IMT Institute for Advanced Studies, Lucca Lucca, Italy

The Museum Heritage of Italian Universities: Current Situation and Improvement Opportunities

PhD Program in Management and Development of Cultural Heritage XXV Cycle

> By Chiara Tarantino 2013

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Abstract

Italian universities have a rich museum heritage accumulated since their origins, which in some cases date back to the Sixteenth century. From that period it has been enriched and transformed, to include at least 265 museums, collections and monuments, unfortunately mostly unknown. Is this heritage a marginal one, or is it to be valued? This research will propose an answer, starting from the description of the heritage, considering its role, interpreting the universities policies, and examining the dynamics of its management and prospects for improvement.

There is no specific complete and updated bibliographical source on Italian university museums in general, nor on the specific aspects covered by this research, while there are many articles and monographs on individual museums and "museum systems" that have been particularly useful in reconstructing the history and characteristics of exhibition. For this reason the research was carried out by using and comparing other sources of different types such as documents, websites, interviews and appropriately compiled questionnaires.

University policies turn out to be various and contradictory and just a few of them perceive their museum heritage as a point of strength, dedicating it adequate resources. However, it still has a priceless value, closely linked to research and teaching, both for the university community and society, thanks to its quality and consistency of collections, as well as its current function, that could easily be enhanced in better conditions. In many cases, the situation could be improved simpley using coordinated management, in order to optimise resources and limit investment, and general planned policies.

Introduction

1. Presentation and Aims

"Ferdinandus Medices Magnus Dux Hetruriae III ut adoloscentes studiosi paratum habeant locum in quo fruticum herbarumque facultates et naturas pernoscant, hortos instruendos curavit, domumque sua pecunia, emptam et scite instauratam adiunxit, per quam eos ingredi cupientibus aditum patere voluit, anno salutis MDVC" 1.

This is written on the monumental entrance of the first Italian university museum, the "Garden of Simples" (a herbal/medicinal garden) in Pisa. Founded in 1543 by the famous doctor and botanist Luca Ghini, due to the foresight of the Grand Duke Cosimo I de' Medici, a *Galleria* (Gallery) of Natural History was added a few years later. The inscription is not simply propaganda on the part of Grand Duke Ferdinand (though obviously it emphasises his financial commitment), but evidence of a clear cultural policy: the garden and the gallery were open both to young scholars and to anyone wishing to enter.

From the Sixteenth century, Italian university museum heritage has been enriched and transformed, to include at least 265 museums, collections and monuments, unfortunately mostly

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¹ "Ferdinand III Medici, Grand Duke of Tuscany, in order to offer scholars a suitable place to learn about nature and properties of the fruits and herbs, cared that they were made gardens and added a building purchased at his own expense and expertly restored, through which wanted to open the access to those who wanted to enter, in the year of salvation 1595." Translated by Emanuele Taccola.

almost unknown. Is this heritage a marginal one, or is it to be valued? This research will propose an answer, starting from the description of the heritage, considering its role, interpreting the universities policies, and examining the dynamics of its management and prospects for improvement.

The thesis is divided into three parts. The first part describes today's museum heritage, tracing its origins and following its transformations. I start by presenting its distribution between universities, its type (museum, multimedia museum, plaster casts, herbarium and so on), its field (humanistic or technical-scientific) and cultural sphere of reference (chemical-physical-mathematical, natural sciences and so on), the main characteristics of exhibition and access, and the number of visitors. Then I outline the history of this heritage, from its origins to the present day, through the main lines of its development, and highlights of the most recent debate.

This study is based on the assumption and belief that university museum heritage is invaluable to universities and the community, locally and globally. There are many sources and experiences quotable on the subject, here I present the most authoritative and comprehensive: the "Recommendation of the Committee of Ministers to member states on the governance and management of university heritage" of the Committee of Ministers of the Council of Europe, which contain numerous ideas for reflection on different issues dealt with in the research. Then I analyse the Statutes and General Regulations of the universities, to understand what their official position is: the possible citation of their museum heritage in their founding

documents presupposes an awareness and recognition of its value.

The value of museums and collections derives primarily from their role. Therefore, a chapter is reserved for its classification, through the examination of missions and objectives, activities, services, targets and the types of relationships that exist inside and outside the university.

The third part examines the issue of management. It starts by addressing some general aspects related to the management of museums and public museums, prior to the investigation and considerations of university heritage: legal status and autonomy, the relationship between the public and the private, and staffing.

I then proceed with the analysis of the forms and policies for the management of university heritage, at both a central and peripheral level, for museums, collections and monuments. I will look at how the universities take care of activities and services at the central level, through general bodies and offices, or through specific structures, central coordination units commonly called "museum systems", and describe the features and operation of these structures. With regard to the museums, administrative status and autonomy, direction, resources, planning, an analysis of results and development will be taken into account. One chapter will describe management method and the resources assigned to the care and development of collections and monuments, which not being structures, are linked by similar problems and less articulated than museums. I will then discover whether museum heritage is guaranteed at least by a minimum level of communication, and if there are obvious weaknesses in the process.

Finally, I will summarize the strengths and weaknesses of museums and collections in the opinion of those responsible for them.

2. Sources

There is no specific complete and updated bibliographical source on Italian university museums in general, nor on the specific aspects covered by this research. The only general publications, "Un'indagine sui musei scientifici ed orti botanici universitari italiani" by Cipriani C., Merola A., Sentinelli L.² and "L'Italia dei musei" of Primicerio D.³, date back to 1986 and 1991.

The first of these two publications, dedicated specifically to university museums and botanical gardens, provides an overview of the situation of space, staff, funds, status, cataloguing of assets, and opening hours. The survey, conducted by sending questionnaires to the universities, includes 98 museums and 23 botanical gardens, but it is out of date and does not list the structures herein considered. The publication by Daniela Primicerio analyses Italian museums in general, among them 194 university museums, examining geographical distribution, type, ownership and management. It includes the list of all the structures, but cannot be considered comprehensive because it only takes into consideration museums identified in national, local and regional surveys available at that time.

However, there are numerous scientific articles and monographs on individual museums, collections and "museum

² Cipriani C., Merola A., Sentinelli L., *Un'indagine sui musei scientifici ed orti botanici universitari italiani*, Museologia Scientifica, vol. III, fasc. 3-4, 1986, pp 251-252.

³ Primicerio D., L'Italia dei musei, Milano 1991.

systems" that have been particularly useful in reconstructing the history and characteristics of exhibition.

For this reason the research was carried out by using and comparing other sources of different types such as documents, websites, interviews and appropriately compiled questionnaires.

Statutes and regulations of the universities, museums and "museum systems", and the documents produced by the Commission of delegates of Rectors for museums, archives and centres for university collections of historical and scientific interest of the CRUI (Conferenza dei rettori delle università italiane)4 were consulted. In 2001, following a proposal by the Commission, an online forum⁵ linked to a database of Italian university museums was established, implemented directly by the universities. The database is no longer available. It should have contained information about all the museums of the Italian universities: the establishment (type, history, any regulation); registry (owner University and address of the museum); staff (amount and type); structural information (size and opening hours); financial information (balance sheets and funding over the last 3 years); services (archives, library, photo-library, listening room, laboratory, audiovisual room, teaching activity); multimedia (images, interactive products); collections (name and short description); history of the directors (chronology); history of people connected to the museum or collections; and

⁴ Conference of Chancellors of the Italian Universities.

⁵ The online forum can still be found at <u>www1.crui.it/musei</u>, which was last updated on 26 June 2002.

publications⁶. However, the minutes of the Commission meetings are still available on the website: one of these⁷provides data until 31 May 2002. From the document we get a partial list of structures, which are useful points of comparison with those obtained by personal research.

The official websites of the universities, the central coordination units, museums and collections, and also Municipalities, Provinces and Regions, have been the most current and complete source of the existence of heritage, including its features and accessibility.

Direct requests to the universities, interviews and questionnaires were used to verify and integrate all the information.

The information, obtained from different sources, has been systematized and inserted in a specifically programmed database.

The considerations on general topics relating to the management of museums are, however, the result of the study and comparison of a wide range of literary sources in various areas (museological, economic-managerial and legislative), of different types (essays, manuals, conference proceedings, documents, legislative acts), and sometimes expressing opposing points of view.

The details of the specific sources for individual topics are given at the beginning of each chapter.

⁶ Draught document *Analisi DB progetto musei* attachment to the minutes of 20 March 2002 of the Commissione dei delegati rettorali per i musei, gli archivi e i centri per le collezioni universitarie di interesse storico-scientifico della CRUI.

⁷ Attachment 3 of the Minutes of the meeting held on 5 June 2002.

3. Methodology

In this section, I describe the original tools created for the collection and analysis of data: the questionnaires and the database. Depending on the topic, the data was processed with reference to the total number of universities, central coordination units, museums, collections and monuments; or to the random sample of the respondents to the questionnaires.

Each chapter is introduced by a section on the methodology adopted for the particular topic treated therein.

All the data is summarized in the appendices in the form of charts and tables.

4. The Questionnaires

Three questionnaires were compiled to gather information about museums, collections and central coordination units. To ensure rapid completion, each of them had only a few questions, mostly closed, requiring precise data or affirmative / negative answers. Each of them, however, is provided with a space for comments.

The questionnaires were sent by email to the representatives of the structures sourced from the internet or from the offices of the universities. In cases where there was no response, we attempted telephone contact and sent the email questionnaire a second time.

Responses were received by email in most cases, or by telephone, from the people responsible, or their assistants.

Sites and monuments were not sent the questionnaire because all the required information was found through other sources.

The questionnaire for the Central Coordination Units (see below) is divided into two groups of questions, 21 in all: the first 17 require an objective response, the last 4 a subjective opinion. The questions with objective answers are addressed to investigate the administrative status of the CCU, the type of personnel, the existence of activity planning, analysis of results, and development.

With the last 4 questions the respondent is asked to express an opinion on the adequacy of resources and to report the strengths and weaknesses of the CCU and/or management system. This last set of questions aims, on the one hand, to acquire the capacity for self-evaluation of the structure, and on the other hand, to make a final analysis in the conclusion.

OBJECTIVE INFORMATION

Administrative status

- When was the centre/office established?
- Does the centre/office have a regulations/a statute?
- To what structure is the centre/office assigned?

Type of staff

- How many units of technical staff are assigned to the centre/office?
- How many units of administrative staff are assigned to it?
- How many units work full-time?
- How many units work part-time?
- How many units have specific training in the field of cultural heritage?
- How many professors are assigned to it?
- How many researchers are assigned to it?

Planning, analysis of results and development

- Does the centre/office have an annual budget allocated by the university or other structures?
- Does it raise funds? How?
- Does it have an annual plan of activities?
- At year end, does it draw up a report of activities?
- Does it have a communication plan?
- Is it integrated into a wider regional network? Which one?
- Does it have any relationship with the local community? What kind?

SUBJECTIVE OPINION

- Do you believe that the allocated budget is enough?
- Do you believe that the staff assigned is enough?
- What are the weaknesses of the centre/office?
- What are the strengths of the centre/office?

The questionnaire was administered electronically to the representatives of the CCU (nominated on the websites or indicated by URP - Public Relations Offices of the universities) from November 2011. The response deadline was November 2012, after which the data processing began. 16 out of the19 universities that were contacted responded to the questionnaire, making a total of 19 CCU out of the 22 (86%) contacted. That is, 3 CCUs belonging to 3 different universities did not respond. However, for one of the CCUs it was possible to obtain all the data through telephone interviews with employees, the Regulations and the website. As for the other two responses, all the essential information was missing, except for the name and administrative form. However, the data found was sufficient to draw relevant considerations and significance. The percentages of respondents to specific questions, if they constitute the only source of information, are expressed in the relevant chapters and sections.

Museums and collections have their own questionnaires. In order to obtain the data required, I compiled two partially different questionnaires, one for museums and one for collections. For museums, which are structures, we assume the existence of direction, staff, mission, activities and services, a structural management of the work from planning to analysis of results- these did not apply to collections. Both questionnaires include questions about the museum unit history, staff

assignment, exhibitions and access, funds, activities and services, and the opinion of the respondents. The questionnaire for the structures (see below) has further questions about administrative status, staff, mission, planning, analysis of results and development.

MUSEUMS QUESTIONNAIRE

OBJECTIVE INFORMATION

History

- When was the structure (museum/centre/garden) established in its present form?
- Did the structure previously exist in another form (for example was it part of another museum etc.)?

Administrative and Legal Status

- Was the structure established with a legally binding act (law, decree, decision of University body)? If so, please specify what kind of act.
- Is it autonomous or is it connected to another structure (for example departments etc.)? If it is connected to another structure, please specify which.
- Does it have regulations/a statute? If so, and it is not available on the internet, can you please send it to me?

Exhibition and Access

- Does the structure have an autonomous space?
- If so, how many square metres (approximately)?
- How many items are exhibited (approximately)?
- How many visitors does it have every year?
- Is it open to visitors?
- According to what criteria? (indicate yes or no)
 - On specific days and at specific times
 - By appointment
- What types of admission do you have? (indicate yes or no)
 - Free access
 - Free admission
 - Ticket

Funds and Staff

- Does the structure have an annual budget allocated by the University or another structure?
- Does it have a director?
- How many units of technical staff are assigned to the centre / office?
- How many units of administrative staff are assigned to it?
- How many units work full-time?
- How many units work part-time?
- How many units have specific training in the field of cultural heritage or museology?
- How many professors are assigned to it?
- How many researchers are assigned to it?

Mission

- Does the structure have a mission?
- If so, where is it defined (for example in the Regulation, on the website etc.)?
- What is expected of the mission?

Activities and Services

- What kind of activities does the structure carry out (apart from conservation and exhibition) (indicate yes or no)?
 - Research
 - Restoration
 - Organisation of exhibitions
 - Organisation of seminars and conferences
 - Organisation of programmes for museum education
 - Organisation of specific activities for students
 - Organisation of specific activities for the staff of the University
 - Organisation of cultural mediation activities
 - Organisation of social inclusion activities
 - Other (specify) ...
- What kind of services does it offer? (indicate yes or no)
 - Guided tours
 - Educational programs for schools
 - Specific educational activities for adults
 - Video Room
 - Library
 - Bookshop
 - Cafeteria

- Other (specify) ...
- Are there specific activities and services for the following? (indicate yes or no)
 - Scholars
 - University students
 - University staff
 - Children
 - Families
 - Senior Citizens
 - People with disabilities
- Is it integrated into a wider regional network? Which one?
- Does it have any relationship with the local community? What kind?

Planning, Analysis of Results and Development

- Does the museum/centre/garden have an annual budget allocated by the university or other structures?
- Does it raise funds? How?
- Does it have an annual plan of activities?
- At year end, does it draw up a report of activities?
- Does it have a communication plan?

SUBJECTIVE OPINION

- Do you believe that the allocated budget is enough?
- Do you believe that the staff assigned are enough?
- Do you believe that the space assigned is enough?
- What are the weaknesses of the museum/centre/garden?
- What are the strengths of the museum/centre/garden?

COLLECTIONS QUESTIONNAIRE

OBJECTIVE INFORMATION

History

• When was the collection gathered/acquired by the University?

Administration

- To what structure is the collection connected?
- Does it have an annual budget allocated by the University or other structures?

Exhibition and access

- Does it have an autonomous space?
- If so, how many square metres (approximately)?

- How many items are exhibited (approximately)?
- Is it open?
- According to what criteria? (indicate yes or no)
 - According to the opening hours of the managing structure
 - On specific days and at specific times
 - By appointment
- What types of admission do you have? (indicate yes or no)
 - Free access
 - Free admission
 - Ticket
- How many visitors does it have every year?

Activities and Services

- Apart from conservation and exhibition, does the management structure organise activities related to the following (indicate yes or no)?
 - Research
 - Restoration
 - Organisation of exhibitions
 - Organisation of seminars and conferences
 - Organisation of programs for museum education
 - Organisation of specific activities for students
 - Organisation of specific activities for the staff of the University
 - Organisation of cultural mediation activities
 - Organisation social inclusion activities
 - Other (specify) ...
- What kind of services does it offer? (indicate yes or no)
 - Guided tours
 - Educational programs for schools
 - Specific education activities for adults
 - Other (specify) ...
- Are there specific activities and services for the following? (indicate yes or no)
 - Scholars
 - University students
 - University staff
 - Children
 - Families

- Senior Citizens
- People with disabilities

SUBJECTIVE OPINION

- Do you believe that the allocated budget is enough?
- Do you believe that the staff assigned are enough?
- Do you believe that the space assigned is enough?

114 museums out of 196 (58%) identified and 30 collections out of 54 (56%) responded to the questionnaire. Some museums and collections at the time of the research were closed and couldn't be visited, so the completed questionnaires accounted for 60% of both the collections and the museums that could be visited.

For the most part, however, the necessary information has been added from other sources.

The percentages of respondents to specific questions, if they constitute the only source of information, are expressed in the relevant chapters and sections.

5. The Database

The database is set up by Access. It consists of two files, one containing the data storage tables, the other the management masks. Given the large number of fields, there are different tables for different structures (universities, central coordination units, museum units) and themes; tables with transverse information (links between museum units and central coordination units); and tables with the field list for more complex combo boxes. As an example, *Fig.* 1 shows the relationship between the tables.

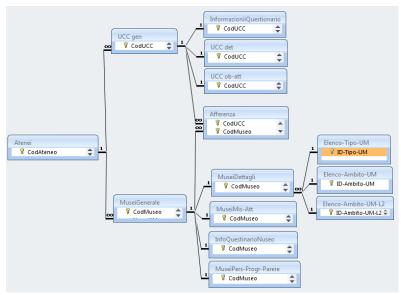


Figure 1: Relationship between tables

The management file opens with a menu (*Fig.* 2) through which you can enter universities, central coordination units, museum units and the main information relating to them, the answers to the questionnaires, the fields of the combo boxes.



Figure 2: Database access menu

Queries were created to process the data then linked to Excel spreadsheets. On this basis, pivot tables and charts in Excel have been created.

6. Critical Issues

The research found critical issues concerning both the quantification of heritage and the knowledge (mainly organisational) of its characteristics.

First of all, museum heritage is in continuous development and transformation: the collections become museums and the museums split up or join to form new structures, changing name, location and structure of reference. Even now it is in the process of being reorganised, due to the application of the so-called "Gelmini Reform" which led to a radical change of the inner articulation of the universities.

Secondly, it is difficult to find any information about the heritage: there are no exhaustive recent publications, nor is there a national coordinating body. Potentially the most updated source is the internet, but not all the universities have specific pages dedicated to their museum heritage, and not all the museums and collections have their own website. For this reason it is sometimes difficult to verify the existence of museums and collections and identify whose responsibility they are.

Chapter 1.1

Museum Heritage Today

The initial phase of the study provides an overview of Italian university museum heritage, presenting its distribution between universities, the type, the area and the field of reference, the main characteristics of exhibition and access, and the number of visitors.

The aims are on the one hand, knowledge and heritage classification and on the other, the interpretation of the related cultural policies.

1.1.1 Methodology and sources

The first phase of the study was aimed at identifying the universities which have museum heritage, that is: museums, collections, and sites or monuments⁸ which could be defined with the neutral term of "museum units". It was then tested whether there is any correlation between the number of museum units, and the size and age of the universities.

Each museum unit was then classified according to a specific type (for example, botanical garden, multimedia museum etc.), the cultural area (humanistic or technical-scientific), and field at both the general level (for example,

17

⁸ The sites or monuments that the universities recognise themselves as part of the museum heritage. The archival-library heritage is excluded from the research.

medical-pharmaceutical) and a specific level (for example dentistry).

Finally, for each of them, the basic characteristics were analysed: exhibition (existence or not of autonomous space, exhibition area), access (opening hours and ticketing system), and the number of visitors.

The research has faced two major problems: firstly, that the period of carrying out the research corresponded to a phase of reorganization of the universities; and secondly, the collection of complete, current and unambiguous data, which required the use and comparison of different literary, documentary and online sources, requests to those responsible at the universities and museum units, and specifically set up questionnaires.

There are no complete and updated literary sources on the subject. The most recent and relevant publications are the aforementioned "Un'indagine sui Musei Scientifici ed Orti Botanici Universitari Italiani" by Cipriani C., Merola A., Sentinelli L.9 and "L'Italia dei Musei" by Primicerio D.10.

The official websites of museum units and universities are definitely the most current source, although unfortunately they not always available or easily accessible. Not all universities dedicate specific pages to their museum heritage, and not all of the museum units have their own website and, when they do, it is often nested within the website of other structures and is not indexed properly, and therefore cannot be found through commonly used search engines.

⁹ Cipriani C., Merola A., Sentinelli L., Un'indagine sui musei scientifici ed orti botanici universitari italiani, Museologia Scientifica, vol. III, fasc. 3-4, 1986, pp 251-252.

¹⁰ Primicerio D., L'Italia dei musei, Milano 1991.

Support information has been obtained through the official websites of other public institutions such as Municipalities, Provinces and Regions, which usually describe or list the museums of their territory in the pages devoted to "culture".

On the MIUR (Ministry of Education, University and Research) website, the *Cerca Università*¹¹ database is also accessible, giving wide range of updated information concerning the organisation of the universities. Here it is possible to find the number of students enrolled, and the existence of some museums organised as "centres for research" or "services".

Also, documentary sources were particularly useful. The "statutes" and "regulations of structures" of the universities sometimes also mention museum heritage, but not always .

The minutes of the Commission of Delegates of Chancellors for Museums, Archives and Centres for University Collections of Historical-Scientific Interest of the CRUI, relative to the database of university museums, were used as a point of comparison with the list of museums identified during the research.

The questionnaires were used to integrate the data relating to the characteristics of access and the numbers of visitors to the museums.

1.1.2 Distribution

Italian universities have a rich cultural heritage, both tangible and intangible, accumulated since their origins, which in some cases date back to the sixteenth century. Part of it is now recognized and acknowledged as museum heritage consisting of

¹¹ http://cercauniversita.cineca.it.

a wide range of museums, collections and monuments, which we can define as "museum units": in Italy there are 82^{12} universities of which 37 of them manage 265^{13} units (*Table 1 and Fig. 3*). The list of museum units can be found in Appendix A.

All this adds up to an immeasurable number of things of unknown cultural interest, underestimated or not yet curated in the form of a museum, but still of some value. For example, the Department of Mechanics of the *Politecnico di Milano* is organizing a collection of machines, tools and pedagogic models used since the founding of the University¹⁴.

The *Università di Palermo* and *Roma La Sapienza* have more than twenty museum units each, 22 and 21 respectively, followed by Pavia which has 19. 14 universities have between 1 and 3 units each; 12 universities have between 6 and 8 units; and the remaining 8 universities have between 10 and 15.

University	Museum Units n.
Palermo	22
Roma Sapienza	21
Pavia	19
Bologna	15
Napoli Federico II	13
Pisa	12
Torino	12
Cagliari	12

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¹² The information is taken from the Ministry of Education website. Telematic universities were not considered in the total count.

¹³ The museum units belong to the individual universities with the exception of the Felice Ippolito National Museum of Antarctica, managed by an Inter-University Centre between Genoa, Siena and Trieste.

¹⁴ De Alberti L., Rovida E., *Patrimonio storico del dipartimento di Meccanica*, Milano 1999.

Tuscia (Viterbo)	11
Genova	10
Padova	10
Sassari	8
Catania	8
Perugia	8
Parma	8
Bari	7
Modena-Reggio Emilia	7
Salento	7
Milano	6
Molise	6
Ferrara	6
Siena	6
Trieste	6
Napoli SUN	3
Calabria	3
Urbino	3
Milano Politecnico	3
Roma Tor Vergata	2
Camerino	2
Messina	2
L'Aquila	1
Chieti-Pescara	1
Ge, Si, Tr (Centro interuniversitario)	1
Napoli Parthenope	1
Bari Politecnico	1
Firenze	1
Roma 3	1
Table 1: Universities and number of museum units	

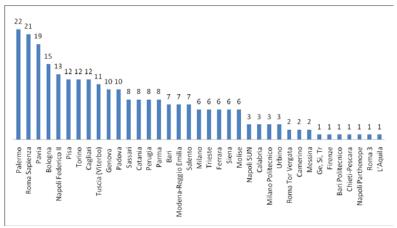


Figure 3: Number of museum units per university

The universities that have museum units differ greatly from each other in terms of tradition, when they were founded, and their size. No special relationship seems to exist between the characteristics of universities and the distribution of museum units.

Italian universities are either very old (in some cases medieval), or modern and contemporary, founded between the nineteenth century and the first few years of the twenty first century¹⁵: 11 universities were founded before the fifteenth

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¹⁵ For the oldest universities the date, and sometimes, the era of foundation are, as yet, open historiographical issues. In addition to the scarcity of documents, there is no universally accepted chronology either of essence or form. For a summary of the argument refer to Dolcini C., *Le prime Università* in Brizzi G.P., Del Negro P., Romano A., Ed., Storia delle Università italiane, Messina 2007, vol. 1 pp 11-43 (in particular pp11-18), Novarese D., *Istituzioni complementari e alternative allo studium in Italia: presenza e ruolo degli oridni religiosi (secc. XIII-XVI)* in Brizzi G.P., Del Negro P., Romano A., Ed., Storia delle Università italiane,

century, 7 between the fifteenth and seventeenth centuries, 1 in the nineteenth century, 15 in the twentieth century, and 1 in 2006. We have, for example, Palermo, founded in the first half of the nineteenth century, which with 22 museum units has the most; Napoli *Parthenope*, founded in the first half of the twentieth century which has 1 unit; Roma *La Sapienza*, founded in the first half of the fourteenth century, which has 21 units; and Firenze, founded in the same period which has 1 unit. (*Tables 2 and 3, Fig. 4*).

Periods and Universities	Year of birth of the University
11th C.	
Bologna	1088
1st half 13th C.	
Padova	1222
Napoli Federico II	1224
Siena	1240
2nd half 13th C.	
Perugia	1276
14th C.	
Roma La Sapienza	1303

Messina 2007, vol. 1 pp 137-157 e Frova C., *Università italiane nel medioevo: nuovi orientamenti per una periodizzazione* in Annali di Storia delle Università italiane - Volume 1, 1997.

References to the establishment of the individual universities can be found in Brizzi G.P., Del Negro P., Romano A., Ed., *Storia delle Università italiane*, Messina 2007, vol. 3 (a chapter for each university)

Having searched in the above-mentioned source, if I was unable to find the relevant information, I used the dates given by the universities themselves (either in their presentation in the book cited, on their website, or as inscribed on their official logo).

Firenze	1321
Camerino	1336
Pisa	1343
Pavia	1361
Ferrara	1391
15th C.	
Torino	1404
Parma	1412
Catania	1434
16th C.	
Urbino	1506
Messina	1548
17th C.	
Sassari	1617
Cagliari	1620
Genova	1670
19th C.	
Palermo	1805
Milano Politecnico	1863
20th C.	
Torino Politecnico	1906
Napoli Parthenope	1919
Milano	1924
Bari	1924
Trieste	1938
L'Aquila	1952
Chieti-Pescara	1965
Calabria	1968
Tuscia	1979
Roma Tor Vergata	1982

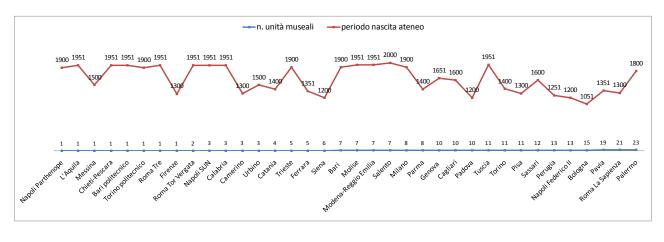
Molise	1982
Bari Politecnico	1990
Napoli SUN	1991
Roma Tre	1992
Modena-Reggio Emilia	1998
2000	
Salento	2006

Table 2: Chronological list of the Foundation of Italian Universities

University	Museum Units n.	Birth of Universities (period)
Salento	7	Post 2000
L'Aquila	1	
Chieti-Pescara	1	
Bari politecnico	1	
Roma Tre	1	
Roma Tor Vergata	2	2nd half 20th C.
Napoli SUN	3	
Calabria	3	
Molise	7	
Modena-Reggio Emilia	7	
Tuscia	11	
Napoli Parthenope	1	
Torino politecnico	1	
Trieste	5	1st half 20th C.
Bari	7	
Milano	8	
Milano Politecnico	3	2nd half 19th C.
Palermo	23	1st half 19th C.
Genova	10	2nd half 17th C.

Cagliari	10	1st half 17th C.
Sassari	12	
Messina	1	1st half 16th C.
Urbino	3	
Catania	4	
Parma	8	1st half 15th C.
Torino	11	
Ferrara	5	2nd half 14th C.
Pavia	19	
Firenze	1	
Camerino	3	1st half 14th C.
Pisa	11	
Roma La Sapienza	21	
Perugia	13	2nd half 13th C.
Siena	6	
Padova	10	1st half 13th C.
Napoli Federico II	13	
Bologna	15	1st half 11th C.

Table 3: Period of Foundation of universities and museum unit numbers (ordered by number of museum units)



1051 2 nd half 11 th C	1200 1st half 13th C	1251 2 nd half 13 th C	1300 1st half 14th C
1351 2 nd half 14 th C.	1400 1st half 15th C	1500 1st half 16th C	1600 1st half 17th C
1651 2 nd half 17 th C	1800 1st half 19th C	1900 1st half 20th C	1951 2 nd half 20 th
2000 1st half 20th C			

Figure 4: Period of Foundation of universities and number of museum units

The size of the university bears no relation to the number of museum units. The universities that have museum units are small, medium and large (ranging from 6.759 students at the *Università di Camerino* to 116.564 students at the *Università di Roma La Sapienza*). These do not affect the number of museum units: for example, Firenze, with 51.957 students, has 1 museum unit, while Tuscia, with 8.725 students, has 11 museum units (*Table 4 and Fig. 4*).

University	Museum Units n.	Enrolled student
Palermo	23	51795
Roma La Sapienza	21	116564
Pavia	19	21913
Bologna	15	77000
Napoli Federico II	13	84857
Perugia	13	27548
Sassari	12	14051
Torino	11	62965
Pisa	11	50271
Tuscia	11	8725
Padova	10	61653
Genova	10	35895
Cagliari	10	29099
Milano	8	59715
Parma	8	30085
Salento	7	22937
Modena-Reggio Emilia	7	19258
Bari	7	11060
Molise	7	7943

Siena	6	17425
Trieste	5	18433
Ferrara	5	16591
Catania	4	53352
Milano Politecnico	3	37626
Calabria	3	33187
Napoli SUN	3	28120
Urbino	3	13090
Camerino	3	6759
Roma Tor Vergata	2	31676
Firenze	1	51957
Roma Tre	1	34573
Chieti-Pescara	1	31933
Messina	1	30499
Torino politecnico	1	27103
L'Aquila	1	23067
Napoli Parthenope	1	16995
Bari politecnico	1	11060

Table 4: Universities, museum units and enrolled students (ordered by number of museum units)

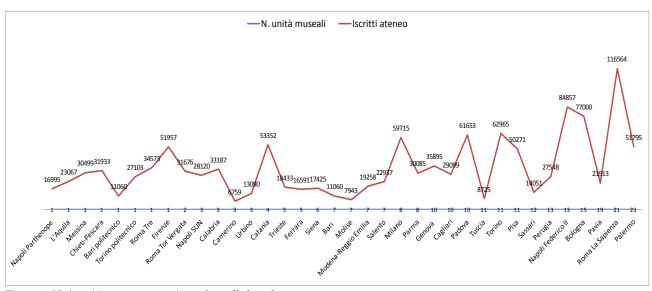


Figure 4: Universities, museum units and enrolled students

1.1.3 Typology

74% of the museum units (196) consist of museums, 20% (54) of collections and 6% (15) of sites or monuments (*Fig.* 5).

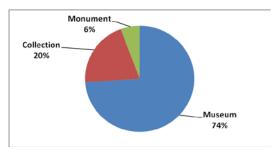


Figure 5: Museums, collections and monuments (percentage)

Within these broad categories, the universities have classified their heritage according to a wide typology of more specific units that include:

- for museums germplasm bank, plaster cast museum, laboratory museum, spread museum, multimedia museum, botanical garden, archive. There is also an interclass type related to "mixed" units, such as the Museo orto botanico of Bari, Museo astronomico Orto botanico di Brera of the Università di Milano and Orto Botanico ed Herbarium Mediterraneum of Palermo.
- for **collections** collection, plaster cast collection¹⁶ and herbarium.

Table 5 shows the number of museum units according to type and University.

¹⁶ In Italian both "plaster cast museum" and "plaster cast collection" are defined in the same way: "gipsoteca".

University	Germ bank	Coll	Herb	Plast Cats M/C	Intercl	Lab	Mus	Spr Mus	Mult Mus		Mon	Arch	Tot
Bari		3			1	1	2						7
Bari Politecnico							1						1
Bologna		1					12		1	1			15
Cagliari		3					8			1			12
Calabria							3						3
Camerino							1			1			2
Catania		1					6			1			8
Chieti-Pescara							1						1
Ferrara		2					2			1	1		6
Firenze							1						1
Ge, Si, Tr							1						1
Genova		3					5			2			10
L'Aquila										1			1

Messina	1							1		2
Milano				1		3		2		6
Milano Politecnico	1					2				3
Modena-Reggio Emilia					1	5		1		7
Molise	1					5				6
Napoli Federico II	1					11		1		13
Napoli Parthenope						1				1
Napoli SUN						3				3
Padova						10				10
Palermo	6			1		8			7	22
Parma	1					6		1		8
Pavia	6					7		1	5	19
Perugia	1	1	1		1	3		1		8
Pisa	3		1			7		1		12
Roma 3						1				1
Roma Sapienza						20		1		21
Roma Tor Vergata						1		1		2

Salento							4	1	1	1			7
Sassari		5					3						8
Siena		2					3				1		6
Torino		1					9			1		1	12
Trieste		3					2			1			6
Tuscia (Viterbo)	1	6					2			1	1		11
Urbino		·					2			1			3
Totale	1	51	1	2	3	3	161	1	2	24	15	1	265

Table 5: Number of museum units by University (in alphabetical order) and type

The categories most represented are of the more traditional types: Museum referred to 61% (161) of the museum units, followed by Collection (19%, 51 units) and Botanical Garden (9%, 24 units). There are 3 Laboratories and Interclass Units, the Plaster Cast Collections and Museums and the Multimedia Museums have 2 units. Archives, Germplasm bank, Spread Museum, and Herbarium are represented by 1 unit (*Table 6 and Fig. 6*).

Category	n.
Museum	161
Collection	51
Botanical garden	24
Site or monument	15
Interclass	3
Laboratory	3
Gipsoteca	2
Multimedia museum	2
Archive	1
Germplasm bank	1
Spread museum	1
Herbarium	1
Total	265

Table 6: Number of museum units according to type

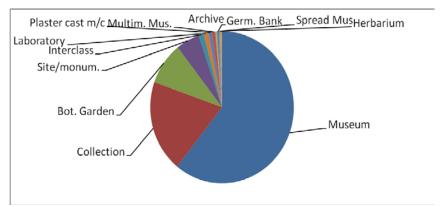


Figure 6: Museum unit types

It is important to reiterate that the museum units were classified according to the classification established for them by the Universities, without considering their nature, according to which the number of plaster cast collections, botanical gardens and herbaria is greater.

There are six plaster cast collections held by Italian universities: these are the *Gipsoteca di Arte Antica* of the *Università di Pisa* and the *Gipsoteca* of the *Università di Perugia*, and also the *Università di Padova*, *Pavia*, *Roma La Sapienza* and *Urbino*. The plaster casts of Padova are on display in the *Museo di Archeologia*, while the plaster casts of Urbino and Roma are set up as Museums: *Museo dei Gessi* and *Museo dell'Arte Classica*.

There are 31 botanical gardens. In addition to these, there are the five units of the *Università della Calabria, di Bari, di Firenze, di Palermo* and *di Siena*. The botanical gardens of Calabria, Firenze and Siena are part of the *Museo di Storia*

Naturale della Calabria ed Orto Botanico, Museo di Storia Naturale and Museo Botanico: Orto Botanico e Herbarium, classified as Museums. The botanical gardens of Bari and Palermo are organized as Botanical Garden and Herbarium, classified as Interclass.

1.1.4 Area and Field

79% (210) of the museum units fall within the Technical-Scientific area and 21% (55) within the Humanistic area (*Table 7 and Fig. 7*).

Area	n.
Technical-Scientific	210
Humanistic	55
	Total 265

Table 7: Number of museum units according to area

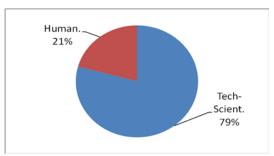


Figure 7: Percentage of museum units according to area

In both areas the majority of museum units are represented by museums (138 in the Technical-Scientific area,

23 in the Humanistic area), and collections (38 in the Technical-Scientific area, 14 in the Humanistic area) (*Fig. 8*).

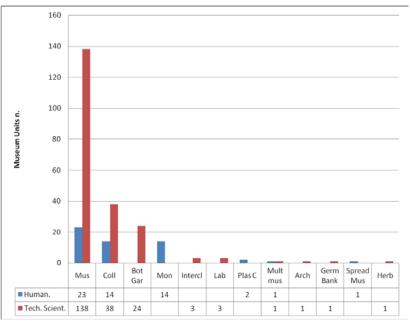


Figure 8: Number of museum units according to area

Within the two areas there are a wide range of specific fields. Given the history of the museum unit these nuances are very interesting and therefore, in order not to lose them, I distinguished two levels of fields according to a different degree of detail.

The level 2 field, more generally, involves 8 categories: Archaeological-Artistic-Literary, Chemical-Physical Mathematical, Economic, Interclass, Medical-Pharmaceutical,

Natural Sciences, Historical and Social Sciences, and Technical-Engineering.

The level 2 prevailing field is Natural Sciences which includes half of the museum units (50%, 132). Trailing behind, and with little difference between them, are: the Medical-Pharmaceutical fields (12%, 31); Archaeological-Artistic-Literary (11%, 29); Chemical-Physical-Mathematical (10%, 27); and Sciences Historical and Social (9%, 25). The Technical-Engineering and Interclass fields are 5% (13 units) and 3% (7 units) respectively. One unit falls within the Economic field (*Table 8 and Fig. 9*).

Level 2 field	n.
Natural Sciences	132
Medical-Pharmaceutical	31
Archaeological-Artistic-Literary	29
Chemical-Physical-Mathematical	27
Sciences Historical and Social	25
Technical-Engineering	13
Interclass	7
Economic	1
Total	265

Table 8: Number of museum units per level 2 field

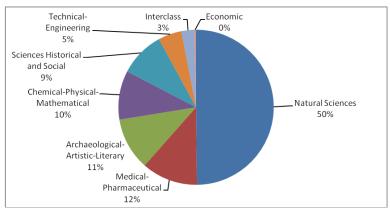


Figure 9: Percentage of museum units per level 2 field

The level 1 field is comprised of various categories identified when possible based on the name of the museum unit or otherwise on the basis of the goods constituting the unit. The level 2 field actually comes from the combination of the level 1 field categories which are:

- Archaeology, Art, Communication, Photography, Plaster Cast Collection/Museum, Interclass, Literature and Music which are included in the level 2 field Archaeological-Artistic-Literary;
- Chemistry, Physics, Computer Science, Mathematics which are included in the level 2 field Chemical-Physical-Mathematical;
- Study of Commodities which is included in the level 2 field Economic;
- Interclass, Science and Technology, History of Science which are included in the level 2 field **Interclass**;

- Anatomy, Criminal Anthropology, Pharmacy, Human Physiology, Interclass, Histology, Medicine, Dentistry, Pathology, Psychology, Radiology which are included in the level 2 field Medical-Pharmaceutical;
- Agriculture, Environment, Animal Anatomy Comparative and Veterinary, Anthropology, Astronomy, Biology, Botany, Entomology, Geology and Mineralogy, Interclass, Paleontology, Earth Sciences, Natural Sciences, Natural History, Zoology and Animal Husbandry which are included in the level 2 field Natural Sciences;
- City and Territory, Education and Didactics, Ethnography, University History that converge in the level 2 field Sciences Historical and Social;
- Architecture, Engineering and Topography which are included in the level 2 field **Technical-Engineering**.

Botany has the most museum units (44) followed by: Geology and Mineralogy (18); Anatomy and Archaeology (15); Physics and Zoology (14); Comparative and Veterinary Animal Anatomy; City and Territory (11) (*Table 9 and Fig. 10*).

Field (Level 1 and 2)	n.
Natural Sciences	132
Botany	44
Geology and Mineralogy	18
Zoology and Animal Husbandry	14
Animal Anatomy Comparative and Veterinary	11
Natural History	7
Paleontology	6

Anthropology	6
Agriculture	5
Entomology	5
Earth Sciences	4
Environment	3
Astronomy	3
Natural Sciences	3
Interclass	2
Biology	1
Medical-Pharmaceutical	31
Anatomy	15
Medicine	4
Dentistry	2
Pharmacy	2
Human Physiology	2
Criminal Anthropology	1
Psychology	1
Pathology	1
Radiology	1
Interclass	1
Histology	1
Archaeological-Artistic-Literary	29
Archaeology	15
Plaster cast museum/collection	5
Art	4
Photography	2
Communication	1
Music	1
Interclace	1

Chemical-Physical-Mathematical		27
Physics		14
Chemistry		8
Mathematics		3
Computer Science		2
Sciences Historical and Social		25
City and Territory		11
University History		10
Ethnography		2
Education and Didactics		2
Technical-Engineering		13
Engineering		10
Architecture		2
Topography		1
Interclass		7
Interclass		3
Science and Technology		3
History of Science		1
Economic		1
Study of Commodities		1
	Total	265

Table 9: Number of museum units per level 1 and 2 fields

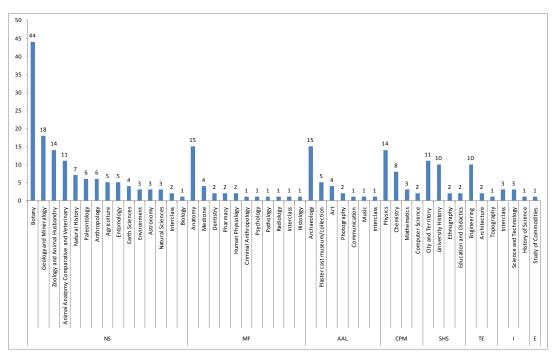


Figure 10: Number of museum units per level 1 and 2 fields

18% of the collections and museums (41 units) exhibit instruments, machines and models used for research and teaching of scientific and technical disciplines (*Fig. 11*), chemistry, engineering, physics, mathematics etc (Appendix C). One example is the collection of the *Museo della Chimica* of the *Università di Genova*, which exhibits Kipp devices, glassware, Dewar vases, strainers, funnels, mortars, sieves, burners, ovens, scales, colorimeters, polarimeters, microscopes, hydrometers, used between the early nineteenth century and the first half of the twentieth, inside the chemical laboratory of the University where Stanislao Cannizzaro¹⁷ taught.

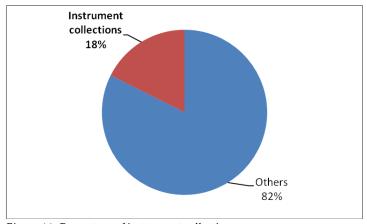


Figure 11: Percentage of instrument collections

17 Rambaldi G., Istrumenti di chimica. Un laboratorio del XIX secolo, Genova 1966.

1.1.5 Exhibition and Access

Apart from the botanical gardens, not all museums and collections have an autonomous space. In fact, 83% of the museums have an autonomous space and 44% of the collections; the data is unknown for 9% of the museums and 13% of the collections. So, at least 74% of the museums and collections have an autonomous space, while at least 16% do not. (*Figure 12, 13 and 14*) and their specimens are displayed and/or stored inside closets, cabinets, drawers, boxes in the corridors of departments, laboratories or classrooms.

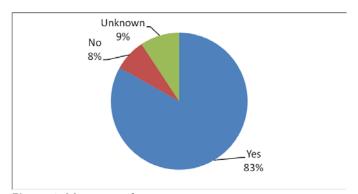


Figure 12: Museums and autonomous space

¹⁸ Percentage calcutated on total MUs.

¹⁹ Excluding botanical gardens.

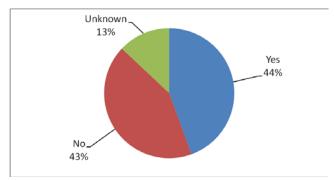


Figure 13: Collections and autonomous space

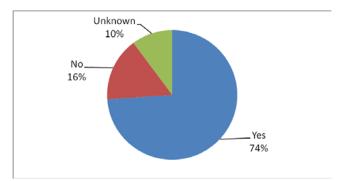


Figure 14: Museums, collections and autonomous space

Museums and collections 20 have between 20^{21} and 5.000 square metres. The majority of them (62%) have a space that

²⁰ Botanical gardens excluded.

 $^{^{21}}$ Sample of 87 (53%) from museums and collections having an autonomous space, excluding botanical gardens. For the remaining 47% the data is unknown. Note that this data is also unknown by many respondent to the questionnaire.

exceeds 300 m², 26% exceed 1m², and only 9% have an area less than 100 m^2 (Fig. 15).

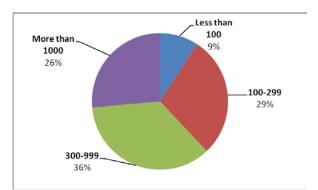


Figure 15: Museums, collections and exhibition area in square metres

The number of exhibits in museums and collections varies greatly depending on the specific nature of the exhibit, which ranges from lithic fragments, zoological and archaeological, to anatomical preparations, casts of statues, life-size reconstructions of animals, scientific instruments, paintings etc. Only 12%²² of the collections show less than 100 exhibits, 48% have 1000 or more, and 16% have 10 000 or more. The quantity of collection exhibits is not, however, a parameter for evaluating the quality of exhibitions, which also depends on the historical value of the collection, the informational and

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²² Sample of 120 (55%) collections, including museum collections but excluding botanical gardens. Note that this data is also unknown by many respondent to the questionnaire (this is also because many collections are not catalogued).

educational apparatus, as well as on the quality of the exhibits themselves (*Fig. 16*).

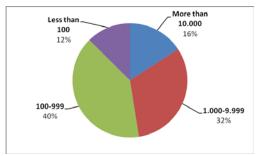


Figure 16: number of exhibits displayed in museums and collections

25% of museums include a video room with the exhibition, 35% with a library, 13% with a bookshop, and 4% with a cafè (*Fig.* 17).

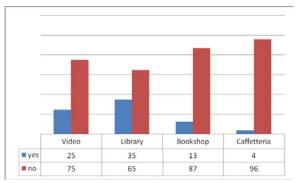


Figure 17: Services (percentage)

11% of the museums and collections are currently closed to the public for restoration, renovation, or

organisational reasons, at least 29% are open by appointment and at least 48% have regular opening hours, generally Monday to Friday or according to the opening hours of the structures responsible (when they do not have autonomous space). For 12% of these, data is unknown. There are no substantial variations between museums and collections (*Fig.* 18)

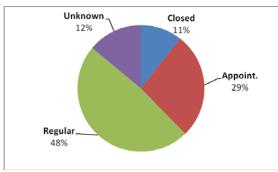


Figure 18: Museums, collections and opening times

Sites and monuments, which are mostly spaces within historic buildings normally used for university life (classrooms, courtyards, etc.), with rare exceptions, have set opening hours and free access.

The majority of museums and collections (at least $66\%^{23}$) have free admission, at least 22% also have free access, and probably only 14% of them have a paid admission system (*Fig. 19*). Data is unknown for 20% of the museums and collections (due to lack the answers to the questionnaires, and

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²³ Percentage calculated excluding museums and collections that are not open.

official websites not specifying the information): these too probably provide free access or at least free admission. Sometimes, even if free admission is provided, paid guided tours are offered and the proceeds are used to subsidise the service.

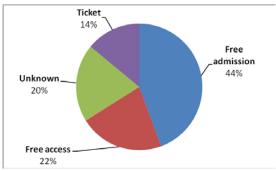


Figure 19: Museums, collections and access times

All the exhibition and access data are available in Appendix L.

1.1.6 Visitors

For the majority of the museum units, the number of visitors (Appendix L) is not recorded and the data used for this research is generally only estimated by respondents to the questionnaire, who in many cases have not been able to supply these figures at all. It varies greatly and ranges from 10 to 60 000 at the *Orto Botanico ed Herbarium Mediterraneum* of

Palermo. 12%²⁴ of the museum units have a number of annual visitors exceeding 20 000; 9% of them between 10 000 and 20 000; 25% of them between 1 000 and 10 000; 14% between 500 and 1 000; and 17% between 100 and 500. The remaining museums receive less than 100 and in some cases only a few dozen (*Fig.* 20). These percentages, however, may not be representative because only 95 museum units (36%) have been analysed.

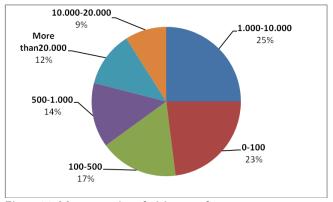


Figure 20: Museum unit and visitor numbers

For the same reason, the type of visitor is only an assumption, in particular, on the basis of specific activities and services offered by museums and structures responsible for collections and monuments: these are mainly school and university students.

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²⁴ Data collected from the questionnaires and websites. For many museum units, visitor numbers are not recorded.

1.1.7 Final Considerations

It is difficult to get the full picture of the museum heritage of Italian universities because, on the one hand, its size and organisation are in continuous development and transformation, and on the other hand, not all universities are effectively involved in its development. There is currently no national coordinating body and information is obtainable, often with difficulty, mainly from documentary sources and the websites of individual universities and structures. Based on the analysis of this data it is possible, however, to trace a statistically significant profile.

In Italy there are 82 universities and 37 of these manage 265 museums, collections and monuments, which could be defined using the general and neutral term "museum units". To all this is added an immeasurable amount of unknown or undervalued items of cultural interest, underestimated or not yet ordered in a museum form, but nonetheless not without value.

The number of museum units per university is very different and varies between 1 and 22. Also, the universities that have them are very different from each other, by tradition, foundation date and size, and there does not seem to be any special relationship between these characteristics and the distribution of museum units.

Even the museum units themselves are very different from each other. In this chapter, typology and the cultural sphere were analysed.

With regard to typology we find both traditional and "modern" museum types: museums, collections, germplasm

banks, herbaria, plaster cast collections/museums, laboratories, spread museums, multimedia museums, botanical gardens and sites or monuments. The most represented categories are, however, the traditional ones: museums, collections and botanical gardens.

The desire to devote itself to heritage conservation rather than to conservation in general is clear, demonstrating regard for a wider audience than the university one: there is a high prevalence of museums, which are structures organised to deliver services, and, although some museum units are not currently open, at least half of them have regular opening hours and the remainder is still accessible by appointment.

The existence of territorial museum forms, such as the spread museum and the value enhancement of sites and monuments, confirms a committed outreach to the community.

The majority of museums and collections have an autonomous space, with exhibition areas of very different sizes, usually in excess of 300 square metres. Some of them complete the exhibition with a video room, library, bookshop and café.

A definite strength is the size of the collections, which can exceed 10 000 exhibits.

Only a small percentage of museum units charge an admission fee.

For the most part, the number of visitors is not recorded, but when it is, it varies widely, from 10 to 60 000.

There is a large disparity between the number of museum units of the Technical-Scientific and the Humanistic

areas, as many as 78% belong to the first group. Within these two broad categories, museum units refer to a wide range of cultural fields, in simple terms attributable to 8 groups: Archaeological-Artistic-Literary, Chemical-Physical-Mathematical, Economic, Interclass, Medical-Pharmaceutical, Natural Sciences, Sciences Historical and Social, Technical-Engineering. The most represented field is Natural Sciences which makes up half of the museum units.

18% of collections and museums exhibit instruments, machines and models used for research and teaching of scientific and technical disciplines, chemistry, engineering, physics, mathematics etc.

Chapter 1.2

History of the Italian University Museum Heritage

In this chapter I relate the history of the Italian university museum heritage, from its origins to the present, introducing the main transformations of museums and collections and highlighting the most relevant points of the most recent debate and its consequences.

1.2.1 Methodology and Sources

As there is no specific bibliography about this area of the subject, my research has integrated historical literature of the museum heritage of different universities with documents, legal acts, university websites, and also the answers to a questionnaire which was sent to museum managers.

The first part – concerning reconstructing the history of the heritage – required longer and more complicated work, both to collect and process information. For each museum I've taken into account:

• The date of establishment of the collections, which indicates the starting date of the collection or acquisition date of the material by the university, states the museum's substantial origin. If a museum changes

its name, administration, location or set-up, it will still be considered the same.

- A pre-existing form of the museum if it derives from another museum from which it was separated or which didn't belong to the university, or if it was created by a unification of different museums. If a museum derives from a collection, it is not considered a pre-existing form.
- The date of establisment of the pre-existing form of the museum.
- The date of start of the collection is valid both for museums and for collections. It can correspond to the date of constitution of the museum.
- Every relevant stage of its **history**.

Since there are no publications²⁵ for each museum unit, the contribution of other sources has been fundamental, especially questionnaires which were also a means of verification. The main criticism concerns the fact that collections and museums have complicated and partially unknown records. In particular you don't always find out the start and/or establishment date of a collection, even if the period can always be tracked (in terms of collocation within the first or second half of a century). That is why the historical reconstruction is based on the general period. The data in the *database* can be found in Appendix D.

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 $^{^{\}rm 25}\,\mbox{See}$ Bibliography for complete list of literary sources used.

1.2.2 The Origins

Today's museums and collections were established some in the first half of the 1500s, but mostly in the second half of the 1800s and, particularly, from the second half of the 1900s $(57\%^{26})$ (Fig. 21 and 22).

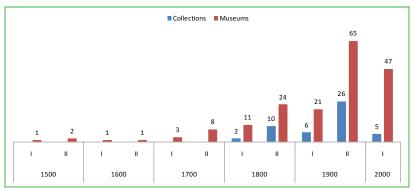


Figure 21: Period of creation of today's museums and collections (considered separately)

Data

²⁶ Data calculated on 93% of museums and collections. The date of establishment of 7% of museums and collections is unknown (6% of museums and 9% of collections).

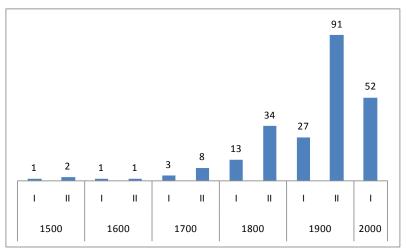


Figure 22: Periods of establishment of today's museums and collections (considered together)

Several existing museums, and particularly those established in the second half of the 20th century, were constituted on pre-existing collections which were reorganized and presented in a different museum form. As a matter of fact, a good number of collections (39) was established between 1500s and 1700s, and their number has increased constantly ever since, apart from the decrease in the first half of 1900s (*Fig.* 23).

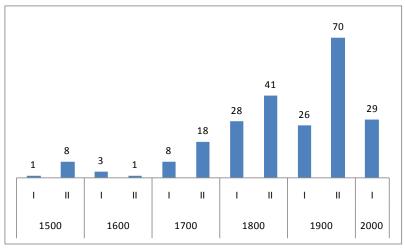


Figure 23: Period of development of the collections (including museum collections)

The oldest university collections, belonging to the 1500s and 1600s, established during the European cultural climate of fervent development of natural sciences, brought about the spread of botanical gardens and collections of natural sciences²⁷. The very first ones belong to the Universities of Pisa and Bologna.

The oldest extant collection is the one of the *Orto Botanico* of Pisa, the first university botanical garden in the world. It was founded as a "Garden of Simples" (a medicinal or herbal garden) in 1543 by the famous doctor and botanist

Imola 1981, pp.283-310.

²⁷ For further in-depth analysis see Maccagni C., Le raccolte e i musei di storia naturale e gli orti botanici come istituzioni alternative e complementari rispetto alla cultura delle università e delle accademie in Bohem L., Raimondi E., Università, accademie e società scientifiche in Italia e Germania dal Cinquecento al Settecento,

Luca Ghini, due to Grand Duke Cosimo I de' Medici's support and foresight. Pisa's Botanical Garden was especially created to allow medical students of the University to study actual living herbs²⁸. Luca Ghini's idea of establishing just such a botanical garden was not supported when he first thought of it while teaching at the University of Bologna. So, when Cosimo I asked him to move to Pisa, Luca Ghini accepted as the Grand Duke was very eager to invest in his project²⁹. Its educational function was not the only one: the plaque, which was hung in 1595 on the monumental entrance, specifies that the doors of the Garden are open not only to the students, but also to "whoever wishes to enter in"³⁰ and this was confirmed by numerous travellers who visited it³¹. Between 1590 and 1595, under Grand Duke Ferdinand I, the prefect³² of the Garden of Simples Joseph Goedenhuize (known as Giuseppe Casabona

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 $^{^{28}}$ Letter from Luca Ghini to Pier Francesco Riccio, July 4^{th} , 1545, in Tomasi Tongiorgi L. and Tosi A.'s transcription in *Appendice I – Il Giardino dei Semplici nelle fonti antiche* in *Giardino dei Semplici – Garden of Simples*, Pisa 2002, p. 211

²⁹ Garbari F., I "Prefetti" del Giardino, dalle origini in Giardino dei Semplici – Garden of Simples, Pisa 2002, pp 11-46

³⁰ "Ferdinandus Medices Magnus Dux Etruriae III Ut adoloscentes studiosi paratum habeant locum in quo fructicum herbarumque naturam et facultates pernoscant, hortus instruendos curavit, domumque sua pecunia, emptam et scite instauratam adiunxit, per quam eos ingredi cupientibus aditum patere voluit, anno salutis 1595", transcribed in Bedini G., Pistolesi G., L'Orto botanico in Arte e Scienza nei Musei dell'Università di Pisa, Pisa 2002, pp 27-70.

 $^{^{31}}$ Transcriptions of the most relevant documents are in Tomasi Tongiorgi L. and Tosi A. in *Appendice I – Il Giardino dei Semplici nelle fonti antiche* in *Giardino dei Semplici – Garden of Simples*, Pisa 2002, pp. 211-234

 $^{^{\}rm 32}$ The term "prefect" used to mean "manager of the Garden".

or Benincasa in Italy) gathered the core elements of the natural collection (consisting of minerals, petrified shells and corals) which were then shown in the purpose-built Gallery. The story of the Gallery is an exemplary model for the evolution of many similar university collections. Initially it presented itself as a Wunderkammern which displays natural products (naturalia) next to unusual objects (curiosa) and artefacts of different eras and origins (artificialia)33. The habit of installing eclectic collections of finds in these botanical gardens can also be found in other gardens established in Europe a few decades after Pisa's one³⁴: they too followed the fashion of the cabinets of curiosities, but above all they were a fundamental educational means. The direct links to the garden were the herbarium, the "dried garden", and painted images of live Everything was carefully ordered and preserved inside the gallery35. The practice of drying plants in order to observe them throughout the year and show them to students was started in Pisa, once again because of Luca Ghini's intuition³⁶.

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³³ Tongiorgi Tomasi L., Arte e natura nel Giardino dei Semplici: dalle origini fino all'età medicea in Giardino dei Semplici – Garden of Simples, Pisa 2002, pp. 47-81.

³⁴ Tongiorgi Tomasi L., "Extra" e "Intus": progettualità degli orti botanici e collezionismo eclettico tra il XVI e XVII secolo in Il giardino come labirinto della storia, Siracusa 1984.

³⁵ Amadei L., Il Museo Botanico in Arte e Scienza nei Musei dell'Università di Pisa, Pisa 2002, pp 71-96

³⁶ Garbari F., Nasce presso l'orto pisano, nel XVI secolo, la botanica moderna in Livorno e Pisa: due città e un territorio nella politica dei Medici, Pisa 1980, p. 528.

Like the majority of eclectic collections of the 1500s and 1600s³⁷, the Pisan collection contained several manuscripts, which were useful in the understanding of the finds shown in the gallery³⁸. What is left of the collection is now displayed at the *Museo di Storia Naturale e del Territorio di Calci* and at the *Orto BOtanico*, while some paintings still decorate the walls of the Dean's palace.

In the end, Bologna established its botanical garden soon after Pisa in 1568, after the City Council had approved the proposal of Luca Ghini's student (and eventually professor) Ulisse Aldrovandi. Aldrovandi is universally known as the "emblematic representative of that scientific which marked collecting $[\ldots]$ the passage from encyclopaedism, as mere scholarship, to modern science³⁹". He also established one of the first natural history museums, where samples of botany, zoology and mineralogy were kept, and classified. According to Aldrovandi's organised estimation, the samples included 18,000 "diversities of natural

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³⁷ Tongiorgi Tomasi L., Collezioni e immagini naturalistiche in Toscana dal cinque al settecento. La nascita dei musei scientifici e il rapporto arte-scienza, 1988, pp. 31-67.

³⁸ Tongiorgi Tomasi L., Arte e natura nel Giardino dei Semplici: dalle origini fino all'età medicea in Giardino dei Semplici – Garden of Simples, Pisa 2002, pp 47-81.

³⁹ "...rappresentante emblematico di quel collezionismo scientifico, che ... segnò il passaggio dall'enciclopedismo, come mera erudizione, alla scienza modernamente intesa", Tugnoli Pattaro S., Filosofia e storia della natura in Ulisse Aldovrandi in Simili R., Ed., Il teatro della natura di Ulisse Aldovrandi, Bologna 2001, p. 9.

things" and 7,000 "dried plants" ⁴⁰. Some items of the collection can be seen in Bologna's university museums.

In 1736, doctor Antonio Vallisneri's son from Lucca, professor in Padua since 1700, donated his father's collection to the University of Padua, which contained natural and archaeological finds, anatomical preparations, medical and scientific tools⁴¹. The antiquary section was separated in 1805 in order to constitute the Cabinet of Antiquities⁴². Collections of archaeological-artistic-literary items only began to be disseminated in the second half of the 20th century.

By the end of the 1800s, collections of medical-pharmaceutical items had already begun to flourish. The *Curriculum* had been present in medicine since the origin of Italian universities, where it was linked to logic and the arts up to the 13th century. It followed the tradition of the so-called

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⁴⁰ "Diversità di cose naturali" and "piante essiccate", Olmi G., *Il collezionismo scientifico* in Simili R., Ed., Il teatro della natura di Ulisse Aldovrandi, Bologna 2001, pp. 20-50 e Olmi G., Tongiorgi Tomasi L., *De piscibus. La bottega artistica di Ulisse Aldovrandi e l'immagine naturalistica*, Rome 1993, pp. 7-31.

⁴¹ Rippa Bonati M., I Vallisneri, padre e figlio, e l'origine del collezionismo universitario patavino in Gregolin C., Ed., I musei, le collezioni scientifiche e le sezioni antiche delle biblioteche, Padua 1996, pp.15-17 and Rippa Bonati M., Il Museo Vallisneri, le collezioni storiche della Facoltà di Medicina e la sezione antica della Biblioteca medica Pinali in Gregolin C., I musei, le collezioni scientifiche e le sezioni antiche delle biblioteche, Padua 1996, pp. 19-32.

⁴² Peruzzi G., Quaja P., *I musei*, *le collezioni e le biblioteche antiche dell'Università di Padova*, Annali di Storia delle Università italiane - Volume 6 (2002); Gorini G., Menegazzi A., *Il Museo di Scienze Archeologiche e d'Arte in Gregolin C.*, Ed., I musei, le collezioni scientifiche e le sezioni antiche delle biblioteche, Padova 1996, pagg. 49-59

rule of the "Articella", which was instituted at the old medical school (10th -13th centuries) in Salerno. Teaching the Curriculum was based on reading, commenting on, and debating (disputatio) influential texts, such as the previously quoted "Articella", the "Anathomia Mondini" and the Almansoris". From the beginning of the 14th century, surgery distinguished itself as an autonomous discipline⁴³. Medical failures, which were dramatically evident in pestilences and pox plagues, brought the educational method (as was founded on Aristotelian philosophy mediated by Arabic influences) into question. At the beginning of the 16th century, the authoritative medieval sources were set aside in favour of the original Greek sources, which were directly translated by the Hippocrates, famous doctors Galen, Theophrastus, Dioscorides and Aristotle. At the same time botany, necessary for the identification of medical plants, and anatomy, both empirical and theoretical, began to acquire more value. Consequently botanical gardens and public dissections performed by lecturer-doctors spread through Europe. At the end of the 17th century, reading and commenting were obsolete methods and were progressively superseded by experimental research in biology, physiology and embryology. As a necessary aid to the new teaching method, universities began to equip themselves with laboratories, extensive

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⁴³ Crisciani C., Curricula e contenuti dell'insegnamento: la medicina dalla origini al secolo XV in Brizzi G.P., Del Negro P., Romeno A., Ed., Storia delle Università italiane, Messina 2007, vol. 2 pp. 183-203.

technical libraries and anatomical museums⁴⁴. The oldest museum in this field is the Luigi Cattanei Anatomical Wax Museum (*Museo delle Cere Anatomiche "Luigi Cattanei"*) in Bologna. The current museum was re-organized in 2002, its origins deriving from the anatomical laboratory of the Science Institute. The Institute, founded in 1711 by Luigi Ferdinando Marsigli, was initially provided with a chamber containing dried preparations for exercises which later, to avoid desiccation of the specimens, were replaced with wax anatomical models made by Ercole Lelli, the founder of this technique. In 1803, Professor Alessandro Moreschi removed the wax modelling lab from the Anatomical laboratory and historicized its collection⁴⁵.

In the second half of the 1800s collections widened their fields, gathering social-historical, chemical-physical, mathematical and economical items. The first social-historical collection is the *Museo Storico della Didattica "Mauro Laeng"* (History of Education Museum). It was established as an educational museum in 1873 by Minister Ruggero Bonghi and it preserved demonstrational collections, pedagogical material,

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⁴⁴ Mugnai Carrara D., Curricula e contenuti dell'insegnamento: la medicina dal XVI secolo al 1800 in Brizzi G.P., Del Negro P., Romeno A., Ed., Storia delle Università italiane, Messina 2007, vol. 2, pp. 205-227 e Mattone A., Olivari T., Le istituzioni del sapere universitario: teatri anatomici e orti botanici nell'età moderna in Brizzi G.P., Del Negro P., Romeno A., Ed., Storia delle Università italiane, Messina 2007, vol. 2, pp. 437-495.

⁴⁵ Ruggeri A., Ruggeri F., *Bologna. Museo delle Cere dell'Istituto di Anatomia Umana* in Società Italiana di Anatomia, Guida ai Musei Italiani di Anatomia, pp. 7-28.

books and magazines, aiming to teach and to keep teaching current⁴⁶.

Physical and natural disciplines were still included in philosophical teaching in the 16th century, taught according to Aristotle's model, which was first abandoned outside the universities (inside, professors didn't have to develop research). Teaching physics and chemistry as autonomous disciplines dates back to the first half of the 18th century. In the Restoration, nevertheless, due to lack of funds, the number of teaching posts of scientific subjects decreased drastically. A renewed impetus to develop this field came with the Summit of Italian Scientists (Riunioni degli Scienziati Italiani), which took place from 1839 to 1847 and which fostered the circulation of ideas and the diffusion of Humboldt's method, based on research and integration with education⁴⁷. In the same period, in Bologna, several implements, which belonged to the Science institute's Physics Rooms and the Science Academy's Physics Laboratory, were categorised according to a historical system. The first school was founded by Count Luigi Ferdinando Marsigli between 1711 and 1715 and the second in 1745. At the beginning of the 1900s, the collection which had grown with the passage of time, was displayed at the new Institute of Physics. It grew further until it became the

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⁴⁶ Laeng M., *Il Museo storico della didattica presso la III Università di Roma* in Annali di Storia delle Università italiane, vol. 2 (1998).

⁴⁷ Pepe L., *Le discipline fisiche, matematiche e naturali e i loro insegnanti nelle università italiane dal XVII al XIX secolo* in Brizzi G.P., Del Negro P., Romeno A., Ed., *Storia delle Università italiane*, Messina 2007, vol. 2 pp. 143-182.

current *Museo di Fisica* (Museum of Physics), officially recognised in 1982⁴⁸.

From the end of the 1800s, Professor Vittorio Vallecchia from La Sapienza University in Rome began collecting merchandise and natural product samples, which were useful in studying and teaching the progress of industries and trade, and which became a true and proper *Museo di Merceologia* (Museum of the Study of Commodities) in 1906⁴⁹.

Collections in the technical-engineering field were created in the first half of the 20th century. The first is probably the educational collection of ship models, nautical tools and ship parts of the Parthenope University of Naples from the collections inherited from the Navy Arsenal and the School of Naval Cadets.

Figure 24 depicts the period in which different kinds of collections were established.

⁴⁸ VVAA, Sistema museale d'Ateneo, Guida ai 13 musei universitari di Bologna, Bologna 2004, pagg. 38-41.

⁴⁹ Barbanera M., Venafro I., Ed., *I musei dell'Università La Sapienza*, Roma 1993, pp 217-229.

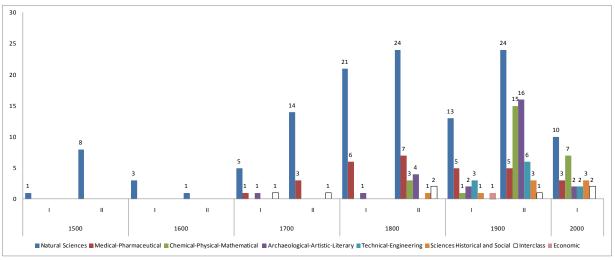


Figure 24: Period of establishment of collections(including museum collections) by field

From the second half of the 1800s the first collections of implements were created and they continued to develop in the second half of the 20th century (*Fig.* 25).

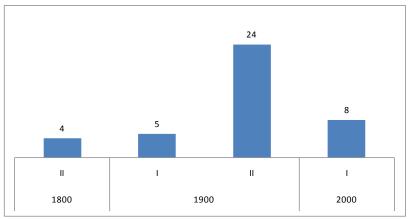


Figure 25: Period of establishment of collections (including museum collections) of implements

The organization of collections into museums is not the only transformation that has occurred to the museum heritage. The majority of museums in fact have had a very complicated story: not only have they changed name, location, set-up, and been closed and re-opened, but they have also been combined or split up in order to create new structures, sometimes more than once. At least 23% (46) of today's museums, established since 1700s, derive from older museums which were constituted since 1500s but above all in 1700s and 1800s (*Fig. 26, 27 and 28*).

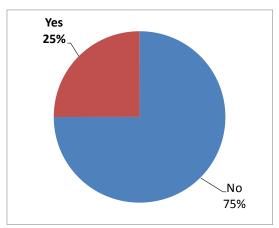


Figure 26: Percentage of today's museums which derive from pre-existing ones

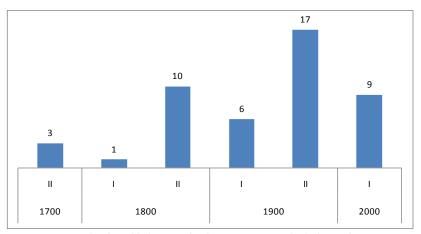


Figure 27: Periods of establishment of today's museums which derive from pre-existing museums

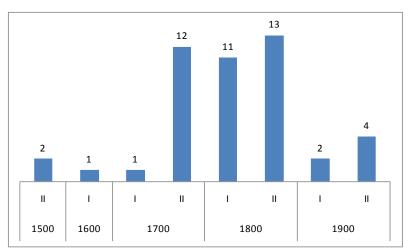


Figure 28: Periods of establishment of previous museums

Sometimes there are up to two periods of dividing up of museums and, in some cases, previously divided collections are put together again after centuries.

An example of this phenomenon, mainly pertaining museums of the natural sciences field, we can mention the *Museo di Zoologia e Anatomia Comparata* (Museum of Zoology and Comparative Anatomy), *Museo di Paleontologia* (Museum of Paleontology) and *Museo Gemma 1786*. *Museo Mineralogico e Geologico Estense* (Gemma 1786. The Este Mineralogy and Geology Museum) of the *Università di Modena e Reggio Emilia*, that derive from the *Museo di Storia Naturale* ⁵⁰ (Natural History

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⁵⁰ Ansaloni I., Pederzoli A., Guidetti R., Baraldi L., *Museo di zoologia e anatomia comparata* in Russo A., Corradini E., Ed., Musei universitari modenesi, Bologna 2008, pp. 149-177; Bertacchini M., *Museo minrelaogico e geologico estense. Gemma 1786* in Russo A., Corradini E., Ed., *Musei universitari modenesi*, Bologna 2008, pp.73-92; Vescogni A., Serventi P., *Il Museo di paleontologia* in Russo A., Corradini E., Ed., *Musei universitari modenesi*, Bologna 2008, pp. 123-148.

Museum). The Natural History Museum had been founded in 1786 together with the homonymous teaching post, thanks to Duke Francesco III d'Este, who had started the collection of finds in order to "form a home museum" in 1776. In 1877 it was divided into the two museums: Zoology and Comparative Anatomy, and Mineralogy, Geology and Paleontology. The collections of the latter were divided further on in 1926 into the Institute of Mineralogy and Geology, which were again rejoined in 1993. In 2005 the new museum was named "Gemma 1786", beginning a new project of value enhancement and diffusion of culture. The Paleontology Museum split from the Geology one in 1961.

Table 10 reports the list of today's museums which have been substantially changed.

University	Museum
Bari	Museo orto botanico
Bologna	Museo delle Cere anatomiche "Luigi Cattanei"
Bologna	Museo di Fisica
Bologna	Museo di Mineralogia
Bologna	Museo di Zoologia
Bologna	Museo Geologico «Giovanni Capellini»
Cagliari	Museo di Cere Anatomiche "Clemente Susini"
Cagliari	Museo di Mineralogia "Leonardo de Prunner"
Cagliari	Museo di Zoologia
Calabria	Museo di Storia Naturale della Calabria ed Orto Botanico
Firenze	Museo di storia naturale
Genova	Centro universitario di servizi giardini botanici Hanbury
Milano	Museo astronomico - Orto botanico di Brera
Modena R.E.	Gemma 1786. Museo Mineralogico e Geologico Estense

Modena R.E.	Museo di Paleontologia
Modena R.E.	Museo di Zoologia ed Anatomia Comparata
Modena R.E.	Orto Botanico
Napoli F. II	CMSNF - Museo di Antropologia
Napoli F.II	MUSA - CHIUSO - Museo Botanico "Orazio Comes"
Napoli F. II	Museo di Anatomia Veterinaria
Padua	Museo di Antropologia
Padua	Museo di Scienze Archeologiche e d'Arte
Palermo	Museo di Mineralogia
Palermo	Museo Geologico "Gaetano Giorgio Gemmellaro"
Parma	Museo del Dipartimento di Anatomia Umana,
	Farmacologia e Scienze medico-forensi
Parma	Museo di mineralogia
Parma	Museo di Storia Naturale
Parma	Museo Paleontologico Parmense
Parma	Orto botanico
Pavia	Museo di Mineralogia
Pavia	Museo di Storia Naturale
Pisa	Museo botanico
Pisa	Museo della grafica
Pisa	Museo di anatomia veterinaria
Pisa	Museo di storia naturale e del territorio di Calci
Roma S.	Museo di Anatomia Comparata
Roma S.	Museo di Fisica
Roma S.	Museo di Geologia
Roma S.	Museo di Paleontologia
Roma S.	Museo di Zoologia
Roma Tre	Museo storico della didattica "Mauro Laeng"
Sassari	Museo geologico mineralogico "Aurelio Serra"

Sassari	IN FASE DI ATTIVAZIONE - Museo scientifico
Seconda	
Università	
Napoli	Museo di anatomia
Siena	Museo Botanico: Orto Botanico e Herbarium
Trieste	Museo di Mineralogia e Petrografia

Table 10: Museums which derive from pre-existing museums

Recently some universities have enriched their museum heritage by including both sites and monuments, mostly situated in university spaces which have particular historical significance, such as Chiaromonte Steri Palace in Palermo, the University Palace in Pavia and the University monumental network of the Tuscia area.

1.2.3 The Most Recent Debate

At the end of the 70s, in Italy, there was a renewed interest in scientific and technological museums, with positive consequences for university museums, which were, as has been seen, mostly scientific and technical in nature. Typically, scientific museums would begin initiatives, the State afterwards supporting those initiatives and then becoming their promoter, through appointing commissions, census-taking and the passing of laws.

In 1975 the first Congress of the National Association of Scientific Museums took place in Florence – ANMS⁵¹ was established in 1972 in order to "protect the national heritage of scientific museology, [...] keep public interest for scientific

⁵¹ ANMS, Musei scientifici, orti botanici, giardini zoologici, acquari: loro compiti nel momento attuale: atti del 1. congresso dell'ANMS: Firenze, 29-30 maggio 1975I, Firenze 1976.

museums alive by enhancing their educational and popular functions; to ensure that cultural tasks of technical and scientific staff of those institutions are taken into consideration; [...] to promote mutual understanding among institutions in order to facilitate exchange of experience and material, and also to create new common rules and maintain the connection with similar Italian and foreign associations" ⁵².

In 1977, after a request which had arisen from an ANMS congress in 1975, the Public Education Minister appointed a commission to study the problems of university scientific museums and botanical gardens. The commission, amongst other things, gathered information through questionnaires to universities⁵³. Results were published in 1986 in the book "Un'Indagine sui Musei Scientifici ed Orti Botanici Universitari Italiani" (An Enquiry on University Scientific Museums and Botanical Gardens) by da Cipriani C., Merola A. e Sentinelli L., who took part in the Commission.

Two very important initiatives, which date back to 1991, favoured the development of university museums and began to awaken society to their importance: the passing of Law no. 113

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^{52 &}quot;[...] tutelare il patrimonio nazionale di museologia scientifica, [...] mantenere desto l'interesse del pubblico per i musei scientifici, potenziandone le funzioni educativa e divulgativa; vigilare perché i compiti culturali del personale scientifico e tecnico di tali istituzioni siano tenuti nella considerazione dovuta; [...] promuovere intese fra le istituzioni per facilitare scambi di esperienze e di materiale, nonché per la formulazione di normative comuni e mantenere il collegamento con Associazioni similari italiane ed estere", ANMS's Statute (Approved in 21.03.1974, last update 17.11.2010), art. 2.
53 Cipriani C., Merola A., Sentinelli L., *Un'indagine sui musei scientifici ed orti botanici universitari italiani*, Museologia Scientifica, vol. III, fasc. 3-4, 1986, pp 251-252

on March 28 1991 (113/1991), "Initiatives to diffuse scientific culture"; and the creation of the Scientific and Technologic Culture Week.

Law 113/1991 was created in order to "promote and favour the diffusion of technical-scientific culture, as in mathematics, physics and natural science culture and applied sciences culture; to contribute to the protection and value enhancement of the massive technical-scientific patrimony of historical interest preserved in Italy⁵⁴". University museums are explicitly mentioned in the second clause of the law, in which they define the "strategic objective of constituting an organic national system of museums, scientific and historical-scientific centres", with "the adoption of the necessary means useful to allow university scientific museums and botanical gardens to diffuse knowledge in a straightforward way". In detail, what the Minister of Universities and Research had planned was to reorganize and expand the institutions involved in diffusing technical-scientific culture and favour the creation of new institutions. They wanted to promote the recognition of historical, bibliographical, scientific and technical documentary testimonies and boost education and updating for museum managements and scientific centres. Their aim was also to invest in the strengthening of educational, popular communicational activities, especially for schools, but also for

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⁵⁴ "[...] promuovere e favorire la diffusione della cultura tecnico-scientifica, intesa come cultura delle scienze matematiche, fisiche e naturali e come cultura delle tecniche derivate, e di contribuire alla tutela e alla valorizzazione dell'imponente patrimonio tecnico-scientifico di interesse storico conservato in Italia", Law 113/1991 art. 1, clause 1.

the general public⁵⁵. The law scheduled the publication of an application announcement to apply for yearly funding for activities which were connected with the aims of the law⁵⁶. The law also instituted a technical-scientific committee to counsel and co-ordinate which was presided over by the Minister of Universities and Research and made up of five members appointed by the same Minister. The members were: a representative of the CRUI (*Conferenza dei rettori delle università italiane*)⁵⁷; a representative of the Assembly of Science and Technology; a representative of the National Council of Research; a representative of the Ministry of Education; and a representative of the Ministry of Arts and Culture. All of them were experts in the dissemination of scientific culture, in particular publishing, communication and education⁵⁸.

In 2000, law n. 6 of January 6, modified law 113/1991, maintaining however, the same goals, the activity of the technical-scientific committee, and the yearly application announcement for funding.

Since 1991, the Scientific and Technological Week has taken place every year, aiming to "activate every skill and energy of the Country in order to favour the diffusion of a solid and critical technical-scientific culture", by stimulating in particular "the opening of efficient channels of communication and exchange between the civil society and the research

⁵⁵ Law 113/1991 art. 1, clause 1 a-f.

 $^{^{56}}$ Law 113/1991 art. 2 ter.

⁵⁷ Conference of Deans of Italian Universities.

⁵⁸ Law 113/1991 art. 2-quarter.

system"⁵⁹. Hundreds of events such as exhibitions, conferences, seminars, meetings, guided tours, theatre and multimedia shows, concerts and film festivals are organized all over the country. The various initiatives are planned by institutions, associations and companies which operate in the cultural field and are coordinated by the MIUR. The Ministry of Education, University and Research chooses a theme for the event every year. The Scientific and Technological Week is an efficient means of disseminating knowledge that forms part of the university museum heritage.

In 1991 Daniela Primicerio published "L'Italia dei Musei. Indagine su un Patrimonio Sommerso60", being inspired by the enquiry into Italian cultural heritage which was led by the Ministry of Economic Affairs' Nucleo di Valutazione degli Investimenti Pubblici (a team evaluating public investment), in which she had taken part. As part of the enquiry, the team carried out censuses and analyses of every institute considered to be a museum in local, regional and national surveys61, in which 194 university museums are identifiable and distinct from State ones62.

In 1999 an important impetus was given by the CRUI who activated a Commission for museums, archives and centres

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⁵⁹ "Mobilitare tutte le competenze e le energie del Paese per favorire la più capillare diffusione di una solida e critica cultura tecnico-scientifica [...] l'apertura di efficaci canali di comunicazione e di scambio tra l'universo della società civile, da un lato, e l'articolato complesso del Sistema ricerca, dall'altro", Memorandum from the Minister for the XXII Week of Scientific Culture, www.istruzione.it/web/ricerca/diffusione.

 $^{^{\}rm 60}$ The Italy of Museums. Study of a Hidden Heritage.

⁶¹ Primicerio D., L'Italia dei Musei, Milano 1991, pp 1-2.

⁶² Primicerio D., L'Italia dei Musei, Milano 1991, pp 7, 22.

for university collection of historical-scientific interest, which was constituted by delegates of the deans of different universities. Their objectives⁶³ referred to the integration with the National System of Museums and Scientific centres which was proposed in law no. 6/200064. The Commission promoted debate on museology in universities, by favouring the exchange of ideas and information through meetings and the diffusion of material, through a portal on museums and university archives. In the Report of year 2000, the Commission dealt with the question of the role of university museums, by advising on some possible goals and characteristics of each museum and museum system. The Commission, after research carried out by thematic work groups, eventually formulated a series of CRUI proposals for the Ministry and the universities. The proposals were: the recognition of the importance of museum heritage in university statutes; the constitution of museum systems inside universities; the establishment of a national network of university museum systems; national coordination and planning managed either by the CRUI or by a special agency; the creation of services to support network activities such as the Centro interuniversitario (an inter-university centre set up to restore scientific implements, a national online database of the elements of the museum heritage and an educational laboratory); systematic census of the scientific collections of technological finds and and bibliographical historical-scientific sources of interest; experimentation of an online portal to enhance the value of the

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⁶³ *Musei storico-scientifici universitari: realtà e prospettive,* Report of the CRUI Commission musei, archivi e centri per le collezioni universitarie di interesse storico-scientifico, Rome, June 13 2000, p 3.

⁶⁴ Art. 1, clause 2.

heritage; re-organization and education of university staff involved in museum activities; and exchange of material between different universities⁶⁵.

The first phase of work of the Commission lasted until 2002, when they compiled their last minutes⁶⁶. On June 5, 2002, the group working on regulations presented a proposal about the constitution of a National Institute of University Museum Systems which was approved by the Commission. The proposal became law in locations assigned by the CRUI⁶⁷. The portal on university museums was created, but only stayed on-line for a few years⁶⁸.

Even if several measures of the Commission didn't achieve the expected results, in part because of interruption of works, it was responsible for the creation of the university museum systems (*Sistemi Museali*). This is a central coordination unit of the museum heritage which is currently in 19 universities. The national debate on museum systems arose in the second half of the 1970s in Italy⁶⁹. The first university museum system was established in Pisa in 1982, probably due to a particularly advanced regional policy⁷⁰. In the 90s, at least⁷¹ five more

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⁶⁵ Musei storico-scientifici universitari: realtà e prospettive, Relazione della Commissione CRUI musei, archivi e centri per le collezioni universitarie di interesse storico-scientifico, Rome, June 13, 2000, pp 13-23.

⁶⁶ Verbale della Commissione CRUI del 5 giugno 2002.

 $^{^{67}}$ Verbale della Commissione CRUI del 5 giugno 2002 and Attachment 2.

⁶⁸ The state of development of works is traceable in the reports of the Commission, in particular in *Verbale del 5 giugno* 2002 *Allegato* 3.

⁶⁹ For further analysis Lamonica D., Pellegrini E., Ed., Regioni e musei: politiche per i sistemi museali dagli anni Settanta a oggi. Atti del convegno Scuola normale superiore Pisa, 4 dicembre 2007, Pavona 2009.

⁷⁰ Tuscany was one of the first regions to be interested in the potential of the *Sistemi Museali* and to use this expression a regolative act, Law 89/1980. The

universities provided central units of coordination and at least 10 more (63%) have developed this model since 2000 (*Fig.* 29).

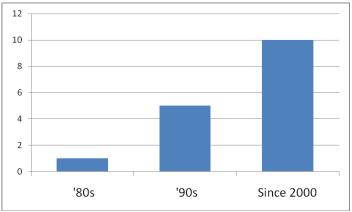


Figure 29: Period of establishment of museum systems (sistemi museali)

The activity of the Commission started again in 2012.

1.2.4 The Current Re-organization

On December 30, 2010, law no.240 was passed on "Regulations about organization of universities, academic staff and enrolment, as well as a mandate to the Government to empower the quality

purposes of this law were already mentioned in a proposal of the Giunta Regionale in 1976, n. 112, "Norme in materia di musei di enti locali e di interesse locale, di beni culturali e ambientali. Delega alle funzioni amministrative agli enti locali". For further in-depth analysis Borgioli C., Pellegrini E., Dossier sui sistemi museali in Toscana, 2007, http://sistemimuseali.sns.it.

⁷¹ We don't know the date of foundation of the central units of coordination of three universities: Bologna, Cagliari, Napoli SUN.

and efficiency of the university system^{72"}, the so-called *Riforma Gelmini*. The law doesn't specifically cite university museums but, since it modifies the internal articulation of universities, it has also brought about their re-organization: in most cases faculties to which they were assigned were suppressed and departments were radically changed⁷³. In many cases they were simply moved from the old to the new structure (faculty or department), in other cases, they actually planned the general management of the university museum heritage by creating new coordination structures and redistributing the staff⁷⁴. Many universities are still re-organizing the arrangement of their museums.

1.2.5 Final Considerations

What we consider Italian university museum heritage today has been evolving in different ways since the first universities were founded, as an essential part of the process of research and teaching. The only exception is monuments which were recently included as historical symbols of identity. This makes describing the overall history difficult, unless it's done following general lines of development.

The majority of collections were established as a selection of study materials, others have been created recently to be able to consider them from a historical point of view and to present the evolution of investigation and education in specific fields. The

⁷² "Norme in materia di organizzazione delle università, di personale accademico e reclutamento, nonché delega al Governo per incentivare la qualità e l'efficienza del sistema universitario".

⁷³ Law n. 240 December 30, 2010, art. 2 clause 2.

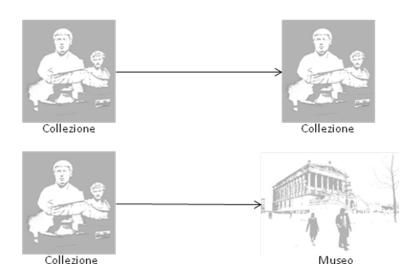
⁷⁴ Data emerging in this current research.

latter is the case of numerous collections of scientific implements used in labs or machines and prototypes from research projects. Some of these collections are merely historical archives by now, but many of them are still used as a scientific support.

The oldest collections, belonging to the 1500s and 1600s, were installed during a period of fervent development of natural sciences in Europe, which brought about the spreading of botanical gardens and natural science collections. They were founded by the most illustrious and innovative scholars of their times, through the support of the political power of the Italian states, of their rulers and their city councils who recognised their value, not only as an expression of culture, but as a means of propaganda.

In the first half of the 1700s, the first medical-pharmaceutical and archaeological-artistic-literary collections were created. In the second half of the 1800s the social-historical and chemical-physical-mathematical collections originated. The first and only collection of economical items was created in the first half of the 1900s, as well as collections of technical-engineering items.

Some museums were established as they were, but they later changed name, structure and location. Botanical gardens are a good example of this. Some other museums derive from the re-organization of pre-existing collections, sometimes including those from other museums, which were split or joined to make new institutes (*Fig.* 30).



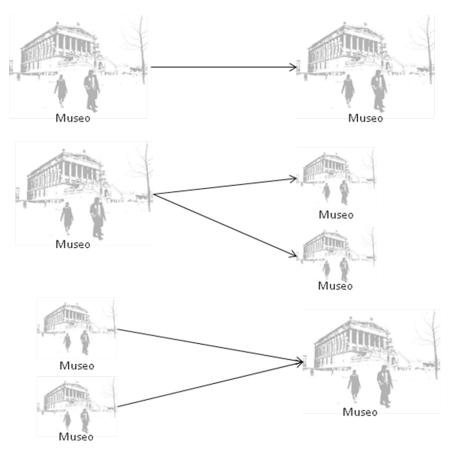


Figure 30: Process of creation and transformation of museums and collections

This continual process of creation and transformation, a testament to the active nature of this field, is generally influenced by politics and culture both inside and outside universities.

Since the end of the 1970s there has been a trend towards the development of university museums in areas of more general national interest involving scientific and technological museums. The initiatives increased, organized by museums themselves, but also by the State, which became their promoter, through appointing commissions, census-taking and legal declarations.

In 1999 a further input was given by CRUI which activated a Commission for museums, archives and centres for university collections of historical-scientific interest; it promoted the debate on museology in universities by favouring the exchange of ideas and information and coordinating mutual activities. The Commission also established the current university *Sistemi Museali*.

Even now the university museum patrimony is being reorganized, after the passing of the so-called *Riforma Gelmini* law, which brought about a radical change in the internal articulation of museums.

Chapter 2.1

Introduction: Value of the Museum Heritage of European Universities

The research is based on the assumption and belief that the museum heritage of universities is invaluable to the universities and to the local and global community. Many sources and personal accounts could be cited, but the most authoritative and complete is the "Recommendation of the Committee of Ministers of the Council of Europe to member states on the governance and management of university heritage". This chapter describes the document, which contains numerous points of reflection on topics encountered during my research.

2.1.1 The Recommendation of the Committee of Ministers of the Council of Europe to Member States on the Governance and Management of University Heritage

On 7 December 2005 the Committee of Ministers of the Council of Europe met to draw up a document⁷⁵ addressed to the governments of member states containing recommendations for

⁷⁵ Council of Europe - Committee of Ministers, *Recommendation Rec*(2005)13 of the Committee of Ministers to member states on the of university heritage, adopted on 7 December 2005 at the 950th meeting of the Ministers' Deputies.

the drafting of guidelines and the dissemination of good practice relating to the governance and management of European university heritage. The university heritage, defined as "all tangible and intangible heritage related to higher education institutions, bodies and systems as well as to the academic community of scholars and students, and the social and cultural environment of which this heritage is a part", logically includes the museum heritage.

This act was created with the explicit intention of filling a gap in the legislation of cultural heritage, taking into account the particular situation of university heritage, the responsibility of which is shared between governments and other national, regional, local and university authorities, and having no specific regulatory point of reference.

The value of this heritage is stated in the premises of the recommendations and results with the fact that:

the heritage of European universities encompasses elements of key importance to higher education such as academic and institutional autonomy, the ability to adapt and renew while preserving core values of independent scholarship, and freedom of teaching and learning, and that these are fully compatible with the values of the Council of Europe; ...university autonomy is an integral part the heritage European of of universities and one of the key principles of higher education in Europe; [...] this very university autonomy has confirmed the uniqueness of university heritage. [...] The heritage of European universities concerns individual higher education institutions as well as the academic community of scholars and students collectively, and European society at large [...] [because] the European dimension is an integral part of university heritage, and vice versa [and because] universities are, by their history, their heritage and their current activities, European and international institutions par excellence.On this basis, the Committee of Ministers lay down the recommendations for heritage policies, legislative institutional framework, heritage governance and management at higher education institutions, finance, access, professionalisation, training, research, awareness raising, relations with the local community, international cooperation.

Through them, universities and all public authorities are invited to do everything possible to protect and enhance the value of university heritage and increase the awareness of its value not only within the university but also in the local, national and international communities. These entities are therefore requested to pursue these goals through specific regulation and policies, with the availability of adequate financial and professional resources and to take advantage of the mutual relationship between teaching, research, the local community and international cooperation.

Given the essential nature of each recommendation and their relevance in the following chapters, Appendix O contains the original text.

2.1.2 Final Considerations

The heritage, both tangible and intangible, of European universities, logically including museum heritage, is invaluable not only for the university community but also for local, national and international communities. This value is derived from the reciprocal relationship between the fundamental values of European universities (autonomy, development, freedom of teaching and learning) and the uniqueness of their heritage, and is closely linked to research and teaching.

The Committee of Ministers of the Council of Europe has formalized this concept through a document providing a specific regulatory framework for the governance and management of the heritage of European universities. It contains the recommendations, addressed to governments, other public authorities and universities, for the protection and enhancement of the university heritage and for the growth, in the whole community, of the awareness of its value.

Every effort must be made to achieve this goal: through regulation and legislative tools; with the availability of adequate financial and professional resources, and taking mutual advantage of the relationship between teaching, research, the community and international cooperation.

Chapter 2.2

Museum Heritage in University Founding Documents

In this chapter we analyze the Statutes and General Regulations of the universities that have museum units to understand what their official position is towards museum heritage. The possible inclusion of this museum heritage in the founding documents of universities, in fact, assumes awareness and recognition of its value. At the end of this work it will be useful to compare what is stated and what is put into effect, and to identify any weaknesses in the processes of heritage management.

2.2.1 Methodology and sources

The data contained in this chapter comes from the Statutes and General Regulations of the universities. The relevant extracts for each university can be found in Appendix P.

2.2.2 Museum Heritage in University Statutes and General Regulations

Statutes and General Regulations are the founding documents of a university. 75% (27 out of 36) of the universities in this study that have museum units, mention their museum heritage in their Statutes and/or General Regulations. 13,8% (5 universities) mention it both in their Statutes and General Regulations; 55,5%

(20 universities) only in their Statutes⁷⁶; and 5,5% (2 Universities) only in their General Regulations. 69,4% (25 universities) include it in their Statutes, and 19,4% (7 universities) include it in their General Regulations (*Table 11 and Fig. 31*).

University	Museum in Statute	Museum in Regulation
Bari P.	Yes	No
Torino P.	Yes	No
Aquila	No	Yes
Bari	Yes	Yes
Bologna	Yes	No
Cagliari	Yes	No
Calabria	Yes	No
Camerino	Yes	No
Chieti-P.	Yes	Regulations not found ⁷⁷
Catania	No	Yes
Ferrara	No	Regulations not found
Firenze	Yes	Regulations not found
Genova	Yes	No
Messina	No	No
Milano	Yes	Yes
Molise	Yes	No
Modena R.E.	Yes	No
Napoli F. II	Yes	Regulations not found
Napoli Part.	No	No

 $^{^{76}\,6}$ of these 20 universities have not yet approved their General Regulations.

⁷⁷ The General Regulations are not available on the website, nor have they been provided by the offices contacted. Almost certainly they have not yet been approved.

Napoli SUN	No	No
Palermo	Yes	No
Padova	Yes	Yes
Perugia	Yes	No
Pisa	Yes	Yes
Parma	Yes	Yes
Pavia	Yes	No
RomaTre	No	No
Roma Sap.	Yes	Regulations not found
Roma TV	No	Regulations not found
Salento	Yes	No
Siena	Yes	Regulations not found
Sassari	No	Regulations not found
Torino	Yes	Regulations not found
Trieste	No	No
Tuscia	Yes	No
Urbino	No	No

Table 11: Museum heritage mentioned in the Statutes and General Regulations of the universities in the study

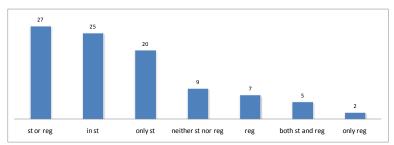


Figure 31: Museum heritage mentioned in Statutes and General Regulations of universities (general data)

Universities mention their heritage within their Statutes in different sections depending on the predominant content. Some of them state their aim in the "General Provisions"; in these cases they claim to be committed to protecting and enhancing the value of the heritage and briefly explain how. Other universities mention collections, museums, botanical gardens and museum systems in the section reserved for "Pedagocical and Research Structures" or "Other Structures", explicitly stating their aims and tasks (*Table 12*) or attaching them to specific regulations.

Section	Content	
General provisions	Universities claim to be committed to	
	protection and value enhancement of the	
	heritage including a brief explanation	
Pedagogical and Research	Aims and tasks of collections, museums,	
Structures, Other	botanical gardens and museum systems	
Structures		

Table 12: Museum heritage in university Statutes

Universities mention museums and museum systems in the General Regulations describing rules of activation, resources and operation. The *Università di Padova*⁷⁸ goes further adding a precise definition of "collection" and "museum" and defining "Requirements and services" for them.

2.2.3 Final Consideration

Statutes and General Regulations are the founding documents of universities. Mentioning their museum heritage in these

⁷⁸ Regolamento generale dell'Università di Padova, CAPO III - Regolamento-Ouadro dei Musei.

documents, universities reaffirm the value and the knowledge that this heritage provides. This is especially true when museum heritage is mentioned in the "General Provisions" section of the Statute, which contains the statements of intent. A similar conclusion has been reached by the CRUI Museum Commission, who in 2000 stated that "an essential element for every possible activity towards conservation and value enhancement of the historical memory of university research is the formal recognition of the importance of these activities. This recognition goes through the insertion of the role of collections, museums and museum techniques in the university Statute⁷⁹".

I would add to this that establishing precise organizational commitments within Statutes or General Regulations shows a real intention to implement these theoretical statements. The case of the *Università di Padova* is particularly interesting because it adds a specific reflection on the essence, requirements and services of museums and collections.

The fact that most of the universities mention museum heritage in at least one of the two legislative tools is positive, but 25% of universities still do not officially recognize its value.

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⁷⁹ *Musei storico-scientifici universitari: realtà e prospettive,* Relazione della Commissione Musei, Archivi e Centri per le Collezioni Universitarie di interesse storico-scientifico, Roma, 13 giugno 2000.

Chapter 2.3

Italian University Collections and Museums: Role, Value and Identity

What is the role of university museums and collections today? Is it different from that of other museums? I aim to answer these questions by analyzing: the missions and aims; the activities they carry out; the services they provide; who they engage with; and what kind of relations they have within and outside of the university.

First, however, I would suggest a new approach to the observation of the relationship between a museum and its value, one that can also be extended to collections. This approach avoids the concept of "production", related to organizations and the awareness of action, where instead the image of the museum is as one "generating" value, with an ever active role in its relationship with itself.

2.3.1 Methodology and Sources

This chapter results from the integration of arguments supported by different research modes: on the one hand, the definition of the concept of museum "generating" value, on the other hand, the analysis of some characteristics of Italian university museums: missions and aims, activities, services, to whom they are addressed, what kind of relations they have within and outside of the university. I have considered two research methods in this chapter: the first being literary sources about the value of museums; the second, the data collected from questionnaires sent directly to museum units.

The survey on museum units is based on those who responded to the questionnaire, which, however representative and meaningful, is only a sample. The choice is due to the fact that, as we have seen, not all museums have regulations and the information on websites is usually not comprehensive, systematic nor statistically significant. The questionnaire was sent to 250 museums and collections and was completed by144 of them: that is, 58% of the total and 60% of those accessible, specifically, 114 museums out of 196 (58% of the total) and 30 collections out of 54 (56% of total).

The complete data is contained in Appendices H, I, J, K.

2.3.2 Museums: Role, Value and Identity

The connection between the concepts of "role" and "value" of museums in particular, and cultural heritage in general, has been an object of reflection since the 70s. The economic crisis of that period pushed European states to review public spending, compelling institutions to justify their investments and demonstrate, as companies do, their productivity in terms of services and value. Museums, having to justify and defend their role, emphasized their social and economic worth with the support of new interdisciplinary studies aimed at defining their

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⁸⁰ The total also includes museums and collections that are not open to visitors or are not currently active.

value. With reference to this, we can distinguish two main lines of research: the analysis of the process of value production; and the value produced.

The first line of research derives from the reinterpretation of the "value chain" by Michael Porter, in his 1985 book "Competitive Advantage: Creating and Sustaining Superior Performance⁸¹", in the context of economic and business analysis. Porter begins with the assumption that the results of an organization depend on the correlation between all its components and activities, to detect the specific value produced by each of them and distinguish them, on this basis, as primary activities and support. The critical review of this model has been the starting point for a number of studies oriented towards the description and understanding of museum activities and processes⁸².

The second line of research comes from the article "Advocating the Value of Museums⁸³", presented by Carol Scott at the Intercom/ICOM in 2007, in which she writes of the results of a survey conducted in Australia, through interviews with operators, visitors, and non-visitors to museums. As a conclusion, Scott summarizes the type of value given to the museum by the participants, setting out the four categories

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⁸¹ Porter M., Competitive Advantage: Creating and Sustaining Superior Performance, New York 1985.

⁸² See, for example, Baia Curioni S., *Processi di produzione del valore nei musei* in Dragoni P., Montella M., Musei e valorizzazione dei Beni culturali. Atti della Commissione per la definizione dei livelli minimi di qualità delle attività di valorizzazione, Bologna 2010, pagg. 250-275 e Ferraro V., *Restyling museum role and activities: Europena best practices towards a new strategic fit* in Il capitale culturale, II (2011), pagg. 133-177 http://www.unimc.it/riviste/cap-cult.

⁸³ Scott C., Advocating the Value of Museums, Vienna 2007.

commonly cited in museology as "use value", "institutional", "intrinsic" and "instrumental", from the perspective of the individual and the community (*Table 13*).

	Instrumental	Intrinsic	Institutional	Use
Individuals	Learning (Self direct learning, Skill building)	 Cognitive (Discover, Enrichment, Excitement, Inspiration) Wellbeing (Joy, Pleasure) Empathetic (Perspective, Awareness) 	Citizenship	DirectIndirectNon use(Bequest, Option, Existence)
Communities	Community capacity (Community learning, Knowledge building, Leisure, Civic pride) Social cohesion (Engagement, Inclusion, Diversity) Economy (Tourism, Civic branding, Employement, Local multiplyer effect, Urban regeneration, Inspiration)	Historical (Archive) Social (Identity) Spiritual (Meaning) Symbolic (Commemoration)	Democracy Quality of information Trust Relationship Citizenship	

Table 13: The value of museums according to the research by Scott (Scott table reproduction)

These two approaches address the issue of "value" from different perspectives, presenting, on the one hand, a museum-organization engaged in the production of value and on the other hand, a museum apparently passive as to whom the value is assigned (*Fig. 32*).

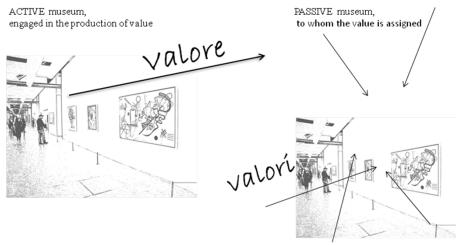


Figure 32: The active and passive Museum-Value relationship models.

Are these two views in opposition? No, they are two sides of the same coin. In fact, the term "production" implies an organisation's intended action, a circumstance applicable to certain values identified by Scott, such as "tourism" and "entertainment". On the other hand, there are values that are recognized as intrinsic, such as "civic pride", "identity", "citizenship" which simply derive from what a museum means for an individual or the community. The image of a museum that generates value, spontaneously and consciously, in a constant, two-way exchange with the outside, may represent a compromise between these two points of view (*Fig.* 33).

Museum that GENERATES value and values

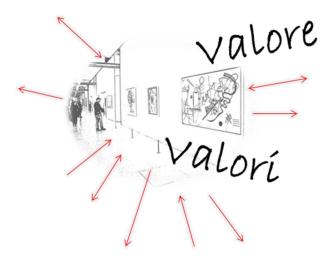


Figure 33: The museum generating value and values

This definition, in addition to creating one single image of the relationship between museum and value, gives the possibility of transposing reasoning to the collections, which are not organizations.

A further step in this analysis could be to restrict the parameters to determine specific aspects of the roles of different museums and collections. The observations made so far deal with the general concept of a museum⁸⁴, but can depending on type (archaeological, scientific, civic, university etc.) and the category of people with whom it actually has a relation (adults, tourists, the scientific community, women etc.) (*Fig. 34*). Therefore, we can describe the particularities of the role and the expression of the identity of each museum, or specific types of museum, according to this.



Figure 34: Variability of values

⁸⁴ This is true for collections too.

2.3.3 The Original Value of Museums and Collections of Italian Universities

We have seen how university medical/herb garden collections and galleries were created with the express purpose of acting as an aid to teaching and research in universities, on the initiative of the most distinguished scholars, with the support of political power, for purposes of propaganda and cultural. Therefore, according to what has already been considered, they were generating value in academic teaching and research, propaganda and cultural development in relation to specific groups of individuals, made up of university students and teachers, the scientific community, and representatives of political power (*Fig. 35*). The close connection with academic teaching and research, is clearly a distinctive element.

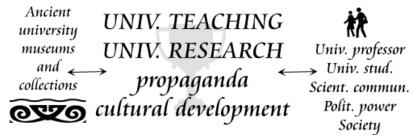


Figure 35: The specific values of the first museums and collections of universities

To discover if they still retain this feature, we must examine their missions, activities, services, who they engage with, and what kind of relationships they have within and outside the university.

2.3.4 University Museums Today: Missions and Aims

According to the ICOM Code of Ethics⁸⁵ and the Italian Guideline on Technical-Scientific Criteria and Standards of Operation and Development of Museums⁸⁶, the mission statement is a prerequisite. Why is this so important? "[The mission] outlines the aims of the museum and might include a reference to the institution's historic achievements and concern for responsibility, define the purpose of the museum, summarize the aims of the museum, include a declaration or summary of the principles by which the museum proposes to operate⁸⁷." The mission is therefore the founding statement of museums, according to which every choice is made, from the organization to the definition of specific strategies and activities. It is therefore essential to consciously manage the museum in accordance with its own nature.

In Italy, the definition of the mission is not yet commonly used nor widely accepted, because Italian museums, notably public ones, have an 'implicit' general mission by tradition. Making it explicit, however, is not a waste of time, because it triggers an intense and systematic

⁸⁵ ICOM, 2006. *Code of Ethics for Museums*. Paris. Available at http://icom.museum/code2006 eng.pdf.

⁸⁶ D.M. 10 maggio 2001, G.U. 19 ottobre 2001, n. 244, Atto di Indirizzo sui Criteri Tecnico-Scientifici e sugli Standard di Funzionamento e Sviluppo dei Musei.

⁸⁷ ICOM, Running a Museum: A Practical Handbook, Parigi 2004, pag. 138.

reflection, encouraging the identification of the particularities of museums and actually helping in its management⁸⁸.

56% of museums in the study have a mission statement (*Fig. 36*), published in their Regulations, on their website or, in the case of museums related to central coordination units, sometimes in the Regulation of these units, such as the museums assigned to the *Sistema Museale* of the *Università di Napoli Federico II*⁸⁹.

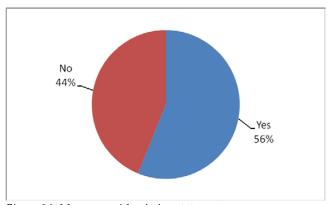


Figure 36: Museums with mission statement

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⁸⁸ For more details see Sibilio Parri B., Ed., Definire la missione e le strategie del museo, Milano 2004, Chirieleison C., La gestione strategica dei musei, Milano 2002, pagg. 263-277, Eminenti G., Mari C., Viggiani S., La formazione manageriale nella gestione dei musei e delle istituzioni culturali, Milano 2002, pag. 20.

⁸⁹ The Regolamento per il funzionamento del Sistema museale dell'Università di Napoli Federico II, at Art. 10 – Musei: finalità e compiti, says that "a museum's aims are the same as those of its Museum System [...]" and the questionnaire respondents explicitly identified those aims with their museum mission.

The aims of museums are related to three spheres of interest: university, local and universal. The university sphere has as its objective the value enhancement of university heritage, support to teaching, and the history of the university. The local sphere's aim is the protection and enhancement of local territory, both natural and human. The universal sphere concerns the dissemination of a specific discipline, environmental protection, promotion of culture and science, and research. The aims of preservation and the display of heritage for public benefit, implicit in the definition of any museum, are not considered in these three spheres of interest.

The mission statement, according to the aims, may relate to one or more spheres of interest simultaneously. *Table 14* describes the aims of the three spheres with examples.

Sphere of	Aim	Example	Museum
interest			
University	Value enhancement	Value enhancement	Museo degli
	of the University	of curated	strumenti per il
	heritage	collections	calcolo,
			Università di
			Pisa
	Support to teaching	Enhancing	Museo storico-
		structures and	archeologico,
		services for teaching	Università del
		in historical and	Salento
		archeological fields	
		at the University	
	History of the	Collection and	Museo della
	University	exhibition of	chimica,
	-	instruments that	Università di

		document the	Palermo
		history of university	1 uternio
		chemistry in	
		Palermo from 1860	
		to the present	
		*	Museo storico-
		Documenting and	
		giving value to the	archeologico,
		studies conducted	Università del
		by archaeologists	Salento
		and historians of	
		ancient age of the	
		University	
Local	Protection and	Conservation of	Museo orto
	value enhancement	seeds and	botanico,
	of local, natural and	propagules of	Università di
	human territories	native plants for the	Bari
		establishment of	
		gene banks	
		Promoting scientific	Museo di
		research,	scienze naturali,
		popularization and	Università di
		museum education	Camerino
		related to the nature	
		of Marche and of the	
		Central Appenines	
Universal	Dissemination of	Promoting chemical	Museo di
	specific disciplinary	culture and	chimica,
	knowledge	knowledge of its	Università di
	Į	history	Genova
		Revealing the	Museo dei gessi,
		history of taste	Università di
			Urbino
	Environment	Conservation of	Museo Orto
	protection	plant biodiversity	Botanico,
	r	r	Università degli
	l		Silve of Still Wegti

		Studi di Bari
Promoting culture	Promoting and	Museo di
and science	spreading scientific	paleontologia,
	culture in society	Università di
		Napoli Federico
		II
Research	Promoting research	Museo di
	on issues related to	antropologia,
	the Museum	Università di
	Collections	Napoli Federico
		II

Table 14: Spheres of interest of Museum Aims

48% of museums have the aims of the university sphere. 22% have the aims of the local sphere and 78% have the aims of the universal sphere (*Fig. 37*).

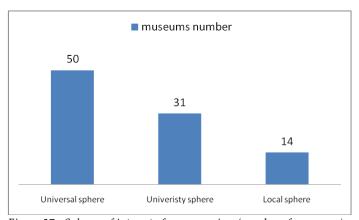


Figure 37: Spheres of interest of museum aims (number of museums)

2.3.5 Activities and Services of Museums and Structures Responsible for Collections

Museums, apart from conservation and exhibition, deal with: research (80% of cases), restoration (39%), organization of exhibitions (68%), seminars and conferences (68%), museum education programs (43%), specific activities for university students (74%), specific activities for the staff of the university (16%), cultural mediation (26%), and social inclusion (23%) (*Fig.* 38).

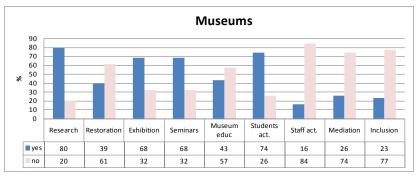


Figure 38: Activities of museums

The structures responsible for the collections, apart from conservation and exhibition, deal with: research (in 47% of cases), restoration (37%), organization of exhibitions (50%), seminars and conferences (53%), museum education programs (30%), specific activities for university students (43%), specific activities for the staff of the university (7%), cultural mediation (13%), and social inclusion (7%) (*Fig.* 39).

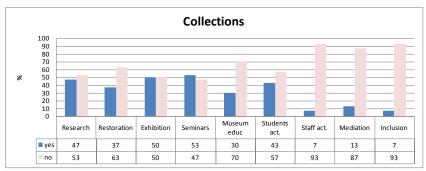


Figure 39: Activities of structures responsible for collections

Museums and structures responsible for collections, apart from conservation and exhibition, deal with: research (in 73% of cases), restoration (38%), organization of exhibitions (64%), seminars and conferences (65%), museum education programs (40%), specific activities for university students (67%), specific activities for the staff of the university (14%), cultural mediation (24%), and social inclusion (19%) (*Fig.* 40).

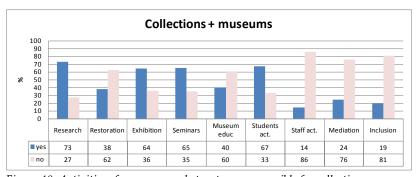


Figure 40: Activities of museums and structures responsible for collections

The services offered by museums include: guided tours (89% of cases), education programs for schools (74%), education activities for adults (31%), video rooms (25%), libraries (35%), bookshops (13%), and cafès (4%) (*Fig. 41*).

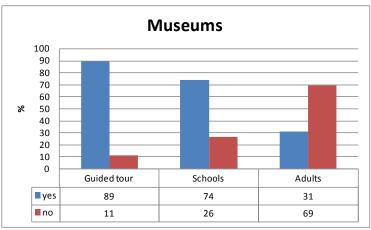


Figure 41: Services of museums

The structures responsible for collections offer: guided tours (57% of cases), education programs for schools (53%), and educational activities for adults (15%) (*Fig.* 42).

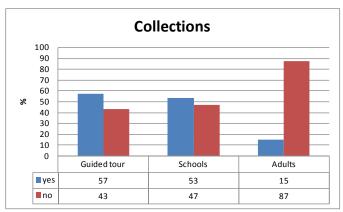


Figure 42: Services of structures responsible for collections

Museums and structures responsible for collections offer: guided tours (82% of cases), education programs for schools (69%), and educational activities for adults (27%) (*Fig.* 43).

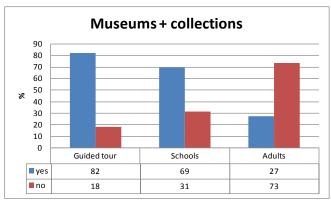


Figure 43: Services of museums and structures responsible for collections

Specific museum activities and services of are aimed at: scholars (80% of cases), university students (82%), university staff (32%), children (68%), families (43%), senior citizens (34%), and people with disabilities (35%) (*Fig. 44*).

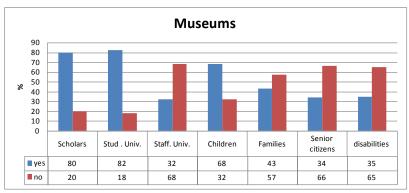


Figure 44: Beneficiaries of museum activities and service

Specific activities and services of the structures responsible for collections are aimed at: scholars (47% of cases), university students (60%), university staff (13%), children (43%), families (33%), senior citizens (27%), and people with disabilities (23%) (*Fig.* 45).

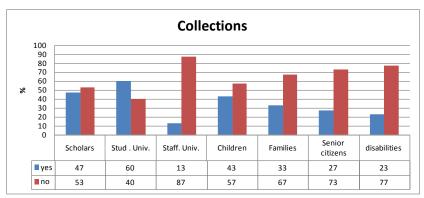


Figure 45: Beneficiaries of activities of the structures responsible for collections

Specific activities and services of museums and structures responsible for collections are aimed at: scholars (73% of cases), university students (78%), university staff (28%), children (63%), families (41%), senior citizens (33%), and people with disabilities (33%) (*Fig.* 46).

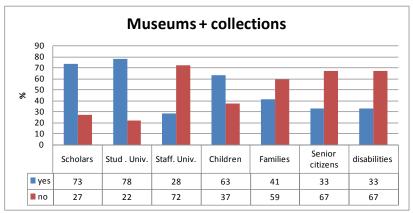


Figure 46: Beneficiaries of activities and services of museums and structures responsible for collections

2.3.6 Museums and Relationship with the Territory

39% of museums are involved in local networks or with local matters (*Fig.* 47).

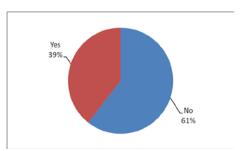


Figure 47: Museums involved in networks

59% of museums have connections with the local community through the organization of educational activities for schools, but also exhibitions and seminars on topics of local culture or the territory, and cooperation with public authorities, associations and other civic institutions (*Fig. 48*).

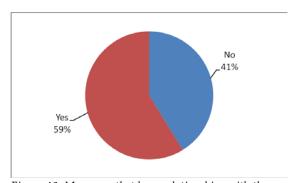


Figure 48: Museums that have relationships with the community

2.3.7 The Value of Today's Museums and Collections of Universities

The factors described thus far show how university museums and collections generate both instrumental and symbolic value in relation to university, local, national, international, and scientific communities, and to individuals of different ages, cultures and types.

The **instrumental value** concerns:

- protection and value enhancement of university heritage,
- support for teaching and research, in particular related to university museums and collections,
- protection and value enhancement of cultural heritage,
- protection and development of the territory,
- development of the local community,
- dissemination of culture and science,
- cultural mediation,
- social inclusion.

The **symbolic value** is connected to:

- identity of the university and the local community,
- university autonomy,
- freedom of teaching and learning (Fig. 49).

GOALS

•Enhancement of univ. heritage
•Teaching support
•Univ. history
•Protection and value
enhancement of local territory
•Dissemin. specific disc. knowledge
•Environment protection
•Promoting culture and science
•Research

ACTIVITY •Conservation

•Research
•Exhibitions
•Seminars and conferences
•Museum education
•Activity for univ. students
•Cultural mediation
•Social inclusion

VALUE

Instrumental

Protection and enhancement of univ. heritage Protection and enhancement of cultural heritage Support to teaching and research in particular for university Protection and value enhancement of local territory

Development of the local community
Promoting culture and science
Cultural mediation
Social inclusion

Symbolic

Identity of the university and local community

Autonomy of university

Freedom of teaching and learning



University community

Local community

Scientific community

People of different age, culture and typology

Figure 49: University museums as generators of value

SERVICES

•Guided tours

School education

Adults activities

•Video room

Library

Bookshop

Caffetteria

BENEFICIARIES

Scholars

University students

University staff

Children

•Family

•Senior citizens

People with disabilities

RELATIONSHIP WITH OUSIDE

Opening to external visitors
Tarritorial/the motion at

•Territorial/thematicnet
•Relationship with the local community

2.3.8 Final Considerations

The economic crisis of the 70s forced states to review public spending, compelling institutions to justify their investments and demonstrate, as companies do, their productivity in terms of services and value. In this context, the theme of the "value" of museums has become an object of interdisciplinary study. The two main approaches are on the one hand, a museumorganisation engaged in the production of value; and on the other, a museum apparently passive to whom the value is attributed. To synthesize these into a single concept, applicable to collections too, both the image of a museum "generating" value and the emphasis of a constant active role creates a two-way exchange with the outside. A further step in analysis has allowed distinction of parameters to determine any specific aspects of the role of different museums and collections: by type (archaeological museum, scientific, civic, university etc.), and by category of people with whom the entity actually has a relation (adults, tourists, the scientific community, women etc.).

University herbal/medical gardens, collections and galleries were created with the explicit purpose of supporting teaching and research in universities, under the initiative of the most distinguished scholars, with the support of political power, with both cultural and propagandist purposes. Their unmistakable distinguishing feature can be recognized in the close relationship between university teaching and research. As demonstrated by their activities, museums and collections maintain this role and through it, express their own identity and particular nature.

In recent years we have also witnessed the progressive opening up of museum heritage to the territory. Today museums and structures responsible for collections offer the opportunity of guided tours; they collaborate with other city institutions and organizations for common projects; and they take part in themed networks at local, regional and national levels. The main beneficiaries of outdoor activities are schools and children in general, although there are initiatives aimed at adults, in particular with the organization of seminars and conferences.

Unfortunately, all these attempts are not usually made formally explicit through the mission statement. An examination of the available mission statements however confirms an orientation towards goals related to the academic sphere (with teaching support and value enhancement of the heritage and history of the university); the local sphere (protection and development of the territory); and the universal sphere (the promotion of specific disciplines; environment protection; promotion of culture and science and research).

In practice, however, if on the one hand heritage has acquired a territorial dimension, on the other hand, universities do not promote their knowledge sufficiently within this area, so that they do not recognize the technical and administrative staff as stakeholders and do not involve themselves in any specific initiative. In addition, the mission does not explicitly point out the value of heritage as a witness of the history of the university or as an instrument of identity

for the academic community, while these could in fact be their very strengths.

On this basis it can be stated that university museums and collections have exceeded the boundaries of universities, becoming an integral part of the national heritage, while maintaining their own identity and characteristics inextricably linked with research and teaching. They have in fact acquired relevance in the university, local, national, international, and scientific communities; and to individuals of different ages, cultures and types. They have presented themselves as generators of instrumental and symbolic values: protection and value enhancement of university heritage; support for the teaching and research; in particular, the protection and value enhancement of cultural heritage and territory; development of the local community; dissemination of culture and science; cultural mediation; social inclusion; their own identity and that of the local community; university autonomy; and freedom of teaching and learning.

The hope is that they can strengthen their origins, keeping alive their relationship with teaching and research, and further develop the role as witness to the history of universities and as an instrument of identity for the academic community, expressed by the students and all of their staff.

Chapter 3.1 General Problems in Management of Museums and Public Museums

This chapter, prior to the analysis of the management of university heritage in particular, deals with the problems of a general nature relating to the management of both museums and public museums: legal status and autonomy of Italian museums; the relationship between public and private entities in their management; and staff selection. These topics, the subject of a wider debate, are not examined here in all their complexity, but are briefly presented, highlighting what is necessary for the interpretation of the following chapters and, in particular, the personal conclusions.

3.1.1 Methodology and Sources

Prior to the analysis of the management of university heritage, this chapter looks at problems of a general nature relating to the management of museums and public museums. These being: legal status and autonomy of Italian museums; the relationship between public and private bodies in their management; and staff selection. Alongside the discussion of

legal status and autonomy, there is a brief description of the legal institutions that facilitate the autonomy of museums (foundations, associations and committees); on top of this, the importance of regulation as an instrument of autonomy is highlighted. For the analysis of the relationship between public and private sectors, we will start with the origin of this debate in order to understand its implications, Then we will look at the issue of outsourcing and the concept of the museum company, dedicating a specific space to the foundations of participation, which has had great success as a model of cultural heritage management. These topics, the subject of a wider debate, are not examined here in all their complexity, but are briefly presented, highlighting what is necessary for the interpretation of the following chapters and, in particular, of the personal conclusions.

All this is based on consultation and discussion of a wide range of literary sources from various areas (museological, economic-managerial and legislative), of different types (essays, manuals, conference proceedings, documents, legislation), and sometimes with opposing points of view. There is also a personal interpretation of motivations and risks of the phenomenon of the escalation of the problem of the economic value of cultural heritage that was created in the Eighties.

3.1.2 Legal Status and Autonomy of Italian Museums Legal Status

In Italy museums are not legally recognized specifically and therefore do not exist as an institution type. In order to

ensure legal recognition or at least a degree of independence other forms provided by the Civil Code have therefore been used. These include the institutions pursuant to Legislative Decree 267/00, foundations, 'foundations of participation', associations and committees⁹⁰.

Autonomy

In Italy the issue of the autonomy of the museums belonging to public authorities, who are both in the majority and the most important, has long been the centre of a debate that tries to mediate the demand for autonomy by museums with the maintenance of the current institutional order. Its beginnings can be indentified in the final report of the 196491 Franceschini Commission, established in research aims were the "protection and value enhancement of historical, archaeological, artistic and landscape heritages." With reference to museums, the Commission suggested giving recognition "to the direction of the main state museums, in the context of superintendence, the quality of autonomous office ... and to each museum ... a necessary self-sufficiency as regards the essential services and specialized personnel⁹²".

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⁹⁰ For a more thorough examination of this subject consult Antonucci D., Commento al codice dei beni culturali e del paesaggio, 2009, 453-456; Chirieleison C., La gestione strategica dei musei, Milano, 2002, 183-228; Sibilio Parri B. (edited by), Governare il museo. Differenti soluzioni istituzionali e gestionali, Milano 2004.

⁹¹ Law no. 310/64.

⁹² Law no. 310/64, statement LXXIII – Musei. Original text: "alla direzione dei maggiori musei statali, nell'ambito delle Soprintendenze, la qualità di uffici autonomi ... e a ogni museo ... una necessaria autosufficienza per ciò che concerne i servizi essenziali e il personale specializzato".

According to a classification proposed by Barry Lord and Gail Dexter Lord and supported by Daniele Jalla⁹³, museums can have three different degrees of autonomy:

- museums that are part of a public institution, the socalled "museum-office", as with most Italian museums, state museums and local authority museums,
- museums that have a partial autonomy, such as local authority museums transformed into institutions pursuant to Legislative Decree no. 267/00,
- independent (and thus, totally autonomous) museums, such as those with the status of a foundation or association with , in many cases, legal status.

Forms of Autonomy: Foundation, Association, Committee

Independent museums belong to the "private" museums category: those which belong to private individuals, are constituted subject to private law⁹⁴, have legal personality or are *de facto* entities. Although there are museums that still retain the name of "legal entity" (a term 'formerly applied to all the subjects to whom the recognition of legal personality was given^{95'}), most of these are either a foundation, an association or a committee.

⁹³ Lord B., Dexter Lord G., *The manual of museum management*, London 1997, 14-18 and Jalla D., *Il museo contemporaneo. Introduzione al nuovo sistema iatliano*, Novara 2003, 26-30.

⁹⁴ For a thorough examination of this subject consult Jalla D., Il museo contemporaneo. Introduzione al nuovo sistema museale italiano, Novara 2003, 167-171. Original text: "applicata un tempo al complesso dei soggetti cui veniva attribuito il riconoscimento della personalità giuridica".

⁹⁵ Jalla D., Il museo contemporaneo. Introduzione al nuovo sistema museale italiano, Novara 2003, 168.

Associations arise from the collective will of the members, which is exercised through the internal controlling body.

Foundations have a constitutive element in the heritage, which must have a specific aim and an outside purpose of public value (the basis of its activities and organisation) defined at its establishment. They are governed by an external will, that of the founder, and are themselves subject to this will and to the external control exercised by a regional or state authority. Since the Eighties, in the wake of the situation described above, the number of foundations has grown exponentially, especially in the field of cultural heritage⁹⁶, to become the preferred option for management. In particular, in the context of state administration, foundations have been used to set accountable, autonomous single entities apart in order to reduce public expenditure, to exceed limits of autonomy and flexibility, and to increase accountability⁹⁷.

According to the Civil Code, even committees can be recognized as legal entities and manage museums as promoters of monuments, exhibitions, although this rarely happens.

Regulation as an Instrument of Autonomy

[%] Jalla D., *Il museo contemporaneo. Introduzione al nuovo sistema museale italiano,* Novara 2003, 170.

⁹⁷ Zan L., Managerializzazione delle organizzazioni culturali e assetto istituzionale. La trasformazione in Fondazione in prospettiva manageriale in Governare il museo. Differenti soluzioni istituzionali e gestionali, Milano, 2004, 159-177.

Research⁹⁸ by the Ministry of Cultural Heritage and Activity in 2006 has shown that, even today, according to the directors and curators of museums, a lack of autonomy affects the efficiency and effectiveness of the management of the museum and its impact on the territory, and that regulation constitutes a tool to give value to the identity of the museum and enhance decision-making, even within the same institutional framework.

Furthermore, the existence of a museum statute and/or regulations, which clearly define legal status, mission statement, policies and aims, role and composition of its governing bodies, is the first of the minimum standards required by the ICOM Code of Ethics⁹⁹. Its importance is recognized in Italy by the Guidelines on Technical-Scientific Criteria and Standards of Operation and Development of Museums¹⁰⁰, according to which "Endowing museums - regardless of their condition as either public or private, independent or integrated into the institution to which they belong - with statutes, regulations or other written documents of equal value, allows us to recognize their legal status and to ensure that all museums have an organic complex of rules related to their specific mission¹⁰¹". On these grounds many

⁹⁸ AAVV, La carta d'identità del museo. Il regolamento, Roma 2009.

⁹⁹ ICOM, 2006. *Code of Ethics for Museums*. Paris. Available at http://icom.museum/code2006.eng.pdf.

D.M. 10 maggio 2001, G.U. 19 ottobre 2001, n. 244, Atto di Indirizzo sui Criteri Tecnico-Scientifici e sugli Standard di Funzionamento e Sviluppo dei Musei.
 D.M. 10 maggio 2001, Ambito I – Status giuridico. Original text: "Dotare i musei - indipendentemente dalla loro condizione, pubblica o privata, autonoma o integrata all'interno dell'ente di appartenenza - di statuti, regolamenti o di altri

Regions, such as Tuscany¹⁰², have indicated this as a requirement for museums seeking regional recognition and/or accreditation.

Relationship between Public and Private 3.1.3 Management of Public Museums: the Birth of the Debate and its Implications

The Birth of the Debate

The issue of the relationship between public and private management of public museums flared up in Italy in the Eighties, together with the debate on the economic and financial value of cultural heritage. This in response to a situation derived from the huge investment of the state in this area by the end of the Seventies and the increase in both unemployment and public spending. In this context, cultural heritage was seen as a new reservoir of employment and, as the need to reduce public spending made the increase of public administrative personnel impossible, private initiative was encouraged and promoted 103.

documenti scritti di pari valore, consente di riconoscere loro uno status giuridico proprio e di assicurare a ciascun museo un complesso organico di norme correlato alla sua specifica missione".

¹⁰² Regione Toscana, L.R. 21/2010 "Testo unico delle disposizioni in materia di beni, istituti e attività culturali", art. 20.1.

¹⁰³ For a thorough examination of this subject consult Donato F., Musei, servizi pubblici e ruolo dei privati in Donato F., Visser Travagli A.M., Il museo oltre la crisi. Dialogo fra museologia e management, Milano 2010, 47-56; Montella M., Musei e beni culturali. Verso un modello di governance, Milano, 2003, 87-111 and 140-165; Solima L., La gestione imprenditoriale dei musei, 50-68, Visser Travagli A.M., L'ingresso dei privati nel museo pubblico in Donato F.,

Unfortunately, if on the one hand, the state sought to boost employment and entrepreneurship, and to increase efficiency, on the other hand, it created the conditions for the emergence of a trend that uncritically emphasized the economic-instrumental role of cultural heritage and demonized public administration, which is accused globally and *a priori* of incompetence and inefficiency.

In my view, this can be attributed to a misunderstanding and a real reversal of the concept of the "value" of cultural heritage. "Value enhancement" goes from being a goal to being an instrument to achieve new goals: a solution to unemployment; cuts in public expenditure; and an increase in efficiency. This is, first of all, conceptually wrong, as confirmed by the Constitutional Court in 1986, in a ruling that clarifies how the "cultural aesthetic value ... cannot be subordinated to other values including economic ones¹⁰⁴". Secondly, it carries risks related to the protection and,

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Visser Travagli A.M., Il museo oltre la crisi. Dialogo fra museologia e management, Milano 2010, 56-67. For a thorough examination of the current implications of the relationship between private and public consult AAVV, I nuovi sentieri dei beni culturali in Italia: tra storia, economia e legislazione, Udine 2003 especially Losavio G., Demanio culturale: dal Codice civile al Regolamento del 2000, 47-56; Settis S., Patrimonio culturale e società civile, 27-28 and Volpe G., Argomenti storico giuridici per l'integrità del demanio culturale italiano, 33-46 and Pinna G., Patrimonio culturale, musei e il codice dei beni culturali, in Lo stato a-culturale. Intorno al Codice dei beni culturali, Como 2005, 41-69.

¹⁰⁴ Settis S., Patrimonio culturale e società civile in I nuovi sentieri dei beni culturali in Italia: tra storia, economia e legislazione, Udine 2003, 26. Original text: "valore estetico culturale ... non può essere subordinato ad altri valori ivi compresi quelli economici".

paradoxically, the achievement of the new goals themselves, as history has documented (*Fig. 50*).

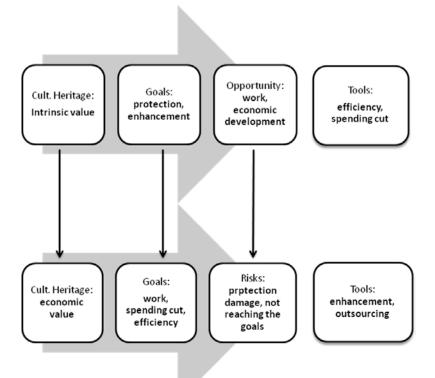


Figure 50: Results of the reversal of the concept of the "value" of cultural heritage

In fact, public administrations en masse, have entrusted the management of their museums, partly or entirely to private entities of various types (associations, foundations and companies), for the most part following the trend, without assessing its real opportunities and not always with the hoped for results. One of the best examples of this is when a collection of British Crown arms was moved from The Tower of London to a purpose built museum inside a mall in the City of Leeds. This followed the privatization of the museum's management and the catastrophic choices¹⁰⁵ made by the consortium responsible for it. The result was a decrease in visitor numbers from 1 million to less than 200 000 per year and the bankruptcy of the managing consortium.

Outsourcing the Management of Cultural Heritage and Museums

In the decades following the initiatives of the Eighties, particularly in the Nineties, legislation was passed to encourage outsourcing and reorganization of the management of cultural heritage in state and local authority museums. Examples are:

- Law 142/90, which allows the management of museums of local entities through special agencies, institutions and societies
- Ronchey Law of 1993¹⁰⁶, which allows state museums to entrust the management of additional services to outside companies
- Law 352/97, which allows government departments to stipulate agreements with voluntary organisations

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¹⁰⁵ The event is summarized by Settis S., *Patrimonio culturale e società civile* in I nuovi sentieri dei beni culturali in Italia: tra storia, economia e legislazione, Udine 2003, 27-28.

¹⁰⁶ Law n. 4/93.

- Law 449/97, which allows public administrations to enter into sponsorship contracts with private and nonprofit parties
- Legislative Decree no. 368/98, which allows the Ministry of Cultural Heritage and Activities to stipulate agreements with public administrations and with private parties for the value enhancement of cultural and environmental heritage.

The current Code of Cultural Heritage and Landscape¹⁰⁷ deals with the forms of cultural heritage management as a part of value enhancement¹⁰⁸. It confirms that the value enhancement activities can be carried out internally by public institutions in a direct form or indirectly through concessions to third parties, with the aim of ensuring a better level of cultural heritage value enhancement.

Assessing the Need for Outsourcing

We have seen the context and aims that have favoured the outsourcing process, highlighting negative aspects and results, but that does not mean that, if used properly, it can't be a real opportunity. This will depend on the circumstances being evaluated, in order, on the basis of motivation, expected results, objective, and the outsourcer.

The motivation, in my view, must be related exclusively to the fulfilment of the mission and the protection and value enhancement of the museum. The motivation should exclude such purposes as creating new jobs but could

 108 D.Lgs. 42/2004, art. 115 (Forme di gestione) - titolo II (Fruizione e valorizzazione).

¹⁰⁷ D.Lgs. 42/2004, modified by the D.lgs. n. 156 del 2006.

rather be a lack of staff or the need for capital. The real existence of motivations should always be established, considering and dispensing with all other possible solutions first.

For example, the lack or inadequacy of staff can be solved with serious and conscientious policies of personnel management, at the various levels of staff selection, distribution, and training (where public administration aspires to the use of qualified personnel to fill key roles, outsourcing secondary services, and /or relatively unskilled workers).

Expected results, closely related to motivation, will also serve to evaluate with hindsight the correctness of the choices made.

Secondly, it should be determined whether to outsource management solely for specific services/activities or to do so completely. It is preferable in the latter case to entrust powers of direction and control to the museum, and the compliance with policies and the mission of the museum to the outsourcer. Activities and services can then be selected to ensure these conditions, focusing on those that are merely executive¹⁰⁹. At this point you will choose the type of outsourcer (which may be a corporation, company, foundation etc.) based on the motivations and the services /activities selected. (*Fig. 51*).

¹⁰⁹ For a thorough examination of this subject conusult Baia Curioni S., *Processi di produzione del valore nei musei* in Dragoni P., Montella M., Musei e valorizzazione dei Beni culturali. Atti della Commissione per la definizione dei livelli minimi di qualità delle attività di valorizzazione, Bologna 2010.

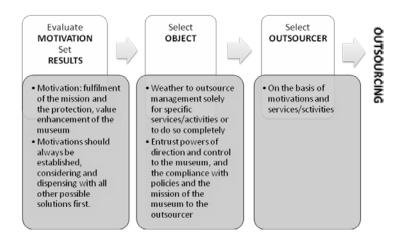


Figure 51: Outsourcing: process and factors that guarantee its opportunity

The "Fondazione di Partecipazione" as a Tool for the Management of Museums

Examining the facts for the numerous foundations working in the field of cultural heritage, the distinguishing feature of this type of institution, was scarce and insufficient to achieve their aims and had to be heavily supplemented by external, mainly public, funding, thus eliminating the motives and the advantages of the foundations' use¹¹⁰.

To have a tool best suited to the management of cultural heritage, a special type of foundation was created in the Nineties, the Fondazione di Partecipazione (Foundation of Participation), which according to its promoter, Enrico

¹¹⁰ Jalla D., Il museo contemporaneo. Introduzione al nuovo sistema museale italiano, Novara 2003 170-171.

Bellezza, represents a synthesis of foundation and association¹¹¹. A non-profit, legal institution of private law combines the progressivity of capital formation with the participation of different actors (public and private), which have different weights in accordance with the principle of proportionality between contribution and representation, with the guarantee of respect of the public interest, through a monitoring body composed exclusively of representatives of public authorities.

Since 2001, universities have been able to establish a specific type of foundation of participation: the university foundation. After Law 388/2000 (Finance Act 2001) granted universities the chance to establish private foundations to "acquire goods and services at the best market conditions" and "for the performance of day to day business, and support to teaching and research¹¹²", Presidential Decree 254/2001 defined the operational terms of the constitution of university foundations.

Among the specific activities to be undertaken by university foundations are the management and promotion of

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¹¹¹ For a thorough examination of this subject conusult Bellezza E., *Le fondazioni di partecipazione quali modelli di gestione dei musei* in Governare il museo. Differenti soluzioni istituzionali e gestionali, Milano, 2004, 135-157; Chirieleison C., *La gestione strategica dei musei*, Milano, 2002, 198-208 and 225-228 and Jalla D., *Il museo contemporaneo. Introduzione al nuovo sistema museale italiano*, Novara 2003 171-172.

¹¹² Law 388/2000 art. 59. Original text: "realizzare l'acquisizione di beni e servizi alle migliori condizioni di mercato" and "per lo svolgimento della attività strumentali e di supporto della didattica e della ricerca".

university cultural heritage¹¹³. The added value of university foundations in this context depends on the fact that it is subject to functional, managerial and financial control by the university, ensuring maximum consistency with its mission and values: in fact, third parties interested in participating in the foundation must be approved by the university¹¹⁴, which also approves both the annual and the multi-annual plans of the foundation and defines the guidelines for the activities of the Board of Administration, the governing body, and control of financial, administrative, and accounting activities¹¹⁵.

The Museum-Company

Since the eighties the escalation of the problem of economic interest toward cultural heritage and the search for efficiency is accompanied by the embracing of managerial models and terminology from foreign museums. The assumption is that museums can be considered as companies and as such can be managed¹¹⁶. This theory, which has a

¹¹³ DPR 254/2001 art. 2.

¹¹⁴ DPR 254/2011 art. 6.

¹¹⁵ For a thorough examination of this subject consult Bellezza E., *Le fondazioni di partecipazione quali modelli di gestione dei musei* in Governare il museo. Differenti soluzioni istituzionali e gestionali, Milano, 2004, 135-157 and Ferrara D., Rea M.A., *Le fondazioni universitarie in Italia. Profilo istituzionale e modelli gestionali* in Economia aziendale online, Vol. 2, 3 (2011): 327-343.

¹¹⁶ For a thorough examination of this subject consult Bernardi B., *Polpette avvelenate e management dei musei* in I nuovi sentieri dei beni culturali in Italia: tra storia, economia e legislazione, Udine 2003, 57-68; Chirieleison C., *La gestione strategica dei musei*, Milano, 2002, 3-47; Visser Travagli A.M., *Il museo fra etica ed economia* e *L'introduzione degli strumenti manageriali: una questione soprattutto di competenze* in Donato F., Visser Travagli A.M., Il

positive effect if applied schematically, can also be ineffective or even detrimental. By analyzing the different definitions of the company the concept of "economy" remains as a common and identifying element. Economic equilibrium is seen both "as a necessary condition for the continuance of the company over time and as both a means and an end of the life of the company itself¹¹⁷". Consequently, as a result of this skewed perspective, the financial aspects were over-emphasized, transforming the museum into yet another producer of services aimed at meeting the needs of customers for profit (*Fig.* 52).

museo oltre la crisi. Dialogo fra museologia e management, Milano 2010, 129-136 and 158-171.

¹¹⁷ Chirieleison C., La gestione strategica dei musei, Milano, 2002, 10. Original text: "condizione necessaria per la durata dell'azienda nel tempo e quindi contemporaneamente come mezzo e fine della vita dell'azienda stessa".

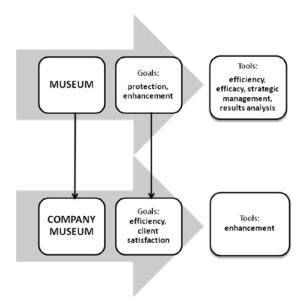


Figure 52: Results of the reversal of the concept of "museum"

Fabio Donato highlights another factor that leads to negative results in the first phase of the application of economic principles to museums. He emphasizes that "the role of tools as agents of change, gave much less importance to the role of people in terms of knowledge, skills and motivation. It was felt that the simple introduction of tools could change behaviours and impact directly on organisational culture, which has not been the case¹¹⁸".

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¹¹⁸ Donato F., in Donato F., Visser Travagli A.M., *Il museo oltre la crisi. Dialogo fra museologia e management*, Milano 2010, 37. Original text: "il ruolo degli strumenti quali fattori di cambiamento, dando invece assai minore importanza al ruolo delle persone, in termini di conoscenze, competenze e motivazioni. Si è

Some aspects related to company management, on the other hand, have stimulated a systematic reflection on new instances, useful for the achievement of guardianship and value enhancement goals. The concepts of autonomy, effectiveness, efficiency, strategic management, and systematic evaluation of the results, have encouraged, for example, the development of a mission, goals and strategies, the consideration of different types of visitors with specific needs, a management aware of financial aspects, the interaction between museums and the outside world, the evaluation of results as a means of improvement¹¹⁹.

3.1.4 The Importance of Museum Staff

To emphasize the importance of staff we use once again the ICOM Code of Ethics¹²⁰ and the Guidelines on Technical-Scientific Criteria and Standards of Operation Development of Museums¹²¹: both of these set out the

ritenuto cioè che la semplice introduzione degli strumenti potesse modificare i comportamenti e incidere direttamente sulla cultura organizzativa, cosa che non è stata".

¹¹⁹ For a thorough examination of this subject consult Solima L., La gestione imprenditoriale dei musei. Percorsi strategici e competitivi nel settore dei beni culturali, Padova 1998 and Eminente G., Mari C., Viggiani S., La formazione manageriale nella gestione dei musei e delle istituzioni culturali, Milano 2002, Sibilio Parri B., Ed., Governare il museo. Differenti soluzioni istituzionali e gestionali, Milano 2004.

¹²⁰ ICOM, 2006. Code of Ethics for Museums. Paris. Available on the internet: http://icom. museum/ code2006_eng.pdf, art. 1.11-1.18

¹²¹ D.M. 10 maggio 2001, G.U. 19 ottobre 2001, n. 244, S.O, Ambito IV -Personale.

minimum standards while the latter stresses that "the multiple museums (primarily conservation functions of management of collections, access and services to the public, safety, research) may be carried out only if they have qualified personnel¹²²". As highlighted by the ICOM Code of Ethics "the numerical consistency and the different statutes regulating the employment relationship ... may vary in respect to the size of the museum, the type and importance of the collections, the level of responsibility of each structure (and thus the institute's autonomy with respect to property from the owners and the system to which it belongs), however, to safeguard the collective interest, certain governing rules must still be complied with:

- rules and transparent procedures in the selection of the director, and with any appointment, staff promotion or termination of employment;
- recognition of the specific skills required in different areas of the museum's activities (director, conservationists, restorers, people in education, safety managers, supervisors and staff in general).
- verification of proper training for the tasks;
- updating, retraining and ongoing training of staff;
- full responsibility of the director in front of the governing body and control of the museum, especially choices of a technical and scientific nature."

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¹²² Original text: "le molteplici funzioni del museo (in primo luogo conservazione e gestione delle collezioni, accesso e servizi al pubblico, sicurezza, ricerca) possono essere svolti solo a condizione che esso disponga di personale qualificato."

3.1.5 Final Considerations

The analysis of the management of university museum heritage requires a knowledge of the general issues common to the management of museums and public museums, in addition to the specific issues arising from belonging to the university sector. An introduction to this analysis is therefore essential to understand the analysis presented in the following chapters: legal status and autonomy of public museums; the relationship between public and private management of cultural heritage; and the selection of staff are all, along with their various implications, particularly relevant.

In Italy museums are not legally recognized specifically and, therefore, the matter of their autonomy, especially that of public museums, has long been at the centre of a debate that seeks to mediate the demand for independence by museums while preserving the current institutional framework. At present, we can distinguish three degrees of autonomy: the lesser degree characterizing the so-called "museum-office"; museums that have a partial autonomy, such as the territorial ones transformed into institutions pursuant to Legislative Decree no. 267/00; and finally independent museums, which have the status of a foundation, association or committee.

The debate on the relationship between public and private, to which the issue of outsourcing and the concept of a museum company are connected, began in the Eighties when, in the context of social crisis, the problem of the economic function of cultural heritage escalated. This, resulting from a misunderstanding of the role of value enhancement, has led to inadequate and dangerous policies for the protection and

management of cultural heritage, but has also opened the way for systematic reflection on important new instances.

Indeed, based on incorrect assumptions that the main aim of the cultural heritage sector was to boost the economy and provide new jobs, particularly in the private sector, indiscriminate outsourcing of the management of cultural heritage and the discrediting of public administration has been encouraged. At the same time the corporate nature of museums was stressed, because of uncritical pursuit of profit and satisfaction of users-customers.

On the other hand, the exchange of ideas imposed by this climate has stimulated reflection on new and useful aspects for the cultural heritage sector, if applied critically but not abusively, and interpreted with specific purposes of protection and enhancement. These include: defining the mission; goals and strategies; the consideration of different types of visitors along with their specific needs; wise management of the financial aspects; a systematic interaction between the museum and the outside world; the evaluation of the results as a tool for improvement (*Table 15*).

From the debate of the Eighties ...

Negative aspects		Positive aspects	
•	Emphasis on the economic	•	definition of mission,
	role of cultural heritage		objectives, strategies
	versus protection and	•	consideration of
	value enhancement		different types of
•	Uncritical outsourcing		visitors
•	Emphasis on tools versus	•	a management aware of

- knowledge, skills and motivation of human capital
- Discredit of public administration
- Museum company

 the financial aspects
 a systematic interaction between the museum and the outside world evaluation of the results as a means of improvement

Table 15: Results of the debate on the economic value of C.H. during the '80s

Outsourcing can also be an opportunity, but only if its use is assessed for each individual case, without starting from vague assumptions, but rather assessing its motivation, expected results, objective and the outsourcer.

In this regard, the entity that comes closest to the values and mission of the university is a special type of foundation of participation: the university foundation. Legally formalised for the acquisition of goods and services at the best market conditions, day to day business, and support to teaching and research (which include promotion and management of cultural heritage), it is liable to a managerial, financial and functional check by the university itself.

Before addressing the analysis of the management of the university museum heritage it is also necessary to emphasize the importance of the regulations of museums and of the personnel in charge (guarantees of independence and quality) at both the national and international level, as recognised respectively by Guidelines on Technical-Scientific Criteria and Standards of Operation and Development of Museums and the ICOM Code of Ethics.

Chapter 3.2

Centralized Coordination and the Central Coordination Units (CCU)

This chapter is devoted to the analysis of the forms and policies of centralized management of museum heritage by the universities, that is, to those who are commonly referred to as "museum systems". As we shall see however, this definition is extremely reductive in practice, because the forms of coordination are manifold and museum systems are only one of them. For this reason, we will talk more generally of "central coordination units (CCU)" below.

Specifically, the chapter has three aims. First of all we will see if universities perform activities and transversal services at a central level for museum units, through non-specific entities and offices or through CCUs appointed to this, be they museum systems, centres, etc. We will then describe the central coordination units and how they function, suggesting a classification into three types (political, technical, hybrid) and the possible management models deriving from them.

On this basis, we will draw out the considerations on the policies of the universities towards their heritage. These deductions, together with those of the following chapters, will make up the final conclusions. In the end, we will report internal and external weaknesses in process which affect the achievement of the aims of the central coordination units while at the same time outlining development opportunities.

3.2.1 Methodology and Sources

There is no updated general literature on the topics covered: publications relating to university "museum systems" describe their heritage from the point of view of history and science, but do not contain considerations pertinent to the aims of this chapter. Therefore, the research was developed through other sources: analysis of both national and university legal acts; consultation of official web sites; and data collected from the specially created questionnaire.

University legal acts include Statutes, General Regulations and Regulations of any central coordination unit. As already mentioned, Statutes and General Regulations do not always mention museum heritage, but in some cases give administrative information on the central coordination units. CCU Regulations describe their objectives, tasks and organization, but not all structures possess these.

Official university websites, which in some cases have specific pages dedicated to the central coordination units, have been mainly used to learn about their structure, the activities they perform and the museum units (MU) that compose them.

To get additional information and verify the information collected through the sources described above, the CCU staff were sent questionnaires and contacted by phone. All the information has been cross-referenced systematized and inserted into the database for processing of data.

Appendices Q, R, S contain the descriptions of the individual units summarizing characteristics of the structures; museum units that compose them; data used for statistics; and specific sources.

The data obtained is both relevant and significant, but the collection phase was complicated due to the time it took to conduct the research. Italian Universities are facing a very complex reform aimed at a complete reorganization. Universities are adapting at different speeds, so in some cases, the central coordination units are in a transformation phase and as yet, the new structure has no dedicated person to refer to.

3.2.2 The Central Coordination of Activities and Management of the Museum Heritage

Universities adopt different policies regarding the coordinated management of their museum heritage. First, we find universities that have structures responsible for this task, which we will define in general terms as "central coordination units (CCU)", and then there are universities that do not have these. Moreover, in some universities there is the figure of the Chancellor's Delegate or Vice-Chancellor¹²³ for museum

¹²³ In Italian "prorettore".

heritage, who is essentially the intermediary between museum units/CCUs and the Academic Senate/Administration Council (*Fig.* 53). Currently, 4 out of 37 universities have a Delegate/Vice-Chancellor for museum heritage: the Universities of Palermo, Parma, Pisa and Salento. In all cases, this is in addition to the central coordination units.

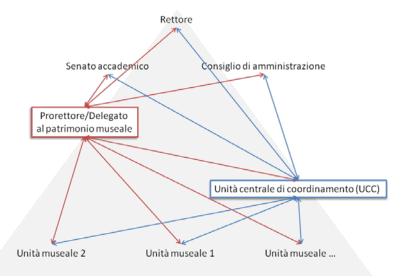


Figure 53: Relation Delegate/Vice-Chancellor for museum heritage and other university bodies/structures

A further distinction can be made between universities that, independently of any central coordination unit, perform some activities related to museum heritage at a central level, through other administrative offices or bodies, and universities that do not. There are four possible cases, as shown in *Table 16*.

Central coordination units	Activities carried out at central level
X	-
X	X
-	X
-	-

Table 16: Models of museum heritage management. Coordination of activities and management

For example, the Central Communication Office, regardless of the existence of any central coordination unit, deals generally with the promotion of the initiatives of the museums through the website of the university, issuing of press releases, and the organization of press conferences.

The distribution of funds to the museum units is also part of the activities considered in *Figure 72* because the following cases can occur:

- The Academic Senate and the Council of Administration allocate specific funds to the CCU, which then distributes them amongst the various MUs;
- The Academic Senate and the Council of Administration allocate specific funds directly to the MU;
- The Academic Senate and the Council of Administration do not allocate specific funds for the management of museum heritage, but the individual managing structures (departments, centres and faculties) allocate a portion of their own funds.

The assignment of spaces can also follow the same procedures.

3.2.3 The Relationship between Museum Units and Other Bodies/Offices of the University

The relationship between museum units and various bodies and offices of the university may be more or less complicated and more or less direct according to the following cases:

- A. existence of central coordination unit (CCU),
- B. existence of Delegate/Vice-Chancellor for museum heritage,
- C. existence of both CCU and Delegate/Vice-Chancellor for museum heritage,
- D. absence of both CCU and Delegate/Vice-Chancellor for museum heritage.

In case A (existence of CCU) the relationship between museum units and bodies and offices of the University tend to be indirect and simple, because there is a single reference point that acts as an interface between the two levels (*Fig.* 54).

In case B (existence of Delegate/Vice-Chancellor for museum heritage) the relationship between museum units and bodies of the University tend to be indirect and simple, because there is a single reference point that acts as an interface between the two levels. The relationship with offices however is direct and potentially chaotic, because each museum units has an individual relationship with all the offices and vice versa (*Fig.* 55): for example, several museum units could make similar requests to the same office at different times, preventing offices from planning work.

In case C (existence of both CCU and Delegate/Vice-Chancellor for museum heritage) the relationship between

museum units and bodies and offices of the University tend to be indirect, complicated and potentially chaotic, because there are two intermediate reference points that serve as an interface between the two levels, and because central coordination unit and Delegate/Vice-Chancellor must also interface with each other (*Fig.* 56).

In case D (absence of both CCU and Delegate/Vice-Chancellor for museum heritage) the relationship between museum units and bodies and offices of the University is direct and potentially chaotic, because each museum unit has a relationship with all the bodies and offices and vice versa (*Fig.* 57).

Table 17 summarizes the characteristics of the four situations.

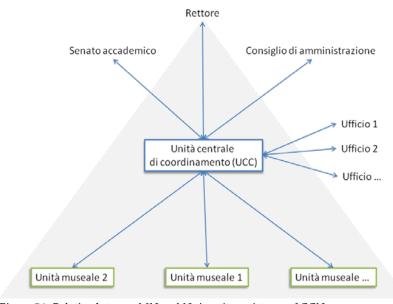


Figure 54: Relation between MU and University: existence of CCU

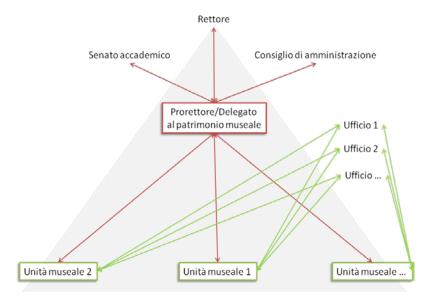


Figure 55: Relation between MU and University: existence of Delegate/Vice-Chancellor for museum heritage

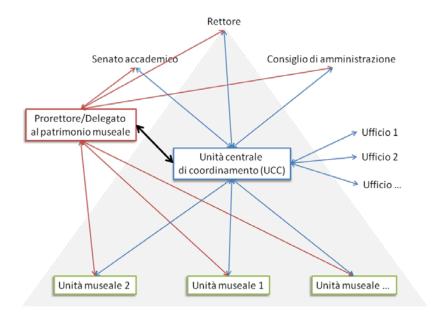


Figure 56: Relation between MU and University: absence of both CCU and Delegate/Vice-Chancellor for museum heritage

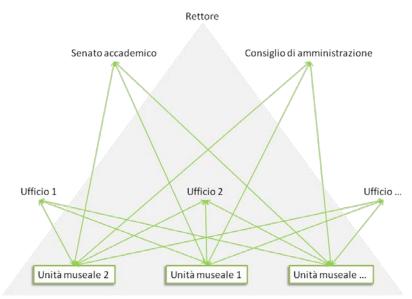


Figure 57: Relation between MU and University: existence of both CCU and Delegate/Vice-Chancellor for museum heritage

	Relationship with university bodies	Relationship with university offices
A) CCU	Indirect and simple	Indirect and simple
B) Delegate/Vice- Chancellor	Indirect and simple	Direct and chaotic
C) CCU + Delegate/Vice- Chancellor	Indirect, complicated and chaotic	Indirect, complicated and chaotic
D) No CCU, No Delegate/Vice- Chancellor	Direct and chaotic	Direct and chaotic

Table 17: Relation between MU and the University: characteristics of the different situations

3.2.4 The central coordination units (CCU)

Starting in the Eighties, as already mentioned, many universities have set up their own museum heritage in "central coordination units (CCU)", called in different cases "systems", "networks", "centres", or "offices" ¹²⁴.

Currently half of the universities, 19 universities out of 37, have one or two central coordination units (*Fig. 78*). However, 10 of the universities that do not have central units have only one museum unit. There are 4 other universities who in their Statutes require the presence of central units that are not currently active, namely the Universities of Catania, Modena e Reggio Emilia, Molise, and Torino. The *Università di Parma* has two central units, one of which is in the phase of activation.

The central units usually include and/or coordinate all the museum units of the university, even when the university has two central units because in this case the two structures have different responsibilities¹²⁵. An exception is the *Università degli Studi di Napoli Federico II*, which has divided its museum units, according to their thematic area, between two central units independent of each other.

The central units comprise from 1 to 22 museum units (*Table 18*).

¹²⁴ Further details below in "Political, Technical and Hybrid CCUs".

¹²⁵ Further details below in "Political, Technical and Hybrid CCUs" and "Management Models of Museum Heritage".

Università degli studi di Palermo	
SMA - Sistema museale di ateneo and UOA12 - Unità	
organizzativa d'area "Valorizzazione del patrimonio culturale e	
scientifico e Sistema Museale" - Servizio "Gestione musei"	22
Università degli studi di Roma La Sapienza	
PMS - Polo museale sapienza	21
Università degli studi di Pavia	
CSSMA - Centro di servizi Sistema museale di ateneo	19
Università degli studi di Bologna	
SMA - Sistema museale di ateneo	15
Università di Pisa	
SMA - Sistema museale	12
Università degli studi di Cagliari	
CIMAS - Centro Interdipartimentale dei Musei e dell'Archivio	
Storico	12
Università degli studi della Tuscia	
SMA - Sistema museale di ateneo	11
Università degli studi di Padova	
CAM - Centro di ateneo per i musei	10
Università degli studi di Parma	
SM - Settore musei	8
Università degli studi di Perugia	
CAMS Centro di ateneo per i musei scientifici	8
Università del Salento	
SMA - Sistema museale	7
Università degli studi di Bari Aldo Moro	
CISMUS - Centro Interdipartimentale di Servizi per la Museologia	
Scientifica	7
Università degli studi di Napoli Federico II	
MUSA - Centro Museale "Musei delle Scienze Agrarie"	7

CMSN - Centro Musei delle Scienze Naturali	5
Università degli studi di Trieste	
SMATS - sistema museale di ateneo	6
Università degli studi di Ferrara	
SMA - Sistema museale	6
Università degli studi di Camerino	
PMA - Polo museale di ateneo	3
Università degli studi di Siena	
CUTVAP - Centro di servizi tutela e valorizzazione antico	
patrimonio scientifico e SIMUS - sistema museale senese	6
Seconda università degli studi di Napoli	
Centro di servizio di ateneo MUSA - Museo universitario delle	
scienze e delle arti	3
Politecnico di Torino	
CEMED - Centro museo e documentazione storica	1
Table 18: List of universities that have central coordination units, their natural number of museum units	mes and

Some universities divide up their central units into smaller, generally themed units. This is the case of the Universities of Perugia, Pisa and Roma La Sapienza. The *CAMS - Centro di Ateneo per i Musei Scientifici di Perugia* is organized into seven Functional Areas operating for homogeneous sectors¹²⁶ in order to carry out the activities of museological research, training, dissemination, value

enhancement of the scientific collections, and services. The SMA - Sistema Museale di Ateneo of the Università di Pisa is

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¹²⁶ Regulations for CAMS- Centro di ateneo per i musei scientifici dell'Università di Perugia, art. 8.

divided into Museum Centres ("Polo" in Italian), which are the service structures of the system; every centre can be divided into sections according to the number and importance of the museums that constitute it¹²⁷. The *PMS - Polo Museale Sapienza* of the *Università degli Studi di Roma La Sapienza* is divided into Areas, which represent a cultural and scientific combination and contribute to the accomplishment of the aims of PMS and that of individual Museums¹²⁸.

3.2.5 Regulations and Statutes of the Central Coordination Units

Regulations and Statutes (hereinafter "Regulations") are the basic documents for the operation of the central coordination units. At present, 68% of units have regulations.

Regulations, organized in different forms form university to university, always contain specific guidelines relating to objectives, activities and/or responsibilities of the units; assigned structures and their articulation; and entities. Usually, they explicitly declare the type of administrative-accounting organization used. In some cases there are also sections related to personnel, spaces and/or location, activity programming and closing balances, financing, and service management (including external staff).

¹²⁷ Regulations for *SMA – Sistema museale di ateneo dell'Università di Pisa,* art. 5 e 7.

 $^{^{128}}$ Regulations for PMS - Polo museale Sapienza dell'Università degli studi di Roma La Sapienza, art. 3.

3.2.6 Aims, Tasks and Activities of the Central Coordination Units

Before explaining the aims, tasks and activities of the units in detail, it is useful to specify what is meant by these terms, in this and the following chapters:

- the "aim", is the purpose of the unit, such as "integration of the university museum with the territory"
- "task", is the general duty/job entrusted to the unit to achieve the aim, such as "designing activities for the integration with the territory"
- "activity", is what the unit specifically does to fulfil its task, such as "organizing an event in collaboration with local associations".

There may be several tasks related to a single aim, or tasks that meet multiple aims. In general there are several activities that fulfil a single task (*Fig. 58*).

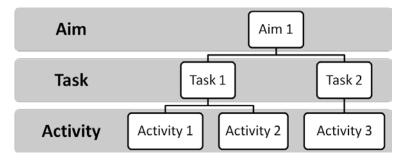


Figure 58: Aims, tasks and activities

Currently, however, "tasks" and "activities" are used interchangeably in unit regulations, usually to express the concept of "task", while in some regulations, those that in most other cases are considered "tasks", are referred to as "aims".

Since, as mentioned, not all of the units have Regulations, the following considerations come from the integrated analysis of Regulations, responses to the questionnaires and interviews, and unit websites.

The range of the aims identified for the central units includes:

- coordinating and conservation, value enhancement, study, and use
- integration of museum and collection complexes
- supporting and promoting museums and collections in the performance of their institutional tasks
- supporting, providing and delivering services related to teaching and university research, building an ideal path linking historical memory to current horizons of knowledge in a multidisciplinary vision
- disseminating scientific and technological culture

The tasks identified for the central units are both internal and external, and include: protection, communication, museology, teaching and training, integration with the outside world, dissemination of culture, research, external consulting and internal organization. *Table 19* lists the range of tasks. Most of the tasks are common to all the units, with the exception of: care of the implementation of the museum heritage website; the image of the University; staff training;

dissemination of culture in society; consulting activity; support to other structures; and the approval of the regulations of the individual museums. These latter are only considered by some units.

The range of tasks includes the promotion, care, support and/or coordination of:

Oriented to	Task	Int.	Ext.
PROTECT.	Conservation of the University museum	Х	
	heritage		
	Expansion of collections	X	
	Restoration of exhibits	Χ	
	Programs for cataloguing of the collections	X	
COMMUNIC.	Production of catalogues and other		
	museological publications (both science and popular science)	Х	Х
	Creation of the museum heritage website	Х	Х
	Image	Х	Х
MUSEOL.	Museum development projects	X	
	Permanent and temporary exhibitions	Х	Χ
TEACHING	Educational activities for schools		Χ
AND TRAINING	Collaborations for the teaching of those disciplines related to the museum heritage		
	Ongoing Staff training for both national and foreign museums		Х
	Internal staff training	Χ	
INTEGRATIO N WITH THE	University participation in local, regional, national, European and international projects		Х
OUTSIDE	Integration of museums in local, national and international networks		Х
DISSEMIN. OF CULTURE	Dissemination of culture in society		Х

RESEARCH	Research, particularly on issues related to the museum collections	Х	Х
	Scientific collaboration with researchers, museums and scientific institutions, both Italian and foreign		х
CONSULTIN	Consulting activity		χ
G ACTIVITY			
MANGEMEN	Policy formulation		
T AND	Museum funding		
DEVELOP.	Annual museums plan of activities		
	Approval of the Regulations of the	Х	
	individual museums		
	Verification of results	X	
	Support given to other university structures	Χ	

Table 19: Tasks of the central coordination units. The tasks common to most of the units are highlighted.

Table 20: shows the range of activities carried out by the central coordination units to fulfil their tasks.

	Tasks Promotion, care, support and/or coordination of:	Activities
PROTECTION	Conservation of the University	Restoration of exhibits
	museum heritage	Coordination and promotion of structural restoration activities
	Expansion of the collections	Promoting the acquisition of new exhibits
	Programs for cataloguing of the	Cataloguing exhibits
	collections	Promoting study, experimentation and application of
		advanced technologies for cataloguing, inventorying and archiving
COMMUNICATION	Production of catalogues and other	Choice of subjects, writing texts, coordination of
	museum publications (both science and popular science)	publication (paper or web)
	Creation of the museum heritage website	Website design
	Image of the University	Coordination of the production of promotional material
MUSEOLOGY	Museum development projects	Proposals for the management of space

	Exhibitions, both permanent and temporary	Planning and coordination of exhibitions
TEACHING AND	Educational activities for schools	Coordination of teaching activities
TREANING		Teaching activities
	Collaborations for the teaching of	Guided tours of the collections
	those disciplines related to the museum heritage	Teaching activities
	Ongoing Staff training for both national and foreign museums	Organisation of seminars and conferences
	Internal staff training	Organisation of training courses
INTEGRATION WITH THE OUTSIDE	University participation in local, regional, national, European and international projects	Participation in external projects with a wide range of specific activities ranging from projection to promotion and administration
	Integration of museums in local, national and international networks	Participation in museum networks
DISSEMINATION OF CULTURE	Dissemination of culture in society	Organisation of seminars and conferences
RESEARCH	Research, particularly on issues related to the museum collections	Organisation of seminars and conferences
	Scientific collaboration with	Organisation of seminars and conferences

	researchers, museums and scientific institutions, both Italian and foreign	Promotion and collaboration for research activity
CONSULTING ACTIVITY	Consulting activity	Consulting activity
MANAGEMENT	Policy formulation	Determining the objectives of the management
AND DEVELOPMENT		Identifying the lines of scientific and cultural development
		Proposals for the museums and collections management, plans for grouping of museums in clusters
	Funding for museums	Proposal for the allocation of funds for museums and collections
	Annual museums plan of activities	Proposal for the annual museums plan of activities
	Approval of the Regulation of the individual museums	Approval of the Regulation of the individual museums
	Verification of results	Drafting the annual report of activities
		Verification of results of the management of museums
	Support to the other structures	Administrative, managerial, and organizational support

Table 20: The activities of the central coordination units carried out according to their tasks

While in theory what are defined as 'unit aims and tasks' bear a close affinity to the 'actions' of different universities, on a practical level there are significant differences in the implementation of actions to fulfil these tasks. In fact, few units systematically or continuously implement all activities.

Some activities are commonly overlooked. In particular, few units carry out specific activities to increase collections or to carry out staff training.

Another important variable is the implementation of activities by the staff of the units or staff of other structures¹²⁹ (departments, museum units, offices of central administration). In many cases, the central unit is concerned exclusively with the promotion and coordination of activities. For example, all communication activities are usually fully delegated to the Central Communication Office of the University.

3.2.7 Planning, Analysis of Results and Development

The implementation of functional activities for an effective and efficient management of the CCUs; planning; analysis of results; and development have all been explicitly checked by means of the questionnaire.

The results reveal that, regardless of the provisions of the unit tasks in the Regulations, few of them systematically deal with planning and analysis of results. Only 60%¹³⁰ draws

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¹²⁹ Further details are discussed in the paragraphs below.

¹³⁰ These percentages are based on 91% of total CCUs: i.e. 20 out of 22 (data of Cagliari and Naples SUN being missing).

up an annual plan of activities and only 65% set up an annual report of activities. Only 20% of the units have a communication plan.

The central units are highly committed to seeking external financing and integration with the territory. Universities tend not to guarantee a fixed annual budget, but in 70% of cases, the units participate in national and international public or private funding applications.

Eight university units are part of local networks or broader schemes: the *Polo Museale* of the *Università di Camerino* participates in the *Rete dei Musei della Provincia di Macerata*; the *Centro Musei delle Scienze Naturali* of *Napoli Federico II* in the *Circuito Informativo per i Beni Culturali e Paesaggistici della Campania*; the *Settore Musei* of Parma in the *Sistema Museale Provinciale*;

the Centro di Servizi Sistema Museale di Ateneo of Pavia in the Sistema Museale Locale Pavia Musei; Sistema Museale di Pavia, del suo Ateneo e della sua Certosa; the Centro di Ateneo per i Musei Scientifici of Perugia in the Rete Regionale degli Ecolaboratori; the Centro di Servizi Tutela e Valorizzazione Antico Patrimonio Scientifico) and the Sistema Museale Senese of Siena in the Fondazione Musei Senesi; and finally the Sistema Museale di Ateneo of the Tuscia in the Sistema Museale Urbano della Provincia di Viterbo.

All the central coordination units have relationships with the local community, in particular through the organization of educational activity for schools.

3.2.8 Political, Technical and Hybrid Central Coordination Units

As already mentioned, the central coordination units of the various universities have different names: "system", "network", "centre", "organizational unit", or "sector". All these structures can be grouped into three types: political, technical, or hybrid. The main distinction depends on the type of personnel that are assigned to 131 or constitute them 132.

The units of a political type consist of a large number of teaching staff; no staff unit is assigned directly to the central unit, so for each of them the participation in the unit is an extra, temporary activity.

Technical units are composed exclusively of technical and administrative staff that are assigned to them.

The hybrid units are made up of assigned technical and administrative staff, and teaching staff, that is not assigned but has an official role within them.

The central coordination units may or may not have administrative, financial, accounting and managerial autonomy (*Table 21*). In the first case, the units draw up and approve their own balance sheet, budget plan and financial statement whereas in the second case, although the units are autonomous in the management of resources made available to them, the resources are part of the balance sheet of the

¹³² The personnel who constitute a structure are not entrusted to the structure but are part of it nonetheless. For example, professors are entrusted to departments but may be part of centres of research.

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¹³¹ In Italian, "afferire" means that the personnel depend on the University and are entrusted to one specific structure that it manages.

Central Administration or of other structures. Hybrid and technical units may or may not be autonomous, the political ones are not.

University	CCU	Type	Autonomy
Bari Aldo Moro	CISMUS - Centro Interdipartimentale di Servizi per la Museologia Scientifica	Hybrid x	
Bologna	SMA - Sistema museale di ateneo	Hybrid	х
Cagliari	CIMAS - Centro Interdipartimentale dei Musei e dell'Archivio Storico	Hybrid	x
Camerino	PMA - Polo museale di ateneo	Hybrid	х
Ferrara	SMA - Sistema museale	Hybrid	-
Napoli SUN	Centro di servizio di ateneo MUSA - Museo universitario delle scienze e delle arti	Hybrid	х
Napoli Federico II	CMSN - Centro Musei delle Scienze Naturali	Hybrid	х
Napoli Federico II	MUSA - Centro Museale "Musei delle Scienze Agrarie"	Hybrid x	
Padova	CAM - Centro di ateneo per i musei Hybrid		х
Palermo	SMA - Sistema museale di ateneo	Hybrid	-
Palermo	UOA12 - Unità organizzativa d'area "Valorizzazione del patrimonio culturale e scientifico e Sistema	Technica I	-

	Museale" -Servizio "Gestione		
	musei"		
Parma	SM - Settore musei	Technica	_
		1	_
Pavia	CSSMA - Centro di servizi	Hybrid	x
	Sistema museale di ateneo	Tiybiid	^
Perugia	CAMS Centro di ateneo	Hybrid	x
	per i musei scientifici	Tiybiid	^
Pisa	SMA - Sistema museale	Hybrid	x
Roma La Sapienza	PMS - Polo museale	Umbrid	
	sapienza	Hybrid	X
Salento	SMA - sistema museale	Political	-
Siena	CUTVAP - Centro di servizi		
	tutela e valorizzazione	Hybrid	x
	antico patrimonio scientifico		
Siena	SIMUS - sistema museale	Political	
	senese	1 Offical	-
Torino	CEMED - Centro museo e	I Ili d	
	documentazione storica	Hybrid	1
Trieste	SMATS - sistema museale di	Hybrid	_
	ateneo	1190110	-
Tuscia	SMA - Sistema museale di	Hydrid Awaitin	
	ateneo	Hybrid	Allocation

Table 21: List of political, technical and hybrid CCUs and their levels of autonomy

"Centres" are structures with a precise administrative significance of generally autonomous, hybrid units.

"Organisational Unit" and "sector" refer to offices of the Central Administration and constitute non-autonomous, technical units.

The terms "system" and "network", used in a general sense, do not fall into any type of administrative category and may refer to similar or completely different structures.

Currently, the only university that employs the definition "museum network" is the Università di Modena e Reggio Emilia, but the unit is not activated and its characteristics are not yet defined. The term "system" refers to both political and hybrid structures, be they autonomous or not. Moreover, two universities use the definition "museum system" in a particular way. The Università degli studi di Padova, within its Statute¹³³, simply refers to all of its museum units as a whole and not to a precise structure. The Università degli studi di Napoli Federico II refers to "Museum System" as the complex of museum centres, departmental museums and botanical gardens, overseen by the Chancellor or his delegate with coordination functions¹³⁴. The case is unique because it is formalized as a central coordination unit, with its own regulations and general aims. It does not have specific tasks, bodies or personnel that are assigned directly to it, but only one figure, the Chancellor or his delegate, who oversees it. The regulations define the structures that compose this system (including two central coordination units) and their characteristics. So, apart from its formalization as a number of units, in practice its structure and operation is very similar to those of the universities that have one or more units and a delegate of the Chancellor/Vice-Chancellor for museum heritage. For this reason the museum system of Napoli Federico II is not counted per se among the central coordination units, while its "superintendent" has been

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¹³³ Statute of *Università degli studi di Padova*, art. 57

¹³⁴ Statute of *Università degli studi di Napoli Federico II*, art. 36 and working Regulations for *Sistema museale dell'Università di Napoli Federico II*.

counted among the delegates of the Chancellor for museum heritage.

Aims and tasks of the units of different types are similar "on paper". Comparing the regulations of these units, there are no substantial differences. The difference only occurs at the level of activity, not so much in the range of possible activities, as in the capacity/ability to directly execute them, in terms of amount and frequency. In general, political units are concerned only with coordination and/or promotion of joint activities: we could say that they give the input, but then the individual structures carry them out. In the case of hybrid and technical units, though, there are also a series of activities carried out within the unit (*Fig. 59*).

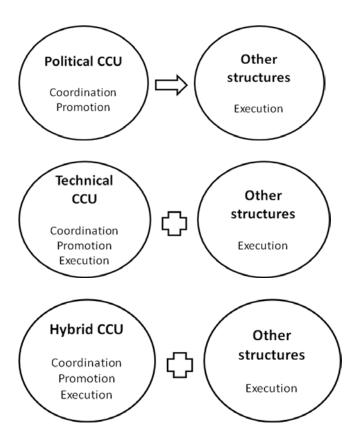


Figure 59: Coordination, promotion, execution of activities by various types of central coordination units

Moreover, hybrid and technical central coordination units organise a larger number of initiatives. This obviously depends on the availability of administrative and technical staff. On this basis, we can state that the main functions of political units include: a definition of intent and policies for the management of museum heritage; promotion and "political" coordination of initiatives to enhance the value of the heritage. Technical units essentially have executive functions in respect to policies established directly by the university. On this basis, they carry out the coordination activities of the museum units, offering these units, in some cases, *ad hoc* technical and administrative support. Hybrid units embody political and technical aspects: define the policies of museum heritage management; coordinate and promote the museum units; offer the units their technical and administrative support; and sometimes centralize some activities.

Table 22 summarizes the characteristics of the three types of unit.

Type	Structure	Staff	Direction	Characteristic	Activity	Auton.135
POL.		Teaching staff. All staff assigned to other structures	President + Committee only of professors and researchers	Definition of aims and policies for the management of the museum heritage, promotion and "political" coordination of initiatives of enhancing the value of the heritage	Political, coordination and promotion	No
TEC.	Office (Organizatio nal Unit, Sector)	Technical and administrativ e staff. All staff assigned to the CCU	Office Manager	Executive function in respect to policies established directly by the University, on the basis of which they carry out their activities of museum units coordination, offering	Promotion, coordination and implementatio n	No

 $^{^{\}rm 135}$ Autonomy on all levels, including administration, finance, accounts and management.

				them, in some cases, ad hoc technical support and administrative		
НҮВ.	Centres	Teaching staff and technical- administrative The technical staff are assigned to the CCU	President + Coordinator + Mixed bodies	embody political and technical aspects: define the policies of museum heritage management, coordinate and promote the museum units, offer them their technical and administrative support and, sometimes, centralize some	Political, promotion, coordination and implementatio n	Yes or not
				activities		

NB "Networks" and "systems" may refer to all three types.

Table 22: Characteristics of different types of central coordination units

3.2.9 Direction and Coordination

Technical units are directed by the office manager.

Hybrid and political units are directed by monocratic and collegiate bodies.

Political CCUs identify substantially with their entities: a technical-scientific committee, usually composed of the heads of the museum units (professors and researchers) and a President, chosen from among its members from a proposal of the committee and appointed by the Chancellor.

The structure of the entities of hybrid units is various; it may be simple and similar to that of political units with a monocratic and collegiate body, or more complex, as a result of the structure of the unit itself. There may be more bodies and/or President monocratic (Director Coordinator) and collegiate bodies (with different names¹³⁶, committee, council, board, etc.). The composition of the committees varies from university to university, but they are made up of a large majority of teaching staff, usually the heads the museum units, and minimal participation by administrative staff, in general only the Administrative Secretary and a representative of the technical-administrative staff. Table 23 proposes some examples.

¹³⁶ In Italian "comitato, consiglio, collegio, giunta".

University	Central coordination unit	Bodies	Composition and main characteristic of the bodies
Napoli Federico II	Centro musei delle scienze naturali e Centro museale musei delle scienze agrarie" - MUSA	Director	Chosen from amongst full-time professors with specific skills, Appointed by the Academic Senate on a proposal of the Chancellor
		Technical - Scientific Committee	Director of the Centre, who presides; Scientific directors of museums belonging to the Centre; A representative of the technical and administrative staff; Administrative Secretary, as both an advisor and minute taker
Bologna	Sistema museale di ateneo	Director	Appointed by the Chancellor on the proposal of the Technical Scientific Committee
		Technical Scientific Committee	Director; Responsible for museums; Co-opted experts, numbering no more

			than three;
			Administrative Secretary, as both an
			advisor and minute taker
		Comitato di	Director;
		Gestione	Three members from among scientific
			and technical staff of the museums;
			Administrative Secretary, as both an
			advisor and minute taker
			The members of the Management
			Committee are appointed by the
			Chancellor on the proposal of TSC
Roma	Polo museale Roma Sapienza	President	Appointed by the Chancellor among
Sapienza			scholars of high scientific and cultural
			profile;
			carry out, together with the Director,
			representation and promotion activities;
			Participates in meetings of the Council
			and of the Board without the right to
			vote
		Director	Selected from amongst the professors of
			the University, appointed by the
			Chancellor with the assent of the Senate

	as part of a triad proposed by the Board; Convenes and presides over the Board and the Council
Managerial	Director;
council ¹³⁷	Administrative Secretary;
	5 Directors of museums (one per area)
	selected by the Board;
	2 representatives elected from amongst
	the technical administrative staff of the
	centre and of the museums curators
Board of	Director of the Centre;
museums ¹³⁸	Museum directors;
	Curators;
	Administrative Secretary as both an
	advisor and minute taker

Table 23: Examples of hybrid unit entities.

 $^{^{137}}$ In Italian "Consiglio Direttivo".

¹³⁸ In Italian "Collegio dei musei".

If there is only one monocratic body (usually the Director) it convenes and presides over the collegiate bodies, and represents and coordinates the units. A further monocratic body may be added (usually the President) to act as an advisory and representative.

In the event that there is only one collegiate body, it has functions of policy, planning, management and verification of the unit activity. Sometimes, a second collegiate body is added in an advisory and technical support role.

3.2.10 Management Models of Museum Heritage

Applying what has been mentioned about the actual situations of the universities, it is found that up to now, 4 models of museum heritage management have been implemented: no coordinated management; a purely political unit; a purely hybrid unit; or two different types of units. Another model, which is currently not activated, might involve the use of a purely technical unit.

Table 24 compares their characteristics.

Management model	Definition of the general policies of heritage management	Technical administrative coordination
No coordinated management	None or University	None
Political CCU	Political CCU	None
Technical CCU	University	Technical CCU
Hybrid CCU	Hybrid CCU	Hybrid CCU
Two CCUs of different	Political CCU or	Technical CCU or
types	Hybrid CCU	Hybrid CCU

Table 24: Characteristics of museum heritage management models

Depending on the management model there may be deficiencies in the definition of the level of general heritage management policies and technical-administrative coordination (no coordinated management); at the level of technical-administrative coordination (only political CCU) or covering of both these aspects, looked after by two different structures (political CCU, technical or hybrid), by the same (hybrid CCU) or by the university and a central unit (technical CCU).

In cases where the university directly defines the management policies of the museum heritage this can be done through the Academic Senate, the Council of Administration or a Delegate of the Chancellor/Vice-Chancellor.

Table 25 highlights strengths, weaknesses, threats and opportunities of each management model.

Management model: no coordinated management

Strengths	Opportunities	Weaknesses	Threats
Autonomy of the	Development of individual	Autonomy of the	Resource management not
individual structures	structures	individual structures	optimised;
			Uneven development of
			the individual structures;
			"Negative" competition
			between the individual
			structures;
			Lack of common planning;
			Small role in university
			policies
		Lack of coordinated image	Poor visibility;
			Small role in territorial
			policies;
			Small role in participating
			in funding applications for
			the financing of cultural
			activities

Management model: with political CCU

Strengths	Opportunities	Weaknesses	Threats
Definition of common shared policies	The policies established are adequate for the development of individual structures and as a system; The structures recognize themselves in the policies defined	Lack of technical and administrative coordination	Resource management not optimised; Uneven development of the individual structures; "Negative" competition between the individual structures;
Coordinated image	Visibility; Have influence in territorial policies; Astute participation in funding applications for the financing of cultural activities		Lack of common planning

Management model: with technical CCU

Strengths	Opportunities	Weaknesses	Threats
Technical and	Overview of the needs of	Policies established by the	Inadequate policies for the
administrative	all structures;	university bodies non-	development of individual
coordination	Optimized management of	specific	structures and as a system;
	resources;		The structures do not
	Minimal technical-		recognize themselves in the
	administrative support for		policies of the University
	all structures;		
	Common planning		
Coordinated image	Visibility;	Lack of political authority	Small role in university
	Have influence in	of the CCU	policies;
	territorial policies;		The structures seem
	Astute participation in		independent from the
	funding applications for		CCU
	the financing of cultural		
	activities		

Management model: two different types of CCU

Strengths	Opportunities	Weaknesses	Threats
Definition of	The policies established are adequate for	Policy-making and	Poor communication
common shared	the development of individual structures	technical-administrative	between the two
policies	and as a system;	coordination belong to two	CCUs;
	The structures recognize themselves in	different CCUs	Misalignment
	the defined policies		between the policies
			defined and activities
Technical and	Overview of the needs of all structures;		of the CCUs;
administrative	Optimized management of resources;		Lack of autonomy of
coordination	Minimal administrative support for all		the technical CCU
	structures;		Confusion of
	Common planning		competence;
Coordinated image	Visibility;		Bureaucratic
	Have influence in territorial policies;		complications;
	Astute participation in funding		Conflicts between the
	applications for the financing of cultural		two CCUs;
	activities		Coordination system
			not fully efficient and
			effective

Management model: with hybrid CCU

Strengths	Opportunities	W.	T.
Definition of common shared policies	The policies established are adequate for the development of	-	-
_	individual structures and as a system; The structures recognize		
	themselves in the policies defined		
Technical and administrative	Overview of the needs of all structures; Optimized management		
coordination	of resources; Minimal administrative support for all structures;		
	Common planning		
Coordinated image	Visibility; Have influence in territorial policies; Astute		
<u> </u>	participation in funding applications for the financing of cultural		
	activities		
Teaching staff and technical-	Ability to define policies and apply them to activities within the		
administrative work in the same	same CCU; Simplification of the process of internal		
CCU	communication		
The definition of policies and the	Sharing of policies by the teaching staff and tech-admin of the		
technical-administrative coordination	CCU and the structures; Coherence between policy and		
belong to the same CCU	technical-administrative activity; Bureaucratic simplification		
-	The structures have a single point of reference; Full efficiency		
	and effectiveness of the coordination system; More weight in the		
	university policy		

Table 25: Strengths, weaknesses, threats and opportunities of museum heritage management models

Currently one university has chosen a purely political CCU; one university has both a political and a technical unit; one university has both a political and a hybrid unit; one university has both a hybrid and a technical unit; 15 universities have chosen only the hybrid type. Of these latter, the *Università degli studi di Napoli Federico II* has divided its museum units according to their thematic area between two hybrid central coordination units that are independent of each other (*Table 26*).

University	Hyb.	Pol.	Tech.	Tot.
Università degli studi di Bari Aldo Moro	1			1
Università degli studi di Bologna	1			1
Università degli studi di Cagliari	1			1
Università degli studi di Camerino	1			1
Università degli studi di Ferrara	1			1
Università degli studi di Napoli Fed. II	2			2
Seconda università degli studi di Napoli	1			1
Università degli studi di Padova	1			1
Università degli studi di Palermo	1		1	2
Università degli studi di Parma		1	1	2
Università degli studi di Pavia	1			1
Università degli studi di Perugia	1			1
Università di Pisa	1			1
Università degli studi di Roma Sapienza	1			1
Università del Salento		1		1
Università degli studi di Siena	1	1		2
Politecnico di Torino	1			1

Università degli studi di Trieste	1		1
Università degli studi della Tuscia	1		1
Total			23

Table 26: Number and type of central coordination units per University

3.2.11 The Technical-Administrative Staff

As we have seen, the hybrid and technical CCUs have assigned technical-administrative staff. This staff is both of the technical and administrative-managerial areas, varying in number depending on the complexity of the set up of the unit and on the political choices of the universities: in most cases only the staff (usually administrative) used in coordination or in transversal activities is assigned to the unit; in some cases however, the mostly technical staff employed by the single museum units, is also assigned to the central unit. The university with the highest number of staff is Pisa with 36 units (25 technical, 11 administrative); followed by three universities that have between 21 and 17 units (Perugia, Ferrara and one of the central units of Napoli Federico II); and three universities that have between 12 and 10 units (Bologna, Padova and Pavia). Six universities have only one unit of personnel per central unit and the remaining five universities between 3 and 6 units of personnel (Table 27).

University	CCU	Pers Tech	Pers Amm	Pers TOT
Pisa	SMA	25	11	36
Perugia	CAMS	19	2	21
Ferrara	SM	11	8	19

Napoli Federico II	CMSN	11	6	17
Bologna	SMA	5	7	12
Padova	CAM	10	2	12
Pavia	CSSMA	7	3	10
Camerino	PMA	5	1	6
Napoli Federico II	MUSA	4	2	6
Siena	CUTVAP	2	2	4
Torino Politecnico	CEMED	1	3	4
Parma	SGM	0	3	3
Bari Aldo Moro	CISMUS	1	0	1
Palermo	SMA*	0	1	1
Palermo	UOA12	0	1	1
Roma La Sapienza	PMS*	0	1	1
Trieste	SMATS	0	1	1
Tuscia	SMA	1 0 1		1
Cagliari	CIMAS	No data available		
Napoli SUN	MUSA	No data available		

^{*} CCU of recent activation or reorganization. Staff may increase when unit is fully up and running.

Table 27: Number of units of technical and administrative staff per central coordination unit

With a few exceptions, the staff is engaged full-time.

The technical area staff performs functions related to the care of collections and teaching; administrative-managerial staff may have non-specific functions of coordination or specific lines of activity related to communication, teaching and accounting. Only 18%¹³⁹ has specific training in the field of cultural heritage and its management and apart from some exceptions, this is to be found in the area of technical personnel.

3.2.12 Final Considerations

Universities and Coordinated Management of Museum Heritage: the Current Framework

Most of the universities that have a substantial and varied museum heritage employ special structures for its coordinated management, which are commonly referred to as "museum systems". In reality however, the museum systems in the strictest sense are only a part of these structures. For this reason the definition of "central coordination units (CCU)" has been coined to indicate in the broadest sense each of these structures, which include "centres", "networks" and other offices.

Currently half of the universities, 19 universities out of 37, have one or two central coordination units which usually comprise and /or coordinate all of the university museum units, even when the university has two central units, because in this case the two structures have different tasks. An exception is the *Università degli Studi di Napoli Federico II*, which has divided its museum units thematically between two central units independent from each other.

In some universities, there is also the figure of the Delegate of the Chancellor or Vice-Chancellor for museum

Percentage calcuated on 86% of the total number of CCUs: i.e. without the universities of Bologna, Calgary and Naples SUN, for whom there is no available data.

heritage, which is essentially the interface between museum units/central coordination units and the Academic Senate/Council of Administration.

Although the existence of such a figure can be useful in principle, if established in addition to the central unit it may be counterproductive, because of the doubling of the responsible personnel with the consequent complication of relationships between the parties involved.

University Policies

The coordinated management of museum structures is the best solution for their development and the effectiveness and efficiency of their work. This is because it allows for the definition and implementation of policies appropriate to the development of the individual museum units and system as a whole, as well as the optimisation of resources, and better visibility and more weight in territorial policies.

Every action carried out by a university on this subject may be interpreted according to its implications as a choice that suggests a different degree of interest towards museum heritage. (*Table 28*).

Choices that suggest	Choices	Implications	Interpretation
Interest toward the	To have CCU or CCU and	The University dedicates	Political choice: the
museum heritage	Delegate of the Chancellor	resources to the museum	University recognizes the
		heritage trying to manage	value of the museum
		it in an effective and	heritage.
		efficient way	The degree of interest is
			expressed in the allocation of
			funds, space and human
			resources.
Only formal Interest	To have only a political CCU	The University activate an	The University undertakes
toward the museum		unspecific CCU without	specific actions for the
heritage		assigning technical-	coordinated management of
		administrative staff to it	the heritage but stops at the
	To have only the Delegate of	The University create an	planning stage or makes
	the Chancellor	interface but do not	choices that are inefficient at
		actively support its	an operational level.
		operation	More than the result of a
	To provide for CCU in the	The University limits itself	conscious policy, these
	Statute but not activate them	to a theoretical proposal	choices seem to be the result
			of internal and/or external
	Do not provide the CCU with	The University does not	pressure

	staff with specific skills	invest in the CCU	
Poor or nonexistent	Do not have CCU but carry	Some activities are carried	The university has no specific
interest toward the	out certain activities at the	out at the central level but	interest towards the museum
museum heritage	central level	there is a general lack of	heritage
		vision, planning and	
		coordination	
Different possibilities	The choice between different	The management models	It is a choice that has political
of interpretation	management models (except	give the action different	implications but that may be
	the one with only one	incisiveness- towards	taken just for technical
	political CCU)	museum heritage, with	reasons or imitation of other
		implications at political	universities
		level operational and	
		technical	
	Some CCU do not have a	It lacks the basic	This can be caused by both a
	regulation	document for the	political choice (of little
		operation of the CCU	interest towards heritage), or
		which may cause poor	technical or practical reasons
		effectiveness, efficiency	(ie. the recent reorganization
		and incisiveness	of the CCU or the lack of
			understanding of the
			importance of regulation)

Table 28: Choices of universities and their interpretations

Based on the research findings, the policies of the universities are various and contradictory, so that within the same university there are positive choices alongside negative ones. There are, for example, universities that set up central coordination units but do not give them sufficient resources for effective management, or universities that provide for central units in their statute but that do not activate them.

Sometimes, moreover, it seems that the choices of higher academic institutions depend not on a genuine political plan but are rather a random response to internal or external pressure on the university: to push towards informed and coordinated management, by the MU heads, from within, and the CRUI from outside (at least until the first few years of the 21st century when the Museum Commission began).

Functioning of the CCU

As we have seen there are different types of CCU, political, technical and hybrid, which are distinguished by the staff that are assigned, the management, the functions, activities, and type and degree of autonomy.

The staff, depending on CCU type, can consist of teaching or technical-administrative personnel: in the latter case you can only assign staff involved in inter-connected and joint activities or, in addition, personnel that work for individual museum units. Considerations in this respect will be made in the general conclusions of the thesis after the analysis of the functioning of museum units.

Different models of coordinated management of assets are possible according to the type, number and interaction of CCUs activated on campus: be they political, technical, hybrid or even two different types of CCU.

The choice of management model will greatly affect the effectiveness and efficiency of the actions of the CCU and the achievement of these objectives. Management through a hybrid CCU is the best, having strengths in terms of planning, management, implementation and effectiveness, both inside and outside of the university, and showing no particular weaknesses.

This is with regard to the analysis of processes, but, of course, by implementing the model numerous other variables that affect the performance of the CCU come into play. From the research it emerged that the variables are numerous and complex and, include more than the availability of resources, including the rules, the direction of the CCU, the type of staff, planning and analysis of the results, and the distribution of work amongst internal and external CCU staff.

Table 29 summarizes the characteristics of the variables showing impact, strengths, weaknesses, and the potential for improvement

Variable	Regulations
Impact on	Objectives and organization of the CCU, as a result
	of the possibility of achieving the objectives
Weaknesses	Not all CCUs have regulations
	The regulations do not always contain all the
	necessary information
	The regulations are sometimes ambiguous
	regarding objectives, tasks, activities

Strengths	-
Potential for	All CCUs should adopt Regulations
Improvement	The regulations should, at the very least, contain
	information on: objectives, CCU tasks, assigned
	structures and their articulation, entities,
	administrative accounting, personnel, space,
	programming and final activity, financing, service
	management
	Objectives and tasks of the CCU should be
	expressed clearly and be consistent with each other,
	avoiding ambiguities in terminology, particularly
	between 'tasks' and 'activities', as has been seen.

Variable	CCU Management
Impact on	Definition of policies and objectives, planning and
	asset management, resource management and
	personnel, analysis of results
Weakness	-
Strengths	Enthusiasm of the members of the organisation
Potential for	It may be useful to rethink the type of technical-
Improvement	administrative representation. It would be desirable
_	that as well as an accounting position, which may or
	may not include the right to vote, there is always a
	position provided for at least one chosen person
	(appointed or elected) amongst the technical or
	administrative staff with specific expertise in the
	management of cultural heritage: not that you
	should treat it as a "trade union" representative, but
	as a figure who knows the skills and needs of the
	technical and administrative staff and who is able to
	bring added technical and scientific value to the

T
directing entity. In the case in which the technical-
administrative staff member who works at museum
units not assigned to the CCU, two members of staff
could be chosen, one from the CCU and one from
the structures, always according the previously
described criteria.

Variable	Types of Personnel
Impact on	Policy implementation, coordination and execution
	activities
Weaknesses	Shortage of staff, particularly administrative and
	managerial, with training and expertise in the
	management of cultural heritage: there is no specific
	selection on the basis of training and skills for the
	staff of administrative and managerial area of CCU
	The CCU does not handle the updating of staff
Strengths	Enthusiasm of the staff
	Administrative and managerial personnel with
	accounting expertise
	Technical personnel with expertise in the care of the
	collections
Potential for	Apart from those with accounting skills,
Improvement	administrative and managerial personnel should
	have
	training and expertise in the management of cultural
	heritage and be selected ad hoc
	The UCC should be responsible for the updating of
	staff, organizing internal courses or
	encouraging participation in external courses

Variable	Planning and Result Analysis
Impact on	Asset management, opportunities for improvement
Weaknesses	Few CCUs systematically deal with planning and analysis of results
Strenghts	-
Potential for	All CCUs should give importance to this work,
Improvement	drawing up plans, reports, and annual self- evaluation reports

Variable	Distribution of Work between Internal staff and External CCU
Impact on	Asset management, effectiveness and efficiency
Weaknesses	There are activities, for example communication, which are fundamental for the CCU and require a thorough knowledge of content and specific problems, but which in general are delegated entirely to other offices. When the personnel operating the museum units are not assigned to the CCU, the work is not always optimized
Strengths	-
Potential for	Plan the distribution of work in order to get the
Improvement	maximum results from the collaboration with
	other structures but without delegating all of the tasks fundamental to the CCU, such as communication

Table 29: Variables affecting the operation of the CCU, and the potential for improvement

The weaknesses derive as much from the policies of the universities as from domestic issues: the lack of clear, complete and universal regulation; the lack of personnel with specific training in the management of cultural heritage; the lack of a culture of planning and result analysis; and a rather ineffective and inefficient distribution of labour between CCU and other offices. Among these, the most difficult problem to solve is that relating to staff, since it depends mainly on the university and can only be overcome with a strong stance being taken by the CCU.

There is however potential for improvement, which in most cases can be achieved through the awareness and willingness of the CCU.

In addition to the structural variables that affect CCU operation, the goals are conditioned by the implementation or not of activities specifically related to it; leaving aside those closely connected to different objectives, in the research, activities considered interconnected have been investigated: the research of funding and communication. One of the strengths of the CCUs seems to be the search for funding, almost all of them are dedicated to this, albeit with different results. The opposite happens with communication because, regardless of whether this is dealt with inside or outside of the CCU, there are few CCUs that the approach it in a systematic and constant way, for example by providing a communication plan.

Concluding Remarks

The framework described doesn't offer a particularly good picture of the museum heritage of universities. In fact,

apart from a few exceptions, universities generally consider it a matter of secondary importance, devoting scant resources to its management and taking steps in this regard only after being pushed by the heads of museum units. Often, universities' policies serve as mere formalities, impeding CCUs from achieving their best. However, many of the weaknesses of CCUs can easily be overcome through awareness and determination, creating ample room for improvement, even in a politically unchanged framework.

These, at present incomplete considerations, will become clear following the investigation of museum units in the following chapters.

Chapter 3.3

Museums: Autonomy, Resources and Managerial Models

This chapter has three objectives concerning the operation of museums, both in university contexts and specifically in each museum unit.

The results intend, above all, to describe the ongoing situation through an examination of the individual museums, or of a relevant sample of them, by highlighting their strengths and weaknesses. To do so I will take into account administrative status, autonomy, direction, resources, planning, analysis of the results and development.

I will also examine the analysis of three general management models: Internal, Collaborative, and Outsourced. The aim is to ascertain whether there is a model which is better than the others, by evaluating theoretically their positive and negative aspects and their effective applicability in a university context.

From all of this, I will draw the possible conclusions as to university policies towards museums.

Appendices E, F and G report observed data.

3.3.1 Methodology and Sources

There is no specific source material about the topics I'm dealing with. For this reason the necessary data for this phase has been taken from official university documents including regulations of central coordination units (CCUs) and of museum units (MUs) as well as websites and questionnaires which were specifically prepared. The Data derives from several sources and has been systematised and archived in a database to allow for its analysis.

3.3.2 Administrative status and autonomy

In order to determine the level of autonomy of museums, some necessary features have been gathered, such as the administrative status, relationship with other structures, existence of an act of constitution, presence of regulations and a statute.

University museums are in the category of "office-museums" and they operate at different levels of autonomy in the fields of choices and resources. These are awarded by the university based on distribution policies among the structures and within the ministry restrictions on the upper limit of expense and on the staff enrolment process.

Sections of departments, sections or parts of central coordination units (the so-called *sistemi museali*) and centres can be an integral and non-distinct part of departments themselves (or of faculties in some cases before the Gelmini Reform (*Riforma Gelmini*). The administrative status influences their type and level of autonomy. Within this grid, museums constituted as centres can be distinguished. These benefit from

scientific, organisational, administrative and, usually, accounting (financial) autonomy, while all the others have only scientific autonomy.

The majority of museums, 54%¹⁴⁰, weren't constituted with an official act (*Fig. 60*). However, even non-officially constituted museums are generally recognised through quotations in documents, decisions and regulations produced by different bodies of the university.

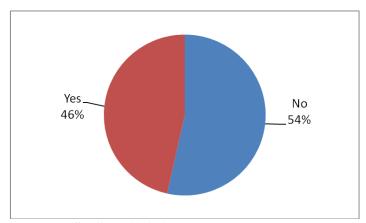


Figure 60: Officially established museums

70%¹⁴¹ of museums don't have their own regulations or statutes, but sometimes museums which are subordinate to central coordination units refer to their rules (*Fig. 61*).

¹⁴⁰ Sample of questionnaire respondents: 114 museums out of 196 (58%).

¹⁴¹ Sample of questionnaire respondents: 114 museums out of 196 (58%).

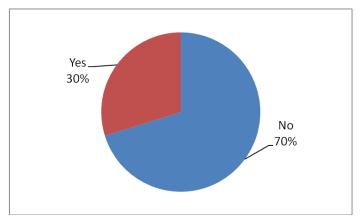


Figure 61: Museums with regulations

3.3.3 Direction

University museums have a manager, who is chosen through procedures which are seldom clearly defined in a regulatory document, and who is sometimes the director of the department when a museum corresponds to a department.

Usually, only the director of the museum is in charge of its entire management, except in bigger and/or more autonomously regulated museums with at least one advisory assembly, to which a second assembly can be added and/or a second monocratic body¹⁴².

¹⁴² Organo monocratico. See, for example, the regulations of Museo di Palazzo Poggi di Bologna (Decreto Rettorale 22 maggio 2001, n° 131/37), Museo di Storia Naturale di Firenze (Decreto rettorale, 21 settembre 2011, n. 889 – prot. 57555), Museo della Grafica di Pisa, Centro interdipartimentale Museo di Storia Naturale e del Territorio di Pisa (D.R. n. 01/18078 del 24 ottobre 2005).

The museum manager, named director or president, is normally a university professor or has a scientific directorial role.

When a museum is autonomous, the director works side by side with a second, technical person, sometimes with scientific and museological expertise¹⁴³, who directs and coordinates the structure and is responsible for technical and administrative management. This office can also be appointed through a specific contest¹⁴⁴.

When there is a single counselling and orientating assembly body, called a scientific committee, it determines the objectives and the direction of the museums: their coordination and monitoring, but also their schedule.

Sometimes, there is a second advisory body, called a technical committee, *consultivo* or *giunta*, which has consultative, propositional and supporting functions towards the manager.

Advisory bodies are usually composed of teachers and technical-administrative staff, with whom external offices may cooperate¹⁴⁵ (*Table 30*).

Type of body	Name	Members	Role
1st monocratic	Director /	University	Scientific
body	President	professor	direction
2nd monocratic	Director /	Non teacher, can	Activity
body (possible)	President	be external	coordination,
			technical and

¹⁴³ See, for example, the regulations of *Museo di Storia Naturale di Firenze*.

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¹⁴⁴ See, for example, the regulations of *Museo di Storia Naturale di Firenze*.

¹⁴⁵ See, for example, the regulations of *Museo della Grafica di Pisa*.

			administrative management
1st advisory body	Scientific Committee /	Teaching and	Objective and direction
	Direction Committee / Council	technical- administrative staff, external collaboration	determination, scheduling, coordination and monitoring
2nd advisory body (possible)	Technical Committee / Consultivo / Giunta	might be added	Advisory, propositional and supportive of the manager

Table 30: Museum direction entities

3.3.4 Internal Staff

University museums can have assigned staff, depending on their administrative status. Museums constituted as centres hire external staff. Museums which do not have assigned staff, can still have exclusively dedicated personnel, which sometimes happens when a museum originates from, or is part of, a central coordination unit. As we have seen, only the staff who are employed in common transverse activities between different museums are assigned to some central coordination units. Other employees, who deal with single museum units, are also assigned to some coordination units.

Therefore, depending on the existence of central coordination units, their organization, category and relations of museums, staff can be managed according to the variables of *Figure 62*. The Figure depicts how much simpler it is to provide museums with specifically dedicated staff when they belong to central coordination units.

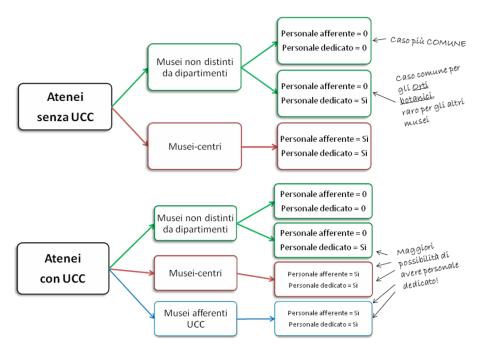


Figure 62: Staff management: variants with and without central coordination units

In any case, 45%¹⁴⁶ of museums don't have exclusively dedicated technical and/or administrative staff (*Fig. 63*). They are looked after by a manager, usually a professor or a researcher, who deals with every aspect, from preservation to education, with possible and/or occasional support from other professors or experts and members of staff. 24% have a staff unit, which is usually technical, and only 5% have more than 10. Among the museums which have most staff units are the botanical gardens for which gardeners are necessary.

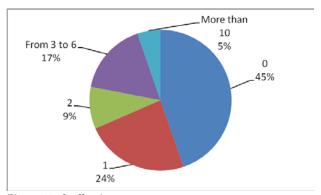


Figure 63: Staff units per museum

83% of museum staff belong to the technical category and the remaining 17% are administrative-managerial personnel (*Fig. 64*).

 $^{146}\, Sample$ of questionnaire respondents: 114 museums out of 196 (58%).

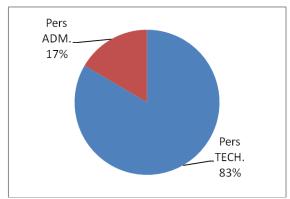


Figure 64: Categories of museum staff

88% of staff work full-time and only 12% work part-time (Fig. 65).

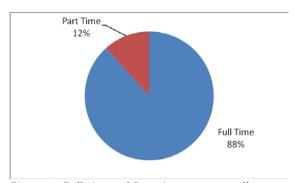


Figure 65: Full-time and Part-time museum staff

The presence of technical-administrative employees quantitatively influences the museums' activities. The staff favour the development of all projects, and in particular research, exhibition set-up, conferences, workshops, museum education programs, and university students' activities. (Fig. 66 and 67).

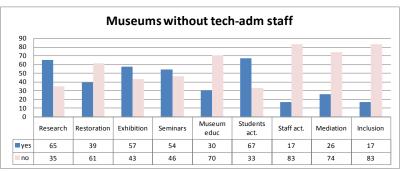


Figure 66: Museum activities without technical-administrative staff

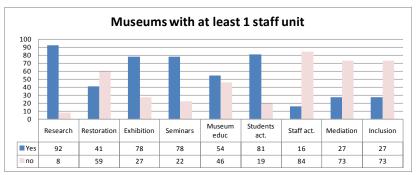


Figure 67: Museum activities with technical-administrative staff

Only 15% of staff have specifically studied cultural heritage management or museology (*Fig. 68*). This doesn't affect the range of activities, but it can influence their efficiency and efficacy.

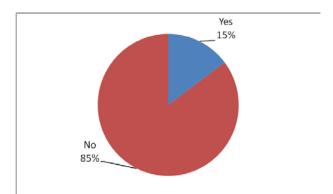


Figure 68: Skilled staff in cultural heritage management or museology

3.3.5 Budget

Only 54%¹⁴⁷ of museums have a specific yearly budget given by the university or other structures (departments, central coordination units) (*Fig.* 69).

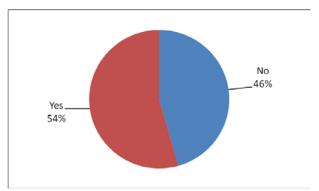


Figure 69: Museums with a yearly budget

 $^{147}\,\mbox{Sample}$ of questionnaire respondents: 114 out of 196 museums (58%).

3.3.6 The Best Status for University Museums

We have seen how autonomy can influence museums' efficacy and efficiency and how status influences autonomy. So, the ideal museum has a status which guarantees more autonomy. However different considerations have to be made while choosing the status of university museums. All the implications and possibilities of exceeding limits that are imposed need to be compared (*Table 31*), in order to establish whether there is a better solution and if so, what it is.

To be thorough, I will also include the status of independent museums, typical of foundations and associations, which are not used for any university museums at the moment, but which were chosen for public museums in the past.

- Museums which are parts of other structures have very limited autonomy and do not have assigned staff. These weaknesses can be overcome by asking for dedicated staff from departments and above all from central coordination units (this latter is quite often the case); by officially establishing the museum; and adopting regulations. These museums have two fundamental strengths: the guarantee of respect of the role, and the particularity and the identity of the university museum.
- Museums organized as centres offer the same guarantees as the former, but they are much more autonomous, they have assigned technicaladministrative staff and teachers with an official role.

• **Independent** museums are completely autonomous, but they misrepresent the idea of the university museum itself, causing a loss of particularity and identity, jeopardizing the respect of their role.

Status	Autonomy	Weaknesses and Risks	St	rengths and Opportunities	Overcoming status' limits
Part of other structure (department, central coordination unit)	Scientific	 Very limited autonomy No assigned staff 	•	Guarantee of respect of role of university museum Guarantee of respect of particularity and identity of museum	 Official establishment of the museum Regulations as a means of autonomy Assigned staff from other structures
Centre	Scientific, organizational, administrative and usually accounting autonomy, within the limits of resources and general rules of the university	More autonomous than museums that are part of other structures, but still not very autonomous	•	Assigned staff Collaboration between teachers and technical- administrative staff Guarantee of respect of role of university museum Guarantee of respect of particularity and identity	Regulations and/or Statute as a means of autonomy

			of museum	
Independent Museum (Foundation, Association)	Complete	 No guaranter respect of rol university museum Lack of resperanticularity identity of museum 	ect of	

Table 31: University museum status and connected implication

Excluding the status of an independent museum, unsuitable as a university museum, there is still a need to compare the museums belonging to other structures and centres.

Even if the centre choice seems to be the best in a museum's perspective, this solution isn't always possible. Establishing this structure implies overwhelming university administration and goes against the recent university reform. For this reason it can only be justifiable when a museum has specific needs to become a centre, being a big structure.

In other cases, a museum can be managed as part of other structures (with a measure of autonomy, and efficiency and efficacy), if it is officially established, it has regulations and assigned staff.

3.3.7 Managerial Models

Museums are usually managed directly with exclusively internal resources, but there are a few cases in which:

- They are managed directly in collaboration with other entities
- Some services and/or activities are managed by a third party
- They are managed indirectly

This can be illustrated with the cases of the Universities of Padua, Catania and Pisa.

• The majority of museums of the University of Padua have subcontracted their educational services to a cooperative.

- In 2010 Literature and Philosophy faculties in Catania stipulated a convention with an association of students to manage the access and the services related to the Museum of the Factory¹⁴⁸.
- The Museum of Graphics¹⁴⁹ in Pisa is managed by a collaboration between the Comune and representatives of the scientific community. The regulations of the Museum state that the "Scientific director, nominated by the University of Pisa ... has the direction and the exclusive responsibility of the museum activity of preservation, study and consultation of the Collection ... and the exhibition" 150. Besides, there is also a President who is "appointed by the Mayor from among the people who are in charge in the Comune and have adequate expertise"151. The President fulfils the function of "representative of the Museum, ensuring the correct development of activities and coordinating Museum activities with the Comune institutional ones"152. The President also "summons and presides over the Direction Committee of the

¹⁴⁸ Museo della Fabbrica.

¹⁴⁹ Museo della Grafica.

¹⁵⁰ "Direttore scientifico, nominato dall'Università di Pisa" che "ha la direzione e la responsabilità esclusiva dell'attività museale di conservazione, studio e consultazione della Collezione […] e dell'attività espositiva".

¹⁵¹ "Nominato dal Sindaco tra persone che ricoprano incarichi nell'ambito del Comune dotate di adeguata competenza".

¹⁵² "Rappresentanza del Museo, assicurando il corretto svolgimento delle attività ed esercitando un ruolo di coordinamento tra le attività del Museo e le attività istituzionali del Comune".

Museum^{153"} 154. An Honorary President is "elected by the University of Pisa ... among experts in the field of museum institutions, he has the right to vote in the Direction Committee of the Museum" 155. The Direction Committee is responsible for scheduling, coordinating and monitoring the activities of the Museum and it is composed of the Scientific Director, the President, the Honorary President, a member of the Comune Council or a delegate, four experts in museum institutions, of which two are nominated by the Dean and two by the Mayor¹⁵⁶. The museum also has a Managerial Technical Committee, established to "ensure an adequate organizational and managerial support to the Direction Committee of the Museum and, generally, the activities of the Museum" 157. It is composed of the Scientific Director, a delegate of the Administrative Director of the University and two representatives of the Comune to be chosen from among directors and officials¹⁵⁸. Spaces, equipment and funds are made available by both the University and the Comune and the management of the museum activities is looked after

¹⁵³ Comitato d'Indirizzo del Museo.

^{154 &}quot;Convoca e presiede il Comitato d'indirizzo del Museo".

¹⁵⁵ "Nominato dall'Università di Pisa [...] fra esperti nel campo delle istituzioni museali, con diritto di voto nel Comitato d'indirizzo del Museo", Regulations of *Museo della Grafica dell'Università di Pisa*, artt. 5.1, 6 e 7.

¹⁵⁶ Regulations of Museo della Grafica dell'Università di Pisa, art. 8.

¹⁵⁷ "Per assicurare un adeguato supporto organizzativo e gestionale al Comitato d'indirizzo del Museo e, più in generale, alle attività del Museo".

¹⁵⁸ Regulations of *Museo della Grafica dell'Università di Pisa*, art. 10.

by a Delegate of the Administrative Director¹⁵⁹. The collaboration between the two entities is strengthened by the objectives of the museum, oriented towards cooperation with the University for educational activities, as well as promotion of the cultural growth of the local community and the social and economical development of the Pisan and Tuscan territories. They also aim to enhance the value of the cultural heritage of the territory and to develop and affirm the image of Pisa and Tuscany both nationally and internationally¹⁶⁰.

• Museo degli Strumenti di Calcolo¹⁶¹ in Pisa is managed by the Galileo Galilei Foundation, established by the University of Pisa in 1939¹⁶² and recently reorganized. It has also received the collections of the Centre for the Preservation and Study of the Scientific Instruments of the Department of Physics¹⁶³. The Foundation, whose goal is to promote scientific and technological culture, includes two representatives of the University and of the Comune di Pisa in its board of directors.

In summary, there are 3 managerial models:

¹⁵⁹ Regulations of *Museo della Grafica dell'Università di Pisa*, artt.11, 12 e 13.

 $^{^{160}}$ Regulations of the Graphic Museum of the University of Pisa, article 2.

¹⁶¹ Museum of Computational Instruments

¹⁶² Information related to the Foundation was obtained from the web sites of University of Pisa <u>www.unipi.it</u>.

¹⁶³ Centre for the conservation and study of scientific instruments of the department of Physics.

- **Internal** (direct, with exclusive use of internal resources),
- **Collaborative** (direct, but in collaboration with other entities)
- **Outsourced** (indirect management of services and/or activities of the museum).

Table 32 illustrates the strengths and weaknesses, risks and opportunities of each model.

Managerial Model: Internal

 Coherence of cultural policies of the museum with the university mission Development and promotion of the university through the museum
Development and promotion of the university through the museum
university through the museum
, o
 Integration between the museum and
the educational activities and research
of the university
Development of the group identity of
the staff

Managerial Model: Collaborative

Weaknesses	Risks	Strengths	Opportunities
	 Bureaucratic complications Confusion in roles Conflicts with partners 		 Coherence of the museum's cultural policies with the university mission Development and promotion of the university through the museum Integration between the museum and the educational activities and research of the university
		Participation of personnel with diverse skills	Comparison, integration and growth of expertise
		Greater staff availability	Increase of activities
		Comparison with other realities	 Opening up to the outside Broadening of the horizons Reinforcement of the relationships between the university and other realities

Managerial Model: Outsourced

Weaknesses	Risks	Strengths	Opportunities
	 Incoherence of the museum's cultural policies with the university mission Lack of development and promotion of the university through the museum Lack of integration between the museum and the educational activities and research of the university Conflicting and unsatisfied staff because of difference in consideration, role and compensation, based on two categories (internal and external staff) 	 More freedom in staff recruitment More availability of staff 	

Table 32: Museum managerial models: strengths and weaknesses, risks and opportunities

Internal management often coincides with lack of staff and sometimes, lack of specialised staff. In reality this depends only on university choices on staff policies and not on an "intrinsic" defect of the managerial model.

The **Outsourcing** model has two **variations**:

- Outsourcing of the complete management of the museum
- Outsourcing of services and/or activities

These variations can be analysed in depth, distinguishing between strategic and non-strategic activities.

Consequently, we should also bear in mind the variations in the Outsourcing model

- Outsourcing of non-strategic services or activities
- Outsourcing of strategic activities (Fig. 70).

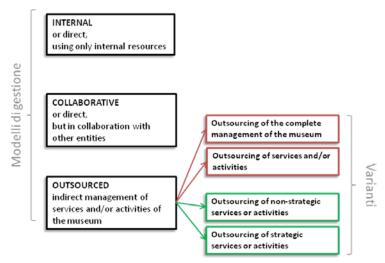


Figure 70: Managerial models and variations

The characteristics of outsourcing of management of strategic services or activities, and the outsourcing of the complete management of the museum are the same (*Fig. 71*), which coincide with the previous *Fig. 70* on the outsourcing model.

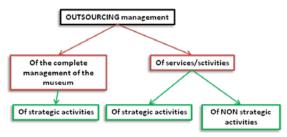


Figure 71: Variations of the management of Outsourcing: synthesis

The characteristics of the outsourcing of the management of non-strategic services or activities are summarised in *Table 33*.

Managerial model: Management outsourcing non-strategic services or activities

Weaknesses	Risks	Strengths	Opp.
	Lack of integration	More freedom	
	between the museum and	in staff	
	the educational activities	recruitment	
	and research of the	• More	
	university	availability of	
	 Lack of development of 	staff	
	group identity of the staff		
Use of internal	• Conflicts		
and external	Unsatisfied personnel		

personnel with		
different roles		
and financial		
compensation		

Table 33: Museum management through the outsourcing of the museum or of specific activities

Table 34 can be summarised by stating that the different managerial models have the following characteristics:

- Internal management: it has neither weaknesses, risks, nor strengths, but it has strategic opportunities concerning the respect of values and the university's mission, its development and promotion, and the increase of group identity of the staff.
- Collaborative management: like internal management, it has strengths which lead to strategic opportunities of respect of values and university mission, and to its development and promotion. Moreover, it offers opportunities which derive from its relationship with other realities, like opening up to the outside, the broadening of horizons and the reinforcement of the relationships between university and other spheres. More opportunities lie in staff enrolment from different entities, as well as in the confrontation, integration and growth of expertise, and the increase of activities. It doesn't have any weak points, but it has risks with regard to the efficient management of services and activities.
- Outsourced management: it has undoubted strong points with greater freedom of choice of staff and the

availability of staff. However it has considerable risks concerning the respect of the university's values and mission; development and promotion; and the efficient management of services and activities. In the case of Outsourcing of non-strategic services or activities, the range of risks is less remarkable: there are no risks in incoherence of the cultural policies of the museum with the university's mission; and lack of possibility of development and promotion of the university through the museum. If the planning and the coordination of the activities is adequately managed by the structure, there are no risks for loss of possibility of integration between the museum and the educational and research activities.

Weakness and risks on the one hand, and strengths and opportunities on the other, of the different management models, can be synthesised, depending on their influence, into four spheres:

- Sphere of values, of the mission, of university development and promotion: relationship between cultural policies of the museum and university mission; development and promotion of the university through the museum; integration between museum and educational and research activities of the university; broadening of horizons.
- Sphere of relationship with the outside: opening up to the outside; reinforcement of the relationship between the university and other entities; confrontation with different entities.

- Sphere of efficiency: bureaucratic complications; role confusion; conflicts among entities; group identity of the staff; conflicting and unsatisfied staff because of different consideration, compensation and position, based on two categories (internal and external staff); availability of staff.
- **Sphere of efficacy**: confrontation, integration and growth of expertise; increase of activities; differently skilled personnel; freedom of choice of staff.

So, managerial models have aspects which influence the four spheres, according to *Figure 108*.

Managerial Models	Weaknesses and risks	Strengths and
		Opportunities
Internal Management		Sphere of values, of
		mission, of
		development and
		promotion of the
		university
		+
		Sphere of efficiency
Collaborative	Sphere of efficiency	Sphere of values, of
Management		mission, of
		development and
		promotion of the
		university
		+
		Sphere of relations
		with the outside
		+
		Sphere of efficacy
		+
		Sphere of efficiency

Outsourced	Sphere of values, of	Sphere of efficiency
Management	mission, of	+
o o	development and promotion of the university	Sphere of efficacy
	+	
	Sphere of efficiency	

Table 34: Records of museum management: synthesis of strengths, weaknesses, risks and opportunities

The distinction according to these spheres can contribute to evaluating managerial models and their variations. We can surely consider that the sphere of values, of mission, of development and promotion of university and the sphere of relations with the outside concern the essence of the museum and of the university museum and are fundamental characteristics. The spheres of efficacy and efficiency are certainly important, but they involve characteristics, which could be defined as technical, that are not specific to the museum or to the university museum, and which can still be improved independently of the management model. Therefore the first two spheres should be considered more important (*Fig.* 72).

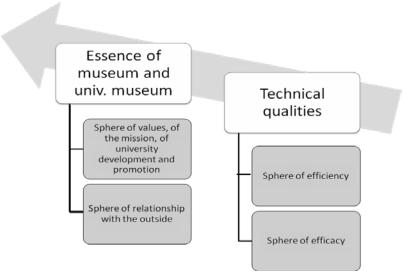


Figure 72: Importance of the spheres influenced by the characteristics of the managerial models

On this basis, the best managerial models are theoretically the Internal and the Collaborative ones.

Nevertheless museums have to deal in practice with the real situation and, in the first place, the effective availability of assigned internal staff, their typology, the technical possibility of obtaining more necessary personnel through recruitment or transfers from other university structures. In some cases, the only possible option is to entrust the management of some activities or of the museum itself to a third party. In this case, it is advisable to outsource only non-strategic activities, keeping planning and coordinating for internal management.

Given the risks that outsourcing of museum management implies, such outsourcing should be dependent on the existence of concrete guarantees respecting the role of the museum and its coherence with the university mission. The best guarantee in this sense is the possible presence of university representatives inside the managerial body, such as in university foundations¹⁶⁴.

3.3.8 Planning, Result Analysis and Development

56%¹⁶⁵ of museums seek funding through application to competition announcements or through requests to entities or companies for specific projects (*Fig.* 73).

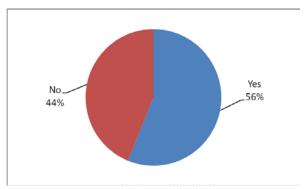


Figure 73: Museums which search for funds

57% have a yearly schedule of activities (*Fig.* 74).

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¹⁶⁴ See Introduction.

¹⁶⁵ Sample of questionnaire respondents: 114 museums out of 196 (58%).

¹⁶⁶ Sample of questionnaire respondents: 114 museums out of 196 (58%).

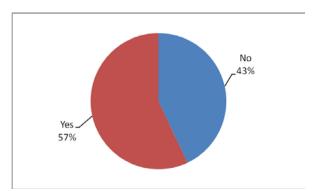


Figure 74: Museums with an activity plan

 $60\%^{167}$ draw up a report at the end of the year of activities undertaken (*Fig.* 75).

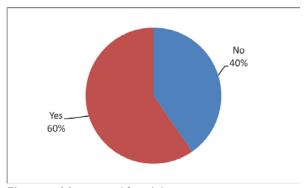


Figure 75: Museums with activity reports

 $11\%^{168}$ draw up a self-evaluation report of the achievement of results and the weak points, in order to plan an improvement programme (Fig. 76).

¹⁶⁷ Sample of questionnaire respondents: 114 museums out of 196 (58%).

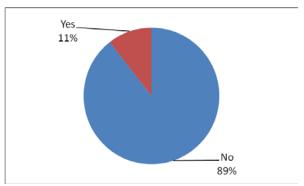


Figure 76: Museums with self-evaluation reports

Museums that are assigned to or coordinated by Central Coordination Units, in some cases, conduct planning, result analysis and development in conjunction with or through the CCU.

3.3.9 Final Considerations

Autonomy and Managerial Models of Museums: the Current Situation

Italian university museums are in the category of "office-museums". They are mostly an integral part of a department; they are not officially instituted; they don't have regulations or specific staff; the director is not chosen through definite procedures and they only have scientific autonomy.

Museums which are constituted as centres and those assigned to, or part of, central coordination units, are in a better situation. In the first case, in fact, they are officially

¹⁶⁸ Sample of questionnaire respondents: 114 museums out of 196 (58%).

established; they have regulations, assigned staff and scientific, organizational, administrative, and usually accounting autonomy. In the second case, university museums are assigned to structures which have explicit goals to enhance the value of the museum heritage. These structures can be organized as centres, with several benefits for the museums, as seen before: i.e. museums which are not regulated can refer to the regulations of their central coordination unit and can have specific personnel, even if not directly assigned (*Fig. 77*).

Museums part of department Scientific autonomy · No official establishment • No regulation No specific staff · No director chosen through specific procedures

· assigned to structures which have explicit goals to enhance the value of the museum heritage. These structures can be organized as centres, with several benefits for the museums, as seen before: i.e. museums which are not regulated can refer to the regulations of their central coordination unit and can have specific personnel, even if not

directly assigned

Museums in CCU Museums-Centers · officially established regulations assigned staff • scientific, organizational, administrative, and usually accounting autonomy

Figure 77: Characteristics of museums belonging to departments, CCU entrusted or subordinated, and constituted as centres

In all three cases, anyway, administrative-technical personnel are usually few or non existent and don't have specific training in arts, management or museology. In departmental museums, activities are usually developed by professors, with voluntary help from departmental staff or that from other structures.

The presence of administrative-technical personnel influences the activities carried out by museums quantitatively: it favours the development of research, exhibitions, conferences and seminars, museum education programs, and initiatives for university students.

The person in charge is usually nominated from among university professors, without following definite procedures, apart from with regulated museums. In those cases, generally in bigger and autonomous museums, the manager can be supported by another monocratic body with a technical role, and/or one or more advisory bodies with political, managerial or supportive functions. The contingent second monocratic body can be composed of internal or external staff, with technical, scientific and museum related expertise. The advisory bodies are usually made up of professors and administrative-technical staff, but they can also be integrated with external members.

Despite the limitations of the office-museum status, making museums independent through foundations or associations is not adequate for their identity, specific nature and mission. Most difficulties can be overcome from the inside, without misrepresenting university museums, due to their regulations, planned management, and changes to university policies.

University museums are managed according to three general models: Internal management (direct, with exclusive use of internal resources), Collaborative (direct, in collaboration with other entities/companies), Outsourced (indirect management of services and/or activities of the museum). The Outsourced model has different variations: Non-strategic service and/or activity outsourcing, Strategic service and/or activity outsourcing, or Complete museum management outsourcing.

The three models have strengths and weaknesses, and risks and opportunities which can be summarised according to their influence on four spheres of value: the sphere related to the mission, to the development and promotion of the university; the sphere linked to the relationship with the outside; the sphere of efficiency; the sphere of efficacy. Models can be theoretically evaluated according to the spheres they affect. On this basis, the best management models turn out to be the Internal and the Collaborative ones, as they positively influence the most important sphere: the one related to the mission, development and promotion of the university. The first one doesn't present risks and has further opportunities in the Sphere of efficiency. The second one has more possibilities in the sphere of efficacy and in that of relations with the outside, although it carries some elements of risk, which are easily removable, in the sphere of efficiency.

From a practical point of view, nevertheless, in absence of internal staff and the possibility to have them, the only feasible solution can be to entrust the management of the activity or of the museum itself to a third party. In this case, it is advisable to outsource exclusively non-strategic activities.

The outsourcing of museum management (which carries a vast range of risks linked to the Spheres of mission, development and promotion of university, and efficiency), should be chosen as the last option. It should, in any case, be subordinated to the existence of concrete guarantees and the respect of the role of the museum, and its coherence with the university mission. The best guarantee in this sense is the possible presence of university representatives inside the managerial body, such as in university foundations.

Independently from the practical evaluations which are brought to bear among the models, it would be beneficial if the universities undertook the direct management of their museums, by recognising them as integral part of the educational system and of the diffusion of culture, just as other educational and research structures do.

Strengths and Weaknesses of Museums and Improvement Opportunities

The operation of museums currently presents a few strengths, several weaknesses, but also numerous improvement opportunities (*Table 35*).

Luckily, the strong points include aspects for the development of museums which are substantial for their nature and their mission. Except in rare cases, museums are directly managed, with dedicated internal staff. Moreover, seeking external funds is now assumed to be an indispensable action.

Weaknesses, on the other hand, concern technical aspects that can be improved (even if more through a change in university policies than through museum initiatives): lack of autonomy, due to the administrative status and to regulatory shortcomings; scarcity or absence of specific personnel; shortage of staff trained in arts and museology who are able to plan and manage development activities; insufficient and irregular university funds.

Furthermore only half of the museums use means that allow a planned and conscious management, by giving more guarantees of efficacy and efficiency: research of funds through application to competition announcements or through requests to entities and companies for specific projects; planning a yearly report of activities; auto-evaluation report.

The impact of these issues can be reduced thus:

- In the case of universities with one or more big museums, by organizing them into a centre, which is naturally autonomous, regulated and has entrusted staff;
- In the case of universities with several museums, by organizing technical or hybrid CCUs: their staff would conduct specific activities for museums and their regulations might be a point of reference for them;
- In the case of constitution of new museums, by using legal acts;
- In any case, by giving museums regulations, a manager elected with clear procedures, and other monocratic and/or advisory bodies, composed of people who have adequate scientific, museological and technical skills.

- By requiring dedicated staff (even though not assigned) with specific expertise;
- By promoting the in-house training of the staff in management, arts and museology;
- By investing more energy in planning activities and in verifying results, in order to optimise the work and the resources and to verify the weakness that affect the achieving of results.

Strengths +	Weaknesses -	Opportunities to change
 Internal Management Search for funds Passion and expertise of staff 	 Scarce autonomy Not officially established Use of regulations not widespread Directors not elected using predetermined procedures Few or no specific states of Generally personnel specialists in arts and museology Insufficient and irregular university funds Few look for funds Few use plans and yearly reports of activities and autoevaluation reports 	 through official acts Provide museums with regulations Request dedicated staff (even though not entrusted) and

Table 35: Strengths and weaknesses in museum operations and opportunities to change

University Policies

Generally, universities do not put sufficient and/or adequate resources into their museums and they consider them as collections, as if they don't deserve autonomy. For this reason, independently from their Statutes and General Regulations, Universities guarantee their survival, but don't provide the necessary means for development and value enhancement.

This kind of policy can reasonably depend on two presuppositions:

- The old concept of the role of the museum, oriented towards preservation more than value enhancement, according to which it carries out simple activities that don't require expertise or specific knowledge. Thus it is sufficient to take care of them as a pastime, through staff who usually work somewhere else or who are hardly sufficient to guarantee the preservation of collections;
- The idea that university museums and collections have lost their value and connection with education and research, that they are just an affectation for a few enthusiasts.

In many cases, the situation could be improved through a simple coordinated management, in order to optimise resources and limit the investment. This investment would hardly turn out to be unbearable, in such a large context as a university if included in general planned policies, especially with regard to the staff.

Fortunately, there are exceptions, usually botanical gardens, which are generally provided with specific personnel by the university that invests in their museum patrimony, considering it an integral part, not only of their history, but also of their identity.

Chapter 3.4

Management of Collections and Monuments

This brief chapter describes the management and resources dedicated to the conservation and value enhancement of collections and monuments. The implications of their management are simpler than the ones of the museums, nevertheless they share some issues.

This chapter has two specific objectives: to highlight the strengths and weaknesses in collection and monument management, and to define the university policies in this regard.

3.4.1 Methodology and Sources

There is no specific and up-to-date bibliography about this topic, therefore the necessary information for this phase of the research was taken from prearranged questionnaires and from university, department, and central coordination unit websites.

The relative data can be found in Appendix E.

3.4.2 Management

Collections and monuments are classifiable as structures and are assigned to departments, central coordination units or university. Like museums, they can refer to two entities, in the case in which they are assigned to departments or the university and are part of a central coordination unit at the same time.

The responsibility of the collections is usually assigned to a teacher, professor or researcher, from the assigning department or relevant scientific sector in the case of collections assigned to CCUs. The person responsible for the collections usually manages resources, activities and services. Monuments don't have a specific person in charge, but they are managed in the same way as classrooms, laboratories etc. by the advisory bodies of the department or by the central administration. They are spaces of particular historical value in current use.

The management of collections and monuments can theoretically be indirect, having consequently the same problems as indirectly managed museums, but as a matter of fact it is usually direct.

3.4.3 Resources

Since collections and monuments are always assigned to other structures, they don't have any exclusively dedicated staff, save rare exceptions in which they are assigned to central coordination units or are under contract principally for teaching activities.

Usually it is the person in charge, professor or researcher, who takes care of all the aspects, from preservation to pedagogy, with the occasional help of other teachers or administrative-technical staff of the main structures.

Only 37% of collections have a specific yearly budget awarded by the university or other structures (departments, central coordination units). It is usually a meagre amount, only sufficient for preservation, but not for adequate value enhancement, let alone increasing the collection itself (*Fig. 78*).

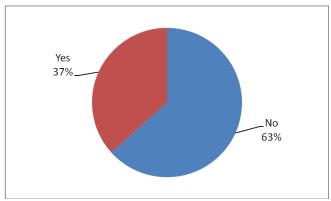


Figure 78: Collections with yearly budget

3.4.4 Final Considerations

Collections and monuments are usually directly managed by departments, central coordination units or central administration, without any exclusively dedicated staff, except rare cases in which they are assigned to central coordination units.

Apart from the cases already mentioned, every activity concerning collections is taken care of by the professor in charge, possibly with support from other teachers and administrative-technical staff from their structure of reference.

Only 37% of them have yearly funds.

University policies

Universities' interest towards their own collections isn't evident in the situation illustrated, since collections are left to the good will of professors and administrative-technical staff, with insufficient budget to increase them and enhance their value.

Monuments, on the other hand, are common spaces with a particular historical value, which do not need dedicated staff. Universities include them in their museum heritage, thus implying their cultural value.

Strengths and Weaknesses

Collection management has only one strength: the passion of the staff who take care of it. There are several weaknesses and they concern substantial aspects, to the point of compromising development and value enhancement: usually collections don't have dedicated staff or sufficient funds.

Monument management, however, seems to be adequate for their safeguard and value enhancement.

Chapter 3.5

The Role of Communication in Disseminating the Knowledge of Museum Heritage

Italian universities have a museum heritage of remarkable value, wealth and variety. But is it communicated adequately? In this chapter I will attempt to answer this question and justify the result through the identification of weaknesses in the communication process¹⁶⁹.

I will focus on the guaranteed communication level of museum heritage, on the role of the universities, on the central coordination units (CCU) and museum units (MU), and on the problems of process management.

3.5.1 Methodology and Sources

Since there are no publications or detailed documents which analyse the topic in depth, this phase of research has been developed due to direct sources, such as official websites and the answers to the questionnaire I had sent to the managers of the structures.

¹⁶⁹ Obviously this is not the only factor influencing the number of visitors, but more consideration will be given to this in the final conclusions.

First of all, I've examined their basic means to spread information: websites of universities, of central coordination units and of museum units. In order to make a coherent analysis, based on univocal and unambiguous data, I've established four "levels of communication" with definite characteristics and websites have been evaluated in relation to them. I've chosen the perspective of a potential "average user" as a starting point, that is a person who is interested in visiting a museum, a collection or a monument. The relative level of communication is therefore characterised by necessary information: a brief presentation and the details that allow you to visit a place of interest, such as address, opening times, accessibility and at least a telephone number or email address to ask further information. Websites that don't have such information have been classified as "level 0". On the other hand, additional information has been distinguished according to the interest it may attract for "experts" of the subject and "insiders". The first two types of users could be interested in the history of the museum, in an in-depth analysis of the collection and in specific services, like guided tours, programmes of museum education, conference etc. The insiders, beyond all this, might also look for information on the operation and policies of the museum unit, that is its mission, its regulations, its direction and its staff (Table 36).

Level of communication	Characteristics	
Level 0	It doesn't have the necessary information to be a	
	minimum level	
Minimum level or	It has all the following information: presentation,	

"average user"	address, opening times, accessibility and at least	
level	telephone number or email address	
Expert Level	It has all the minimum level information , plus at least of the following history of the MU, elements or particular aspects of the collection, specific activities and services of the museum (i.e. museum education programmes etc.)	
Insider Level	It has all the information of the minimum level plus at least one of the expert level, and at least one of the following: mission, regulations, direction and staff	

Table 36: Websites and levels of communication

Secondly, I have verified whether or not that information had been clearly expressed, if the websites were accessible according to the standard of the World Wide Web Consortium (W3C), and easily reachable through the university web site.

Finally, in order to determine if there were any noticeable points of weakness in the communication process, I've chosen the presence or absence of communications plans of the central coordination unit and museum unit as an indicator. This tool is oriented to activity planning, guaranteeing completeness and efficient and efficacious management, otherwise hardly reachable 170.

¹⁷⁰ Obviously this is not the only factor influencing the number of visitors, but more consideration will be given to this in the final conclusions. For a summary on the purpose and functionality of a communication plan see Macchioni L., Neri, V., Nobili F., *Il piano di comunicazione: che cosa è, come farlo, perché farlo,* Pisa 2010 e Levi N. (a cura di), *Il piano di comunicazione nelle amministrazioni pubbliche,* Ercolano 2004, in particolare pagg. 31-35.

3.5.2 Museum Heritage on University Websites

Out of the 37 universities that own museums, collections and monuments, only 25 dedicate a specific page to their museum heritage, with varying visibility making it more or less accessible. There are three levels of reachability:

- Level 1, "immediate", when the page is highlighted in the home page.
- Level 2, "easy", when the page is reachable in two clicks and the link can be found in an intuitive area, usually in "Structures". This however implies that the user already knows about the existence of museum heritage.
- Level 3, "difficult", when the page is reachable with three or more clicks, usually after a path such as "home page > structures > other structures" (*Table 37*).

In cases where the university has a central coordination unit, the museum heritage page can coincide with its website.

	LEVEL		Coincide with	
University	Difficult	Easy	Immediate	UCC
Bari P.	x			
Torino P.	x			
Napoli SUN		х		
Aquila		х		
Bari	x			х
Bologna		•	х	x
Cagliari			х	

Camerino		х		х
Ferrara		х		х
Firenze		x		
Milano		х		
Modena R.E.			x	
Napoli F. II			х	
Padova			х	
Palermo		х		х
Parma			x	
Pavia			x	
Perugia	X			х
Roma Sapienza			x	х
Sassari	X			
Siena		x		х
Torino		х		
Trieste		x		х
Salento			X	х
Pisa		x		

Table 37: Universities and reachability of the museum heritage page (list)

Museum heritage pages are easily reachable for the most part (44%), but only 36% are immediately reachable; 20% of cases are difficult to reach (*Fig.* 79).

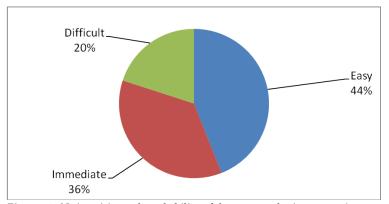


Figure 79: Universities and reachability of the museum heritage page (percentage)

3.5.3 Museum Heritage and Central Coordination Units' Pages

Museum heritage pages ¹⁷¹ are essentially of two kinds: some report details through lists and data sheets for each museum unit, others only have a list of links to specific websites.

When the museum heritage page corresponds to the central coordination unit page, there can be more information about the unit itself.

72% of museum heritage pages have a level of communication which is equal or superior to the minimum level and the majority are expert or insider levels (32% for both). 8%, or 7 universities out of 37, have a communication level below the minimum and a few expert or insider pages contain all the information which characterises the category (*Table 38 and Fig. 80*).

¹⁷¹ The museum heritage page addresses and CCU websites with information about communication levels can be consulted in Appendix M.

	Level	Minimum	Expert	Insider
University	0	level	level	level
Bari P.	х			
Torino P.	х			
Napoli SUN	X			
Aquila			х	
Bari	x			
Bologna				x
Cagliari	x			
Camerino			X	
Ferrara				х
Firenze				х
Milano			x	
Modena R.E.			x	
Napoli F. II			x	
Padova				x
Palermo			x	
Parma		x		
Pavia				x
Perugia	x			
Roma Sapienza			x	
Sassari				x
Siena				х
Torino			Х	
Trieste	х			
Salento				х
Pisa		х		

Table 38: Universities and level of communication in the museum heritage page (list)

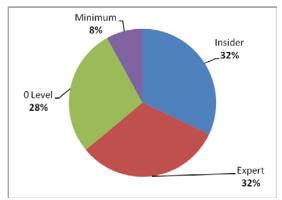


Figure 80: Universities and level of communication in the museum heritage page (percentage)

In level 0 cases, that is below minimum level, it is possible to find superior levels of information, but not the necessary information to make a minimum level.

Apart from the completeness of contents, in some cases there are inoperative links, out of date or contradictory information, constantly under construction sections and unintuitive map organization.

Pages are usually planned by respecting accessibility standards, but unfortunately they don't have English versions.

3.5.4 Museum Units' Websites

89%¹⁷² of museum units have their own website or at least a data sheet on the museum heritage website.

 $^{^{172}}$ Web addresses and information on the levels of communication of all the MUs can be consulted in Appendix M.

29% of websites don't reach a minimum level of communication, 12% contain a minimum level or average user information, 36% are expert user level, 23% are insider level (*Fig. 81*).

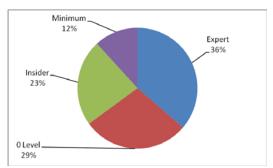


Figure 81: Communication level of museum unit websites

In-depth historical information is generally reported and several websites also contain an online archive of collections.

A few post their mission and regulations.

Some have a stylish design, but they aren't often created in accordance of accessibility standards, in particular they aren't usually visible on tablets and smart phones. Websites of museum units of the same university can also be very different from one another in regards to contents and design.

Despite the thoroughness of contents, there is usually out of date or contradictory information compared to the museum heritage pages.

Usually they don't have English versions.

3.5.5 The Communications Plan of Central Coordination Units and Museum Units

As seen before, only 18.18% of CCUs have a communications plan. Only 30% of museums have a communications plan¹⁷³.

3.5.6 Final Considerations

Generally, I've observed that university museum heritage is presented on the internet through specific pages inside the general website, through the central coordination units and museum units' websites.

The situation varies according to the university and the structure. It is clear that communication is usually neither planned nor designed by specifically skilled staff in this field. It isn't coordinated between university and structures either, so that you may find contrasting information on their websites.

Universities do not always show interest in their heritage: only 25 out of 37 dedicate a specific page to it, which is rarely easily visible on the home page and sometimes is almost impossible to find (*Fig. 82 and 83*).

¹⁷³ Sample of questionnaire respondents: 114 museums out of 196 (58%).

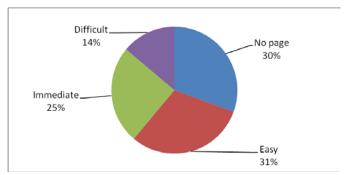


Figure 82: Museum heritage page on the university website

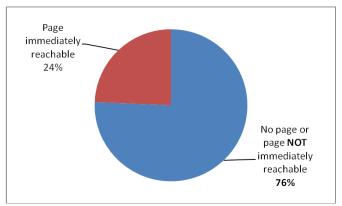


Figure 83: Museum heritage page on the university website – aggregated data

On this basis, I can hypothesize universities' policies, as depicted in *Table 39*.

Existence and reachability of the museum heritage page on the university website	Possible interpretation
Level 1: immediate The page is reachable from the home page	The university highlights its museum heritage and perceives it as a point of strength
Level 2: easy The page is reachable after two clicks and the link can be found in an intuitive area, usually in the "structures" section	The university perceives its museum heritage as equal to the other structures
Level 3: difficult The page is reachable after three clicks, usually after a path like: home page > structures > other structures	The university is conscious of its museum heritage, but it considers it less important than other structures

Table 39: Museum heritage page on the university website and university policies

In most cases, contents are posted according to the accessibility standards, even if a little more than half of them are exhaustive.

Nearly all museum units have a website or at least a page on the central coordination units websites. By cross-checking these data with the quality of contents, the general situation appears less positive but definitely improvable (*Fig. 84 and 85*). As a matter of fact, although 53% have high quality content, useful for expert users and insiders, for 36% of museum units, information is nonexistent, obscure or insufficient for the organisation of a visit.

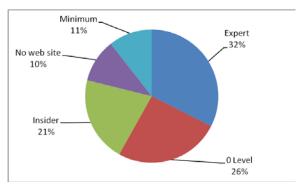


Figure 84: Museum units' websites and quality of contents

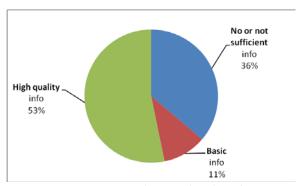


Figure 85: Museum unit websites and quality of content – aggregated data

A few central coordination units and museums have a communications plan to increase efficacy and efficiency and this is the main weakness of the process which compromises the positive result of every activity.

Chapter 3.6 Strengths and Weaknesses of Museums and Collections: the Insiders' Opinion

This chapter presents the strengths and weaknesses of museums and collections according to the opinions of the questionnaire respondents, who are managers or delegates of central coordination units, museums and collections.

3.6.1 Methodology and Sources

CCUs, museum and collections managers' and delegates' opinions have been ascertained through a questionnaire which contained three closed questions about the availability of budget, staff and space, and two open questions about the strengths and weaknesses of the structures.

Data has been recorded on a random sample of the respondents: 86% of the total central coordination units and 58% of the total museums and collections, that is 60% of the museums and collections that can be visited.

The data is presented only in its processed form. It is not reported in the Appendix according to each individual structure, in order to maintain the anonymity of the respondents.

3.6.2 Respondents' Opinions on Central Coordination Units

Through the questionnaires I've also asked the respondents' personal opinion on the situation of the CCUs and, in particular, if the budget and the staff assigned by the University are sufficient (closed question) and which are the strengths and weaknesses of the CCUs (open question).

According to 58% of the respondents, the awarded budget is insufficient, while it is sufficient for 21%. The remaining 21% of the respondents haven't answered the question (*Fig. 86*).

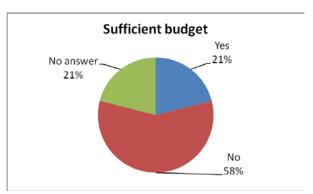


Figure 86: Respondents' opinion: budget availability

According to 68% of the respondents, the assigned staff is insufficient, while they are sufficient for 11%. The remaining 21% haven't answered the question (*Fig. 87*).

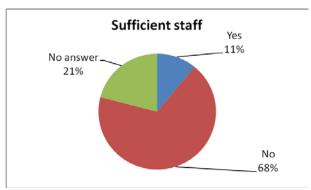


Figure 87: Respondents' opinion: staff availability

Respondents have indicated the weaknesses linked to their structures (one case), to their management and to their relationship with the University, as depicted in *Table 40*.

	Weaknesses	Field
•	Inadequate location	Structures
•	Lack of funds	Management
•	Lack of staff	
•	Non-specialised staff	
•	Lack of autonomous	
	administration	
•	Lack of an adequate secretary and a public relations office	
•	Scarce relationship with museums	
•	Scarce clarity of role at an administrative level	Relationship with University

Table 40: Weaknesses of central coordination units

The strengths concern management and, in only one case, the relationship with the University, as depicted in *Table 41*.

	Strengths	Field
•	Coordinated management which	Management
	reduces waste and a offers more	
	to the public	
•	Multi-disciplinary activities	
	which create open cultural	
	perspectives	
•	Staff's passion and expertise	
•	Support from managerial	Relationship with University
	entities	

Table 41: Strengths in CCUs

3.6.3 Respondents' Opinions on Museum Units

74% of the respondents from museums and collections believe that the awarded budget is not sufficient, 6% that it is sufficient, 20% haven't answered the question (*Fig. 88*).

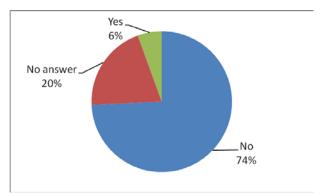


Figure 88: Respondents' opinion: budget availability

72% of the respondents from museums and collections believe that the assigned staff is not sufficient, 9% that they are sufficient, 19% haven't answered the question (*Fig. 89*).

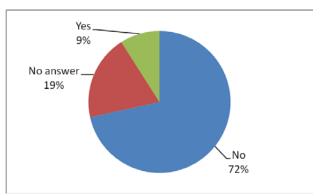


Figure 89: Respondents' opinion: staff availability

48% of the respondents from museums and collections believe that the exhibition space, the specimen preservation room and the office for managerial activities are not sufficient, 19% that they are sufficient, 33% haven't answered the question (*Fig. 90*).

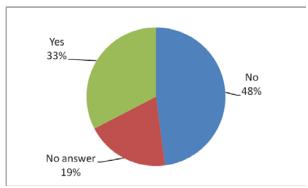


Figure 90: Respondents' opinion: space availability

Respondents have highlighted several strengths concerning structures, accessibility, management, activities, collections, and impact on territory and society, as depicted in *Table 42*.

	Strengths	Field
•	Location, usually in city centres	Structures and Accessibility
•	The Headquarters are usually in	
	historical buildings	
•	The quality of the exhibition as	
	in space organization, set up and	
	didactical apparatus	
•	Accessibility	
•	The coordinated management	Management
	by central coordination units is	
	more efficient and efficacious	
•	Staff's commitment, passion and	
	professionalism	
•	The quality of research and	Activities
	laboratory activities linked to	
	collections	

Preservation and safeguard	
activities of collections and	
territory	
Quality and variety of cultural	
proposals: exhibitions,	
conferences, diverse didactical	
activities for different users	
Quality of collections, which are	Collections
unique, consistent, old,	Conections
_	
scientifically valuable and rare.	
They concern a wide range of	
topics	
History of museums and	
collections which can date back	
to ancient times and which is	
often linked to famous scientists	
and scholars	
The subject linked to collections,	
which often makes visitors	
interested	
The chance to compare theory	Impact on territory and society
and reality for university	
students	
Learning support for students of	
every grade	
Link between the general public	
and scientific research	
Concrete and productive	
relations with other entities of	
research, academics and local	
1	
community	
Awareness of users towards	
preservation and safeguard	

Table 42: Strengths of museums and collections

Respondents have pointed out the weak points of structures, accessibility, management, activities, relations with territory, role recognition and national policies, as shown in *Table 43*.

Weaknesses	Field
Inadequacy of headquarters	Structures and
Inadequacy of location, when far from city centre,	accessibility
outside the touristy circuits, hardly reachable and	
lack of road signs	
Non-accessibility due to physical obstacles	
Limited opening times	
Lack of funds from University	Management
Inefficient and inefficacious management and	
organization	
Impossibility of long-range plans and schedules	
Lack of a stable director	
Lack of dedicated staff	
Lack of administrative-technical staff with specific	
scientific, museological and educative expertise	
Frequent staff turnover	
Lack of specifically trained researchers on the	
collection topics	
Lack of security staff	
Lack of a development and value enhancement plan	
Inadequacy of communication	
Scarcity of events related to territory	Activities
Impossibility to organize exhibitions	
Sometimes old fashioned displays	
The lack of integration in a Region or City museum	Relationship
network which can give more visibility and more	with territory
importance to each structure	
Lack of museum professionalism and role	Role
recognition in the university	recognition

Lack of university classes dedicated to the history of	
sciences and museology in order to make students	
aware of the value of collections	
Non-defined administrative status	
The necessity of continuous intervention of	National
restoration of architectural structures due to the	policies
absence of funds from the Ministry of Culture	

Table 43: Weaknesses of museums and collections

3.6.4 Final Considerations

From the analysis of the answers of the people in charge of central coordination units, museums and collections, the general weakness that stands out is the lack, or in some cases complete absence, of human and financial resources and insufficient exhibition space, a specimen preservation room and an office for managerial activities.

Two strengths are largely recognised and shared: the coordinated managerial model of activities (where existing) and the staff's passion and professionalism(Even though managers of museums and collections insist on the lack of administrative-technical staff with specific scientific. museological education and expertise in cultural management).

Central coordination units specifically have strengths concerning management and, in one case, relationship with the university. The weaknesses are related to management and the relationship with the university, and to structures in one of the cases.

The strengths of museums and collections are linked to structures, accessibility, management, activities, collections, impact on territory and on society. The weaknesses concern structure, accessibility, management, activities, relationship with territory, role recognition and national policies. As we have seen in the case of museums and collections, location, accessibility, headquarters, activities and relationships with territory are mentioned both in strengths and in weaknesses. Managers perceive them as strategic aspects which can determine added value, but which are also often inadequate.

Generally, the highlighted weaknesses substantially derive from the university polices which do not recognise the role and the value of central coordination units, museums and collections. These are not equipped with staff, funds and sufficient and adequate spaces, a fact that consequently and negatively affects structures, accessibility, management, activities, efficacy and efficiency of the results (*Fig. 91*).

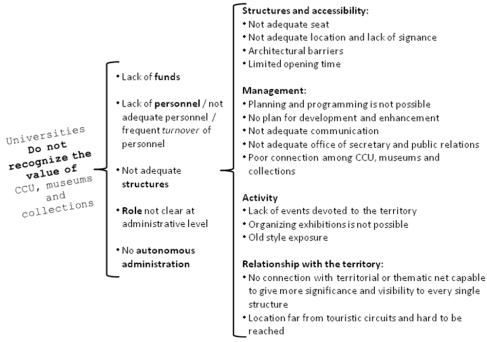


Figure 91: University policies and negative impacts on structures

The real strength, underlined by almost all respondents, is represented by collections which stand out for their uniqueness, consistency, age, variety, scientific value and rarity of specimens. They also generate value for universities, society, local and scientific communities and schools:

- The chance for university students to compare theory and reality, in regards to the subjects they study
- Support in learning for students of schools of every grade
- Link between the general public and scientific research
- Concrete and productive relationships with other research entities, with academics and local communities
- Users' awareness of preservation and safeguard
- Memory of university, science, research, teaching history and notable examples given by scientists and scholars.

Conclusions

Italian University museum heritage has a priceless value for the university community and for society, both for its quality and consistency of collections, as well as its current function, and for its potential function in better conditions.

It is difficult to gain a clear perspective of the whole situation, because while it is continuously transforming and developing, not every university is efficaciously committed in its value enhancement. At the moment it is being reorganized, after the so-called Gelmini Reform, which fundamentally changed the internal structure of universities.

Moreover, there is no national coordination entity and the related information is not easy to find in documents and on university websites. In Italy, 37 out of 82 universities own 265 museums, collections or monuments which can be defined, with the neutral and general term, as "museum units". In addition, there are an immeasurable amount of unknown objects of cultural interest which are either underestimated or not yet set up in museums, but still of great value.

Museum units are very different from one another with regard to their type, field, dimension, activity and organization. They include, amongst others, germplasm banks, herbaria, plaster cast galleries, laboratories, diffused museums, multimedia museums and botanical gardens. 78% of museum units are technical-scientific, chemical-physical-

mathematical, economical, medical-pharmaceutical, technical-engineering and above all natural scientific. The humanities museums concern archaeology, art and literature and historical-social sciences.

The majority of them have an autonomous space, with display areas above 300 square metres and include a video room, library, bookshop and café. Spaces are not always sufficient or adequate to exhibit specimens according to proper museological criteria, nor to welcome visitors. There are still many museum units which do not have an autonomous space and which still preserve or exhibit their specimens inside cupboards, cabinets, chests of drawers and department corridors, laboratories the boxes classrooms. It hasn't been possible to get the full picture of the number of visitors, because this isn't registered in most cases, but it seems to be extremely variable, from less than ten to more than ten thousand visitors per year. Only a small percentage of museums have a ticketing system, while paid guided tours and museum education programmes are quite widespread but not standardised.

What we consider as Italian university museum heritage today was established and has been transformed according to different dynamics since the creation of universities, as an essential part of research and teaching processes. Monuments, however, have only recently become part of museum heritage and historic symbols. Some museums have changed name, structure or location, others derive from the re-organization of pre-existing collections or from

museums which were split up or combined with others to create new structures.

The oldest collections were constituted in the 1500s and 1600s in the European cultural climate of fervent development of natural sciences by the most illustrious and innovative scholars of that time, due to the support of the political power of the Italian states, their rulers and their city councils who sensed their propagandist and cultural value. The majority of collections were established as a selection of study materials, others have been created recently to consider them from a historical point of view, in order to present the evolution of investigation and education in specific fields. The latter is the collections composed of case numerous scientific instruments used in labs, or machines and prototypes of research projects. Some of these collections only have historical significance now, but many of them are still used as scientific support.

Collections stand out for their uniqueness, consistency, age, variety, scientific value and rarity of specimens and (as verified through analysis, of the mission, activities and services of museums and of the structures responsible for collections), they generate value for universities, local communities, schools and society as a whole. The Committee of Ministers of the Council of Europe, which has specifically drawn up a document of Recommendation for the protection and enhancement of the university heritage, has underlined that this value is derived from the reciprocal relationship between the fundamental values of European universities (autonomy, development, freedom of teaching and learning)

and the uniqueness of their heritage, and is closely linked to research and teaching.

Museums and people in charge of collections still recognise their main role and their identity in this relationship today. In the last few years, they have re-opened to the territory thanks to guided tours, event organisation and museum educational tours, also thanks to the collaboration with other entities and city organisations to define common projects and participate in thematic territorial networks, both local and national.

Most of the universities mention their museum heritage in their legislative documents (Statute and General Regulations), thus officially showing its value recognition. The same significance can be attributed to the activation of central coordination units which implies at least a minimum use of resources focused towards an efficacious and efficient heritage management.

University policies turn out to be various and contradictory, as they are sometimes dictated by internal pressures, usually from professors in charge of museums and collections, and external pressure, like the Commission for museums, archives and centres for university collection of historical-scientific interest of the CRUI. The Commission was established in 1999, and has favoured the exchange of ideas and information and promoted several initiatives, among which are the cataloguing of university heritage and the creation of a dedicated online portal. Although many projects haven't produced the hoped for results, in part because of the long term suspension of the Commission's work, the

constitution of the majority of university *Sistemi Museali* is in fact due to this Commission. The national debate on museum systems arose in the second half of the 1970s in Italy. The first university museum system was established in Pisa in 1982, probably due to a particularly advanced regional policy. In the 90s, at least five more universities provided central units of coordination and at least 10 more (63%) have developed this model since 2000, at the same time as the Commission's activity.

A few universities perceive their museum heritage as a point of strength, so much so that it is presented on their website's homepage, however others do not give it a specific page or, if they do, they don't promote it, making it only reachable through a link on the second or third level of the site map.

Moreover, with the exception of some, universities don't dedicate sufficient or adequate resources to their heritage: they guarantee its survival, but they don't provide the necessary means to develop and enhance its value with spaces, funding and staff.

In any case, 45% of museums don't have exclusively dedicated technical and/or administrative staff. They are overseen by a manager, usually a professor or a researcher, who deals with every aspect, from preservation to education, with possible and/or occasional support from other professors or experts, and members of staff. Only 15% of staff, however, have specifically studied arts, managing or museology.

The fact that museums don't receive enough attention from universities, which should be places of cultural production *par excellence*, is worrying.

The uncertain university policies, which don't recognise the role and value of central coordination units, have negative consequences on structures and accessibility, management, activities, efficacy and efficiency of the results, slowing their development and gradually leading them into decline, to loss of identity, and inefficacy of their role (*Fig.* 92)

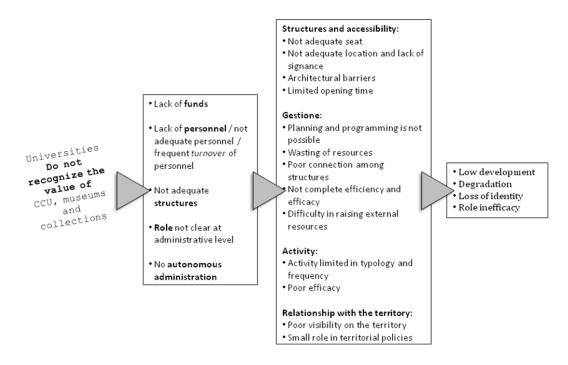


Figure 92: University policies and negative consequences on structures

This kind of policy can reasonably depend on two suppositions:

- The old concept of the role of the museum, oriented towards preservation more than value enhancement, according to which it carries out simple activities that don't require expertise or specific knowledge. Thus it is sufficient to look after the museum as a pastime, through staff who usually work somewhere else or who are hardly sufficient to guarantee the preservation of collections;
- The idea that university museums and collections have lost their value and connection with education and research; that they are just an affectation for a few erudite experts and enthusiasts.

In many cases, the situation could be improved through a simple coordinated management, in order to optimise resources and limit investment. The latter would hardly turn out to be unfeasible in such a large context as a university if it were included in general planned policies, especially with regard to the staff.

Coordinated management through specific central units, in the case of a consistent and articulated heritage, turns out to be the best solution for its development and for the efficacy and efficiency of its functioning. Not only does it optimise resources, but it also allows the definition and enactment of adequate policies for the growth of every single museum unit and the whole system, as well as better visibility and weight in territorial policies. Half of the universities use this means through museum systems, centres, networks etc. In some of them a dean's delegate or a *prorettore* (director appointed by the dean) of the museum heritage has been created who can represent the interface between museums/central coordination units and academic senate/board of directors.

In order to overcome what seems to be the chronic illness of office-museums (lack of funds and staff, and ineffective and inefficient management), universities have sometimes chosen to entrust some of their activities (i.e. museum education), or the entire management, to an external entity, such as an association, cooperative or foundation.

The privatisation of the management of public activities dates back to the 80s, within the context of an Italian and European social crisis, when the economical function of culture was exacerbated by a misunderstanding of the role of value enhancement. As a matter of fact, the outsourcing of cultural management and the disparagement of public administrations, accused a priori of incompetence, inefficiency and rigidity, were encouraged, starting from the wrong assumption, that the main aim of the cultural sector was to relaunch the economy and offer new job placements. So, from that period onwards, many public administrations have partially or totally entrusted the management of their museums to the private sector, without evaluating the real opportunity and seldom achieving the desired results. One of the best examples of this is when a collection of British Crown arms was moved from The Tower of London to a purpose built museum inside a mall in the City of Leeds. This followed the privatization of the museum's management and the catastrophic choices made by the consortium responsible for it.

The result was a decrease in visitor numbers from 1 million to less than 200 000 per year and the bankruptcy of the managing consortium.

The specific analysis done during the research on university specimens has demonstrated how this solution is not appropriate to their identity, mission and development. It carries elements of risk, such as the incoherence of museum cultural policy with university mission, loss of possible growth and promotion of the university through the museum, loss of possible integration between museum and university pedagogy and research, loss of possible group identity of staff, conflict and dissatisfaction amongst internal and external staff, because of differing consideration, position and wages according to their category.

Outsourcing (either of the whole museum, or above all, of strategic activities), should be the last option and subordinate to the existence of concrete guarantees of respect to the role of the museum and its coherence with the university mission. The best guarantee in this sense is the possible presence of university representatives inside the managerial body, such as in university foundations where universities have functional, managerial and financial control.

Separate to the practical evaluations which are brought to bear on the models, it would be beneficial if universities undertook the direct management of their museums, by recognising them as an integral part of the educational system and of the diffusion of culture, just as other educational and research structures do.

Everything is best managed internally.

Museum heritage management is influenced by university policies, as well as by the functioning and policies of single structures (central coordination units, museums, other structures in charge of monuments and collections) and by their interaction: only the harmony of the system can produce successful results. University policies act not only on the distribution of resources, but also on managerial models, that is, on the creation of central coordination units, their typology and the museums' autonomy. However, museums and central coordination units don't have a secondary role, using available resources optimally, searching for external funds and adopting adequate managerial tools. Other non-autonomous structures in charge of monuments, collections and museums may offer their support (*Fig. 93*).

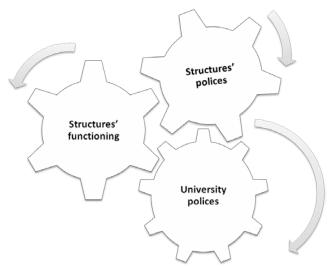


Figure 93: Internal managerial "mechanism" of the museum patrimony

The positive consequences of central coordination units have already been highlighted, but choosing their type, and the deriving heritage managerial model, also influences the efficacy and efficiency of the actions and the achievement of goals.

There are different types of CCU, political, technical and hybrid, which are distinguished by the staff that is assigned to the management, the functions, activities, and type and degree of autonomy.

A typical example of political central coordination units is the committee of professors which defines aims and policies for museum heritage management, and promotes and coordinates value enhancing initiatives. Technical units are coordinating offices with executive. and technicaladministrative functions and are made up of technicaladministrative staff. Hybrid units, such as centres, have political and technical aspects: they are provided with teaching and technical-administrative staff; there are defined heritage managerial policies; they coordinate and promote museum units and, at the same time, offer technicaladministrative support; and they can also be autonomous.

Depending on the typology, number and interaction of central coordination units, there are different possible managerial models: a political unit, a technical unit, a hybrid unit, or two different types of units. Hybrid unit management seems to be the best one, as it combines technical and political aspects and it can facilitate planning, management, execution,

and incisiveness, both inside and outside the university, without any particular weaknesses.

Museums are mostly an integral part of departments; they are not officially instituted; they don't have regulations or specific staff; the director is not chosen through definite procedures and they only have scientific autonomy. Museums which are constituted as centres and those subordinated to, or part of, central coordination units are in a better situation. Firstly, they are officially established; they have regulations, staff as well scientific, organizational, assigned as administrative, and usually accounting autonomy. Secondly, university museums refer to structures which have explicit goals to enhance the value of the museum patrimony. These structures can be organized as centres, with several benefits for the museums, as seen previously: museums which are not regulated can refer to the regulations of their central coordination unit and can have specific personnel, even if not directly assigned.

University museums are managed according to three general models: Internal management (direct, with exclusive use of internal resources), Collaborative (direct, in collaboration with other entities/companies), Outsourced (indirect management) of strategic or non-strategic activities or activities of the museum.

The best management models turn out to be the Internal and Collaborative ones, as they positively influence the most important aspects: value, mission, development, and promotion of the university. Both of them guarantee the coherence of the cultural policies of the museum with the

university mission; the development and promotion of the university through the museum; and its integration with education and research. The Internal model allows for the development of group identity of the staff. The Collaborative model can facilitate confrontation, integration and growth of staff expertise, an increase of activities, opening up to the outside, broadening of horizons, reinforcement of relationships between the university and the outside reality. However, this model presents risks in the sphere of efficiency, such as bureaucratic complications, role confusion and conflicts between the university and the entity/company with whom it works.

Collections and monuments are usually directly managed by departments, central coordination units or by a central administration, without any exclusively dedicated staff, except in rare cases where they are assigned to central coordination units.

Apart from the mentioned cases, every activity concerning collections is taken care of by the professor in charge, possibly with support from other teachers or technical-administrative staff from their structure of reference.

Central coordination units and museums (functioning as any type), generally have several technical weaknesses, but also several improvement opportunities with regard to regulations, direction, type of personnel, planning and analysis of results, work distribution, external resources research, and communication (*Table 44*).

Weaknesses	Regulations
Influence	Objectives and organization, thus the possibility to
	achieve goals
Improvement	Every structure should be officially constituted
opportunities	and should have regulations
	Regulations should contain directions on:
	objectives, tasks, entities, accounting
	administrative organization, staff, spaces,
	planning and final activity balance, funds,
	service management
	Objectives and tasks should be clear and
	coherent with one another, avoiding
	ambiguous terminology

Weaknesses	Direction
Influence	Definition of policies and objectives, planning and activity management, resources and staff management, result analysis
Improvement opportunities	The procedures to choose the entities should be defined It could be useful to re-think the type of technical-administrative representatives. Another nominated or elected figure from technical or administrative staff, with specific expertise in cultural management, more than an accountant, with the right to vote, should be provided. It shouldn't be a union representative, but a person who knows the skills and needs of the technical-administrative staff and who is able to bring an added value to the directing body

Weaknesses	Type of staff	
Influence	Enactment of policies, coordination and execution of	
	activities	
Improvement	Precise roles and specific skills should be defined for	

opportunities		all the staff, including the administrative-managerial area (except for the accountants), who should have had specific training in cultural management and/or
		in museology and should be selected for that purpose.
	•	Structures should look after and promote the in- house training by organizing internal classes or incentivize external classes attendance

Weaknesses	Planning and Result Analysis
Influence	Management of activities, improvement possibilities
Improvement	Every structure should give importance to all these
opportunities	activities, by drawing up yearly plans and auto-
	evaluation reports

Weaknesses	Work distribution
Influence	Activity management, efficacy and efficiency
Improvement	To plan work distribution in order to optimise the
opportunities	collaboration with other structures, without delegating
	fundamental activities, such as communication

Weaknesses	Research of external resources	
Influence	Activity management, efficacy and efficiency	
Improvement	Funding applications for public or private funds	
opportunities	Activate specific collaboration with other entities,	
	companies or associations	
	Organize guided tours, museum education services,	
	and events with paid tickets	
	Establish a bookshop	

Weaknesses	Communication
Influence	Efficacy
Improvement	Provide an easy, accessible, comprehensive and
opportunities	updated website

• Provide a coordinated and integrated communication plan

Table 44: Weaknesses of museums and central coordination units and improvement opportunities

Despite the many technical and political obstacles, which can nonetheless be overcome, university museums, collections and monuments have gone beyond university borders, becoming part of the national heritage, but keeping their own identity and particularity introducing themselves as bearers of instrumental and symbolic values: university and local community identity; university autonomy; freedom to teach and learn; safeguarding and value enhancement of university heritage; pedagogical and research support; territorial protection and development; local community progress; diffusion of culture and science; cultural mediation; and social inclusion. University museum heritage offers the chance to compare reality and theory with regard to the subjects of students' educational path and learning support for all school students; it connects the general public to scientific research; it allows the creation of concrete and productive relationships with other research entities, with academics and with the local community and makes visitors aware of safeguarding and preservation; it hands down the history of universities, science, research, teaching and examples of famous scientists and academics.

For all these reasons, I would like to conclude by re-stating the Committee of Ministers of the Council of Europe's recommendations, hoping that universities will:

- establish "transparent institutional policies for protecting and raising awareness of their heritage both within the institutions and in society at large",
- make "full use of existing laws and of external and internal regulations for the protection and preservation of their heritage"
- manage the heritage according to "the best national and international standards established by competent heritage bodies or authorities within or outside the university"
- provide it with adequate resources,
- make it accessible,
- consider "qualification requirements, career structures and professional development plans for different categories of staff working on university heritage",
- encourage "research on heritage by their own staff as well as by other qualified researchers",
- make an effort to "raise awareness of their heritage in the academic community [...] and in their local communities, among political decision makers and in civil society at large."

Appendices

Appendix A - Museum Units (per University)

Ge, Si, Tr

Museo Nazionale dell'Antartide "Felice Ippolito"

http://www.mna.it/

Bari Politecnico

Museo della fotografia

Via E. Orabona n.4 70125 Bari

 $\underline{http://www.poliba.it/index.php/it/ateneo/centri-di-ateneo/298-museo-della-\underline{fotografia.html}$

Milano Politecnico

Archivio degli strumenti topografici

IN FASE DI COSTITUZIONE - Museo del dipratimento di Fisica

Museo di corrosione

Torino

Museo archivio politecnico

Corso Duca degli Abruzzi 24 – 10129 Torino

Centro operativo: via Cavalli 22/H

http://areeweb.polito.it/strutture/cemed/001/Index2.htm

L'Aquila

Giardino botanico alpino

Monte Aquila (L'Aquila),

http://www.giardinocampoimperatore.it/

Bari

CHIUSO - Laboratorio di Storia della Psicologia Applicata "A. Marzi"

http://www.cismus.uniba.it/laspa.htm

Collezioni di chimica

via Orabona, 4 - 70126 Bari

Collezioni di fisica

Dipartimento di Fisica, Campus universitario

Via Amendola 173 - Bari

http://www.cismus.uniba.it/fisica.htm

Collezioni di informatica

Dipartimento di Informatica, Campus universitario

Via E. Orabona, 4 - Bari

Museo del dipartimento di biologia

Dipartimento di Biologia, Via E. Orabona, 4 70125 BARI

http://www.dipartimentodibiologiabari.it/museo/

Museo di scienze della terra

Dipartimento di Scienze della

Terra e Geoambientali

Via Orabona, 4 - 70125 BARI

http://www.geo.uniba.it/museo-presentazione.html

Museo orto botanico

via Orabona 4, 70126 Bari

http://www.cismus.uniba.it/ortobota.htm

Bologna

CHIUSO - Museo del IX centenario

Via Zamboni, 33

40126 Bologna

http://www.sma.unibo.it/ixcentenario/index.html

CHIUSO - Museo della Specola

Via Zamboni, 33

40126 Bologna

http://boas3.bo.astro.it/dip/Museum/MuseumHome.html

Erbario e museo botanico

Via Irnerio, 42

40126 Bologna

http://www.sma.unibo.it/erbario/index.html

Museo delle Cere anatomiche "Luigi Cattanei"

Via Irnerio, 48

40126 Bologna

http://www.museocereanatomiche.it/

Museo di Anatomia comparata

Via Selmi, 3

40126 Bologna

http://www.sma.unibo.it/anatomiacomparata/index.html

Museo di Anatomia degli animali domestici

Via Tolara di sopra, 50

Ozzano Emilia (BO)

http://www.sma.unibo.it/animalidomestici/index.html

Museo di Anatomia patologica e teratologia veterinaria Alessandrini-Ercolani

Via Tolara di sopra, 50

Ozzano Emilia (BO)

http://www.sma.unibo.it/patologiaveterinaria/index.html

Museo di Antropologia

Via Selmi, 3

40126 Bologna

http://www.sma.unibo.it/antropologia/index.html

Museo di Fisica

Via Irnerio, 46

40126 Bologna

http://www.df.unibo.it/museo/welcome.htm

Museo di Mineralogia

Piazza di Porta San Donato, 1

40126 Bologna

http://www.sma.unibo.it/mineralogia/index.html

Museo di Palazzo Poggi

Via Zamboni 33 - 40126 BOLOGNA

www.museopalazzopoggi.unibo.it

Museo di Zoologia

Via Selmi, 3 - 40126 Bologna

http://www.sma.unibo.it/zoologia/index.html

Museo Geologico «Giovanni Capellini»

Via Zamboni, 63

40126 Bologna

http://www.museocapellini.org/paleonet/public/

Orto botanico

Via Irnerio, 42

40126 Bologna

http://www.sma.unibo.it/ortobotanico/index.html

Raccolta di strumenti chirurgici veterinari

Via Tolara di sopra, 50 - Ozzano Emilia (Bo)

http://www.sma.unibo.it/strumentiveterinari/index.html

Cagliari

Collezione Archeologica "Evan Gorga"

Dipartimento di Scienze Archeologiche e Storico-artistiche

Cittadella dei Musei, Piazza Arsenale 1, Cagliari

http://www.unica.it/pub/2/index.jsp?is=2&iso=10

Collezione degli Strumenti e Apparecchi di Chimica

Dipartimento di Scienze Chimiche, Cittadella Universitaria di Monserrato

Cittadella Universitaria di Monserrato, Cagliari

http://faber-1.dsc.unica.it:8080/strumentichimica/

Collezione Luigi Piloni

via Università 38, Cagliari

http://www.unica.it/pub/2/index.jsp?is=2&iso=491

Museo di Cere Anatomiche "Clemente Susini"

Cittadella dei Musei,

piazza Arsenale, Cagliari

http://medicina.unica.it/cere/

Museo di Fisica

Dipartimento di Fisica dell'Università, Città Universitaria, 09042 Monserrato (CA) http://www.dsf.unica.it/museo/

Museo di Mineralogia "Leonardo de Prunner"

Dipartimento di Scienze della Terra, Via Trentino, 51 - 09127 - CAGLIARI http://www.unica.it/pub/2/index.jsp?is=2&iso=10

Museo di Zoologia

Dipartimento di Biologia Animale ed Ecologia, Viale Poetto, nº 1 09126 - Cagliari http://www.unica.it/~animabiol/museo.htm

Museo etno-botanico

Dipartimento di Scienze Botaniche, Viale S. Ignazio 13, 09123 Cagliari http://www.unica.it/pub/2/index.jsp?is=2&iso=10

Museo Herbarium

Dipartimento di Scienze Botaniche, Viale S. Ignazio 13, 09123 Cagliari http://www.unica.it/pub/2/index.jsp?is=2&iso=10

Museo sardo di Antropologia ed Etnografia

Dipartimento di Biologia Sperimentale, Dipartimento di Biologia Sperimentale "B. Loddo"

Cittadella Universitaria Monserrato

SS 554, Km 4.500 - 09042 Cagliari

http://www.unica.it/pub/2/index.jsp?is=2&iso=10

Museo sardo di Geologia e mineralogia e Paleontologia "Domenico Lovisato"

Dipartimento di Scienze della Terra, Via Trentino, 51 - 09127 - CAGLIARI

http://www.unica.it/pub/2/index.jsp?is=2&iso=10

Orto botanico

Dipartimento di Scienze Botaniche, Viale S. Ignazio 13, 09123 Cagliari http://unica2.unica.it/scienzebotaniche/Orto.htm

Calabria

Museo di paleontologia

Via P. Bucci, Cubo 14B

87036 Arcavacata di Rende (CS)

http://museopaleo.unical.it/index.php

Museo di Storia Naturale della Calabria ed Orto Botanico

Loc. Polifunzionale, Arcavacata di Rende

87030, CS

http://museo.unical.it/

RiMuseum - Museo per l'Ambiente

Via Cavour n.1 - 87036 Rende (CS)

http://rimuseum.unical.it/

Camerino

Museo di scienze naturali

Convento San Domenico

Piazza dei Costanti

62032 Camerino

http://web.unicam.it/museodellescienze/

Orto botanico "Carmela Cortini"

Viale Oberdan, S/N - I - 62032 CAMERINO (MC)

http://www.unicam.it/ateneo/strutture/ortobotanico/index.asp

Chieti-Pescara

Museo Universitario

Piazza Trento e Trieste

66100 Chieti

http://www.museo.unich.it/

Catania

Archivio ceramografico

CHIUSO - Museo di scienze della terra

Dipartimento di scienze biologiche, geologiche e ambientali, sezione di Scienze della terra, corso Italia 57, 95129 Catania

www.museoscienzaterract.it

Museo della fabbrica

Piazza Vaccarini, 95121 Catania

http://www.officineculturali.net/

Museo della rappresentazione - Casa della città

Museo dello studio

Presso sede centrale Università, Piazza Università, 2 - 95124 Catania

Museo di archeologia

Museo di zoologia e casa delle farfalle

Via Lago di Nicito, 388 (c/o Dipartimento di Biologia Animale "Marcello La

Greca")

http://catania.spacespa.it/musei/21-museo-di-zoologia-e-casa-delle-farfalle/

Orto botanico

Via A. Longo 19 I-95125 CATANIA

http://www.dipbot.unict.it/orto-botanico/

Ferrara

Arredi storici della Premiata Farmacia Navarra e collezione strumenti

Dipartimento di Scienze farmaceutiche, Via Fossato di Mortara, 17/19 44100 FERRARA

http://www.unife.it/ateneo/sma/le-collezioni/le-collezioni/navarra

Collezione instrumentaria delle scienze fisiche - CISIF

Dipartimento di Fisica dell'Università di Ferrara, Polo Scientifico e Tecnologico.

Via Giuseppe Saragat, 1 - Ferrara

http://cisfis.unife.it/index.html

Museo Anatomico "Giovanni Tumiati"

Istituto di Anatomia, Via Fossato di Mortara 70 c/o Cubo - 44121 Ferrara http://www.unife.it/ateneo/sma/i-musei/i-musei/museo-tumiati

Museo di Paleontologia e Preistoria 'P. Leonardi'

Palazzo Turchi di Bagno (1495),

Corso Ercole I d'Este 32, Ferrara

http://www.unife.it/ateneo/dipartimento/biologia-

evoluzione/strutture/sezioni/sezioni-di-palazzo-di-bagno/museo-paleontologico-e-

NON ESPOSTA - Collezione di chimica

http://www.unife.it/ateneo/sma/le-collezioni/strumenti-chimica

Orto botanico

Corso Porta Mare 2b

I-44100 Ferrara

http://www.unife.it/dipartimento/biologia-evoluzione/strutture/orto-botanico

Firenze

Museo di storia naturale

SEZIONI DEL MUSEO, Antropologia e Etnologia, Via del Proconsolo, 12, Botanica, Geologia e Paleontologia, Mineralogia e Litologia, Via La Pira, 4, Via la Pira, 4, Orto Botanico, Via Micheli, 3, Zoologia "La Specola", Via Romana, 17, Firenze

http://www.msn.unifi.it/mdswitch.html

Genova

Centro universitario di servizi giardini botanici Hanbury

La Mortola

Corso Montecarlo, 43

18039 Ventimiglia (IM)

http://www.giardinihanbury.com/hanbury4/

Collezione di reperti anatomici

Dipartimento di Medicina sperimentale (DIMES), Via L. B. Alberti, 2 - 16132 Genova

Museo di Anatomia Comparata

Museo di chimica

Dipartimento di Chimica e Chimica Industriale (DCCI)

via Dodecaneso, 31

16146 Genova

http://www.chimica.unige.it/museo/index.htm

Museo di etnomedicina Antonio Scarpa

Museo di Etnomedicina "A. Scarpa"

Università degli Studi di Genova

Via Balbi, 4 - 4° piano

16126 Genova

http://www.etnomedicina.unige.it/index.php

Museo di fisica

Dipartimento di Fisica, via Dodecaneso 33 - 16146, Genova

 $\underline{\text{http://www.fisica.unige.it/index.php?option=com_content\&task=view\&id=21\&Itemid=45}$

Museo di geologia e paleontologia

NON ESPOSTA - Collezione di monete antiche

NON ESPOSTA - Collezione di vasi antichi

Orto botanico

Corso Dogali, 1M I-16136 GENOVA

http://www.dipteris.unige.it/gruppi/polohanbury/index.html

Messina

Collezione Museologica Botanica

Piazza XX Settembre, 98100 MESSINA

http://www.ortobotanico.messina.it

Orto botanico "Pietro Castelli"

Piazza XX Settembre, 98100 MESSINA

http://www.ortobotanico.messina.it/

Milano

Erbario museo botanico del dipartimento di biologia

Dipartimento di Biologia - Università degli Studi di Milano

Via Celoria, 26 - 20133 Milano

http://www.biodip.unimi.it/it/dipartimento/mbotanico.htm

Museo astronomico - Orto botanico di Brera

Palazzo Brera, via Brera 28, 20121 Milano

http://www.brera.unimi.it/museo/index.html

Museo delle collezioni mineralogiche, gemmologiche, petrografiche e giacimentologiche

Dipartimento di Scienze della Terra "A. Desio" dell'Università

degli Studi, in Via Botticelli 23, 20133 Milano

Museo didattico di zoologia

Dipartimento di Biologia

via Celoria, 26 - 20133 Milano

http://users.unimi.it/~museozoo/

Orto botanico di Cascina rosa

via Valvassori Peroni 7

http://www.unimi.it/ateneo/3821.htm

Orto botanico G.E. Ghirardi

Dipartimento di Biologia

http://www.unimi.it/ateneo/3823.htm

Molise

Collezioni entomologiche

Museo del territorio

Museo di ingegneria agroalimentare

Museo di patologia vegetale

Museo di zootecnia

Museo erbario del Molise

Dipartimento di Scienze e Tecnologie per l'Ambiente ed il Territorio

Contrada Fonte Lappone 86090 Pesche (IS)

http://www.distat.unimol.it/erbario/

Modena-Reggio Emilia

CHIUSO - Musei anatomici

viale Berengario, 14-41100 Modena

http://www.museianatomici.unimore.it/

CHIUSO - Museo Astronomico e Geofisico

Dipartimento di Scienze dell'Ingegneria

piazza Roma, 22 - 41121 Modena

http://www.museoastrogeo.unimore.it/

Gemma 1786. Museo Mineralogico e Geologico Estense

Dipartimento di Scienze della Terra dell'Università degli Studi di Modena e Reggio Emilia in largo S. Eufemia 19, Modena

http://www.gemma.unimore.it/

Laboratorio delle Macchine Matematiche

Dipartimento di Matematica in via Campi 213/b e presso la sede di via Tito Livo,

1. Modena

http://www.mmlab.unimore.it/

Museo di Paleontologia

via Università, 4 - 41121 Modena

http://www.museopaleo.unimore.it/

Museo di Zoologia ed Anatomia Comparata

via Università, 4 - 41121 Modena

http://www.museozoologia.unimore.it/

Orto Botanico

viale Caduti in Guerra, 127 - 41121 Modena

http://www.ortobot.unimore.it/

Napoli Federico II

CMSNF - Museo di Antropologia

Collegio massimo dei Gesuiti sito in via Mezzocannone 8, Napoli

http://www.musei.unina.it/antropologia.php

CMSNF - Museo di Fisica

Via Mezzocannone 8 - 80134 Napoli

http://www.museodifisica.unina.it/

CMSNF - Museo di Paleontologia

complesso di San Marcellino e Festo sito in Largo San Marcellino, 10, Napoli

http://www.musei.unina.it/paleontologia.php

CMSNF - Museo Zoologico

Collegio massimo dei Gesuiti sito in via Mezzocannone 8, Napoli

http://www.musei.unina.it/zoologia.php

CMSNF - Real Museo Mineralogico

Collegio massimo dei Gesuiti sito in via Mezzocannone 8, Napoli

http://www.musei.unina.it/mineralogia.php

MUSA - CHIUSO - Museo Botanico "Orazio Comes"

http://www.museiagraria.unina.it/doc/comes.htm

MUSA - CHIUSO - Museo Di meccanica agraria "Carlo Santini"

http://www.museiagraria.unina.it/doc/santini.htm

MUSA - CHIUSO - Museo di Mineralogia "Antonio Parascandolo"

http://www.museiagraria.unina.it/doc/parascandola.htm

MUSA - CHIUSO -Museo di Entomologia "Filippo Silvestri"

via Università, 100

80055 Portici (NA)

http://www.museiagraria.unina.it/doc/silvestri.htm

MUSA - Museo Anatomo - Zootecnico "Tito Manlio Bettini"

Via Università 113, Parco Gussone, Portici

http://www.museobettini.unina.it/

MUSA - NON ESPOSTE - Collezioni strumentazioni scientifiche

http://www.museiagraria.unina.it/doc/strumentazioni.htm

MUSA - Orto Botanico di Portici

via Università, 100

80055 Portici (NA)

http://www.museiagraria.unina.it/doc/orto.htm

Museo di Anatomia Veterinaria

Facoltà di Medicina veterinaria, Napoli

http://www.unina.it/ateneo/musei/dettaglio.jsp?codiceMuseo=30002

Napoli Parthenope

Museo navale

Via Petrarca, 80, 80122 Napoli

Napoli SUN

Museo di anatomia

via Luciano Armanni, 5

CAP: 80138

http://www.museoanatomico-napoli.it/index.html

Museo di farmacologia

c/o Complesso di S. A. delle Dame

(via L. De Crecchio)

Museo di odontoiatria

c/o Complesso di S. A. delle Dame, via L. De Crecchio, Napoli

Palermo

Archivio Ducrot e Dotazione Basile

Facoltà di Architettura, viale delle Scienze, edificio 14, Palermo

http://portale.unipa.it/amministrazione/areapatrimonialenegoziale/sistemamusea le/home/chi siamo.html

Cappella dei Falegnami

Via Maqueda 172 (ingresso dalla traversa, via D'Alessi)

http://portale.unipa.it/amministrazione/areapatrimonialenegoziale/sistemamusea

le/home/Materiale Siti Collezioni Musei/

Carceri dei Penitenziati

Piazza Marina 61, Palermo

http://portale.unipa.it/amministrazione/areapatrimonialenegoziale/sistemamuseale/home/Materiale Siti Collezioni Musei/

Chiesa di S. Antonio Abate

Piazza Marina 61, Palermo

http://portale.unipa.it/amministrazione/areapatrimonialenegoziale/sistemamusea le/home/Materiale Siti Collezioni Musei/

CHIUSO - Osservatorio Astronomico e Museo della Specola

http://portale.unipa.it/amministrazione/areapatrimonialenegoziale/sistemamuseal e/home/Materiale Siti Collezioni Musei/Specola/Osservat

Collezione di Anatomia

http://portale.unipa.it/amministrazione/areapatrimonialenegoziale/sistemamusea le/home/Materiale Siti Collezioni Musei/

Collezione di Fisiologia Umana

Dipartimento di Medicina Interna e Specialistica (DIMIS), Via del Vespro, 129 90127 Palermo

http://www.unipa.it/sistemamuseale/siti/fisiologia umana/index.html

Collezione di Ingegneria: Civile, Ambientale, Aerospaziale, dei Materiali (DICAM)

Ingegneria Civile, Ambientale, Aerospaziale, dei Materiali (DICAM)

V.le delle Scienze - Ed. 8 - 90128 Palermo

http://www.unipa.it/sistemamuseale/siti/architettura/index.html

Collezione di Ingegneria: Elettronica ed elettrotecnica

Ingegneria Elettrica, Elettronica e delle Telecomunicazioni, di tecnologie

Chimiche, Automatica e modelli Matematici (DIEETCAM)

V.le delle Scienze - Ed. 9 90100 Palermo

http://www.unipa.it/sistemamuseale/siti/elettronica_elettrotecnica/index.html

Collezione di Ingegneria: Trasporti

Dipartimento dell'Energia

V.le delle Scienze Ed. 9 - 90128 Palermo

http://www.unipa.it/sistemamuseale/siti/trasporti/index.html

Convento di S. Antonino

Piazza Sant' Antonino, Corso Tukory, 2 Palermo

http://portale.unipa.it/amministrazione/areapatrimonialenegoziale/sistemamusea le/home/Materiale Siti Collezioni Musei/

Cripta delle Repentite

Via Divisi 81, Palermo

http://portale.unipa.it/amministrazione/areapatrimonialenegoziale/sistemamusea

le/home/Materiale Siti Collezioni Musei/

Fossa della Garofala

Viale delle Scienze, ingresso facoltà di Agraria, Palermo

http://portale.unipa.it/amministrazione/areapatrimonialenegoziale/sistemamusea

le/home/Materiale Siti Collezioni Musei/

Museo della Chimica

Dipartimento di Chimica Inorganica e Analitica

Viale delle Scienze - Parco d'Orleans II Ed. 17

90128 Palermo

http://cheminor.unipa.it/index.php/dipartimento/foto-del-

dipartimento/category/1.html

Museo della Radiologia "Pietro Cignolini"

Policlinico, piazza delle Cliniche 2, Palermo

http://www.unipa.it/sistemamuseale/siti/radiologia/index.html

Museo di Entomologia Agraria

Dipartimento DEMETRA, Vialele delle Scienze - Edificio 4 Ingresso H 90128 Palermo

http://www.unipa.it/sistemamuseale/siti/agraria/index.html

Museo di Mineralogia

Via Archirafi, 36, Palermo

http://www.unipa.it/sistemamuseale/siti/radiologia/index.html

Museo Geologico "Gaetano Giorgio Gemmellaro"

Corso Tukory, 131

90134 - Palermo

http://www.unipa.it/museogemmellaro/Museo Gemmellaro/HomePage.html

Museo Storico dei Motori e dei Meccanismi

Dipartimento di Ingegneria Chimica Gestionale, Informatica Meccanica, viale delle Scienze, edificio 8, Palermo

http://www.museomotori.unipa.it/

Museo Zoologico "Pietro Doderlein"

Via Archirafi 18, Palermo

http://147.163.1.89/museozoologia/index.php?option=com_frontpage&Itemid=1

Orto Botanico ed Herbarium Mediterraneum

Via Lincoln 2 - 90133 Palermo

http://www.ortobotanico.unipa.it/

Palazzo Chiaromonte Steri

Piazza Marina 61, Palermo

http://portale.unipa.it/amministrazione/areapatrimonialenegoziale/sistemamuseale/home/Materiale Siti Collezioni Musei/

Padova

Museo Botanico

via Orto Botanico, 15 - 35123 Padova

http://www.musei.unipd.it/botanico/

Museo degli Strumenti dell'Astronomia

Osservatorio Astrofisico di Asiago

via Osservatorio 8 - 36012 Asiago (VI)

http://www.musei.unipd.it/astronomia/

Museo dell'Educazione

via degli Obizzi, 21-23 - 35122 Padova

http://www.musei.unipd.it/educazione/index.html

Museo di Antropologia

via Orto Botanico, 15 - 35123 Padova

http://www.musei.unipd.it/antropologia/

Museo di Geologia e Paleontologia

Palazzo Cavalli

via Giotto 1 - 35121 Padova

http://www.musei.unipd.it/geologia/

Museo di Macchine "Enrico Bernardi"

Dipartimento di Ingegneria Meccanica

viale Venezia, 1 - 35131 Padova

http://www.musei.unipd.it/macchine/

Museo di Mineralogia

Palazzo Cavalli

via Matteotti 30 - 35121 Padova

tel. +39 049 8272006 - fax +39 049 8272010

http://www.musei.unipd.it/mineralogia/

Museo di Scienze Archeologiche e d'Arte

Dipartimento di Archeologia

Palazzo Liviano, piazza Capitaniato, 7 - 35139 Padova

http://www.musei.unipd.it/archeologia/

Museo di Storia della Fisica

Dipartimento di Fisica "Galileo Galilei" - Polo didattico

via Loredan, 10 - 35131 Padova

http://www.musei.unipd.it/fisica/

Museo di Zoologia

via G. Jappelli, 1/a - 35121 Padova

tel. +39 049 8275410 - fax. +39 049 8275475

http://www.musei.unipd.it/zoologia/

Perugia

Collezione del dipartimento di Matematica e informatica

Dipartimento di Matematica e Informatica, Via Vanvitelli 1 - 06123 Perugia http://accounts.unipg.it/~camso1/aoperative.htm

Erbario Cicioni-Bruschi

Dipartimento Biologia Applicata, Borgo XX Giugno 74

http://accounts.unipg.it/~camso1/aoperative.htm

Galleria di Storia Naturale dell'Università di Perugia

Presso Manifattura ex Tabacchi di Casalina, Deruta, Località Casalina

Gipsoteca

Dipartimento Scienze Storiche, Sezione di Scienze Storiche dell'Antichità, Via Aquilone, 7

06100 PERUGIA

http://accounts.unipg.it/~camso1/aoperative.htm

Laboratorio di storia dell'agricoltura di Casalina

Presso Manifattura ex Tabacchi di Casalina, Deruta, Località Casalina

Museo di Anatomia Umana

Sezione di Anatomia del Dipartimento di Medicina Sperimentale e Scienze Biochimiche dell'Ateneo Perugino,

Via del Giochetto, Edificio A

http://accounts.unipg.it/~camso1/aoperative.htm

Museo di Fisica

Dipartimento di Fisica, via Alessandro Pascoli, I-06123 Perugia http://wwwold.fisica.unipg.it/museo/start_noframe.html

Orto botanico

Borgo XX Giugno,74

06121 Perugia

http://accounts.unipg.it/~camso1/aoperative.htm

Pisa

Antiquarium di archeologia classica

presso la chiesa di San Paolo all' Orto - Pisa, piazza San Paolo all' Orto N° 20 http://archeo4.arch.unipi.it/antiqua.html

Collezioni di egittologia

Via S. Frediano, 12 56100 Pisa

http://www.egittologia.unipi.it/pisaegypt/collezioni.htm

Collezioni di paletnologia

Sezione di Paleontologia Umana, Paletnologia

Via Santa Maria 53 - 56126 Pisa

http://archeo4.arch.unipi.it/collpaletno.html

Gipsoteca di arte antica

presso la chiesa di San Paolo all' Orto - Pisa, piazza San Paolo all' Orto N° 20 http://archeo4.arch.unipi.it/gipso.html

Museo botanico

via Luca Ghini 5, 56126 Pisa

http://www.biologia.unipi.it/ortobotanico/

Museo degli strumenti per il calcolo

vecchi macelli in via Nicola Pisano, 25, Pisa

http://www.fondazionegalileogalilei.it

Museo della grafica

Palazzo Lanfranchi

Lungarno Galilei 9 - I-56125 Pisa

http://www.arte.unipi.it/GDS.htm

Museo di anatomia e istologia patologica

via Roma 57, Pisa

Museo di anatomia patologica

Dipartimento di Ricerca Traslazionale e delle Nuove Tecnologie in Medicina e Chirurgia

via Roma, 55

http://www.med.unipi.it/morfologia/sito dipartimento pag museo anatomico.h

tml

Museo di anatomia veterinaria

Dipartimento di Patologia Animale, Profilassi ed Igiene degli Alimenti viale delle Piagge, $\mathbf 2$

http://www.vet.unipi.it/museo

Museo di storia naturale e del territorio di Calci

via Roma 79 – 56011 Calci (Pisa)

http://www.msn.unipi.it/

Orto botanico

via Luca Ghini 5, 56126 Pisa

http://www.biologia.unipi.it/ortobotanico/

Parma

Centro studi e archivio della comunicazione (CSAC)

Via Palermo 6 (ingresso consultazione Via Catania, 1) - 43100 Parma

Collezione di strumenti scientifici "Macedonio Melloni"

Dip. di Fisica - Viale delle Scienze - 43100 Parma

http://old.unipr.it/musei/fisica.html

Museo anatomico veterinario

Via del Taglio 8 - 43100 Parma

http://old.unipr.it/musei/anato1.html

Museo del Dipartimento di Anatomia Umana, Farmacologia e Scienze medicoforensi

c/o Ospedale Maggiore - Via Gramsci 14, 43126 Parma

http://www.anfamedmuseo.unipr.it/

Museo di mineralogia

Dip. di Scienze della Terra -V.le G.P.Usberti 157/a - 43100 Parma

http://old.unipr.it/musei/mine.html

Museo di Storia Naturale

Dipartimento di Biologia Evolutiva e Funzionale

http://www.biol.unipr.it/index.rvt?func=sezioni&sez_id=6

Museo Paleontologico Parmense

Dip. di Scienze della Terra - V.le G.P.Usberti 157/a - 43100 Parma

http://old.unipr.it/musei/paleo.html

Orto botanico

via Farini 90

43121 Parma

http://www.biol.unipr.it/orto/

Pavia

Aula Magna

Palazzo Universitario

Strada Nuova 65 27100 Pavia

Tel. + 39 0382 984707

http://musei.unipv.it/musei/2 mon 4.html

Aula Scarpa

Palazzo Universitario

Strada Nuova 65 27100 Pavia

Tel. + 39 0382 984707

http://musei.unipv.it/musei/2 mon 5.html

Aula Volta

Palazzo Universitario

Strada Nuova 65 27100 Pavia

Tel. + 39 0382 984707

http://musei.unipv.it/musei/2 mon 3.html

CHIUSA AL PUBBLICO - Collezione Fisiologia

Dipartimento di Medicina Molecolare

Sezione di Fisiologia umana

via Forlanini, 6 - Pavia

http://musei.unipv.it/musei/2 coll 2 F.html

CHIUSA AL PUBBLICO - Collezione Istologia ed Embriologia

Dipartimento di Medicina sperimentale

Sezione di Istologia ed Embriologia generale, via Forlanini, 10 - Pavia

http://musei.unipv.it/musei/2 coll 3 IE.html

CHIUSA AL PUBBLICO - Collezione Matematica

Dipartimento di Matematica "Felice Casorati",

via Ferrata, 1 - Pavia

http://musei.unipv.it/musei/2 coll 4 M.html

CHIUSO - Collezione Patologia Generale

Palazzo Botta

Piazza Botta, 10

http://musei.unipv.it/musei/2 coll 6 PG.html

CHIUSO - Museo di Anatomia

Dipartimento di Medicina sperimentale

Sezione di Anatomia umana normale

via Forlanini, 8 27100 Pavia

http://musei.unipv.it/musei/2 musei 6 AN.html

CHIUSO - Museo di Chimica

Dipartimento di Chimica

Universita degli Studi di Pavia

Viale Taramelli 16, 27100 Pavia

http://musei.unipv.it/musei/2 musei 8 C.html

CHIUSO - Museo di Fisica

Dipartimento di Fisica A.Volta

Via Bassi, 6 - 27100 Pavia

http://musei.unipv.it/musei/2 musei 9 F.html

Collezione di Archeologia

Strada Nuova, 65 27100 Pavia

http://musei.unipv.it/musei/2 musei 7 AR.html

Collezione Musicologia

Corso Garibaldi, 178 - 26100 CREMONA

http://musei.unipv.it/musicologia/

Cortile di Volta

Palazzo Universitario

Strada Nuova 65 27100 Pavia

Tel. + 39 0382 984707

http://musei.unipv.it/musei/2 mon 2.html

Il palazzo dell'Università

Palazzo Universitario

Strada Nuova 65 27100 Pavia

Tel. + 39 0382 984707

http://musei.unipv.it/musei/2 mon 1.html

Museo della Tecnica Elettrica

via Ferrata, 3 - 27100 Pavia

http://www-3.unipv.it/museotecnica/

Museo di Mineralogia

Dipartimento di Scienze della Terra

Via Ferrata, 1 - Pavia

http://musei.unipv.it/Mineralogia/default.htm

Museo di Storia Naturale

Via Guffanti, 13 - 27100 Pavia

http://www-3.unipv.it/webbio/cismu/bamusei.htm

Museo per la Storia dell' Università

Palazzo Universitario

Strada Nuova 65 27100 Pavia

Tel. + 39 0382 984707

http://musei.unipv.it/msu/

Orto Botanico

Via S. Epifanio, 14 - 27100 Pavia

http://www-3.unipv.it/orto1773/

Roma 3

Museo storico della didattica "Mauro Laeng"

Dipartimento di Scienze dell'Educazione

Via Milazzo, 11b

00185 Roma

http://host.uniroma3.it/laboratori/museodidattica/chi.htm

Roma Sapienza

Fort Apollonia Museum of Nzema Culture and History

http://www.musei.uniroma1.it/apollonia/index.html

Museo Arte e giacimenti Minerari

Facoltà di Ingegneria - Polo di Latina - V.le A. Doria - Latina

http://www.musei.uniroma1.it/museoartegiacimenti/index.html

Museo del Vicino Oriente

Via Palestro, 63 - 00185 Roma

http://www.musei.uniroma1.it/informamuseonew.asp?ID=6

Museo dell'Arte Classica

Università degli Studi di Roma "La Sapienza" P.le Aldo Moro, 5 - 00185 Roma

http://www.musei.uniroma1.it/arteclassica/index.html

Museo delle Antichità Etrusco Italiche

Università degli Studi di Roma "La Sapienza", P.le Aldo Moro, 5 -00185 Roma http://www.musei.uniroma1.it/museoetruscologia/index.htm

Museo delle Origini

Università degli Studi di Roma "La Sapienza", P.le Aldo Moro, 5 -00185 Roma http://www.musei.uniroma1.it/museodelleorigini/index.html

Museo di Anatomia Comparata

Dipartimento di Biologia e Biotecnologie "C. Darwin" - Università "La Sapienza" - Via Borelli,50 - 00161 Roma

http://www.musei.uniroma1.it/anatomiacomparata/index.html

Museo di Anatomia Patologica

Dip. di Medicina Sperimentale e Patologia- Università degli Sudi "La Sapienza - V.le Regina Elena , 324

http://www.musei.uniroma1.it/anatomiapatologica/index.html

Museo di Antropologia "Giuseppe Sergi"

Dipartimento di Biologia Animale e dell'Uomo, Università "La Sapienza", Piazzale Aldo Moro 5, 00185 Roma

http://www.musei.uniroma1.it/museodiantropologia/index.html

Museo di Chimica "Primo Levi"

Dipartimento di Chimica - Università degli Studi "La Sapienza" - P.le Aldo Moro, 5 - 00185 Roma

http://w3.uniroma1.it/museochimica/index.html

Museo di Fisica

Dipartimento di Fisica. P.le Aldo Moro,5 - 00185 Roma http://www.phys.uniroma1.it/DipWeb/museo/home.htm

Museo di Geologia

Dipartimento di Scienze della Terra - Università degli Studi di Roma "La Sapienza" - P.le A. Moro, 5 -00185 Roma

http://tetide.geo.uniroma1.it/sciterra/musei/museogeo/pag1.htm

Museo di Idraulica

Dipartimento di Idraulica, Trasporti e Strade - Via Eudossiana, 20 http://www.musei.uniroma1.it/informamuseonew.asp?ID=20

Museo di Merceologia

Dipartimento per le Tecnologie, le risorse e lo sviluppo Facoltà di Economia Via del Castro Laurenziano 9 - 00161 Roma

http://w3.uniroma1.it/musmerc/Index.html

Museo di Mineralogia

Dipartimento di Scienze della Terra - Università degli Studi di Roma "La Sapienza" - P.le A. Moro, 5 - 00185 Roma

http://musmin.geo.uniroma1.it/

Museo di Paleontologia

Dipartimento di Scienze della Terra - Università degli Studi di Roma "La Sapienza" - P.le A. Moro, 5 - 00185 Roma

http://tetide.geo.uniroma1.it/sciterra/musei/pal/museo.html

Museo di Storia della Medicina

Facoltà di Medicina e Chirurgia- Università degli Studi "La Sapienza" - Viale dell'Università 34,a - 00185 Roma

http://www.histmed.it/museo/museo.htm

Museo di Zoologia

Piazzale Valerio Massimo, 6 - 0185 Roma

http://www.musei.uniroma1.it/zoologia/index.html

Museo Erbario - Museo di Botanica

P.Le A. Moro, 5 00185 Roma

http://www.musei.uniroma1.it/erbario/index.html

Museo Laboratorio Arte Contemporanea

P.le A. Moro, 5 00185 Roma

http://www.luxflux.org/museolab/museo.htm

Orto Botanico

Largo Cristina di Svezia n. 24 00165 Roma

http://sweb01.dbv.uniroma1.it/orto/index.html

Roma Tor Vergata

Museo dell'Immagine Fotografica e delle Arti Visuali (MIFAV)

http://www.mifav.uniroma2.it/

Orto botanico

Via Guido Carli s.n.c., 00133 Roma

http://www.ortobotanicoroma2.it/

Salento

CHIUSO - Museo dell'Ambiente

Centro Ecotekne - S.P. 6, Lecce-Monteroni - 73047 - Monteroni di Lecce

http://www.museoambiente.unisalento.it/ e vecchio sito:

http://siba3.unile.it/ctle/mda/info.html

Museo di Biologia Marina "Pietro Parenzan", Porto Cesareo

STAZIONE DI BIOLOGIA MARINA

Via A. Vespucci, 13/17

73010 Porto Cesareo (Lecce), Italy

http://siba2.unisalento.it/sbm/

Museo di Ecologia degli Ecosistemi Mediterranei, Otranto

Faro di Punta Palascia, Otranto

http://www.obseco.unisalento.it/Museo/index.php?option=com_content&view=article&id=63&Itemid=60

Museo Diffuso di Cavallino

Piazzetta F.lli Cervi

http://www.comune.cavallino.le.it/index.php?option=com_content&task=view&id=155&Itemid=1

Museo Papirologico

Centro di Studi Papirologici, Via V.M. Stampacchia

http://www.museopapirologico.eu/

Museo Storico-Archeologico

Complesso Studium 2000

Università del Salento

Via di Valesio, 73100 Lecce

http://www.musa.unisalento.it/ris istituzionale/museo/presentazione.html

Orto Botanico

Primo nucleo Università degli Studi di Lecce c/o Ecotekne Via Prov. Lecce-Monteroni, 73100 LECCE

Nuovo polo, Strada Prov. Lecce-San Cataldo, località Mass. Sant' Angelo, 73100 LECCE

http://www.leccebotanicalgarden.unisalento.it/

Siena

Archivio e Percorso Storico d'Ateneo

palazzo del Rettorato, in Banchi di Sotto 55, Siena

http://www3.unisi.it/v0/portale.html?fld=3901

Collezione di Fisica

Dipartimento di Fisica, Siena

http://www.unisi.it/v0/portale.html?fld=3909

Collezioni di Preistoria, Archeologia Classica e Archeologia Medievale

Dipartimento di Archeologia e Storia delle Arti

Via Roma, 56 - 53100 Siena

http://www3.unisi.it/v0/portale.html?fld=3902

Museo Anatomico

Polo Scientifico San Miniato

Via Aldo Moro, 6 - 53100 Siena

http://www.unisi.it/v0/portale.html?fld=3904

Museo Botanico: Orto Botanico e Herbarium

Dipartimento di Scienze Ambientali "G. Sarfatti", in via P. A. Mattioli 4, Siena http://www3.unisi.it/v0/minisito2.html?fld=4341

Museo di Scienze della Terra

Dipartimento di Scienze della Terra

Via del Laterino, 8 - 53100 Siena

http://www.dst.unisi.it/MST/PrimaPaginaMST.htm

Sassari

Collezione agronomica e museo all'aperto di storia dell'agricoltura

Azienda Sperimentale Agraria, Frazione di Ottava, Sassari

http://www.uniss.it/php/proiettoreTesti.php?cat=186&item=1&xml=/xml/testi/test i2360.xml&tl=Agronomia

Collezione anatomica

Dipartimento di Scienze Biomediche, sezione Anatomia Umana Normale

Viale San Pietro 43/c, 07100 Sassari

http://www.uniss.it/php/proiettoreTesti.php?cat=186&item=2&xml=/xml/testi/test i2357.xml&tl=Anatomia

Collezione di botanica farmaceutica

Dipartimento di Scienze del farmaco

Via Muroni 23 a, 07100 Sassari

http://www.uniss.it/php/proiettoreTesti.php?cat=186&item=3&xml=/xml/testi/test i2356.xml&tl=Botanica

Collezione di fisica

Dipartimentale di matematica e fisica

Via Vienna 2, 07100 Sassari

http://www.uniss.it/php/proiettoreTesti.php?cat=186&item=5&xml=/xml/testi/test i2361.xml&tl=Fisica

collezione entomologica

Dipartimento di Protezione delle Piante

Via E. de Nicola, 1, 07100 Sassari

http://www.uniss.it/php/proiettoreTesti.php?cat=186&item=4&xml=/xml/testi/test i2359.xml&tl=Entomologia

collezione zoologica

Dipartimento di Zoologia e Antropologia Biologica

Via Muroni 25, 07100 Sassari

http://www.uniss.it/php/proiettoreTesti.php?cat=186&item=7&xml=/xml/testi/test i2352.xml&tl=Zoologia

IN FASE DI ATTIVAZIONE - Museo scientifico

http://www.uniss.it/php/museo.php

Museo geologico mineralogico "Aurelio Serra"

Dipartimento di Ingegneria del Territorio, Sezione di Geopedologia e Geologia Applicata

Via E. De Nicola, 1, 07100 Sassari

 $\underline{http://www.uniss.it/php/proiettoreTesti.php?cat=186\&item=6\&xml=/xml/testi/testi/2358.xml\&singpag=1$

Torino

ASTUT - Archivio scientifico e tecnologico

Archivio Scientifico e Tecnologico - A.S.T.

Via Verdi 8, 10134 TORINO

http://www.unito.it/unitoWAR/page/istituzionale/ateneo2/archivio_scientifico3

CHIUSO - Museo di antropologia e etnografia

via Accademia Albertina, 17

10123 Torino

http://www.museounito.it/antropologia/default.html

Collezioni di scienze naturali

Presso Museo Regionale di Scienze Naturali, via Giolitti, 36 - Torino

http://www.regione.piemonte.it/museoscienzenaturali/index.htm

Museo "Perroncito"

http://museoperroncito.weebly.com/

Museo del Dipartimento di Scienze Veterinarie

http://veterinaria.campusnet.unito.it/do/home.pl/View?doc=museo/museo.html

Museo dell'agricoltura del Piemonte

Via Leonardo Da Vinci, 44 - 10095 Grugliasco (To)

http://www.unito.it:80/unitoWAR/appmanager/musei1/M011? nfpb=true

Museo di anatomia umana "Luigi Rolando"

C.so M. d'Azeglio 52

10126 Torino

http://www.museounito.it/anatomia/default.html

Museo di antropologia criminale "C. Lombroso"

via Pietro Giuria 15

10126 Torino

http://www.museounito.it/lombroso/default.html

Museo di fisica

Dipartimento di Fisica in via Pietro Giuria, 1 Torino.

http://www.museodifisica.unito.it/

Museo di odontoiatria

Via Nizza, 230 - 10126 Torino Presso Centro di eccellenza per l'Assistenza, la Didattica e la Ricerca in campo Odontostomatologico "Dental School"- 3° piano Lingotto

http://www.unito.it:80/unitoWAR/appmanager/musei1/M010? nfpb=true

Orto botanico

Viale P. A. Mattioli 25 - 10125 Torino

http://www.bioveg.unito.it/ortoita/ortob.htm

Trieste

Collezione del Dipartimento di Fisica

Dipartimento di Fisica,, Via Valerio 2 - 34127 TRIESTE

http://physics.units.it/Dipartimento/museo.htm

Museo delle scienze sanitarie

Facoltà di Medicina, Ospedale di Cattinara - 34149 TRIESTE

http://www.smats.units.it/MDS

Museo di Mineralogia e Petrografia

Comprensorio di S. Giovanni, Palazzina "O", Via E. Weiss, 6 - 34127 Trieste

http://www.geoscienze.units.it/index.php?option=com_content&view=category&layout=blog&id=22&Itemid=127

NON ESPOSTA - Collezione "Marussi"

Dipartimento di Geoscienze, Via Weiss - 34128 TRIESTE

http://www.smats.units.it/CAT

Orto botanico

Dipartimento di Biologia - Università degli Studi di Trieste

Via Giorgieri 7 - 34174 - Trieste

http://www2.units.it/biologia/ortoval/valerio.htm

Raccolta di opere d'arte

Università di Trieste

http://www.smats.units.it/CAT

Tuscia (Viterbo)

Banca del Germoplasma della Tuscia

Largo dell'Università s.n.c., Blocco C, Viterbo

http://www.sma.unitus.it/index.php/banca-del-germoplasma-della-tuscia.html

Collezione entomologica

Dipartimento di Scienze e Tecnologie per l'Agricoltura, le Foreste, la Natura e l'Energia,

Via San Camillo de Lellis s n c - 01100 Viterbo

http://www.sma.unitus.it/index.php/collezione-entomologica.html

Collezioni della Facoltà di Agraria

Dipartimento di Scienze e Tecnologie per l'Agricoltura, le Foreste, la Natura e l'Energia,

Via San Camillo de Lellis s.n.c.- 01100 Viterbo

http://www.sma.unitus.it/index.php/collezioni-della-facolta-di-agraria.html

Museo della città e del territorio, Vetralla

Via di Porta Marchetta, 2 Vetralla - Vt

http://www.ghaleb.it/Museo.htm

Museo Erbario della Tuscia

Centro Interdipartimentale dell'Orto Botanico, Università della Tuscia, via S. Camillo de Lellis s/n, Viterbo

http://www.unitus.it/dipartimenti/dabac/erbario/intro.asp

NON ESPOSTA - Collezione archeologica

Dipartimento di Scienze dei Beni Culturali , Largo dell'Università s.n.c.- 01100 Viterbo

http://www.sma.unitus.it/index.php/strutture-afferenti-2/collezione-

archeologica.html

NON ESPOSTA - Collezione di anatomia comparata e zoologia

(Ubicazione pre-riforma) Facoltà di Scienze matematiche, fisiche e naturali, Via S. Camillo de Lellis

 $\underline{http://www.sma.unitus.it/index.php/collezione-di-anatomia-comparata-e-zoologia.html}$

Orto Botanico dell'Azienda Agraria Didattico-Sperimentale

Strada Bullicame s.n.c.

01100 Viterbo (Italy)

http://www.unitus.it/centri/ortobotanico/home.asp

Rete dei complessi monumentali di Ateneo

Università della Tuscia

http://www.sma.unitus.it/index.php/rete-dei-complessi-monumentali-di-

ateneo.html

Rete dell'arte contemporanea della Tuscia

Università della Tuscia

http://www.sma.unitus.it/index.php/strutture-afferenti-2/rete-dellarte-

contemporanea-della-tuscia.html

Xylarium

Dipartimento di Scienze e Tecnologie per l'Agricoltura, le Foreste, la Natura e l'Energia,

Via San Camillo de Lellis s.n.c.- 01100 Viterbo

http://www.sma.unitus.it/index.php/xylarium.html

Urbino

Museo dei gessi

Istituto di Archeologia e Storia dell'Arte Antica "S. Stucchi", Via del Balestriere 2

61029 Urbino (PU)

http://www.uniurb.it/sbc/ist archeo/museo dei gessi.htm

Museo di scienza e tecnologia

Piazza della Repubblica 13 - 61029 Urbino (PU) http://www.uniurb.it/PhysLab/Museum.html

Orto botanico

Via Bramante 28 - 61029 Urbino (PU)

Appendix B - Museum Units per Field

Archeologico-Artistico-Letterario

Archeologia

Antiquarium di archeologia classica

Archivio ceramografico

Collezione Archeologica "Evan Gorga"

Collezioni di egittologia

Collezioni di paletnologia

Collezioni di Preistoria, Archeologia Classica e Archeologia Medievale

Museo del Vicino Oriente

Museo delle Antichità Etrusco Italiche

Museo delle Origini

Museo di archeologia

Museo Papirologico

Museo Storico-Archeologico

NON ESPOSTA - Collezione archeologica

NON ESPOSTA - Collezione di monete antiche

NON ESPOSTA - Collezione di vasi antichi

Arte

Museo della grafica

Museo Laboratorio Arte Contemporanea

Raccolta di opere d'arte

Rete dell'arte contemporanea della Tuscia

Comunicazione

Centro studi e archivio della comunicazione (CSAC)

Fotografia

Museo della fotografia

Museo dell'Immagine Fotografica e delle Arti Visuali (MIFAV)

Gipsoteca

Collezione di Archeologia

Gipsoteca

Gipsoteca di arte antica

Museo dei gessi

Museo dell'Arte Classica

Interclasse

Museo di Scienze Archeologiche e d'Arte

Musica

Collezione Musicologia

Chimico-Fisico-Matematico

Chimica

CHIUSO - Museo di Chimica

Collezione degli Strumenti e Apparecchi di Chimica

Collezioni di chimica

Museo della Chimica

Museo di chimica

Museo di Chimica "Primo Levi"

Museo di corrosione

NON ESPOSTA - Collezione di chimica

Fisica

CHIUSO - Museo di Fisica

CMSNF - Museo di Fisica

Collezione del Dipartimento di Fisica

Collezione di Fisica

Collezione di fisica

Collezioni di fisica

IN FASE DI COSTITUZIONE - Museo del dipratimento di Fisica

Museo di Storia della Fisica

Informatica

Collezioni di informatica

Museo degli strumenti per il calcolo

Matematica

CHIUSA AL PUBBLICO - Collezione Matematica

Collezione del dipartimento di Matematica e informatica

Laboratorio delle Macchine Matematiche

Economico

Merceologia

Museo di Merceologia

Interclasse

Interclasse

Museo archivio politecnico

Museo astronomico - Orto botanico di Brera

Museo di Palazzo Poggi

Scienza e tecnica

ASTUT - Archivio scientifico e tecnologico

Collezione di strumenti scientifici "Macedonio Melloni"

Museo di scienza e tecnologia

Storia della scienza

Collezione instrumentaria delle scienze fisiche - CISIF

Medico-Farmaceutico

Anatomia

CHIUSO - Musei anatomici

CHIUSO - Museo di Anatomia

Collezione anatomica

Collezione di Anatomia

Collezione di reperti anatomici

Museo Anatomico

Museo Anatomico "Giovanni Tumiati"

Museo delle Cere anatomiche "Luigi Cattanei"

Museo di anatomia

Museo di anatomia e istologia patologica

Museo di Anatomia Patologica

Museo di anatomia patologica

Museo di Anatomia Umana

Museo di anatomia umana "Luigi Rolando"

Museo di Cere Anatomiche "Clemente Susini"

Antropologia criminale

Museo di antropologia criminale "C. Lombroso"

Farmacia

Arredi storici della Premiata Farmacia Navarra e collezione strumenti

Museo di farmacologia

Fisiologia umana

CHIUSA AL PUBBLICO - Collezione Fisiologia

Collezione di Fisiologia Umana

Interclasse

Museo del Dipartimento di Anatomia Umana, Farmacologia e Scienze medicoforensi

Istologia

CHIUSA AL PUBBLICO - Collezione Istologia ed Embriologia

Medicina

Museo delle scienze sanitarie

Museo di etnomedicina Antonio Scarpa

Museo di Storia della Medicina

Museo Universitario

Odontoiatria

Museo di odontoiatria

Museo di odontoiatria

Patologia

CHIUSO - Collezione Patologia Generale

Psicologia

CHIUSO - Laboratorio di Storia della Psicologia Applicata "A. Marzi"

Radiologia

Museo della Radiologia "Pietro Cignolini"

Scienze naturali

Agraria

Collezione agronomica e museo all'aperto di storia dell'agricoltura

Collezioni della Facoltà di Agraria

Laboratorio di storia dell'agricoltura di Casalina

MUSA - CHIUSO - Museo Di meccanica agraria "Carlo Santini"

Museo dell'agricoltura del Piemonte

Ambiente

Museo di Ecologia degli Ecosistemi Mediterranei, Otranto

Museo Nazionale dell'Antartide "Felice Ippolito"

RiMuseum - Museo per l'Ambiente

Anatomia animale, comparata e veterinaria

Museo "Perroncito"

Museo anatomico veterinario

Museo del Dipartimento di Scienze Veterinarie

Museo di Anatomia Comparata

Museo di Anatomia comparata

Museo di Anatomia Comparata

Museo di Anatomia degli animali domestici

Museo di Anatomia patologica e teratologia veterinaria Alessandrini-Ercolani

Museo di anatomia veterinaria

Museo di Anatomia Veterinaria

Raccolta di strumenti chirurgici veterinari

Antropologia

CHIUSO - Museo di antropologia e etnografia

CMSNF - Museo di Antropologia

Museo di Antropologia

Museo di Antropologia

Museo di Antropologia "Giuseppe Sergi"

Museo sardo di Antropologia ed Etnografia

Astronomia

CHIUSO - Museo della Specola

CHIUSO - Osservatorio Astronomico e Museo della Specola

Museo degli Strumenti dell'Astronomia

Biologia

Museo di Biologia Marina "Pietro Parenzan", Porto Cesareo

Botanica

Banca del Germoplasma della Tuscia

Centro universitario di servizi giardini botanici Hanbury

Collezione di botanica farmaceutica

Collezione Museologica Botanica

Erbario Cicioni-Bruschi

Erbario e museo botanico

Erbario museo botanico del dipartimento di biologia

Giardino botanico alpino

MUSA - CHIUSO - Museo Botanico "Orazio Comes"

MUSA - NON ESPOSTE - Collezioni strumentazioni scientifiche

MUSA - Orto Botanico di Portici

Museo botanico

Museo Botanico

Museo Botanico: Orto Botanico e Herbarium

Museo di patologia vegetale

Museo Erbario - Museo di Botanica

Museo erbario del Molise

Museo Erbario della Tuscia

Museo etno-botanico

Museo Herbarium

Museo orto botanico

Orto botanico "Carmela Cortini"

Orto botanico "Pietro Castelli"

Orto Botanico dell'Azienda Agraria Didattico-Sperimentale

Orto botanico di Cascina rosa

Orto Botanico ed Herbarium Mediterraneum

Orto botanico G.E. Ghirardi

Xylarium

Entomologia

Collezione entomologica

collezione entomologica

Collezioni entomologiche

MUSA - CHIUSO -Museo di Entomologia "Filippo Silvestri"

Museo di Entomologia Agraria

Geologia e mineralogia

CMSNF - Real Museo Mineralogico

Gemma 1786. Museo Mineralogico e Geologico Estense

MUSA - CHIUSO - Museo di Mineralogia "Antonio Parascandolo"

Museo Arte e giacimenti Minerari

Museo delle collezioni mineralogiche, gemmologiche, petrografiche e giacimentologiche

Museo di Geologia

Museo di Mineralogia

Museo di Mineralogia "Leonardo de Prunner"

Museo di Mineralogia e Petrografia

Museo Geologico "Gaetano Giorgio Gemmellaro"

Museo Geologico «Giovanni Capellini»

Museo geologico mineralogico "Aurelio Serra"

Museo sardo di Geologia e mineralogia e Paleontologia "Domenico Lovisato"

Interclasse

CHIUSO - Museo Astronomico e Geofisico

Museo di Geologia e Paleontologia

Paleontologia

CMSNF - Museo di Paleontologia

Museo di paleontologia

Museo di Paleontologia

Museo di Paleontologia

Museo di Paleontologia e Preistoria 'P. Leonardi'

Museo Paleontologico Parmense

Scienze della terra

CHIUSO - Museo di scienze della terra

Museo di geologia e paleontologia

Museo di scienze della terra

Museo di Scienze della Terra

Scienze naturali

Collezioni di scienze naturali

IN FASE DI ATTIVAZIONE - Museo scientifico

Museo di scienze naturali

Storia naturale

CHIUSO - Museo dell'Ambiente

Galleria di Storia Naturale dell'Università di Perugia

Museo di Storia Naturale

Museo di storia naturale

Museo di Storia Naturale

Museo di Storia Naturale della Calabria ed Orto Botanico

Museo di storia naturale e del territorio di Calci

Zoologia e zootecnica

CMSNF - Museo Zoologico

collezione zoologica

MUSA - Museo Anatomo - Zootecnico "Tito Manlio Bettini"

Museo del dipartimento di biologia

Museo di Zoologia

Museo di Zoologia

Museo di Zoologia

Museo di Zoologia

Museo di zoologia e casa delle farfalle

Museo di Zoologia ed Anatomia Comparata

Museo di zootecnia

Museo didattico di zoologia

Museo Zoologico "Pietro Doderlein"

NON ESPOSTA - Collezione di anatomia comparata e zoologia

Scienze storiche e sociali

Città e territorio

Cappella dei Falegnami

Carceri dei Penitenziati

Chiesa di S. Antonio Abate

Convento di S. Antonino

Cripta delle Repentite

Fossa della Garofala

Museo del territorio

Museo della città e del territorio, Vetralla

Museo della rappresentazione - Casa della città

Museo Diffuso di Cavallino

Palazzo Chiaromonte Steri

Educazione e didattica

Museo dell'Educazione

Museo storico della didattica "Mauro Laeng"

Etnografia

Collezione Luigi Piloni

Fort Apollonia Museum of Nzema Culture and History

Storia università

Archivio e Percorso Storico d'Ateneo

Aula Magna

Aula Scarpa

Aula Volta

CHIUSO - Museo del IX centenario

Cortile di Volta

Il palazzo dell'Università

Museo dello studio

Museo per la Storia dell' Università

Rete dei complessi monumentali di Ateneo

Tecnico-Ingegneristico

Architettura

Archivio Ducrot e Dotazione Basile

Museo della fabbrica

Ingegneria

Archivio degli strumenti topografici

Collezione di Ingegneria: Civile, Ambientale, Aerospaziale, dei Materiali (DICAM)

Collezione di Ingegneria: Elettronica ed elettrotecnica

Collezione di Ingegneria: Trasporti

Museo della Tecnica Elettrica

Museo di Idraulica Museo di ingegneria agroalimentare Museo di Macchine "Enrico Bernardi" Museo navale Museo Storico dei Motori e dei Meccanismi **Topografia** NON ESPOSTA - Collezione "Marussi"

Appendix C – Instruments Collections

Milano Politecnico

Archivio degli strumenti topografici

Torino

Museo archivio politecnico

Bari

Collezioni di informatica

Collezioni di chimica

CHIUSO - Laboratorio di Storia della Psicologia Applicata

Bologna

Raccolta di strumenti chirurgici veterinari

Museo di Fisica

CHIUSO - Museo della Specola

Cagliari

Museo di Fisica

Collezione degli Strumenti e Apparecchi di Chimica

Ferrara

Arredi storici della Premiata Farmacia Navarra e collezione

Collezione instrumentaria delle scienze fisiche - CISIF

NON ESPOSTA - Collezione di chimica

Genova

Museo di chimica

Museo di fisica

Napoli Federico II

CMSNF - Museo di Fisica

MUSA - CHIUSO - Museo Di meccanica agraria "Carlo

MUSA - NON ESPOSTE - Collezioni strumentazioni

Palermo

CHIUSO - Osservatorio Astronomico e Museo della Specola

Museo della Chimica

Collezione di Fisiologia Umana

Collezione di Ingegneria: Elettronica ed elettrotecnica

Museo Storico dei Motori e dei Meccanismi

Padova

Museo di Storia della Fisica

Museo di Macchine "Enrico Bernardi"

Museo degli Strumenti dell'Astronomia

Perugia

Museo di Fisica

Pisa

Museo degli strumenti per il calcolo

Parma

Collezione di strumenti scientifici "Macedonio Melloni"

Pavia

CHIUSA AL PUBBLICO - Collezione Fisiologia

CHIUSO - Museo di Chimica

CHIUSO - Museo di Fisica

Roma Sapienza

Museo di Idraulica

Museo di Chimica "Primo Levi"

Museo di Fisica

Siena

Collezione di Fisica

Sassari

Collezione di fisica

Collezione agronomica e museo all'aperto di storia

Torino

Museo di fisica

Museo dell'agricoltura del Piemonte

Museo del Dipartimento di Scienze Veterinarie

Trieste

Collezione del Dipartimento di Fisica

Museo delle scienze sanitarie

Appendix D – Museum Units History

University	Museum Unit	MU Year of birth	MU Previous form	Year of birth MU previous form	Collection Year of birth
Bari	CHIUSO - Laboratorio di Storia della Psicologia Applicata "A. Marzi"	1949	No		1949
Bari	Collezioni di chimica	1969	Not applicable		II half 20th C
Bari	Collezioni di fisica	1928	Not applicable		1928
Bari	Collezioni di informatica	2000	Not applicable		21th C
Bari	Museo del dipartimento di biologia	1925	No		1925
Bari	Museo di scienze della terra	1986	No		1957
Bari	Museo orto botanico	2000	Yes	1955	1939
Bari Politecnico	Museo della fotografia	2006	No		1998
Bologna	CHIUSO - Museo del IX centenario	21th C	No		21th C
Bologna	CHIUSO - Museo della Specola	1979	No		1933
Bologna	Erbario e museo botanico	1551	No		1551
Bologna	Museo delle Cere anatomiche "Luigi Cattanei"	1803	Yes	1742	1803

University	Museum Unit	MU Year of birth	MU Previous form	Year of birth MU previous form	Collection Year of birth
Bologna	Museo di Anatomia comparata	1814	No		1814
Bologna	Museo di Anatomia degli animali domestici	1882	No		1874
Bologna	Museo di Anatomia patologica e teratologia veterinaria Alessandrini-Ercolani	1863	No		1807
Bologna	Museo di Antropologia	1908	No		1908
Bologna	Museo di Fisica	1982	Yes	1907	II half 19th C
Bologna	Museo di Mineralogia	1860	Yes	I half 19th C	II half 16th C
Bologna	Museo di Palazzo Poggi	2000	No		1711
Bologna	Museo di Zoologia	1860	Yes	I half 19th C	II half 16th C
Bologna	Museo Geologico «Giovanni Capellini»	1860	Yes	I half 19th C	II half 16th C
Bologna	Orto botanico	1568	No		1568
Bologna	Raccolta di strumenti chirurgici veterinari	1984	Not applicable		1984
Cagliari	Collezione Archeologica "Evan Gorga"	1955	Not applicable		1955

University	Museum Unit	MU Year of birth	MU Previous form	Year of birth MU previous form	Collection Year of birth
Cagliari	Collezione degli Strumenti e Apparecchi di Chimica	1996	Not applicable		1996
Cagliari	Collezione Luigi Piloni	1981	Not applicable		1981
Cagliari	Museo di Cere Anatomiche "Clemente Susini"	1991	Yes	1858	1858
Cagliari	Museo di Fisica	II half 20th C	No		II half 20th C
Cagliari	Museo di Mineralogia "Leonardo de Prunner"	II half 20th C	Yes	1806	1806
Cagliari	Museo di Zoologia	1927	Yes	1806	1806
Cagliari	Museo etno-botanico	21th C	No		21th C
Cagliari	Museo Herbarium				
Cagliari	Museo sardo di Antropologia ed Etnografia	1953	No		1953
Cagliari	Museo sardo di Geologia e mineralogia e Paleontologia "Domenico Lovisato"				
Cagliari	Orto botanico	1866	No		1866
Calabria	Museo di paleontologia	2009	No		2009

University	Museum Unit	MU Year of birth	MU Previous form	Year of birth MU previous form	Collection Year of birth
Calabria	Museo di Storia Naturale della Calabria ed Orto Botanico	2001	Yes	1982	1982
Calabria	RiMuseum - Museo per l'Ambiente	2010	No		2010
Camerino	Museo di scienze naturali	1987	No		1987
Camerino	Orto botanico "Carmela Cortini"	1828	No		1828
Catania	Archivio ceramografico				
Catania	CHIUSO - Museo di scienze della terra				
Catania	Museo della fabbrica	1986	No		1986
Catania	Museo della rappresentazione - Casa della città				
Catania	Museo dello studio				
Catania	Museo di archeologia				
Catania	Museo di zoologia e casa delle farfalle	1853	No		1853
Catania	Orto botanico	1858	No		1858
Chieti- Pescara	Museo Universitario	1998	No		1994

University	Museum Unit	MU Year of birth	MU Previous form	Year of birth MU previous form	Collection Year of birth
Ferrara	Arredi storici della Premiata Farmacia Navarra e collezione strumenti	1978			1978
Ferrara	Collezione instrumentaria delle scienze fisiche - CISIF	2003	Not applicable		2003
Ferrara	Museo Anatomico "Giovanni Tumiati"	1797	No		1797
Ferrara	Museo di Paleontologia e Preistoria 'P. Leonardi'	1964	No		1949
Ferrara	NON ESPOSTA - Collezione di chimica	1960	Not applicable		1960
Ferrara	Orto botanico	1742	No		1742
Firenze	Museo di storia naturale	1984	Yes	1775	1775
Ge, Si, Tr	Museo Nazionale dell'Antartide "Felice Ippolito"	1996	No		1996
Genova	Centro universitario di servizi giardini botanici Hanbury	1983	Yes	1867	1867
Genova	Collezione di reperti anatomici	II half 19th C	Not applicable		II half 19th C

University	Museum Unit	MU Year of birth	MU Previous form	Year of birth MU previous form	Collection Year of birth
Genova	Museo di Anatomia Comparata	1989	No		I half 20th C
Genova	Museo di chimica	1999	No		1999
Genova	Museo di etnomedicina Antonio Scarpa	1995	No		1967
Genova	Museo di fisica	1991	No		1991
Genova	Museo di geologia e paleontologia				
Genova	NON ESPOSTA - Collezione di monete antiche	II half 20th C	Not applicable		II half 20th C
Genova	NON ESPOSTA - Collezione di vasi antichi	II half 20th C	Not applicable		II half 20th C
Genova	Orto botanico	1802	No		1802
L'Aquila	Giardino botanico alpino	1952	No		1952
Messina	Collezione Museologica Botanica	1990	Not applicable		1990
Messina	Orto botanico "Pietro Castelli"	1638	No		1638
Milano	Erbario museo botanico del dipartimento di biologia	II half 20th C	No		1871
Milano	Museo astronomico - Orto botanico di Brera	2005	Yes	1774	1774

University	Museum Unit	MU Year of birth	MU Previous form	Year of birth MU previous form	Collection Year of birth
Milano	Museo delle collezioni mineralogiche, gemmologiche, petrografiche e giacimentologiche	2004	No		1937
Milano	Museo didattico di zoologia	1994	No		I half 20th C
Milano	Orto botanico di Cascina rosa	2004	No		2004
Milano	Orto botanico G.E. Ghirardi	1964	No		1964
Milano Politecnico	Archivio degli strumenti topografici	II half 20th C	Not applicable		1951
Milano Politecnico	IN FASE DI COSTITUZIONE - Museo del dipratimento di Fisica	21th C	No		2000
Milano Politecnico	Museo di corrosione	21th C	No		2000
Modena- Reggio Emilia	CHIUSO - Musei anatomici	1818	No		1775
Modena- Reggio Emilia	CHIUSO - Museo Astronomico e Geofisico	1936	No		1826

University	Museum Unit	MU Year of birth	MU Previous form	Year of birth MU previous form	Collection Year of birth
Modena- Reggio Emilia	Gemma 1786. Museo Mineralogico e Geologico Estense	1877	Yes	1786	1786
Modena- Reggio Emilia	Laboratorio delle Macchine Matematiche	2002	No		2002
Modena- Reggio Emilia	Museo di Paleontologia	1961	Yes	1786	1786
Modena- Reggio Emilia	Museo di Zoologia ed Anatomia Comparata	1877	Yes	1776	1776
Modena- Reggio Emilia	Orto Botanico	1772	Yes	1758	1772
Molise	Collezioni entomologiche				
Molise	Museo del territorio				
Molise	Museo di ingegneria agroalimentare				

University	Museum Unit	MU Year of birth	MU Previous form	Year of birth MU previous form	Collection Year of birth
Molise	Museo di patologia vegetale				
Molise	Museo di zootecnia				
Molise	Museo erbario del Molise	2006	No		2000
Napoli Federico II	CMSNF - Museo di Antropologia	1963	Yes	1881	1881
Napoli Federico II	CMSNF - Museo di Fisica	1983	No		1983
Napoli Federico II	CMSNF - Museo di Paleontologia	1932	No		1801
Napoli Federico II	CMSNF - Museo Zoologico	1813	No		1813
Napoli Federico II	CMSNF - Real Museo Mineralogico	1801	No		1801
Napoli Federico II	MUSA - CHIUSO - Museo Botanico "Orazio Comes"	1958	Yes	1877	II half 16th C
Napoli Federico II	MUSA - CHIUSO - Museo Di meccanica agraria "Carlo Santini"	1963	No		1930
Napoli	MUSA - CHIUSO - Museo di	1990	No		1876

University	Museum Unit	MU Year of birth	MU Previous form	Year of birth MU previous form	Collection Year of birth
Federico II	Mineralogia "Antonio Parascandolo"				
Napoli Federico II	MUSA - CHIUSO -Museo di Entomologia "Filippo Silvestri"	2000	No		1876
Napoli Federico II	MUSA - Museo Anatomo - Zootecnico "Tito Manlio Bettini"	1872	No		1872
Napoli Federico II	MUSA - NON ESPOSTE - Collezioni strumentazioni scientifiche	1872	Not applicable		1872
Napoli Federico II	MUSA - Orto Botanico di Portici	1872	No		1872
Napoli Federico II	Museo di Anatomia Veterinaria	2000	Yes	1835	1798
Napoli Parthenope	Museo navale	1919	No		1919
Napoli SUN	Museo di anatomia	1997	Yes	1816	1816
Napoli SUN	Museo di farmacologia	21th C	No		21th C

University	Museum Unit	MU Year of birth	MU Previous form	Year of birth MU previous form	Collection Year of birth
Napoli SUN	Museo di odontoiatria	21th C	No		21th C
Padova	Museo Botanico	2000	No		1835
Padova	Museo degli Strumenti dell'Astronomia	II half 20th C	No		II half 20th C
Padova	Museo dell'Educazione	1993	No		1993
Padova	Museo di Antropologia	1910	Yes	1869	1869
Padova	Museo di Geologia e Paleontologia	1874	No		1736
Padova	Museo di Macchine "Enrico Bernardi"	1941	No		1927
Padova	Museo di Mineralogia	1883	No		1736
Padova	Museo di Scienze Archeologiche e d'Arte	1969	Yes	1805	1736
Padova	Museo di Storia della Fisica	1990	No		1990
Padova	Museo di Zoologia	1869	No		1736
Palermo	Archivio Ducrot e Dotazione Basile	II half 20th C	Not applicable		II half 20th C
Palermo	CHIUSO - Osservatorio Astronomico e Museo della	2001	No		1976

University	Museum Unit	MU Year of birth	MU Previous form	Year of birth MU previous form	Collection Year of birth
	Specola				
Palermo	Collezione di Anatomia	1932	Not applicable		1932
Palermo	Collezione di Fisiologia Umana	II half 20th C	Not applicable		II half 20th C
Palermo	Collezione di Ingegneria: Civile, Ambientale, Aerospaziale, dei Materiali (DICAM)	1951			1951
Palermo	Collezione di Ingegneria: Elettronica ed elettrotecnica	II half 20th C	Not applicable		II half 20th C
Palermo	Collezione di Ingegneria: Trasporti	II half 20th C	Not applicable		II half 20th C
Palermo	Museo della Chimica	2006	No		2006
Palermo	Museo della Radiologia "Pietro Cignolini"	1995	No		1995
Palermo	Museo di Entomologia Agraria	2010	No		1960
Palermo	Museo di Mineralogia	1911	Yes	1860	1860
Palermo	Museo Geologico "Gaetano Giorgio Gemmellaro"	1860	Yes	1838	1838
Palermo	Museo Storico dei Motori e dei Meccanismi	2011	No		2011

University	Museum Unit	MU Year of birth	MU Previous form	Year of birth MU previous form	Collection Year of birth
Palermo	Museo Zoologico "Pietro Doderlein"	1862	No		1862
Palermo	Orto Botanico ed Herbarium Mediterraneum	1779	No		1779
Parma	Centro studi e archivio della comunicazione (CSAC)	1987	No		1987
Parma	Collezione di strumenti scientifici "Macedonio Melloni"	21th C	Not applicable		21th C
Parma	Museo anatomico veterinario	1925	No		1848
Parma	Museo del Dipartimento di Anatomia Umana, Farmacologia e Scienze medico-forensi	2006	Yes	1851	1851
Parma	Museo di mineralogia	1925	Yes	1766	1814
Parma	Museo di Storia Naturale	1980	Yes	1766	1766
Parma	Museo Paleontologico Parmense	1895	Yes	1766	1766
Parma	Orto botanico	1768	Yes	1600	1600
Pavia	CHIUSA AL PUBBLICO - Collezione Fisiologia	II half 20th C	Not applicable		II half 20th C

University	Museum Unit	MU Year of birth	MU Previous form	Year of birth MU previous form	Collection Year of birth
Pavia	CHIUSA AL PUBBLICO - Collezione Istologia ed Embriologia	I half 19th C	Not applicable		I half 19th C
Pavia	CHIUSA AL PUBBLICO - Collezione Matematica	II half 19th C	Not applicable		II half 19th C
Pavia	CHIUSO - Collezione Patologia Generale	1875	Not applicable		1875
Pavia	CHIUSO - Museo di Anatomia	1772	No		1772
Pavia	CHIUSO - Museo di Chimica	II half 20th C	No		II half 20th C
Pavia	CHIUSO - Museo di Fisica				
Pavia	Collezione di Archeologia	1819	Not applicable		1819
Pavia	Collezione Musicologia	II half 20th C	Not applicable		II half 20th C
Pavia	Museo della Tecnica Elettrica	2000	No		2000
Pavia	Museo di Mineralogia	1934	Yes	1771	1771
Pavia	Museo di Storia Naturale	2005	Yes	1771	1771
Pavia	Museo per la Storia dell' Università	1936	No		1936
Pavia	Orto Botanico	1773	No		1773
Perugia	Collezione del dipartimento di	2000	Not applicable		2000

University	Museum Unit	MU Year of birth	MU Previous form	Year of birth MU previous form	Collection Year of birth
	Matematica e informatica				
Perugia	Erbario Cicioni-Bruschi	II half 19th C	Not applicable		II half 19th C
Perugia	Galleria di Storia Naturale dell'Università di Perugia	2010	No		II half 19th C
Perugia	Gipsoteca	1960	Not applicable		1960
Perugia	Laboratorio di storia dell'agricoltura di Casalina	2010	No		1896
Perugia	Museo di Anatomia Umana	1814	No		1814
Perugia	Museo di Fisica	1992	No		1992
Perugia	Orto botanico	1786	No		1786
Pisa	Antiquarium di archeologia classica	1950	Not applicable		1950
Pisa	Collezioni di egittologia	1962	Not applicable		1962
Pisa	Collezioni di paletnologia	II half 19th C	Not applicable		II half 19th C
Pisa	Gipsoteca di arte antica	1887	Not applicable		1887
Pisa	Museo botanico	1799	Yes	1591	1591
Pisa	Museo degli strumenti per il calcolo	1995	No		1995

University	Museum Unit	MU Year of birth	MU Previous form	Year of birth MU previous form	Collection Year of birth
Pisa	Museo della grafica	2007	Yes	1957	1957
Pisa	Museo di anatomia e istologia patologica	1870	No		1870
Pisa	Museo di anatomia patologica	1832	No		1832
Pisa	Museo di anatomia veterinaria	1970	Yes	1875	1850
Pisa	Museo di storia naturale e del territorio di Calci	1985	Yes	1591	1591
Pisa	Orto botanico	1543	No		1543
Roma 3	Museo storico della didattica "Mauro Laeng"	1986	Yes	1873	1873
Roma Sapienza	Fort Apollonia Museum of Nzema Culture and History	2010	No		2010
Roma Sapienza	Museo Arte e giacimenti Minerari	1984	No		1984
Roma Sapienza	Museo del Vicino Oriente	1962	No		1962
Roma Sapienza	Museo dell'Arte Classica	1892	No		1892

University	Museum Unit	MU Year of birth	MU Previous form	Year of birth MU previous form	Collection Year of birth
Roma Sapienza	Museo delle Antichità Etrusco Italiche	1962	No		1962
Roma Sapienza	Museo delle Origini	1942	No		1942
Roma Sapienza	Museo di Anatomia Comparata	1873	Yes	1870	1804
Roma Sapienza	Museo di Anatomia Patologica	1950	No		II half 19th C
Roma Sapienza	Museo di Antropologia "Giuseppe Sergi"	1884	No		1884
Roma Sapienza	Museo di Chimica "Primo Levi"	1986	No		1986
Roma Sapienza	Museo di Fisica	1979	Yes	1857	1857
Roma Sapienza	Museo di Geologia	1873	Yes	1804	1804
Roma Sapienza	Museo di Idraulica	II half 20th C	No		II half 20th C
Roma	Museo di Merceologia	1906	No		1906

University	Museum Unit	MU Year of birth	MU Previous form	Year of birth MU previous form	Collection Year of birth
Sapienza					
Roma Sapienza	Museo di Mineralogia	1804	No		1804
Roma Sapienza	Museo di Paleontologia	1928	Yes	1873	1804
Roma Sapienza	Museo di Storia della Medicina	1937	No		1937
Roma Sapienza	Museo di Zoologia	1853	Yes	1824	1804
Roma Sapienza	Museo Erbario - Museo di Botanica	1938	No		1872
Roma Sapienza	Museo Laboratorio Arte Contemporanea	1985	No		1985
Roma Sapienza	Orto Botanico	1660	No		1660
Roma Tor Vergata	Museo dell'Immagine Fotografica e delle Arti Visuali (MIFAV)	1992	No		1992
Roma Tor Vergata	Orto botanico	2008	No		2008

University	Museum Unit	MU Year of birth	MU Previous form	Year of birth MU previous form	Collection Year of birth
Salento	CHIUSO - Museo dell'Ambiente	2000	No		2000
Salento	Museo di Biologia Marina "Pietro Parenzan", Porto Cesareo	1966	No		1966
Salento	Museo di Ecologia degli Ecosistemi Mediterranei, Otranto	2009	No		2009
Salento	Museo Diffuso di Cavallino	2003	No		2003
Salento	Museo Papirologico	2007	No		2007
Salento	Museo Storico-Archeologico	2007	No		2007
Salento	Orto Botanico	1992	No		1992
Sassari	Collezione agronomica e museo all'aperto di storia dell'agricoltura	II half 20th C	No		1946
Sassari	Collezione anatomica	1912	Not applicable		1912
Sassari	Collezione di botanica farmaceutica	1876	Not applicable		1876
Sassari	Collezione di fisica	1989	Not applicable		1989
Sassari	collezione entomologica	1945	Not applicable		1945
Sassari	collezione zoologica	1880	Not applicable		1880
Sassari	IN FASE DI ATTIVAZIONE -	2010	Yes	II half 20C	1635

University	Museum Unit	MU Year of birth	MU Previous form	Year of birth MU previous form	Collection Year of birth
	Museo scientifico				
Sassari	Museo geologico mineralogico "Aurelio Serra"	1966	Yes	1899	1899
Siena	Archivio e Percorso Storico d'Ateneo	21th C	No		21th C
Siena	Collezione di Fisica	II half 20th C	Not applicable		II half 20th C
Siena	Collezioni di Preistoria, Archeologia Classica e Archeologia Medievale	1980	Not applicable		1980
Siena	Museo Anatomico	2000	No		I half 19th C
Siena	Museo Botanico: Orto Botanico e Herbarium	2007	Yes	1784	1784
Siena	Museo di Scienze della Terra	II half 20th C	No		II half 20th C
Torino	ASTUT - Archivio scientifico e tecnologico	1992	No		1992
Torino	CHIUSO - Museo di antropologia e etnografia	1926	No		1926
Torino	Collezioni di scienze naturali				

University	Museum Unit	MU Year of birth	MU Previous form	Year of birth MU previous form	Collection Year of birth
Torino	Museo "Perroncito"	2000	No		1879
Torino	Museo archivio politecnico	1997	No		1859
Torino	Museo del Dipartimento di Scienze Veterinarie	2000	No		2000
Torino	Museo dell'agricoltura del Piemonte	1984	No		1984
Torino	Museo di anatomia umana "Luigi Rolando"	1739	No		1739
Torino	Museo di antropologia criminale "C. Lombroso"	2009	No		1859
Torino	Museo di fisica	II half 20th C	No		II half 20th C
Torino	Museo di odontoiatria	2008	No		1936
Torino	Orto botanico	1729	No		1729
Trieste	Collezione del Dipartimento di Fisica	2000	Not applicable		2000
Trieste	Museo delle scienze sanitarie	2010	No		2010
Trieste	Museo di Mineralogia e Petrografia	1995	Yes	1949	1949
Trieste	NON ESPOSTA - Collezione				

University	Museum Unit	MU Year of birth	MU Previous form	Year of birth MU previous form	Collection Year of birth
	"Marussi"				
Trieste	Orto botanico	1963	No		1963
Trieste	Raccolta di opere d'arte				
Tuscia (Viterbo)	Banca del Germoplasma della Tuscia	2005	No		2005
Tuscia (Viterbo)	Collezione entomologica	II half 20th C	Not applicable		II half 20th C
Tuscia (Viterbo)	Collezioni della Facoltà di Agraria	II half 20th C	Not applicable		II half 20th C
Tuscia (Viterbo)	Museo della città e del territorio, Vetralla	1991	No		1991
Tuscia (Viterbo)	Museo Erbario della Tuscia	1990	No		1984
Tuscia (Viterbo)	NON ESPOSTA - Collezione archeologica	1898	Not applicable		1898
Tuscia (Viterbo)	NON ESPOSTA - Collezione di anatomia comparata e zoologia	1989	Not applicable		1989
Tuscia	Orto Botanico dell'Azienda Agraria	1998	No		1998

University	Museum Unit	MU Year of birth	MU Previous form	Year of birth MU previous form	Collection Year of birth
(Viterbo)	Didattico-Sperimentale				
Tuscia (Viterbo)	Rete dei complessi monumentali di Ateneo				
Tuscia (Viterbo)	Rete dell'arte contemporanea della Tuscia	II half 20th C	Not applicable		II half 20th C
Tuscia (Viterbo)	Xylarium	II half 20th C	Not applicable		II half 20th C
Urbino	Museo dei gessi	1998	No		1988
Urbino	Museo di scienza e tecnologia	2010	No		1899
Urbino	Orto botanico	1809	No		1809

Appendix E – Museum Units Management

Foundation act, Type of foundation act, Administrative form, Depend by, Regulation, Dorector, Annual budget

University	Museum Unit	Found. Act	Type of Foundation Act	Administrative Form	Depend by	Reg.	Dir.	An. Bud.
Bari	CHIUSO - Laboratorio di Storia della Psicologia Applicata "A. Marzi"	No			Department	No	No	No
Bari	Collezioni di informatica	No			Department	No	No	No
Bari	Museo orto botanico	Yes	Rector's Decree	Autonomous		Yes	Yes	Yes
Bologna	Museo di Anatomia degli animali domestici	No			Museum System	No	No	No
Bologna	Museo di Anatomia patologica e teratologia veterinaria Alessandrini- Ercolani	No	None		Museum System	No	No	Yes
Bologna	Museo di Fisica	Yes	Approvemen t of Faculty and University		Museum System	Yes	Yes	Yes
Bologna	Museo di Palazzo Poggi	Yes	Academic	Autonomous		Yes	Yes	Yes

University	Museum Unit	Found. Act	Type of Foundation Act	Administrative Form	Depend by	Reg.	Dir.	An. Bud.
			Senate Deliberation					
Bologna	Museo Geologico «Giovanni Capellini»	Yes	University Deliberation		Department	No	Yes	Yes
Bologna	Orto botanico	Yes	Deliberation of the Civic Senate of 1567		Department	Yes	Yes	Yes
Bologna	Raccolta di strumenti chirurgici veterinari	No			Department	No	No	No
Cagliari	Collezione Archeologica "Evan Gorga"	No			Center	No	No	Yes
Cagliari	Collezione degli Strumenti e Apparecchi di Chimica	No			Department	No	No	No
Cagliari	Museo di Cere Anatomiche "Clemente Susini"	Yes	Rector's Decree	Autonomous		No	Yes	Yes
Calabria	Museo di paleontologia	No	None		Department	No	No	Yes
Calabria	Museo di Storia Naturale della Calabria ed Orto Botanico	Yes	Rector's Decree	Autonomous		No	Yes	Yes
Calabria	RiMuseum - Museo per	Yes	Rector's		Central	No	Yes	Yes

University	Museum Unit	Found. Act	Type of Foundation Act	Administrative Form	Depend by	Reg.	Dir.	An. Bud.
	l'Ambiente		Decree		Administration			
Camerino	Museo di scienze naturali	Yes	Rector's Decree	Autonomous. Interdep. Center of Services		No	Yes	Yes
Camerino	Orto botanico "Carmela Cortini"	No	None		Museum Pole	No	Yes	No
Catania	Museo della fabbrica	Yes	University General Regulation		Department	No	Yes	No
Catania	Orto botanico	No			Department	No	Yes	Yes
Ferrara	Arredi storici della Premiata Farmacia Navarra e collezione strumenti	No			Department	No	No	No
Ferrara	Collezione instrumentaria delle scienze fisiche - CISIF	No			Department	No	No	No
Ferrara	Museo Anatomico "Giovanni Tumiati"	No	None		Department	No	Yes	No
Ferrara	Museo di Paleontologia e Preistoria 'P. Leonardi'	No	None		Department	No	Yes	No
Ferrara	Orto botanico	Yes	Reform of the "Studio di		Department	Yes	Yes	Yes

University	Museum Unit	Found.	Type of	Administrative	Depend by	Reg.	Dir.	An.
		Act	Foundation	Form				Bud.
			Act					
			Ferrara" Pope					
			Clemente					
			14th					
Firenze	Museo di storia naturale	Yes	Rector's	Autonomous		Yes	Yes	Yes
			Decree					
Ge, Si, Tr	Museo Nazionale	Yes	Decree of the	Autonomous	Center	Yes	Yes	Yes
	dell'Antartide "Felice		Minister of					
	Ippolito"		University					
			and Research					
Genova	Centro universitario di	Yes	Rector's	Autonomous.		Yes	No	Yes
	servizi giardini botanici		Decree	Center of				
	Hanbury			Services				
Genova	Museo di chimica	No	None		Department	No	Yes	No
Genova	Museo di etnomedicina	Yes	Donation		Department	Yes	Yes	No
	Antonio Scarpa							
Genova	Orto botanico	No	None		Department	No	No	No
Messina	Collezione Museologica	No	None		Department	No	No	Yes
	Botanica				1			
Messina	Orto botanico "Pietro	No			Department	No	No	Yes
	Castelli"							
Milano	Museo astronomico - Orto	Yes	Rector's	Autonomous		No	Yes	Yes

University	Museum Unit	Found. Act	Type of Foundation Act	Administrative Form	Depend by	Reg.	Dir.	An. Bud.
	botanico di Brera		Decree					
Milano	Museo delle collezioni mineralogiche, gemmologiche, petrografiche e giacimentologiche	Yes	Rector's Decree		Department	Yes	Yes	No
Milano	Archivio degli strumenti	No			Department	No	No	No
Politecnico	topografici							
Milano	Museo di corrosione	No				No	Yes	Yes
Politecnico								
Modena- Reggio E.	CHIUSO - Musei anatomici	No			To be defined	No	No	No
Modena- Reggio E.	Laboratorio delle Macchine Matematiche	No	None		Department	No	Yes	No
Modena- Reggio E.	Museo di Paleontologia	No	None	Autonomous		No	No	No
Modena- Reggio E.	Museo di Zoologia ed Anatomia Comparata	No		Autonomous		No	No	No
Napoli Federico II	CMSNF - Museo di Antropologia	Yes	Academic Senate Deliberation	Part of Center	Center	Yes	Yes	Yes
Napoli	CMSNF - Museo di Fisica	Yes	Academic	Part of Center	Center	Yes	Yes	Yes

University	Museum Unit	Found. Act	Type of Foundation Act	Administrative Form	Depend by	Reg.	Dir.	An. Bud.
Federico II			Senate Deliberation					
Napoli Federico II	CMSNF - Museo di Paleontologia	Yes	Academic Senate Deliberation	Part of Center	Center	Yes	Yes	Yes
Napoli Federico II	CMSNF - Museo Zoologico	Yes	Academic Senate Deliberation	Part of Center	Center	Yes	Yes	Yes
Napoli Federico II	CMSNF - Real Museo Mineralogico	Yes	Academic Senate Deliberation	Part of Center	Center	Yes	Yes	Yes
Napoli Federico II	MUSA - CHIUSO - Museo Botanico "Orazio Comes"	No	None	Part of Center	Center	No	Yes	Yes
Napoli Federico II	MUSA - CHIUSO -Museo di Entomologia "Filippo Silvestri"	Yes	Rector's Decree	Part of Center	Center	No	Yes	Yes
Napoli Federico II	MUSA - NON ESPOSTE - Collezioni strumentazioni scientifiche	No		Part of Center	Center	No	No	Yes
Napoli Federico II	Museo di Anatomia Veterinaria	Yes	Rector's Decree		Department	Yes	No	No

University	Museum Unit	Found. Act	Type of Foundation	Administrative Form	Depend by	Reg.	Dir.	An. Bud.
Namal: CLINI	Museo di anatomia	No	Act		Domontmont	No	Yes	No
Napoli SUN					Department			
Padova	Museo Botanico	No		Part of Center	Center	No	Yes	No
Padova	Museo degli Strumenti dell'Astronomia	No		Part of Center	Center	No	Yes	No
Padova	Museo dell'Educazione	No		Part of Center	Center	No	Yes	No
Padova	Museo di Antropologia	No		Part of Center	Center	No	Yes	No
Padova	Museo di Geologia e Paleontologia	No		Part of Center	Center	No	Yes	No
Padova	Museo di Macchine "Enrico Bernardi"	No		Part of Center	Center	No	Yes	No
Padova	Museo di Mineralogia	No		Part of Center	Center	No	Yes	No
Padova	Museo di Scienze Archeologiche e d'Arte	No		Part of Center	Center	No	Yes	No
Padova	Museo di Storia della Fisica	No	None	Part of Center	Center	No	No	No
Padova	Museo di Zoologia	No		Part of Center	Center	No	Yes	No
Palermo	CHIUSO - Osservatorio Astronomico e Museo della Specola	No	None		Department	Yes	No	No
Palermo	Collezione di Anatomia	No			Department	No	No	No
Palermo	Collezione di Fisiologia	No			Department	No	No	No

University	Museum Unit	Found. Act	Type of Foundation Act	Administrative Form	Depend by	Reg.	Dir.	An. Bud.
	Umana							
Palermo	Collezione di Ingegneria: Civile, Ambientale, Aerospaziale, dei Materiali (DICAM)	No			Department	No	No	No
Palermo	Collezione di Ingegneria: Elettronica ed elettrotecnica	No			Department	No	No	No
Palermo	Museo della Chimica	Yes	Department Deliberation		Department	No	No	No
Palermo	Museo di Entomologia Agraria	No			Department	No	Yes	No
Palermo	Museo di Mineralogia	No	None		Department	Yes	Yes	No
Palermo	Museo Geologico "Gaetano Giorgio Gemmellaro"	No	None		Department	No	Yes	Yes
Palermo	Museo Storico dei Motori e dei Meccanismi	No	None		Department	No	Yes	Yes
Palermo	Orto Botanico ed Herbarium Mediterraneum	Yes	Decree of the "Deputazione degli studi"		Department	Yes	Yes	Yes
Parma	Collezione di strumenti scientifici "Macedonio	No			Department	No	No	No

University	Museum Unit	Found. Act	Type of Foundation Act	Administrative Form	Depend by	Reg.	Dir.	An. Bud.
	Melloni"							
Parma	Museo anatomico veterinario	No			Faculty	No	No	No
Parma	Museo del Dipartimento di Anatomia Umana, Farmacologia e Scienze medico-forensi	Yes	Rector's Decree		Department	No	Yes	No
Parma	Museo di Storia Naturale	Yes	Rector's Decree	Section of the Dipartimento di Biologia Evolutiva e Funzionale	Department	No	Yes	Yes
Parma	Museo Paleontologico Parmense	Yes	Faculty Deliberation		Department	No	Yes	No
Parma	Orto botanico	No		Section of the Dipartimento di Biologia Evolutiva e Funzionale	Department	No	Yes	Yes
Pavia	CHIUSA AL PUBBLICO - Collezione Istologia ed Embriologia	No			Museum System	No	No	No

University	Museum Unit	Found. Act	Type of Foundation Act	Administrative Form	Depend by	Reg.	Dir.	An. Bud.
Pavia	CHIUSA AL PUBBLICO - Collezione Matematica	No			Department	No	No	No
Pavia	Collezione di Archeologia	No			Museum System	No	No	Yes
Pavia	Collezione Musicologia	No			Museum System	No	No	No
Pavia	Museo di Mineralogia	No	None		Museum System	No	Yes	Yes
Pavia	Museo di Storia Naturale	No			Museum System	No	Yes	Yes
Pavia	Museo per la Storia dell' Università	Yes	Administrati on Council Deliberation		Museum System	No	Yes	Yes
Pavia	Orto Botanico	Yes	Deliberation of the Count Carlo Firmian		Museum System	No	Yes	No
Perugia	Collezione del dipartimento di Matematica e informatica	No			Department	No	No	No
Perugia	Erbario Cicioni-Bruschi	No			Department	No	No	No
Perugia	Laboratorio di storia dell'agricoltura di Casalina	No	None	Part of Center	Center	No	Yes	No
Perugia	Museo di Anatomia Umana	Yes	Administrati on Council Deliberation	Part of Center	Center	No	No	No

University	Museum Unit	Found. Act	Type of Foundation Act	Administrative Form	Depend by	Reg.	Dir.	An. Bud.
Perugia	Orto botanico	No	None	Part of Center	Center	Yes	Yes	No
Pisa	Antiquarium di archeologia classica	No	None		Museum System	No	Yes	Yes
Pisa	Collezioni di egittologia	No			Museum System	No	No	Yes
Pisa	Collezioni di paletnologia	No			Museum System	No	No	Yes
Pisa	Gipsoteca di arte antica	No			Museum System	No	Yes	Yes
Pisa	Museo botanico	No	None		Museum System	No	Yes	Yes
Pisa	Museo degli strumenti per il calcolo	No		Completely autonomous. Foundation		Yes	Yes	No
Pisa	Museo della grafica	Yes	Agreement University/Ci vic Council		Museum System	Yes	Yes	Yes
Pisa	Museo di anatomia e istologia patologica	No	None		Museum System	No	Yes	Yes
Pisa	Museo di anatomia patologica	No			Museum System	No	Yes	Yes
Pisa	Museo di anatomia veterinaria	No	None		Museum System	Yes	Yes	Yes

University	Museum Unit	Found.	Type of	Administrative	Depend by	Reg.	Dir.	An.
		Act	Foundation Act	Form				Bud.
Pisa	Museo di storia naturale e del territorio di Calci	Yes	Rector's Decree	Autonomous. Interdep. Center		Yes	Yes	Yes
Pisa	Orto botanico	No			Museum System	No	Yes	Yes
Roma 3	Museo storico della didattica "Mauro Laeng"	Yes	Rector's Decree		Department	No	Yes	Yes
Roma Sapienza	Museo delle Origini	Yes	Royal Decree		Department	No	Yes	Yes
Roma Sapienza	Museo di Anatomia Patologica	No	None		Department	No	Yes	No
Roma Sapienza	Museo di Antropologia "Giuseppe Sergi"	Yes	Rector's Decree		Department	Yes	Yes	Yes
Roma Sapienza	Museo di Fisica	No	None		Department	No	Yes	No
Roma Sapienza	Museo di Merceologia	No	None		Department	No	Yes	Yes
Roma Sapienza	Museo di Mineralogia	Yes	Breve "Uberes dum menti nostrae" by Pope Pio 7th		Department	Yes	Yes	Yes
Roma	Museo di Paleontologia	No	None		Department	No	Yes	Yes

University	Museum Unit	Found.	Type of	Administrative	Depend by	Reg.	Dir.	An.
		Act	Foundation	Form				Bud.
			Act				1	
Sapienza								
Roma	Museo di Storia della	Yes	Rector's		Department	No	Yes	Yes
Sapienza	Medicina		Decree					
Roma	Museo Erbario - Museo di	Yes	University		Department	No	Yes	Yes
Sapienza	Botanica		Deliberation					
Salento	CHIUSO - Museo	Yes	Academic		Department	No	Yes	Yes
	dell'Ambiente		Senate					
			Deliberation					
Salento	Museo di Biologia Marina	Yes	Donation		Department	No	Yes	Yes
	"Pietro Parenzan", Porto							
	Cesareo							
Salento	Museo di Ecologia degli	Yes	Agreement		University	No	Yes	Yes
	Ecosistemi Mediterranei,							
	Otranto							
Salento	Museo Diffuso di Cavallino	Yes	Academic	Autonomy of	Department	No	Yes	Yes
			Senate	organization (art.				
			Deliberation	86 Statute of the				
				University)				
Salento	Museo Papirologico	No	None		Center	No	Yes	Yes
Salento	Museo Storico-Archeologico	No	None		Department	No	Yes	Yes
Salento	Orto Botanico	Yes	Academic		Department	No	Yes	Yes

University	Museum Unit	Found. Act	Type of Foundation Act	Administrative Form	Depend by	Reg.	Dir.	An. Bud.
			Senate Deliberation					
Sassari	Collezione agronomica e museo all'aperto di storia dell'agricoltura	No			Department	No	No	No
Sassari	collezione entomologica	No			Department	No	No	Yes
Sassari	collezione zoologica	No			Department	No	No	No
Sassari	IN FASE DI ATTIVAZIONE - Museo scientifico	Yes	Rector's Decree		Part of Office	Yes	Yes	Yes
Sassari	Museo geologico mineralogico "Aurelio Serra"	No	None		Department	No	No	No
Siena	Collezione di Fisica	No			Department	No	No	No
Siena	Museo Anatomico	No	None		Museum System	Yes	No	No
Siena	Museo Botanico: Orto Botanico e Herbarium	Yes	Department Statute		Department	Yes	Yes	No
Torino	ASTUT - Archivio scientifico e tecnologico	Yes	Rector's Decree	Autonomous. Center		Yes	Yes	Yes
Torino	CHIUSO - Museo di antropologia e etnografia	Yes	University Deliberation		Department	No	Yes	No

University	Museum Unit	Found. Act	Type of Foundation Act	Administrative Form	Depend by	Reg.	Dir.	An. Bud.
Torino	Collezioni di scienze naturali	No			Property of theUniversità di Torino, managemed by the Museo Regionale di Scienze Naturali di Torino	No	Yes	Yes
Torino	Museo "Perroncito"	No	None		Department	No	Yes	No
Torino	Museo del Dipartimento di Scienze Veterinarie	No	None		Department	No	Yes	No
Torino	Museo dell'agricoltura del Piemonte	Yes	Foundation act of the Association	Completely auotnomous. Association		Yes	Yes	No
Torino	Museo di anatomia umana "Luigi Rolando"	No			Department	Yes	No	Yes
Torino	Museo di antropologia criminale "C. Lombroso"	No			Department	Yes	Yes	Yes
Torino	Museo di odontoiatria	Yes	Department Deliberation		Department	No	Yes	No
Trieste	Museo delle scienze sanitarie	No	None			No	No	No

University	Museum Unit	Found. Act	Type of Foundation Act	Administrative Form	Depend by	Reg.	Dir.	An. Bud.
Trieste	Museo di Mineralogia e Petrografia	No	None		Department	No	Yes	Yes
Trieste	Raccolta di opere d'arte	No			University	No	No	No
Tuscia (Viterbo)	NON ESPOSTA - Collezione di anatomia comparata e zoologia	No			Department and Museum System	No	No	Yes
Tuscia (Viterbo)	Orto Botanico dell'Azienda Agraria Didattico- Sperimentale	Yes	Rector's Decree	Section Azienda Agraria Didattico- Sperimentale nello Lupori dell'Università degli Studi della Tuscia	Azienda Agraria Didattico- Sperimentale Nello Lupori of the Università degli Studi della Tuscia	Yes	Yes	Yes
Tuscia (Viterbo)	Xylarium	No			Department	No	No	No
Urbino	Museo dei gessi	No				No	No	No
Urbino	Museo di scienza e tecnologia	Yes	Rector's Decree		Department	No	No	No

Appendix F – Museums. Staff

University	Museum Unit	P.	P.	Full	Part	Cult.	Prof.	Ris.
		Tech.	Adm.	T.	T.	Her.		
Bari	CHIUSO - Laboratorio di Storia della Psicologia Applicata "A. Marzi"							
Bari	Museo orto botanico	5	0	5	0	1	2	1
Bologna	Museo di Anatomia degli animali domestici	0	0	0	0	0	1	0
Bologna	Museo di Anatomia patologica e teratologia veterinaria Alessandrini-Ercolani	0	0	0	0	0	1	0
Bologna	Museo di Fisica	0	0	0	0	0	1	0
Bologna	Museo di Palazzo Poggi	3	1	3	1	3	1	0
Bologna	Museo Geologico «Giovanni Capellini»	1	1	2	0	1	0	0
Bologna	Orto botanico	5	0	5	0	0	0	0
Cagliari	Museo di Cere Anatomiche "Clemente Susini"	1	0	1	1	0	1	0
Calabria	Museo di paleontologia	0	0	0	0	0	2	0
Calabria	Museo di Storia Naturale della Calabria ed Orto Botanico	4	2	6	0	0	1	2
Calabria	RiMuseum - Museo per l'Ambiente	1	1	2	0	2	2	1
Camerino	Museo di scienze naturali	4	2	5	1	0	1	0
Camerino	Orto botanico "Carmela Cortini"	4	0	4	0	2	0	0
Catania	Museo della fabbrica	0	0	0	0	0	1	0

University	Museum Unit	P. Tech.	P. Adm.	Full T.	Part T.	Cult. Her.	Prof.	Ris.
					-			
Catania	Orto botanico	2	0	2	0	1	2	0
Ferrara	Museo Anatomico "Giovanni Tumiati"	0	0	0	0	0	1	0
Ferrara	Museo di Paleontologia e Preistoria 'P. Leonardi'	1	1	2	0	0	0	0
Ferrara	Orto botanico	4	0	4	0	0	2	1
Firenze	Museo di storia naturale	37	13	50	0			
Ge, Si, Tr	Museo Nazionale dell'Antartide "Felice Ippolito"	0	0	0	0	0	2	2
Genova	Centro universitario di servizi giardini botanici Hanbury	19	1	16	4	0	1	0
Genova	Museo di chimica	0	0	0	0	0	1	0
Genova	Museo di etnomedicina Antonio Scarpa	0	0	0	0	0	1	1
Genova	Orto botanico	1	0	1	0	0	1	0
Messina	Orto botanico "Pietro Castelli"	3	0	3	0	0	0	2
Milano	Museo astronomico - Orto botanico di Brera	5	1	1	4	1	1	0
Milano	Museo delle collezioni mineralogiche, gemmologiche, petrografiche e giacimentologiche	0	0	0	0	0	0	0
Milano								
Politecnico	Museo di corrosione							
Modena-Reggio E.	CHIUSO - Musei anatomici	0	0	0	0	0	0	0
Modena-Reggio E.	Laboratorio delle Macchine Matematiche	0	0	0	0	0	1	1

University	Museum Unit	P. Tech.	P. Adm.	Full T.	Part T.	Cult. Her.	Prof.	Ris.
Modena-Reggio								
E.	Museo di Paleontologia	0	0	0	0	0	1	0
Modena-Reggio E.	Museo di Zoologia ed Anatomia Comparata	1	0	0	0	0	0	0
	•	1	0	U	U	U	0	U
Napoli Federico II	1 0							
Napoli Federico II	CMSNF - Museo di Fisica							
Napoli Federico II	CMSNF - Museo di Paleontologia							
Napoli Federico II	CMSNF - Museo Zoologico							
Napoli Federico II	CMSNF - Real Museo Mineralogico							
Napoli Federico II	MUSA - CHIUSO - Museo Botanico "Orazio Comes"	0	1	1	0	0	1	0
Napoli Federico II	MUSA - CHIUSO -Museo di Entomologia "Filippo Silvestri"	0	0	0	0	0	1	0
Napoli Federico II	Museo di Anatomia Veterinaria	1	0	1	0	1	1	0
Napoli SUN	Museo di anatomia	0	0	0	0	0	1	0
Padova	Museo Botanico	1	0	1	0	1	1	0
Padova	Museo degli Strumenti dell'Astronomia	1	0	1	0	0	1	0
Padova	Museo dell'Educazione	1	0	1	0	0	1	0
Padova	Museo di Antropologia	1	0	1	0	0	1	0
Padova	Museo di Geologia e Paleontologia	2	0	2	0	2	1	0
Padova	Museo di Macchine "Enrico Bernardi"	0	0	0	0	0	1	0

University	Museum Unit	P. Tech.	P. Adm.	Full T.	Part T.	Cult. Her.	Prof.	Ris.
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Padova	Museo di Mineralogia	1	0	1	0	1	1	0
Padova	Museo di Scienze Archeologiche e d'Arte	1	1	2	0	1	1	0
Padova	Museo di Storia della Fisica	1	0	1	0	1	0	0
Padova	Museo di Zoologia	1	0	1	0	1	1	0
Palermo	CHIUSO - Osservatorio Astronomico e Museo della Specola	0	0	0	0	0	0	0
Palermo	Museo della Chimica	0	0	0	0	0	1	0
Palermo	Museo di Entomologia Agraria							
Palermo	Museo di Mineralogia	0	0	0	0	0	0	0
Palermo	Museo Geologico "Gaetano Giorgio Gemmellaro"	2	0	2	0	2	0	0
Palermo	Museo Storico dei Motori e dei Meccanismi	0	0	0	0	0	2	0
Palermo	Orto Botanico ed Herbarium Mediterraneum	12	2	12	0	0	15	12
Parma	Museo anatomico veterinario	0	0	0	0	0	4	2
	Museo del Dipartimento di Anatomia Umana, Farmacologia e							
Parma	Scienze medico-forensi	1	0	1	0	1	1	0
Parma	Museo di Storia Naturale	3	1	3	1	0	1	1
Parma	Museo Paleontologico Parmense	0	0	0	0	0	1	2
Parma	Orto botanico	1	0	1	0	0	1	0
Pavia	Museo di Mineralogia	0	0	0	0	0	0	1
Pavia	Museo di Storia Naturale	4	0	4	0	0	1	0

University	Museum Unit	P. Tech.	P. Adm.	Full T.	Part T.	Cult. Her.	Prof.	Ris.
Pavia	Museo per la Storia dell' Università	1	1	1	1	1	2	0
Pavia	Orto Botanico	6	0	4	2	0	3	1
Perugia	Laboratorio di storia dell'agricoltura di Casalina	3	0	3	0	1	0	0
Perugia	Museo di Anatomia Umana	0	0	0	0	0	2	0
Perugia	Orto botanico	16	0	15	1	1	1	0
Pisa	Museo botanico	4	0	3	1	1	0	1
Pisa	Museo degli strumenti per il calcolo	1	0	0	1	0	0	0
Pisa	Museo della grafica	1	2	3	0	1	2	0
Pisa	Museo di anatomia e istologia patologica	0	0	0	0	0	1	0
Pisa	Museo di anatomia patologica	0	0	0	0	0	1	0
Pisa	Museo di anatomia veterinaria	0	0	0	0	0	1	2
Pisa	Museo di storia naturale e del territorio di Calci	10	5	14	1	4	11	9
Pisa	Orto botanico							
Roma 3	Museo storico della didattica "Mauro Laeng"	0	0	0	0	0	1	1
Roma Sapienza	Museo delle Origini	1	0	1	0	1	1	1
Roma Sapienza	Museo di Anatomia Patologica	0	0	0	0	0	1	0
Roma Sapienza	Museo di Antropologia "Giuseppe Sergi"	0	0	0	0	0	1	0
Roma Sapienza	Museo di Fisica	0	0	0	0	0	1	0

University	Museum Unit	P. Tech.	P. Adm.	Full T.	Part T.	Cult. Her.	Prof.	Ris.
Roma Sapienza	Museo di Merceologia	0	1	1	0	0	1	0
Roma Sapienza	Museo di Mineralogia	2	0	2	0	0	15	0
Roma Sapienza	Museo di Paleontologia	1	0	1	0	0	8	3
Roma Sapienza	Museo di Storia della Medicina	1	0	1	0	1	1	0
Roma Sapienza	Museo Erbario - Museo di Botanica	1	0	0	1	0	1	0
Salento	CHIUSO - Museo dell'Ambiente	3	0	3	0	0	5	2
Salento	Museo di Biologia Marina "Pietro Parenzan", Porto Cesareo	1	0	1	0	1	1	0
Salento	Museo di Ecologia degli Ecosistemi Mediterranei, Otranto	0	0	0	0	0	1	0
Salento	Museo Diffuso di Cavallino	1	0	1	0	1	1	0
Salento	Museo Papirologico	1	0	1	0	0	2	0
Salento	Museo Storico-Archeologico	1	0	1	0	1	1	0
Salento	Orto Botanico	3	0	3	0	0	1	1
Sassari	Collezione agronomica e museo all'aperto di storia dell'agricoltura							
Sassari	IN FASE DI ATTIVAZIONE - Museo scientifico	4	2	1	5	2	17	0
Sassari	Museo geologico mineralogico "Aurelio Serra"	1	0	1	0	0	1	0
Siena	Museo Anatomico	2	0	0	2		2	0
Siena	Museo Botanico: Orto Botanico e Herbarium	9	1	9	1	0	4	1
Torino	ASTUT - Archivio scientifico e tecnologico	1	1	1	1	0		0

University	Museum Unit	P.	P.	Full	Part	Cult.	Prof.	Ris.
		Tech.	Adm.	T.	T.	Her.		
Torino	CHIUSO - Museo di antropologia e etnografia	1	0	1	0	0	1	1
Torino	Museo "Perroncito"	0	0	0	0	0	1	0
Torino	Museo del Dipartimento di Scienze Veterinarie	0	0	0	0	0	1	0
Torino	Museo dell'agricoltura del Piemonte	0	0	0	0	0	0	0
Torino	Museo di anatomia umana "Luigi Rolando"	0	0	0	0	0	3	0
Torino	Museo di antropologia criminale "C. Lombroso"	0	0	0	0	0	2	0
Torino	Museo di odontoiatria	1	0	1	0	0	1	0
Trieste	Museo delle scienze sanitarie	0	0	0	0	0	0	0
Trieste	Museo di Mineralogia e Petrografia	0	0	0	0	0	1	2
Tuscia (Viterbo)	Orto Botanico dell'Azienda Agraria Didattico-Sperimentale	3	2	5	0	0	2	0
Urbino	Museo dei gessi	0	0	0	0	0	0	1
Urbino	Museo di scienza e tecnologia	0	0	0	0	0	0	1

Appendix G – Museums. Planning, analysis, development

University	Museum Unit	Fund Raising	Act. Plan.	Act. Rep.	Autoeval. Rep.
Ge, Si, Tr	Museo Nazionale dell'Antartide "Felice Ippolito"	Yes	Yes	Yes	No
Bari	Museo orto botanico	Yes	Yes	No	No
Bari	CHIUSO - Laboratorio di Storia della Psicologia Applicata "A. Marzi"	No	No	No	No
Bologna	Museo di Fisica	Yes	Yes	Yes	No
Bologna	Museo di Palazzo Poggi	Yes	Yes	Yes	No
Bologna	Museo di Anatomia degli animali domestici	No	No	No	No
Bologna	Museo Geologico «Giovanni Capellini»	Yes	Yes	Yes	Yes
Bologna	Orto botanico	Yes	No	Yes	No
Bologna	Museo di Anatomia patologica e teratologia veterinaria Alessandrini-Ercolani	No	No	No	No
Cagliari	Museo di Cere Anatomiche "Clemente Susini"	Yes	Yes	Yes	No
Calabria	Museo di paleontologia	No	Yes	Yes	Yes
Calabria	RiMuseum - Museo per l'Ambiente	Yes	Yes	Yes	Yes
Calabria	Museo di Storia Naturale della Calabria ed Orto Botanico	Yes	No	No	Yes
Camerino	Orto botanico "Carmela Cortini"	Yes	Yes	Yes	No
Camerino	Museo di scienze naturali	Yes	Yes	Yes	No

University	Museum Unit	Fund	Act. Plan.	Act. Rep.	Autoeval.	
		Raising			Rep.	
Catania	Orto botanico	Yes	Yes	Yes	Yes	
Catania	Museo della fabbrica	Yes	No	No	No	
Ferrara	Orto botanico	Yes	Yes	Yes	No	
Ferrara	Museo Anatomico "Giovanni Tumiati"	Yes	No	No	No	
Ferrara	Museo di Paleontologia e Preistoria 'P. Leonardi'	No	No	Yes	No	
Firenze	Museo di storia naturale	Yes	Yes	Yes	No	
Genova	Orto botanico	No	No	No	No	
Genova	Museo di etnomedicina Antonio Scarpa	Yes	No	No	No	
Genova	Museo di chimica	Yes	Yes	Yes	No	
Genova	Centro universitario di servizi giardini botanici Hanbury	Yes	Yes	Yes	No	
Messina	Orto botanico "Pietro Castelli"	No	Yes	Yes	No	
Milano	Museo delle collezioni mineralogiche, gemmologiche, petrografiche e giacimentologiche	Yes	Yes	Yes	No	
Milano	Museo astronomico - Orto botanico di Brera	Yes	Yes	Yes	No	
Modena-						
Reggio E.	Museo di Paleontologia	No	No	No	No	
Modena-						
Reggio E.	Museo di Zoologia ed Anatomia Comparata	No	Yes	Yes	No	
Modena- Reggio E.	Laboratorio delle Macchine Matematiche	Yes	No	Yes	No	

University	Museum Unit	Fund	Act. Plan.	Act. Rep.	Autoeval.
		Raising			Rep.
Modena-					
Reggio E.	CHIUSO - Musei anatomici	No	No	No	No
Napoli					
Federico II	MUSA - CHIUSO - Museo Botanico "Orazio Comes"	Yes	No	No	No
Napoli					
Federico II	Museo di Anatomia Veterinaria	No	No	Yes	No
Napoli					
Federico II	CMSNF - Museo di Fisica	Yes	Yes	Yes	No
Napoli					
Federico II	CMSNF - Museo di Antropologia	Yes	Yes	Yes	No
Napoli					
Federico II	CMSNF - Museo di Paleontologia	Yes	Yes	Yes	No
Napoli					
Federico II	CMSNF - Museo Zoologico	Yes	Yes	Yes	No
Napoli					
Federico II	CMSNF - Real Museo Mineralogico	Yes	Yes	Yes	No
Napoli					
Federico II	MUSA - CHIUSO -Museo di Entomologia "Filippo Silvestri"	Yes	No	No	No
Napoli SUN	Museo di anatomia	No	No	No	No
Palermo	CHIUSO - Osservatorio Astronomico e Museo della Specola	No	Yes	Yes	No
Palermo	Orto Botanico ed Herbarium Mediterraneum	No	Yes	Yes	Yes
Palermo	Museo Storico dei Motori e dei Meccanismi	Yes	Yes	Yes	No

University	Museum Unit	Fund Raising	Act. Plan.	Act. Rep.	Autoeval. Rep.
Palermo	Museo Geologico "Gaetano Giorgio Gemmellaro"	Yes	Yes	Yes	No
Palermo	Museo di Mineralogia	No	Yes	Yes	No
Palermo	Museo della Chimica	No	No	No	No
Palermo	Museo di Entomologia Agraria	No	No	No	No
Padova	Museo di Antropologia	No	Yes	Yes	No
Padova	Museo di Zoologia	No	Yes	Yes	No
Padova	Museo di Storia della Fisica	Yes	Yes	Yes	No
Padova	Museo di Scienze Archeologiche e d'Arte	No	Yes	Yes	No
Padova	Museo di Mineralogia	No	Yes	Yes	No
Padova	Museo di Geologia e Paleontologia	No	Yes	Yes	No
Padova	Museo dell'Educazione	No	Yes	Yes	No
Padova	Museo degli Strumenti dell'Astronomia	No	Yes	Yes	No
Padova	Museo Botanico	No	Yes	Yes	No
Padova	Museo di Macchine "Enrico Bernardi"	No	Yes	Yes	No
Perugia	Orto botanico	Yes	No	Yes	No
Perugia	Laboratorio di storia dell'agricoltura di Casalina	No	Yes	Yes	No
Perugia	Museo di Anatomia Umana	No	No	No	No
Pisa	Museo di anatomia veterinaria	Yes	Yes	Yes	No
Pisa	Museo botanico	Yes	Yes	Yes	No

University	Museum Unit	Fund	Act. Plan.	Act. Rep.	Autoeval.
		Raising			Rep.
Pisa	Museo degli strumenti per il calcolo	Yes	Yes	Yes	No
Pisa	Museo di anatomia patologica	No	No	No	No
Pisa	Museo di storia naturale e del territorio di Calci	Yes	Yes	Yes	No
Pisa	Orto botanico	Yes	No	No	No
Pisa	Museo di anatomia e istologia patologica	No	No	No	No
Pisa	Museo della grafica	Yes	Yes	Yes	Yes
Parma	Museo di Storia Naturale	Yes	No	No	No
Parma	Museo anatomico veterinario	No	No	No	No
Parma	Museo Paleontologico Parmense	No	No	No	No
Parma	Orto botanico	Yes	No	No	No
Parma	Museo del Dipartimento di Anatomia Umana, Farmacologia e Scienze medico-forensi	No	No	Yes	No
Pavia	Orto Botanico	Yes	No	No	No
Pavia	Museo per la Storia dell' Università	Yes	Yes	Yes	No
Pavia	Museo di Storia Naturale	Yes	No	Yes	No
Pavia	Museo di Mineralogia	Yes	No	Yes	No
Roma 3	Museo storico della didattica "Mauro Laeng"	No	Yes	No	No
Roma Sapienza	Museo Erbario - Museo di Botanica	No	No	No	No

University	Museum Unit	Fund	Act. Plan.	Act. Rep.	Autoeval.
		Raising			Rep.
Roma					
Sapienza	Museo di Storia della Medicina	Yes	No	No	No
Roma					
Sapienza	Museo di Paleontologia	No	Yes	Yes	No
Roma					
Sapienza	Museo di Mineralogia	Yes	No	No	No
Roma					
Sapienza	Museo di Merceologia	No	Yes	No	No
Roma					
Sapienza	Museo delle Origini	Yes	Yes	No	No
Roma					
Sapienza	Museo di Anatomia Patologica	No	No	No	No
Roma					
Sapienza	Museo di Antropologia "Giuseppe Sergi"	No	Yes	No	No
Roma					
Sapienza	Museo di Fisica	No	No	No	No
Salento	Orto Botanico	Yes	Yes	Yes	No
Salento	Museo di Biologia Marina "Pietro Parenzan", Porto Cesareo	No	Yes	Yes	No
Salento	Museo Storico-Archeologico	Yes	Yes	Yes	Yes
Salento	Museo di Ecologia degli Ecosistemi Mediterranei, Otranto	Yes	Yes	Yes	No
Salento	CHIUSO - Museo dell'Ambiente	Yes	Yes	No	No

University	Museum Unit	Fund	Act. Plan.	Act. Rep.	Autoeval.
		Raising			Rep.
Salento	Museo Papirologico	Yes	Yes	Yes	Yes
Salento	Museo Diffuso di Cavallino	Yes	Yes	Yes	Yes
Siena	Museo Botanico: Orto Botanico e Herbarium	Yes	Yes	Yes	No
Siena	Museo Anatomico	Yes	No	Yes	Yes
Sassari	Museo geologico mineralogico "Aurelio Serra"	No	No	No	No
Sassari	Collezione agronomica e museo all'aperto di storia dell'agricoltura	No	No	No	No
Sassari	IN FASE DI ATTIVAZIONE - Museo scientifico	Yes	Yes	Yes	Yes
Torino	CHIUSO - Museo di antropologia e etnografia	Yes	No	No	No
Torino	Museo "Perroncito"	No	No	No	No
Torino	Museo di antropologia criminale "C. Lombroso"	Yes	Yes	Yes	No
Torino	Museo di anatomia umana "Luigi Rolando"	Yes	Yes	Yes	No
Torino	ASTUT - Archivio scientifico e tecnologico	Yes	Yes	Yes	No
Torino	Museo del Dipartimento di Scienze Veterinarie	No	No	No	No
Torino	Museo dell'agricoltura del Piemonte	No	No	No	No
Torino	Museo di odontoiatria	No	No	No	No
Trieste	Museo delle scienze sanitarie	No	No	No	No
Trieste	Museo di Mineralogia e Petrografia	Yes	No	No	No
Tuscia	Orto Botanico dell'Azienda Agraria Didattico-Sperimentale	Yes	Yes	Yes	No

University	Museum Unit	Fund Raising	Act. Plan.	Act. Rep.	Autoeval. Rep.
(Viterbo)					
Urbino	Museo di scienza e tecnologia	No	No	No	No
Urbino	Museo dei gessi	No	No	No	No
Milano					
Politecnico	Museo di corrosione	Yes	Yes	Yes	No

Appendix H – Museums and Collections. Activities

University	Museum Unit	Res.	Rest.	Exh.	Sem.	Edu.	Univ. Stud.	Univ. Staff	Cult. Med.	Soc. Incl.
Ge, Si, Tr	Museo Nazionale dell'Antartide "Felice Ippolito"	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Bari	Museo orto botanico	Yes	No	Yes	Yes	Yes	Yes	No	No	No
Bari	CHIUSO - Laboratorio di Storia della Psicologia Applicata "A. Marzi"	No	No	No	No	No	No	No	No	No
Bari	Collezioni di informatica	No	No	No	No	No	No	No	No	No
Bologna	Raccolta di strumenti chirurgici veterinari	No	No	No	No	No	No	No	No	No
Bologna	Orto botanico	Yes	No	Yes	Yes	No	Yes	Yes	No	No
Bologna	Museo Geologico «Giovanni Capellini»	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes
Bologna	Museo di Fisica	Yes	No	Yes	Yes	No	Yes	No	No	No
Bologna	Museo di Anatomia patologica e teratologia veterinaria Alessandrini-Ercolani	Yes	Yes	Yes	No	No	Yes	No	No	No
Bologna	Museo di Anatomia degli animali domestici	No	No	No	No	No	No	No	No	No
Bologna	Museo di Palazzo Poggi	No	No	No	No	No	No	No	No	No
Cagliari	Museo di Cere Anatomiche "Clemente Susini"	Yes	No	Yes	Yes	No	Yes	No	No	No
Cagliari	Collezione degli Strumenti e Apparecchi di Chimica	No	Yes	Yes	No	No	No	No	Yes	No
Cagliari	Collezione Archeologica "Evan Gorga"	Yes	Yes	Yes	Yes	No	No	No	No	No
Calabria	Museo di paleontologia	Yes	No	Yes	Yes	No	Yes	No	Yes	No

University	Museum Unit	Res.	Rest.	Exh.	Sem.	Edu.	Univ. Stud.	Univ. Staff	Cult. Med.	Soc. Incl.
Calabria	RiMuseum - Museo per l'Ambiente	Yes	No	Yes	Yes	No	Yes	Yes	Yes	Yes
Calabria	Museo di Storia Naturale della Calabria ed Orto Botanico	Yes	No	Yes	Yes	Yes	Yes	No	No	No
Camerino	Orto botanico "Carmela Cortini"	Yes	No	No	No	Yes	Yes	No	No	No
Camerino	Museo di scienze naturali	Yes	No	Yes	Yes	Yes	Yes	No	Yes	Yes
Catania	Museo della fabbrica	Yes	No	Yes	Yes	Yes	Yes	No	Yes	Yes
Catania	Orto botanico	Yes	No	Yes	Yes	Yes	Yes	No	No	Yes
Ferrara	Orto botanico	Yes	No	Yes	Yes	No	Yes	No	No	Yes
Ferrara	Arredi storici della Premiata Farmacia Navarra e collezione strumenti	Yes	No	Yes	Yes	No	Yes	No	No	No
Ferrara	Museo di Paleontologia e Preistoria 'P. Leonardi'	Yes	Yes	No	No	No	Yes	No	No	No
Ferrara	Museo Anatomico "Giovanni Tumiati"	No	No	Yes	No	No	No	No	No	No
Ferrara	Collezione instrumentaria delle scienze fisiche - CISIF	Yes	Yes	Yes	Yes	Yes	Yes	No	No	No
Firenze	Museo di storia naturale	Yes	Yes	Yes	Yes	Yes	Yes	No	No	Yes
Genova	Museo di etnomedicina Antonio Scarpa	Yes	No	No	Yes	No	Yes	No	Yes	No
Genova	Orto botanico	Yes	No	Yes	Yes	Yes	Yes	No	Yes	Yes
Genova	Centro universitario di servizi giardini botanici Hanbury	Yes	Yes	Yes	Yes	No	Yes	No	No	Yes
Genova	Museo di chimica	No	No	Yes	Yes	No	Yes	Yes	Yes	No

University	Museum Unit	Res.	Rest.	Exh.	Sem.	Edu.	Univ. Stud.	Univ. Staff	Cult. Med.	Soc. Incl.
Messina	Collezione Museologica Botanica	No	No	No	No	No	No	No	No	No
Messina	Orto botanico "Pietro Castelli"	Yes	No	Yes	Yes	No	No	No	No	No
Milano	Museo astronomico - Orto botanico di Brera	Yes	No	Yes	Yes	No	No	No	No	No
Milano	Museo delle collezioni mineralogiche, gemmologiche, petrografiche e giacimentologiche	Yes	No	No	No	No	Yes	No	No	No
Modena- Reggio E.	Laboratorio delle Macchine Matematiche	Yes	Yes	Yes	Yes	No	Yes	No	No	No
Modena- Reggio E.	Museo di Zoologia ed Anatomia Comparata	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes
Modena- Reggio E.	Museo di Paleontologia	No	No	No	Yes	No	Yes	No	No	No
Modena- Reggio E.	CHIUSO - Musei anatomici	No	No	No	No	No	No	No	No	No
Napoli Federico II	Museo di Anatomia Veterinaria	Yes	No	Yes	No	No	Yes	No	No	No
Napoli Federico II	MUSA - CHIUSO -Museo di Entomologia "Filippo Silvestri"	Yes	No	Yes	No	No	Yes	No	No	No
Napoli Federico II	MUSA - CHIUSO - Museo Botanico "Orazio Comes"	Yes	No	Yes	Yes	No	Yes	No	No	No
Napoli Federico II	CMSNF - Real Museo Mineralogico	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

University	Museum Unit	Res.	Rest.	Exh.	Sem.	Edu.	Univ. Stud.	Univ. Staff	Cult. Med.	Soc. Incl.
							Stud.	Stall	wied.	mei.
Napoli										
Federico II	CMSNF - Museo Zoologico	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Napoli										
Federico II	CMSNF - Museo di Paleontologia	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Napoli										
Federico II	CMSNF - Museo di Fisica	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Napoli										
Federico II	CMSNF - Museo di Antropologia	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Napoli	MUSA - NON ESPOSTE - Collezioni strumentazioni									
Federico II	scientifiche	Yes	No	Yes	Yes	Yes	Yes	No	No	No
Napoli										
SUN	Museo di anatomia	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Palermo	Collezione di Ingegneria: Elettronica ed elettrotecnica	No	No	No	No	No	Yes	No	No	No
Palermo	Collezione di Ingegneria: Civile, Ambientale,									
	Aerospaziale, dei Materiali (DICAM)	No	No	No	No	No	No	No	No	No
Palermo	Collezione di Fisiologia Umana	No	No	No	No	No	No	No	No	No
Palermo	Museo di Entomologia Agraria	Yes	No	No	No	Yes	Yes	No	No	No
Palermo	Collezione di Anatomia	Yes	No	Yes	Yes	No	No	No	No	No
Palermo	CHIUSO - Osservatorio Astronomico e Museo della									
	Specola	Yes	Yes	Yes	Yes	Yes	No	No	No	Yes
Palermo	Orto Botanico ed Herbarium Mediterraneum	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	No

University	Museum Unit	Res.	Rest.	Exh.	Sem.	Edu.	Univ. Stud.	Univ. Staff	Cult. Med.	Soc. Incl.
Palermo	Museo Storico dei Motori e dei Meccanismi	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	No
Palermo	Museo Geologico "Gaetano Giorgio Gemmellaro"	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes
Palermo	Museo di Mineralogia	Yes	No	No	No	Yes	Yes	No	No	No
Palermo	Museo della Chimica	No	No	No	No	No	No	No	Yes	No
Padova	Museo di Antropologia	Yes	No	Yes	Yes	Yes	Yes	No	No	No
Padova	Museo di Mineralogia	Yes	No	No	No	Yes	Yes	No	No	No
Padova	Museo Botanico	Yes	No	No	No	Yes	Yes	No	No	No
Padova	Museo dell'Educazione	Yes	No	Yes	Yes	Yes	Yes	No	No	No
Padova	Museo di Geologia e Paleontologia	Yes	No	No	Yes	Yes	Yes	No	No	No
Padova	Museo di Macchine "Enrico Bernardi"	Yes	No	No	No	No	Yes	No	No	No
Padova	Museo di Storia della Fisica	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	No
Padova	Museo di Zoologia	Yes	No	No	Yes	Yes	Yes	No	No	No
Padova	Museo degli Strumenti dell'Astronomia	Yes	No	No	No	No	Yes	No	No	No
Padova	Museo di Scienze Archeologiche e d'Arte	Yes	Yes	Yes	Yes	Yes	Yes	No	No	No
Perugia	Laboratorio di storia dell'agricoltura di Casalina	Yes	Yes	No	Yes	No	No	No	No	No
Perugia	Orto botanico	Yes	No	Yes	Yes	No	Yes	Yes	No	No
Perugia	Collezione del dipartimento di Matematica e informatica	Yes	No	Yes	Yes	No	Yes	No	No	No
Perugia	Museo di Anatomia Umana	No	Yes	Yes	No	No	Yes	No	No	No

University	Museum Unit	Res.	Rest.	Exh.	Sem.	Edu.	Univ. Stud.	Univ. Staff	Cult. Med.	Soc. Incl.
Perugia	Erbario Cicioni-Bruschi	Yes	Yes	No	No	Yes	Yes	Yes	No	No
Pisa	Museo botanico	Yes	Yes	Yes	No	Yes	Yes	No	No	No
Pisa	Museo degli strumenti per il calcolo	Yes	Yes	Yes	Yes	No	No	No	No	No
Pisa	Gipsoteca di arte antica	Yes	Yes	Yes	Yes	Yes	Yes	No	No	No
Pisa	Museo della grafica	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Pisa	Museo di anatomia patologica	Yes	Yes	Yes	Yes	No	No	No	No	No
Pisa	Museo di anatomia veterinaria	Yes	Yes	Yes	Yes	No	Yes	No	No	No
Pisa	Museo di storia naturale e del territorio di Calci	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No
Pisa	Orto botanico	Yes	Yes	Yes	Yes	Yes	Yes	No	No	No
Pisa	Collezioni di egittologia	Yes	Yes	Yes	Yes	No	Yes	No	No	No
Pisa	Antiquarium di archeologia classica	Yes	No	Yes	Yes	No	No	No	No	No
Pisa	Collezioni di paletnologia	Yes	Yes	Yes	Yes	Yes	Yes	No	No	No
Pisa	Museo di anatomia e istologia patologica	Yes	No	No	Yes	No	Yes	No	No	No
Parma	Museo del Dipartimento di Anatomia Umana, Farmacologia e Scienze medico-forensi	Yes	No	No	Yes	No	Yes	No	No	No
Parma	Orto botanico	Yes	No	Yes	Yes	Yes	Yes	No	No	No
Parma	Museo Paleontologico Parmense	No	No	No	No	No	No	No	No	No
Parma	Museo anatomico veterinario	Yes	Yes	No	No	No	Yes	No	No	No
Parma	Collezione di strumenti scientifici "Macedonio Melloni"	Yes	No	No	Yes	Yes	No	No	No	No

University	Museum Unit	Res.	Rest.	Exh.	Sem.	Edu.	Univ.	Univ.	Cult.	Soc.
							Stud.	Staff	Med.	Incl.
Parma	Museo di Storia Naturale	Yes	No	Yes	Yes	Yes	No	No	No	No
Pavia	CHIUSA AL PUBBLICO - Collezione Matematica	No	No	No	No	No	No	No	No	No
Pavia	Collezione di Archeologia	No	Yes	Yes	Yes	Yes	No	No	Yes	No
Pavia	CHIUSA AL PUBBLICO - Collezione Istologia ed Embriologia	No	No	No	No	No	No	No	No	No
Pavia	Orto Botanico	Yes	No	Yes	Yes	Yes	Yes	No	No	Yes
Pavia	Collezione Musicologia	Yes	Yes	No	Yes	No	Yes	No	Yes	Yes
Pavia	Museo di Mineralogia	Yes	No	No	No	No	Yes	No	No	No
Pavia	Museo di Storia Naturale	Yes	Yes	Yes	Yes	No	Yes	No	No	Yes
Pavia	Museo per la Storia dell' Università	Yes	Yes	Yes	Yes	No	Yes	No	No	No
Roma 3	Museo storico della didattica "Mauro Laeng"	Yes	Yes	Yes	Yes	No	Yes	No	No	No
Roma Sapienza	Museo di Merceologia	No	No	Yes	Yes	No	Yes	No	No	Yes
Roma										
Sapienza	Museo di Mineralogia	Yes	Yes	Yes	No	No	Yes	No	No	No
Roma										
Sapienza	Museo di Paleontologia	No	No	No	No	No	No	No	No	No
Roma										
Sapienza	Museo di Storia della Medicina	Yes	No	Yes	Yes	No	Yes	Yes	Yes	No
Roma	Museo Erbario - Museo di Botanica	Yes	Yes	Yes	Yes	Yes	Yes	No	No	No

University	Museum Unit	Res.	Rest.	Exh.	Sem.	Edu.	Univ. Stud.	Univ. Staff	Cult. Med.	Soc. Incl.
Sapienza							Stuu.	Stair	wieu.	mer.
Roma										
Sapienza	Museo delle Origini	Yes	Yes	Yes	Yes	Yes	Yes	No	No	No
Roma	5									
Sapienza	Museo di Anatomia Patologica	No	No	No	No	No	Yes	No	No	No
Roma										
Sapienza	Museo di Antropologia "Giuseppe Sergi"	Yes	Yes	Yes	Yes	Yes	Yes	No	No	No
Roma										
Sapienza	Museo di Fisica	No	No	No	No	No	No	No	No	No
Salento	Orto Botanico	Yes	No	Yes	Yes	Yes	Yes	No	No	No
Salento	Museo Storico-Archeologico	Yes	Yes	Yes	Yes	No	Yes	No	Yes	No
Salento	CHIUSO - Museo dell'Ambiente	Yes	Yes	Yes	No	No	Yes	No	No	No
Salento	Museo Papirologico	Yes	Yes	Yes	Yes	No	Yes	No	No	No
Salento	Museo Diffuso di Cavallino	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes
Salento	Museo di Ecologia degli Ecosistemi Mediterranei,									
	Otranto	Yes	No	Yes	Yes	No	No	No	No	No
Salento	Museo di Biologia Marina "Pietro Parenzan", Porto									
	Cesareo	Yes	Yes	Yes	Yes	Yes	No	No	Yes	No
Siena	Collezione di Fisica	No	No	No	Yes	No	Yes	Yes	Yes	Yes
Siena	Museo Anatomico	No	Yes	No	No	Yes	Yes	No	No	No

University	Museum Unit	Res.	Rest.	Exh.	Sem.	Edu.	Univ. Stud.	Univ. Staff	Cult. Med.	Soc. Incl.
Siena	Museo Botanico: Orto Botanico e Herbarium	Yes	No	No	Yes	Yes	Yes	Yes	No	No
Sassari	collezione zoologica	No	No	No	No	No	No	No	No	No
Sassari	Museo geologico mineralogico "Aurelio Serra"	No	No	No	No	No	No	No	No	No
Sassari	collezione entomologica	No	No	No	No	No	Yes	No	No	No
Sassari	Collezione agronomica e museo all'aperto di storia dell'agricoltura	Yes	No	No	No	No	Yes	No	No	No
Sassari	IN FASE DI ATTIVAZIONE - Museo scientifico	Yes	No	Yes	No	Yes	No	No	Yes	No
Torino	Museo di antropologia criminale "C. Lombroso"	No	No	No	No	No	No	No	No	No
Torino	CHIUSO - Museo di antropologia e etnografia	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Torino	Museo di anatomia umana "Luigi Rolando"	No	No	No	No	No	No	No	No	No
Torino	ASTUT - Archivio scientifico e tecnologico	Yes	Yes	Yes	Yes	No	No	No	Yes	No
Torino	Museo di odontoiatria	Yes	Yes	Yes	Yes	No	No	No	No	No
Torino	Museo dell'agricoltura del Piemonte	No	No	Yes	Yes	No	No	No	No	No
Torino	Museo del Dipartimento di Scienze Veterinarie	No	No	No	No	No	No	No	No	No
Torino	Museo "Perroncito"	No	No	No	No	No	No	No	No	No
Torino	Collezioni di scienze naturali	Yes	Yes	Yes	Yes	Yes	No	No	No	No
Trieste	Museo di Mineralogia e Petrografia	Yes	No	Yes	Yes	No	Yes	No	No	No
Trieste	Raccolta di opere d'arte	No	No	No	No	No	No	No	No	No
Trieste	Museo delle scienze sanitarie	No	No	No	No	No	No	No	No	No

University	Museum Unit	Res.	Rest.	Exh.	Sem.	Edu.	Univ.	Univ.	Cult.	Soc.
							Stud.	Staff	Med.	Incl.
Tuscia										
(Viterbo)	Xylarium	Yes	Yes	Yes	Yes	No	Yes	No	No	No
Tuscia	Orto Botanico dell'Azienda Agraria Didattico-									
(Viterbo)	Sperimentale	Yes	No	Yes	Yes	No	Yes	No	No	Yes
Tuscia	NON ESPOSTA - Collezione di anatomia comparata e									
(Viterbo)	zoologia	No	No	Yes	No	Yes	Yes	No	No	No
Urbino	Museo dei gessi	Yes	Yes	No	Yes	Yes	Yes	No	No	No
Urbino	Museo di scienza e tecnologia	No	No	Yes	Yes	No	No	No	No	No
Milano										
Politecnico	Archivio degli strumenti topografici	No	No	Yes	Yes	No	No	No	No	No
Milano										
Politecnico	Museo di corrosione	Yes	No	Yes	Yes	No	No	No	No	No

Appendix I – Museums and Collections. Services

University	Museum Unit	Tour	Sch.	Adu.	Vid.	Lib.	Book	Cafè
Bari	CHIUSO - Laboratorio di Storia della Psicologia Applicata "A. Marzi"	No						
Bari	Collezioni di informatica	Yes	Yes	No	No	No	No	No
Bari	Museo orto botanico	Yes	Yes	Yes	No	Yes	No	No
Bologna	Museo di Anatomia degli animali domestici	No						
Bologna	Museo di Anatomia patologica e teratologia veterinaria Alessandrini- Ercolani	Yes	Yes	No	No	No	No	No
Bologna	Museo di Fisica	Yes	Yes	No	No	Yes	No	No
Bologna	Museo di Palazzo Poggi	No						
Bologna	Museo Geologico «Giovanni Capellini»	Yes	Yes	Yes	Yes	No	No	No
Bologna	Orto botanico	Yes	Yes	Yes	No	No	No	No
Bologna	Raccolta di strumenti chirurgici veterinari	Yes	No	No	No	No	No	No
Cagliari	Collezione Archeologica "Evan Gorga"	No						
Cagliari	Collezione degli Strumenti e Apparecchi di Chimica	Yes	Yes	No	No	No	No	No
Cagliari	Museo di Cere Anatomiche "Clemente Susini"	Yes	Yes	Yes	No	No	Yes	Yes
Calabria	Museo di paleontologia	Yes	Yes	No	Yes	No	No	No
Calabria	Museo di Storia Naturale della Calabria ed Orto Botanico	Yes	Yes	No	No	Yes	No	No
Calabria	RiMuseum - Museo per l'Ambiente	Yes	Yes	Yes	Yes	Yes	No	No
Camerino	Museo di scienze naturali	Yes	Yes	Yes	No	No	Yes	No

University	Museum Unit	Tour	Sch.	Adu.	Vid.	Lib.	Book	Cafè
Camerino	Orto botanico "Carmela Cortini"	Yes	Yes	No	No	No	Yes	No
Catania	Museo della fabbrica	Yes	Yes	No	No	No	No	No
Catania	Orto botanico	Yes	Yes	Yes	Yes	Yes	Yes	No
Ferrara	Arredi storici della Premiata Farmacia Navarra e collezione strumenti	Yes	Yes	Yes	No	No	No	No
Ferrara	Collezione instrumentaria delle scienze fisiche - CISIF	Yes	Yes	Yes	No	No	No	No
Ferrara	Museo Anatomico "Giovanni Tumiati"	No						
Ferrara	Museo di Paleontologia e Preistoria 'P. Leonardi'	Yes	No	No	No	Yes	No	No
Ferrara	Orto botanico	Yes	Yes	Yes	No	No	No	No
Firenze	Museo di storia naturale	Yes	Yes	Yes	Yes	No	Yes	No
Ge, Si, Tr	Museo Nazionale dell'Antartide "Felice Ippolito"	Yes	Yes	Yes	Yes	Yes	Yes	No
Genova	Centro universitario di servizi giardini botanici Hanbury	Yes	Yes	Yes	No	Yes	No	No
Genova	Museo di chimica	Yes	Yes	No	No	No	No	No
Genova	Museo di etnomedicina Antonio Scarpa	Yes	Yes	No	No	Yes	No	No
Genova	Orto botanico	Yes	Yes	Yes	No	No	No	No
Messina	Collezione Museologica Botanica	Yes	No	No	No	No	No	No
Messina	Orto botanico "Pietro Castelli"	Yes	Yes	No	No	No	No	No
Milano	Museo astronomico - Orto botanico di Brera	Yes	Yes	No	No	Yes	No	No
Milano	Museo delle collezioni mineralogiche, gemmologiche, petrografiche e giacimentologiche	Yes	Yes	No	No	No	No	No
Milano	Archivio degli strumenti topografici	No						

University	Museum Unit	Tour	Sch.	Adu.	Vid.	Lib.	Book	Cafè
Politecnico								
Milano Politecnico	Museo di corrosione	Yes	No	No	No	No	No	No
Modena-		1		- 10	- 1.0		- 10	
Reggio E.	CHIUSO - Musei anatomici	No	No	No	No	No	No	No
Modena- Reggio E.	Laboratorio delle Macchine Matematiche	Yes	Yes	Yes	No	No	No	No
Modena-								
Reggio E.	Museo di Paleontologia	Yes	Yes	No	No	No	No	No
Modena-								
Reggio E.	Museo di Zoologia ed Anatomia Comparata	Yes	Yes	Yes	Yes	No	No	No
Napoli								
Federico II	CMSNF - Museo di Antropologia	Yes	Yes	Yes	Yes	No	Yes	No
Napoli Federico II	CMSNF - Museo di Fisica	Yes	Yes	Yes	Yes	No	Yes	No
Napoli								
Federico II	CMSNF - Museo di Paleontologia	Yes	Yes	Yes	Yes	No	Yes	No
Napoli								
Federico II	CMSNF - Museo Zoologico	Yes	Yes	Yes	Yes	No	Yes	No
Napoli								
Federico II	CMSNF - Real Museo Mineralogico	Yes	Yes	Yes	Yes	No	Yes	No
Napoli								
Federico II	MUSA - CHIUSO - Museo Botanico "Orazio Comes"	Yes	Yes	Yes	No	Yes	No	Yes

University	Museum Unit	Tour	Sch.	Adu.	Vid.	Lib.	Book	Cafè
Napoli								
Federico II	MUSA - CHIUSO -Museo di Entomologia "Filippo Silvestri"	No						
Napoli								
Federico II	MUSA - NON ESPOSTE - Collezioni strumentazioni scientifiche	Yes	Yes	No	No	No	No	No
Napoli								
Federico II	Museo di Anatomia Veterinaria	Yes	Yes	No	No	No	No	No
Napoli SUN	Museo di anatomia	Yes	Yes	Yes	No	No	No	No
Padova	Museo Botanico	Yes	Yes	No	No	No	No	No
Padova	Museo degli Strumenti dell'Astronomia	Yes	No	No	No	No	No	No
Padova	Museo dell'Educazione	Yes	Yes	No	No	No	No	No
Padova	Museo di Antropologia	Yes	Yes	No	No	No	No	No
Padova	Museo di Geologia e Paleontologia	Yes	Yes	Yes	No	No	No	No
Padova	Museo di Macchine "Enrico Bernardi"	Yes	No	No	No	No	No	No
Padova	Museo di Mineralogia	Yes	Yes	No	No	No	No	No
Padova	Museo di Scienze Archeologiche e d'Arte	Yes	Yes	Yes	No	No	No	No
Padova	Museo di Storia della Fisica	Yes	Yes	No	No	No	No	No
Padova	Museo di Zoologia	Yes	Yes	No	No	No	No	No
Palermo	CHIUSO - Osservatorio Astronomico e Museo della Specola	Yes	Yes	No	No	Yes	No	No
Palermo	Collezione di Anatomia	Yes	Yes	No	No	No	No	No
Palermo	Collezione di Fisiologia Umana	No						

University	Museum Unit	Tour	Sch.	Adu.	Vid.	Lib.	Book	Cafè
Palermo	Collezione di Ingegneria: Civile, Ambientale, Aerospaziale, dei Materiali (DICAM)	No						
Palermo	Collezione di Ingegneria: Elettronica ed elettrotecnica	No	Yes	No	No	No	No	No
Palermo	Museo della Chimica	Yes	Yes	No	No	Yes	No	No
Palermo	Museo di Entomologia Agraria	Yes	Yes	No	No	No	No	No
Palermo	Museo di Mineralogia	Yes	Yes	No	Yes	Yes	No	No
Palermo	Museo Geologico "Gaetano Giorgio Gemmellaro"	Yes	Yes	No	Yes	Yes	No	No
Palermo	Museo Storico dei Motori e dei Meccanismi	Yes	Yes	No	No	Yes	No	No
Palermo	Orto Botanico ed Herbarium Mediterraneum	Yes	Yes	No	Yes	Yes	Yes	Yes
Parma	Collezione di strumenti scientifici "Macedonio Melloni"	No	Yes	Yes	No	No	No	No
Parma	Museo anatomico veterinario	No						
Parma	Museo del Dipartimento di Anatomia Umana, Farmacologia e Scienze medico-forensi	Yes	Yes	No	No	No	No	No
Parma	Museo di Storia Naturale	Yes	Yes	Yes	No	Yes	No	No
Parma	Museo Paleontologico Parmense	Yes	No	No	No	No	No	No
Parma	Orto botanico	Yes	Yes	No	No	Yes	No	No
Pavia	CHIUSA AL PUBBLICO - Collezione Istologia ed Embriologia	No						
Pavia	CHIUSA AL PUBBLICO - Collezione Matematica	No						
Pavia	Collezione di Archeologia	Yes	Yes	No	No	No	No	No
Pavia	Collezione Musicologia	Yes	Yes	No	No	No	No	No

University	Museum Unit	Tour	Sch.	Adu.	Vid.	Lib.	Book	Cafè
Pavia	Museo di Mineralogia	Yes	Yes	Yes	No	No	No	No
Pavia	Museo di Storia Naturale	Yes	Yes	No	No	Yes	No	No
Pavia	Museo per la Storia dell' Università	Yes	Yes	No	No	Yes	No	No
Pavia	Orto Botanico	Yes	Yes	Yes	Yes	No	No	No
Perugia	Collezione del dipartimento di Matematica e informatica	Yes	Yes	No	No	No	No	No
Perugia	Erbario Cicioni-Bruschi	Yes	No	No	No	No	No	No
Perugia	Laboratorio di storia dell'agricoltura di Casalina	Yes	No	No	Yes	No	No	No
Perugia	Museo di Anatomia Umana	Yes	Yes	No	No	No	No	No
Perugia	Orto botanico	Yes	Yes	No	No	Yes	No	No
Pisa	Antiquarium di archeologia classica	No						
Pisa	Collezioni di egittologia	Yes	Yes	Yes	No	No	No	No
Pisa	Collezioni di paletnologia	No	Yes	No	No	No	No	No
Pisa	Gipsoteca di arte antica	Yes	Yes	No	No	No	No	No
Pisa	Museo botanico	Yes	Yes	No	No	No	No	No
Pisa	Museo degli strumenti per il calcolo	Yes	Yes	No	Yes	Yes	No	No
Pisa	Museo della grafica	Yes	Yes	Yes	Yes	Yes	Yes	No
Pisa	Museo di anatomia e istologia patologica	Yes	No	No	No	No	No	No
Pisa	Museo di anatomia patologica	Yes	No	No	No	No	No	No
Pisa	Museo di anatomia veterinaria	Yes	Yes	No	No	No	No	No

University	Museum Unit	Tour	Sch.	Adu.	Vid.	Lib.	Book	Cafè
Pisa	Museo di storia naturale e del territorio di Calci	Yes						
Pisa	Orto botanico	Yes	Yes	No	No	Yes	No	No
Roma 3	Museo storico della didattica "Mauro Laeng"	Yes	No	No	No	Yes	No	No
Roma	-							
Sapienza	Museo delle Origini	Yes	Yes	Yes	No	No	No	No
Roma								
Sapienza	Museo di Anatomia Patologica	Yes	No	No	No	No	No	No
Roma								
Sapienza	Museo di Antropologia "Giuseppe Sergi"	Yes	Yes	Yes	Yes	Yes	No	No
Roma								
Sapienza	Museo di Fisica	Yes	No	No	No	No	No	No
Roma								
Sapienza	Museo di Merceologia	Yes	Yes	No	Yes	No	No	No
Roma								
Sapienza	Museo di Mineralogia	Yes	No	No	No	No	No	No
Roma								
Sapienza	Museo di Paleontologia	No						
Roma								
Sapienza	Museo di Storia della Medicina	Yes	Yes	No	Yes	Yes	No	No
Roma								
Sapienza	Museo Erbario - Museo di Botanica	Yes	Yes	No	No	Yes	No	No
Salento	CHIUSO - Museo dell'Ambiente	Yes	Yes	No	No	No	No	No

University	Museum Unit	Tour	Sch.	Adu.	Vid.	Lib.	Book	Cafè
Salento	Museo di Biologia Marina "Pietro Parenzan", Porto Cesareo	Yes	Yes	No	Yes	Yes	No	No
Salento	Museo di Ecologia degli Ecosistemi Mediterranei, Otranto	Yes	Yes	No	Yes	No	No	No
Salento	Museo Diffuso di Cavallino	Yes	Yes	Yes	No	No	No	No
Salento	Museo Papirologico	Yes	Yes	No	No	Yes	No	No
Salento	Museo Storico-Archeologico	Yes	Yes	No	Yes	Yes	Yes	No
Salento	Orto Botanico	Yes	Yes	No	No	Yes	No	No
Sassari	Collezione agronomica e museo all'aperto di storia dell'agricoltura	Yes	No	No	No	No	No	No
Sassari	collezione entomologica	Yes	No	No	No	No	No	No
Sassari	collezione zoologica	No						
Sassari	IN FASE DI ATTIVAZIONE - Museo scientifico	Yes	Yes	No	No	No	No	No
Sassari	Museo geologico mineralogico "Aurelio Serra"	Yes	Yes	No	No	No	No	No
Siena	Collezione di Fisica	Yes	Yes	Yes	No	No	No	No
Siena	Museo Anatomico	Yes	Yes	Yes	No	No	No	No
Siena	Museo Botanico: Orto Botanico e Herbarium	Yes	Yes	Yes	No	Yes	No	No
Torino	ASTUT - Archivio scientifico e tecnologico	Yes	No	No	Yes	No	No	No
Torino	CHIUSO - Museo di antropologia e etnografia	Yes	Yes	Yes	No	No	No	No
Torino	Collezioni di scienze naturali	Yes	Yes	No	No	Yes	Yes	No
Torino	Museo "Perroncito"	Yes	No	No	No	Yes	No	No
Torino	Museo del Dipartimento di Scienze Veterinarie	Yes	No	No	No	Yes	No	No

University	Museum Unit	Tour	Sch.	Adu.	Vid.	Lib.	Book	Cafè
Torino	Museo dell'agricoltura del Piemonte	No	No	No	No	Yes	No	No
Torino	Museo di anatomia umana "Luigi Rolando"	No						
Torino	Museo di antropologia criminale "C. Lombroso"	No						
Torino	Museo di odontoiatria	Yes	Yes	No	No	Yes	No	No
Trieste	Museo delle scienze sanitarie	No						
Trieste	Museo di Mineralogia e Petrografia	Yes	Yes	Yes	No	No	No	No
Trieste	Raccolta di opere d'arte	No						
Tuscia (Viterbo)	NON ESPOSTA - Collezione di anatomia comparata e zoologia	No	Yes	No	No	No	No	No
Tuscia (Viterbo)	Orto Botanico dell'Azienda Agraria Didattico-Sperimentale	Yes	Yes	No	Yes	Yes	No	No
Tuscia (Viterbo)	Xylarium	Yes	No	No	No	No	No	No
Urbino	Museo dei gessi	No						
Urbino	Museo di scienza e tecnologia	Yes	No	No	No	No	No	No

Appendix J – Museums and Collections. Targets

University	Museum Unit	Sch.	Uni. Stu.	Uni. Staff	Chil.	Fam.	Sen.	Dis.
Bari	CHIUSO - Laboratorio di Storia della Psicologia Applicata "A.		N		NT	N		N.T.
D .	Marzi"	No	No	No	No	No	No	No
Bari	Collezioni di informatica	No	No	No	No	No	No	No
Bari	Museo orto botanico	Yes	Yes	No	Yes	Yes	Yes	Yes
Bologna	Museo di Anatomia degli animali domestici	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Bologna	Museo di Anatomia patologica e teratologia veterinaria Alessandrini-Ercolani	Yes	Yes	Yes	No	No	No	No
Bologna	Museo di Fisica	Yes	Yes	No	Yes	Yes	Yes	Yes
Bologna	Museo di Palazzo Poggi	No	No	No	No	No	No	No
Bologna	Museo Geologico «Giovanni Capellini»	Yes	Yes	No	Yes	Yes	Yes	Yes
Bologna	Orto botanico	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Bologna	Raccolta di strumenti chirurgici veterinari	Yes	No	No	No	No	No	No
Cagliari	Collezione Archeologica "Evan Gorga"	No	No	No	No	No	No	No
Cagliari	Collezione degli Strumenti e Apparecchi di Chimica	No	No	No	Yes	Yes	No	No
Cagliari	Museo di Cere Anatomiche "Clemente Susini"	Yes	Yes	No	No	Yes	Yes	No
Calabria	Museo di paleontologia	Yes	Yes	Yes	Yes	Yes	Yes	Yes

University	Museum Unit	Sch.	Uni. Stu.	Uni. Staff	Chil.	Fam.	Sen.	Dis.
Calabria	Museo di Storia Naturale della Calabria ed Orto Botanico	Yes	Yes	No	Yes	No	No	No
Calabria	RiMuseum - Museo per l'Ambiente	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Camerino	Museo di scienze naturali	Yes	Yes	No	Yes	Yes	Yes	Yes
Camerino	Orto botanico "Carmela Cortini"	No	Yes	No	Yes	Yes	No	No
Catania	Museo della fabbrica	Yes	Yes	No	Yes	Yes	Yes	Yes
Catania	Orto botanico	Yes	Yes	No	Yes	Yes	Yes	No
Ferrara	Arredi storici della Premiata Farmacia Navarra e collezione strumenti	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Ferrara	Collezione instrumentaria delle scienze fisiche - CISIF	No	Yes	No	Yes	No	No	No
Ferrara	Museo Anatomico "Giovanni Tumiati"	No	No	No	No	No	No	No
Ferrara	Museo di Paleontologia e Preistoria 'P. Leonardi'	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Ferrara	Orto botanico	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Firenze	Museo di storia naturale	Yes	Yes	No	Yes	No	No	Yes
Ge, Si, Tr	Museo Nazionale dell'Antartide "Felice Ippolito"	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Genova	Centro universitario di servizi giardini botanici Hanbury	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Genova	Museo di chimica	Yes	Yes	Yes	Yes	No	No	No
Genova	Museo di etnomedicina Antonio Scarpa	Yes	Yes	Yes	No	No	No	No
Genova	Orto botanico	Yes	Yes	Yes	Yes	No	Yes	Yes

University	Museum Unit	Sch.	Uni. Stu.	Uni. Staff	Chil.	Fam.	Sen.	Dis.
Messina	Collezione Museologica Botanica	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Messina	Orto botanico "Pietro Castelli"	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Milano	Museo astronomico - Orto botanico di Brera	No	No	No	No	No	No	No
Milano	Museo delle collezioni mineralogiche, gemmologiche, petrografiche e giacimentologiche	No	No	No	Yes	No	No	No
Milano Politecnico	Archivio degli strumenti topografici	No	No	No	No	No	No	No
Milano Politecnico	Museo di corrosione	Yes	Yes	No	No	No	No	No
Modena- Reggio E.	CHIUSO - Musei anatomici	No	No	No	No	No	No	No
Modena- Reggio E.	Laboratorio delle Macchine Matematiche	Yes	Yes	No	No	No	No	Yes
Modena- Reggio E.	Museo di Paleontologia	Yes	Yes	No	Yes	Yes	No	No
Modena- Reggio E.	Museo di Zoologia ed Anatomia Comparata	Yes	Yes	No	Yes	Yes	Yes	Yes
Napoli Federico II	CMSNF - Museo di Antropologia	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Napoli	CMSNF - Museo di Fisica	Yes	Yes	Yes	Yes	Yes	Yes	Yes

University	Museum Unit	Sch.	Uni. Stu.	Uni. Staff	Chil.	Fam.	Sen.	Dis.
Federico II								
Napoli								
Federico II	CMSNF - Museo di Paleontologia	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Napoli								
Federico II	CMSNF - Museo Zoologico	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Napoli								
Federico II	CMSNF - Real Museo Mineralogico	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Napoli								
Federico II	MUSA - CHIUSO - Museo Botanico "Orazio Comes"	Yes	Yes	No	Yes	Yes	No	No
Napoli								
Federico II	MUSA - CHIUSO -Museo di Entomologia "Filippo Silvestri"	Yes	Yes	No	No	No	No	No
Napoli								
Federico II	MUSA - NON ESPOSTE - Collezioni strumentazioni scientifiche	Yes	Yes	No	Yes	Yes	No	No
Napoli								
Federico II	Museo di Anatomia Veterinaria	Yes	Yes	No	Yes	Yes	No	No
Napoli								
SUN	Museo di anatomia	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Padova	Museo Botanico	Yes	Yes	No	Yes	No	No	No
Padova	Museo degli Strumenti dell'Astronomia	Yes	Yes	No	Yes	No	No	No
Padova	Museo dell'Educazione	Yes	Yes	No	Yes	No	No	No

University	Museum Unit	Sch.	Uni. Stu.	Uni. Staff	Chil.	Fam.	Sen.	Dis.
Padova	Museo di Antropologia	Yes	Yes	No	Yes	No	No	No
Padova	Museo di Geologia e Paleontologia	Yes	Yes	No	Yes	No	No	No
Padova	Museo di Macchine "Enrico Bernardi"	Yes	Yes	No	No	No	No	No
Padova	Museo di Mineralogia	Yes	Yes	No	Yes	No	No	No
Padova	Museo di Scienze Archeologiche e d'Arte	Yes	Yes	No	Yes	No	No	No
Padova	Museo di Storia della Fisica	Yes	Yes	Yes	Yes	Yes	No	No
Padova	Museo di Zoologia	Yes	Yes	No	Yes	No	No	No
Palermo	CHIUSO - Osservatorio Astronomico e Museo della Specola	No	No	No	Yes	No	No	No
Palermo	Collezione di Anatomia	Yes	Yes	No	No	No	No	No
Palermo	Collezione di Fisiologia Umana	No	No	No	No	No	No	No
Palermo	Collezione di Ingegneria: Civile, Ambientale, Aerospaziale, dei Materiali (DICAM)	No	No	No	No	No	No	No
Palermo	Collezione di Ingegneria: Elettronica ed elettrotecnica	No	Yes	No	No	No	No	No
Palermo	Museo della Chimica	Yes	Yes	No	No	No	No	No
Palermo	Museo di Entomologia Agraria	No	No	No	No	No	No	No
Palermo	Museo di Mineralogia	No	Yes	No	Yes	Yes	No	No
Palermo	Museo Geologico "Gaetano Giorgio Gemmellaro"	Yes	Yes	No	Yes	Yes	No	No
Palermo	Museo Storico dei Motori e dei Meccanismi	Yes	Yes	No	No	No	No	No

University	Museum Unit	Sch.	Uni. Stu.	Uni. Staff	Chil.	Fam.	Sen.	Dis.
Palermo	Orto Botanico ed Herbarium Mediterraneum	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Parma	Collezione di strumenti scientifici "Macedonio Melloni"	No	No	No	No	No	No	No
Parma	Museo anatomico veterinario	Yes	Yes	No	No	No	No	No
Parma	Museo del Dipartimento di Anatomia Umana, Farmacologia e Scienze medico-forensi	Yes	Yes	No	No	No	No	No
Parma	Museo di Storia Naturale	Yes	Yes	No	Yes	Yes	No	Yes
Parma	Museo Paleontologico Parmense	No	No	No	No	No	No	No
Parma	Orto botanico	Yes	Yes	No	Yes	No	No	No
Pavia	CHIUSA AL PUBBLICO - Collezione Istologia ed Embriologia	Yes	Yes	Yes	No	No	No	No
Pavia	CHIUSA AL PUBBLICO - Collezione Matematica	No	No	No	No	No	No	No
Pavia	Collezione di Archeologia	Yes	Yes	No	Yes	No	Yes	No
Pavia	Collezione Musicologia	Yes	Yes	No	Yes	Yes	Yes	Yes
Pavia	Museo di Mineralogia	Yes	Yes	No	Yes	Yes	Yes	No
Pavia	Museo di Storia Naturale	No	Yes	No	Yes	No	Yes	Yes
Pavia	Museo per la Storia dell' Università	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Pavia	Orto Botanico	Yes	Yes	No	Yes	Yes	No	Yes
Perugia	Collezione del dipartimento di Matematica e informatica	No	Yes	No	Yes	Yes	Yes	Yes
Perugia	Erbario Cicioni-Bruschi	Yes	Yes	No	No	No	No	No

University	Museum Unit	Sch.	Uni. Stu.	Uni. Staff	Chil.	Fam.	Sen.	Dis.
Perugia	Laboratorio di storia dell'agricoltura di Casalina	No	No	No	No	No	No	No
Perugia	Museo di Anatomia Umana	No	No	No	No	No	No	No
Perugia	Orto botanico	Yes	Yes	No	Yes	No	No	No
Pisa	Antiquarium di archeologia classica	Yes	Yes	No	No	No	No	No
Pisa	Collezioni di egittologia	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Pisa	Collezioni di paletnologia	No	Yes	No	No	No	No	No
Pisa	Gipsoteca di arte antica	Yes	Yes	No	Yes	Yes	Yes	Yes
Pisa	Museo botanico	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Pisa	Museo degli strumenti per il calcolo	Yes	Yes	No	Yes	Yes	No	No
Pisa	Museo della grafica	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Pisa	Museo di anatomia e istologia patologica	Yes	Yes	No	No	No	No	No
Pisa	Museo di anatomia patologica	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Pisa	Museo di anatomia veterinaria	Yes	Yes	No	Yes	No	No	No
Pisa	Museo di storia naturale e del territorio di Calci	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Pisa	Orto botanico	Yes	Yes	No	Yes	No	No	No
Roma 3	Museo storico della didattica "Mauro Laeng"	Yes	Yes	Yes	Yes	No	No	Yes
Roma Sapienza	Museo delle Origini	Yes	Yes	No	Yes	Yes	Yes	Yes

University	Museum Unit	Sch.	Uni. Stu.	Uni. Staff	Chil.	Fam.	Sen.	Dis.
Roma								
Sapienza	Museo di Anatomia Patologica	Yes	Yes	No	No	No	No	No
Roma								
Sapienza	Museo di Antropologia "Giuseppe Sergi"	Yes	Yes	No	Yes	No	No	No
Roma								
Sapienza	Museo di Fisica	No	No	No	No	No	No	No
Roma								
Sapienza	Museo di Merceologia	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Roma								
Sapienza	Museo di Mineralogia	Yes	Yes	No	No	No	No	No
Roma								
Sapienza	Museo di Paleontologia	No	No	No	No	No	No	No
Roma								
Sapienza	Museo di Storia della Medicina	Yes	Yes	Yes	Yes	No	No	No
Roma								
Sapienza	Museo Erbario - Museo di Botanica	Yes	Yes	No	Yes	Yes	Yes	Yes
Salento	CHIUSO - Museo dell'Ambiente	Yes	Yes	No	No	No	No	No
Salento	Museo di Biologia Marina "Pietro Parenzan", Porto Cesareo	Yes	Yes	No	Yes	Yes	No	No
Salento	Museo di Ecologia degli Ecosistemi Mediterranei, Otranto	No	No	No	Yes	Yes	No	No
Salento	Museo Diffuso di Cavallino	Yes	Yes	No	Yes	Yes	No	No

University	Museum Unit	Sch.	Uni. Stu.	Uni. Staff	Chil.	Fam.	Sen.	Dis.
Salento	Museo Papirologico	Yes	Yes	No	Yes	No	No	No
Salento	Museo Storico-Archeologico	Yes	Yes	No	Yes	Yes	Yes	No
Salento	Orto Botanico	No	Yes	No	Yes	No	No	No
Sassari	Collezione agronomica e museo all'aperto di storia dell'agricoltura	Yes	Yes	No	No	No	No	No
Sassari	collezione entomologica	Yes	Yes	No	No	No	No	No
Sassari	collezione zoologica	No	No	No	No	No	No	No
Sassari	IN FASE DI ATTIVAZIONE - Museo scientifico	No	No	No	No	No	No	No
Sassari	Museo geologico mineralogico "Aurelio Serra"	Yes	Yes	No	Yes	No	No	No
Siena	Collezione di Fisica	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Siena	Museo Anatomico	Yes	Yes	Yes	No	No	No	No
Siena	Museo Botanico: Orto Botanico e Herbarium	Yes	Yes	Yes	No	No	No	No
Torino	ASTUT - Archivio scientifico e tecnologico	Yes	No	No	Yes	No	Yes	No
Torino	CHIUSO - Museo di antropologia e etnografia	Yes	Yes	Yes	Yes	No	No	Yes
Torino	Collezioni di scienze naturali	No	No	No	Yes	Yes	No	No
Torino	Museo "Perroncito"	Yes	Yes	Yes	Yes	No	No	No
Torino	Museo del Dipartimento di Scienze Veterinarie	Yes	Yes	Yes	Yes	No	No	No
Torino	Museo dell'agricoltura del Piemonte	Yes	Yes	Yes	No	No	No	No

University	Museum Unit	Sch.	Uni. Stu.	Uni. Staff	Chil.	Fam.	Sen.	Dis.
Torino	Museo di anatomia umana "Luigi Rolando"	No	No	No	No	No	No	No
Torino	Museo di antropologia criminale "C. Lombroso"	No	No	No	No	No	No	No
Torino	Museo di odontoiatria	Yes	Yes	Yes	No	No	No	No
Trieste	Museo delle scienze sanitarie	No	No	No	No	No	No	No
Trieste	Museo di Mineralogia e Petrografia	No	Yes	No	Yes	Yes	Yes	Yes
Trieste	Raccolta di opere d'arte	No	No	No	No	No	No	No
Tuscia (Viterbo)	NON ESPOSTA - Collezione di anatomia comparata e zoologia	No	Yes	No	Yes	No	No	No
Tuscia (Viterbo)	Orto Botanico dell'Azienda Agraria Didattico-Sperimentale	Yes	Yes	No	Yes	Yes	Yes	Yes
Tuscia								
(Viterbo)	Xylarium	Yes	Yes	No	Yes	Yes	Yes	Yes
Urbino	Museo dei gessi	Yes	Yes	No	No	No	No	No
Urbino	Museo di scienza e tecnologia	Yes	No	No	No	No	No	No

Appendix K – Museums and Collections. Mission, Net, Community Relationship

University	Museum Unit	Miss.	Net	Loc. Com.
Bari	CHIUSO - Laboratorio di Storia della Psicologia Applicata "A. Marzi"	No	No	No
Bari	Museo orto botanico	Yes	No	No
Bologna	Museo di Anatomia degli animali domestici	No	No	Yes
Bologna	Museo di Anatomia patologica e teratologia veterinaria Alessandrini-Ercolani	Yes	No	No
Bologna	Museo di Fisica	Yes	No	Yes
Bologna	Museo di Palazzo Poggi	Yes	Yes	Yes
Bologna	Museo Geologico «Giovanni Capellini»	Yes	Yes	Yes
Bologna	Orto botanico	No	Yes	Yes
Cagliari	Museo di Cere Anatomiche "Clemente Susini"	No	No	No
Calabria	Museo di paleontologia	Yes	Yes	Yes
Calabria	Museo di Storia Naturale della Calabria ed Orto Botanico	No	Yes	No
Calabria	RiMuseum - Museo per l'Ambiente	Yes	Yes	Yes
Camerino	Museo di scienze naturali	Yes	No	Yes
Camerino	Orto botanico "Carmela Cortini"	Yes	Yes	Yes
Catania	Museo della fabbrica	Yes	Yes	Yes
Catania	Orto botanico	Yes	Yes	Yes
Ferrara	Museo Anatomico "Giovanni Tumiati"	No	No	Yes

University	Museum Unit		Net	Loc.
				Com.
Ferrara	Museo di Paleontologia e Preistoria 'P. Leonardi'	No	No	No
Ferrara	Orto botanico	Yes	Yes	Yes
Firenze	Museo di storia naturale	Yes	No	Yes
Ge, Si, Tr	Museo Nazionale dell'Antartide "Felice Ippolito"	Yes	Yes	No
Genova	Centro universitario di servizi giardini botanici Hanbury	Yes	Yes	Yes
Genova	Museo di chimica	Yes	No	No
Genova	Museo di etnomedicina Antonio Scarpa	Yes	No	No
Genova	Orto botanico	Yes	No	Yes
Messina	Orto botanico "Pietro Castelli"	Yes	No	Yes
Milano	Museo astronomico - Orto botanico di Brera	Yes	Yes	No
Milano	Museo delle collezioni mineralogiche, gemmologiche, petrografiche e giacimentologiche	Yes	No	Yes
Milano Politecnico	Museo di corrosione	No	No	No
Modena-				
Reggio E.	CHIUSO - Musei anatomici	No	No	No
Modena-	Laboratorio delle Macchine Matematiche	No	Yes	Yes
Reggio E. Modena-	Laboratorio delle Maccilille Materiaticile	INU	res	168
Reggio E.	Museo di Paleontologia	No	Yes	Yes

University	Museum Unit		Net	Loc.
				Com.
Modena-				
Reggio E.	Museo di Zoologia ed Anatomia Comparata	No	Yes	Yes
Napoli				
Federico II	CMSNF - Museo di Antropologia	Yes	Yes	Yes
Napoli				
Federico II	CMSNF - Museo di Fisica	Yes	Yes	Yes
Napoli				
Federico II	CMSNF - Museo di Paleontologia	Yes	Yes	Yes
Napoli				
Federico II	CMSNF - Museo Zoologico	Yes	Yes	Yes
Napoli				
Federico II	CMSNF - Real Museo Mineralogico	Yes	Yes	Yes
Napoli				
Federico II	MUSA - CHIUSO - Museo Botanico "Orazio Comes"	No	Yes	Yes
Napoli				
Federico II	MUSA - CHIUSO -Museo di Entomologia "Filippo Silvestri"	Yes	No	No
Napoli				
Federico II	Museo di Anatomia Veterinaria	Yes	No	Yes
Napoli				
SUN	Museo di anatomia	Yes	No	No
Padova	Museo Botanico	No	No	No
Padova	Museo degli Strumenti dell'Astronomia	No	No	No

University	Museum Unit	Miss.	Net	Loc. Com.
Padova	Museo dell'Educazione	No	No	No
Padova	Museo di Antropologia	No	No	No
Padova	Museo di Geologia e Paleontologia	No	No	No
Padova	Museo di Macchine "Enrico Bernardi"	No	No	No
Padova	Museo di Mineralogia	No	No	No
Padova	Museo di Scienze Archeologiche e d'Arte	No	No	No
Padova	Museo di Storia della Fisica	No	No	Yes
Padova	Museo di Zoologia	No	No	No
Palermo	CHIUSO - Osservatorio Astronomico e Museo della Specola	Yes	No	No
Palermo	Museo della Chimica	Yes	No	Yes
Palermo	Museo di Entomologia Agraria	No	No	No
Palermo	Museo di Mineralogia	Yes	Yes	Yes
Palermo	Museo Geologico "Gaetano Giorgio Gemmellaro"	Yes	Yes	Yes
Palermo	Museo Storico dei Motori e dei Meccanismi	Yes	No	Yes
Palermo	Orto Botanico ed Herbarium Mediterraneum	Yes	No	Yes
Parma	Museo anatomico veterinario	No	No	No
Parma	Museo del Dipartimento di Anatomia Umana, Farmacologia e Scienze medico- forensi	No	Yes	No
Parma	Museo di Storia Naturale	No	Yes	No

University	Museum Unit	Miss.	Net	Loc.
				Com.
Parma	Museo Paleontologico Parmense	No	Yes	No
Parma	Orto botanico	Yes	No	Yes
Pavia	Museo di Mineralogia	No	Yes	Yes
Pavia	Museo di Storia Naturale	No	Yes	Yes
Pavia	Museo per la Storia dell' Università	No	Yes	Yes
Pavia	Orto Botanico	No	Yes	Yes
Perugia	Laboratorio di storia dell'agricoltura di Casalina	No	No	No
Perugia	Museo di Anatomia Umana	No	No	No
Perugia	Orto botanico	Yes	No	No
Pisa	Museo botanico	Yes	No	Yes
Pisa	Museo degli strumenti per il calcolo	Yes	No	No
Pisa	Museo della grafica	Yes	No	Yes
Pisa	Museo di anatomia e istologia patologica	No	No	No
Pisa	Museo di anatomia patologica	No	No	No
Pisa	Museo di anatomia veterinaria	Yes	Yes	Yes
Pisa	Museo di storia naturale e del territorio di Calci	Yes	Yes	Yes
Pisa	Orto botanico	No	No	Yes
Roma 3	Museo storico della didattica "Mauro Laeng"	Yes	No	No
Roma	Museo delle Origini	Yes	No	Yes

University	Museum Unit		Net	Loc.
				Com.
Sapienza				
Roma				
Sapienza	Museo di Anatomia Patologica	No	No	No
Roma				
Sapienza	Museo di Antropologia "Giuseppe Sergi"	Yes	No	Yes
Roma				
Sapienza	Museo di Fisica	No	No	No
Roma				
Sapienza	Museo di Merceologia	Yes	No	Yes
Roma				
Sapienza	Museo di Mineralogia	Yes	No	No
Roma				
Sapienza	Museo di Paleontologia	Yes	Yes	Yes
Roma				
Sapienza	Museo di Storia della Medicina	Yes	No	Yes
Roma				3.4
Sapienza	Museo Erbario - Museo di Botanica	No	No	Yes
Salento	CHIUSO - Museo dell'Ambiente	Yes	No	No
Salento	Museo di Biologia Marina "Pietro Parenzan", Porto Cesareo	No	No	Yes
Salento	Museo di Ecologia degli Ecosistemi Mediterranei, Otranto	No	Yes	Yes
Salento	Museo Diffuso di Cavallino	Yes	Yes	Yes

University	Museum Unit		Net	Loc.
				Com.
Salento	Museo Papirologico	Yes	No	No
Salento	Museo Storico-Archeologico	Yes	No	Yes
Salento	Orto Botanico	Yes	No	Yes
Sassari	Collezione agronomica e museo all'aperto di storia dell'agricoltura	No	No	No
Sassari	IN FASE DI ATTIVAZIONE - Museo scientifico	Yes	Yes	No
Sassari	Museo geologico mineralogico "Aurelio Serra"	No	No	No
Siena	Museo Anatomico	Yes	Yes	Yes
Siena	Museo Botanico: Orto Botanico e Herbarium	Yes	Yes	Yes
Torino	ASTUT - Archivio scientifico e tecnologico	Yes	No	Yes
Torino	CHIUSO - Museo di antropologia e etnografia	Yes	No	Yes
Torino	Museo "Perroncito"	No	No	Yes
Torino	Museo del Dipartimento di Scienze Veterinarie	No	No	Yes
Torino	Museo dell'agricoltura del Piemonte	Yes	No	No
Torino	Museo di anatomia umana "Luigi Rolando"	No	Yes	Yes
Torino	Museo di antropologia criminale "C. Lombroso"	No	Yes	Yes
Torino	Museo di odontoiatria	Yes	No	No
Trieste	Museo delle scienze sanitarie	Yes	No	No
Trieste	Museo di Mineralogia e Petrografia	No	Yes	Yes
Tuscia	Orto Botanico dell'Azienda Agraria Didattico-Sperimentale	Yes	Yes	Yes

University	Museum Unit	Miss.	Net	Loc. Com.
(Viterbo)				
Urbino	Museo dei gessi	Yes	Yes	Yes
Urbino	Museo di scienza e tecnologia	No	Yes	Yes

Appendix L – Museum Units. Space, Items, Access, Visitors

University	Museum Unit	Auton. Space	Mq	Items	Opening	Access	Visit.
Bari	CHIUSO - Laboratorio di Storia della Psicologia Applicata "A. Marzi"	Yes		400	Closed	Closed	
Bari	Collezioni di chimica	No		80	Appointment	Free Adm.	
Bari	Collezioni di fisica	Yes		184	Regular	Free Acc.	
Bari	Collezioni di informatica	No		100	Regular	Free Acc.	
Bari	Museo del dipartimento di biologia	Yes	170		Regular		
Bari	Museo di scienze della terra	Yes	1000		Regular	Free Adm.	
Bari	Museo orto botanico	Yes	1400	40800	Regular	Free Acc.	2000
Bari Politecnico	Museo della fotografia	Yes					
Bologna	CHIUSO - Museo del IX centenario	Yes	300		Closed	Closed	
Bologna	CHIUSO - Museo della Specola	Yes			Closed	Closed	
Bologna	Erbario e museo botanico	Yes			Regular		
Bologna	Museo delle Cere anatomiche "Luigi Cattanei"	Yes			Regular	Free Adm.	
Bologna	Museo di Anatomia comparata	Yes			Regular		
Bologna	Museo di Anatomia degli animali domestici	No			Appointment	Free Adm.	300

University	Museum Unit	Auton. Space	Mq	Items	Opening	Access	Visit.
Bologna	Museo di Anatomia patologica e teratologia veterinaria Alessandrini-Ercolani	Yes	240	2000	Appointment	Free Adm.	250
Bologna	Museo di Antropologia	Yes			Regular		
Bologna	Museo di Fisica	Yes	300		Appointment	Free Adm.	1000
Bologna	Museo di Mineralogia	Yes		10000	Regular		
Bologna	Museo di Palazzo Poggi	Yes	1500	3000	Regular	Ticket	30000
Bologna	Museo di Zoologia	Yes			Regular		
Bologna	Museo Geologico «Giovanni Capellini»	Yes	2000	1000000	Regular	Free Adm.	20000
Bologna	Orto botanico	Yes	20000	3000	Regular	Free Acc.	10000
Bologna	Raccolta di strumenti chirurgici veterinari	No		200	Appointment	Free Adm.	10
Cagliari	Collezione Archeologica "Evan Gorga"	No		147	Regular	Free Acc.	
Cagliari	Collezione degli Strumenti e Apparecchi di Chimica	Yes	500	500	Regular	Free Acc.	200
Cagliari	Collezione Luigi Piloni	Yes			Regular	Free Adm.	
Cagliari	Museo di Cere Anatomiche "Clemente Susini"	Yes	240	70	Regular	Ticket	10000
Cagliari	Museo di Fisica	No			Appointment		
Cagliari	Museo di Mineralogia "Leonardo de Prunner"						
Cagliari	Museo di Zoologia	Yes			Appointment	Free Adm.	

University	Museum Unit	Auton. Space	Mq	Items	Opening	Access	Visit.
Cagliari	Museo etno-botanico	Yes					
Cagliari	Museo Herbarium						
Cagliari	Museo sardo di Antropologia ed Etnografia						
Cagliari	Museo sardo di Geologia e mineralogia e Paleontologia "Domenico Lovisato"						
Cagliari	Orto botanico	Yes			Regular	Ticket	
Calabria	Museo di paleontologia	Yes	400	120	Regular	Free Acc.	4000
Calabria	Museo di Storia Naturale della Calabria ed Orto Botanico	Yes	8000	1000	Regular	Free Acc.	1000
Calabria	RiMuseum - Museo per l'Ambiente	Yes	1200		Regular	Free Acc.	6000
Camerino	Museo di scienze naturali	Yes	1000		Regular	Ticket	
Camerino	Orto botanico "Carmela Cortini"	Yes	1000	1026	Regular	Free Acc.	800
Catania	Archivio ceramografico						
Catania	CHIUSO - Museo di scienze della terra	Yes			Closed	Closed	
Catania	Museo della fabbrica	Yes	2500	10	Regular	Ticket	15000
Catania	Museo della rappresentazione - Casa della città	Yes					
Catania	Museo dello studio	Yes			Regular	Free Adm.	
Catania	Museo di archeologia	Yes					

University	Museum Unit	Auton. Space	Mq	Items	Opening	Access	Visit.
Catania	Museo di zoologia e casa delle farfalle	Yes	300		Regular	Free Adm.	
Catania	Orto botanico	Yes	16000	353000	Regular	Ticket	30000
Chieti- Pescara	Museo Universitario	Yes			Regular	Ticket	
Ferrara	Arredi storici della Premiata Farmacia Navarra e collezione strumenti	Yes	65	563	Regular	Free Adm.	
Ferrara	Collezione instrumentaria delle scienze fisiche - CISIF	Yes	100	300	Appointment	Free Adm.	500
Ferrara	Museo Anatomico "Giovanni Tumiati"	No		1900	Appointment	Free Adm.	60
Ferrara	Museo di Paleontologia e Preistoria 'P. Leonardi'	Yes	440	1000	Regular	Free Acc.	900
Ferrara	NON ESPOSTA - Collezione di chimica	No		82	Closed	Closed	
Ferrara	Orto botanico	Yes	4500	1860	Regular	Free Acc.	5000
Firenze	Museo di storia naturale	Yes			Regular	Ticket	
Ge, Si, Tr	Museo Nazionale dell'Antartide "Felice Ippolito"	Yes	600		Regular	Ticket	2500
Genova	Centro universitario di servizi giardini botanici Hanbury	Yes	180000	20000	Regular	Ticket	50000
Genova	Collezione di reperti anatomici	No				Free Adm.	
Genova	Museo di Anatomia Comparata	Yes			Appointment	Free Adm.	

University	Museum Unit	Auton. Space	Mq	Items	Opening	Access	Visit.
Genova	Museo di chimica	Yes	250	960	Appointment	Free Adm.	1000
Genova	Museo di etnomedicina Antonio Scarpa	Yes		1500	Regular	Free Acc.	1000
Genova	Museo di fisica	Yes		600	Regular	Free Adm.	
Genova	Museo di geologia e paleontologia			45700			
Genova	NON ESPOSTA - Collezione di monete antiche	No		74	Closed	Closed	
Genova	NON ESPOSTA - Collezione di vasi antichi	No		32	Closed	Closed	
Genova	Orto botanico	Yes	10200	100000	Regular	Free Acc.	4000
L'Aquila	Giardino botanico alpino	Yes			Regular		
Messina	Collezione Museologica Botanica	Yes	600	1300	Regular	Free Acc.	2000
Messina	Orto botanico "Pietro Castelli"	Yes	8000	10000	Regular	Free Acc.	7000
Milano	Erbario museo botanico del dipartimento di biologia	Yes					
Milano	Museo astronomico - Orto botanico di Brera	Yes	8000		Regular	Free Acc.	10000
Milano	Museo delle collezioni mineralogiche, gemmologiche, petrografiche e giacimentologiche	No		3000	Appointment	Free Adm.	300
Milano	Museo didattico di zoologia	Yes			Regular	Free Adm.	
Milano	Orto botanico di Cascina rosa	Yes			Regular	Free Acc.	
Milano	Orto botanico G.E. Ghirardi	Yes			Appointment		

University	Museum Unit	Auton. Space	Mq	Items	Opening	Access	Visit.
Milano Politecnico	Archivio degli strumenti topografici	No		150	Appointment	Free Adm.	0
Milano Politecnico	IN FASE DI COSTITUZIONE - Museo del dipratimento di Fisica	No			Closed	Closed	
Milano Politecnico	Museo di corrosione	Yes					
Modena- Reggio E.	CHIUSO - Musei anatomici	Yes			Closed	Closed	
Modena- Reggio E.	CHIUSO - Museo Astronomico e Geofisico	Yes			Closed	Closed	
Modena- Reggio E.	Gemma 1786. Museo Mineralogico e Geologico Estense	Yes		1500	Regular	Free Adm.	
Modena- Reggio E.	Laboratorio delle Macchine Matematiche	Yes	300	80	Appointment	Free Adm.	600
Modena- Reggio E.	Museo di Paleontologia	Yes		25	Appointment	Free Adm.	
Modena- Reggio E.	Museo di Zoologia ed Anatomia Comparata	Yes	750	15000	Appointment	Free Adm.	9000
Modena- Reggio E.	Orto Botanico	Yes			Regular	Free Adm.	
Molise	Collezioni entomologiche						
Molise	Museo del territorio						

University	Museum Unit	Auton. Space	Mq	Items	Opening	Access	Visit.
Molise	Museo di ingegneria agroalimentare	-					
Molise	Museo di patologia vegetale						
Molise	Museo di zootecnia						
Molise	Museo erbario del Molise	Yes		10000	Appointment	Free Adm.	
Napoli Federico II	CMSNF - Museo di Antropologia	Yes	4000	150000	Regular	Ticket	35000
Napoli Federico II	CMSNF - Museo di Fisica	Yes	4000	150000	Regular	Ticket	35000
Napoli Federico II	CMSNF - Museo di Paleontologia	Yes	4000	150000	Regular	Ticket	35000
Napoli Federico II	CMSNF - Museo Zoologico	Yes	4000	150000	Regular	Ticket	35000
Napoli Federico II	CMSNF - Real Museo Mineralogico	Yes	800	25000	Regular	Ticket	35000
Napoli Federico II	MUSA - CHIUSO - Museo Botanico "Orazio Comes"	Yes	100	300	Closed	Closed	
Napoli Federico II	MUSA - CHIUSO - Museo Di meccanica agraria "Carlo Santini"	No			Closed	Closed	
Napoli Federico II	MUSA - CHIUSO - Museo di Mineralogia "Antonio Parascandolo"	No			Closed	Closed	
Napoli	MUSA - CHIUSO -Museo di Entomologia	Yes	400		Closed	Closed	0

University	Museum Unit	Auton. Space	Mq	Items	Opening	Access	Visit.
Federico II	"Filippo Silvestri"						
Napoli Federico II	MUSA - Museo Anatomo - Zootecnico "Tito Manlio Bettini"	Yes					
Napoli Federico II	MUSA - NON ESPOSTE - Collezioni strumentazioni scientifiche	Yes	50	100	Closed	Closed	
Napoli Federico II	MUSA - Orto Botanico di Portici	Yes			Regular	Free Acc.	
Napoli Federico II	Museo di Anatomia Veterinaria	Yes	300	1000	Appointment	Free Acc.	200
Napoli Parthenope	Museo navale						
Napoli SUN	Museo di anatomia	Yes	500	3000	Regular	Free Adm.	1000
Napoli SUN	Museo di farmacologia						
Napoli SUN	Museo di odontoiatria						
Padova	Museo Botanico	Yes		500000	Appointment	Free Adm.	
Padova	Museo degli Strumenti dell'Astronomia	Yes			Appointment	Free Adm.	
Padova	Museo dell'Educazione	Yes			Appointment	Free Adm.	
Padova	Museo di Antropologia	Yes		20000	Appointment	Free Adm.	
Padova	Museo di Geologia e Paleontologia	Yes			Appointment		
Padova	Museo di Macchine "Enrico Bernardi"	Yes			Appointment		

University	Museum Unit	Auton. Space	Mq	Items	Opening	Access	Visit.
Padova	Museo di Mineralogia	Yes		3000	Appointment	Free Adm.	
Padova	Museo di Scienze Archeologiche e d'Arte	Yes			Appointment	Free Adm.	
Padova	Museo di Storia della Fisica	Yes	300	2000	Appointment	Free Adm.	3000
Padova	Museo di Zoologia	Yes			Appointment	Free Adm.	
Palermo	Archivio Ducrot e Dotazione Basile	Yes			Regular	Free Adm.	
Palermo	Cappella dei Falegnami	Yes			Regular	Free Adm.	
Palermo	Carceri dei Penitenziati	Yes			Regular	Free Adm.	
Palermo	Chiesa di S. Antonio Abate	Yes			Regular	Free Adm.	
Palermo	CHIUSO - Osservatorio Astronomico e Museo della Specola	Yes	120	80	Closed	Closed	10000
Palermo	Collezione di Anatomia	No		500	Regular	Free Acc.	100
Palermo	Collezione di Fisiologia Umana	No		40	Appointment	Free Adm.	300
Palermo	Collezione di Ingegneria: Civile, Ambientale, Aerospaziale, dei Materiali (DICAM)			1000	Appointment	Free Adm.	
Palermo	Collezione di Ingegneria: Elettronica ed elettrotecnica	No		100	Appointment	Free Adm.	
Palermo	Collezione di Ingegneria: Trasporti				Appointment	Free Adm.	
Palermo	Convento di S. Antonino	Yes					
Palermo	Cripta delle Repentite	Yes			Regular	Free Adm.	

University	Museum Unit	Auton. Space	Mq	Items	Opening	Access	Visit.
Palermo	Fossa della Garofala	Yes			Regular	Free Adm.	
Palermo	Museo della Chimica	Yes	80	100	Appointment	Free Adm.	500
Palermo	Museo della Radiologia "Pietro Cignolini"	Yes			Regular	Free Adm.	
Palermo	Museo di Entomologia Agraria	Yes			Appointment	Free Adm.	
Palermo	Museo di Mineralogia	No		650	Regular	Ticket	700
Palermo	Museo Geologico "Gaetano Giorgio Gemmellaro"	Yes	2500	5000	Regular	Ticket	15000
Palermo	Museo Storico dei Motori e dei Meccanismi	Yes	450	600	Appointment	Free Adm.	2000
Palermo	Museo Zoologico "Pietro Doderlein"	Yes					
Palermo	Orto Botanico ed Herbarium Mediterraneum	Yes	100000	412000	Regular	Ticket	60000
Palermo	Palazzo Chiaromonte Steri	Yes			Regular	Free Adm.	
Parma	Centro studi e archivio della comunicazione (CSAC)	Yes			Regular	Free Adm.	
Parma	Collezione di strumenti scientifici "Macedonio Melloni"	Yes		110	Regular	Free Acc.	600
Parma	Museo anatomico veterinario	Yes	55	566	Regular	Free Adm.	
Parma	Museo del Dipartimento di Anatomia Umana, Farmacologia e Scienze medico- forensi	Yes	80	550	Appointment	Free Adm.	70

University	Museum Unit	Auton. Space	Mq	Items	Opening	Access	Visit.
Parma	Museo di mineralogia			1000	Regular	Free Adm.	
Parma	Museo di Storia Naturale	Yes	2150	13000	Regular	Free Acc.	
Parma	Museo Paleontologico Parmense	Yes	70	100	Regular	Free Acc.	150
Parma	Orto botanico	Yes	11000		Regular	Free Adm.	
Pavia	Aula Magna	Yes				Free Adm.	
Pavia	Aula Scarpa	Yes				Free Adm.	
Pavia	Aula Volta	Yes				Free Adm.	
Pavia	CHIUSA AL PUBBLICO - Collezione Fisiologia			300	Closed	Closed	
Pavia	CHIUSA AL PUBBLICO - Collezione Istologia ed Embriologia	No		10000	Closed	Closed	50
Pavia	CHIUSA AL PUBBLICO - Collezione Matematica	No		170	Closed	Closed	10
Pavia	CHIUSO - Collezione Patologia Generale	Yes		300	Closed	Closed	
Pavia	CHIUSO - Museo di Anatomia	Yes		2000	Closed	Closed	
Pavia	CHIUSO - Museo di Chimica				Closed	Closed	
Pavia	CHIUSO - Museo di Fisica			800	Closed	Closed	
Pavia	Collezione di Archeologia	Yes	200	8500	Appointment	Ticket	700
Pavia	Collezione Musicologia	Yes		80	Appointment	Free Adm.	100

University	Museum Unit	Auton. Space	Mq	Items	Opening	Access	Visit.
Pavia	Cortile di Volta	Yes				Free Adm.	
Pavia	Il palazzo dell'Università	Yes				Free Adm.	
Pavia	Museo della Tecnica Elettrica	Yes	5000		Regular	Free Adm.	
Pavia	Museo di Mineralogia	Yes	450	1000	Regular	Free Acc.	300
Pavia	Museo di Storia Naturale	Yes	2000	5000	Appointment	Free Adm.	1500
Pavia	Museo per la Storia dell' Università	Yes	400	6000	Regular	Free Adm.	2500
Pavia	Orto Botanico	Yes	20000	26300	Regular	Free Acc.	10500
Perugia	Collezione del dipartimento di Matematica e informatica	No		130	Appointment	Free Adm.	3000
Perugia	Erbario Cicioni-Bruschi	Yes	20	15000	Regular	Free Acc.	20
Perugia	Galleria di Storia Naturale dell'Università di Perugia	Yes			Regular		
Perugia	Gipsoteca	Yes	280	80	Appointment	Free Adm.	
Perugia	Laboratorio di storia dell'agricoltura di Casalina	Yes	1000	200	Regular	Ticket	1000
Perugia	Museo di Anatomia Umana	Yes			Appointment	Free Adm.	30
Perugia	Museo di Fisica	No					
Perugia	Orto botanico	Yes	26000	900	Regular	Free Acc.	
Pisa	Antiquarium di archeologia classica	No		1000	Appointment	Free Adm.	

University	Museum Unit	Auton. Space	Mq	Items	Opening	Access	Visit.
Pisa	Collezioni di egittologia	Yes	140	500	Appointment	Free Adm.	500
Pisa	Collezioni di paletnologia	Yes	40		Regular	Free Adm.	
Pisa	Gipsoteca di arte antica	Yes	400	100	Regular	Free Adm.	
Pisa	Museo botanico	Yes	350	250	Regular	Ticket	
Pisa	Museo degli strumenti per il calcolo	Yes	1000		Regular	Free Acc.	3000
Pisa	Museo della grafica	Yes			Regular	Ticket	10000
Pisa	Museo di anatomia e istologia patologica	Yes	100	1500	Appointment	Free Adm.	300
Pisa	Museo di anatomia patologica	Yes	300	3500	Appointment	Free Adm.	300
Pisa	Museo di anatomia veterinaria	No	400	2000	Appointment	Free Adm.	1500
Pisa	Museo di storia naturale e del territorio di Calci	Yes	4300	10000	Regular	Ticket	28831
Pisa	Orto botanico	Yes	3000		Regular	Ticket	
Roma 3	Museo storico della didattica "Mauro Laeng"	Yes	100	50	Regular	Free Adm.	
Roma Sapienza	Fort Apollonia Museum of Nzema Culture and History	Yes					
Roma Sapienza	Museo Arte e giacimenti Minerari	Yes		150			
Roma Sapienza	Museo del Vicino Oriente	Yes		1500	Appointment		

University	Museum Unit	Auton. Space	Mq	Items	Opening	Access	Visit.
Roma Sapienza	Museo dell'Arte Classica	Yes		1200	Regular		
Roma Sapienza	Museo delle Antichità Etrusco Italiche	Yes	570		Appointment		
Roma Sapienza	Museo delle Origini	Yes	400	1500	Regular	Free Acc.	1500
Roma Sapienza	Museo di Anatomia Comparata	Yes			Regular	Free Acc.	
Roma Sapienza	Museo di Anatomia Patologica	Yes	100		Appointment	Free Adm.	
Roma Sapienza	Museo di Antropologia "Giuseppe Sergi"	Yes	500	100	Regular	Free Acc.	1000
Roma Sapienza	Museo di Chimica "Primo Levi"	Yes			Regular	Free Adm.	
Roma Sapienza	Museo di Fisica	Yes	200		Regular	Free Adm.	300
Roma Sapienza	Museo di Geologia	Yes			Regular	Free Acc.	
Roma Sapienza	Museo di Idraulica	Yes			Appointment	Free Acc.	
Roma Sapienza	Museo di Merceologia	Yes	300	6000	Regular	Free Acc.	

University	Museum Unit	Auton. Space	Mq	Items	Opening	Access	Visit.
Roma Sapienza	Museo di Mineralogia	Yes	1200	30000	Regular	Free Acc.	
Roma Sapienza	Museo di Paleontologia	Yes	900	1000	Regular	Free Acc.	500
Roma Sapienza	Museo di Storia della Medicina	Yes	500	6000	Regular	Free Acc.	5000
Roma Sapienza	Museo di Zoologia	Yes			Regular	Free Acc.	
Roma Sapienza	Museo Erbario - Museo di Botanica	Yes	200	1000000	Regular	Free Adm.	600
Roma Sapienza	Museo Laboratorio Arte Contemporanea	Yes			Regular	Free Adm.	
Roma Sapienza	Orto Botanico	Yes			Regular	Ticket	
Roma Tor Vergata	Museo dell'Immagine Fotografica e delle Arti Visuali (MIFAV)	Yes					
Roma Tor Vergata	Orto botanico	Yes					
Salento	CHIUSO - Museo dell'Ambiente	Yes	1000	500	Closed	Closed	1000
Salento	Museo di Biologia Marina "Pietro Parenzan", Porto Cesareo	Yes	300	900	Regular	Free Adm.	12000
Salento	Museo di Ecologia degli Ecosistemi	Yes	200		Appointment	Free Adm.	1000

University	Museum Unit	Auton. Space	Mq	Items	Opening	Access	Visit.
	Mediterranei, Otranto						
Salento	Museo Diffuso di Cavallino	Yes			Regular	Free Acc.	7000
Salento	Museo Papirologico	Yes	180	100	Regular	Free Acc.	2000
Salento	Museo Storico-Archeologico	Yes	500	300	Regular	Free Adm.	3000
Salento	Orto Botanico	Yes	14800	10000	Regular	Free Adm.	3500
Sassari	Collezione agronomica e museo all'aperto di storia dell'agricoltura	Yes	1600	150	Appointment	Free Adm.	
Sassari	Collezione anatomica	Yes		250	Appointment	Free Adm.	
Sassari	Collezione di botanica farmaceutica	Yes			Appointment	Free Adm.	
Sassari	Collezione di fisica	Yes		130	Appointment	Free Adm.	
Sassari	collezione entomologica	Yes	82	60000	Appointment	Free Adm.	50
Sassari	collezione zoologica	No		1000	Regular	Free Acc.	
Sassari	IN FASE DI ATTIVAZIONE - Museo scientifico	Yes		3000	Appointment	Free Adm.	
Sassari	Museo geologico mineralogico "Aurelio Serra"	No		600	Regular	Free Acc.	
Siena	Archivio e Percorso Storico d'Ateneo	Yes			Regular	Free Adm.	
Siena	Collezione di Fisica	Yes	100	150	Regular	Free Adm.	500
Siena	Collezioni di Preistoria, Archeologia Classica e Archeologia Medievale				Appointment	Free Adm.	

University	Museum Unit	Auton. Space	Mq	Items	Opening	Access	Visit.
Siena	Museo Anatomico	Yes	500	2100	Appointment	Free Adm.	600
Siena	Museo Botanico: Orto Botanico e Herbarium	Yes	2500	1400	Regular	Free Acc.	4200
Siena	Museo di Scienze della Terra				Regular	Free Acc.	
Torino	ASTUT - Archivio scientifico e tecnologico	Yes	250	500	Appointment	Free Adm.	150
Torino	CHIUSO - Museo di antropologia e etnografia	Yes	500	0	Closed	Closed	
Torino	Collezioni di scienze naturali	Yes	4300		Regular	Ticket	
Torino	Museo "Perroncito"	Yes	150		Appointment	Free Adm.	10
Torino	Museo archivio politecnico	Yes			Appointment	Free Adm.	
Torino	Museo del Dipartimento di Scienze Veterinarie	Yes	150		Appointment	Free Adm.	100
Torino	Museo dell'agricoltura del Piemonte	No		3000	Closed	Closed	
Torino	Museo di anatomia umana "Luigi Rolando"	Yes			Regular	Ticket	
Torino	Museo di antropologia criminale "C. Lombroso"	Yes			Regular	Ticket	
Torino	Museo di fisica	No		247	Regular	Free Adm.	
Torino	Museo di odontoiatria	Yes	100	1000	Appointment	Free Adm.	500
Torino	Orto botanico	Yes			Appointment	Ticket	
Trieste	Collezione del Dipartimento di Fisica						

University	Museum Unit	Auton. Space	Mq	Items	Opening	Access	Visit.
Trieste	Museo delle scienze sanitarie	Yes			Regular	Free Acc.	
Trieste	Museo di Mineralogia e Petrografia	Yes	250	1000	Regular	Free Adm.	1000
Trieste	NON ESPOSTA - Collezione "Marussi"	No			Closed	Closed	
Trieste	Orto botanico	Yes			Appointment	Free Adm.	
Trieste	Raccolta di opere d'arte	No			Regular	Free Acc.	
Tuscia (Viterbo)	Banca del Germoplasma della Tuscia	Yes		270	Appointment	Free Adm.	
Tuscia (Viterbo)	Collezione entomologica	No				Free Adm.	
Tuscia (Viterbo)	Collezioni della Facoltà di Agraria	Yes		450	Appointment	Free Adm.	
Tuscia (Viterbo)	Museo della città e del territorio, Vetralla	Yes			Regular	Free Adm.	
Tuscia (Viterbo)	Museo Erbario della Tuscia	Yes					
Tuscia (Viterbo)	NON ESPOSTA - Collezione archeologica	No		250	Closed	Closed	
Tuscia (Viterbo)	NON ESPOSTA - Collezione di anatomia comparata e zoologia	No		60	Closed	Closed	150
Tuscia (Viterbo)	Orto Botanico dell'Azienda Agraria Didattico-Sperimentale	Yes			Regular	Ticket	2000

University	Museum Unit	Auton. Space	Mq	Items	Opening	Access	Visit.
Tuscia (Viterbo)	Rete dei complessi monumentali di Ateneo	Yes			Regular	Free Acc.	
Tuscia (Viterbo)	Rete dell'arte contemporanea della Tuscia	Yes			Regular	Free Acc.	
Tuscia (Viterbo)	Xylarium	No		100	Appointment	Free Adm.	50
Urbino	Museo dei gessi	Yes	160	39	Regular	Ticket	200
Urbino	Museo di scienza e tecnologia	Yes	200		Appointment	Free Adm.	
Urbino	Orto botanico	Yes			Regular	Free Adm.	

Appendix M – Museum Units. Communication

University	Museum Unit	Quest.	Com. Lev.	Com. Plan
Bari	CHIUSO - Laboratorio di Storia della Psicologia Applicata "A. Marzi"	Yes	0 Level	No
Bari	Collezioni di chimica	No	No Web S.	
Bari	Collezioni di fisica	No	0 Level	
Bari	Collezioni di informatica	Yes	No Web S.	No
Bari	Museo del dipartimento di biologia	No	0 Level	
Bari	Museo di scienze della terra	No	Expert	
Bari	Museo orto botanico	Yes	0 Level	No
Bari Politecnico	Museo della fotografia	No	0 Level	
Bologna	CHIUSO - Museo del IX centenario	No	Minim. Lev.	
Bologna	CHIUSO - Museo della Specola	No	Expert	
Bologna	Erbario e museo botanico	No	Expert	
Bologna	Museo delle Cere anatomiche "Luigi Cattanei"	No	Expert	
Bologna	Museo di Anatomia comparata	No	Minim. Lev.	
Bologna	Museo di Anatomia degli animali domestici	Yes	Expert	No
Bologna	Museo di Anatomia patologica e teratologia veterinaria Alessandrini-Ercolani	Yes	Expert	Yes
Bologna	Museo di Antropologia	No	Minim. Lev.	

University	Museum Unit	Quest.	Com. Lev.	Com. Plan
Bologna	Museo di Fisica	Yes	Expert	No
Bologna	Museo di Mineralogia	No	Minim. Lev.	
Bologna	Museo di Palazzo Poggi	Yes	Insider	Yes
Bologna	Museo di Zoologia	No	Minim. Lev.	
Bologna	Museo Geologico «Giovanni Capellini»	Yes	Insider	Yes
Bologna	Orto botanico	Yes	Expert	No
Bologna	Raccolta di strumenti chirurgici veterinari	Yes	Minim. Lev.	No
Cagliari	Collezione Archeologica "Evan Gorga"	Yes	0 Level	No
Cagliari	Collezione degli Strumenti e Apparecchi di Chimica	Yes	Expert	No
Cagliari	Collezione Luigi Piloni	No	Expert	
Cagliari	Museo di Cere Anatomiche "Clemente Susini"	Yes	Expert	No
Cagliari	Museo di Fisica	No	Expert	
Cagliari	Museo di Mineralogia "Leonardo de Prunner"	No	0 Level	
Cagliari	Museo di Zoologia	No	Expert	
Cagliari	Museo etno-botanico	No	0 Level	
Cagliari	Museo Herbarium	No	0 Level	
Cagliari	Museo sardo di Antropologia ed Etnografia	No	0 Level	
Cagliari	Museo sardo di Geologia e mineralogia e Paleontologia "Domenico Lovisato"	No	0 Level	
Cagliari	Orto botanico	No	Expert	

University	Museum Unit	Quest.	Com. Lev.	Com. Plan
Calabria	Museo di paleontologia	Yes	Expert	No
Calabria	Museo di Storia Naturale della Calabria ed Orto Botanico	Yes	Minim. Lev.	No
Calabria	RiMuseum - Museo per l'Ambiente	Yes	Expert	Yes
Camerino	Museo di scienze naturali	Yes	Expert	No
Camerino	Orto botanico "Carmela Cortini"	Yes	Expert	Yes
Catania	Archivio ceramografico	No	No Web S.	
Catania	CHIUSO - Museo di scienze della terra	No	Expert	
Catania	Museo della fabbrica	Yes	Insider	No
Catania	Museo della rappresentazione - Casa della città	No	No Web S.	
Catania	Museo dello studio	No	No Web S.	
Catania	Museo di archeologia	No	No Web S.	
Catania	Museo di zoologia e casa delle farfalle	No	Expert	
Catania	Orto botanico	Yes	Expert	Yes
Chieti-Pescara	Museo Universitario	No	Insider	
Ferrara	Arredi storici della Premiata Farmacia Navarra e collezione strumenti	Yes	0 Level	No
Ferrara	Collezione instrumentaria delle scienze fisiche - CISIF	Yes	Expert	No
Ferrara	Museo Anatomico "Giovanni Tumiati"	Yes	0 Level	No
Ferrara	Museo di Paleontologia e Preistoria 'P. Leonardi'	Yes	Expert	No
Ferrara	NON ESPOSTA - Collezione di chimica	No	0 Level	

University	Museum Unit	Quest.	Com. Lev.	Com. Plan
Ferrara	Orto botanico	Yes	Insider	No
Firenze	Museo di storia naturale	Yes	Insider	Yes
Ge, Si, Tr	Museo Nazionale dell'Antartide "Felice Ippolito"	Yes	Insider	Yes
Genova	Centro universitario di servizi giardini botanici Hanbury	Yes	Insider	Yes
Genova	Collezione di reperti anatomici	No	No Web S.	
Genova	Museo di Anatomia Comparata	No	No Web S.	
Genova	Museo di chimica	Yes	Expert	No
Genova	Museo di etnomedicina Antonio Scarpa	Yes	Expert	No
Genova	Museo di fisica	No	Insider	
Genova	Museo di geologia e paleontologia	No	No Web S.	
Genova	NON ESPOSTA - Collezione di monete antiche	No	No Web S.	
Genova	NON ESPOSTA - Collezione di vasi antichi	No	No Web S.	
Genova	Orto botanico	Yes	0 Level	Yes
L'Aquila	Giardino botanico alpino	No	Expert	
Messina	Collezione Museologica Botanica	Yes	Expert	No
Messina	Orto botanico "Pietro Castelli"	Yes	Expert	No
Milano	Erbario museo botanico del dipartimento di biologia	No	0 Level	
Milano	Museo astronomico - Orto botanico di Brera	Yes	Expert	No
Milano	Museo delle collezioni mineralogiche, gemmologiche, petrografiche e giacimentologiche	Yes	No Web S.	No

University	Museum Unit	Quest.	Com. Lev.	Com. Plan
Milano	Museo didattico di zoologia	No	Expert	
Milano	Orto botanico di Cascina rosa	No	Expert	
Milano	Orto botanico G.E. Ghirardi	No	Expert	
Milano Politecnico	Archivio degli strumenti topografici	Yes	No Web S.	No
Milano Politecnico	IN FASE DI COSTITUZIONE - Museo del dipratimento di Fisica	No	No Web S.	
Milano Politecnico	Museo di corrosione	Yes	No Web S.	No
Modena-Reggio Emilia	CHIUSO - Musei anatomici	Yes	Expert	No
Modena-Reggio Emilia	CHIUSO - Museo Astronomico e Geofisico	No	Expert	
Modena-Reggio Emilia	Gemma 1786. Museo Mineralogico e Geologico Estense	No	Expert	
Modena-Reggio Emilia	Laboratorio delle Macchine Matematiche	Yes	Insider	No
Modena-Reggio Emilia	Museo di Paleontologia	Yes	Expert	No
Modena-Reggio Emilia	Museo di Zoologia ed Anatomia Comparata	Yes	0 Level	No
Modena-Reggio Emilia	Orto Botanico	No	Expert	

University	Museum Unit	Quest.	Com. Lev.	Com. Plan
Molise	Collezioni entomologiche	No	No Web S.	
Molise	Museo del territorio	No	No Web S.	
Molise	Museo di ingegneria agroalimentare	No	No Web S.	
Molise	Museo di patologia vegetale	No	No Web S.	
Molise	Museo di zootecnia	No	No Web S.	
Molise	Museo erbario del Molise	No	Expert	
Napoli Federico II	CMSNF - Museo di Antropologia	Yes	Expert	Yes
Napoli Federico II	CMSNF - Museo di Fisica	Yes	Expert	Yes
Napoli Federico II	CMSNF - Museo di Paleontologia	Yes	Expert	Yes
Napoli Federico II	CMSNF - Museo Zoologico	Yes	Expert	Yes
Napoli Federico II	CMSNF - Real Museo Mineralogico	Yes	Expert	Yes
Napoli Federico II	MUSA - CHIUSO - Museo Botanico "Orazio Comes"	Yes	Expert	Yes
Napoli Federico II	MUSA - CHIUSO - Museo Di meccanica agraria "Carlo Santini"	No	Expert	
Napoli Federico II	MUSA - CHIUSO - Museo di Mineralogia "Antonio Parascandolo"	No	Expert	

University	Museum Unit	Quest.	Com. Lev.	Com. Plan
Napoli Federico II	MUSA - CHIUSO -Museo di Entomologia "Filippo Silvestri"	Yes	Expert	No
Napoli Federico II	MUSA - Museo Anatomo - Zootecnico "Tito Manlio Bettini"	No	Expert	
Napoli Federico II	MUSA - NON ESPOSTE - Collezioni strumentazioni scientifiche	Yes	Expert	No
Napoli Federico II	MUSA - Orto Botanico di Portici	No	Expert	
Napoli Federico II	Museo di Anatomia Veterinaria	Yes	0 Level	No
Napoli Parthenope	Museo navale	No	No Web S.	
Napoli SUN	Museo di anatomia	Yes	Expert	No
Napoli SUN	Museo di farmacologia	No	No Web S.	
Napoli SUN	Museo di odontoiatria	No	No Web S.	
Padova	Museo Botanico	Yes	Insider	No
Padova	Museo degli Strumenti dell'Astronomia	Yes	Insider	No
Padova	Museo dell'Educazione	Yes	Insider	No
Padova	Museo di Antropologia	Yes	Insider	No
Padova	Museo di Geologia e Paleontologia	Yes	Insider	No
Padova	Museo di Macchine "Enrico Bernardi"	Yes	Insider	No

University	Museum Unit	Quest.	Com. Lev.	Com. Plan
Padova	Museo di Mineralogia	Yes	Insider	No
Padova	Museo di Scienze Archeologiche e d'Arte	Yes	Insider	No
Padova	Museo di Storia della Fisica	Yes	Insider	No
Padova	Museo di Zoologia	Yes	Insider	No
Palermo	Archivio Ducrot e Dotazione Basile	No	0 Level	
Palermo	Cappella dei Falegnami	No	0 Level	
Palermo	Carceri dei Penitenziati	No	0 Level	
Palermo	Chiesa di S. Antonio Abate	No	0 Level	
Palermo	CHIUSO - Osservatorio Astronomico e Museo della Specola	Yes	0 Level	Yes
Palermo	Collezione di Anatomia	Yes	0 Level	No
Palermo	Collezione di Fisiologia Umana	Yes	0 Level	No
Palermo	Collezione di Ingegneria: Civile, Ambientale, Aerospaziale, dei Materiali (DICAM)	Yes	0 Level	No
Palermo	Collezione di Ingegneria: Elettronica ed elettrotecnica	Yes	0 Level	No
Palermo	Collezione di Ingegneria: Trasporti	No	0 Level	
Palermo	Convento di S. Antonino	No	0 Level	
Palermo	Cripta delle Repentite	No	0 Level	
Palermo	Fossa della Garofala	No	0 Level	
Palermo	Museo della Chimica	Yes	Minim. Lev.	No
Palermo	Museo della Radiologia "Pietro Cignolini"	No	0 Level	

University	Museum Unit	Quest.	Com. Lev.	Com. Plan
Palermo	Museo di Entomologia Agraria	Yes	0 Level	No
Palermo	Museo di Mineralogia	Yes	0 Level	No
Palermo	Museo Geologico "Gaetano Giorgio Gemmellaro"	Yes	Expert	Yes
Palermo	Museo Storico dei Motori e dei Meccanismi	Yes	Expert	Yes
Palermo	Museo Zoologico "Pietro Doderlein"	No	Expert	
Palermo	Orto Botanico ed Herbarium Mediterraneum	Yes	Expert	Yes
Palermo	Palazzo Chiaromonte Steri	No	0 Level	
Parma	Centro studi e archivio della comunicazione (CSAC)	No	No Web S.	
Parma	Collezione di strumenti scientifici "Macedonio Melloni"	Yes	Minim. Lev.	No
Parma	Museo anatomico veterinario	Yes	Minim. Lev.	No
Parma	Museo del Dipartimento di Anatomia Umana, Farmacologia e Scienze medico-forensi	Yes	Expert	Yes
Parma	Museo di mineralogia	No	Minim. Lev.	
Parma	Museo di Storia Naturale	Yes	Minim. Lev.	No
Parma	Museo Paleontologico Parmense	Yes	Minim. Lev.	No
Parma	Orto botanico	Yes	Minim. Lev.	No
Pavia	Aula Magna	No	0 Level	
Pavia	Aula Scarpa	No	0 Level	
Pavia	Aula Volta	No	0 Level	
Pavia	CHIUSA AL PUBBLICO - Collezione Fisiologia	No	Insider	

University	Museum Unit	Quest.	Com. Lev.	Com. Plan
Pavia	CHIUSA AL PUBBLICO - Collezione Istologia ed Embriologia	Yes	Insider	No
Pavia	CHIUSA AL PUBBLICO - Collezione Matematica	Yes	Insider	No
Pavia	CHIUSO - Collezione Patologia Generale	No	Insider	
Pavia	CHIUSO - Museo di Anatomia	No	Insider	
Pavia	CHIUSO - Museo di Chimica	No	Insider	
Pavia	CHIUSO - Museo di Fisica	No	Insider	
Pavia	Collezione di Archeologia	Yes	Insider	Yes
Pavia	Collezione Musicologia	Yes	Insider	No
Pavia	Cortile di Volta	No	0 Level	
Pavia	Il palazzo dell'Università	No	0 Level	
Pavia	Museo della Tecnica Elettrica	No	Insider	
Pavia	Museo di Mineralogia	Yes	Insider	No
Pavia	Museo di Storia Naturale	Yes	Insider	Yes
Pavia	Museo per la Storia dell' Università	Yes	Insider	No
Pavia	Orto Botanico	Yes	Insider	No
Perugia	Collezione del dipartimento di Matematica e informatica	Yes	Minim. Lev.	No
Perugia	Erbario Cicioni-Bruschi	Yes	Minim. Lev.	No
Perugia	Galleria di Storia Naturale dell'Università di Perugia	No	No Web S.	
Perugia	Gipsoteca	No	Minim. Lev.	

University	Museum Unit	Quest.	Com. Lev.	Com. Plan
Perugia	Laboratorio di storia dell'agricoltura di Casalina	Yes	No Web S.	No
Perugia	Museo di Anatomia Umana	Yes	Minim. Lev.	No
Perugia	Museo di Fisica	No	0 Level	
Perugia	Orto botanico	Yes	Minim. Lev.	No
Pisa	Antiquarium di archeologia classica	Yes	0 Level	No
Pisa	Collezioni di egittologia	Yes	Expert	No
Pisa	Collezioni di paletnologia	Yes	Expert	No
Pisa	Gipsoteca di arte antica	Yes	Expert	No
Pisa	Museo botanico	Yes	Expert	No
Pisa	Museo degli strumenti per il calcolo	Yes	Insider	No
Pisa	Museo della grafica	Yes	Insider	Yes
Pisa	Museo di anatomia e istologia patologica	Yes	No Web S.	No
Pisa	Museo di anatomia patologica	Yes	Minim. Lev.	No
Pisa	Museo di anatomia veterinaria	Yes	Expert	Yes
Pisa	Museo di storia naturale e del territorio di Calci	Yes	Insider	Yes
Pisa	Orto botanico	Yes	Expert	No
Roma 3	Museo storico della didattica "Mauro Laeng"	Yes	Expert	No
Roma Sapienza	Fort Apollonia Museum of Nzema Culture and History	No	Expert	
Roma Sapienza	Museo Arte e giacimenti Minerari	No	Expert	

University	Museum Unit	Quest.	Com. Lev.	Com. Plan
Roma Sapienza	Museo del Vicino Oriente	No	Expert	
Roma Sapienza	Museo dell'Arte Classica	No	Insider	
Roma Sapienza	Museo delle Antichità Etrusco Italiche	No	Expert	
Roma Sapienza	Museo delle Origini	Yes	Insider	No
Roma Sapienza	Museo di Anatomia Comparata	No	Expert	
Roma Sapienza	Museo di Anatomia Patologica	Yes	Insider	No
Roma Sapienza	Museo di Antropologia "Giuseppe Sergi"	Yes	Insider	Yes
Roma Sapienza	Museo di Chimica "Primo Levi"	No	Insider	
Roma Sapienza	Museo di Fisica	Yes	Expert	No
Roma Sapienza	Museo di Geologia	No	Insider	
Roma Sapienza	Museo di Idraulica	No	Expert	
Roma Sapienza	Museo di Merceologia	Yes	Insider	Yes
Roma Sapienza	Museo di Mineralogia	Yes	Insider	No
Roma Sapienza	Museo di Paleontologia	Yes	Expert	No
Roma Sapienza	Museo di Storia della Medicina	Yes	Insider	Yes
Roma Sapienza	Museo di Zoologia	No	Insider	
Roma Sapienza	Museo Erbario - Museo di Botanica	Yes	Insider	No
Roma Sapienza	Museo Laboratorio Arte Contemporanea	No	Insider	
Roma Sapienza	Orto Botanico	No	Expert	

University	Museum Unit	Quest.	Com. Lev.	Com. Plan
Roma Tor Vergata	Museo dell'Immagine Fotografica e delle Arti Visuali (MIFAV)	No	0 Level	
Roma Tor Vergata	Orto botanico	No	0 Level	
Salento	CHIUSO - Museo dell'Ambiente	Yes	Insider	Yes
Salento	Museo di Biologia Marina "Pietro Parenzan", Porto Cesareo	Yes	Expert	No
Salento	Museo di Ecologia degli Ecosistemi Mediterranei, Otranto	Yes	Expert	Yes
Salento	Museo Diffuso di Cavallino	Yes	Minim. Lev.	Yes
Salento	Museo Papirologico	Yes	Minim. Lev.	No
Salento	Museo Storico-Archeologico	Yes	Expert	Yes
Salento	Orto Botanico	Yes	Expert	No
Sassari	Collezione agronomica e museo all'aperto di storia dell'agricoltura	Yes	0 Level	No
Sassari	Collezione anatomica	No	0 Level	
Sassari	Collezione di botanica farmaceutica	No	0 Level	
Sassari	Collezione di fisica	No	0 Level	
Sassari	collezione entomologica	Yes	0 Level	No
Sassari	collezione zoologica	Yes	0 Level	No
Sassari	IN FASE DI ATTIVAZIONE - Museo scientifico	Yes	Insider	No
Sassari	Museo geologico mineralogico "Aurelio Serra"	Yes	0 Level	No
Siena	Archivio e Percorso Storico d'Ateneo	No	Minim. Lev.	

University	Museum Unit	Quest.	Com. Lev.	Com. Plan
Siena	Collezione di Fisica	Yes	Minim. Lev.	No
Siena	Collezioni di Preistoria, Archeologia Classica e Archeologia Medievale	No	Minim. Lev.	
Siena	Museo Anatomico	Yes	Minim. Lev.	No
Siena	Museo Botanico: Orto Botanico e Herbarium	Yes	Insider	Yes
Siena	Museo di Scienze della Terra	No	0 Level	
Torino	ASTUT - Archivio scientifico e tecnologico	Yes	Insider	No
Torino	CHIUSO - Museo di antropologia e etnografia	Yes	0 Level	No
Torino	Collezioni di scienze naturali	Yes	Insider	No
Torino	Museo "Perroncito"	Yes	Expert	No
Torino	Museo archivio politecnico	No	0 Level	
Torino	Museo del Dipartimento di Scienze Veterinarie	Yes	0 Level	No
Torino	Museo dell'agricoltura del Piemonte	Yes	0 Level	No
Torino	Museo di anatomia umana "Luigi Rolando"	Yes	Expert	No
Torino	Museo di antropologia criminale "C. Lombroso"	Yes	Expert	No
Torino	Museo di fisica	No	Expert	
Torino	Museo di odontoiatria	Yes	Expert	No
Torino	Orto botanico	No	0 Level	
Trieste	Collezione del Dipartimento di Fisica	No	0 Level	
Trieste	Museo delle scienze sanitarie	Yes	0 Level	No

University	Museum Unit	Quest.	Com. Lev.	Com. Plan
Trieste	Museo di Mineralogia e Petrografia	Yes	Minim. Lev.	Yes
Trieste	NON ESPOSTA - Collezione "Marussi"	No	0 Level	
Trieste	Orto botanico	No	0 Level	
Trieste	Raccolta di opere d'arte	Yes	0 Level	No
Tuscia (Viterbo)	Banca del Germoplasma della Tuscia	No	Expert	
Tuscia (Viterbo)	Collezione entomologica	No	0 Level	
Tuscia (Viterbo)	Collezioni della Facoltà di Agraria	No	0 Level	
Tuscia (Viterbo)	Museo della città e del territorio, Vetralla	No	Insider	
Tuscia (Viterbo)	Museo Erbario della Tuscia	No	0 Level	
Tuscia (Viterbo)	NON ESPOSTA - Collezione archeologica	No	Expert	
Tuscia (Viterbo)	NON ESPOSTA - Collezione di anatomia comparata e zoologia	Yes	Minim. Lev.	No
Tuscia (Viterbo)	Orto Botanico dell'Azienda Agraria Didattico-Sperimentale	Yes	0 Level	No
Tuscia (Viterbo)	Rete dei complessi monumentali di Ateneo	No	Expert	
Tuscia (Viterbo)	Rete dell'arte contemporanea della Tuscia	No	Expert	
Tuscia (Viterbo)	Xylarium	Yes	0 Level	No
Urbino	Museo dei gessi	Yes	0 Level	No
Urbino	Museo di scienza e tecnologia	Yes	Expert	No
Urbino	Orto botanico	No	No Web S.	

Appendix N – Museum Units. Questionnaires Answers

University	Museum Unit	Name
Bari	CHIUSO - Laboratorio di Storia della Psicologia Applicata "A. Marzi"	Sinatra Maria
Bari	Collezioni di informatica	Ferilli Stefano
Bari	Museo orto botanico	Forte Luigi
Bologna	Museo di Anatomia degli animali domestici	Classified
Bologna	Museo di Anatomia patologica e teratologia veterinaria Alessandrini-Ercolani	Marcato Paolo Stefano
Bologna	Museo di Fisica	Dragoni Giorgio
Bologna	Museo di Palazzo Poggi	Simoni Fulvio
Bologna	Museo Geologico «Giovanni Capellini»	Vai Gian Battista
Bologna	Orto botanico	Mossetti Umberto
Bologna	Raccolta di strumenti chirurgici veterinari	Valentini Simona
Cagliari	Collezione Archeologica "Evan Gorga"	
Cagliari	Collezione degli Strumenti e Apparecchi di Chimica	De Montis Stefania
Cagliari	Museo di Cere Anatomiche "Clemente Susini"	Riva Alessandro
Calabria	Museo di paleontologia	Classified
Calabria	Museo di Storia Naturale della Calabria ed Orto Botanico	Passalacqua Nicodemo G.
Calabria	RiMuseum - Museo per l'Ambiente	Classified
Camerino	Museo di scienze naturali	Invernizzi Chiara
Camerino	Orto botanico "Carmela Cortini"	Classified

University	Museum Unit	Name
Catania	Museo della fabbrica	Militello Pietro Maria
Catania	Orto botanico	Lo Giudice Cristina
Ferrara	Arredi storici della Premiata Farmacia Navarra e collezione strumenti	Vicentini Chiara Beatrice
Ferrara	Collezione instrumentaria delle scienze fisiche - CISIF	Zini Grazia
Ferrara	Museo Anatomico "Giovanni Tumiati"	Capitani Silvano
Ferrara	Museo di Paleontologia e Preistoria 'P. Leonardi'	cercare mail
Ferrara	Orto botanico	Negrini Fabrizio
Firenze	Museo di storia naturale	Scarpellini Alba
Ge, Si, Tr	Museo Nazionale dell'Antartide "Felice Ippolito"	Pugliese Nevio
Genova	Centro universitario di servizi giardini botanici Hanbury	Mariotti Mauro
Genova	Museo di chimica	Petrillo Giovanni
Genova	Museo di etnomedicina Antonio Scarpa	Guerci Antonio
Genova	Orto botanico	Mariotti Mauro
Messina	Collezione Museologica Botanica	Vicinanza Marco
Messina	Orto botanico "Pietro Castelli"	Picone Rosella
Milano	Museo astronomico - Orto botanico di Brera	Classified
	Museo delle collezioni mineralogiche, gemmologiche, petrografiche e	
Milano	giacimentologiche	Bocchio Rosangela
Milano Politecnico	Archivio degli strumenti topografici	Migliaccio Federica
Milano Politecnico	Museo di corrosione	Classified

University	Museum Unit	Name
Modena-Reggio		
Emilia	CHIUSO - Musei anatomici	Maramaldo Rita
Modena-Reggio		
Emilia	Laboratorio delle Macchine Matematiche	Bartolini Maria Giuseppina
Modena-Reggio	M. A. D. L. A. L. L.	D 16 1
Emilia	Museo di Paleontologia	Papazzoni Cesare Andrea
Modena-Reggio Emilia	Muses di Zaglagia ad Anatomia Comparata	Gambarelli Andrea
	Museo di Zoologia ed Anatomia Comparata	
Napoli Federico II	CMSNF - Museo di Antropologia	Del Re Maria Carmela
Napoli Federico II	CMSNF - Museo di Fisica	Del Re Maria Carmela
Napoli Federico II	CMSNF - Museo di Paleontologia	Del Re Maria Carmela
Napoli Federico II	CMSNF - Museo Zoologico	Del Re Maria Carmela
Napoli Federico II	CMSNF - Real Museo Mineralogico	Del Re Maria Carmela
Napoli Federico II	MUSA - CHIUSO - Museo Botanico "Orazio Comes"	Classified
Napoli Federico II	MUSA - CHIUSO -Museo di Entomologia "Filippo Silvestri"	Garonna Antonio Pietro
Napoli Federico II	MUSA - NON ESPOSTE - Collezioni strumentazioni scientifiche	Classified
Napoli Federico II	Museo di Anatomia Veterinaria	De Luca Adriana
Napoli SUN	Museo di anatomia	Esposito Vincenzo
Padova	Museo Botanico	Quaja Pierangela
Padova	Museo degli Strumenti dell'Astronomia	Quaja Pierangela
Padova	Museo dell'Educazione	Quaja Pierangela

University	Museum Unit	Name
Padova	Museo di Antropologia	Quaja Pierangela
Padova	Museo di Geologia e Paleontologia	Quaja Pierangela
Padova	Museo di Macchine "Enrico Bernardi"	Quaja Pierangela
Padova	Museo di Mineralogia	Quaja Pierangela
Padova	Museo di Scienze Archeologiche e d'Arte	Quaja Pierangela
Padova	Museo di Storia della Fisica	Talas Sofia
Padova	Museo di Zoologia	Quaja Pierangela
Palermo	CHIUSO - Osservatorio Astronomico e Museo della Specola	Chinnici Ileana
Palermo	Collezione di Anatomia	Cappello Francesco
Palermo	Collezione di Fisiologia Umana	Mudò Giuseppa
	Collezione di Ingegneria: Civile, Ambientale, Aerospaziale, dei Materiali	
Palermo	(DICAM)	Villa Benedetto
Palermo	Collezione di Ingegneria: Elettronica ed elettrotecnica	Dusonchet Luigi
Palermo	Museo della Chimica	Zingales Roberto
Palermo	Museo di Entomologia Agraria	Massa Bruno
Palermo	Museo di Mineralogia	Azzaro Ettore
Palermo	Museo Geologico "Gaetano Giorgio Gemmellaro"	Di Patti Carolina
Palermo	Museo Storico dei Motori e dei Meccanismi	Monastero Riccardo
Palermo	Orto Botanico ed Herbarium Mediterraneum	Raimondo Francesco M.
Parma	Collezione di strumenti scientifici "Macedonio Melloni"	De Renzi Roberto

University	Museum Unit	Name
Parma	Museo anatomico veterinario	Panu Rino
	Museo del Dipartimento di Anatomia Umana, Farmacologia e Scienze medico-	
Parma	forensi	Dallatana Davide
Parma	Museo di Storia Naturale	Csermely Davide
Parma	Museo Paleontologico Parmense	Monegatti Paola
Parma	Orto botanico	Spallanzani Linda
Pavia	CHIUSA AL PUBBLICO - Collezione Istologia ed Embriologia	Calligaro Alberto
Pavia	CHIUSA AL PUBBLICO - Collezione Matematica	Cornalba Maurizio
Pavia	Collezione di Archeologia	Harari Maurizio
Pavia	Collezione Musicologia	Mauri Laura
Pavia	Museo di Mineralogia	Callegari Athos Maria
Pavia	Museo di Storia Naturale	Classified
Pavia	Museo per la Storia dell' Università	Garbarino Maria Carla
Pavia	Orto Botanico	Bracco Francesco
Perugia	Collezione del dipartimento di Matematica e informatica	Ughi Emanuela
Perugia	Erbario Cicioni-Bruschi	Venanzoni Roberto
Perugia	Laboratorio di storia dell'agricoltura di Casalina	Maovaz Marco
Perugia	Museo di Anatomia Umana	Donato Francesco Rosario
Perugia	Orto botanico	Maovaz Marco
Pisa	Antiquarium di archeologia classica	Donati Fulvia

University	Museum Unit	Name
Pisa	Collezioni di egittologia	Silvano Flora
Pisa	Collezioni di paletnologia	Grifoni Renata
Pisa	Gipsoteca di arte antica	Donati Fulvia
Pisa	Museo botanico	Amadei Lucia
Pisa	Museo degli strumenti per il calcolo	Classified
Pisa	Museo della grafica	Tavoni Alice
Pisa	Museo di anatomia e istologia patologica	Fornaciari Gino
Pisa	Museo di anatomia patologica	Natale Gianfranco
Pisa	Museo di anatomia veterinaria	Coli Alessandra
Pisa	Museo di storia naturale e del territorio di Calci	Landini Walter
Pisa	Orto botanico	Classified
Roma 3	Museo storico della didattica "Mauro Laeng"	Covato Carmela
Roma Sapienz	ta Museo delle Origini	Conati Barbaro Cecilia
Roma Sapienz	a Museo di Anatomia Patologica	Gallo Pietro
Roma Sapienz	a Museo di Antropologia "Giuseppe Sergi"	Manzi Giorgio
Roma Sapienz	ta Museo di Fisica	Battimelli Giovanni
Roma Sapienz	ta Museo di Merceologia	Biniecka Malgorzata
Roma Sapienz	a Museo di Mineralogia	Panzanino Flora
Roma Sapienz	a Museo di Paleontologia	Manni Riccardo
Roma Sapienz	ta Museo di Storia della Medicina	Aruta Alessandro

University	Museum Unit	Name
Roma Sapienza	Museo Erbario - Museo di Botanica	Abbate Giovanna
Salento	CHIUSO - Museo dell'Ambiente	Belmonte Genuario
Salento	Museo di Biologia Marina "Pietro Parenzan", Porto Cesareo	Miglietta Anna Maria
Salento	Museo di Ecologia degli Ecosistemi Mediterranei, Otranto	Sangiorgio Franca
Salento	Museo Diffuso di Cavallino	Notario Corrado
Salento	Museo Papirologico	Cavalieri Maria Clara
Salento	Museo Storico-Archeologico	Signore Grazia Maria
Salento	Orto Botanico	Accogli Rita, IppolitoFabio
Sassari	Collezione agronomica e museo all'aperto di storia dell'agricoltura	Bagella Stefania
Sassari	collezione entomologica	Nuvoli Maria Tiziana A.
Sassari	collezione zoologica	Delitala Giuseppe Marco
Sassari	IN FASE DI ATTIVAZIONE - Museo scientifico	Bagella Stefania
Sassari	Museo geologico mineralogico "Aurelio Serra"	Madrau Salvatore, Deroma Mario
Siena	Collezione di Fisica	Millucci Vincenzo
Siena	Museo Anatomico	Vannozzi Francesca
Siena	Museo Botanico: Orto Botanico e Herbarium	Bonini Ilaria, Castagnini Paolo
Torino	ASTUT - Archivio scientifico e tecnologico	Fausone Mara
Torino	CHIUSO - Museo di antropologia e etnografia	Classified
Torino	Collezioni di scienze naturali	Classified
Torino	Museo "Perroncito"	Galloni Marco

University	Museum Unit	Name
Torino	Museo del Dipartimento di Scienze Veterinarie	Marco Galloni
Torino	Museo dell'agricoltura del Piemonte	Bonzanino Monica
Torino	Museo di anatomia umana "Luigi Rolando"	Malerba Giancarla, Borio Claudio
Torino	Museo di antropologia criminale "C. Lombroso"	Malerba Giancarla, Borio Claudio
Torino	Museo di odontoiatria	Burello Valerio
Trieste	Museo delle scienze sanitarie	Ponte Euro, Nicotra Mario
Trieste	Museo di Mineralogia e Petrografia	Princivalle Francesco
Trieste	Raccolta di opere d'arte	Classified
Tuscia (Viterbo)	NON ESPOSTA - Collezione di anatomia comparata e zoologia	Romano Nicla
Tuscia (Viterbo)	Orto Botanico dell'Azienda Agraria Didattico-Sperimentale	Fonck Monica
Tuscia (Viterbo)	Xylarium	Romagnoli Manuela
Urbino	Museo dei gessi	Santucci Anna
Urbino	Museo di scienza e tecnologia	Mantovani Roberto

Appendix O - COUNCIL OF EUROPE COMMITTEE OF MINISTERS, Recommendation Rec(2005)13 of the Committee of Ministers to member states on the governance and management of university heritage

(Adopted by the Committee of Ministers on 7 December 2005 at the 950th meeting of the Ministers' Deputies)

The Committee of Ministers of the Council of Europe, under the terms of Article 15.*b* of the Statute of the Council of Europe,

Considering that the aim of the Council of Europe is to achieve greater unity among its members and that this aim can be pursued notably by common action in educational and cultural matters:

Having regard to the European Cultural Convention of 1954 (ETS No. 18);

Having regard to the Convention for the Protection of the Architectural Heritage of Europe (Granada Convention) (ETS No. 121) and to the European Convention on the Protection of the Archaeological Heritage (Revised) (Valletta Convention) (ETS No. 143);

Having regard to the Final Declaration and the Action Plan adopted by the Second Summit of Heads of State and Government of the Council of Europe (October 1997);

Having regard to the "Europe, a Common Heritage" campaign, undertaken between 1999 and 2000 on the decision of the Second Summit, and in particular to the project on the heritage of European universities within this campaign;

Having regard to the Joint Declaration of the European Ministers of Education signed in Bologna on 19 June 1999 launching the Bologna Process of higher education reform aiming to establish a European Higher Education Area by 2010;

Considering that the heritage of European universities encompasses elements of key importance to higher education today, such as academic and institutional autonomy, the ability to adapt and renew while preserving core values of independent scholarship, and freedom of teaching and learning, and that these are fully compatible with the values of the Council of Europe;

Considering that university autonomy is an integral part of the heritage of European universities and one of the key principles of higher education in Europe;

Considering that this very university autonomy has confirmed the uniqueness of university heritage;

Considering that cultural heritage is the subject of international legal instruments, such as the Granada and Valletta Conventions, that address general issues of cultural heritage without specific reference to the heritage of universities;

Considering that the responsibility for the governance and management of the university heritage is shared between governments, other public authorities at national, regional and local levels and higher education institutions;

Considering the role played in the governance and management of university heritage by non-governmental organisations at international, national and regional levels;

Considering that the newer standard-setting texts on cultural heritage within the context of the Council of Europe provide a wider definition of the concept of cultural heritage with more emphasis on beliefs, perceptions, traditions and concepts that make reference to intellectual heritage;

Having regard to the Hague Convention for the Protection of Cultural Property in the Event of Armed Conflict of 14 May 1954 and its Second Protocol of 26 March 1999, the UNESCO Convention for the Safeguarding of the Intangible Cultural Heritage of 17 October 2003 and the World Intellectual Property Organisation's normative texts directly related to intellectual heritage, such as the Berne Convention for the Protection of Literary and Artistic Works;

Considering that cultural heritage is subject to national legislation, most of which deals with heritage in broader terms rather than specific aspects of heritage, such as university heritage and that, in some countries, higher education legislation may contain provisions that are also relevant to university heritage, but that there is little or no synergy between these two categories of laws;

Considering that no international standards exist specifically for university heritage and that policies and strategies for the protection of this heritage are highly diverse and range from fully developed structures to an absence of definition of management responsibilities other than informal precedent;

Considering that higher education institutions have a double mission as concerns training in heritage: on the one hand, they have a mission to train high level specialists in all heritage-related fields, while on the other hand, they also have a mission to provide training in the specific heritage of universities for both heritage specialists and members of the academic community specialising in other areas;

Considering that the European dimension is an integral part of university heritage, and vice versa, that universities are, by their history, their heritage and their current activities, European and international institutions par excellence, and that the European dimension should guide all activities related to university heritage,

Recommends that the governments of member states:

- a. take steps to implement in their policy, law and practice the principles set out in the appendix to this recommendation;
- b. promote the implementation of the principles and measures contained in the appendix where this is not the direct responsibility of governments;
- c. promote the implementation of these measures by relevant public authorities at all levels as well as higher education institutions;

d. ensure that this recommendation is distributed as widely as possible among all persons and bodies concerned.

Appendix to Recommendation Rec(2005)13

Scope

- 1. The present recommendation aims to set out guidelines for and good practice in the governance and management of the heritage of European universities.
- 2. The provisions of this recommendation are applicable to higher education institutions and bodies seeking to adhere to the traditions and values that this heritage represents as defined in the present recommendation, and that assume responsibility for the protection and enhancement of these traditions and values as a common European heritage, regardless of the age of these institutions.
- 3. This recommendation is addressed to governments. However, in view of the shared responsibility for the governance and management of university heritage, its provisions may be implemented not only by governments, but also by other public authorities at national, regional and local levels, higher education institutions and public bodies responsible for the management and protection of cultural heritage, as the case may be.

Definitions

University/higher education institution

4. For the purposes of the present recommendation, the terms "university" and "higher education institution" shall designate an establishment providing higher education and being recognised by the competent authority as belonging to its system of higher education. For the purposes of the present text, the terms shall be used indiscriminately, even if it is realised that in some higher education systems, a formal and/or legal distinction is made between various kinds of higher education institutions, and that the right to the use of the term "university" may be protected by law.

Heritage of universities

5. For the purposes of this recommendation, the "heritage of universities" shall be understood to encompass all tangible and intangible heritage related to higher education institutions, bodies and systems as well as to the academic community of scholars and students, and the social and cultural environment of which this heritage is a part. The "heritage of universities" is understood as being all tangible and intangible traces of human activity relating to higher education. It is an accumulated source of wealth with direct reference to the academic community of scholars and students, their beliefs, values, achievements and their social and cultural function as well as modes of transmission of knowledge and capacity for innovation.

Institutional heritage policies

6. The heritage of European universities concerns individual higher education institutions as well as the academic community of scholars and students collectively,

and European society at large. Higher education institutions should be encouraged to establish transparent institutional policies for protecting and raising awareness of their heritage both within the institutions and in the larger society. In so doing, institutions could make explicit their understanding, preservation and enhancement of their heritage and the goals for its conservation and for raising awareness of it, as well as specify the structure, instruments and means with which the institution intends to implement these policies, including its decision-making structures and a clear planning process.

Legislative framework

- 7. Competent public authorities and higher education institutions should be encouraged to make full use of existing laws and of external and internal regulations for the protection and preservation of the heritage of universities.
- 8. Competent public authorities and higher education institutions should, however, be encouraged to review their laws and/or internal regulations with a view to adopting adequate provisions to protect their heritage where such do not already exist. In their internal regulations, universities should be encouraged to take account of possible measures for protecting and raising awareness of the heritage of universities as outlined in the present recommendation through legislation as well as guidelines established by professional organisations.
- 9. The status of the university heritage and parts thereof should be clarified through law or internal university regulations, as the case may be.

Heritage governance and management at higher education institutions

- 10. University leaders should be encouraged to consider all parts of the heritage of a higher education institution as falling under their ultimate legal, administrative and moral responsibility.
- 11. Universities should be encouraged to define, as appropriate in the context of the particular institution, the political and administrative responsibility for the university heritage as well as appropriate reporting mechanisms.
- 12. Higher education institutions should be encouraged to make their goals and policies for the university heritage explicit, for example through the adoption of a heritage charter for the institution or a specific heritage plan.
- 13. Institutions and units managing parts of the university heritage, such as museums, collections, libraries, archives, building services or university departments, should be encouraged to make explicit their goals and policies for the parts of the university heritage that fall under their responsibility, taking due account of the overall heritage policies of the higher education institution of which they are a part.
- 14. The management of the university heritage and parts thereof should conform to the best national and international standards established by competent heritage bodies or authorities within or outside of the university.

- 15. In considering major overall decisions and developments, including strategic plans for the institution, plans for the use of its buildings and their surroundings and other development plans, elected bodies as well as the administration of higher education institutions should be encouraged to give explicit consideration to the impact of such plans and decisions on the university heritage.
- 16. Universities should be encouraged to make acquisitions, bequests, loans, deposits and disposals an integral part of institutional policy and allow them to benefit from adequate conservation measures and administrative and financial safeguards, including insurance policies.

Finance

- 17. The financing of the policies for university heritage falls under the shared responsibility of government and of higher education institutions. In systems with public financing of higher education whether entirely or partially the competent public authorities should include provisions for the financing of the policies for the university heritage in the budgets allocated to higher education institutions. The institutions should in their turn be encouraged to make provision for the financing of their heritage policies within their own budget, whether publicly or privately funded, and seek to obtain additional funding from external sources.
- 18. Higher education institutions and bodies should be encouraged to provide and maintain suitable physical accommodation for their heritage and to provide balanced and reasonable funding for its protection and enhancement.
- 19. To the extent that the upkeep and protection of university heritage is financed through the general university budget, rather than through earmarked provisions from public or other sources, higher education institutions should be encouraged to set up the budget in such a way as to make it possible to identify the appropriations for heritage purposes.
- 20. Where required, institutions should be encouraged to seek supplementary external funds to enhance their heritage and implement their heritage policies. Such funds may be sought from local, regional, national or international sources.

Access

- 21. As far as compatible with the main missions of the university and with international and national standards of ethical practice, universities should be encouraged to make their heritage accessible to members of the academic community and/or the general public, as appropriate.
- 22. In some cases, access may need to be restricted in order to protect and conserve specific parts of this heritage or for reasons that have to do with the research and teaching of the institution. In such cases, institutions should be encouraged to make every effort to achieve a reasonable balance between heritage conservation needs, the needs of research and teaching and the desirability of providing wide access for the

general public. However, at no time should the conservation of university heritage be endangered by institutional policies concerning access to this heritage.

- 23. Institutions should be encouraged to give access to their university heritage for members of the general public at affordable prices and within reasonable opening hours.
- 24. Higher education institutions and bodies should be encouraged to take appropriate measures to safeguard and protect their heritage.
- 25. As far as possible and in accordance with their general heritage policies, universities should be encouraged to take appropriate measures and develop methods for the promotion of the value, nature and interest of this heritage today.

Professionalisation

- 26. Higher education institutions, in co-operation with ministries or agencies responsible for higher education and cultural heritage and/or relevant professional organisations, as appropriate, should be encouraged to consider qualifications requirements, career structures and professional development plans for different categories of staff working on university heritage. In particular, they should be encouraged to credit academic staff with appropriate academic merit for their work with museums, collections, archives, libraries and other academic work related to university heritage.
- 27. Higher education institutions should be encouraged to consider elaborating specific instructions for heritage-related posts, emphasising the specific professional requirements.
- 28. They should be encouraged to advertise internationally at least those heritagerelated posts that require a high level of heritage expertise, with a view to making it possible to fill some posts with foreign experts. Governments should take steps to abolish any remaining legislation stipulating that certain posts at higher education institutions or heritage institutions may only be filled by nationals.
- 29. Higher education institutions and bodies as well as ministries responsible for higher education and/or cultural heritage should seek to set up for aand networks, both nationally and internationally, for professional exchange and development among heritage professionals working on university heritage.

Training

- 30. Higher education institutions should be encouraged to establish training programmes in heritage-related fields. They should aim to provide balanced competences and skills combining an overview and a common-heritage approach with training in the specific knowledge and skills required of the various heritage-related professions as well as "instrumental" skills and, as far as possible, should be integrated with and draw on existing heritage units at the institution.
- 31. Students in heritage-related fields should be strongly encouraged to train for at least one semester at a foreign university, and universities should be encouraged to

make every effort to recognise the period spent at a foreign institution as part of the degree to be earned from the student's home institution. Higher education institutions should also be encouraged to seek co-operation with other institutions with a view to offering joint, advanced-level heritage courses involving staff and students from several universities.

Research

- 32. With due regard for the principle of institutional autonomy and for the freedom of academic staff to select the topics of their own research, higher education institutions should encourage research on heritage by their own staff as well as by other qualified researchers, taking an interdisciplinary and comparative approach and, as appropriate, seeking to co-ordinate such research.
- 33. Research councils, international research programmes, foundations and other bodies funding research should be encouraged to support programmes and projects to further research both on heritage in general and more specifically on the heritage of universities, in particular programmes and projects involving specialists from a variety of disciplines (conservation, restoration, inventories, core data systems and applied high technology) and/or from a variety of higher education institutions from various countries.
- 34. Higher education institutions and bodies should be encouraged to make all parts of their heritage available for research purposes in so far as this does not entail a risk for the conservation of this heritage. In the latter case, they should be encouraged to seek alternative solutions for the proper use of this heritage for research purposes.

Awareness raising

- 35. Higher education institutions should be encouraged to make focused efforts to raise awareness of their heritage in the academic community of scholars and students, in their local communities, among political decision makers and in civil society at large.
- 36. Higher education institutions should be encouraged to include in their awarenessraising efforts activities which aim to improve knowledge and understanding of their heritage among pupils and teachers at schools, in particular local schools, in order to help them identify with this heritage and see it as a part of the heritage of their community and region as well as a part of the common heritage of Europe.
- 37. Higher education institutions should be encouraged to develop policies and strategies for co-operating with media on a regular basis to raise awareness of their university heritage. They should also be encouraged to prepare publications on their history and heritage and to aim at least some of them at general readers and be available at an affordable price.
- 38. Higher education institutions should be encouraged to provide staff members responsible for communication, external relations and awareness-raising activities

with a background in the heritage of the institution as well as in the heritage of European universities.

Relations with the local community

- 39. True to their mission of teaching, research and awareness raising, higher education institutions should, in general terms, be encouraged to seek to develop and maintain close connections with the local communities of which they are a part and offer their services and expertise to these communities as appropriate.
- 40. Higher education institutions should be encouraged to seek to develop close relations with local authorities as well as with civil society in the communities in which they are located. Local and regional authorities should, for their part, also be encouraged to seek to develop and maintain close relations with higher education institutions in their area.

International co-operation

- 41. Governments should encourage universities as well as relevant public authorities to explore and make use of all possibilities to establish European and international cooperation activities in heritage-related fields, including, as appropriate, programmes of international organisations and institutions, such as the Council of Europe, UNESCO, the European Union, the European Science Foundation, University Museums and Collections (UMAC), International Council of Museums (ICOM/ICOMOS) or the International Council on Archives (ICA), regional cooperation programmes, university networks and bilateral university co-operation.
- 42. In the same way, universities should be encouraged to promote heritage research projects, including a comparative and/or European dimension, in particular where such projects include co-operation between staff at various European universities.
- 43. Governments should encourage higher education institutions as well as relevant public authorities to make full use of the opportunities offered for increased international co-operation within the framework of a European higher education area and of Council of Europe conventions and other legal instruments.

Appendix P - Museum Heritage in Statutes and General Regulations¹⁷⁴

UNIVERSITA' DEGLI STUDI DELL'AQUILA

Statute

(G.U. n. 22, 27.01.2012)

It does not mention neither museums or museum system.

General Regulation

(Latest Update D.R. n. 1923 – 2010, 11.11.2010)

Art. 31 Musei Universitari ed altre strutture: risorse ed oneri di gestione

- 1. Ai sensi del primo comma dell'art. 15 dello Statuto, l'UAQ può disporre l'attivazione di musei universitari o di altre strutture in settori di specifico interesse dell'ateneo in ogni caso al di fuori delle categorie comprese nei punti a) ed e) del predetto comma.
- 2. L'attivazione di tali strutture è deliberata dal Senato Accademico, dopo aver acquisito il parere espresso in merito dal Consiglio di Amministrazione, su proposta delle strutture didattiche e scientifiche dell'ateneo interessate alla propria costituzione.
- 3. Queste ultime debbono fornire le risorse economiche, gli spazi, le strutture ed il personale necessario al funzionamento, assumerne gli oneri di gestione e stabilirne il Regolamento di funzionamento.

POLITECNICO DI BARI

Statute

(D.R. n. 213, 28.09.1992. Latest update D.R. n. 625, 29.11.2002)

TITOLO I - DISPOSIZIONI GENERALI, CAPO I - PRINCIPI DIRETTIVI, Art. 1 – Principi generali

9. Il Politecnico cura la salvaguardia e la valorizzazione del proprio patrimonio culturale costituito dagli strumenti scientifici impiegati e dai vari prodotti e documenti connessi con le ricerche sviluppate nel proprio ambito; ciò anche ai fini della formazione e dell'ordinamento di una collezione museale, testimonianza della propria storia scientifica e tecnologica.



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¹⁷⁴ Updated at 25/11/2012.

UNIVERSITA' DEGLI STUDI DI BARI

Statute

(D.R. n. 7772, 22.10.1996. Latest update D.R. n. 10279, 28.07.2008)

TITOLO VII - STRUTTURE DI SOSTEGNO ALL'ORGANIZZAZIONE DELLA DIDATTICA E DELLA RICERCA, Art. 57 Aziende e **Musei scientifici**

1 . Per fornire **supporto alla ricerca e alla didattica**, il Senato Accademico, previo parere del Consiglio di Amministrazione, può deliberare la costituzione di Aziende e Musei scientifici, nonché di altre strutture di rilevante interesse comune.

General Regulation

(D.R. n. 2884, 05.04.2000. Latest update D.R. n. 12467, 20.10.2008)

TITOLO I - ELEZIONE E COSTITUZIONE DEGLI ORGANI DI ATENEO, Capo VI - Organi delle strutture di ricerca, Art. 53 – Rinvio

Le norme relative alla elezione e costituzione degli Organi delle strutture di ricerca si applicano agli Organi dei Centri, delle Aziende, dei **Musei** e delle altre strutture di rilevante interesse comune di cui al Titolo III.

TITOLO II - FUNZIONAMENTO DEGLI ORGANI DI ATENEO, Capo V - Organi delle strutture di ricerca, Art. 74 – Rinvio

Le norme relative all'organizzazione e al funzionamento degli Organi delle strutture di ricerca si applicano agli Organi dei Centri, delle Aziende, dei **Musei** e delle altre strutture di rilevante interesse comune di cui al Titolo III.

TITOLO III - ORGANIZZAZIONE E FUNZIONAMENTO DELLE STRUTTURE E DEGLI APPARATI - AMMINISTRATIVI CENTRALI E PERIFERICI, Capo III - Amministrazione periferica, Art. 79 - Assegnazione a strutture didattiche e di ricerca L'assegnazione di unità di personale è disposta, altresì, a favore dei Centri di servizio di Ateneo, del Sistema Informativo, del Sistema bibliotecario di Ateneo e di Aziende e **Musei Scientifici**.

TITOLO III - ORGANIZZAZIONE E FUNZIONAMENTO DELLE STRUTTURE E DEGLI APPARATI - AMMINISTRATIVI CENTRALI E PERIFERICI, Capo III - Amministrazione periferica, Sezione II - Strutture di ricerca

Art. 94 - Aziende e Musei Scientifici

1. Le Aziende, i Musei Scientifici e altre strutture di rilevante interesse comune possono essere costituite per fornire supporto alla ricerca e alla didattica.

2. La costituzione delle strutture di cui al 1° comma deve essere proposta da Consigli di Facoltà e di Dipartimento interessati ed è deliberata dal Senato Accademico, su parere conforme del Consiglio di Amministrazione.

La deliberazione deve indicare le finalità perseguite, le risorse attribuite, gli Organi di governo e di gestione della struttura e le relative funzioni.

3. Il Rettore costituisce le strutture di cui al 1° comma con proprio provvedimento che determina modalità e termini di attivazione.

Le stesse sono gestite secondo le modalità stabilite dal Regolamento di Ateneo per l'Amministrazione, la Finanza e la Contabilità.

Esse adottano un proprio Regolamento di funzionamento.

Art. 95 - Disattivazione

1. L'Organo che delibera la costituzione dei Centri di Servizio, delle Aziende, dei **Musei** e delle altre strutture, di rilevante interesse comune, può deliberarne la disattivazione.

ALMA MATER STUDIORUM – UNIVERSITÀ DI BOLOGNA

Statute

(Appendix A, D.R. n. 1203, 13.12.2011)

SEZIONE V – ALTRE STRUTTURE DI ATENEO E ORGANIZZAZIONE AMMINISTRATIVA, art. 29 Sistema museale di Ateneo

- 1. Il Sistema Museale di Ateneo è l'insieme coordinato delle strutture destinate a provvedere alla classificazione, tutela e valorizzazione del patrimonio di beni di interesse storico, artistico e scientifico dell'Ateneo.
- 2. Il Sistema Museale di Ateneo si articola nelle diverse strutture che ospitano tali beni e si avvale di una **gestione unitaria** che ne agevola e promuove la **valenza didattica** e **scientifica** nonché la **diffusione a vantaggio della società**; a tal fine collabora con gli enti e le istituzioni locali, nazionali e internazionali.
- 3. L'organizzazione, il funzionamento, le responsabilità scientifiche, direttive e gestionali del

Sistema Museale di Ateneo sono definite da apposito regolamento.

UNIVERSITÀ DEGLI STUDI DI CAGLIARI

Statute

(D.R. 23.05.2007. Latest update July 2008)

TITOLO III - STRUTTURE DIDATTICHE E DI RICERCA E LORO ORGANI, Art. 46 **Orto Botanico, musei** ed archivi

- 1. L'**Orto Botanico** provvede alla tutela ed alla valorizzazione del patrimonio vegetale dell'Università necessario **per la ricerca e la didattica** e suscettibile di fruizione pubblica.
- 2. L'Orto Botanico è annesso al Dipartimento cui afferisce la maggior parte del personale docente dei settori scientifico-disciplinari della botanica.
- 3. L'Università assicura per la gestione dell'Orto Botanico, compatibilmente con le proprie disponibilità, personale, finanziamenti e strutture adeguati allo svolgimento dei compiti istituzionali e promuove, di concerto con le strutture didattiche e scientifiche interessate, l'arricchimento del suo patrimonio.
- 4. L'Università promuove la valorizzazione del patrimonio di interesse storico presente nei Dipartimenti e raccolto in musei, in collezioni scientifiche ed archivi, assicurando finanziamenti e personale compatibilmente con le proprie disponibilità ed in funzione del valore della struttura e della fruibilità pubblica.
- 5. Per l'apertura al pubblico dell'Orto Botanico, dei musei, delle collezioni e degli archivi di cui al presente articolo, l'Università può stipulare apposite **convenzioni** con le Amministrazioni locali e con Enti pubblici.
- 6. Per l'eventuale costituzione di **Centri** di servizio riguardanti le strutture di cui al presente articolo si dovrà far riferimento agli articoli 43 e 45 di questo Statuto.

General Regulation

(20.07.2009)

It does not mention neither museums or museum system.

UNIVERSITA' DELLA CALABRIA

Statute

(Latest update DR n. 1761, 08.06.2010)

TABELLA D - CENTRI DI SPERIMENTAZIONE O DOCUMENTAZIONE SCIENTIFICA

Museo di Storia Naturale della Calabria ed Orto Botanico

General Regulation

(Latest update DR n. 2978, 30.11.2009)

It does not mention neither museums or museum system.

UNIVERSITA' DI CAMERINO

Statute

(D.R. n. 148, 25.02.2009)

TITOLO IV Strutture di ricerca e formazione, Art. 32 **Sistema** Biblioteconomico **Museale**

- 1. Il sistema Biblioteconomico Museale dell'Ateneo è dedicato alle esigenze della ricerca e della formazione ed è inserito funzionalmente in sistemi informativi locali, nazionali e internazionali. Svolge funzioni di pubblico interesse attinenti alla tutela, alla fruizione e valorizzazione dei beni che raccoglie, nonché alla ricerca scientifica e alla didattica.
- 2. Il Sistema ha il compito di:
- a) garantire agli studenti, ai professori, ai ricercatori e, secondo regole definite, al pubblico, l'accesso diretto alle fonti bibliografiche di informazione mediante la ricerca, l'acquisizione, la conservazione, lo sviluppo del patrimonio di testi, documenti e beni; b) sostenere e promuovere le attività museali presenti nell'Ateneo finalizzate alla ricerca scientifica, alla promozione e diffusione della cultura, alla conservazione, restauro, catalogazione ed esposizione di beni culturali, all'incremento delle

collezioni, all'attività didattica ed espositiva per le scuole di ogni ordine e grado.

General Regulation

(Latest update D.R. n. 42, 13.12.2007)

It does not mention neither museums or museum system.

UNIVERSITA' DI CATANIA

Statute

(D.R. 28.11.2011)

It does not mention neither museums or museum system.

General Regulation

(Latest update DR 6111, 06.10.2010)

Titolo VIII - Rapporti con l'esterno, CAPO F - Musei Universitari, Articolo 119 - Regolamentazione delle strutture museali ed archivistiche e del Sistema Museale di Ateneo

1. Il Senato accademico, su proposta di una o più Facoltà e/o Dipartimenti, sentito il Consiglio di amministrazione, per tutelare, incrementare e rendere fruibile il patrimonio culturale/scientifico di alto pregio di cui dispone, può deliberare la costituzione di **strutture museali** ed archivistiche, quali **musei** o archivi aperti al pubblico o **centri museali** o archivistici.

- 2. Nella delibera di proposta dei Consigli delle strutture decentrate dovranno essere indicati: il personale docente che ha espresso formalmente l'intenzione di aderire alle strutture museali ed archivistiche di cui al comma precedente, nonchè le risorse patrimoniali e finanziarie disponibili od acquisibili e le esigenze di personale tecnico-amministrativo.
- 2 bis L'accertamento di quanto indicato nella proposta di cui ai commi 1 e 2, come pure la formale assegnazione di locali e di personale tecnico-amministrastivo, vengono effettuati dal Consiglio di amministrazione.
- 2 ter Le strutture museali ed archivistiche possono avvalersi anche di altro personale docente, interessato all'attività museale/archivistica, indicato in elenchi che integrano l'originaria proposta di costituzione e siano stati motivatamente approvati dal Consiglio di cui ai successivi commi 3 e 4.
- 2 quater II centro museale o archivistico, quale accorpamento di più strutture e/o patrimoni museali o archivistici, prevede un'organizzazione in sezioni.
- 3. Sono **organi** della struttura museale: il Consiglio, la Giunta (nel caso di centri museali o archivistici) e il direttore.
- 4. Il Consiglio è costituito da:
- a) il direttore;
- b) il personale docente;
- c) una rappresentanza del personale tecnico-amministrativo, la cui composizione viene definita dal regolamento del sistema museale di Ateneo.
- 5. Il direttore è un professore di ruolo ed è eletto dal Consiglio. La carica di direttore è incompatibile con quella di preside, di direttore di dipartimento e di responsabile di sezione. Il direttore è nominato con decreto del rettore per un quadriennio ed è riconfermabile per una sola volta.
- 6. Sono **organi delle sezioni del centro museale** o archivistico:
- a) il responsabile;
- b) il consiglio.
- 7. Il consiglio di sezione è costituito da:
- a) il responsabile;
- b) il personale docente;
- c) una rappresentanza del personale tecnico-amministrativo, la cui composizione viene definita dal regolamento di cui al comma 16.
- 8. Il responsabile di sezione è un professore di ruolo ed è eletto dal Consiglio di sezione. La carica di responsabile è incompatibile con quella di preside, di direttore di dipartimento e di direttore del centro museale o archivistico. Il responsabile di sezione è nominato dal rettore per un quadriennio ed è riconfermabile per una sola volta.
- 9. L'organizzazione e le modalità di funzionamento delle strutture museali o archivistiche sono definite da un **regolamento interno**, approvato a maggioranza assoluta dei componenti dei loro rispettivi Consigli.

- 10. Il sistema museale di Ateneo (S.M.A.) è istituito dal Consiglio di amministrazione, sentito il Senato accademico, per il coordinamento delle attività museali ed archivistiche dell'Università di Catania, nonchè per il sostegno e la promozione delle strutture preposte allo svolgimento di tali compiti istituzionali. Il S.M.A. ha autonomia gestionale, organizzativa e di spesa; ad esso si applicano, in quanto compatibili, le norme relative ai dipartimenti universitari.
- 11. Al sistema museale di Ateneo afferiscono tutte le strutture museali ed archivistiche aperte al pubblico dell'Università di Catania.

Può afferire anche l'Orto botanico, previa delibera degli organi competenti.

- 12. Sono organi del S.M.A. il presidente e il Comitato tecnico-scientifico (C.T.S.).
- 13. Il presidente è un professore di ruolo ed è nominato dal rettore per un quadriennio ed è riconfermabile per una sola volta. La carica di presidente è incompatibile con quella di preside, di direttore di dipartimento e di qualsiasi altra carica nell'ambito delle strutture museali o archivistiche.
- 14. Il Comitato tecnico-scientifico (C.T.S.), che svolge anche le funzioni di Comitato di gestione del sistema museale di Ateneo, è costituito dal presidente, che lo presiede, e dai direttori di tutte le strutture museali (Orto botanico incluso) ed archivistiche aperte al pubblico.
- 15. Sulla base di una programmazione annuale delle attività e di una relazione sull'attività svolta nell'anno precedente presentata dal C.T.S., il Consiglio di amministrazione può disporre un finanziamento annuale per il funzionamento del S.M.A.
- 16. Il funzionamento del S.M.A. viene disciplinato da apposito regolamento deliberato dal C.T.S. ed approvato dal Senato accademico e dal Consiglio di amministrazione.

UNIVERSITA' DEGLI STUDI DI CHIETI PESCARA

Statute

(D.R. n. 811, 18.09.2009)

Titolo IV - Le strutture didattiche e scientifiche, Sezione III – Dipartimenti, Art.70 L'Università promuove l'acquisizione, la conservazione e la fruizione del proprio patrimonio librario, documentale e museale [...].

L'Università organizza le sue **raccolte museali** e naturalistiche a fini di studio, ricerca e diffusione culturale e partecipa al sistema museale nazionale e internazionale.

General Regulation

UNIVERSITA' DI FERRARA

Statute

(G.U. n. 162, 14.07.2005)

It does not mention neither museums or museum system.

General Regulation

Not existing/Not found.

UNIVERSITA' DI FIRENZE

Statute

(D.R. n. 577, 20.06.1995. Latest update D.R. n. 1333, 3.11.2008.)

TITOLO V - ALTRE STRUTTURE DELL'ATENEO, Articolo 28 - Musei

- 1. I Musei provvedono alla raccolta, tutela, classificazione ed esposizione al pubblico, nonché allo studio dei beni di interesse storico, artistico e naturalistico dell'Ateneo i quali, per pregio e quantità, non possano essere considerati pertinenza di altre strutture didattiche e di ricerca.
- 2. Con **Regolamento di Ateneo**, approvato dal Senato Accademico e dal Consiglio di Amministrazione, saranno dettate disposizioni di carattere generale circa le modalità di costituzione e funzionamento dei Musei.
- 3. Nel rispetto dei principi dell'articolo 97 della Costituzione e secondo i criteri di economicità, di funzionalità e di efficienza, il Regolamento di cui al comma precedente dovrà comunque prevedere <u>l'attribuzione dell'autonomia amministrativa, contabile e di spesa dei Musei</u>.

Articolo 28 bis93 - Centri per la valorizzazione e lo studio di beni culturali

1. Per attività di valorizzazione, di studio, ed eventualmente di formazione alla ricerca, relative a collezioni di reperti scientifici o di patrimoni librari ed archivistici che abbiano notevole interesse culturale, e che richiedano una gestione affidata ad apposita Unità amministrativa secondo quanto previsto dal Regolamento per l'Amministrazione, la Finanza e la Contabilità, il Senato Accademico, sentito il Consiglio di Amministrazione, può deliberare la costituzione di Centri di Ateneo per la valorizzazione e lo studio di beni culturali.

¹⁷⁵ The General Regulation is not published on the web site and has not been given by the contacted offices. It is probably not been approved.

2. Con apposito Regolamento di Ateneo, approvato dal Senato Accademico e dal Consiglio di Amministrazione, sono dettate le norme sulla costituzione e il funzionamento dei Centri di Ateneo per la valorizzazione e lo studio di beni culturali, la cui istituzione è comunque condizionata alla sussistenza di adeguate risorse.

General Regulation

Not existing/Not found.

UNIVERSITA' DEGLI STUDI DI GENOVA

Statute

(6.12.2011)

INTRODUZIONE

L'Ateneo tutela e valorizza il proprio patrimonio storico, bibliografico e documentale attraverso il **potenziamento e la costituzione di musei**, biblioteche, archivi, **orti botanici**, anche con l'adozione

di tecnologie multimediali.

General Regulation

(D.R. n. 80, 07.03.2000)

It does not mention neither museums or museum system.

UNIVERSITA' DEGLI STUDI DI MESSINA

Statute

(Latest update 29.09.2010)

It does not mention neither museums or museum system.

General Regulation

(26.06.2008)

It does not mention neither museums or museum system.

UNIVERSITA' DEGLI STUDI DI MILANO

Statute

(D.R. 15.03.2012)

TITOLO I - NORME GENERALI, Art. 9 - Beni storico-artistici, naturalistici e culturali

1. L'Università tutela e valorizza i beni culturali e naturalistici e le raccolte artistiche, bibliografiche, storiche e scientifiche che fanno parte del suo patrimonio o che sono detenute a qualsiasi titolo, incrementandone la consistenza e organizzandone la gestione a fini di studio, di ricerca e di divulgazione culturale.

TITOLO V - CENTRI E STRUTTURE DI SERVIZIO, Art. 55 - Patrimonio storico, culturale e naturalistico

2. Raccolte, collezioni, orti botanici di valore storico, culturale e naturalistico posseduti o comunque detenuti dall'Università sono gestiti dai Dipartimenti di riferimento, che provvedono alla loro conservazione e valorizzazione, nonché, ove possibile, al loro incremento, garantendone la fruizione, ovvero assumono, su delibera del Consiglio di amministrazione, previo parere obbligatorio del Senato accademico, la configurazione organizzativa più consona con le loro caratteristiche, eventualmente anche museale, secondo le tipologie previste per i Centri funzionali di cui al presente Titolo.

General Regulation

(D.R. 16.11.1999. Latest update 2.03.2009)

Articolo 25 - Orti botanici e raccolte museali

- 1. L'Università salvaguarda e valorizza i beni culturali e naturalistici e le raccolte artistiche, storiche e scientifiche che fanno parte del suo patrimonio, incrementandone la consistenza e organizzandone la gestione a fini di studio, di ricerca e di divulgazione culturale.
- 2. Gli orti botanici e le raccolte museali afferiscono alle strutture didattiche, di ricerca e di servizio che provvedono alla loro conservazione e gestione e ne garantiscono la fruizione, ovvero possono assumere, su delibera del Senato accademico e del Consiglio di amministrazione, forma autonoma sul modello, per quanto compatibile, dei centri di servizio d'ateneo.

UNIVERSITA' DEGLI STUDI DEL MOLISE

Statute

(DR n. 15, 10.01.12)

TITOLO III - STRUTTURE DIDATTICHE, SCIENTIFICHE E DI SERVIZIO, Art 40 - Sistema bibliotecario e museale di Ateneo

5. L'Ateneo cura la tutela e la valorizzazione dei beni culturali, delle collezioni naturalistiche, nonché degli strumenti scientifici di sua proprietà, partecipando al **sistema museale territoriale**. A tal fine può avvalersi della collaborazione di enti pubblici e privati.

General Regulation

(D.R. n. 177, 2.03.12)

It does not mention neither museums or museum system.

UNIVERSITA' DI MODENA E REGGIO EMILIA

Statute

(D.R. n. 3, 6.02.2012)

TITOLO III - STRUTTURE DELL'UNIVERSITÁ, Art. 37 - Rete museale di Ateneo

- 1. È istituita la **Rete museale di Ateneo** che provvede alla **valorizzazione**, **alla tutela**, **classificazione ed esposizione al pubblico**, **nonché allo studio** dei beni di interesse storico, artistico e naturalistico dell'Ateneo.
- 2. Con Regolamento di Ateneo saranno dettate disposizioni di carattere generale circa le modalità di costituzione e funzionamento della Rete museale, per la quale <u>potrà essere prevista</u> <u>l'attribuzione dell'autonomia decisionale nell'ambito delle risorse della struttura.</u>

General Regulation

(Latest update D.R. n. 71, 6.11.2009)

It does not mention neither museums or museum system.

UNIVERSITA' DEGLI STUDI DI NAPOLI FEDERICO II

Statute

(D.R. n. 837, 24.02.05)

Titolo III - RICERCA

Articolo 23 - Strutture per la ricerca

- 2. Cooperano all'attività di ricerca **l'Orto Botanico**, l'Azienda Agraria e l'Azienda ospedaliero-universitaria.
- Contribuiscono all'attività di ricerca le Biblioteche, i Musei, i Centri e le altre strutture di servizio.
- 4. Le strutture per la ricerca sono **elencate** in allegato al presente Statuto (Allegato A). Articolo 36 **Sistema museale**
- 1. I Musei ed i Centri museali costituiscono il sistema museale dell'Università, volto ad organizzare, anche mediante tecnologie innovative e in forme coordinate, la raccolta, la conservazione, l'arricchimento, la classificazione e la fruizione dei beni di interesse storico, artistico e naturalistico dell'Università.

- 2. I **Centri museali hanno <u>autonomia gestionale, organizzativa e di spesa</u>. Ad essi si applicano, in quanto compatibili, le norme relative ai Centri di servizio.**
- 3. I principi di funzionamento del sistema museale sono stabiliti da regolamento.
- 4. Possono essere istituiti, con convenzioni, Musei e Centri museali interuniversitari o comuni con altri soggetti pubblici e privati.

General Regulation

Not existing/Not found.

UNIVERSITA' DEGLI STUDI DI NAPOLI PARTHENOPE

Statute

(D.R. n.2, 2.01.2012)

It does not mention neither museums or museum system.

General Regulation

(D.R. n. 595, 29.09.2005)

It does not mention neither museums or museum system.

SECONDA UNIVERSITA' DEGLI STUDI DI NAPOLI

Statute

(D.R. n. 171, 24.02.2012)

TITOLO III, STRUTTURE DELL'ATENEO, CAPO I – Dipartimenti, Centri e Scuole, Sez. II – Centri, Art. 29 - **Sistema Museale di Ateneo**

- 1. E' istituito il museo universitario delle scienze e delle arti, da ora in poi MUSA, quale centro di servizio per l'acquisizione, la conservazione, la valorizzazione, la gestione e la fruizione delle raccolte artistiche, naturalistiche e scientifiche, finalizzato al supporto delle attività di studio, di ricerca e di diffusione culturale, in coordinamento con il sistema museale nazionale e internazionale.
- 2. Sono organi del MUSA il direttore e la commissione scientifica, nominati dal rettore.
- 3. Il consiglio di amministrazione determina, ogni anno o con piani pluriennali, l'ammontare delle risorse di cui il centro può disporre.
- 4. L'organizzazione e il funzionamento del MUSA sono disciplinati dal regolamento generale di ateneo.

General Regulation

(D.R. 4565, 31.12.03)

It does not mention neither museums or museum system.

UNIVERSITA' DEGLI STUDI DI PADOVA

Statute

(D.R. n. 3276, 16.12.2011. Latest update D.R. n. 1664, 27.06.2012)

TITOLO III – STRUTTURE DIDATTICHE, SCIENTIFICHE E DI SERVIZIO, Capo IV – Centri di ricerca e strutture di servizio, Art. 57 – Archivi e **Sistema museale di Ateneo** 2. L'Ateneo **si impegna a salvaguardare e valorizzare i beni culturali**, così come definiti dalla normativa vigente, nella disponibilità dell'Ateneo, anche al fine di **favorirne la più ampia fruizione da parte della città e del territorio**; a tale fine i Musei sono collegati tra di loro all'interno del **Sistema museale di Ateneo**, articolato e gestito nei modi previsti dal Regolamento generale di Ateneo nel rispetto dell'autonomia delle strutture dipartimentali.

General Regulation

(D.R. 1826-2010 Prot. n. 40919, Anno 2000 Tit. I Cl. 3 Fasc. 3)

Capo II – ORGANZZAZIONE, Art. 151 - **Centro di Ateneo per i Musei (CAM)**: finalità, Art. 152 - Organi del CAM, Art. 153 - L'Assemblea, Art.154 - Composizione dell'Assemblea, Art. 155 - Il Comitato Tecnico-Scientifico (CTS), Art. 156 - Composizione del Comitato Tecnico-Scientifico, Art. 157 - Il Direttore, Art. 158 - Risorse del CAM

CAPO III - Regolamento-Quadro dei Musei, Sezione I - Definizione di Musei e Collezioni

Art. 159 - Definizione di Museo.

- 1. Il Museo è una struttura permanente che acquisisce, conserva, ordina ed espone beni culturali per finalità di ricerca, di studio e didattiche.
- 2. Le raccolte di oggetti dell'Ateneo sono classificate come Musei se soddisfano i requisiti e garantiscono i servizi di cui all'art. 160 del presente Regolamento.
- 3. Le raccolte che non soddisfano in tutto o in parte i requisiti e l'erogazione di servizi specificati dal precitato art. 160 costituiscono le Collezioni.
- 4. Non sono ammesse acquisizioni o gestioni di oggetti senza:
- a) registrazione inventariale, in conformità alle disposizioni del Regolamento di Ateneo per l'amministrazione, la finanza e la contabilità;
- b) catalogazione almeno in una forma minima, secondo gli standard nazionali di catalogazione del Ministero competente;
- c) accessibilità all'utenza (diretta o per via informatica).

Sezione II - Organizzazione dei servizi, Art. 160 - Requisiti e servizi dei Musei

1. I Musei devono essere dotati di:

- a) sede di esposizione permanente che risponda a principi museologici e museografici nel rispetto degli standard nazionali e internazionali e sia conforme alle disposizioni di legge in materia di sicurezza per le collezioni, gli utenti e gli addetti;
- b) spazi per esposizioni temporanee che rispondano a principi museologici e museografici nel rispetto degli standard nazionali e internazionali e siano conformi alle disposizioni di legge in materia di sicurezza per le collezioni, gli utenti e gli addetti:
- c) depositi che custodiscano gli oggetti non esposti al pubblico, organizzati in modo funzionale e logico, privilegiando le esigenze di conservazione, di controllo e di manutenzione da parte del personale addetto e conformi alle disposizioni di legge in materia di sicurezza;
- d) uffici per il personale addetto collocati in posizione funzionale rispetto alla sede espositiva ed
- espressamente assegnati dalla Struttura responsabile della sede espositiva stessa;
- e) laboratori organizzati sulla base di convenienze logistiche ed organizzative in relazione alle necessità di interventi conservativi e di restauro nonché di documentazione dei singoli Musei o dei Poli museali;
- f) archivi e fototeche relativi al patrimonio del Museo o del Polo museale;
- g) un catalogo informatizzato secondo gli standard nazionali di catalogazione del Ministero competente;
- h) personale con professionalità specifica.
- 2. I Musei devono fornire i seguenti servizi:
- a) apertura agli utenti con orari e condizioni definiti dal Regolamento dei singoli Musei e dal Regolamento delle attività didattiche;
- b) accesso ai depositi, agli archivi e alla documentazione scientifica per motivi di studio e ricerca con l'assistenza di un Operatore del Museo in orari concordati;
- c) prestito degli oggetti per ragioni di studio e ricerca e per esposizioni temporanee nazionali e internazionali; le politiche e le procedure dei prestiti saranno definite dal Regolamento prestiti;
- d) riproduzione di documenti (escluso il materiale bibliografico) a disposizione dell'utenza, secondo le norme vigenti in materia di tutela dei BBCC e secondo il Regolamento per le riprese video e foto dei Beni culturali dell'Università di Padova e riproduzione dei materiali d'archivio di proprietà della stessa;
- e) consultazione delle schede di catalogo dei singoli Musei, rese disponibili al pubblico in forme diverse e solo relativamente ai dati non pregiudiziali alla sicurezza dei beni;
- f) consulenza nell'ambito di attività di individuazione, censimento e catalogazione finalizzati allo studio e alla valorizzazione del patrimonio mobile e immobile presente nell'Ateneo e nel territorio;

- g) perseguimento di politiche di incremento delle raccolte, attraverso acquisti, donazioni, lasciti, depositi, comodati, usucapione, assegnazioni a seguito di azione giudiziaria, scambi e permute con altri Musei secondo criteri definiti dal Regolamento dei singoli Musei e dal Regolamento per le politiche di incremento;
- h) altri servizi eventualmente proposti dal Comitato Tecnico-Scientifico del CAM in relazione:
- allo sviluppo di innovazioni tecnologiche nell'ambito della didattica museale e della comunicazione;
- allo sviluppo di attività didattiche ed educative che consentano diversi livelli di approfondimento;
- a particolari servizi richiesti da convenzioni sottoscritte con terzi.

Art. 161 - Utenti

- 1. Hanno accesso ai servizi indicati all'art. 160, comma 2, del presente Regolamento:
- a) i professori, i ricercatori, gli studenti e il personale tecnico-amministrativo dell'Ateneo;
- b) tutti coloro che sono legati da un rapporto formale di ricerca e di didattica con l'Ateneo;
- c) altri studiosi;
- d) pubblico generico.
- 2. L'accesso ai singoli servizi indicati all'art. 160, comma 2, viene disciplinato dal Regolamento dei singoli Musei e dal Regolamento delle attività didattiche.

Art. 162 - Personale

- 1. Ai Musei viene assegnato personale qualificato in numero sufficiente ad assicurare i servizi e le attività programmate.
- 2. I Musei devono avvalersi prioritariamente di personale inquadrato nei profili professionali dell'area funzionale tecnico-scientifica. Tuttavia le attività dei Musei possono usufruire anche dell'apporto di addetti di altre aree funzionali.
- 3. I Musei possono avvalersi per la loro attività anche di personale a tempo determinato e con rapporto di collaborazione appositamente regolamentato (volontari in servizio civile, studenti part-time, ecc.), nonché della collaborazione di volontari.
- 4. Il personale in servizio presso i Musei comprende profili professionali specifici in grado di assicurare le funzioni di tutela e conservazione, di servizio al pubblico, di studio e ricerca sulle collezioni, di educazione e didattica museale, di valorizzazione, di inventariazione e catalogazione.

Art. 163 - Risorse dei Musei

1. Le assegnazioni e le spese per i Musei sono individuate nei bilanci preventivi e nei conti consuntivi dell'Ateneo e dei centri di spesa: CAM e singoli Dipartimenti interessati.

2. Il Comitato Tecnico-Scientifico del CAM individua i criteri di ripartizione delle risorse assegnate a favore dei Musei. Sulla base di tali criteri, provvede a formulare le proposte di ripartizione ai Musei.

Art. 164 - Norme transitorie

- 1. Entro un anno dall'entrata in vigore del presente Regolamento generale, il CAM elabora e propone agli Organi di governo dell'Ateneo l'adozione dei seguenti Regolamenti specifici:
- a) Regolamento per le politiche di incremento;
- b) Regolamento prestiti;
- c) Regolamento delle attività didattiche;
- d) Regolamento attività di ricerca;
- e) Regolamento attività di catalogazione;
- f) Carta dei Servizi.

UNIVERSITA' DEGLI STUDI DI PALERMO

Statute

(D.R. 246, 30.01.2012)

PARTE IV - SERVIZI, APPARATO AMMINISTRATIVO E PATRIMONIO, Art. 44 – Sistema museografico e orto botanico

- 1. L'Università promuove la conservazione, l'arricchimento e la fruizione del proprio patrimonio culturale e scientifico attraverso il Sistema Museografico dell'Università di Palermo, che comprende i seguenti musei:
- a) Musei tematici realizzati presso le strutture didattiche e scientifiche dell'Università;
- b) Orto botanico e Herbarium Mediterraneum.
- 2. Il Consiglio di Amministrazione, su proposta del Senato Accademico, **può** costituire ciascuna unità del sistema museale in <u>centro di spesa</u>.

General Regulation

(D.R. 5739, 2.12.2008)

It does not mention neither museums or museum system.

UNIVERSITA' DEGLI STUDI DI PARMA

Statute

(14.04.2011. Latest update 21.12.2011)

CAPO III - SISTEMA BIBLIOTECARIO DI ATENEO, MUSEI E ARCHIVI, Art. 31 Sistema Bibliotecario di Ateneo, Musei e Archivi

- 3. Il **Sistema museale e archivistico** dell'Ateneo è costituito dall'insieme delle strutture responsabili dell'acquisizione, della conservazione, della valorizzazione e della fruizione degli archivi, delle raccolte artistiche, naturalistiche e scientifiche.
- 4. L'Università organizza le sue raccolte museali e naturalistiche **a fini di studio,** ricerca e diffusione culturale e partecipa al sistema museale nazionale e internazionale.
- 5. L'organizzazione e il funzionamento del Sistema Bibliotecario di Ateneo e del Sistema museale e archivistico sono disciplinati da **regolamenti approvati dal Senato** Accademico e dal Consiglio di Amministrazione.

General Regulation

(D.R. 1727, 8.11.2000)

museale

Art. 23 - Centri di Ricerca e di Didattica

1.1. [Il Senato Accademico su iniziativa di Facoltà o Dipartimenti **può proporre** l'istituzione di] **Centri** Interdipartimentali o Interfacoltà per attività di ricerca, di didattica e

Art. 27 - Musei ed Archivi

1. L'Università organizza le sue raccolte culturali (bibliografiche, artistiche, storico scientifiche, naturalistiche, ecc..) a fini di studio e ricerca, in strutture atte alla pubblica fruizione e partecipa al sistema museale nazionale ed internazionale.

Le modalità di istituzione e funzionamento delle strutture sono contenute in apposito Regolamento approvato dal Senato Accademico e dal Consiglio di Amministrazione. Il Regolamento deve contenere le norme relative agli organi di gestione di tali strutture, le modalità di gestione amministrativa nell'ambito dell'impostazione ed autonomia stabilite dal Regolamento di Ateneo per l'amministrazione, la finanza e la contabilità e quant'altro necessario per il

funzionamento della struttura.

2. Le raccolte museali e naturalistiche **possono afferire alle strutture didattiche di ricerca e di servizio che provvedono alla loro conservazione** e gestione e ne garantiscono la fruizione.

UNIVERSITÀ DEGLI STUDI DI PAVIA

Statute

(11.04.2012)

Titolo 4 - Strutture e organi di supporto alla ricerca scientifica e alle attività didattiche e formative, art. 33 - **Sistema Museale di Ateneo**

- 1. Il Sistema Museale di Ateneo ha la funzione di organizzare, salvaguardare e rendere fruibili raccolte e collezioni di materiale di rilevante interesse storico scientifico, anche a supporto della ricerca, della didattica e della formazione, adottando tutte le iniziative atte a valorizzarle presso il grande pubblico anche in collaborazione con altre strutture dell'Ateneo, con enti culturali locali, nazionali e internazionali.
- 2. La struttura e le modalità di funzionamento del Sistema Museale di Ateneo sono disciplinate da apposito regolamento.

General Regulation

(26.07.2012)

It does not mention neither museums or museum system.

UNIVERSITA' DEGLI STUDI DI PERUGIA

Statute

(D.R. n. 2454, 30.9.1996. Latest update 2010)

Allegato E) - CENTRI DI SERVIZIO, Centro di Ateneo per i Musei Scientifici (C.A.M.S.)

General Regulation

(DR n. 2080, 2.08.1997)

It does not mention neither museums or museum system.

UNIVERSITA' DI PISA

Statute

(D.R. n. 1057, 27.01.2011)

TITOLO I - Principi generali e attività dell'Università, Articolo 3 - Attività istituzionali L'Università si impegna ad assicurare le risorse necessarie all'espletamento delle attività istituzionali garantendone un'equa ripartizione. In particolare provvede all'organizzazione di poli didattici, di aree di studio, di biblioteche, di laboratori, di centri di calcolo, di centri di servizi, di musei e di quant'altro sia necessario all'attività didattica e di ricerca.

TITOLO IV - Autonomia organizzativa e gestionale, Articolo 39 - Sistema bibliotecario di ateneo

Il **sistema museale** di ateneo è costituito dai musei e dalle collezioni. Le norme quadro per il funzionamento del sistema museale sono definite nel **piano museale di ateneo**

approvato dal senato accademico sentito il consiglio di amministrazione per gli aspetti di competenza.

General Regulation

Not completely approved, Approved part: Regulation of the "Sistema Museale di Ateneo", D.R. n. 11069, 3.09.2012).

UNIVERSITA' DEGLI STUDI ROMA SAPIENZA

Statute

(D.R. n. 545, 4.8.2010)

TITOLO I – Principi generali, Art. 11 - Centri di ricerca, Centri di servizi e Centri misti, comma 4

I Musei della "Sapienza" costituiscono un "Polo Museale e dell'Orto Botanico", articolato in aree, quale centro di spesa autonomo; il Senato Accademico ne approva il Regolamento, assicurando il collegamento dei singoli Musei con i Dipartimenti di afferenza.

General Regulation

Not existing/Not found.

UNIVERSITA' DEGLI STUDI ROMA TRE

Statute

(*Latest update 26.10.2010*)

It does not mention neither museums or museum system.

General Regulation

(Latest update 21.07.2011)

It does not mention neither museums or museum system.

UNIVERSITA' DEGLI STUDI ROMA TOR VERGATA

Statute

(29.11.2011)

It does not mention neither museums or museum system.

General Regulation

UNIVERSITA' DEL SALENTO

Statute

(22.12.2011)

PARTE TERZA - SISTEMA D'ATENEO, TITOLO SECONDO - BIBLIOTECHE, MUSEI E CENTRI, ARTICOLO 86 - **Sistema dei Musei**, Parchi, Orti botanici, Osservatori scientifici

- 1. Il Consiglio di amministrazione, su proposta di un Dipartimento e sentito il Senato accademico, delibera a maggioranza assoluta la istituzione di Musei, Parchi, Orti botanici e Osservatori scientifici, per la tutela, valorizzazione e fruizione dei beni culturali, scientifici, monumentali, ambientali e naturalistici di proprietà dell'Università o ad essa affidati.
- 2. Queste strutture operano con <u>autonomia organizzativa</u> all'interno del Dipartimento proponente e coordinandosi all'interno di un sistema comune con quelle esistenti.
- 3. L'Università può stipulare contratti e convenzioni o costituire consorzi con soggetti esterni per la valorizzazione e lo sviluppo delle attività di Musei, Parchi, Orti botanici e Osservatori scientifici finalizzate alla tutela, valorizzazione e fruizione dei beni culturali, scientifici, monumentali, ambientali e naturalistici di proprietà dell'Università o ad essa affidati.

General Regulation

(DR n. 91, 31.01.2012)

It does not mention neither museums or museum system.

UNIVERSITA' DEGLI STUDI DI SASSARI

Statute

(G.U. n. 298, 23.11.2011)

It does not mention neither museums or museum system.

General Regulation

Not existing/Not found.

UNIVERSITA' DEGLI STUDI DI SIENA

Statute

(D.R. n. 164/2012, 7.02.2012)

TITOLO V – AMMINISTRAZIONE

Articolo 51 - Strutture di servizio

1. Sono strutture di servizio dell'Università: [...] d) Sistema Museale d'Ateneo.

Articolo 54 - Sistema Museale d'Ateneo

- 1. Il Sistema Museale d'Ateneo costituisce un sistema coordinato di strutture e servizi deputato alla raccolta, tutela, arricchimento, classificazione, valorizzazione, studio ed esposizione al pubblico dei beni di interesse storico, artistico, archeologico, scientifico e naturalistico dell'Ateneo che, per pregio, importanza e quantità, non possono considerarsi di pertinenza di altre strutture di ricerca e didattiche.
- 2. Con il **Regolamento generale d'Ateneo** sono definite le modalità costitutive, organizzative e di funzionamento dei Musei, nonché i livelli di responsabilità del personale addetto.
- 3. Ai Musei dell'Ateneo è garantita, nell'ambito del Sistema e comunque nel rispetto delle linee di indirizzo e delle direttive del Direttore Generale, <u>autonomia scientifica e organizzativa</u>.

General Regulation

Not existing/Not found.

POLITECNICO DI TORINO

Statute

(D.R. 418, 29.11.2011)

Titolo I - Principi generali, Art. 3 - Principi di riferimento

7. Il Politecnico **tutela il proprio patrimonio** bibliografico, documentale e **museale**. Assicura la corretta conservazione dei documenti e predispone gli strumenti atti a garantirne la consultazione e l'affidabilità sia in ambiente tradizionale che in ambiente digitale.

Titolo III - Articolazione interna, Art. 26 - Comitato di Ateneo per la Ricerca, Trasferimento tecnologico e Servizi al territorio

e) [Il Comitato di Ateneo per la Ricerca, Trasferimento tecnologico e Servizi al territorio] promuove e **organizza le iniziative per la diffusione, la conservazione e la valorizzazione del patrimonio** culturale, tecnologico, **museale**, bibliotecario e archivistico dell'Ateneo

Titolo V - Norme comuni, Art. 30 - Regolamenti

9. Il Politecnico si dota di una regolamentazione organica in merito ai beni di valore storico culturale posseduti dall'Ateneo, rivolta a costituire un sistema museale e archivistico.

General Regulation

(D.R. n. 261, 15.11.2012)

It does not mention neither museums or museum system.

UNIVERSITA' DEGLI STUDI DI TORINO

Statute

(30.09.2011)

TITOLO III BIBLIOTECHE, ARCHIVI E MUSEI, Art. 38 - Sistema Museale di Ateneo

1. Il Sistema Museale di Ateneo assicura la **conservazione**, **fruizione e valorizzazione** delle collezioni museali universitarie, che rappresentano un giacimento di beni culturali e insieme una preziosa fonte di informazioni storico-scientifiche in relazione alle discipline di riferimento e si propone, nel rispetto delle più moderne indicazioni della museologia scientifica, l'obiettivo di promuovere nel modo più efficace e di **divulgare la cultura scientifica** al pubblico anche non specialistico.

General Regulation

Not existing/Not found.

UNIVERSITA' DEGLI STUDI DI TRIESTE

Statute

(D.R. 131/200, 5.02.2009)

It does not mention neither museums or museum system.

General Regulation

(D.R. 227/2010, 10.02.2010)

It does not mention neither museums or museum system.

UNIVERSITA' DEGLI STUDI DI URBINO

Statute

(D.R. n. 138/2012, 2.04.2012)

It does not mention neither museums or museum system.

General Regulation

(D.R. n.274/2012, 18.07.2012. Latest update D.R. n. 530/2012, 24.10.2012)

It does not mention neither museums or museum system.

UNIVERSITA' DEGLI STUDI DELLA TUSCIA DI VITERBO

(D.R. n. 8729, 29.07.1996. Latest update D.R. n. 833/04, 7.10.2004)

Statute

Titolo IV - STRUTTURE, Art. 32 Sistema museale di Ateneo

1. E' istituito il Sistema Museale di Ateneo (S.M.A.) al fine di sostenere e promuovere la tutela e la valorizzazione del patrimonio architettonico dell'Ateneo e delle sue collezioni storiche, demo-antropologiche, scientifiche, artistiche e naturalistiche nell'intento di favorire lo svolgimento dei compiti istituzionali, di ricerca scientifica, di promozione della cultura, di conservazione, restauro, catalogazione, incremento ed ostensione delle collezioni medesime, nonché di attività espositive di sostegno all'attività didattica dell'Università e delle scuole di ogni ordine. Le modalità relative all'organizzazione ed al funzionamento del S.M.A. sono determinate dal regolamento generale di Ateneo.

General Regulation

(D.R. n. 1373, 26.10.2000. Latest update D.R. n. 1116/10, 30.11.2010)

It does not mention neither museums or museum system.

Appendix Q - Central Coordination Units. Presentation

Bari

CISMUS - Centro Interdipartimentale di Servizi per la Museologia Scientifica

Ouest, answer

Sì

#http://www.cismus.uniba.it#

Born 1993

CHIUSO - Laboratorio di Storia della Psicologia Applicata "A. Marzi"

Collezioni di chimica

Collezioni di fisica

Collezioni di informatica

Museo del dipartimento di biologia

Museo di scienze della terra

Museo orto botanico

Bologna

SMA - Sistema museale di ateneo Quest. answer No

#http://www.sma.unibo.it/#

Born

CHIUSO - Museo del IX centenario

CHIUSO - Museo della Specola

Erbario e museo botanico

Museo delle Cere anatomiche "Luigi Cattanei"

Museo di Anatomia comparata

Museo di Anatomia degli animali domestici

Museo di Anatomia patologica e teratologia veterinaria Alessandrini-Ercolani

Museo di Antropologia

Museo di Fisica

Museo di Mineralogia

Museo di Palazzo Poggi

Museo di Zoologia

Museo Geologico «Giovanni Capellini»

Orto botanico

Raccolta di strumenti chirurgici veterinari

Cagliari

CIMAS - Centro Interdipartimentale dei Musei e dell'Archivio Storico

Quest. answer

No

Born

Collezione Archeologica "Evan Gorga"

Collezione degli Strumenti e Apparecchi di Chimica

Collezione Luigi Piloni

Museo di Cere Anatomiche "Clemente Susini"

Museo di Fisica

Museo di Mineralogia "Leonardo de Prunner"

Museo di Zoologia

Museo etno-botanico

Museo Herbarium

Museo sardo di Antropologia ed Etnografia

Museo sardo di Geologia e mineralogia e Paleontologia "Domenico Lovisato"

Orto botanico

Camerino

PMA - Polo museale di ateneo Quest. answer Sì

#http://www.unicam.it/polomusealeateneo/#

Born 2005

Museo di scienze naturali

Orto botanico "Carmela Cortini"

Catania

Sistema museale SOSPESO Quest. answer

Born 2010

Archivio ceramografico

CHIUSO - Museo di scienze della terra

Museo della fabbrica

Museo della rappresentazione - Casa della città

Museo dello studio

Museo di archeologia

Museo di zoologia e casa delle farfalle

Orto botanico

Ferrara

SMA - Sistema museale Quest. answer Sì

#http://m.unife.it/ateneo/sma#

Born 2012

Arredi storici della Premiata Farmacia Navarra e collezione strumenti

Collezione instrumentaria delle scienze fisiche - CISIF

Museo Anatomico "Giovanni Tumiati"

Museo di Paleontologia e Preistoria 'P. Leonardi'

NON ESPOSTA - Collezione di chimica

Orto botanico

Modena-Reggio Emilia

Sì

Rete museale NON ATTIVA Quest. answer No

Born

CHIUSO - Musei anatomici

CHIUSO - Museo Astronomico e Geofisico

Gemma 1786. Museo Mineralogico e Geologico Estense

Laboratorio delle Macchine Matematiche

Museo di Paleontologia

Museo di Zoologia ed Anatomia Comparata

Orto Botanico

Molise

Sistema museale NON ATTIVO Ouest. answer Sì

Born

Collezioni entomologiche

Museo del territorio

Museo di ingegneria agroalimentare

Museo di patologia vegetale

Museo di zootecnia

Museo erbario del Molise

Napoli Federico II

CMSN - Centro Musei delle Scienze Naturali Quest. answer Sì

#http://www.musei.unina.it/#

Born 1992

CMSNF - Museo di Antropologia

CMSNF - Museo di Fisica

CMSNF - Museo di Paleontologia

CMSNF - Museo Zoologico

CMSNF - Real Museo Mineralogico

MUSA - CHIUSO - Museo Botanico "Orazio Comes"

MUSA - CHIUSO - Museo Di meccanica agraria "Carlo Santini"

MUSA - CHIUSO - Museo di Mineralogia "Antonio Parascandolo"

MUSA - CHIUSO -Museo di Entomologia "Filippo Silvestri"

MUSA - Museo Anatomo - Zootecnico "Tito Manlio Bettini"

MUSA - NON ESPOSTE - Collezioni strumentazioni scientifiche

MUSA - Orto Botanico di Portici

Museo di Anatomia Veterinaria

MUSA - Centro Museale "Musei delle Scienze Agrarie" Quest. answer

#http://www.museiagraria.unina.it/index.html#

Born 2011

CMSNF - Museo di Antropologia

CMSNF - Museo di Fisica

CMSNF - Museo di Paleontologia

CMSNF - Museo Zoologico

CMSNF - Real Museo Mineralogico

MUSA - CHIUSO - Museo Botanico "Orazio Comes"

MUSA - CHIUSO - Museo Di meccanica agraria "Carlo Santini"

MUSA - CHIUSO - Museo di Mineralogia "Antonio Parascandolo"

MUSA - CHIUSO -Museo di Entomologia "Filippo Silvestri"

MUSA - Museo Anatomo - Zootecnico "Tito Manlio Bettini"

MUSA - NON ESPOSTE - Collezioni strumentazioni scientifiche

MUSA - Orto Botanico di Portici

Sì

Museo di Anatomia Veterinaria

Napoli SUN

Centro di servizio di ateneo MUSA - Museo universitario delle scienze e delle arti Quest. answer

answer No

Born

Museo di anatomia

Museo di farmacologia

Museo di odontoiatria

Padova

CAM - Centro di ateneo per i musei Quest. answer Sì

#http://www.musei.unipd.it/#

Born 2002 Museo Botanico

Museo degli Strumenti dell'Astronomia

Museo dell'Educazione

Museo di Antropologia

Museo di Geologia e Paleontologia

Museo di Macchine "Enrico Bernardi"

Museo di Mineralogia

Museo di Scienze Archeologiche e d'Arte

Museo di Storia della Fisica

Museo di Zoologia

Palermo

SMA - Sistema museale di ateneo Quest. answer Sì

#http://portale.unipa.it/amministrazione/areapatrimonialenegoziale/sistemamuseale/home/index.html#

Born 2011

Archivio Ducrot e Dotazione Basile

Cappella dei Falegnami

Carceri dei Penitenziati

Chiesa di S. Antonio Abate

CHIUSO - Osservatorio Astronomico e Museo della Specola

Collezione di Anatomia

Collezione di Fisiologia Umana

Collezione di Ingegneria: Civile, Ambientale, Aerospaziale, dei Materiali (DICAM)

Collezione di Ingegneria: Elettronica ed elettrotecnica

Collezione di Ingegneria: Trasporti

Convento di S. Antonino

Cripta delle Repentite Fossa della Garofala

Museo della Chimica

Museo della Radiologia "Pietro Cignolini"

Museo di Entomologia Agraria

Museo di Mineralogia

Museo Geologico "Gaetano Giorgio Gemmellaro"

Museo Storico dei Motori e dei Meccanismi

Museo Zoologico "Pietro Doderlein"

Orto Botanico ed Herbarium Mediterraneum

Palazzo Chiaromonte Steri

UOA12 - Unità organizzativa d'area "Valorizzazione del patrimonio culturale e scientifico e Sistema

answer Sì Born 2010 Ouest.

Archivio Ducrot e Dotazione Basile

Cappella dei Falegnami

Carceri dei Penitenziati

Chiesa di S. Antonio Abate

CHIUSO - Osservatorio Astronomico e Museo della Specola

Collezione di Anatomia

Collezione di Fisiologia Umana

Collezione di Ingegneria: Civile, Ambientale, Aerospaziale, dei Materiali (DICAM)

Collezione di Ingegneria: Elettronica ed elettrotecnica

Collezione di Ingegneria: Trasporti

Convento di S. Antonino

Cripta delle Repentite Fossa della Garofala

Museo della Chimica

Museo della Radiologia "Pietro Cignolini"

Museo di Entomologia Agraria

Museo di Mineralogia

Museo Geologico "Gaetano Giorgio Gemmellaro"

Museo Storico dei Motori e dei Meccanismi

Museo Zoologico "Pietro Doderlein"

Orto Botanico ed Herbarium Mediterraneum

Palazzo Chiaromonte Steri

Parma

Sistema museale IN ATTIVAZIONE Quest. answer

#http://www.unipr.it/musei#

Sì

Born

Centro studi e archivio della comunicazione (CSAC)

Collezione di strumenti scientifici "Macedonio Melloni"

Museo anatomico veterinario

Museo del Dipartimento di Anatomia Umana, Farmacologia e Scienze medico-forensi

Museo di mineralogia

Museo di Storia Naturale

Museo Paleontologico Parmense

Orto botanico

SM - Settore musei Ouest. answer Sì

#http://www.unipr.it/musei#

Born 1995

Centro studi e archivio della comunicazione (CSAC)

Collezione di strumenti scientifici "Macedonio Melloni"

Museo anatomico veterinario

Museo del Dipartimento di Anatomia Umana, Farmacologia e Scienze medico-forensi

Museo di mineralogia

Museo di Storia Naturale

Museo Paleontologico Parmense

Orto botanico

Pavia

CSSMA - Centro di servizi Sistema museale di ateneo Quest. answer Sì

#http://musei.unipv.it/Index.html#

Born 2005

Aula Magna

Aula Scarpa

Aula Volta

CHIUSA AL PUBBLICO - Collezione Fisiologia

CHIUSA AL PUBBLICO - Collezione Istologia ed Embriologia

CHIUSA AL PUBBLICO - Collezione Matematica

CHIUSO - Collezione Patologia Generale

CHIUSO - Museo di Anatomia

CHIUSO - Museo di Chimica

CHIUSO - Museo di Fisica

Collezione di Archeologia

Collezione Musicologia

Cortile di Volta

Il palazzo dell'Università

Museo della Tecnica Elettrica

Museo di Mineralogia

Museo di Storia Naturale

Museo per la Storia dell' Università

Orto Botanico

Perugia

CAMS -- Centro di ateneo per i musei scientifici Quest. answer

#http://www.unipg.it/camso1/#

Born 1995

Collezione del dipartimento di Matematica e informatica

Erbario Cicioni-Bruschi

Galleria di Storia Naturale dell'Università di Perugia

Sì

Gipsoteca

Laboratorio di storia dell'agricoltura di Casalina

Museo di Anatomia Umana

Museo di Fisica

Orto botanico

Pisa

SMA - Sistema museale Quest. answer

Born 1982

Antiquarium di archeologia classica

Collezioni di egittologia

Collezioni di paletnologia

Gipsoteca di arte antica

Museo botanico

Museo degli strumenti per il calcolo

Museo della grafica

Museo di anatomia e istologia patologica

Museo di anatomia patologica

Museo di anatomia veterinaria

Museo di storia naturale e del territorio di Calci

Orto botanico

Roma Sapienza

PMS - Polo museale sapienza Quest

Quest. answer Sì

Sì

#http://www.musei.uniroma1.it/index.asp#

Born 2010

Fort Apollonia Museum of Nzema Culture and History

Museo Arte e giacimenti Minerari

Museo del Vicino Oriente

Museo dell'Arte Classica

Museo delle Antichità Etrusco Italiche

Museo delle Origini

Museo di Anatomia Comparata

Museo di Anatomia Patologica

Museo di Antropologia "Giuseppe Sergi"

Museo di Chimica "Primo Levi"

Museo di Fisica

Museo di Geologia

Museo di Idraulica

Museo di Merceologia

Museo di Mineralogia

Museo di Paleontologia

Museo di Storia della Medicina

Museo di Zoologia

Museo Erbario - Museo di Botanica

Museo Laboratorio Arte Contemporanea

Orto Botanico

Salento

SMA - sistema museale Quest. answer Sì

#http://www.unisalento.it/web/guest/180#

Born 2009

CHIUSO - Museo dell'Ambiente

Museo di Biologia Marina "Pietro Parenzan", Porto Cesareo

Museo di Ecologia degli Ecosistemi Mediterranei, Otranto

Museo Diffuso di Cavallino

Museo Papirologico

Museo Storico-Archeologico

Orto Botanico

Siena

CUTVAP - Centro di servizi tutela e valorizzazione antico patrimonio scientifico

Quest. answer

Sì

Born 1994

Archivio e Percorso Storico d'Ateneo

Collezione di Fisica

Collezioni di Preistoria, Archeologia Classica e Archeologia Medievale

Museo Anatomico

Museo Botanico: Orto Botanico e Herbarium

Museo di Scienze della Terra

SIMUS - sistema museale senese Quest. answer

#http://www.unisi.it/v0/portale.html?fld=3900#

Born 2007

Archivio e Percorso Storico d'Ateneo

Collezione di Fisica

Collezioni di Preistoria, Archeologia Classica e Archeologia Medievale

Museo Anatomico

Museo Botanico: Orto Botanico e Herbarium

Museo di Scienze della Terra

Torino

Sì

CEMED - Centro museo e documentazione storica Ouest. answer Sì #http://areeweb.polito.it/strutture/cemed/001/Index2.htm# 1997 Born Museo archivio politecnico Sistema museale NON ATTIVO Ouest. answer Sì Born ASTUT - Archivio scientifico e tecnologico CHIUSO - Museo di antropologia e etnografia Collezioni di scienze naturali Museo "Perroncito" Museo del Dipartimento di Scienze Veterinarie Museo dell'agricoltura del Piemonte Museo di anatomia umana "Luigi Rolando" Museo di antropologia criminale "C. Lombroso" Museo di fisica Museo di odontoiatria Orto botanico Trieste SMATS - sistema museale di ateneo Ouest, answer Sì #http://dbiodbs.univ.trieste.it/smats/home.html# 2005 Born Collezione del Dipartimento di Fisica Museo delle scienze sanitarie Museo di Mineralogia e Petrografia

NON ESPOSTA - Collezione "Marussi"

Orto botanico

Raccolta di opere d'arte

Tuscia (Viterbo)

SMA - Sistema museale di ateneo Quest. answer Sì

#http://www.sma.unitus.it/#

Born 2009

Banca del Germoplasma della Tuscia

Collezione entomologica

Collezioni della Facoltà di Agraria

Museo della città e del territorio, Vetralla

Museo Erbario della Tuscia

NON ESPOSTA - Collezione archeologica

NON ESPOSTA - Collezione di anatomia comparata e zoologia

Orto Botanico dell'Azienda Agraria Didattico-Sperimentale

Rete dei complessi monumentali di Ateneo

Rete dell'arte contemporanea della Tuscia

Xylarium

Appendix R – Central Coordination Units. Management: Regulation, Annual budget, Fund Raising, Activity Plan, Activity Report, Communication Plan, Net, Community Relationship

University	CCU	Working	Quest.	Reg.	Budget	Fund	Act.	Act.	Com.	Net	Com.
						Rais.	Plan	Rep.	Plan		Rel.
Bari	BaCISMUS	Yes	Yes	Yes	No	Yes	No	No	No	No	Yes
Bologna	BoSMA	Yes	No	Yes	No	Yes	Yes	Yes	No	No	Yes
Cagliari	CagCIMAS	Yes	No	No	No	No	No	No	No	No	No
Camerino	CamPMA	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Catania	CatSM	No									
Ferrara	FeSM	Yes	Yes	Yes	Yes	No	No	No	No	No	Yes
Modena-Reggio Emilia	Mo_ReRM	No									
Molise	MolSM	No									
Napoli Federico II	NaFedCMSN	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Napoli Federico II	NaFedMUSA	Yes	Yes	No	Yes	Yes	No	Yes	No	No	No
Napoli SUN	NaSUNMusa	Yes	No	No	No	No	No	No	No	No	Yes
Padova	PadCAM	Yes	Yes	Yes	Yes	No	Yes	Yes	No	No	Yes
Palermo	PalSMA	Yes	Yes	Yes	No	Yes	No	Yes	No	No	Yes

University	CCU	Working	Quest.	Reg.	Budget	Fund	Act.	Act.	Com.	Net	Com.
						Rais.	Plan	Rep.	Plan		Rel.
Palermo	PalUOA12	Yes	Yes	Yes	No	Yes	No	Yes	No	No	Yes
Parma	ParSGM	Yes	Yes	No	Yes	Yes	Yes	No	No	Yes	Yes
Parma	ParSM	No									
Pavia	PavCSSMA	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes
Perugia	PerCAMS	Yes	Yes	Yes	No	Yes	Yes	No	No	Yes	Yes
Pisa	PiSMA	Yes	Yes	Yes	No	No	No	No	No	No	No
Roma Sapienza	RomaSapPMS	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	No	Yes
Salento	SalSM	Yes	Yes	Yes	No	No	Yes	Yes	No	No	Yes
Siena	SiCUTVAP	Yes	Yes	Yes	No	Yes	Yes	Yes	No	Yes	Yes
Siena	SiSIMUS	Yes	Yes	Yes	No	No	No	No	No	No	Yes
Torino	ToPolCEMED	Yes	Yes	No	No	Yes	Yes	Yes	Yes	No	Yes
Torino	ToSM	No									
Trieste	TrSMATS	Yes	Yes	Yes	Yes	No	No	Yes	No	No	No
Tuscia (Viterbo)	TusSMA	Yes	Yes	No	No	Yes	Yes	Yes	No	Yes	Yes

Appendix S – Central Coordination Units. Staff

University	CCU	Pers. Tech.	Pers.	Full Time	Part. Time	Cult. Herit.	Drafassara	Researchers
Bari	BaCISMUS	1	0	1	0	1	13	3
Camerino	CamPMA	5	1	5	1	0	0	1
Ferrara	FeSM	2	1	3	0	2	1	1
Napoli Federico II	NaFedCMSN	11	6	17	0	0	6	0
Napoli Federico II	NaFedMUSA	4	2	5	1	0	3	3
Padova	PadCAM	10	2	11	1	10	0	0
Palermo	PalSMA	0	1	1	0	0	6	3
Palermo	PalUOA12	0	1	1	0	0	0	0
Parma	ParSGM	0	3	2	1	0	0	0
Pavia	PavCSSMA	7	3	7	3	0	7	3
Perugia	PerCAMS	19	2	20	1	2	5	1
Pisa	PiSMA	25	11	32	4	4		
Roma Sapienza	RomaSapPMS	0	1	1	0	0		
Salento	SalSM	0	0	0	0	0	7	0
Siena	SiCUTVAP	2	2	4	0	2	0	1
Siena	SiSIMUS	0	0	0	0	0		

University	CCU	Pers. Tech.	Pers. Adm.				Professors	Researchers
Torino	ToPolCEMED	1	3	4	0	1	1	1
Trieste	TrSMATS	0	1	1	0	0	3	3
Tuscia (Viterbo)	TusSMA	1	0	1	0	1	8	2

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