

## HELLENIC REPUBLIC National and Kapodistrian University of Athens

European Academic Heritage Network

# UNIVERSEUM NETWORK MEETING

11-13 June 2015

NATIONAL AND KAPODISTRIAN UNIVERSITY OF ATHENS, GREECE

PARISIANOU S.A.



## UNIVERSEUM NETWORK MEETING

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# SPONSORS









## COMMITTEES

#### **PROGRAMME COMMITTEE**

CHAIR:	<b>Athanasios Katerinopoulos</b> Professor of Petrology and Mineralogy and Director of the Museum of Petrology and Mineralogy, Faculty of Geology – Director of the Centre for
	Museum Studies, National and Kapodistrian University of Athens (Greece)
MEMBER	Marlen Mouliou
(LOCAL):	Lecturer in Museology, Faculty of History and Archaeology, National and Kapodistrian University of Athens (Greece)
MEMBERS	Sofia Talas
(UNIVERSEUM	Curator of the Museum of the History of Physics,
NETWORK	University of Padua (Italy)
EXECUTIVE	Marta Lourenço
COMMITTEE):	Researcher, Deputy Director, National Museum of Natural History and Science, University of Lisbon (Portugal)
	Roland Wittje
	Research Associate, History of Science Unit, University of Regensburg (Germany) – Associate Professor in History of Science and Technology, Indian Institute of Technology Madras, Chennai (India)
	Sébastien Soubiran
	Deputy Director, Jardin des Sciences, University of Strasbourg (France)
	Bruno Vila
	Associate Professor and Head of Mission "Scientific heritage", University of Aix-Marseille (France)

#### LOCAL ORGANIZING COMMITTEE

#### CHAIR: Professor K. Buraselis

Vice Rector - Academic Affairs and International Relations of the National and Kapodistrian University of Athens and Head of the Athens University History Museum

#### VICE CHAIR: P. Polychronakou - Sgouritsa

Professor of Prehistoric Archaeology, Faculty of History and Archaeology

#### MEMBERS: M. Constantoudaki-Kitromilides

Professor of Byzantine Archaeology, Faculty of History and Archaeology and Director of the Museum of Archaeology and History of Art

#### **Emeritus Professor M. Dermitzakis**

Vice Rector of the University of Athens, (2000-2006) and Chairman of the governing body of the Museum of Sciences and Technology

#### **M. Fountopoulou**

Associate Professor and President of the Faculty of Philosophy, Pedagogy and Psychology/Director of the Museum of Education

#### C. Liapi

Associate Professor of Pharmacology, Faculty of Medicine and Head of the Museum of Pharmacology

#### Th. Pitsios

Professor of Physical Anthropology, Faculty of Medicine/Anthropological Museum

#### M. Stefanidou – Loutsidou

Professor of Toxicology, Faculty of Medicine and Director of the Criminology Museum

The Muses, according to the wise Greek mythology, are daughters of Zeus and Mnemosyne (goddess of memory), hence consciously connected to the efforts of preserving human memory and its contents. The proper place for venerating the Muses was in the perception of the ancient world exactly a Museum. The famous institution with this name in Ptolemaic Alexandria enriched the idea with the notions of collaborating scholars and of collecting cultural objects.

In the modern age this was practically expressed through the establishment of various university collections, by the universities themselves or with their support. University museums express then in a very natural way their bearers' care for cultivating sciences and for consistently promoting and sharing valuable data via exhibitions. Museums and Universities are scientific entities that possess in common a lot more than they may express, due to the structure of organization (or the lack of it) in modern states.

In the light of these thoughts it is a great pleasure and challenge for us to organize this year's UNIVERSEUM in the city of Athens and in the venues of the University of Athens. In this context, we feel that hosting UNIVERSEUM is a great trigger and a unique opportunity to realize the University's strengths and weaknesses and therefore attain a more substantial dialogue between the past and the present of the University in an international environment. It could even be an awakening experience.

We would like to deeply thank everybody involved in welcoming UNIVERSEUM in Athens: especially the members and the administrators of all planning and organizing committees, the enthusiastic staff of the University of Athens History Museum and of the other University of Athens museums for undertaking eagerly and carrying out conscientiously the preparation of this meeting. They all shared a common purpose and collaborated closely to achieve it despite adversity and lack of resources. In these times when lack of harmony is often painfully present, may this museological assembly and the integrated work that comes with it be a chance for orchestrating our own "counter-music" with a lasting impact.

#### **Professor Konstantinos Buraselis**

Vice Rector - Academic Affairs and International Relations National and Kapodistrian University of Athens

#### **SESSION 1**

# UNIVERSITY HERITAGE AND CULTURAL ENGAGEMENT OF EUROPEAN UNIVERSITIES

Oral 15-min papers followed by 5 min discussion

The cultural role of universities in communities and in society receives increasing attention as part of the national and international focus on the universities' so-called 'third mission'. This focus provides interesting opportunities for the preservation and promotion of university heritage. University museums and collections, archives and libraries have a long history as cultural actors in local communities or at the national or international level. The understanding of the cultural role of universities, however, has changed drastically in recent decades. How can the university heritage community contribute to the cultural mission of European universities? In which ways can university heritage become more central to this enterprise? What are the challenges and opportunities? Which projects and activities are currently developed in this direction? What are their goals and who are their audiences? What are the results and how should they be evaluated? We welcome exchanges of experiences, case studies and in-depth papers that help us identify the nature and specificity of these issues and concerns.

#### **THEMATIC IN-DEPTH SPECIAL SESSION 2**

# THE MOST CRUCIAL ISSUE(S) WITH UNIVERSITY HERITAGE TODAY

Oral 5 min papers followed by in-depth debate.

The most important/crucial/critical issue(s) – external or internal – that university heritage faces in Europe today.

### **THEMATIC IN-DEPTH SPECIAL SESSION 3**

#### UNIVERSITY HERITAGE, ITS GENERATORS AND ITS SCHOLARS Oral 5 min papers followed by in-depth debate

Various communities inside universities have natural ties with specific dimensions of university heritage. Through research and teaching activities, biologists, astronomers, physicists, engineers and technicians are generators of scientific heritage. While art and architecture historians study art and architecture heritage, historians of science may pay attention to scientific heritage. In this session we would like to discuss how different groups of generators and scholars regard university heritage. What are the roles that heritage plays, or could play for and within these communities? How to enhance these possible roles? What are the challenges and perspectives?

### **CHAIRED POSTER SESSION 4**

5 min presentations followed by questions and discussion

Presentations of scientific programmes, technical issues of and around collections such as storage, preservation and documentation, as well as descriptions of museums, collections and other heritage. Presentations of cultural projects and questions related to the promotion of university heritage are also welcome.

#### WORKSHOP 1

# ON DATABASES AND PORTALS FOR UNIVERSITY COLLECTIONS

Universeum's working group on databases and portals for university collections will have its first get together at the Universeum Meeting 2015, in Athens. The main objective is to create a network for sharing knowledge and experience. In this group, we would like to discuss and work on the following:

- to produce a document with best practices and an accompanying contact list.
- to look into the technical issues that come with building a portal, such as "which infrastructure should we use?", "what fields do we use to present objects to the public?", "which standards do we need, and should we work towards using the same standards on an European level?" and "the pros and cons of a harvesting model".
- working together in presenting our collections on a European level: what are the possibilities?

#### WORKSHOP 2

#### ON THE PRESERVATION OF RECENT HERITAGE OF SCIENCE

Universeum's Working Group for the Preservation of Recent Heritage of Science is concerned with the study, conservation and interpretation of the heritage of science, technology and medicine produced after WWII. At our fourth workshop in Athens we will:

- provide a complete checklist of what is needed to preserve recent heritage of science
- discuss the compilation of a bibliography of reference material
- discuss the documentation of objects that we cannot keep (such as nuclear reactors, satellites that go in space, leased instruments).



#### **THURSDAY 11 JUNE 2015**

#### 09:00-10:00 **REGISTRATION**

Venue: auditorium "Alkis Argyriadis" (Central Building of the University of Athens, 30 Panepistimiou str.)

#### 10:00-11:00 WELCOMING SPEECHES

Venue: Great Hall of Ceremonies (Central Building of the University of Athens, 30 Panepistimiou str.)

**Dr. J. Pissis,** Scientific Associate to the Minister, Ministry of Culture, Education and Religious Affairs

**Professor K. Buraselis**, Vice Rector - Academic Affairs and International Relations of the National and Kapodistrian University of Athens

**Professor E. Karamalengou**, Dean of the School of Philosophy, National and Kapodistrian University of Athens

**Professor M. Begzos**, Dean of the School of Theology, National and Kapodistrian University of Athens

**Professor E. Patsouris**, Dean of the School of Health Sciences, National and Kapodistrian University of Athens

**Professor K. Varotsos**, Dean of the School of Science, National and Kapodistrian University of Athens

Sofia Talas, Chair of UNIVERSEUM

#### 11:00-11:30 Coffee break

#### 11:30-12:30 SPECIAL SESSION

Museums of the National and Kapodistrian University of Athens Venue: auditorium "Alkis Argyriadis" (Central Building of the University of Athens, 30 Panepistimiou str.) Chaired by: **S. Talas**, Curator of the Museum of the History

of Physics, University of Padua – Chair of UNIVERSEUM and **P. Polychronakou-Sgouritsa**, Professor of

Prehistoric Archaeology, University of Athens

11:30-11:40 The Historical Archive of the National and Kapodistrian University

#### V. Karamanolakis

11:40-11:50 The Palaeontological and Geological University Museum of Athens: History and Activities S.J. Roussiakis

11:50-12:00	The Anthropological Museum of Athens University T. K. Pitsios
12:00-12:10	The Anatomical Museum of the Department of Anatomy, School of Medicine, National and Kapodistrian University of Athens M. Piagkou, I. Ralli, G. Skandalakis, P. Skandalakis
12:10-12:20	The Moulage Museum of "Andreas Sygros" Venereal and Skin Diseases Hospital: A Medico-cultural treasure <b>M. Karamanou, K. Christopoulou, Ch. Antoniou</b>
12:20-12:30	Athens University Sciences and Technology Museum, its collections and the history of the building <b>Ch. Symeonidis</b>
12:30-14:00	Lunch break
14:00-15:45	THEMATIC SESSION 1 (Part A') Venue: auditorium "Alkis Argyriadis" Chaired by: H. Dreyssé Chair of ICOM-UMAC and K. Gavroglu Emeritus Professor in History of Physics, University of Athens
14:00-14:15	The university museum: an arena for thought-provoking cognitive conflicts? J. De Schrijver, C. Dugardin, D. Verschelde, D. Segers
14:15-14:30	University Heritage, Museums and Third Mission: a geographical viewpoint on social engagement M. Varotto, L. Rocca, G. Donadelli, Ch. Gallanti
14:30-14:45	University Museums as Mediator between university and society: The example of Patras University Science and Technology Museum <b>P . Theologi-Gouti, E. Vitoratos</b>
14:45-15:00	The National Museum that never was and the university museums that replaced it G.A. Lyras, H. Drinia, A. Dermitzaki
15:00-15:15	Athens University History Museum: A Platform for the University Community and the wider audience E. Kitta, M. Pichou, I. Savvani, F. Tsitou
15:15-15:45	DISCUSSION

15:45-16:15 **Coffee break** 

16:15-18:00	THEMATIC SESSION 1 (Part B')Venue: auditorium "Alkis Argyriadis"Chaired by: S. ScholtenDirector of Heritage Collections, University of Amsterdam andM. FountopoulouPresident of the Faculty of Philosophy, Pedagogy and Psychology, University of Athens
16:15-16:30	From University collections to the general public: The case of Belgium <b>N. Nyst</b>
16:30-16:45	The ubiquitous University Museum: A case study from the University of the Aegean <b>A. Bounia, D. Catapoti</b>
16:45-17:00	National science museum in MCWorld L. Leppik
17:00-17:15	The heritage as a vehicle and unifying element in the cultural development of universities <b>S. Coiteux</b>
17:15-17:30	The multitude benefits of regional natural history museums T. Koskela, P. Halme, J. Torniainen, J. Vilkuna, P. Vuorinen
17:30-18:00	DISCUSSION
20:00	Reception at the Museum of the History of the University of Athens (Tholou 5, Plaka) – Inauguration of the revised exhibition on the scientific instruments of the Museum's collection

- Guided tour
- Cocktail

## FRIDAY 12 JUNE 2015

08:30-09:30 Visit to the Historical Archive of the National and Kapodistrian University of Athens (45 Skoufa str.)

09:30-12:30 TWO (2) PARALLEL WORKSHOPS

Working Group on Recent Scientific Heritage Venue: Law School auditorium (45 Akadimias str., 1st floor) Coordination: **Roland Wittje**, University of Regensburg **Marta C. Lourenço**, University of Lisbon

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Working Group on databases and portals Venue: auditorium "Alkis Argyriadis" Coordination: Esther Boeles, Dutch Foundation for Academic Heritage Delphine Issenmann, University of Strasbourg

12:45-13:15 PRESENTATION OF WORKSHOP RESULTS

Venue: auditorium "Alkis Argyriadis"

13:15-14:30 Lunch break

#### 14:30-16:15 THEMATIC IN-DEPTH SPECIAL SESSION 2

Venue: auditorium "Alkis Argyriadis"

#### Chaired by: M. Lourenço

Deputy Director, National Museum of Natural History and Science, University of Lisbon – Vice Chair of UNIVERSEUM and **M. Stefanidou-Loutsidou** Professor of Toxicology, University of Athens

A Tower of Babel: Miscommunication between university museums, archives and libraries **S.C. Scholten** 

The Gustavianum's Open Storage facility J. Worley, L. Werkström

*Revival of the value of academic heritage in teaching and research* **P. Lambers** 

Issues with young university museums **M. Jarkovská** 

A better future for the past? Vulnerability of university museums and collections B. V. Johansen

National law and policy concerning university museums: the case of University Museums of the National and Kapodistrian university of Athens A. Dermitzaki, A. Doxanaki

A. Dermitzaki, A. Doxanaki

Rethinking the values of Science Heritage: learning strategies for accessible university science museums, Greece **A. Filippoupoliti, D. Koliopoulos** 

Sustainability analysis for the Folklore Museum and Archive (FMA) of the National and Kapodistrian University of Athens **A. Pouliou** 

DISCUSSION

## Coffee break 16:15-16:45 THEMATIC SESSION 4 - POSTERS (Part A') 16:45-18:00 Venue: auditorium "Alkis Argyriadis" Chaired by: S. Soubiran Deputy Director, Jardin des sciences, University of Strasbourg – Secretary of UNIVERSEUM and M. Mouliou Lecturer of Museology, University of Athens Defining university museums' objects for the web L. Andreoli, M. Fornasiero, A. Menegazzi S. Talas An observatory heritage collection in situ J. Caplan LUX, LUCIS – Knowledge in light L. Cirlot, S. Vallmitjana, P. Mateo, I. Garcia Malet The Museum of the School of Engineering – Polytechnic of Porto its cultural mission P. Costa University heritage and cultural engagement of Seville Universitv M. D. Ruiz de Lacanal The past for the future of geography: the collections of the Padova's Museum of Geoaraphy G. Donadelli, C. Gallanti, L. Rocca, M. Varotto Astronomical artefacts in the modern scientific context L.V. Kazantseva Partneship between university museum and local school: Light and shadow F. Marcon *New synergy around scientific collections of Montpellier* N. Miralles (presented by Audrey Théron) The scientific and educational collections of the University of Seville. The importance to know them as the way to preserve them A. M. Galan-Pérez, A. Herrera-Picazo Espinar

#### 18:00-20:30 VISITS TO UNIVERSITY MUSEUMS

1st option

- The Moulage Museum of "Andreas Sygros"
- Museum of Pharmacology
- Anthropological Museum
- Criminology Museum
- The Museum of the Dental School

(transfer by bus)

#### Or

2nd option

- Archaeological Park, University Campus
- Museum of Mineralogy and Petrology
- Zoological Museum
- Museum of Paleontology and Geology

(transfer by bus)

### SATURDAY 13 JUNE 2015

#### 09:00-10:45 THEMATIC IN-DEPTH SPECIAL SESSION 3

Venue: auditorium "Alkis Argyriadis"

#### Chaired by: **R. Wittje**

Research Associate, History of Science Unit, University of Regensburg – Vice Chair of UNIVERSEUM and **A. Katerinopoulos** Professor of Mineralogy and Petrology, University of Athens

University museums: the end of academic heritage? G. Vanpaemel

Classical Archaeological Collections: Organisation and the link between scholars and collections

V. Nørskov, L. M. Andersen Funder

Building a collection with a slow army of seniors **R. Dannevig, A.Vaalund** 

A new form of presentation: Dialogue zone **R. de Raat** 

Human Remains Collection of the Athens Criminology Museum

Z. Sakki, A. Dona, C. Spiliopoulou, M. Stefanidou

Cultural use of the astronomical heritage at Besançon Observatory (University of Franche-Comté) J. Davoigneau, F. Le Guet Tully, F. Vernotte

Practicing archaeology in the museum: the experience of transforming a university museum from an Exhibition Hall to a place of archaeological practice

Y. Papadatos, A.S. Sfyroera, M. Roggenbucke

How to raise the scientific community's awareness to its own heritage?

A. Bidois, A.S. Rozay

Engaging with university museum collections: paradigms of participatory museum practice **M. Mouliou** 

Teaching through Historical Scientific Instruments: The material culture of science as an opportunity to explore science, history of science and science communication issues. Studying the Case of University Scientific Instrument collections in Greece **F. Paparou** 

#### DISCUSSION

- 10:45-11:15 Coffee break
- 11:15-13:15 GENERAL ASSEMBLY
- 13:15-14:30 Lunch break

#### 14:30-16:00 THEMATIC SESSION 4 – POSTERS (Part B')

Venue: auditorium "Alkis Argyriadis"

Chaired by: **B. Vila** Associate Professor, University of Aix-MArseille – Treasurer of UNIVERSEUM and **C. Liapi** Associate Professor of Pharmacology, University of Athens

Conservation of Palaeontological Heritage: Laser Cleaning applications on fossilized bones A. Alexandropoulou, E. Karantoni, N.A. Stefanis, K. Melessanaki, P. Pouli, G. Panagiaris

The Archaeological Museum of the University of Peloponnese Ai. Banou, M.Xanthopoulou, E. Zimi

The heritage of the University of Ioannina A.D. Fotopoulos

Laser cleaning application to a taxidermy paradisaeidae brown bird (Zoological Museum, University of Athens) E. Karantoni, E. Malea, P. Pouli, K. Melessanaki, A. Legakis, G. Panagiaris

Indoor/Outdoor Airborne particulate matter and microbial measurements in the Criminology Museum of the University of Athens

E. Katsivela, M. Lazaridis, I. Kopanakis, L. Raisi, Z. Sakki, M. Stefanidou, E. Karantoni, G. Panagiaris

Technology Museum at Megalopolis G. Lepouras, A. Antoniou

The Bombardment of the Piraeus Harbour by the "Allies" in 1944, through the exhibits of the Athens Criminology Museum G. Loutsidis, S. Athanaselis, C. Spiliopoulou, M. Stefanidou

The Modern Greek Anatomy and the first Anatomy Professors in Medical Schools K. Natsis, M. Piagkou, P. Skandalakis

The sound of silence. The unspoken history of the scientific

instruments of the Athens University History Museum G. N. Vlahakis, P.Lazos, F. Paparou, F. Tsitou

#### 16:00-16:30 Coffee break

16:30-17:15 Keynote speech by **M. D. Dermitzakis**, Emeritus Professor of the Department of Geology and Geoenvironment of National and Kapodistrian University of Athens, Greece

Classification of Knowledge: The Establishment of Collections and University Museums of the National and Kapodistrian University of Athens

#### 17:15-20:00 VISITS TO UNIVERSITY MUSEUMS

1st option

- The Moulage Museum of "Andreas Sygros"
- Museum of Pharmacology
- Anthropological Museum
- Criminology Museum

(transfer by bus)

#### Or

2nd option

- Archaeological Park, University Campus
- Museum of Mineralogy and Petrology
- Zoological Museum
- Museum of Paleontology and Geology (transfer by bus)

#### SUNDAY 14 JUNE 2015

#### OPTIONAL POST-CONFERENCE TOURS

#### 1st option

17:00 Visit to: the Acropolis Museum and the Acropolis archaeological site (Meeting point: Acropolis Museum entrance, 15 Dion. Areopagitou str., duration: 2 1/2 hours)

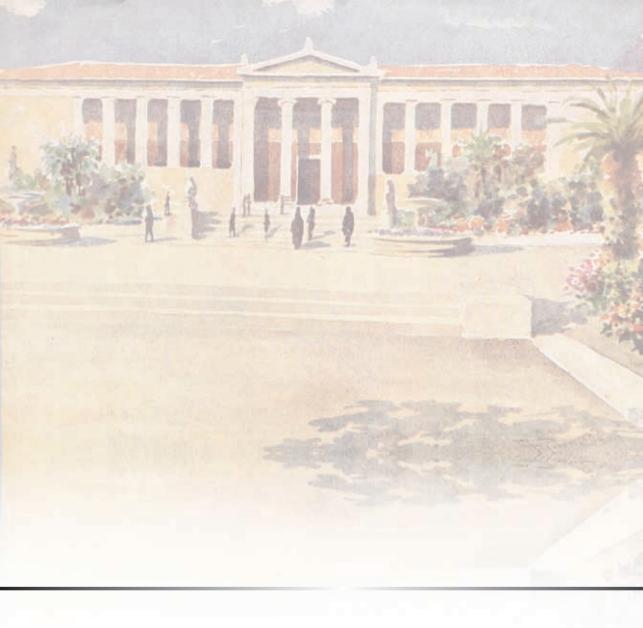
#### 2nd option

- Visit to: Lavrion archaeological site (Souriza)
  - Lavrion Technological and Cultural Park managed by the National Technical University of Athens
  - Lunch
  - Sounio archaeological site

Time of departure: 09:00 (Departure point: Central Building of the University of Athens, 30 Panepistimiou str.)

Approximate time of return: 19:30-20:00

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# ABSTRACTS

SPECIAL SESSION

MUSEUMS OF THE NATIONAL AND KAPODISTRIAN UNIVERSITY OF ATHENS

### THE HISTORICAL ARCHIVE OF THE NATIONAL AND KAPODISTRIAN UNIVERSITY

#### V. Karamanolakis

School of Philosophy, Faculty of History and Archaeology, 4th floor University of Athens, 409, University Campus, 157 84 Zografou, Athens, Greece <u>karamanolaki@arch.uoa.gr</u>

#### Keywords: University of Athens, university archive, history of the universities

The Historical Archive of the National and Kapodistrian University of Athens, created in 1991, has collected and classified the archival holdings of the University. This material constitutes a broad research infrastructure for the study of the history of the University of Athens, but also of Greek and European history in general. The collections of the Archive (around 1,600,000 pages) consist of: a) the archives kept by the secretariats of the Faculties and the archives kept by administrative centres (Senate, Protocol, Public Relations, Archive of the Directorate of the Faculties), b) Personal Archives of the professors of the University of Athens, c) Photographic, audio and cinematographic material from cultural events organized by the University, d) Collection of portraits of University professors. Moreover, it contains archives from institutions founded by the university (hospitals, church etc.) Finally, the Historical Archive aims to gather every record and testimony of the student movement and its activities, as well as the activities of the Teachers' Union.

The Historical Archive has focused on the digitization and electronic management of its massive archival material (nearly 500,000 items), aiming to preserve information from the old paper archives, in order to provide historical research with the advantages of technology, regarding classification of documents, accessing and processing information.

Vangelis Karamanolakis is Assistant Professor of Theory and History of Historiography. He has written books, articles and has edited volumes on history of higher education, history of historiography and intellectual history, the relationship between the archive and historical science, history of the military dictatorship in Greece (1967-1974), as well as history of health.

## THE PALAEONTOLOGICAL AND GEOLOGICAL UNIVERSITY MUSEUM OF ATHENS; HISTORY AND ACTIVITIES

#### S.J. Roussiakis

National and Kapodistrian University of Athens, Faculty of Geology and Geoenvironment, Department of Historical Geology and Palaeontology, Panepistimioupolis, 15784 Athens, Greece <u>srousiak@geol.uoa.gr</u>

Keywords: University of Athens, University Museums, fossil collections, palaeontological excavations

**T** istorically, the Museum of Palaeontology and Geology, National and Historically, the Museum of Athens, dates back to the Physiographical Society, founded in 1835. When the Society donated its collections to the University, its palaeontological and geological collections became central to the University's Physiographical Museum, founded in 1858. Its successor, the Museum of Palaeontology and Geology, was established in 1906 inheriting these early palaeontological and geological collections. The Museum now houses the richest palaeontological (fossil vertebrates, invertebrates and plants) and stratigraphic collections in Greece. Sought after and studied by scientists from all over the world, they are fundamental to the University's academic output and educational role, both graduate and postgraduate. Since the mid-1800s, the Museum has been organising and supporting palaeontological excavations across Greece and abroad, e.g. Pikermi, Vraona, Samos, Megalopolis, Tilos, Kerassia, Katharo, Vatera, Cyprus and Libya. In 1998 it established the Vrissa Natural History Museum in Lesvos. It has also contributed to natural history exhibitions in Pikermi, Samos, Tilos, Rethymnon, Cyprus and elsewhere. The Museum of Palaeontology and Geology is open to schools and the public, offering guided tours and special educational activities.

**Socrates J. Roussiakis** is Assistant Professor of Vertebrate Palaeontology. His main research focuses on the fossil mammal faunas of the Late Cenozoic of Greece and their evolution.

### THE ANTHROPOLOGICAL MUSEUM OF THE UNIVERSITY OF ATHENS

#### Th. K. Pitsios

Museum of Anthropology/Department of Descriptive – Functional Studies, Medical School of Athens, M. Asias 75, Athens, 115 27, Greece <u>tpitsios@med.uoa.gr</u>

Keywords: Human evolution, Museum of Anthropology, Klon Stefanos, Ioannis Koumaris

The Anthropological Museum of the University of Athens was founded in 1886. As a unit of the University, it implements both educational and research activities. It has constituted the most important center for the development of Anthropology in Greece, and is also relevant at European level. The Hellenic Anthropological Society (1924) and Professor Ioannis Koumaris have contributed significantly to the development and communication of the science of anthropology. The majority of the scientific collections of the Anthropological Museum consists of skeletal series that cover all periods of the ancient Greek world. These collections have been the subject of systematic anthropological studies conducted by important Greek and foreign anthropologists, who have expressed views concerning the ethnogenesis, the shaping and the evolution of the Helladic population.

Thanks to the Anthropological Museum's studies, which are mainly conducted in various caves, numerous human fossils have been discovered (many of great importance for the presence and evolution of man in the European region), highly important fossils, as well as cultural artefacts from the Palaeolithic period.

**Theodoros K. Pitsios** received his postgraduate degree in Physical Anthropology, with a minor in Genetics and Paleontology, from the Johannes Gutenberg Universität of Mainz, from which institution he was later awarded his PhD in Natural Sciences. Since 1980, he has been working with the Anthropological Museum of the Medical School of Athens.

## ABSTRACTS

### THE ANATOMICAL MUSEUM OF THE DEPARTMENT OF ANATOMY, SCHOOL OF MEDICINE, NATIONAL AND KAPODISTRIAN UNIVERSITY OF ATHENS

#### <u>M. Piagkou</u>, I. Ralli, G. Skandalakis, P. Skandalakis

Department of Anatomy, Medical School, National and Kapodistrian University of Athens M.Asias 75, 11527, Athens, Greece mapian@med.uoa.gr

#### Keywords: Anatomical Museum, specimen, education

The Anatomical Museum of the Department of Anatomy (Medical L School, National and Kapodistrian University of Athens) was founded in 1877 by Damianos Georgiou Draskas, Professor of Anatomy. The great donor G. Sinas enriched the museum with a skeleton and several dry skulls, while G. Manousis donated an optic microscope. King Otto donated the famous anatomical tables of Weber and Mascani. The collection of Valsamakis (wooden models of bones) from the Ionian Academy was housed in the Museum. The Museum includes a rich collection of dry bones, dry preserved specimens with resin, 100 dry normal and abnormal Caucasian skulls, brain slices, skeletons with exostoses, dry bones with anomalies, fetuses with clefts and malformations, vascular and nerve preparations, formalin embalmed organs with their vascularization and nerve supply and a rich collection of old surgical instruments and several microscopes. Specimens consist of different parts of the human body, including ear, nose, tongue, larynx, pharynx, heart, lungs, female genitals, and the fetus. The anatomical collection comprises more than 800 specimens; c. 60 depict congenital anomalies of human and animal fetuses. This oral presentation highlights the educational contribution of the museum collections and specimens. It is expected to open its doors after renovation coordinated by Professor Panayiotis Skandalakis.

Maria Piagkou DDS, MD, MSc, PhD, Assistant Professor of Anatomy, scientific coordinator of the Anatomical museum for research and educational purposes. Scientific interests for skull anatomy, skull base variability, head and neck dissection and history of anatomy.

Ioanna Ralli MSc, PhD Candidate, scientific interests for history of medicine and anatomy

George Skandalakis Undergraduate student, scientific interests for central nervous system anatomy

Panayiotis Skandalakis MD, PhD, Director-Professor of Anatomy specialized in surgical anatomy and techniques.

### THE MOULAGE MUSEUM OF "ANDREAS SYGROS" VENEREAL AND SKIN DISEASES HOSPITAL: A MEDICO-CULTURAL TREASURE

#### <u>M. Karamanou</u><sup>1</sup>, K. Christopoulou<sup>2</sup>, Ch. Antoniou<sup>2</sup>

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Keywords: Wax medical models, medical museums, dermatology, venereology

From the 18th century until the 1950s, when color photographs replaced moulages in the training of dermatology and venereology, illustration of venereal diseases by use of wax models in a realistic three dimensional representation far surpassed any other available teaching aid, such as the two dimensional paintings and photographs.

In Athens, the Moulage Museum of "Andreas Sygros" Hospital was established in 1912 by distinguished Professor of dermatology and syphilology George Photinos (1876-1958), in the newly founded "Andreas Sygros" dermato-venereological hospital. At the time, it aimed to reinforce the education of medical students and dermatologists. Photinos was exposed to the moulage technique in Paris and especially in Berlin by renowned moulager Heinrich Kasten (1842-1921). The initial wax models of Athens' collection (today the third largest international collection following Paris and Vienna) are credited to have been made by Professor George Photinos himself. Later, the moulages were produced by specially trained craftsmen such as the painter Constantine Mitropoulos. Today, the Moulage Museum of "Andreas Sygros" Hospital remains an important cultural treasure consisting of 1,660 items depicting a variety of skin disorders of an excellent artistic quality. Moulages continue to be used in medical training and public health education representing a mean by which art can support science.

- Marianna Karamanou MD, Ph.D is dermatologist-venereologist, research fellow in History of Medicine Department, Medical School, National and Kapodistrian University of Athens, and invited lecturer in the Institute of History of Medicine, "Claude Bernard" University, Lyon, France. Her main research interests are history of dermatology and venereology and 17th -19th century history of medicine.
- Katerina Christopoulou, graduate of the Nursing School and the Business Administration School. In 2001 she was appointed at "Andreas Sygros" Hospital and from October 2014 she has been in charge of the Hospital's Museum - Library.
- Christina Antoniou, MD, Ph.D is Professor and Chairman of Dermatology and Venereology Department, "Andreas Sygros" Hospital, Medical School, National and Kapodistrian University of Athens, as well as Governor of the Hospital. She is visiting Professor at Dundee Medical School in Scotland and at Medical School of Humboldt University in Berlin. Her main research interests are psoriasis, cutaneous T cell lymphoma, photodermatology and acne.

## ATHENS UNIVERSITY SCIENCES AND TECHNOLOGY MUSEUM, ITS COLLECTIONS AND THE HISTORY OF THE BUILDING

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# Keywords: University Museum, sciences, scientific instruments, historical building

The Athens University Science and Technology Museum preserves a rich and unique collection consisting of more than 10,000 instruments of the University's Physical Sciences School, formerly used for learning, research and technological applications. The Museum also preserves a collection of instruments and the archive of the University of Smyrni, which Konstantinos Karatheodrori saved and brought to Greece.

The building that hosted the Museum before its renovation (started in 2007), was designed by German architect Ernest Ziller. It was the Old Chemistry Laboratory of the University of Athens, founded in 1887 by Professor Anastsasios Christomanos. Many great Professors of Sciences taught there, such as Christomanos, Eisntein's tutor and pioneer in the organisation of the University of Smyrni; the mathematician Karatheordori; Sommerfeld's partner Dimitrios Hondros; Fisher's partner and fellow researcher Leonidas Zervas; and Ceasar Alexopoulos, among others. In the past, the building also hosted the National Chemistry Laboratory, the General Chemistry Laboratory of the State, the National Bureau of Standards, the Land Surveying Committee, the Sea Scaping Company, the 'Physiodiphic' Company, the Botanic Museum, the Hellenic Astronautical Society and the Research Centre of the international programme "Nestor".

**Chrysoleon Symeonidis,** is retired lecturer of Physics in Athens University and member of the Science and Technology Museum's committee.

## **SESSION 1**

UNIVERSITY HERITAGE AND CULTURAL ENGAGEMENT OF EUROPEAN UNIVERSITIES

## THE UNIVERSITY MUSEUM: AN ARENA FOR THOUGHT-PROVOKING COGNITIVE CONFLICTS?

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# Keywords: Misconceptions about science, scientific heritage, reflection, cognitive conflict

Misconceptions about science abide among pupils, students and the general public. As universities play pivotal roles in the search for knowledge and the academic heritage bears witness of this endeavour, university museums can be central in the education about science. But how does one elicit understanding of science?

As misconceptions are hard to erase, they need to be made explicit through cognitive conflict. This entails bringing persons in situations where some of their understandings about science no longer hold. For instance, to accept the idea that science is no truth 'machine', but a strive for reliable knowledge, attention for discredited scientific ideas is as important as for generally accepted theories. Likewise, the academic heritage can elicit reflection about the relation between science and society or the processes of scientific endeavour and discovery.

How does one make a visitor reflect? How does one reconcile the ambition to teach about science with the need to elicit cognitive conflict? How does one dialogue with visitors who have different worldviews? In answering these and similar questions, we may come closer to a university museum embodying the intangible heritage of curiosity and investigation ingrained in the university's core.

- Jelle De Schrijver is a biologist with a PhD in philosophy, working as a science teacher trainer and researcher at the Odisee University College and as an educator at Ghent University Museum. His main areas of research are reflective science education and dialogic teaching.
- **Dominick Verschelde** is a biologist-taxonomist with an MsC and curator at the Ghent University Zoology Museum. He unlocks the collection in workshops, teaching, and as a coach to students' bachelor dissertations. He focuses on the importance of the scientific method and the power of critical reasoning.
- **Chantal Dugardin** is horticultural engineer and hortulana of the Ghent University Botanical Garden. She specializes in collection management and the improvement of public awareness through botanical exhibitions.
- **Danny M.J. Segers** studied physics at Ghent University. He is senior full professor at Ghent University and since 2006 director of the Museum for the History of Sciences. He is actively involved in the foundation of one global university museum at Ghent University.

### UNIVERSITY HERITAGE, MUSEUMS AND THIRD MISSION: A GEOGRAPHICAL VIEWPOINT ON SOCIAL ENGAGEMENT

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# Keywords: Third mission, university museum, human geography, social engagement

T n Italy, University Museums are identified as "third mission" activities by the National Agency for Academic Evaluation (ANVUR). Nevertheless, the quantitative indicators (spaces, budget, number of visitors and opening days etc.), which are currently examined, don't take into account the very quality and efficacy of the social engagement encouraged by the European Commission (Green Paper Fostering and Measuring 'Third Mission' in Higher Education Institutions, 2012). The paper aims to link the recent debate on meanings and practices of the "third mission" within the community of Italian Geographers to the scientific project of the on-going Museum of Geography at the University of Padova, one of the longestrunning centers for geographical research in Italy. This project conceives the museum as a pivot to strengthen interaction among scientific activities, longlife learning and civil society in five main directions: sharing knowledge, multiscalarity, articulation of outcomes, social engagement and integrated assessment. The proposal means to foster a renewed reflection on the methods through which Museums could give new life to the university heritage.

- **Mauro Varotto** (1970) is associate professor of Geography and Cultural Geography at the University of Padova. He is coordinator of the Scientific Committee of the Museum of Geography at the Department of Historical and Geographic Sciences and the Ancient World. His researches are mainly in human and cultural geography.
- **Lorena Rocca** (1966) is professor of Geography/Didactics of Geography at the University of Padova and researcher in human geography and education. She also collaborates with the University of Applied Sciences and Arts of Southern Switzerland (SUPSI). She is member of the Scientific Committee of the Museum of Geography at DiSSGeA.
- **Giovanni Donadelli** (1985) is grant researcher at the Department of Historical and Geographic Sciences and the Ancient World (University of Padova). Involved in the scientific project of the Museum of Geography, his main research interests are geography, technology, education. He is member of the board of Italian Association Geography Teachers.
- **Chiara Gallanti** (1974) is a museum professional collaborating to the project of the Museum of Geography at the Department of Historical and Geographic Sciences and the Ancient World (University of Padova). She is responsible for the scientific cataloguing of the historical items of the collections.

## UNIVERSITY MUSEUMS AS MEDIATOR BETWEEN UNIVERSITY AND SOCIETY: THE EXEMPLE OF PATRAS UNIVERSITY SCIENCE AND TECHNOLOGY MUSEUM

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# Keywords: Activities for the public, schools, the public of University students, connection with society

The following paper describes a study case, the Patras University (PU) Science and Technology Museum (STM). The Museum encoded to the Science and Technology Museum (STM). The Museum opened to the public in 2009 with a core goal to connect PU with Society. It focuses on scientific and technological literacy of school and university students, as well as the society's and opens challenges/ opportunities for experimentation, collaboration and innovation. On the one hand, the STM created a friendly object-oriented environment of non-formal education for different publics. Through targeted actions, it approached the educational community, young, elderly, disabled people etc and society (40,000 visitors in 2014) and managed to connect the three levels of education, using interactive and experimental activities. All museum activities highlight the connection between science and technology. The museum has also succeeded to approach and activate students and the university community by offering them a pleasant place of experimentation, experience and innovation, through volunteering and internship. On the other hand, the Museum highlights the collections, through interdisciplinary approach and promotes dissemination of knowledge produced at the PU. Different methods are used to evaluate all activities. The STM has achieved its core goal, the connection of the university and society. The new challenge now is to open new roots to the development perspective of the museum through collaborations with the Region of Western Greece, and other development agencies. This perspective will reinforce the Museum and will give a central role to academic heritage within the university community, with great contribution to the cultural mission of European universities.

- Penelope Theologi-Gouti, Architect, Ethnologist (DEA), Responsible for Exhibitions, Educational Programs and Other Activities of PU STM, Greece. She has served as Vice Chair/Secretary of ICOM Hellenic NC, Vice Chair/Secretary/Treasurer of UMAC (founding member), Chair/ Secretary of CIDOC Ethno Group. She has numerous publications in national/international, conferences and journals, including articles in Museum International, ICOM study series, OECD journal.
- Evangelos Vitoratos PhD. Professor, Department of Physics, (PU). Director of STM. Interested in: Condensed Matter Physics, Teaching Physics, History and Philosophy of Science. Participant as member of Management Committee or Advisory Board in European networks concerning Physics Education in Europe: EUPEN, "Tuning" educational structures in Europe project, STEPS, HOPE, etc. List of publications at: http://www.physics.upatras.gr/index.php?lang=en, Scopus or ISI web of knowledge.

## ABSTRACTS

# THE NATIONAL MUSEUM THAT NEVER WAS AND THE UNIVERSITY MUSEUMS THAT REPLACED IT

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Keywords: Natural History, University of Athens, History of Science, University Museums

reece does not have a National Natural History Museum. Instead, Gisince 1858, the role of assembling natural history objects has been covered by the museums of the University of Athens (UOA). The presence of extensive collections within the university proved to be a valuable agent for scientific research and academic teaching. However, the university museums did not succeed in performing the role of collection management and serving at the same time different audiences, other than the students. In addition, the collection management was hampered by the very nature of university museums, which focus on teaching and research and not on new approaches to become a resource of learning to a wider audience. Even though the last 20 years efforts have been made to improve their role in educating the public, it is evident that they need radical changes in order to advance their role within the society. The aim of this contribution is to analyse the role of the natural history museums of the UOA in supporting academic research as well as in being a replacement of a national natural history museum. Do university museums need to develop their collections in order to advance their role within the society and education or do they see this as a risk of compromising their traditional mission of scholarship, teaching and education? This contribution attempts to raise these questions as well as to propose valuable solutions.

- **George Lyras** was curator in the Museum of Palaeontology and Geology of the University of Athens. His main research interests are vertebrate evolution and history of palaeontology.
- Hara Drinia is Associate Professor in paleoecology. Her research focus includes geologic and environmental issues based on microfossils. She also develops research in the field of museum education and museology with emphasis on scientific collection. She is member of the Special Interdepartmental Committee of the Postgraduate Studies Programme "Museum Studies" of the University of Athens, where she teaches the courses "Geological and Palaeontological Heritage" and "Museums and Science".
- **Aikaterini Dermitzaki** is Historian- Museologist. She has been working until 2014 in the Museum Studies Research Center of the University of Athens. She has been involved with the management of the course of museum studies at the same institution. From this position she has participated in research projects and other cultural heritage issues. Research interests are the concept of the historical museum and its purposes, local museums, university museums, cultural policy and creative industries.

## ATHENS UNIVERSITY HISTORY MUSEUM: A PLATFORM FOR THE UNIVERSITY COMMUNITY AND THE WIDER AUDIENCE

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Keywords: Activities, participation, interaction, interpretation

Tniversity heritage museums used to consider their collections to address mainly established or emerging experts-students. During the last decades, following the visitor centred policies in museum interpretation and communication, university heritage museums have redefined their cultural role and developed new strategies for attracting a wider audience. Within this context and in an attempt to engage visitors beyond the university community, the Athens University History Museum has initiated a number of diverse learning programmes, events and projects. These include art and science exhibitions, interactive programmes for school students and pre-schoolers, an oral history archive, live science experiments and a partnership with city museums. The challenge the Museum faces today is to move beyond organizing events and activities for the wide audiences. This paper investigates perspectives to provide a common platform where the university community and the university heritage could "meet" with the visitors' voice. It suggests possibilities for alternative interpretations of its collections, inspired by, or co-produced with the Athens University History Museum's communities within the -sometimes unfamiliar- university heritage setting, along with the difficulties, limits and challenges inherent in this attempt.

- **Elena Kitta**, Conservator of Works of Art with a MA in Museum Studies, Athens University History Museum. Research interests: preventive conservation, collection management, collections in historic buildings, museum's building history and creation of an oral history archive of the building's previous tenants.
- **Myrsini Pichou,** Cultural Manager (MSc Hellenic Open University & MA Courtauld Institute of Art). Research interests: university heritage interpretation, museum communication, university heritage and the city, interactive activities for adults.
- Irini Savvani, Art historian, curator, MA Art History, BA Art History, Université Paris I, Panthéon-Sorbonne, curator of the Greek Representation at the 26th Biennial of Sao Paolo (2004). Research interests: museum as a medium, museum communication, university museums and contemporary art.
- Fay Tsitou, Head of learning-educator (PhD museum interpretation/communication, RHUL). Best Practice Award ICOM-CECA, Rio 2013. Research interests: art and science learning activities and exhibits, museum theatre, moderating Athens University History Museum re-exhibition on Sciences.

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## FROM UNIVERSITY COLLECTIONS TO THE GENERAL PUBLIC: THE CASE OF BELGIUM

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#### Keywords: Specific actions, General audience, University collections

In recent years, the ULB Museums Network has been organizing twice a year free thematic activities for general audience, mainly families. The first event happens in May, for the 'International Museum Day' (ICOM) and the 'European Night of Museums' (French Ministry of Culture); every two years, the Network joins a third international event: the 'Fascination of Plants Day'. The second is held on November, for the 'European Academic Heritage Day' of Universeum.

Each of these events offers the opportunity to develop different demos, workshops, guided tours, experiments, and so on, on one specific topic. With some concrete examples, this talk will show how different collections work together twice a year to enhance the dissemination of knowledge through their various objects and many demonstrations.

After more than 10 years, why has the Network preferred to participate in these international events rather than university/city/regional or national events, in terms of audience and dissemination role for example? What is the impact of such events on the university and the community, as well as on the museums themselves? How does the Network's model of organization work? In this paper some answers will be outlined and discussed.

**Nathalie Nyst** teaches the Master of Cultural Management programme at the Faculty of Philosophy and Letters, and has coordinated the ULB museums network since 2004. She is also Director for the Direction of the Cultural of the Ministry of the Wallonia-Brussels Federation where she deals mainly with museum public policies.

## THE UBIQUITOUS UNIVERSITY MUSEUM: A CASE STUDY FROM THE UNIVERSITY OF THE AEGEAN

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#### Keywords: Ubiquitous museum, local community heritage, regional heritage

The University of the Aegean is a network university: it is located in six islands of the Aegean Archipelago. Since its foundation in 1984, it combines two main aims: to introduce new approaches to higher education in Greece and worldwide and to promote regional development. As a result, it works in close collaboration with local communities, while it has evolved into an international research-centred University offering interdisciplinary studies in many fields.

In terms of heritage, the University is currently in the process of organising its historical archive and has developed an active interest in collaborations with museums and other cultural institutions of the islands. Most importantly though, during the last seven years, in the main campus in the island of Lesvos, a rather different approach to the typical university museum is under development: instead of creating a museum focusing on the University's history (since 1984, or since 1920, when Constantin Caratheodori became the first rector of the first University of the Aegean established in Smyrna in the 1920s), it has created two exhibition spaces within the main university buildings hosting/safeguarding important historical artefacts from and for the local community. In the atrium of the Administration Building, there is an exhibition of ancient architectural remains coming from the city of Mytilene and in the atrium of the Marine Sciences Building, there is the vessel Evangelistria, a historical boat which has been the last one to bring refugees to the island of Lesvos after the 1922 disastrous for the Greek community events in the Asia Minor coast. These two exhibition spaces serve as a 'ubiquitous museum' since they are part of everyday life for both the academic and local community, who visits the university on different occasions. They offer the opportunity for various initiatives in collaboration with students, such as a recent Facebook project, but they are also an integral part of the university's identity as an institution oriented towards its community and its symbols. This paper will discuss this approach and will focus on the relation of universities, their museums and their communities.

- Alexandra Bounia is an associate professor of museology at the University of the Aegean. She studied archaeology and history of art at the University of Athens and museum studies at the University of Leicester, UK. Her research interests are on the history, theory and management of collections and museums, the interpretation of material culture, and the use of new media technologies as interpretive media.
- Despina Catapoti is a lecturer in cultural theory and digital culture at the University of the Aegean. She studied archaeology and history of art at the University of Athens and prehistoric archaeology and archaeological theory at the University of Sheffield, UK. Her research interests centre on cultural theory, history of science and epistemology with particular focus on the history and philosophy of archaeology. Her latest work investigates the impact of New Media on cultural heritage outreach.

#### NATIONAL SCIENCE MUSEUM IN MCWORLD

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#### Keywords: Globalization, national museums, use of the heritage

E stonians are one of the world's smallest countries and nationalities (population in 2011 was 1.3 million), with its own native literary culture, including higher education and research. Tartu University (founded 1632) is much older than the Estonian nation-state (founded in 1918), but has (working since 1919 in Estonian) been an important pillar of the nation, and having big impact in the development of society. In addition to this, the university has always tried to be an international research institute. The so called third mission of universities has always rather been the primary one for Tartu University.

For a museum of science history in a national university of a small country, it is unavoidable that several and somewhat contradictory missions have to be performed: to show both the international nature of science as well as local applications, to keep the identity of one's own culture and also merge different ethnic groups, remember the great men of the past, and to attract young people to science. To paraphrase Benjamin J. Barber (Jihad vs. McWorld, 1996), a university museum of a small country must bear the idea of the nation-state (tribalism), while being at the same time part of a supra-national science- and entertainment world (McWorld). To manage this breakneck task has been set as the clear goal of the History Museum of Tartu University in recent years. To accommodate to the new challenges, we would also need a new kind of knowledge of heritage, which we administer. The desire to be attractive, playful, edible to different target groups will also require new different types of research regarding the collections of the museum and the heritage of the university in general. There are no resources for this purpose at this time, but raising awareness of the needs perhaps also will lead to changes.

Lea Leppik, PhD, research director of the University of Tartu Museum, has dealt with the university history in 19-20th century in Baltic area, biographies of scientists, and history of astronomy (Tartu Observatory).

## THE HERITAGE AS A VEHICLE AND UNIFYING ELEMENT IN THE CULTURAL DEVELOPMENT OF UNIVERSITIES

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#### Keywords: Scientific culture, heritage, management

University heritage, intrinsically linked to the activities of higher education and research institutions, reflects the thematic diversity and historical development of European universities. In a context of greater awareness of universities' cultural dissemination missions, university heritage can take its rightful place as an actor, and even as a catalyst for the cultural development of universities.

Taking account of the material and immaterial dimensions and plurality of university heritage may constitute a leverage effect towards identifying the University as a producer of knowledge. The University may take steps, first within its own community, in order to federate, to raise awareness of the concept of heritage that is inherent in its activities and missions. In this approach, it may bring together all stakeholders in university heritage within its global cultural approach as an institution.

This is the background of the use of University of Poitiers' tangible and intangible heritage of the institution in cultural actions towards various audiences: the academic community (faculty and students), the general public, schoolchildren... Those are organized inside the institution, but mainly outside, especially in urban areas (events, exhibitions in public places: shopping centres, railway station...).

**Sylvie Coiteux** is a research engineer at the University of Poitiers; in charge of scientific culture and management of the university's cultural and scientific heritage.

## THE MULTITUDE BENEFITS OF REGIONAL NATURAL HISTORY MUSEUMS

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Keywords: Biodiversity, environmental education, locality

The significance of natural history museums and their collections are L often measured by the quantity of their scientific collections, the number of scientific articles they produce and the research positions they have. However, we argue that small regional natural history museums hold larger social, cultural and environmental impact than solely their scientific collections and the produced hard-core research articles. These museums act as collection preservation and research units, as well as showcases of local biodiversity. With their scientific collections they maintain and support taxonomic teaching, research and citizen activity on a local scale. In addition, co-operation between local environmental authorities and museums is often intensive. With their exhibitions and education programmes, regional museums are also important environmental educators for local schools and audiences by informing about the relevance of biodiversity and nature conservation. Regional museums play an important role in bringing out global environmental threats (eg., global warming and biodiversity loss) on more local and realistic scale. Regional museums are able to show how these global threats affect the local nature, and how we could struggle against them through our own everyday actions and choices. Local is focal whereas global feels far-off and is therefore easy to ignore.

- Tanja Koskela, PhD, is the Chief curator of the Natural History Section of the Jyväskylä University Museum.
- **Panu Halme**, PhD, is a Post-doc researcher at the Department of Biological and Environmental Science, and the Vice director of the Jyväskylä University Museum.
- Jyrki Torniainen, PhD, is the Curator of the Natural History Section of the Jyväskylä University Museum.
- Janne Vilkuna, PhD, is the Director of Jyväskylä University Museum and Professor of Museology.
- **Pirjo Vuorinen**, MA, is the Chief curator of the Cultural History Section of the Jyväskylä University Museum.

## **THEMATIC IN-DEPTH SPECIAL SESSION 2**

THE MOST CRUCIAL ISSUE(S) WITH UNIVERSITY HERITAGE TODAY

## A TOWER OF BABEL: MISCOMMUNICATION BETWEEN UNIVERSITY MUSEUMS, ARCHIVES AND LIBRARIES

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#### Keywords: Cross diciplinary collections, semantics

**T** n recent years, in The Netherlands, there has been a tendency to concentrate university collections of different kinds in new organisational structures, often combining historical objects, archives and special library collections with modern collections in university archives and libraries. Whilst in principle a good idea, it brings to light the difference in purpose, goals and strategies between the modern and the historical. This is reflected in a seemingly identical vocabulary, which in reality disguises sometimes radically different approaches to the purpose, meaning and use of historical and modern collections. Its origins lie in the development of the different disciplines and the purposes they currently serve. The underlying and resulting semantics can cause great confusion and misunderstanding between colleagues and professionals and are rarely recognised. As a case study, recent developments at the University of Amsterdam will be presented. A new policy plan for the University Library, including the heritage collections of the university, led to a Babylonian discourse. Understanding the underlying principles may help colleagues to recognize this and to allow for a more effective and constructive contribution in the discourse on strategy within their universities.

Steph Scholten holds an MA in Art History and works as director of Heritage Collections at the University of Amsterdam since 2009. His main research interests are theoretical concepts of cultural heritage and museum ethics.

### THE GUSTAVIANUM'S OPEN STORAGE FACILITY

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*Keywords: Open storage facility, collections as infrastructure, moving a storage facility* 

The most crucial issue facing University Heritage today is surely the lacksquare overall survival of the collections. We believe that the only way for such collections to survive in today's economic atmosphere is for each collection to be as relevant to their host universities as is possible. The Gustavianum is attempting to achieve this by means of establishing an "open storage facility". This is not only a location where the collections are stored but is also a location open for research and teaching. The facility is manned during working hours and staffed by qualified professionals with the equipment and knowledge necessary to assist in research or teaching. The goal is to be an infrastructural resource for students, teachers and researchers while at the same time keeping the preventive conservation of the collections in mind. For us it has been a question of the establishment of policies and operating procedures that allow the collections to be used and researched upon but not exploited. It has taken time for the Gustavianum's open storage facility to become operational and our discussion will be about this process and the results of our first year.

Both **John and Ludmila** are curators at the Museum Gustavianum. John in the curator of the Nordic Archaeological Collection and Ludmila is the curator of the Collection Classical Antiquities.

## REVIVAL OF THE VALUE OF ACADEMIC HERITAGE IN TEACHING AND RESEARCH

#### P. Lambers

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Keywords: Academic heritage, contemporary teaching, new usage

The collection of the University Museum Utrecht is diverse, containing objects generally considered as scientific heritage (historic microscopes, anatomical preparations, etc.). The UM strives to make the collection in all his variety widely available for teaching and research. Classes using the collection are given by teachers, the curators, or volunteers with professional knowledge and experience. For example, in three sessions, the history of dentistry is shown to dentistry students from the University of Amsterdam. Old instruments are explained and handled, and in the natural history collection a short course is given on the diversity and evolution of teeth among the vertebrates. In this way the educational value of the historic collection is revived in a diverse contemporary context and a new chapter is added to the already rich history of the objects.

It appears that the demand for the collection for teaching and research is growing. In the present academic year up to 600 students will in one way or another have experienced the collection in teaching. In this paper, I will argue that academic heritage shouldn't be considered only of historic relevance, but relevant for contemporary academic practice as it was originally, in sometimes a context surprisingly different from where the objects came from.

Paul Lambers, curator of the Natural History Collection of the University Museum Utrecht. Background / research interest: paleontology, more specific systematics and evolution of fossil actinopterygian and sarcopterygian fish.

### **ISSUES WITH YOUNG UNIVERSITY MUSEUMS**

#### M. Jarkovská

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*Keywords: Young university museum, academics, general public, project "Step by Step through Science"* 

rendel Museum of Masaryk University can be considered as a quite **VL**young institution (founded in 2007). During its existence, it has been trying to develop ways to present University heritage in the best way. The main problem for a quite new university museum in a country with almost no tradition of university museums is to convince people inside and outside the university about its importance. One goal is to convince academics who are taking care of collections that the university museum does not 'steal' or destroy the precious things by exhibiting them and that it is important to present our university cultural heritage. Another goal is to show the general public that it is worth to see and learn through what is preserved 'hidden' in university buildings. One of the huge goals is to convince the university itself why is it important to finance its own museum. That is why Mendel Museum has developed the project "Step by Step through Science" for the involvement of university staff, students and the general public. It would be interesting for conference participants to compare how university museums with long tradition and new university museums address different problems.

Michaela Jarkovská, Bc. DiS. works in Mendel Museum as Head of Guides. She has a degree in Museum Studies. Her main field of interest are guided tours and creating short-term exhibitions. She is co-author of permanent exhibition in the museum and Editor in Chief of Museologica Brunensia Magazine.

## A BETTER FUTURE FOR THE PAST? VULNERABILITY OF UNIVERSITY MUSEUMS AND COLLECTIONS

#### B. V. Johansen

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#### Keywords: Roles, working conditions, vunerability, changing views on heritage

University history museums or collections are organized in various ways. Some are integrated in the university administration, some enjoy a position as departments, while others are branches within libraries, archives or other university museums. The official position, internal tasks and roles vary accordingly. Often, however, the university history museums consist of a small staff and seem to be vulnerable regarding funding, visibility, freedom of speech or sudden changes of values.

During past Universeum Network Meetings, stories have been shared about this vulnerability. In Oslo, we have experienced a pattern: When enjoying success, the conditions are changed, more often to the worse than not. To us, though, a lack of stability or low internal acceptance of university heritage seem to be common basic challenges throughout Europe. The university itself appears to be the worst enemy of its heritage. Is this correct, and if so - why? How can university history museums create a better future for the past?

**Bjørn V. Johansen** is an art historian specializing in university architecture. Fields also include university history, building restoration, research and outreach activities. He is an employee of the University of Oslo since 1991 and head of its Museum of University History since 2004. Recently he has also been a curator at the Norwegian National Museum of Art, Architecture and Design.

## NATIONAL LAW AND POLICY CONCERNING UNIVERSITY MUSEUMS: THE CASE OF UNIVERSITY MUSEUMS OF THE NATIONAL AND KAPODISTRIAN UNIVERSITY OF ATHENS

#### A. Dermitzaki<sup>1</sup>, A. Doxanaki<sup>2</sup>

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#### Keywords: University museums, national law, Policy

The paper will attempt to map the policy of university museums in Greece and particularly of the National and Kapodistrian University of Athens in relation to other policies in European Countries. The aim is to make visible similarities and dissimilarities concerning policy making which is capable of mobilizing a university museum. Another objective is to present the European strategy and recommendations concerning the university heritage.

Can university museums and their host institutions collaborate in such a way that both institutions maximize their potentials? What problems can be encountered and how can they be solved within the contemporary policy framework? This paper will address the above questions and also it will proceed to the analysis of policy documents concerning the function of university museums in Greece, focused on the National and Kapodistrian University of Athens.

- Aikaterini Dermitzaki, PhD, is Historian- Museologist. She has been working until 2014 in the Museum Studies Research Center of the University of Athens. She has been involved with the management of the course of museum studies at the same institution. From this position she has participated in research projects and other cultural heritage issues. Research interests are the concept of the historical museum and its purposes, local museums, university museums, cultural policy and creative industries.
- Anastasia Doxanaki, PhD, is Archaeologist-Museologist. She has been working since 2002 in the Museum Studies Research Center of the University of Athens. She has been involved with the management of the museum studies course and from her present position she has participated in research projects concerning the museum as institution, its evaluation and other cultural heritage issues. Research interests are archaeological museums, visitor studies, local museums and human remains, cultural policy and creative industries.

## RETHINKING THE VALUES OF SCIENCE HERITAGE: LEARNING STRATEGIES FOR ACCESSIBLE UNIVERSITY SCIENCE MUSEUMS

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Keywords: Learning in university science museums, history of science as interpretative strategy, synergies with formal education settings, communication and sustainability of university museums

University museums are institutions with a dual character: as related museum histories have shown, they have performed as laboratories reflecting an introvert institution with limited connections to the public. International research, however, has indicated a turn on issues, such as accessibility, outreach, social learning and sustainability.

The science museum, as a distinct type of a university museum, has acted as a repository of scientific apparatus and natural sciences collections, once used in the teaching of sciences, where exhibitions praise the authentic object and favor the glass-case presentation. Demands for meaningful museum experiences, however, have affected exhibition practices: new media and interactive exhibits have been employed, turning the university science museum to a 'hybrid museum space'.

In Greece, such museums host a wealth of objects lacking, though, a successful way to communicate the exhibition message to the visitors. Accepting that academic science heritage has educational value, new learning strategies and interpretative tools need to be applied to assist these museums become pedagogically meaningful. We propose that a fruitful strategy is the creative implementation of an interpretative framework that utilizes elements of History of Science in exhibitions and educational programmes, acting, thus, as a guiding principal for visitor personal meaning making.

- Anastasia Filippoupoliti is Assistant Professor in museum education at the Democritus University of Thrace. Her research interests span the fields of museology, museum education and science communication. Among her publications is the two-volume edited book Science Exhibitions: Communication and Evaluation and Science Exhibitions: Curation and Design (Edinburgh: Museums Etc).
- **Dimitris Koliopoulos** is a Professor of science education and scientific museology at the University of Patras. His research interests concern the epistemological and educational aspects of the transformation of scientific knowledge to school science in formal and non-formal educational settings.

## SUSTAINABILITY ANALYSIS FOR THE FOLKLORE MUSEUM AND ARCHIVE (FMA) OF THE NATIONAL AND KAPODISTRIAN UNIVERSITY OF ATHENS

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Keywords: Folklore Museum and Archive, Sustainability, Values, Heritage Management

A mong the crucial problems that Europe faces are, firstly a crisis of values and secondly, how can an organisation operate sustainably in order not to be endangered / affected by economic changes. University Museums, specifically, are threatened with release of all or partial financial assistance given to them. This, on the one hand, leaves room for new and innovative ideas and applications; on the other, it requires time, organisation and professional staff. Based upon the above, the workers, those responsible, students and volunteers of the Folklore Museum and Archive of the University of Athens, in collaboration with postgraduate students of Heritage Management, have been working together in order to decide the appropriate practices for sustainability for the Archive of the Collection and for other folklore items of all types through time. Before the actual establishment of the Museum, documents have been created which analyze those actions, as the establishment of seminar courses on research, preservation and promotion of folk culture, the creation of Group of Friends of FMA, the organisation of events with themes drawn from the archive material. With these actions university museums can maintain alive the threatened culture of each people, the customs and traditions that make peoples distinct at a time of diversity leveling.

Anastasia Pouliou has a degree in History, Archaeology and Cultural Resources Management (University of Peloponnese). She is a post-graduate student in the Ma in Heritage Management (University of Kent/ Athens University Economics and Business). She has offered voluntary work to archaeological sites, the National Archaeological Museum of Greece and she currently offers voluntary work to the Folklore Museum and Archive (National and Kapodistrian University of Athens) for matters related to museum management and collection management policies.

**THEMATIC IN-DEPTH SPECIAL SESSION 3** 

UNIVERSITY HERITAGE, ITS GENERATORS AND ITS SCHOLARS

### UNIVERSITY MUSEUMS: THE END OF ACADEMIC HERITAGE?

#### **G. Vanpaemel**

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#### Keywords: University museums, collections

University museums have a long history. From extensive teaching and research collections, they have become much appreciated (or unwanted) testimonies of the past. Typically, the most precious items are saved from destruction and put in a university museum to boast the glorious history of the institution, to document the history of science, or to support outreach activities. But if universities have always possessed and managed collections, they are not, and cannot be, museums in a modern sense. To put academic collections on show in public exhibition spaces, may destroy the very nature of what an academic collection was about: a laboratory for detailed and specialized study. Curators should take care to preserve the academic character of the collections by studying the experiences of historical actors, or by allowing modern researchers to engage with the collections.

**Geert Vanpaemel** is professor for history of science at KU Leuven, and chairman of the university's Commission on Academic Heritage. His historical research is concerned with the public engagement of science and its role in the emergence of a scientific culture.

## CLASSICAL ARCHAEOLOGICAL COLLECTIONS: ORGANISATION AND THE LINK BETWEEN SCHOLARS AND COLLECTIONS

#### V. Nørskov<sup>1</sup>, L. M. Andersen Funder<sup>2</sup>

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Keywords: Classical archaeology, university collections, scholars, the importance of organisation

Collections of classical archaeological objects and plaster casts have been an integral part of departments of Classical Archaeology or Classics in many universities since the nineteenth century. The collections were used in teaching and research, with the plaster casts collections serving as experimental laboratories in sculpture studies. During the late twentieth century, many of these collections have developed into more traditional museums aiming at attracting audiences from outside the university environment. Work with collections consequently shifted towards communication to broader audiences. This change has been enhanced by a more theoretical approach in archaeological research resulting in less interaction with the collections in both teaching and research. Many collections have consequently been removed from the academic departments and integrated into larger university museums. This, however, might threaten the raison d'etre of the university museums as centres for teaching, learning and communication of research. Drawing on the understanding of the field gained through the International Network for Classical Archaeological University Collections founded after an international conference held at the Museum of Ancient Art, Aarhus University, June 2014, this presentation will discuss the challenges in the relationship between scholars and collections posed by this organisational development.

- Vinnie Nørskov: Her research focuses on the relationship between collections and economy: the art market and the influence on research in classical archaeology, the illegal trade in antiquities, the role of ancient art and culture in Western culture and the role of museums in present society.
- Lærke Maria Andersen Funder: Her research is focused on museology, reception studies, classical antiquity, epistemology, the history and heritage of classical archaeology as academic discipline, the role of university museums and collections in the formation of knowledge, and qualitative methodology in humanistic research.

### **BUILDING A COLLECTION WITH A SLOW ARMY OF SENIORS**

#### R. Dannevig, A. Vaalund

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#### Keywords: Collection, documentation, history of science

The Department of Biosciences was the largest public building in Norway when it was opened in 1971. It houses botany, zoology, zoophysiology, marine biology, limnology, genetics and biotechnology. A large building consists of a lot of objects: objects in use, historical objects, biological specimens, personal items - and waste. University heritage is constantly thrown away.

A year ago we started a project in cooperation with the Department's leadership. The goal was to take the objects of historical value out of the different storages, offices, labs and lunch areas and move them to a single storage inside the institute. Retired professors from the Department's different fields assist us in locating the objects, select and provide information about the objects.

This is a slow way of working - a large-scale saving operation, but at the same time a qualitative operation. Together we take the journey from a traditional understanding of a museum as "old things exhibited" to the revelation that we want to capture the history of their own research in the collected items.

We would like to discuss how to create a collection where the faculty's history of science is incorporated. How can museum staff collaborate with scientific communities?

- Ragnhild Dannevig deals with ongoing management and research concerning medical collections. He ensures the sustainability for objects and collections in storage and on site. He is currently project coordinator for building a collection in the Department of Biosciences. Master in museology from 2012: Artist-in-residence in Norwegian Folk museums.
- **Anne Vaalund's** main responsibility since 2003 is to administer Oslo University History Photobase. She is interested in the wide range of angles we need for understanding the complexity of a university: research, teaching, working conditions, staff, students and organisations. Master in university history from 2001: Botany as a research field at the University of Oslo, 1880-1920.

### A NEW FORM OF PRESENTATION: DIALOGUE ZONE

#### R. de Raat

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Keywords: Brain surgery, dialogue, public participation, medical science, medical heritage

L ast year a brain surgeon of the University Medical Centre Utrecht University (UMCU) replaced the entire skull of a 22-year-old female patient by a customised prefabricated plastic copy. The patient who received the new skull suffers from a condition that thickens the bone structure, particularly that of the skull. This operation, a world premiere, was subject of a new concept of presentation in the University Museum Utrecht. In the so-called Dialogue zone, or in this case also referred as Skull Lab, the museum is a platform for exchange of knowledge, questions and ideas on current topics.

In the exhibition, the objects were linked to this theme. Not only historical objects were shown, but also contemporary objects, like the 3D print of the replaced skull. In several workshops, neurosurgeons/scientists answered questions of the audience. Visitors contribute to current research by making a 3D photograph of their skull (data gathering).

I will argue that the benefits of this form of presentation are multiple: it creates interaction between scientists and the public, visitors can participate in research, scientists get more involved in the museum and they become more willing to transfer research-related objects to the museum.

**Reina de Raat** is curator of medical and dental collections, University Museum, Utrecht University. Studies: Paramedic (Radboud University Nijmegen), History (Leiden University) and master program Medical History (VU University Amsterdam). She is a columnist in two Dental magazines (Dentz and Quality Practice Dentistry), the initiator, and co-author of The Canon of Dutch Dentistry (published in 2014). Reina gives lectures about the development of dentistry in the Netherlands to dental students (Faculty of Dentistry Amsterdam, ACTA). She does research on the socio-historical development of dentistry and ophthalmology, a comparative study.

## HUMAN REMAINS COLLECTION OF THE ATHENS CRIMINOLOGY MUSEUM

#### Z. Sakki, A. Dona, C. Spiliopoulou, M. Stefanidou

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Keywords: Human remains, medical school collections, wet and dry specimens, fetuses, anatomical specimens

Tuman remains, which are often included in medical schools, were  $\Pi$ gathered during the nineteenth and twentieth century by visionary physicians, anatomists and forensic pathologists. In each case, collectors and scholars have realized the great value of having collections with skeletons and anatomical specimens for their medical, anthropological and forensic research, as well as for upgrading their teaching process. However, collectors used to make little effort in documenting properly their holdings, in order to establish systematic collections in the way it is expected today. In Greece, a very characteristic collection of this kind with human remains of early twentieth century is housed in the Criminology Museum of the University of Athens. This collection was created during the first half of twentieth century and contains wet and dry human remains, such as embalmed heads of outlaws, one mummy, mummified and skeletal exhibits, as well as formalin-fixed fetuses and neonates with congenital malformations and other anatomical specimens. These human remains have played an important role in teaching medical, law and police academy students. Museologists and museum conservators confront many problems related to collection management and the focal point of these scientists is to make the collections of the past meet the standards of today.

- **Zoi Sakki** is conservator-museologist and doctoral student at the University of Athens, with research interest in human remains and in collections documentation.
- Artemisia Dona is assistant professor at the Department of Forensic Medicine and Toxicology, School of Medicine, University of Athens, Greece.
- Chara Spiliopoulou is professor of Forensic Medicine and Toxicology, head of the Forensic Medicine and Toxicology Unit of the University of Athens, Greece.
- Maria Stefanidou is professor of Toxicology, Department of Forensic Medicine and Toxicology School of Medicine, University of Athens, Greece, director of the Athens Criminology Museum, and vice-president of the Hellenic Society of Toxicology.

## CULTURAL USE OF THE ASTRONOMICAL HERITAGE AT BESANÇON OBSERVATORY (UNIVERSITY OF FRANCHE-COMTÉ)

#### J. Davoigneau<sup>1</sup>, <u>F. Le Guet Tully</u><sup>2</sup>, F. Vernotte<sup>3</sup>

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Keywords: Inventory of university heritage, restoration of university heritage, innovative cultural policy

**T**ounded in 1878 for astronomy, chronometry and meteorology, the lacksquare Besancon observatory was built on a height outside the city, now the centre of the University of Franche-Comté campus. Its architectural and instrumental heritage and its park - planted with century-old trees were studied and inventoried at the beginning of the 21st century. We shall first describe how the inventory carried out by JD and FLGT led FV to become interested in the cumbersome astronomical heritage which at the time was under his responsibility as director of the observatory. Then we shall show how the historical knowledge collected during the inventory, combined with the convergent interest of luxury watch-makers, the Mayor of Besancon and FV, led to measures such as the Monument Historique protection of some of the instruments and buildings, as well as to the complete restoration of the meridian circle - instrument and shelter – and of a very rare analemmatic sundial. We shall examine some of the innovative aspects of the cultural policy, based on the observatory's heritage and industrial horological past, that was introduced to deal with this nineteenth century astronomical site. Finally we shall draw comparisons with the cultural policy of a few other university observatories having a somewhat similar cultural heritage.

- Jean Davoigneau, a historian with a scientific background, works for the Mission Inventaire général du patrimoine culturel at the French Ministry of Culture where he specializes in scientific and technical heritage. He is also involved in several international collaborations within the Convention France-UNESCO.
- **Françoise Le Guet Tully** is honorary astronomer. Her research projects concern the history of astronomical instruments and of institutional observatories. She also works on the history of interferometry and collaborates on the Hypertelescope project, a joint R&D venture of Collège de France and Observatoire de la Côte d'Azur.
- **François Vernotte** is professor of astronomy/astrophysics at the University of Franche-Comté. He was director of the Observatory of Besançon from 2002 to 2012. His research interest concerns the long-term stability of oscillators such as atomic clocks and millisecond pulsars.

## PRACTICING ARCHAEOLOGY IN THE MUSEUM: THE EXPERIENCE OF TRANSFORMING A UNIVERSITY MUSEUM FROM AN EXHIBITION HALL TO A PLACE OF ARCHAEOLOGICAL PRACTICE

#### Y. Papadatos<sup>1</sup>, A.S. Sfyroera<sup>2</sup>, M. Roggenbucke<sup>2</sup>

<sup>1</sup>Department of Archaeology and History of Art, University of Athens, School of Philosophy, University Campus, Athens, 157 84, Greece <sup>2</sup>Museum of Archaeology and History of Art, University of Athens, School of Philosophy, University Campus, Athens, 157 84, Greece gpapadat@arch.uoa.gr

#### Keywords: Archaeology, conservation, excavation

The Museum of Archaeology and History of Art of the National and Kapodistrian University of Athens was founded in the beginning of the twentieth century. For more than a century the collections were enriched with donations and long-term loans, including now more than 8,500 items, originals and copies, dating from prehistoric to modern times, and deriving mostly from Greece but also from other regions of the East Mediterranean.

Since its establishment the Museum served both as an exhibition hall for these objects and as an alternative place for teaching, offering the students the rare opportunity for hands-on experience with artefacts of the past. However, these visits were occasional and always organised by the relevant professor within the framework of a particular course.

In 2010, a fully-equipped Conservation Laboratory was established within the Museum. Subsequently the Hellenic Ministry of Culture granted permission to the directors of the university excavations to have their archaeological materials transported to the Museum for a determined period of time for reasons of conservation. This further enhanced the opportunity for students to observe from close originals from various places and dating. The above transformed the Museum into a place of archaeological practice and research, and induced significant changes in the function of the Museum and the way it is connected with archaeological teaching. This presentation discusses the experience and evaluates the results of this kind of transformation and its impact.

- Yiannis Papadatos is assistant professor of Prehistoric Archaeology, Department of History and Archaeology, University of Athens. Holds aPhD in Prehistoric Archaeology. Is director of excavation projects in East Crete. Research interests: Archaeology of Death, Bronze Age Greece, Ceramic technology, Archaeometallurgy.
- Alexandra S. Sfyroera holds a PhD in Classical Archaeology, and is tenured teaching assistant, Department of History and Archaeology. Participated in excavations in Naxos, Crete and Kea. Contributed to the establishment of the archaeological collections currently exhibited at Gyroulas and Melanes (Naxos). Research interests: Classical Archaeology, ancient Greek history, Greek epigraphy, historical archaeology, ancient Greek medicine.
- Michel Roggenbucke is archaeological conservator. Holds a MA in Museum Studies and is PhD candidate of Classical Archaeology, Laboratory Teaching Staff, Department of History and Archaeology, University of Athens. Is in charge of the Museum's Conservation Laboratory. Participated in excavations on Crete, Mainland Greece, Turkey and Iraq.

## HOW TO RAISE THE SCIENTIFIC COMMUNITY'S AWARENESS TO ITS OWN HERITAGE?

#### A. Bidois<sup>1</sup>, A.-S. Rozay<sup>2</sup>

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Keywords: Scientific heritage, contemporary heritage, intangible heritage, sociology, university heritage

In 2008 the INSA, Rouen's School of Engineering and the University of Rouen joined a national program for the preservation of both the tangible and intangible contemporary heritage of the scientific community (PATSTEC).

Contemporary scientific heritage is well-known for being complex and quite difficult to grasp for laymen. Indeed most of its instruments are black boxes, electronic devices or computer parts. Most of the time, the very concept of scientific heritage has not yet sunk in in researchers' minds. It is a whole process that takes time and opinions must be more broadly exchanged.

We decided to set up a research-team of historians and sociologists working together on intangible heritage. Its aim was to draw up a common methodology to collect and gather data from the perspective of local history as well as social history, and to see and how both commingle with researchers' memories. Several workshops were organized and to limit the scope of the study, we decided to focus more specifically on an atom probe, a specific instrument used in research on Material Science in Rouen. Twenty-eight hours of interviews and numerous archives were preserved, which enabled the production of a film documentary.

After a short presentation of this project, we will analyze what was learnt from this experience, how we dealt with the issues we were confronted to and how this project was key to raising the researchers' and the whole academic community's awareness to its own heritage.

**Anne Bidois** is a sociologist. Her research focuses on the sociological and historical structures at work in higher education in France.

**Anne-Sophie Rozay** has been in charge of the preservation of contemporary scientific heritage in Haute-Normandie for the National Mission for the Preservation of Contemporary Scientific and Technical Heritage (PATSTEC) since 2008.

## ENGAGING WITH UNIVERSITY MUSEUM COLLECTIONS: PARADIGMS OF PARTICIPATORY MUSEUM PRACTICE

#### **M. Mouliou**

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# Keywords: Teaching museology, museum pedagogy, participatory museum culture, engagement, outreach, values of university museums

How can we assess the diversity of values university museums embody today? How can museology as a discipline, both in theory and in practice, assist in rethinking university museums as labs of experimentation within the academic community and as connecting platforms with society at large? How can museology and critical pedagogy suggest new ways of understanding and interpreting university museum collections; and at the same time how can new initiatives unlock the critical and creative potential of students as interpreters of this heritage and co-creators of museum work?

This paper will attempt to address these questions first by drawing from current and evolving research on the value of museums; then, by focusing on examples of practice co-developed with undergraduate students of archaeology in courses of museology at the Faculty of History and Archaeology of the University of Athens; and finally by reflecting on the potential of participatory museum paradigm and the significance of value-based assessments in a quest for sustainable university museums.

Marlen Mouliou is a Lecturer in Museum Studies at the National and Kapodistrian University of Athens, Faculty of History and Archaeology. She is a member of a Cross-Faculty Committee for the Management of the Post-graduate Programme in Museum Studies at the same university. She is also Chair of the International Committee for the Collections and Activities of Museums of Cities of the International Council of Museums. She holds a PhD in Museum Studies. Her research interest are on museums and their social value, museum history, material culture, museum archaeology, city museum policies and urban narratives, participatory museum interpretation, museum professionalism and training, museum accreditation, archaeological ethnographies and local communities

## TEACHING THROUGH HISTORICAL SCIENTIFIC INSTRUMENTS: THE MATERIAL CULTURE OF SCIENCE AS AN OPPORTUNITY TO EXPLORE SCIENCE, HISTORY OF SCIENCE AND SCIENCE COMMUNICATION ISSUES. STUDYING THE CASE OF UNIVERSITY SCIENTIFIC INSTRUMENT COLLECTIONS IN GREECE

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Keywords: Historical scientific instruments, Greek University, history of science, science teaching

uring the last decades there has been a rising interest in the preservation of historical scientific instrument collections and the development of research activities related to them. The role of universities in this enterprise is prominent and sheds fresh light on the weaving of an interdisciplinary field including science, history of science, and science communication issues. The restoration of eighteenth century physics cabinets and nineteenth century historical laboratories, the reconstruction of historical scientific equipment and experiments, the organization of exhibitions and science communication events, the reconstruction of historical lecture demonstrations, the creation of films and theatrical plays, and the one-line display of scientific instrument collections are only few examples of this multifaceted activity of European universities. This new importance given to the study of the material culture of science is strongly related to the recent historiographical turn, according to which history of science is not only the history of ideas but also the history of institutions, instruments, experimental processes, and teaching cultures. Giving specific examples from our latest research activity, we will argue for the fact that the scientific instrument heritage of Greek universities bears information of the highest importance for historians of science and science educators.

**Flora Paparou** holds a Ph.D. in science education. Her research focuses on the utilization of the history of science in science teaching. She currently works in Secondary Education and collaborates with the Athens University Museum on the identification of scientific instruments and the organization of science popularization activities.

**CHAIRED POSTER SESSION 4** 

PART A'

#### DEFINING UNIVERSITY MUSEUMS' OBJECTS FOR THE WEB

#### L. Andreoli<sup>1</sup>, <u>M. Fornasiero<sup>2</sup></u>, A. Menegazzi<sup>3</sup>, S. Talas<sup>4</sup>

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 <sup>2</sup>Museum of the Geology and Paleontology, University of Padua, via Giotto, 1 35121 Padua, Italy
 <sup>3</sup>Museum of Archaeological Sciences and Art, University of Padua, piazza Capitaniato 7, 35139 Padua, Italy
 <sup>4</sup>Museum of the History of Physics, University of Padua, via Marzolo 8, 35131 Padua, Italy

#### Keywords: Data, museum heritage, semantic analysis, digital repository, web

The University of Padua is working to develop a tool that will harvest data from the different data-bases of all Padua University museums and transfer the selected data into a single repository, which can then be directed to Europeana or made available through a portal. The project is carried out jointly by the Center for Libraries (CAB) and the Center for Museums (CAM) of Padua University.

The poster will outline the project and focus on one of its crucial issues, which consists in defining the data to be harvested, ie. the minimum necessary fields that can "define" university heritage objects for the public. The curators of three of the University museums have worked in collaboration with a librarian of the CAB to define this set of fields for archeological and art objects, geological and paleontological heritage and scientific instruments. A kind of web semantic analysis was carried out. The same analysis will be achieved in the next months for the whole heritage of the University of Padua.

- Lorisa Andreoli is a librarian of the Library System of the University of Padua. Her main activities at the University Library System are: Coordinator of the Digitization projects service and Coordinator of Phaidra project.
- Mariagabriella Fornasiero is curator of the museum of Geology and Paleontology at the Padova University. Her main research interests are on Cenozoic molluscs fauna of Veneto, and concerning the history of the paleontological collections of the museum.
- Alessandra Menegazzi is curator of the Museum of Archaeological Sciences and Art at the University of Padua. Her main research interests are in the history of collections of classical sculptures and antiquities (16th-19th centuries) and in questions of use, display, conservation of plaster casts.
- **Sofia Talas** is curator of the Museum of the History of Physics at the University of Padua. Her main research interests are in the history of scientific instruments and the history of physics from the 18th to the 20th century.

### AN OBSERVATORY HERITAGE COLLECTION IN SITU

#### J. Caplan

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#### Keywords: Observatory, astronomy, university, museum

The original Marseille Observatory was operational in 1701. It was attached to the university in the 19th century. In the 1860s it moved to a "New Observatory" equipped with the world's then-largest glass-mirror telescope. In 2008 the astronomers moved again, to the Laboratoire d'Astrophysique de Marseille.

The "New Observatory" site, 2km from the city centre and near several museums, is currently occupied mainly by a university interdisciplinary institute which is just now completing – for its own use – a renovation of most of the buildings. Our historic instruments, archives, etc. are in storage. We plan to return this astronomical heritage to remaining space at the New Observatory, as recommended by an external committee in 2009. The coordinator (*chargé de mission*) of our university's scientific heritage will be negotiating the details, and I am preparing the related documentation.

I shall present the general plan, and the potential dangers. The value of the collection is generally acknowledged, but our university lacks a museum tradition. Local governance is generally unfamiliar with museum storage, conservation, and security. Advice will be welcome!

James Caplan, born in Chicago, studied physics at the University of Chicago and obtained a PhD in astronomy from Northwestern University, before moving to the Marseille Observatory for research on the interstellar medium using Fabry-Perot interferometers, and now astronomical history. He is an *astronome émérite* at the Université d'Aix-Marseille.

## LUX, LUCIS - KNOWLEDGE IS LIGHT

#### L. Cirlot<sup>1</sup>, S. Vallmitjana<sup>2</sup>, P. Mateo<sup>1</sup>, I. Garcia Malet<sup>1</sup>

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*Keywords: University Museum, Virtual Museum, Academic Heritage, University Collections* 

In order to celebrate the International Year of Light 2015, the Virtual Museum of the University of Barcelona (MVUB) wanted to commemorate this event with a virtual exhibition with items from the collections that constitute the Heritage of the University of Barcelona (UB).

As a starting document we are developing a poster in which the thematic core of the exhibition is collected and the relevant explanations are also described. We present this poster to the XVI Universeum Network Meeting.

The exhibition shows the multiple possibilities to analyze, grasp and understand the phenomenon of light, from multidisciplinary approaches, such as art, physics, religion, astronomy and philosophy. Based on the collections that constitute the Virtual Museum of the UB (MVUB), the exhibition consists of objects and images that have a common denominator, light.

The central idea of this virtual exhibition comes from the very coat of arms of the University of Barcelona in which there is a representation of Minerva with the slogan "perfundet omnia luce", symbolizing the light of knowledge.

- **Lourdes Cirlot** is Professor in History of Art and Vice-Rector for Institutional Relations and Culture at the University of Barcelona. She is the main Researcher of the investigation group of Art, Architecture and Digital Society (www.ub.edu/artyarq).
- Santiago Vallmitjana Rico is Professor at the Applied Physics and Optics Department of the Faculty of Physics of the University of Barcelona. He is the author/co-author of more than one hundred scientific papers related to optics and photonics and member of several scientific societies. He is responsible for the collection of instruments of the Physics Faculty since 2004.
- **Pilar Mateo Bretos** is a graduate of Geography and History from the University of Barcelona. She is a Master's in Museology and Cultural and Ethnological Heritage in the University of Barcelona and also a Certificate in Didactic Museography in the University of Barcelona. She is working to the Vice-Rector Department for Institutional Relations and Culture at the University of Barcelona as coordinator of exhibitions.
- **Isabel Garcia Malet** is a graduate of Philosophy and Arts from the University of Barcelona and has worked at this university in the field of culture for more than 20 years. She is now coordinator of the University of Barcelona Museum Project.

# THE MUSEUM OF THE SCHOOL OF ENGINEERING – POLYTECHNIC OF PORTO: ITS CULTURAL MISSION

#### P. Costa

School of Engineering – Polytechnic of Porto, Faculty of Arts of the University of Porto, Instituto de História Contemporânea – Nova, Rua Drº António Bernardino de Almeida, 431, 4200-072, Porto, Portugal <u>pcmc@isep.ipp.pt</u>

*Keywords: Cultural mission, scientific dissemination, scientific collections, Museum of ISEP* 

The School of Engineering – Polytechnic of Porto has been pioneering education and research in Engineering since 1852, and is today one of the top schools of technology in Portugal. The museum of ISEP was created in 1998, with the aim to disseminating science and the scientific collection of the school. Over the years, the museum has become a training space for students through projects, inviting them to interpret objects and collections and solve tomorrow's challenges. The interaction between the museum and the school community is developed, for example, through the production of academic work, using the museum's collection. In recent years, several proposals for the museum's website were produced, projects in augmented reality, prototyping and 3D videos.

These academics works have a big impact on the exhibition, contributing to a better understanding of the history of science, the social dimension of engineering, and the usefulness of work undertaken by students. In short, the Museum of ISEP acquaints students with new technologies taught in courses and demonstrates their practical application while at the same time allowing visitors to experience the scientific and technical evolution of experiment-based education since the foundation of the Industrial School.

Patricia Costa is a museologist at the Museum of ISEP since 1999, researcher at Instituto de História Contemporânea – Nova and affiliated teacher at the Faculty of Arts of the University of Porto. She graduated in History of Science at the Portucalense University, finished her master degre at the University of Porto in 2007, and took a PhD of Geology in History and Methodology of Geological Sciences at FCTUC.

## UNIVERSITY HERITAGE AND CULTURAL ENGAGEMENT OF SEVILLE UNIVERSITY

#### M. D. Ruiz de Lacanal

Universidad de Sevilla (Spain) Directora Grupo HUM 673 SOS Patrimonio, Universidad de Sevilla, Sevilla, España <u>mrdmus@us.es</u>

*Keywords: university, conservation, restauration, educative heritage, scientific collections.* 

A s teacher and director of this group of investigation of the heritage I have the pleasure of presenting the work carried out by its members, which are all researchers. They are interested in continuing their investigation in the area of the conservation and restoration of cultural artefacts, especially from a theoretical and historical point of view.

The Group also presents another poster, where we will portray the different types of heritage of the University of Seville (bibliographical and documentary heritage, monumental heritage, scientific and technical heritage, etc.). The project presented here is divided into two parts: a meeting among teachers who curate and conserve museums and scientific collections, and the subsequent publication of a book containing the results of the meeting. This book discusses the problems of conservation and restoration of museums and scientific collections, and the role and importance of the university heritage. This meeting of teachers from different faculties of the University of Seville has elucidated the connections between different disciplines and universal meaning beyond disciplinary boundaries within the university, something very interesting and precious in the present context.

María Dolores Ruiz de Lacanal Ruiz-Mateos is Profesora Titular of the Faculty of Fine Arts of the University of Seville. She has a degree in fine arts and art history, and a PhD in architecture and heritage. She is a member of I.C.O.M and the IIC group of the Instituto de Conservación. She is a specialist in the history of conservation and restauration and directs the research group HUM-673 SOS concerned with the heritage of the University of Seville.

## THE PAST FOR THE FUTURE OF GEOGRAPHY: THE COLLECTIONS OF THE PADOVA'S MUSEUM OF GEOGRAPHY

#### G. Donadelli, C. Gallanti, L. Rocca, M. Varotto

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# Keywords: University museums, human and physical geography, history of geography, intangible heritage

The aim of this poster is to present the history, the collections and the vision of the future Museum of Geography at the University of Padova. As the cradle of Italian Geography (since 1872 when the first chair of Geography was established), Padova has distinguished itself on the national scene for the long tradition of studies and projects combining physical and humanist approaches.

In almost 150 years, the Institute of Geography has collected a wide number of historical documents, maps, globes, terrain models, wall charts, measuring instruments and photographic documentation. Nevertheless, this remarkable amount of material items is only a part of the wider intangible heritage of methods, skills, and ways of thinking that the Museum of Geography aims to highlight and promote.

- **Giovanni Donadelli** is a researcher at the Department of Historical and Geographic Sciences and the Ancient World (University of Padova). He is involved in the scientific project of the Museum of Geography; his main research interests are geography, technology, and education. He is member of the board of the Italian Association of Geography Teachers.
- **Chiara Gallanti** is a museum professional collaborating in the project of the Museum of Geography at the Department of Historical and Geographic Sciences and the Ancient World (University of Padova). She is responsible for the scientific cataloguing of the historical items of the collections.
- **Lorena Rocca** is Professor of Geography and Didactics of Geography at the University of Padova and researcher in human geography and education. She also collaborates with the University of Applied Sciences and Arts of Southern Switzerland (SUPSI). She is member of the Scientific Committee of the Museum of Geography at DiSSGeA.
- **Mauro Varotto** is Associate Professor of Geography and Cultural Geography at the University of Padova. He is coordinator of the Scientific Committee of the Museum of Geography at the Department of Historical and Geographic Sciences and the Ancient World. His researches are mainly in human and cultural geography.

## ASTRONOMICAL ARTEFACTS IN THE MODERN SCIENTIFIC CONTEXT

#### L.V. Kazantseva

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Keywords: Photography, Astronomical photographic records, Historical astronomical photographic archives, National project

**P**hotography was widely used to record images and spectra in astronomy for more than 100 years, and large collections of astronomical photographic records exist at many observatories. Photographic plates have been by far the most common detector for astronomy for long time. Many astronomical sources have evolutionary time scales much longer than human life, so archive data are the only means to follow such phenomena. The astronomical photographic archives represent an important part of historical and cultural heritage, and reflect and document important epochs of history of science and technology. Many collections are related to famous names in the history of astronomy and astrophysics and have become a significant storage facility.

The national project of the Ukrainian Virtual Observatory has given new life to the old observational archives. The Joint Digital Archive of photographic observations has become the core of the UkrVO and includes observational archives of five Ukrainian observatories covering a period of around 100 years. The total number of photographic plates in the UkrVO collection exceeds 300 thousands. The authentic artefacts of science have their own characteristics. They are associated with a variety of technical solutions for the specific research field, and the role they played in their time in science and society that created them.

**Liliya Kazantseva** has a PhD in astronomy and is Research Associate and Director of the Astronomical Museum. She is a populariser of science and researches the historical development of astronomy in Kyiv.

## PARTNERSHIP BETWEEN UNIVERSITY MUSEUM AND LOCAL SCHOOL: LIGHT AND SHADOW

## F. Marcon

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#### Keywords: Physics instruments, secondary schools, local communities, University

**S** ince 2010, the Museum of the History of Physics of the University of Padua has been involved in the study and preservation of scientific instruments kept in three secondary schools of the Veneto region, two of these in Padua and one in Verona. The situation we found in the three schools was very different in every respect, i.e. as for the instruments themselves, their conditions, the surviving documentation, the room for storage and/or display, the available funds, and the school staff that collaborated.

The present poster will focus on three crucial points of this partnership between the Museum and the schools:

- What has the partnership between the Museum and the schools brought to the local communities?
- How did the Museum experience and handle these collaborations? What were the light and shadows for the Museum?
- What did this kind of work mean to the University of Padua and to the Department of Physics and Astronomy?

**Fanny Marcon** graduated in Art, Cinema and Theatre Studies at the University of Padua. She currently has a research scholarship at the Museum of the History of Physics of the University of Padua. Her research focuses on history of scientific instruments and museology.

## NEW SYNERGY AROUND SCIENTIFIC COLLECTIONS OF MONTPELLIER

## N. Miralles

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#### Keywords: Collections, conservation, promotion, research

In January 2015, the University of Montpellier arose from the merger of two public institutions. In that context, a specific direction with a professional team has been created, dedicated to scientific culture and historical heritage. The collections of the former two establishments are now gathered and form an exceptional heritage of medicine, pharmacy, science and technology. The collections are linked to symbolic places of the history of teaching in Montpellier like the oldest french Jardin des Plantes (1593).

The poster will describe the university collections, their typology, volumes, singularities, and challenges. The different ways of promotion will also be presented, which address two audiences: teaching and research on the one hand and mediation for the general public on the other hand. Some of the collections, like the herbarium and the paleontology collections are used in international research. The entire heritage is a first-rate resource for the diffusion of knowledge and scientific culture in various fields such as history of science and history of art. This wide range of interest enables to build new rich and varied partnerships. Finally, through the work carried out on and with collections, we participate actively in the creation of the identity of the university. This heritage contributes to the attraction of Montpellier.

Noémie Miralles is in charge of preservation and promotion of collections at the University of Montpellier. She also conducts research into the history of the university and its collections. She co-authored *De la faculté des sciences à l'Université Montpellier 2: les sciences et techniques en mouvement* published in 2014.

## THE SCIENTIFIC AND EDUCATIONAL COLLECTIONS OF THE UNIVERSITY OF SEVILLE. THE IMPORTANCE TO KNOW THEM AS THE WAY TO PRESERVE THEM

## A. M. Galán-Pérez, A. Herrera-Picazo Espinar

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#### Keywords: Educational heritage, Scientific Collections, University Museums, Conservation-Restoration

The main objective of this poster is to show the state of art of the University of Seville collections. This study is denominated as Art & Science, and has been developed by the Researcher Group SOS Heritage, and directed by Maria Dolores Ruiz de Lacanal. Our aim is to present the case study of the University of Seville Educational Collections as a first bird's eye view obtained by the group on collections research. This investigation has focus mainly on the history, importance, use and conservation of the collections and their objects.

We present this poster as a result of analysing the scientific, technological, and educational heritage as a single and strong unit while at the same time taking into account that the collections belong to different university faculties and departments, such as Science, Medicine, Pharmacy, Biology, Veterinary, Engineering, Architecture, Optics, Physics, and Chemistry. We will present the Seville Collections and their stakeholders, as well as the first reflections obtained. We will continue our research into important directions, such as the management of the collections and the way towards their preservation. We have begun this research thanks to the first satisfactory meeting on Art & Science, organized by the Group last year.

- **Ana M. Galán Pérez** has a PHD in Fine Arts of the University of Seville, and a Bachelor in History of Art of the University of Zaragoza, as well as in Conservation and Restoration of the ESCRBCC of Barcelona. She is a conservator and a researcher of the Group I+D HUM-673 SOS Heritage of the University of Seville, where she studies the history of the preservation and restoration of heritage.
- Alejandra Herrera-Picazo Espinar has a PHD in Art Research from the University of Seville and a Bachelor in Fine Arts. She specialized in the conservation and restoration of artworks. As a conservator of cultural artefacts, she studies the history of preservation and restoration of cultural heritage, and is a member of the group HUM- 673 SOS Heritage of the University of Seville.

**CHAIRED POSTER SESSION 4** 

PART B'

## CONSERVATION OF PALAEONTOLOGICAL HERITAGE: LASER CLEANING APPLICATIONS ON FOSSILIZED BONES

A. Alexandropoulou<sup>1</sup>, E. Karantoni<sup>1</sup>, N.A. Stefanis<sup>1</sup>, K. Melessanaki<sup>2</sup>, P. Pouli<sup>2</sup>, <u>G. Panagiaris<sup>2</sup></u>

<sup>1</sup>Technological Educational Institute of Athens, Department of Conservation of Antiquities and Works of Art, Ag. Spyridonos str, 12243, Athens, Greece <sup>2</sup>Institute of Electronic Structure and Laser (IESL), Foundation for Research and Technology-Hellas (FORTH), P.O. Box 1385, 71110, Heraklion, Crete, Greece gpanag@teiath.gr

Keywords: Fossil, bones, conservation, laser cleaning

**F**ossils are the archive of nature that documents the geo-diversity, bio-diversity and cultural diversity of the universe. Due to variations as regards their structure, materials and fragility, fossils show a number of diverse conservation issues, cleaning being one of the most important and critical one. Taking into account previous cleaning tests, which were carried out on fossilised bones, it has been demonstrated that laser cleaning is a feasible and effective conservation method to remove hard insoluble crusts that usually enclose fragile fossils. Based on these results, a series of cleaning tests were performed aiming to investigate the most appropriate laser parameters for the removal of these sediments. Hippopotamus bone-fossil fragments (Upper Pleistocene, Kato Zakros Crete), embedded into calcareous matrix with quartz impurities were irradiated employing two different laser ablation methodologies (by means of a QS and a SFR Nd:YAG laser systems). SEM/EDAX and XRD analyses were applied in order to evaluate the cleaning results. After the completion of the experimental procedure, it has been concluded that the SFR Nd: YAG laser system, at wet conditions, constitutes the least harmful cleaning tool, as it removes the sediment without causing damage to the fossilized bone surface.

- Alexandra Alexandropoulou is a young conservator of antiquities and works of art (Dept. Conservation of Antiquities & Works of Art, TEI-A). She has carried out her final thesis on "laser cleaning of fossilized bones".
- **Effrosyni Karantoni** is conservator of antiquities and works of art holding an MA in Museums Studies. She has been Visiting Lecturer of Dept. Conservation of Antiquities & Works of Art, TEI-A. She has participated in research programmes and has great experience in diagnosis and conservation of organic materials.
- Nikolaos-Aleksios Stefanis, Lecturer at the Dept. Conservation of Antiquities & Works of Art, TEI-A, is a conservator of antiquities and works of art (MSc, University of London, UK PhD, Aegean University, Greece). He has worked at various monuments and archaeological excavations as well as in research programmes. He has over 30 papers in scientific journals and conferences.
- **Kristalia Melessanaki** is an arts conservator. She has been involved in several research projects and applications related to the use of laser techniques for cleaning and spectroscopic analysis of CH objects. Her main activity involves the evaluation and controlling with spectroscopic techniques of the laser cleaning applications on artworks.
- Paraskevi Pouli holds a degree in Physics from Aristotle University of Thessaloniki, Greece and a Ph.D. in Physics from Loughborough University, UK. Her research interests include the investigation of laser ablation mechanisms on various materials. She has over 40 publications in refereed scientific journals and conference Proceedings.
- Georgios Panagiaris is Biologist, Doctor of Biological Sciences and Professor at the Department of Conservation of Antiquities and Works of Art, TEI-A. He is a Board member of the Interinstitutional Postgraduate Course "Museum Studies". He is the principal author in a great number of scientific papers. He has coordinated a lot of Greek and International research projects.

## MULTI INTEREST COLLECTIONS IN A DIGITAL REPOSITORY: THE "PERGAMOS" CASE @ UOA

### D. Antoniou, G. Economou, I. Lourdi, C. Viglas, S. Zoi

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#### Keywords: Digital Library System, Institutional Repository, Integration

The proposed poster deals with the Digital Library System (DLS), called "Pergamos", which the Libraries Computing Centre of UOA has designed, developed and supported for more than 8 years now. Pergamos is a feature-rich integrated digital library system that supports heterogenous digital collections coming from various University units such as: the Historical Archive, the Libraries, the Geological Museum etc. The DLS serves cultural heritage, museum and archival content already existing at UOA and offers flexibility in design and metadata policy for each digital collection. The digital content is already indexed by Europeana and is referenced in best practices for Digital Libraries.

"Pergamos" is currently being redesigned and renovated. It will be a part of the new institutional repository of UOA that will contain not only cultural heritage collections, but also collections of Grey Literature, Research Data, Old Books and Periodicals etc. The main target of the Libraries Computing Centre is to offer even more functionality, flexibility and benefits to the academic community such as: finegrained and flexible digital collection definition, management and maintenance, fully searchable and re-useable digital content suitable for educational purposes as well, self-archiving workflow supporting multiple types of university users (professors, students, librarians).

- **Dimitris Antoniou** works in Libraries Computer Centre of National & Kapodistrian University of Athens as System Administrator. His interests include Virtual Computing Environments, Web design and development, Open Source Software and User Experience.
- Giannis Economou holds a MSc degree in Computer Science. He works in Libraries Computer Centre of National & Kapodistrian University of Athens. His research interests include Advanced Information Systems architecture and design, Software Development, Open Source Sofware and User Experience.
- Irene Lourdi holds a PhD in "Metadata models for description of digital folklore collections". She works in Libraries Computer Centre of National & Kapodistrian University of Athens. Her research interests include Digital cultural heritage collections, Metadata schemas and interoperability, Collection-level descriptions, Ontologies and Knowledge organization.
- **Costas Viglas** holds a MSc degree in Computer Science. He works in Libraries Computer Centre of National & Kapodistrian University of Athens. His research interests include digital libraries and repositories, systems integration, databases, open access and open source software
- Sevasti Zoi holds a PhD and a MPhil in History and a MSc in Cultural Organisations Management. She works in Libraries Computer Centre of National & Kapodistrian University of Athens. Her research interests include Social and Political History, Greek Philology, Education, Lifelong Learning, New Technologies in Education, Cultural Studies.

## THE ARCHAEOLOGICAL MUSEUM OF THE UNIVERSITY OF THE PELOPONNESE

#### Ai. Banou, M. Xanthopoulou, E. Zimi

University of Peloponnese. Department of History, Archaeology and Cultural Resources Management. Old Camp, East Centre, 24100 Kalamata, Greece <u>ezimi@uop.gr</u>

#### Keywords: Casts, pottery, teaching collection, interactive database

The University Archaeological Museum of the Department of History, Archaeology, and Cultural Resources Management was inaugurated in December 2014 on the premises of the Faculty of Humanities and Cultural Studies of the University of the Peloponnese in Kalamata. Its collection consists primarily of casts of representative works of Greek art, as well as Roman, Byzantine/Medieval and modern pottery fragments from ancient Corinth. Collected in recent years, the casts range chronologically from Prehistory to Late Antiquity and represent various arts and crafts, such as sculpture, metalwork, and pottery. The Museum also hosts fragments of papyri, mostly unpublished, which were donated to the Department of Philology.

The University Archaeological Museum is an integral part of teaching in our Department, particularly for courses focusing on pottery and sculpture. Both the casts and the pottery are used for training students in recording/cataloguing, documenting and classifying archaeological material, and in archaeological drawing.

The Museum is in the process of becoming a public education resource for the local community of Kalamata, aiming at introducing primary and high school students to the subject of Archaeology.

It intends to enrich its ceramic teaching collection with pottery dating from Prehistory to the Early Roman period and to create new study collections,. Last but not least, the projected creation of an interactive database will not only help organize and manage the collection more efficiently, but it will also be a starting point for the further development of museum studies in our Department and for the dissemination of knowledge to the local community.

- **Emilia Banou** is Assistant Professor of Prehistoric Archaeology at the University of the Peloponnese. Her research interests include the Peloponnese in the Bronze Age, with emphasis on Laconia, and Minoan-Mycenaean religion. She is currently conducting the excavation of the Minoan peak sanctuary at Ayios Yeoryios sto Vouno, Kythera.
- Maria Xanthopoulou is Assistant Professor of Byzantine Archaeology at the University of the Peloponnese. Her research interests include Late Roman and Byzantine pottery and metallurgy (particularly copper alloys), settlement and domestic architecture, Late Roman and Byzantine Crete.
- **Eleni Zimi** is Assistant Professor of Classical Archaeology at the University of the Peloponnese. Her research topics include Classical and Hellenistic metalware (silver and copper), fine pottery in relation to connectivity and trade in the Mediterranean, Classical and Hellenistic Cyrenaica (north Africa). She is in charge of a student training excavation at ancient Messene.

## THE HERITAGE OF THE UNIVERSITY OF IOANNINA

#### A.D. Fotopoulos

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Keywords: University of Ioannina, Folklore Museum, Medical History Museum, Collection of typography exhibits

**F**ounded in 1964, the University of Ioannina effortlessly blended into the local social and cultural community. This symbiotic process created a strong interaction and promoted cultural expression and creativity. The impact of the engagement with the local community led to the foundation of two Museums and a collection, designed to play a significant role in both research and aesthetics. Most of all, of course, they are an educational resource for students, researchers, schools and members of the public. The Folklore Museum holds outstanding acquisitions related to the pre-industrial production era and the agricultural or cattle-breeding daily culture. The classification method has been based on their functional value and everyday use, following the basic international prototypes of data for the documentation of Folklore/Ethnographic Museums. The School of Medicine encouraged the academic community to reconnect and explore the tradition of medicine in the region of Epirus. The Medical History Museum provides an insight into the history of Medicine and displays a large collection of medical heritage, equipment and facilities. Finally, on display is a unique and extensive collection of typography exhibits, ranging from punches, matrices and moulds to machines (cast iron presses, lithography plates), dating back to the eighteenth century.

Andreas D. Fotopoulos is Vice Rector and Professor of Nuclear Medicine, Medical School, University of Ioannina.

## LASER CLEANING APPLICATION TO A TAXIDERMY PARADISAEIDAE BROWN BIRD (ZOOLOGICAL MUSEUM, UNIVERSITY OF ATHENS)

## <u>E. Karantoni</u><sup>1</sup>, E. Malea<sup>1</sup>, P. Pouli<sup>2</sup>, K. Melessanaki<sup>2</sup>, A. Legakis<sup>3</sup>, G. Panagiaris<sup>2</sup>

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#### Keywords: Taxidermy bird, laser cleaning, feather, dust

N atural history collections demonstrate a unique example of multifaceted objects and conservation problems. The aim of this project is the cleaning of the plumage of a taxidermy Paradisaeidae brown bird from the Zoological Museum of the University of Athens. The fine structures of feathers are extremely efficient dust traps and the cleaning procedure is a particular difficult task.

A series of laser cleaning tests were performed aiming to investigate the most appropriate laser parameters for the removal of dust from brown feathers with iridescent edges. Initial tests in the laboratory were focused on real samples. Tests were performed employing visible (at 532nm and 355 nm) and infrared (at 1064nm) wavelengths of ns pulse duration emitted from a Q-switched Nd:YAG laser system.

Evaluation was based on surface macroscopic and microscopic analysis (by optical and scanning electron microscopy), with emphasis on structural integrity and the absence of any chemical alterations. It was shown that infrared (at 1064nm) radiation from a QS laser system successfully removed the soiling without any visible disruption or discoloration of the feather structure. The comparative tests are discussed and the actual cleaning of the taxidermy bird with the selected laser parameters is presented.

- Effrosyni Karantoni is conservator of antiquities and works of art holding an MA in Museums Studies. She has been Visiting Lecturer of Dept. Conservation of Antiquities & Works of Art, TEI-A. She has participated in research programmes and has great experience in diagnosis and conservation of organic materials.
- **Ekaterini Malea**, lecturer at the Dept. Conservation of Antiquities & Works of Art, TEI-A, is a conservator specialized in the conservation of proteinaceous organic materials (MPhil). She has worked at various archaeological excavations and museums as well as in research programmes. She has over 30 papers in scientific journals and conferences.

- **Paraskevi Pouli** holds a degree in Physics from Aristotle University of Thessaloniki, Greece and a Ph.D. in Physics from Loughborough University, UK. Her research interests include the investigation of laser ablation mechanisms on various materials. She has over 40 publications in refereed scientific journals and conference proceedings.
- **Kristalia Melessanaki** is an arts conservator. She has been involved in several research projects and applications related to the use of laser techniques for cleaning and spectroscopic analysis of CH objects. Her main activity involves the evaluation and controlling with spectroscopic techniques of the laser cleaning applications on artworks.
- **Anastasios Legakis** holds BSc (University of Athens) and PhD (University of Southampton, UK) in Biology. He is member of the directory board of the Zoological Museum/University of Athens. He has more than 50 resent original papers in scientific journals and conferences and he has participated as main researcher in Greek and International projects.
- **Georgios Panagiaris** is Biologist, Doctor of Biological Sciences and Professor at the Department of Conservation of Antiquities and Works of Art, TEI-A. He is a Board member of the Interinstitutional Postgraduate Course "Museum Studies". He is the principal author in a great number of scientific papers. He has coordinated a lot of Greek and International research projects.

## INDOOR/OUTDOOR AIRBORNE PARTICULATE MATTER AND MICROBIAL MEASUREMENTS IN THE CRIMINOLOGY MUSEUM OF THE UNIVERSITY OF ATHENS, GREECE

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# Keywords: Airborne microbes, inhalable particulate matter, criminology museum, indoor/outdoor measurements

The Criminology Museum of the University of Athens is located in L an urban environment. The museum's exhibits consist of medicolegal collections containing mainly organic materials, such as leather, skin, bones, wood, paper, mummified tissues, and formalin-fixed tissues. Two year seasonal indoor/outdoor measurements were performed in the museum including measurements of inhalable particulate matter (PM<sub>10</sub>, PM<sub>25</sub>, PM, mass/number concentrations) and airborne microbes (opportunistic pathogenic bacteria, bacteria with degradation capabilities for leather, bone, cellulose, gelatine or textile, autotrophic chemolithotrophic bacteria, acid producing bacteria and fungi). High variability of airborne microbial and PM concentrations were measured in all four seasons. The indoor microbial and PM concentrations were higher than outdoors. In addition, a high number of airborne bacteria with degradation capabilities for bone, leather, cellulose, gelatine, and textile were measured. A microbial enrichment of opportunistic pathogenic bacteria and organic material degrading bacteria was observed in some of the measurements in the showcases during the two year measurements.

The financial support of the project INVENVORG contract No. MIS 376986 (Research Funding Program THALES) by the European Social Fund and the Greek National Strategic Reference Framework is greatly appreciated.

**Eleftheria Katsivela**, associate professor at the Department of Environmental and Natural Resources Engineering at the Technological Educational Institute of Crete (Chania, Greece), and director of the Laboratory of Environmental Chemistry and Biochemical Processes, has extensive experience in managing and carrying out research projects over the past 25 years. Her recent research interests are in the fields of environmental microbiology and biotechnology, quality control, treatment and management of environmental samples (air, water, soil, wastes).

- **Mihalis Lazaridis,** professor in the School of Environmental Engineering, Technical University of Crete, has participated in several International, European and National research projects in the area of air pollution and aerosol science as a coordinator and principal investigator the past 25 years. He has published a large number of ISC research papers.
- **Kopanakis Ilias,** PhD, is a research associate in the School of Environmental Engineering, Technical University of Crete. He has conducted research in the area of particulate matter dynamics and chemical speciation in several research projects. He is a co-author of 6 papers in ISC journals.
- **Louiza Raisi**, MSc, is a researcher at the Department of Environmental and Natural Resources Engineering at the Technological Educational Institute of Crete (Chania, Greece). Her research interests and experience are in the field of environmental microbiology with emphasis in the air quality control.
- **Zoi Sakki** is conservator-museologist and doctoral student at the University of Athens in the Faculty of Medicine, with research interests in human remains and in collections documentation.
- **Maria Stefanidou** is professor at the Faculty of Medicine of the National and Kapodistrian University of Athens, and Director of the Criminology Museum.
- **Effrosyni Karantoni** is conservator of antiquities and works of art holding an MA in Museums Studies. She has been Visiting Lecturer of Dept. Conservation of Antiquities & Works of Art, TEI-Athens, has participated in research programmes and has great experience in diagnosis and conservation of organic materials.
- **Georgios Panagiaris** is biologist, doctor of Biological Sciences and professor at the Department of Conservation of Antiquities and Works of Art, TEI-Athens. He is a board member of the Inter-institutional Postgraduate Course "Museum Studies". He is the principal author in a great number of scientific papers, and has coordinated a lot of Greek and International research projects.

## **TECHNOLOGY MUSEUM AT MEGALOPOLIS**

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Keywords: New museum design, technology museum

The Technology Museum of Megalopolis is designed to operate at  $\mathbf{L}$  the old warehouses next to the train station of Megalopolis (Piraeus Bank property), with the aim of collecting, preserving, protecting, documenting and promoting computer, telecommunications and energy technologies. Historical technologies will be displayed that were considered breakthroughs at their time. Moving around three thematic sections, energy, computers, telecommunications, the museum aims to become a major cultural, technological, and educational centre of the region of Megalopolis, with multidimensional actions covering all three sections. In particular, the museum envisions to inform and educate the general public about technological advancements and to become an important educational pole for all levels (primary, secondary, higher) and all forms (formal, non-formal, informal) education. For higher education, the museum will provide a learning place for students from various departments, such as technology departments, educational departments, history-archaeology departments, etc. In addition, the museum is directly related to academic departments of the University of Peloponnese (Informatics and Telecommunications, Department of History, Archaeology and Cultural Resources Management, Department of Social and Educational Policy) and the Technological Institute of Kalamata (Department of Information Technology and Telecommunications), which makes it an ideal place to conduct teaching and research on issues related to its topics.

- **Georgios Lepouras** is currently an associate professor at the University of Peloponnese, Department of Informatics and Telecommunications. He has taken part in various national and European projects and has numerous publications in international journals and conferences. His research interests include Human-Computer Interaction, Virtual and Augmented Reality, as well as Educational technologies and Technologies for Cultural Heritage.
- **Angeliki Antoniou** is currently an Academic Laboratory Teaching Staff at the University of Peloponnese, Department of Informatics and Telecommunications. Her research interests include Augmented Reality, Educational technologies and Technologies for Cultural Heritage, Personalization, Profiling and Team Formation in Crowdsourcing.

## THE BOMBARDMENT OF THE PIRAEUS HARBOUR BY THE "ALLIES" IN 1944, THROUGH THE EXHIBITS OF THE ATHENS CRIMINOLOGY MUSEUM

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# Keywords: Piraeus bombardment, 1944, World War II, historic heritage, human limbs, ammunition

The aim of Athens Criminology Museum is to extract information and knowledge from its collection items through documentation and to use all these data, not only in an informative way, but also for historical, educational and research purposes. Among the museum collections, there is the collection of human remains and the collection of war objects related to World War II and more specifically to the bombardment of Piraeus by the "Allies" on 11 January 1944 (301st Bombardment Group). The bombardment of Piraeus is an historical event of major interest, that is viewed through the exhibits of the Criminology Museum.

The human remains collection includes various human remains, such as burned and mummified human limbs coming from the bombardment of Piraeus harbour. During this bombardment, 5,500 Greek people and 8 German soldiers were killed and the city, as well as the harbour of Piraeus, were destroyed. The collection of war objects includes ammunition and other objects, such as shell fragments.

The Museum has a unique position in the Greek history that deserves to be "saved" for future generations of scholars. A future thorough investigation of the Department's archives will upgrade the already existing items' documentation concerning the bombardment of Piraeus.

Georgios Loutsidis is a historian, PhD Candidate at Panteion University

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- **Chara Spiliopoulou** is professor of Forensic Medicine and Toxicology, head of the Forensic Medicine and Toxicology Unit of the University of Athens, Greece.
- Maria Stefanidou is professor of Toxicology, Department of Forensic Medicine and Toxicology, School of Medicine, University of Athens, Greece. She is director of the Athens Criminology Museum and vice-president of the Hellenic Society of Toxicology

## THE MODERN GREEK ANATOMY AND THE FIRST ANATOMY PROFESSORS IN MEDICAL SCHOOLS

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Keywords: History, anatomy, medical education, professors, cadaver, dissection

This review adds new elements to the literature in relation to the birth f L and progress of anatomy in Modern Greece. It outlines the efforts of Greek anatomists to collect cadaveric material in order to create Modern Anatomy at the newly founded Medical Schools. Dimitrios Mavrokordatos was the first professor of anatomy, who supported that dissections, experiments and the observation of patients are the main tools, without which no one can become proficient in anatomy and medicine. After its untimely death (1840), the Macedonian Damianos Georgiou was appointed professor. The lack of cadavers for dissections forced Georgiou to the solution of manufacturing dry preparations. In 1841, the teaching of anatomy was theoretical. In 1883, Professor Loukas Papaioannou created the modern anatomical terminology and published in 1886 his handbook of embryology and microscopic anatomy. In 1894, professor Rigas Nikolaidis introduced the teaching of embryology and comparative anatomy. In 1899, Georgios Sclavounos became professor and director of the Laboratory of Anatomy for 40 whole years. Sklavounos introduced research and many terms in Greek medical literature. This is when Greek Anatomy began to be comparable with its Western counterpart. Sclavounos' book is an all-time classic. In the academic year 1943, the Department of Anatomy of the Aristotle University of Thessaloniki was founded. Nikolaos Michalakeas was the first professor and director of the laboratory, followed by Alexandros Savvas (1951), who was known for his magnificent book on the nervous system. Thus, a very important period for Greek Anatomy closes. Undoubtedly these personalities left their mark, organized the Departments of Anatomy and created the rudiments of the official Greek anatomical terminology.

- Konstantinos Natsis, MD, PhD, BSc, FFIMS. He is orthopedic surgeon, president of Sports Medicine Association of Greece, EC member EFSMA & FIMS. He is professor and director of the Laboratory of Anatomy, School of Medicine, Faculty of Health Sciences, Aristotle University of Thessaloniki. His research fields are gross anatomy, Topographical Anatomy, Functional Anatomy, Surgical Anatomy, Anatomical variations, Transmission Electron Microscopy.
- Maria Piagkou, DDS, MD, MSc, PhD. She is oral surgeon and assistant professor of Anatomy. Her scientific interests are gross anatomy, skull base anatomy, anatomical variations, and history of anatomy.
- Panayiotis Skandalakis, MD, PhD. Director-professor of Anatomy, he is specialized in surgical anatomy and techniques.

## THE SOUND OF SILENCE. THE UNSPOKEN HISTORY OF THE SCIENTIFIC INSTRUMENTS OF THE ATHENS UNIVERSITY HISTORY MUSEUM

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Keywords: Athens University Museum, 19th century, scientific instruments

A thens University History Museum is a small but rich museum situated beneath Acropolis in the old city center, housed in the building which initially hosted Athens University for four years (1837-1841). In the museum's galleries, visitors may find, among other exhibits, a unique collection of more than two hundreds scientific instruments. As part of Athens University heritage, these instruments, once used mainly for demonstrations during the university lectures, are today preserved, exhibited and stored in the Museum, constituting one of the few collections of this kind available to the wider public in Greece.

In the present study we aim to present these collections and to tell their stories; the stories of a past almost forgotten but still alive; the human stories which lie behind these instruments, their construction, their use and function, despite their apparent silence. These are the stories which ultimately shape the history of science in Greece and highlight the relationship and connection with relevant stories in other university museums in Europe. Stories and institutions which suggest that through university heritage one can attempt to creatively reconstruct the past and possibly use it as an optimistic starting point for the future.

- **Georgios N. Vlahakis** is assistant professor at the Hellenic Open University. He is historian of Science and his main research interest is history of Science in Greece, history of scientific instruments and popularization of science.
- **Fay Tsitou** is head of learning at the Athens University History Museum and moderator for reexhibiting its scientific collection. Her research interests include art and science activities and exhibits, museum communication and interpretation (PhD).
- **Flora Paparou** holds a Ph.D. in science education. Her research focuses on the utilization of the history of science in science teaching. She currently works in Secondary Education and collaborates with the Athens University History Museum on the identification of scientific instruments and the organization of science popularization activities.
- **Panagiotis Lazos** is historian of science and teacher of Physics in secondary education (PhD candidate). His research interests include history of scientific instruments and their use in physical sciences education. He collaborates with the Athens University History Museum on the identification of scientific instruments and the organization of science popularization activities.

## NON-CHAIRED POSTER SESSION FOR THE MUSEUMS OF THE NATIONAL AND KAPODISTRIAN UNIVERSITY OF ATHENS

## THE ATHENS UNIVERSITY HISTORY MUSEUM

#### E. Kitta, M. Pichou, Irini Savvani, F. Tsitou, E. Kentrou

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Keywords: University, museum, history, activities

The Athens University History Museum was founded in May 1987, in the context of the celebrations for the 150th anniversary of Athens University. The Museum is housed in a historic building, which dates back more than 400 years. In the nineteenth century the building was the home of the renowned Greek architect Stamatios Kleanthis and housed for four years (1837-1841) the first higher educational institution of the independent Greek state.

The Museum's collections consist of books (works by the University's professors, old and rare editions), manuscripts, documents, portraits of professors and benefactors, diplomas, scientific instruments, photographs, medals, seals and other University memorabilia. The Museum's permanent exhibition is presented thematically following the distinctions of the University's first schools (medicine, law, philosophy, theology, sciences).

The Museum offers interactive learning programmes, activities and guided tours which are organized daily and during the weekends for primary school, high school and university students. In accordance with its mission to create and strengthen the bonds between the university and society, the Museum organizes and hosts temporary exhibitions, performances, concerts, lectures, and other events that attract diverse visitor groups, such as academics, tourists, students, families, artists as well as independent visitors or groups.

- Elena Kitta is conservator of Works of Art with a MA in Museum Studies, Athens University History Museum. Her research interests focus on preventive conservation, collection management, collections in historic buildings, museum's building history and creation of an oral history archive of the building's previous tenants.
- Irini Savvani is art historian, curator, MA Art History, BA Art History, Université Paris I, Panthéon-Sorbonne, curator of the Greek Representation at the 26th Biennial of Sao Paolo (2004). Her research interests are: museum as a medium, museum communication, university museums and contemporary art.
- **Myrsini Pichou** is cultural manager (MSc Hellenic Open University & MA Courtauld Institute of Art). Her research interests are: university heritage interpretation, museum communication, university heritage and the city, interactive activities for adults.
- Fay Tsitou is head of learning-educator (PhD museum interpretation/communication & museum puppetry, RHUL). Best Practice Award ICOM-CECA, Rio 2013. Her research interests are: art and science learning activities and exhibits, museum theatre, moderating Athens University History Museum re-exhibition on Sciences.
- **Eleftheria Kentrou** is art conservator museologist and has been in collaboration with the Athens University History Museum since 2007.

## TEACHING MINERALOGY IN THE MUSEUM OF MINERALOGY AND PETROLOGY, NATIONAL AND KAPODISTRIAN UNIVERSITY OF ATHENS

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#### Keywords: University, museum, heritage, teaching

The collections of the Museum were created in 1835. The University acquired them since its foundation in 1837. They consist of over 10,000 specimens of rocks and minerals, as well as maps, books, posters and old scientific instruments. It is a primary source for public outreach and education. Currently the collections support each year the learning of hundreds of students and other people of every age. Visitors and students can admire and learn from more than two thousand mineral and rock species. Many educational samples are added to the collections every year. Recently two new windows have been established. In the first one, newly discovered minerals are displayed, while in the second, rock samples dredged from about 3000m depth of the Mid-Atlantic Ridge are shown.

Issues expounded during teaching are: the contribution of the Lavrion mines to the history of Athens, modern technology and minerals, the water shortage problem, man and its environment, volcanoes, radioactive minerals, industrial minerals and precious stones. The collections of minerals and rocks will continue to develop in the future, and of course to play an important role, whether assisting students or offering knowledge to the public, but also providing research material to any interested scientist.

- Athanasios Katerinopoulos is professor, director of the Museum of Mineralogy and Petrology, director of the Centre of Museum Studies. Published books: Minerals of the Lavrion mines (1994), The world of minerals (2007). Awarded by the Academy of Athens, the Society of Greek Litterateurs and the Union of Greek Minerals and Fossils Collectors.
- Andreas Magganas is professor, director of the section of Mineralogy and Petrology. Research Interests: Petrology of Igneous rocks; Ophiolites; Volcanism in Greece; Low to Very Low Metamorphism of Metabasic Rocks; Metasomatism; Chemistry and Structure of Rock Forming and New Minerals; Applied Mineralogy & Petrology; Archaeometry. Awarded by the Academy of Athens
- **Panagiotis Voudouris** is assistant professor and visiting professor at the Institute of Mineralogy-Petrology, University of Hamburg. Research Interests: magmatic-hydrothermal gold mineralization, ore mineralogy of precious, rare, and critical metals, mineralogy and genesis of gemstones, mineralogy and genesis of alpinotype fissure minerals in metamorphic core complexes, mineralogy in supergene oxidation zones.
- **Ifigeneia Megremi** is Dr. geologist, Laboratory Teaching Staff. Research Interests: Environmental geochemistry, biogeochemistry, mineralogy.

## THE BOTANICAL MUSEUM OF THE UNIVERSITY OF ATHENS

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*Keywords: Botanical Museum, botanical specimens, education, Greece, historical collections, University of Athens* 

The Athens University Botanical Museum was established as an independent body in 1868, being one of the three branches of its preceding Natural History Museum. Theodoros G. Orphanides, Professor of Botany at that time, served as its first director. Today, the Athens University Botanical Museum comprises a wealth of specimens. The exact number is not known since no full listing has ever been made: they may reach or exceed 100,000 samples. The botanical collections by Th. von Heldreich (subset of his herbarium), Th. Orphanides (full herbarium) and V. Tountas (subset of his herbarium) are considered as of primary importance, since they include several specimens that serve as 'Typi' for published species, most of which are endemic to Greece. Modern plant collections cover large parts of mainland and insular Greece and they are registered in a database that permits to store, retrieve and analyze data in efficient ways. The role of the Museum is to maintain and make available to the scientific community all the important historical collections it holds, to serve as a reference specimen collection for the Greek flora and to familiarize visitors of different age levels on the ways that plant diversity is observed and documented.

- **Theophanis Constantinidis** is Assistant Professor of Systematic Botany. His main interests are the Greek flora and phytogeography, diversity and conservation of plants and biosystematics.
- **Ioannis Bazos** PhD, is teaching assistant. His main interests are Greek flora, vegetation and phytogeography, habitat and plant conservation.
- **Dimitris Kazanis**, PhD, is teaching assistant. His main interests are vegetation science, plant ecology and conservation
- **Margarita Arianoutsou** is Professor of Ecology, director of the BM. Her main interest are plant ecology and conservation

## THE BOTANICAL GARDEN OF THE UNIVERSITY OF ATHENS

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Keywords: Botanical Garden, cultivated plants, education, Greece, plant diversity, University of Athens

The Botanical Garden (BG) of the University of Athens was established in 1835 and it was initially used as an arboretum. Its reorganization started after 1851 by Th. von Heldreich and Th. G. Orphanides and it was enriched with 2500 plants and two greenhouses. The Garden was recognized as a scientific branch of the University of Athens in 1867. The number of cultivated plants reached its higher level in 1971. Nowadays most of its original area is under the supervision of the Agricultural University of Athens and only 7 acres remain as the historic Botanical Garden of the University of Athens. About 200 species are currently growing in the BG. Most of them are trees and shrubs, while there are few herbaceous species and a small pond with aquatic plants. The Botanical Garden publishes an Index Seminum and distributes it to almost 200 Botanical Gardens worldwide. The role of the Garden is to serve as a place where plant diversity in both form and use is displayed, to promote the cultivation of particular plants with an historical, pharmaceutical, economic or regional importance (e.g. endemic plants), to promote student education and offer calmness and tranquility to its visitors.

- **Ioannis Bazos** PhD, is teaching assistant. His main interests are Greek flora, vegetation and phytogeography, habitat and plant conservation.
- **Theophanis Constantinidis** is Assistant Professor of Systematic Botany. His main interests are the Greek flora and phytogeography, diversity and conservation of plants and biosystematics.
- **Margarita Arianoutsou** is Professor of Ecology, director of the Botanical Garden. Her main interests are plant ecology and conservation

## THE ZOOLOGICAL MUSEUM OF THE UNIVERSITY OF ATHENS

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#### Keywords: Zoology, museum

The Zoological Museum of the University of Athens belongs to the Department of Biology. It is housed in the University campus, encompassing a surface area of c. 2200 square meters. Its story began 150 years ago, as part of the Physiographic Museum of the University of Athens, in the form of a small collection of stuffed animals. Today it is the oldest and richest zoological museum in Greece.

The Museum's collections include mammals, birds, reptiles, amphibians, fish, marine invertebrates, snails, insects and other invertebrates from Greece and other countries as well as anthropological findings. The Museum's activities include the preservation of the natural heritage of Greece through the conservation of collections and through the creation of databases and archives, the research on the fauna of Greece, the education of students, the raising of public awareness, particularly of young people, and the provision of advice to individuals, organizations, public services etc.

Anastasios Legakis is Associate Professor of Animal Diversity and director of the Zoological Museum of the University of Athens. Teaches Zoology, Evolutionary Biology and Entomology. His scientific interests include systematics, zoogeography and ecology of the insects of Greece, Biogeography, biodiversity of Greece, conservation biology, museology and management of zoological collections.

## THE CRIMINOLOGY MUSEUM AT UNIVERSITY OF ATHENS

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Keywords: University of Athens, Criminology Museum, Crime, Forensic Sciences

The Criminology Museum at University of Athens Medical School is a L unique museum of its kind in Greece, which illustrates history of crime by presenting some of the most notorious crimes that took place during the nineteenth and early twentieth century. The museum was founded in 1933 although the gathering of various criminalistic evidence had begun years ago. Among the 1,500 exhibited objects related to the history and practice of forensic sciences in Greece, the museum houses a collection of firearms, and knives of historic value, a collection of narcotic substances and paraphernalia, and a number of witchcraft objects and counterfeit banknotes. There is also a collection of wax models presenting different types of injuries and a number of self-made nooses used in suicidal hanging. Additionally, the museum has a collection of dry (mummified or skeletal) and formalin-preserved anatomical specimens obtained from medico-legal and pathological autopsy or surgery. Also included are several embalmed heads of famous Greek outlaws of the early 20th century. Finally, the museum possesses the only guillotine ever used in Greece for carrying out judicial executions. Besides being part of the museum the collections provide a valuable source of teaching material for medical, law and police academy students.

- Konstantinos Moraitis is assistant professor in Forensic Anthropology, and head of the Forensic Anthropology Unit at the Department of Forensic Medicine and Toxicology, School of Medicine, University of Athens. His research interests include forensic anthropology, skeletal biology, taphonomy, and trauma analysis.
- **Sotiris Athanaselis** is professor of Toxicology, head of the Toxicology Unit of the Department of Forensic Medicine and Toxicology, School of Medicine, University of Athens.
- **Chara Spiliopoulou** is professor of Forensic Medicine and Toxicology, head of the Forensic Medicine and Toxicology Unit of the University of Athens.
- **Maria Stefanidou** is professor of Toxicology, Department of Forensic Medicine and Toxicology, School of Medicine, University of Athens. She is director of the Athens Criminology Museum and vice-president of the Hellenic Society of Toxicology.

## THE MUSEUM OF GEORGE PAPANICOLAOU, PART OF THE DEPARTMENT OF ANATOMY OF THE MEDICAL SCHOOL OF NATIONAL AND KAPODISTRIAN UNIVERSITY OF ATHENS

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#### Keywords: History, George Papanicolaou, Pap test, medical education

 $\mathbf{F}^{ ext{ebruary 2014}}$  marked the 52th anniversary of the death of George Papanicolaou, the inventor of Pap test for cervical cancer screening. The Medical School of National and Kapodistrian University of Athens, namely the Anatomy lab, hosted a special collection related to his life at Cornell University (Anatomy Lab) in America. Fifty square meters were given by the Emeritus Professor of Anatomy Dr. Nikolaos Papadopoulos, adjacent to the anatomy amphitheater. The amphitheater is one of the few surviving classical anatomical amphitheaters worldwide, dedicated to the famous anatomist George Sklavounos. The professor and director of the Department of anatomy, Dr. Panagiotis Skandalakis, extended the museum and made it part of the Anatomical Museum of the Department of Anatomy. Spyros Marketos, professor of the History of Medicine, and the associate professor of Anatomy, Dimitrios Lappas, sponsored the museum and classified its collections in sections. In the museum area, rare photographs from Dr Pap's life, his awards, the plan of the last Greek banknote and his portraits are exhibited. The central focus of the exhibition includes photographs, letters and other documents about the scientific work of Papanicolaou. Discussions and presentations related to research on female cancers and to modern methods of prevention and diagnosis are displayed as well.

- Dimitrios Lappas MD, PhD, Associate Professor of Anatomy, scientific coordinator of the Museum "George Papanicolaou". Scientific interests for medical history, radiological anatomy, anatomy of variability
- Maria Piagkou DDS, MD, MSc, PhD, Assistant Professor of Anatomy, scientific coordinator of the Anatomical museum for research and educational purposes. Scientific interests for skull anatomy, skull base variability, head and neck dissection and history of anatomy.
- Georgios Skandalakis Undergraduate student, Scientific interests for central nervous system anatomy
- Panayiotis Skandalakis MD, PhD, Director-Professor of Anatomy specialized in surgical anatomy and techniques.

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## **MUSEUM OF PHARMACOLOGY: AIMS AND PERSPECTIVES**

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#### Keywords: Museum, pharmacology

The Museum of Pharmacology, founded in 2003, is housed at the Department of Pharmacology at the Medical School of the University of Athens.

The Museum of Pharmacology is aiming to support the academic and pre- and postgraduate training of the Medical School of Athens, to upgrade scientific research and to enhance the diffusion of academically developing knowledge in both university and society. In order to fulfill its aims, the Museum, among others, organizes educational and scientific exhibitions of research apparatus and minor equipments, biochemicals, books and of any other relative to the pharmacological research materials, promotes activities aiming at the maintenance and repairing of its material, allows guided visiting of its exhibits, organizes lectures, exhibitions, and other educational and scientific activities in order to enhance the diffusion of knowledge arising from the Museum's exhibits and to enlighten the Science of Medical Pharmacology.

The Museum of Pharmacology is a challenging effort to encourage postgraduate research and learning on relative topics, provide knowledge and innovative ideas on how laboratory technology develops or becomes useless, inform younger students on pharmacological research topics and experimental philosophy, provide through the net a wide variety of information concerning its belongings (by simultaneously functioning as a virtual museum).

- **Charis Liapi**, Associate Professor in the Department of Pharmacology at the Medical School of the University of Athens, is Endocrinologist and Pharmacologist. She is member of several national committees for drug approval and expert of the EMA Expert Database. Her research interests are mainly in Nutritional Pharmacology and Neuropharmacology.
- Jannis Papadopulos is orthopedist. He completed his medical studies in Germany. Associate Professor of Pharmacology, retired in 2005 after having served for twenty three years the University. He is the founder of the Museum of Pharmacology and the author of many books. Main interests: pharmacology and social pharmacology.
- Haris Carageorgiou, microbiologist, graduated from the Medical School of the University of Athens and completed Postgraduate training in the UK in Clinical Pharmacology. Associate Professor of Pharmacology. Main scientific interests of research: study of drug action on cholinergic system enzymes in isolated organ preparations or animals and Environmental Pharmacology. Author of many articles and three books on the aforementioned fields.
- **Nikolaos Sitaras** graduated from the Medical School of the University of Athens. After a continuous and consistent academic career he is currently Professor of Clinical Pharmacology and Head of the Department of Pharmacology of the Medical School of Athens.

## THE MUSEUM OF DENTAL SCHOOL OF ATHENS

#### M. Sakelliou, G. Vougiouklakis, D. Koutroumpas

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#### Keywords: Museum, Dentistry, Digital Dental Museum

The Museum of Dental School opened its doors to the public in 2013. L The only one of its kind in Eastern Mediterranean, it deals with the collection and study of dental evidence in Greece. The main exhibition hall includes dental instruments dated from the nineteenth century. There are dental drills, tooth forceps, instruments for operative dentistry, instruments and appliances for dental prosthesis, a rare dental unit with an even rarer dental light, etc. Moreover, the historical archive of the Dental School is incorporated in the Museum. The Museum also considers of crucial importance the building of a dialectic relationship between present and past. So, exhibition islets were created in the Dental School complex. In this way, the exhibits can be viewed daily, not only by the visitors of the Museum but also by students and patients. Modern Internet and Multimedia Technology was engaged to develop a Digital Museum (www.museum.dent.uoa.gr). The purpose was not only to show the exhibits, but also to feature the history of Dental Education and Practice in Greece. Organized tours are available for pupils, students and adult groups, after consultation. Educational programs are also designed for students. The museum supports primary research projects and the undergraduate studies program.

- Margarita Sakelliou (M.Sc. in Health Informatics) is technical collections staff member, responsible for day to day management of the collections, registration of exhibits, as well as managing the museum database and digital assets. Her main research interest is Museum informatics, especially in the fields of digital museum and digital curation.
- **Georgios Vougiouklakis** is the director of the Museum. Besides his research interest as a professor in the field of Operative Dentistry, he also focuses on the historical development of Operative Dentistry, History of Dentistry in Modern Greece and History of Western Dental Education in the 19th and 20th centuries.
- **Dimitrios Koutroumpas** (Ph.D. in History of Medicine) is Post-Doctoral Researcher in History of Dentistry, with a focus on Ancient Greco-Roman Dentistry, also interested in historical research in university historical archives of the 19th and 20th century (documentation, analysis, digitalization and presentation), as for example the archives of Athens Dental and Medical School.

## **MUSEUM OF ARCHAEOLOGY AND HISTORY OF ART**

#### M. Constantoudaki-Kitromilides<sup>1</sup>, A.S. Sfyroera<sup>2</sup>

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Keywords: Museum of Archaeology and History of Art, University of Athens, University Museum, Educational and research activities

The Museum of Archaeology and History of Art was established nearly 80 years ago. Today its eleven Educational Collections comprise more than 8.500 objects, either originals or copies, which are housed in the building of the School of Philosophy. In 2004 an open-air Archaeological Park was inaugurated, including finds that came to light following excavations at Syntagma Square, during the construction of the Athens Metropolitan Railway. In 2010, a fully-equipped Conservation Laboratory was established within the Museum.

The Educational Collections of the Museum display remarkable sets of objects which reflect not only the research interests of professors of Archaeology at the University of Athens, but also the history and significance of the oldest academic institution in our country. The presence of similar collections facilitates the theoretical and practical training of students, as these allow close observation of the objects themselves besides offering the opportunity to address issues such as conservation, documentation and interpretation, management and exhibition of archaeological objects and contemporary works of art. Courses, interactive workshops and tutorials repeatedly take place in the Museum. Furthermore, the Museum always seeks to expand its circle of visitors. For this purpose it organises various educational programmes designed for school pupils as well as lectures for a wider public, and regularly participates in international cultural heritage celebrations and anniversaries (e.g. European Heritage Days and the International Museum Day).

- Maria Constantoudaki-Kitromilides is professor, Byzantine Archaeology, and director of the Museum of Archaeology and History of Art, University of Athens. M.A. Courtauld Institute of Art, University of London. Ph.D. University of Athens. In 2012, she was visiting professor at Villa I Tatti, The Harvard University Center for Italian Renaissance Studies (Florence). Publications on Byzantine and Post-Byzantine painting and relations to West-European art; Domenikos Theotokopoulos (El Greco).
- Alexandra Sfyroera, PhD in Classical Archaeology, is Laboratory Teaching Staff at Museum of Archaeology and History of Art, Department of History and Archaeology. Participated in excavations in Naxos, Crete and Kea. Contributed to the establishment of the archaeological collections currently exhibited at Gyroulas and Melanes (Naxos). Research interests: Classical Archaeology, ancient Greek history, Greek epigraphy, historical archaeology.

## THE EDUCATIONAL PROGRAMS OF THE MUSEUM OF EDUCATION

#### M.Z. Fountopoulou, M. Karra, D. Kleida

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#### Keywords: Educational programs, museum device, education history

The Museum of Education was founded in 1993 at the Faculty of Philosophy, University of Athens. The core mission of the museum is to preserve, document, and care for a large number of exhibits portraying the history of Greek education in the nineteenth and twentieth century.

The museum hosts a permanent exhibition entitled: "Images of Modern Greek Education". Since 2014 the museum has been running indoor educational programs for schools, families and older people: a. Within the programs designed for primary schools, students get to know various aspects of the Greek education of the past through active engagement with the museum exhibits and by participating in several activities such as puppet theatre, storytelling, dramatization etc.; b. The program for Junior and Senior High Schools provides the students with the opportunity of attending a theatrical play: a modern student meets a student from the early 20th century with the purpose to show the differences between past and modern pedagogical models; c. Within a program designed to encourage the exchange among different generations of teachers, "the tree of life" narrative approach is used to record stories from primary, secondary and higher education teachers.

Thanks to a mobile interactive exhibit which combines exhibits from the Museum's handling collection, the educational programs may be also conducted in outdoor locations. The students are intrigued by the automaton mechanisms and brought to discover information, images and oral testimonies about the history of education and pedagogy in Greece from antiquity until modern days.

- Maria-Zoi Fountopoulou studied Greek Literature at the University of Athens and obtained her post-graduate degree in the University of Louvain-La-Neuve. In 1992, she completed her Doctoral Thesis at the Department of Philosophy, Pedagogy and Psychology of the University of Athens, where she holds the post of permanent associate professor in Pedagogy since 2007. Currently, besides teaching, she is the director of the Museum of Education.
- Marilena Karra is an undergraduate student at Athens School of Fine Arts, Dept. Theory and History of Art. She has worked as a guide at the Byzantine Museum in Rethymnon (Crete) and as a journalist in the newspaper "I Patision Zei" and "Hitandrun.gr". Currently, she is running the educational programs at the Museum of Education.
- Danae Kleida has studied Communication, Media and Culture in Panteion University and is also a professor of classical ballet and contemporary dance. She has worked as head archivist in museum exhibitions and is the head of communication at the Museum of Education. Recently, she has been admitted in the 2015-2017 master's programme: Media & Performance in Utrecht University.

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## **MUSEUM OF BIBLICAL AND CHRISTIAN ARCHAEOLOGY**

#### Ch. Karagiannis

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Keywords: Bible, History, Archaeology, Temples, Priests, Tabernacle, Stele, Pottery, Seals

The Biblical Archaeological Museum of the Theology Faculty at the University of Athens was started in 1969 and established in 1982. The Museum holds a number of exhibits such as copies of the tabernacle of the congregation, the Temple of Solomon and Herod, the attires of High priest and Priest, the Code of Hammurabi stele, the stele of Mesa, the Black Obelisk of Salmanassar and a geophysical map of Palestine. It also holds a number of copies of the archaeological findings from the excavations that the Department of Theology activated in 1990-2000 in Israel, such as pottery, coins, tools, small statues, sacred vessels, stamps from the 8th century B.C., and manuscripts.

**Christos Karagiannis** is Assistant Professor of the Old Testament at the Faculty of Theology – Divinity School, National and Kapodistrian University of Athens.

KEYNOTE SPEAKER

## CLASSIFICATION OF KNOWLEDGE: THE ESTABLISHMENT OF COLLECTIONS AND UNIVERSITY MUSEUMS OF THE NATIONAL AND KAPODISTRIAN UNIVERSITY OF ATHENS

## M. D. Dermitzakis

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#### Keywords: University of Athens, collections, university museums

Museums and collections play an important role in inspiring learning and new ways of thinking. The National and Kapodistrian University of Athens owns a vast number of collections and museums of different disciplines, which seek to enhance the educational and scholarly mission of the University through the exhibition, study, preservation and growth of their collections. The paper will briefly present the history of the establishment of the museums and collections of the University of Athens, as well as their function, their mission and their communication with the public. Furthermore, it will attempt to outline the problems and the threats that challenge their survival and future evolution.

**Michael Dermitzakis** is Emeritus Professor in the National and Kapodistrian University of Athens. He was vice-rector of Economic Development, chairman of the Faculty of Human Resources and Dean of the School of Sciences at the University of Athens (UOA). He also served as Director of the University Museum of Geology and Paleontology. He was the president of the Committee of University Museums of UOA, founder of the Natural History Museum (University of Athens) at Vrissa, Lesvos island (1999) and chairman of the Committee of the postgraduate study programme of the University of Athens on Museum Studies from 2003-2008. His main research interests are geology, paleontology, university museums and collections.

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