Επιστημονικό Σωματείο,
Έτος Ίδρυσης 1982, έδρα:
Κάνιγγος 27, 106 82 Αθήνα
(Ένωση Ελλήνων Χημικών)
http://archaeometry.org.gr/index.php/en/

Scientific Association, Year of Establishment 1982, Headquarters: Kaniggos 27, 106 82 Athens (Association of Greek Chemists)
http://archaeometry.org.gr/index.php/en/

Πληροφοριακό Δελτίο της Ελληνικής Αρχαιομετρικής Εταιρείας

- Νοέμβριος 2016 -

"Η αγάπη είναι η αιτία ενότητας όλων των πραγμάτων"
(*Αριστοτέλης*)

Newsletter of the Hellenic Society of Archaeometry

- November 2016 -

Nr. 188

ΠΙΝΑΚΑΣ ΠΕΡΙΕΧΟΜΕΝΩΝ – TABLE OF CONTENTS

ΣΥΝΕΔΡΙΑ - CONFERENCES/WORKSHOPS

UPCOMING EVENTS RELATED TO UNDERWATER 3D MODELING

Dear colleagues,

apologies in advance for any cross-posting of this announcement.

While we wait for the new ISPRS working group to be established we do not have a website to share upcoming events.
In the meantime I briefly report hereafter some information, hoping you find them of interest:

Name	Date	Location	link
Hydro 2016	8-10 November, 2016	Rostock-Warnemünde	http://hydro2016.com/
3D-Modelling and Interpretation for Underwater Archaeology Workshop	24-26 November, 2016	Adelaide, South Australia	www.flinders.edu.au/ehl
Computer Vision for Analysis of Underwater Imagery 2016	4-8 December, 2016	Cancun, Mexico	http://cvaui2016.oceanne
3D ARCH 2017 - (updated topic: 3D applications in terrestrial and underwater environments)	1-3 March 2017	Nafplio, Greece	http://www.3d-arch.org/
The Honor Frost Foundation conference of 'Mediterranean Maritime Archaeology: Under the Mediterranean	20-24 October 2017	Nicosia, Cyprus	http://honorfrostfoundati mediterranean/

Please circulate this email to all your colleagues that you believe might be interested in.

Best regards,

Fabio

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Dr. Fabio Menna
3DOM - 3D Optical Metrology Unit
FBK - Bruno Kessler Foundation
via Sommarive 18
38123 Povo-Trento, Italy
Phone: +39 0461 314446
Web: http://3dom.fbk.eu/people/profile/fmenna
Web: http://www.researchgate.net/profile/Fabio_Menna
Web: http://www.fbk.eu
Web: http://3dom.fbk.eu/

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TECHNART2017, BILBAO, MAY 2-6, 2017

The Technart2017-Bilbao welcomes all contributions on the application of non-destructive and micro-analytical techniques in the field of Cultural Heritage. May 2-6, 2017

Venue: Bizkaia Aretoa conference center (UPV/EHU), BilbaoLocal Organizer Committee: IBeA research group (Analytical Chemistry Department, University of the Basque Country, Spain) President of the organizer committee: Juan Manuel Madariaga (Analytical Chemistry Department , University of the Basque Country, Spain)

We look forward to your participation in this interesting conference. Besides, in Bilbao you will have the opportunity of tasting the famous Basque gastronomy and the wines from the country, visiting the Guggenheim Museum, which is located in front of the Bizkaia Aretoa, and enjoying the green landscapes and seaside of the Basque Country.

International Scientific Committee
D. Anglos (University of Crete, Greece)
B. Brunetti (Perugia University, Italy) M. L. de Carvalho (New University of Lisbon, Portugal) M. Castillejo (CSIC, Spain) R. Van Grieken (University of Antwerp, Belgium)
O. Hahn (BAM, Berlin) K. Janssens (University of Antwerp, Belgium)
A. Germanos Karydas (Institute of Nuclear and Particle Physics, Athens)
R. Van Langh (Rijks Museum, Holand) J. M. Madariaga, (University of Basque Country, Spain)
I. Nakai (Tokyo University of Science, Japan)
A. Nevin (Politecnico di Milano, Italy) P. Romano (IBAM-CNR, Italy)

Please visit the site: http://www.ehu.eus/technart2017

NORTH EUROPEAN SYMPOSIUM FOR ARCHAEOLOGICAL TEXTILES LIBEREC 2017, 22–26 MAY 2017, TECHNICAL UNIVERSITY, LIBEREC, CZECH REPUBLIC

The NESAT XIII symposium will be organized by the Institute of Archaeology of the Czech Academy of Sciences, Prague, v. v. i., and the Faculty of Textile Engineering, Technical University of Liberec in cooperation with Prague Castle Administration. The event will be held on 22–26 May 2017, at the Technical University in Liberec, building G, Studentská Street 2, Liberec, Czech Republic.

The NESAT XIII symposium will be held on 22 – 26 May 2017 in the area of Technical University of Liberec.

The conference is co-organized by:

Following the example of the previous conferences, NESAT XIII will consider prehistoric and historic textile finds, focused on contextual analysis of finds and new methods. Papers on other current research topics related to archaeological textiles are also welcome. The organizers encourage papers that present lesser known or recently excavated textiles, techniques and iconography that will generate discussion and exchange of information among the conference attendees.

Conference Programme

Monday 22 May
14:00 - 20:00
Registration (Technical University in Liberec, building G, Studentská Street 2) Tuesday 23 May from 7:30 Registration (Technical University in Liberec, building G, Studentská Street 2) 9:00 - 9:30

Opening Ceremony
9:30 - 11:00

1. Section: PREHISTORY; PROTOHISTORY

S. Harris – A. Jones: Beautiful things: textiles from an Early Bronze Age cremation, Whitehorse Hill, England

J. Słomska – Ł. Antosik: Cemetery in Świbie. Source of Information on Textile Production in the Iron Age

B. Dimova: Textile research in Bulgaria

M. Przymorska-Sztuczka: New finds of textiles from the Wielbark culture cemetary in Wilkowo, Lębork distict

Discussion
11:00 - 11:20
Coffee Break
11:20 - 12:50

2. Section: PROTOHISTORY

N. Kramer: Boats, Bogs and Burials. Archaeological Textiles from the Roman period in the Netherlands

T. Štolcová – D. Schaarschmidt – I. Vanden Berghe – S. Mitschke: Insights into multi-coloured tapestry textiles from Poprad-Matejovce, Slovakia. Excavation, conservation and analysis.

A. Rast-Eicher: Textiles from two graves of Late Antiquity found in a mausoleum in Jaunay-Clan (F)

Z. Kaczmarek: Creolizing Textiles. Some New Light on Textile Production and Consumption in Roman Age Free Germania

Discussion
12:50 - 14:30
Lunch (Presentation of looms)
14:30 - 16:00

3. Section: OVERVIEWS

J. Maik: 70 years of research on archaeological textiles in Poland

J. Pásztókai-Szeőke – V. Kiss – G. Kulcsár – M. Mordovin – Z. Mráv – P. Polgár – I. Radman-Livaja – V. Szeverényi – I. Szathmári – I. Vida: Mixtura texturalis – recent research of archaeological textiles and textile production in Hungary

E. Orlińska-Mianowska – D. Berbelska – M. Cybulska: Surface exploration, the importance of museum collections in the study of archaeological textiles

A. Collins: A Comparative Analytical Study of Extant Garments from Early Modern Ireland

Discussion
16:00 - 16:20
Coffee Break
16:20 - 17:30

4. Section: ANALYZES

H. Lukešová: Identifying Archaeological Plant Fibre Textiles by means of the Herzog test. Possibilities and limits o polarized light microscopy

R. Chen – M. Gleba – L. Bartos – D. Sanders – A. Hidred: Sails of the Mary Rose: preliminary results of textile and fibre analyses

D. Waudby: Title Retrospective Review of Plant Fibre Diagnostics and Prospects for Future Ethnographic and Archaeological Research Projects

Discussion
17:30 - 18:00
ATR - General Meeting
19:30 - 21:00
Welcome Drink and Festive Lecture by Milena Bravermanová Wednesday 24 May 9:00 - 10:30

5. Section: EARLY MIDDLE AGES

Ch. Brandenburgh: Early medieval textiles from the Netherlands – new research and results

T. Niepold: Trossingen Grave 58 – News from the singer

S. Möller-Wiering: Early Medieval Finds from Rheinland-Pfalz. With Notes on a Technological "Anachronism"

K. Grömer: Simple linen, patterned fabrics and silk samitum. Textiles from the Slavic Cemetery Thunau in Lower Austria

Discussion
10:30 - 10:50
Coffee Break and Photographing
10:50 - 12:20

6. Section: EARLY MIDDLE AGES

U. Mannering – I. Skals: Textile News from Bornholm in Denmark. Recently excavated textiles from a well-known Late Iron Age cemetery

F. Pritchard: Twill weaves from Viking-age Dublin

E. Wincott Heckett: Textiles from the Viking Warrior Grave, Woodstown, Co. Waterford, Ireland

S. Jansone: Textile imprints in Grobina - fabrics and their possible uses

Discussion
12:20 - 14:00
Lunch (Presentation of looms)
14:00 - 15:30

7. Section: MIDDLE AGES

A. Rybarczyk: Knitting from excavations in Elbing

É. Retournard: Textiles for miners and mining: the archaeological textiles from Brandes-en-Oisans (12th-14th centuries, Isère, France)

R. Rammo: Life on a medieval cog through archaeological textiles

R. Case – M. McNealy – B. Nutz: The Lengberg Finds: Remnants of the Lost 15th Century Tailoring Revolution

Discussion
15:30 - 15:50
Coffee Break
15:50 - 17:00

8. Section: DYEING

D. Kohout – H. Březinová – M. Bravermanová – I. Víden: Textile quality, colours and identificated organic dyes. Silk and wollen textiles from the waste layers of medieval Prague

K. Vajanto – M. Pasanen: Dyes and Dyeing Methods used in Finland 1000 Years Ago

A. Bruselius Scharff: The assessment of natural pigmentation in archaeological wool

Discussion
17:00 - 18:00
Poster Section
19:30 - 23:00
Festive Evening (Severočeské muzeum v Liberci/The North Bohemian Museum in Liberec, Masarykova Street 11) Thursday 25 May 9:00 - 10:30

9. Section: MODERN AGE

D. Henri: Textile production and consumption in Tours (France) in the 15th and 16th centuries: an archaeological approach

J. Malcolm-Davies: “Silk” hats from a sheep’s back: How sixteenth century craftspeople created legal luxuries

N. Pavlova: Children's burial clothing from the 16th and 17th centuries excavated in the Ascension Convent of the Moscow Kremlin

G. de Alkmim Radicchi: The archaeological textiles from the whaler-sealer sites in South Shetland Islands (Antarctica)

Discussion
10:30 - 10:50
Coffee Break
10:50 - 12:20

10. Section: EXPERIMENTAL ARCHAEOLOGY

J. Banck-Burges: Experimental Archaeology as a Key for the Recognition of the Culture-historical Value of Archaeological Textiles

H. Igel: Reconstruction provides benchmarks for theoretically evaluating the level of knowledge

K. Kania: To Spin a Good Yarn- Spinning Techniques with Hand Spindles

I. Demant: Making a dress of an Iron Age woman - the results of experimental archaeology used in praxis

Discussion
12:20 - 14:00
Lunch
14:00 - 15:30

11. Section: EXPERIMENTAL ARCHAEOLOGY; TEXTILE TOOLS

M. Siennicka: Studying archaeological textile tools. Some methodological aspects and challenges

E. Andersson Strand: Motion Caputer and Textile Craft technology

J. Korteová: An interpretation of the 'bombastic' Cham Culture spindle whorls by an archaeological experiment

M. de Diego – R. Piqué – A. Palomo – M. Saña Seguí – M. Mozota – I. Clemente – X. Terradas: Fiber production and incipient textile technology in the Early Neolithic site of La Draga (Banyoles, Girona; 5300-4900 BC)

Discussion
15:30 - 15:50
Coffee Break
15:50 - 17:10

12. Section: GARMENT

M. Brunori – I. Degano: The cloth of Henry VII, Holy Roman Emperor (+1313). Diagnostc and conservation campaign

B. Nutz: Peasants and Servants – Deliberately Concealed Garments, Textiles and Textile Tools from a Rural Farm Building

N. Ben-Yehuda: Medieval European Biblical Commentators and their views on the Priestly Vestments of the Hebrew Bible

M. Cybulska: Analysis and visualization of the female costume from the Roman period on the basis of textile finds from Nowy Łowicz 17:10-17:30 Final Discussion 17:30 - 18:00 Closing Ceremony

Please visit the site: http://www.arup.cas.cz/?p=27806&lang=en

ALCOHOL IN THE ANCIENT WORLD, FEBRUARY 24-25, 2017, PENN MUSEUM, PHILADELPHIA, PENNSYLVANIA, USA CALL FOR PAPERS

Center for Ancient Studies Graduate Conference: "Alcohol in the Ancient World"
Deadline for Submissions: December 1, 2016 Conference Date: February 24-25, 2017
Conference Location: Penn Museum, Philadelphia, Pennsylvania, USA
Host: Center for Ancient Studies, University of Pennsylvania

Organizer: Darren Ashby (NELC, University of Pennsylvania) Keynote Speaker: Dr. Patrick McGovern (Penn Museum)

Penn's Center for Ancient Studies invites proposals of papers from graduate students in any discipline who are engaged in the study of alcohol in the pre-modern world.

Beer, wine, and other fermented beverages have played an important role in the social, political, economic, and religious lives of humans for thousands of years. The embedded nature of alcohol in human societies makes it a productive locus for research on a wide range of topics. Possible subjects include the role of alcohol in:

- Production technologies and techniques
- Consumption practices and contexts
- Visual and literary culture
- Law
- Medicine
- The construction and negotiation of identity and gender
- Trade and political economy
- Ritual

Research on the prohibition of alcohol in pre-modern societies is also encouraged. Who is prohibited and why? When and where do these prohibitions apply? What do they entail? How are they enforced and how are they circumvented?

Applications should include a title and an abstract of no more than 250 words that summarizes the work, identifies the methodology, and states the primary conclusions. CAS encourages interdisciplinary research that utilizes multiple sources of evidence, including material culture, texts, iconography, experimental and ethnographic studies, and archaeometry.

Send all materials to mailto:cas.upenn@gmail.com with the subject heading CAS Abstract: APPLICANT NAME. Please include your affiliation in the body of the email. Deadline for abstracts is December 1, 2016. Applicants will be notified of the status of their paper by the middle of December.

The Center for Ancient Studies strives to bring together scholars from different disciplines engaged in the study of pre-modern cultures. Our Center aims to model an

expansive and global vision of the study of the ancient world, spanning Greco-Roman cultures and the Near East but also pre-modern Asia, Africa, and the Americas. For more information see http://www.sas.upenn.edu/ancient/

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Darren P. Ashby
PhD Candidate, Dept. of Near Eastern Languages and Civilizations Graduate Assistant, Center for Ancient Studies Junior Fellow, The Louis J. Kolb Society of Fellows University of Pennsylvania mailto:dashb@sas.upenn.edu

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PROHITECH2017, 3RD INTERNATIONAL CONFERENCE ON PROTECTION OF HISTORICAL CONSTRUCTIONS, LISBON (LISBOA), PORTUGAL, JULY 12 TO 15, 2017, CALL FOR ABSTRACTS

Dear Colleagues,

Instituto Superior Técnico (IST-UL) and the University of Naples (UNINA) are pleased to invite you to participate in PROHITECH´17, the 3rd International Conference on Protection of Historical Constructions, due to take place in Lisbon (Lisboa), Portugal, from July 12 to 15, 2017, www.prohitech2017.com.

The themes of the conference are related to the protection of historical constructions and the topics range from structural and earthquake engineering, intervention strategies, materials and technologies, architecture and urban planning, represented by a showcase of diversified case studies covering different construction materials. A novel set of topics will also be addressed, such as sustainability, energy efficiency, re-use and adaptation to climate changes.

The **call for abstracts** is open. These can be submitted through the conference webpage www.prohitech2017.com tabs Abstracts and Papers/Abstract Submission.

The clock is ticking so please bear in mind the following deadlines:

- Abstract submission **31 October 2016**
- Paper submission 15 January 2017
- Early bird registration fee of authors 31 March 2017

Feel free to contact us, either for scientific purposes prohitech2017-scientific@fundec.pt or administrative prohitech2017@abreu.pt.

Looking forward to welcoming you in Lisbon!

Prof. Luis Calado (IST-UL)
Prof. Federico M. Mazzolani (UNINA)

JOINT INTIMATE AND INTCAL SESSION FOR EGU 2017

Dear colleagues,

Please consider submitting an abstract to the Joint INTIMATE and IntCal session for EGU 2017.

CL1.19/AS4.17/OS1.19 Advances in integrating ice core, marine and terrestrial records and their timescales

A joint INTIMATE and IntCal session

Convener: Christine Lane
Co-conveners: Edouard Bard, Achim Brauer, Irka Hajdas, Tim Heaton, Wim Hoek, Alan Hogg, Raimund Muschler, Christof Pearce, David Richards, Paula Reimer and Dider Roche

Extending instrumental records using well-dated, quantified palaeoenvironmental and palaeoclimate data from ice-core, marine and terrestrial records, is critical to understanding and modelling the timing, mechanisms and impacts of past and future climate change. Recent improvements in radiocarbon calibration and methods for correlation of independently dated archives have revealed both spatial and temporal climate variability on decadal to millennial timescales. Such findings provide key insights into complex drivers, feedbacks and responses operating within the global climate system. With a focus on records from the last 60,000 years, this session co-organised by the INTIMATE network and IntCal, invites contributions that address: the integration of data from diverse palaeo-archives using robust chronological techniques; developments and applications in radiocarbon calibration; novel palaeoclimate modelling approaches and results; research into the nature and variability of past climate change and impacts on the environment. For further information on INTIMATE and IntCal research, see: http://intimate.nbi.ku.dk/ and http://intcal.qub.ac.uk/

Abstract deadline: 11th January 2017 (13:00 CET)*

Submit your abstract here:
http://meetingorganizer.copernicus.org/EGU2017/session/22734

*For EGU support, abstracts and applications must be submitted by 1st December 2016
http://egu2017.eu/financial_support.html

Thanks

Paula Reimer

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Prof. Paula J. Reimer, MRIA
Director, Centre for Climate, the Environment & Chronology (14CHRONO)

School of Natural and Built Environment
Queen's University Belfast
Belfast BT7 1NN
UK
Phone: +44 (0)28 9097 3980

http://chrono.qub.ac.uk/
Facebook: https://www.facebook.com/14ChronoCentre

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EMAC2017, BORDEAUX, FRANCE

Dear EMAC community members,

The online abstract submission for EMAC2017 will open on the 31st of October, at http://emac2017.sciencesconf.org. The deadline is set for the 31st of January, 2017.

The submitted abstracts will be reviewed by the international scientific committee. The reviewing process will be completely anonymous.

Each abstract should not exceed 300 words and should be related to one of the meeting topics. The topics of this 14th edition are:

- Environmental and raw material studies (clay, temper, fuel...);
- Gestures and techniques (chaîne opératoire, production processes, object biography...);
- Ceramic function and use (organic residues, use-wear analysis...);
- Provenance and networks;
- Technical ceramics (metallurgy, glass making...);
- Slips and glazes;
- New methodologies and data analysis (3D, portable and non invasive techniques, statistics...);
- Chronology.

For any inquiry please contact emac2017@sciencesconf.org.

Looking forward to meeting you all in Bordeaux,

The local committee (emac2017@sciencesconf.org)

ΘΕΣΕΙΣ ΕΡΓΑΣΙΑΣ/ΥΠΟΤΡΟΦΙΕΣ – JOB VACANCIES/FELLOWSHIPS

2017-2018 FELLOWSHIPS AT THE METROPOLITAN MUSEUM OF ART

Dear Colleagues,

Please find below information regarding applications for the 2017-2018 Fellowships at The Metropolitan Museum of Art. Please forward this to any students and colleagues whom you believe would be interested. If you have questions, please feel free to reach out to me directly or to Academic.Programs@metmuseum.org - I am happy to answer any questions that you may have!

All best wishes,
Christina Marinelli

2017-2018 Fellowships at The Metropolitan Museum of Art

The Metropolitan Museum of Art welcomes applications from scholars of art history, archaeology, conservation and related sciences, education, as well as from scholars in other disciplines whose projects are interdisciplinary in nature and relate to objects in The Met's collection. The tremendous diversity of fellows' projects reflects the historic and geographic diversity of the Museum's collection. The community of fellows becomes immersed in the intellectual life of the Museum and takes part in a robust program of colloquia, roundtable seminars, research-sharing workshops, behind-the-scenes tours of exhibitions, conversations with Museum staff, and visits to the curatorial and conservation departments. Fellows form long-lasting professional relationships as they discuss research questions, look closely at objects, and share the experience of living in New York City.

Applications are now open for 2017–2018 Fellowships. Please visit http://www.metmuseum.org/about-the-met/fellowships for more information. Questions may be sent to Academic.Programs@metmuseum.org.

Deadlines for all application materials (including letters of recommendation):
Art History Fellowships – November 4, 2016
Museum Education and Public Practice Fellowship – November 4, 2016
Curatorial Research Fellowships – November 4, 2016
Leonard A. Lauder Fellowships in Modern Art – November 4, 2016
Conservation and Scientific Research Fellowships – December 2, 2016

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Christina Marinelli
Programs Associate, Academic Programs
Department of Education
The Metropolitan Museum of Art

(christina.marinelli@metmuseum.org)
(cmarinelli@brynmawr.edu)
(christina.marinelli@gmail.com)

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CAARI FELLOWSHIPS FOR ACADEMIC YEAR 2016-2017

The Cyprus American Archaeological Research Institute (CAARI) in Nicosia, Cyprus offers an active fellowship program for both pre- and post-doctoral research. Fellowship opportunities include CAARI-sponsored fellowships as well as several fellowships sponsored by others, such as Fulbright research fellowships and CAORC multi-country fellowships. The CAARI Director and staff provide guidance to fellows on matters related to their research and on facilities available at CAARI and in Cyprus, and facilitate contacts with relevant local authorities and scholars. In addition to their research, fellows are required to give a lecture on their work, participate in roundtable discussions, and/or serve as featured speakers at CAARI symposia.

The fellowships fall into two categories:
1) internal (CAARI-sponsored) and
2) external (e.g., Fulbright, CAORC) awards.

Note that deadlines for all CAARI-sponsored fellowships is December 15, 2015; external fellowship deadlines vary.

GRADUATE STUDENT FELLOWSHIPS SPONSORED BY CAARI CAARI sponsors three fellowships for graduate students whose research requires work on Cyprus itself. Residence at CAARI is required for all graduate student fellowships.

To apply:
APPLICATION FORM: one form for all fellowships, http://www.caari.org/Files/CAARI%20Grad%20Fellow%20App%20(2016-2017)%20form.pdf.

APPLICATION DEADLINE for all three: December 15, 2015

SUBMIT APPLICATIONS VIA EMAIL: mailto:caari@bu.edu

THE DANIELLE PARKS MEMORIAL FELLOWSHIP: Danielle Parks, author of The Roman Coinage of Cyprus (Nicosia, 2004), directed excavations at the Amathus Gate Cemetery. She first came to Cyprus as an Anita Cecil O'Donovan Fellow. Her death as a young scholar in 2006, deeply felt by the wide circle of her colleagues and friends, is memorialized here by a fellowship designed to open the world of Cypriot culture to young scholars.

This is a fellowship of US $1,000 for a graduate student of any nationality who needs to work in Cyprus to further his/her research on a subject of relevance to Cypriot archaeology and culture. The purpose of the fellowship is to help cover travel to and living expenses in Cyprus. Applications are invited especially from students of Hellenistic and Roman Cyprus. During his/her stay, the fellow is expected to give a presentation at CAARI on a subject related to his/her research. The fellow will periodically keep the Director of CAARI apprised of his/her research activities. The fellow will acknowledge CAARI and the Danielle Parks Memorial Fellowship in any

publication that emerges from the research carried during the fellowship. Residence at CAARI is required.

THE HELENA WYLDE SWINY AND STUART SWINY FELLOWSHIP: One grant of US $1,000 to a graduate student of any nationality in a college or university in the U.S. or Canada to pursue a research project that is relevant to an ongoing field project in Cyprus or that requires work on Cyprus itself. The award is to be used to fund research time spent in residence at CAARI and to help defray costs of travel. Residence at CAARI is required.

THE ANITA CECIL O'DONOVAN FELLOWSHIP:
Founded in memory of musician, composer, and homemaker Anita Cecil O'Donovan, this fellowship offers one grant of US $1000 to a graduate student of any nationality, enrolled in a graduate program in any nation, to pursue research on a project relevant to the archaeology and/or culture of Cyprus; to be used to fund a period of research time in residence at CAARI and to help defray costs of travel. Residence at CAARI is required.

GRADUATE STUDENT EXTERNAL FELLOWSHIPS AVAILABLE FOR RESEARCH AT CAARI

PRE-DOCTORAL FULBRIGHT
Interested graduate students who wish to conduct research in Cyprus should also consider applying to the Fulbright Student Program.

For more information:
http://us.fulbrightonline.org/countries/selectedcountry/cyprus

The following Pre-Doctoral Fellowships are also available directly through the Council of American Overseas Research Centers:

COUNCIL OF AMERICAN OVERSEAS RESEARCH CENTERS (CAORC) MULTI-COUNTRY RESEARCH FELLOWSHIPS: The program is open to U.S. doctoral candidates in fields in the humanities, social sciences, or allied natural sciences and wish to conduct research of regional or trans-regional significance. Fellowships require scholars to conduct research in more than one country, at least one of which hosts a participating American overseas research center, including CAARI. http://caorc.org/fellowships/multi/

Deadline: January 30, 2016, check website for details.

COUNCIL OF AMERICAN OVERSEAS RESEARCH CENTERS (CAORC) MEDITERRANEAN REGIONAL RESEARCH FELLOWSHIPS:

A new focused regional fellowship program enabling U.S. doctoral candidates in fields in the humanities, social sciences, or allied natural sciences and wish to conduct research of regional or trans-regional significance in countries bordering the Mediterranean and served by American overseas research centers, including CAARI. Funding for this program is generously provided by The Andrew W. Mellon Foundation. http://caorc.org/fellowships/mellonmed/

Deadline: January 30, 2016, check website for details

Council of American Overseas Research Centers (CAORC) PO Box 37012, MRC 178 Washington, DC 20013-7012 mailto:fellowships@caorc.org
202-633-1599

POST-DOCTORAL RESEARCH FELLOWSHIPS
CARRI/CAORC Research Fellowships
(Amount available is anticipated but depends on federal appropriations which have not yet been finalized)

Two fellowships funded by the U.S. Department of State Bureau of Educational and Cultural Affairs through a grant from the Council of American Overseas Research Centers. The fellowships provide US $5500 each and are designed for scholars in the humanities, social sciences, and related natural sciences who already have their PhDs, whose research engages the archaeology, history, culture, or geography of Cyprus, and who would derive significant benefit from a month's research time on the island. Recipients will receive up to US $1500 to be used for transportation and an additional US $4000 for research expenses on the island. Particular consideration will be given to applicants whose projects will enable them to include Cyprus in their teaching. A minimum of 30 days residence at CAARI is required. Recipients will present a public lecture or workshop on their research at CAARI during their residency, file a report on their project at its conclusion, and acknowledge CAARI in publications resulting from research done there. Applicants must be U.S. citizens.

To apply:
APPLICATION FORM: http://www.caari.org/Files/CAARI-CAORC%20App%20(2016-2017)%20form.pdf

APPLICATION DEADLINE: December 15, 2015

SUBMIT APPLICATIONS VIA EMAIL: mailto:caari@bu.edu

SENIOR SCHOLAR IN RESIDENCE AT CAARI:
An established scholar who commits to stay at least 30 days in succession at CAARI, ideally during the summer months, and to be available in evenings and weekends to younger scholars working there, in return for 50% reduction in residency rate. Must have PhD in archaeology or ancillary field for at least 5 years prior to visit, be fluent in English (but may be of any nationality), and be committed to mentoring students. Travel and other expenses are not covered.

To apply:
APPLICATION REQUIREMENTS: Letter detailing the applicant's research interests, proposed schedule, and summary curriculum vitae

APPLICATION DEADLINE: December 15, 2015

SUBMIT APPLICATIONS VIA EMAIL: mailto:caari@bu.edu

POST-DOCTORAL RESEARCH FELLOWSHIPS AVAILABLE FOR RESEARCH AT CAARI FULBRIGHT RESEARCH FELLOWSHIPS: Post-Doctoral scholars who wish to conduct research in Cyprus should also consider applying to the Fulbright Scholars Program. For information: http://www.cies.org/country/cyprus

The following Post-Doctoral Fellowships are available directly through the Council of American Overseas Research Centers:
COUNCIL OF AMERICAN OVERSEAS RESEARCH CENTERS (CAORC) MULTI-COUNTRY RESEARCH FELLOWSHIPS: The program is open to scholars who have already earned their Ph.D. in fields in the humanities, social sciences, or allied natural sciences and wish to conduct research of regional or trans-regional significance. Fellowships require scholars to conduct research in more than one country, at least one of which hosts a participating American overseas research center, including CAARI. http://caorc.org/fellowships/multi/

Deadline: January 30, 2016, check website for details.

POST DOC ON ARCHAEOBOTANICAL REMAINS IN CYPRUS, THE RESEARCH PROMOTION FOUNDATION OF CYPRUS

Dear all,

I am writing to you regarding post doctoral research in Cyprus. The Research Promotion Foundation of Cyprus has announced a post doc competition for a post of a duration for 3 years.

The post doctoral researcher should be linked to a Faculty member of a research Institution who would act as a PI.

I am interested in researchers who would focus on archaeobotanical remains in Cyprus and in relation to neighbouring regions. I have access to material from several Bronze Age sites in Cyprus and I would be willing to provide such materials for the post doc.
In addition, candidates specialized in phytolith analysis, plant isotopes and starch analysis are also welcome to apply. The possibility of access to relevant material in Cyprus could be facilitated.

Please contact me in case you know suitable candidates interested in such research by the end of next week and I will be available to give further information. The deadline for applications is the 9th of December.

Best wishes

Evi

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Evi Margaritis
Asst Professor
Science and Technology in Archaeology Research Center (STARC)
The Cyprus Institute
Guy Ourisson Bldg - Athalassa Campus
P.O.Box 27456, 1645 Nicosia, Cyprus
Office Tel. +357-22208616
www.cyi.ac.cy

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ΑΝΑΚΟΙΝΩΣΕΙΣ - ANNOUNCEMENTS

ΕΚΠΑΙΔΕΥΤΙΚΟ ΣΕΜΙΝΑΡΙΟ, ΤΕΙ ΑΘΗΝΑΣ, ΝΕΑ ΗΜΕΡΟΜΗΝΙΑ 24.1 - 9.2.2017, *«ΘΕΜΑΤΑ ΔΙΑΓΝΩΣΗΣ, ΣΥΝΤΗΡΗΣΗΣ ΚΑΙ ΔΙΑΧΕΙΡΙΣΗΣ ΙΣΤΟΡΙΚΩΝ ΑΡΧΕΙΑΚΩΝ ΣΥΛΛΟΓΩΝ»*

Ανακοίνωση

ΕΚΔΗΛΩΣΗ ΕΝΔΙΑΦΕΡΟΝΤΟΣ-ΕΓΡΑΦΗ

Μετά την επιτυχή ολοκλήρωση της πρώτης διοργάνωσης του Σεμιναρίου και κατόπιν αιτημάτων επαγγελματιών του χώρου, το Ερευνητικό Εργαστήριο Προηγμένων Διεπιστημονικών Εφαρμογών στη Συντήρηση - Ανάδειξη Εικαστικών Έργων & Βιβλιακού-Αρχειακού Υλικού-«ARTICON», σε συνεργασία με το Ινστιτούτο Δια Βίου Μάθησης (ΙΔΒΕ) του ΤΕΙ Αθήνας, διοργανώνει εκ νέου το εκπαιδευτικό σεμινάριο με τίτλο ***«Θέματα Διάγνωσης, Συντήρησης και Διαχείρισης Ιστορικών Αρχειακών Συλλογών».***

Σκοπός του σεμιναρίου είναι η ευαισθητοποίηση των επιστημόνων που εργάζονται σε ιστορικές αρχειακές συλλογές σε θέματα διάγνωσης, συντήρησης, διαχείρισης και ανάδειξης των συλλογών. Ιδιαίτερη έμφαση δίδεται στην προσέγγιση ζητημάτων με τη βοήθεια της σύγχρονης τεχνολογίας και την ενίσχυση της εφαρμογής διαδικασιών καλών πρακτικών με στόχο την αντιμετώπιση προβλημάτων σχετικών με τις ιδιαιτερότητες των αντικειμένων των ιστορικών αρχείων.

Το σεμινάριο απευθύνεται σε συντηρητές, βιβλιοθηκονόμους, αρχειονόμους, φωτογράφους, ιστορικούς, ιστορικούς τέχνης και άλλους επιστήμονες συναφών πεδίων οι οποίοι επιθυμούν να εμπλουτίσουν τις γνώσεις και να βελτιώσουν τις δεξιότητες τους σχετικά με τις τελευταίες εξελίξεις, απόψεις και πρακτικές στο χώρο της Διάγνωσης, Συντήρησης και Διαχείρισης ιστορικών αρχειακών συλλογών.

Το σεμινάριο στοχεύει στην διεπιστημονική εκπροσώπηση γνωστικών πεδίων με θεωρητικές εισηγήσεις και εκπαίδευση με πειραματικές ασκήσεις. Μέσω δε αυτών, στη δημιουργία μιας πρόσφορης βάσης για την ενίσχυση της επικοινωνίας μεταξύ των διαφορετικών ειδικοτήτων που καλούνται να συνεργαστούν στον χώρο αυτό.

Η διάρκεια του σεμιναρίου είναι 10 ημέρες και καλύπτει 40 διδακτικές ώρες, με **έναρξη 24-01-2017** και **λήξη 09-02-2017**. Τα μαθήματα διεξάγονται εργάσιμες ημέρες **16.00-20.00μμ**., στους χώρους της ΣΤΕΦ και της Σχολής Καλλιτεχνικών Σπουδών του ΤΕΙ Αθήνας και απαιτείται η φυσική παρουσία των εκπαιδευομένων.

Οι **θεματικές ενότητες** που καλύπτονται περιλαμβάνουν :
- **ζητήματα διάγνωσης, τεκμηρίωσης και συντήρησης χαρτώου υλικού**
- **ψηφιοποίηση, τεκμηρίωση και συντήρηση φωτογραφικών αρχείων**

- **θέματα διαχείρισης συλλογών ιστορικών αρχείων**
- **ειδικές τεχνικές φωτογράφησης στο ορατό (μακρο / μικρο-φωτογραφία)**
- **φωτογράφηση επίπεδων επιφανειών**
- **διαγνωστικές τεχνικές με φθορισμό**

Στο σεμινάριο διδάσκουν μέλη του ARTICON - διακεκριμένοι καθηγητές των Τμημάτων Συντήρησης Αρχαιοτήτων και Έργων Τέχνης, Φωτογραφίας & Οπτικοακουστικών και Ενεργειακής Τεχνολογίας του ΤΕΙ Αθήνας καθώς επίσης συνεργαζόμενοι ερευνητές.

Στο τέλος του σεμιναρίου, μετά από επιτυχή αξιολόγηση των εκπαιδευομένων και υπό την προϋπόθεση της ολοκλήρωσης της παρακολούθησης των προγραμματισμένων ωρών χορηγείται πιστοποιητικό δια βίου εκπαίδευσης, το οποίο δίδει την δυνατότητα χρήσης των πιστωτικών μονάδων και σε άλλα προγράμματα ειδίκευσης. **Ο αριθμός των πιστωτικών μονάδων (ECTS) είναι 5**.

Το κόστος του σεμιναρίου είναι **300 ευρώ** και περιλαμβάνει:
1. Εκπαιδευτικό υλικό σε ηλεκτρονική μορφή.
2. Παροχή εργαστηριακού εξοπλισμού και εργαστηριακών αναλωσίμων
3. Επίσκεψη συλλογών και κέρασμα.

Δυνατότητα παρακολούθησης έχουν επαγγελματίες που εργάζονται σε ιστορικά αρχεία, μεταπτυχιακοί φοιτητές και απόφοιτοι τμημάτων ΑΕΙ συναφών ειδικοτήτων. Οι ενδιαφερόμενοι υποψήφιοι θα πρέπει να υποβάλλουν σχετική ηλεκτρονική αίτηση εγγραφής συνοδευόμενη από τίτλο/τίτλους σπουδών και βιογραφικό σημείωμα με αναφορά στην επαγγελματική και ερευνητική εμπειρία. Στην αίτηση εγγραφής ο υποψήφιος καλείται να αναφέρει συνοπτικά τους λόγους για τους οποίους επιθυμεί την παρακολούθηση του σεμιναρίου.

Η επιλογή των υποψηφίων θα πραγματοποιηθεί λαμβάνοντας υπόψη τους τίτλους σπουδών και την συνάφεια του επαγγελματικού και ερευνητικού έργου, όπως προκύπτει με βάση το βιογραφικό τους σημείωμα. Τα ονόματα των υποψηφίων που θα παρακολουθήσουν το σεμινάριο θα ανακοινωθούν στις αρχές **Δεκεμβρίου 2016.**

Προκειμένου να οριστικοποιηθεί η εγγραφή και οι υποψήφιοι που θα επιλεγούν να έχουν δικαίωμα παρακολούθησης του σεμιναρίου θα πρέπει η καταβολή των διδάκτρων να έχει ολοκληρωθεί μέχρι τις **23 Δεκεμβρίου 2016.**

ΚΑΤΑΛΗΚΤΙΚΗ ΗΜΕΡΟΜΗΝΙΑ ΕΓΓΡΑΦΗΣ : 27 ΝΟΕΜΒΡΙΟΥ 2016 23:59μμ

Για περισσότερες πληροφορίες μπορείτε να επισκεφθείτε τις διευθύνσεις http://articon.lab.teiath.gr & http://articon.lab.teiath.gr/seminarB
να απευθυνθείτε στο τηλέφωνο 210 5385463 ή να στείλετε μήνυμα στο articon@teiath.gr

THE SOCIETY FOR THE PROTECTION OF ANCIENT BUILDINGS AUTUMN TECHNICAL SEMINARS

The SPAB's technical seminars bring together experts in their field to discuss current thinking on key aspects of building conservation, maintenance and repair. The seminars are an excellent way to stay up to date and improve your technical knowledge. They are accredited for Continuing Professional Development (CPD) by the Institute of Historic Building Conservation (IHBC).
We have two seminars currently open for booking in November:
1. Retrofitting Domestic Properties Afternoon Seminar, Cardiff, 9 November 2016, £60 pp
The UK's existing housing stock is amongst the least energy efficient in Europe and accounts for almost a quarter of our annual carbon emissions. As a result, there is an increasing need to retrofit domestic properties to improve their energy efficiency and reduce heat loss. This half-day seminar will provide an essential understanding of the issues associated with retrofitting solid wall, pre-1919 properties.
2. Care and Repair of Old Floors One-Day Seminar, Manchester, 15 November 2016, £150 pp
The major event of the SPAB's History at Your Feet campaign (#lookdown), this one-day seminar will consider the care and repair of old floors and show how careful maintenance and sympathetic repair techniques can help to keep these valuable building elements in place. We will offer practical advice and a 'myth-busting' session, which will look at alternative approaches to the common reasons given for lifting an old floors - including damp, access issues and inserting underfloor heating.

Bookings can be made online by clicking on the seminar title, or contact me using the details below.

Best wishes,

Lucy

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Lucy Jacob
Training Officer (Mondays, Tuesdays, and Fridays)
The Society for the Protection of Ancient Buildings
Tel: 020 7456 0915
Email: lucyj@spab.org.uk
To see courses and events currently open for booking, visit our website. Sign up to our monthly e-newsletter for news and events from the SPAB. Follow us on twitter: @SPAB1877 Visit us on Facebook: SPAB1877

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THE MICHAEL VENTRIS AWARD FOR MYCENAEAN STUDIES (2017)

The Michael Ventris Memorial Fund was founded in 1957 in appreciation of his contribution to the fields of Mycenaean civilization and architecture. The Trustees of the Fund offer an annual award of up to £2,500 to a junior scholar for research into Mycenaean studies or kindred subjects: (1) Linear B and other Bronze Age scripts of the Aegean and Cyprus, and their historical and cultural connections and (2) all other aspects of the Bronze Age of the Aegean and Cyprus. It is intended that the Award should support a specific project, which may be part of a continuing programme of post-doctoral research. The Award is open to applicants from all countries who have completed their doctorate within the past eight years. Applications are also accepted from postgraduate students who are about to complete their doctorate, although the Award is **not** intended to fund doctoral research per se.

Applicants should give particulars of their qualifications and academic record, and should outline the work they intend to pursue in the event of the Award being made to them, including projected costs. Applications should not exceed 6 single-sided pages (A4). They should be submitted by email, ideally as a PDF attachment.

Applicants must also supply the names and addresses of two referees, and, at the same time, ask the referees to write independently in support of their application.

Applications must reach the Classics Manager, Valerie James, Institute of Classical Studies, Senate House, Malet Street, London WC1E 7HU not later than **1 February 2017**.

Please visit the site: http://www.icls.sas.ac.uk/awards/awards-prizes

ONE TRAVEL AWARD SPONSORED BY GEOSCIENCES

As Editor-in-Chief of the open access journal *Geosciences*, I am pleased to announce the opening of the competition for **One** travel award sponsored by *Geosciences*.

One *Travel Award* of **800 Swiss Francs** will be granted to postdoctoral students or PhD students to attend conferences in 2017.

We are accepting applications for this award until **31 January 2017**. Please find additional details here.

We look forward to receiving your applications.

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Prof. Dr. Jesus Martinez-Frias
Editor-in-Chief, *Geosciences*
Geosciences Institute, IGEO (CSIC-UCM)
Facultad de Ciencias Geológicas
C/ José Antonio Novais,
2 Ciudad Universitaria
28040 Madrid, Spain
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For more information on *Geosciences* please visit our website: www.mdpi.com/journal/geosciences

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ONLINE BOOKINGS FOR THE HISTORICAL METALLURGY SOCIETY RESEARCH IN PROGRESS MEETING, TUESDAY 29TH NOVEMBER, 2016, DEPARTMENT OF METALLURGY AND MATERIALS, UNIVERSITY OF BIRMINGHAM

Dear colleagues,

Just a quick reminder that Online Bookings are open for the Historical Metallurgy Society Research in Progress Meeting**.** The event will be held on the Tuesday the 29th November, 2016 at the Department of Metallurgy and Materials, University of Birmingham. The registration fee is £15. There is a limit to the room size, so please book in advance (or get in touch) if you are planning on attending to ensure your seat. The **deadline** for booking, for catering reasons is the **22nd of November**.

The programme and booking form is also available on our website http://hist-met.org/meetings/2016-research-in-progress-meeting.html.

This year as well as an excellent range of topics and speakers, we will also have a keynote speaker Prof Murakami from Japan. He will share some of the research going on in archaeometallurgy in Japan.

Best Wishes
Eleanor Blakelock
HMS Events officer

INTERNET SITES

THE SWEDISH POMPEII PROJECT HAS DIGITALLY RECREATED A WEALTHY BANKERS VILLA AND AN ENTIRE CITY BLOCK USING 3D SCANS FROM THE DEVASTATED CITY, BY JASON DALEY

When Mount Vesuvius erupted in 79 A.D., covering the cities of Pompeii and Herculaneum in layers of ash, it created one of histories great time capsules. The eruption preserved entire stretches of the Roman port of Pompeii, including things like political graffiti and bawdy jokes on the walls. It also captured the heart-wrenching final moments of some 13,000 people citizens who died from the volcano's heat, poison gas and ash clouds.

While some of Pompeii has been unearthed, much of the city remains buried. A massive earthquake in 1980 led the city curator to bring in international help to map the city before the site was damaged or destroyed. That's one reason the Swedish Pompeii Project began working in the city in 2000 trying record and analyze an entire city block in the archeological site. Now the project has used the latest 3D scanning technology to recreate that block, called Insula V.1, and also created a detailed 3D model of one of the Roman villas on the street.

"By combining new technology with more traditional methods, we can describe Pompeii in greater detail and more accurately than was previously possible," Nicoló Dell´Unto, digital archaeologist at Lund University, which is leading the project, says in a press release.

Among the buildings the project has uncovered and digitized on Insula V.1 are a bakery, a laundry, a tavern, three large private houses and some gardens, including one that had a running fountain at the time of the eruption. In layers of the dig site they found rare objects like three intact windows made from crystalline gypsum.

The house model they made is of the villa of Lucius Caecilius Iucundus, a wealthy banker in Pompeii. Excavations show that the entrance to his large abode was paved with a black and white mosaic including the image of sleeping dog. The home also had many frescoes throughout, depicting mythological scenes. The house includes a chest where he stored his money and an altar memorializing an earthquake that occurred in the region 17 years before.

George Dvorsky at Gizmodo reports the house tour shows how the Romans were masters of color and were able to integrate plants, trees and other natural elements into their homes.

It sure looks like fine living-except perhaps for the volcano looming in the distance.

Please visit the site: http://www.smithsonianmag.com/smart-news/check-out-3d-tour-villa-ancient-pompeii-180960698/?no-ist [Go there from embedded links]

PHOENICIAN SHIPWRECK FOUND OFF GOZO, MALTA

At http://www.tvm.com.mt/en/news/sea-bottom-off-gozo-yields-2700-year-old-merchandise-laden-vessel/: is a story "Sea bottom off Gozo yields 2700-year-old merchandise-laden vessel" off the coast of Malta.

It is accessible, but not easy to forward. Go there for inspection.

ΝΕΕΣ ΕΚΔΟΣΕΙΣ – NEW PUBLICATIONS

NETWORKS OF TRADE IN RAW MATERIALS AND TECHNOLOGICAL INNOVATIONS IN PREHISTORY AND PROTOHISTORY: AN ARCHAEOMETRY APPROACH

Proceedings of the XVII UISPP World Congress (1–7 September 2014, Burgos, Spain) Volume 12/Session B34 edited by Davide Delfino, Paolo Piccardo, and João Carlos Baptista. viii+104 pages; illustrated throughout in black & white. **Available both in print and Open Access**. 264 2016. ISBN 9781784914233.

The papers collected in this book correspond to the lectures held during session B34 of UISPP conference in Burgos (June 2014) where the presentation of multidisciplinary works were encouraged. The main goal of bringing together specialists from various disciplines (humanities and natural sciences) was to debate, from different perspectives, the networks in raw materials and technological innovation in Prehistory and Protohistory, involving investigation topics typical of archaeometry: archeometallurgy, petrography, and mineralogy.

This book is also available to download in PDF format in our Open Access section.

Unit Price £25.00

MOBILIZING THE PAST FOR A DIGITAL FUTURE: THE POTENTIAL OF DIGITAL ARCHAEOLOGY

Dear all

My colleagues and I are excited to announce the publication of our new co-edited volume *Mobilizing the Past for a Digital Future: The Potential of Digital Archaeology*. Grand Forks, ND: Digital Press at the University of North Dakota. Edited by Erin W. Averett, Jody M. Gordon, Derek B. Counts.

MTP collects 20 articles that explore the impact of mobile digital technology in archaeological field practice. Detailed case studies range from drones in the Andes to iPads at Pompeii, digital workflows in the American Southwest to examples of how bespoke, DIY, and commercial software provide solutions and craft novel challenges for field archaeologists. Significantly, the contributors embrace the growing spirit of critique present in digital archaeology; this critical edge, backed by real projects, systems, and experiences, gives the book lasting value as both a glimpse into present practices as well as the anxieties and enthusiasm associated with the most recent generation of mobile digital tools.

Mobilizing the Past **is available as a free, open-access download** with online supplemental material or in paper form from Amazon.com.

Download full text here:
https://thedigitalpress.org/mobilizing-the-past-for-a-digital-future/

Paper copies, for those who still like books, can be bought (cheap!) at Amazon: https://www.amazon.com/Mobilizing-Past-Digital-Future-Archaeology/dp/0692790136/.
Please feel free to spread the word to colleagues and students interested in the latest developments in digital archaeology.

DBC

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Derek B. Counts
Professor and Chair
Department of Art History
University of Wisconsin-Milwaukee

Associate Director
Athienou Archaeological Project
Athienou, Cyprus

PO Box 413
Milwaukee, WI 53201
(414) 229-3466

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ΕΙΔΗΣΕΙΣ - NEWS RELEASE

DNA SEQUENCING TRACES ANCIENT PHOENICIAN TO RARE EUROPEAN ANCESTRAL GROUP

Mitochondrial genome sequencing of a 2,500-year-old Phoenician has linked the man's ancestry to a haplogroup associated with European hunter-gatherer populations.

Researchers — co-led by Lisa Matisoo-Smith at the University of Otago in New Zealand — reported the results of the first Phoenician mitochondrial genome today in PLOS One, providing evidence that the European mitochondrial haplogroup arrived in North Africa as early as the late sixth century BC.

The remains of the ancient Phoenician were found in 1994 buried on Byrsa Hill in Carthage, Tunisia, at what was previously a Phoenician acropolis. Gardeners who were planting a tree came across a tomb with a sarcophagus holding the skeleton.

Previous analyses of Phoenician genetic ancestry focused on variation in the Y chromosome since Phoenicians were known as traders and the traders were most commonly men. There are currently six Phoenician Y-STR markers recognized, but the new Otago-led study is the first time that the entire mitochondrial genome of a Phoenician has been sequenced.

Researchers at the University of Otago's ancient DNA facility sequenced a DNA sample extracted from one of the skeleton's ribs, generating 4,851 filtered reads that aligned to the human mitochondrial reference, for 33.1-fold coverage. They used the online tool Haplogrep to analyze the variable sites, and found that the mitochondrial genome was from the haplogroup U5b2c1, considered to be one of the most ancient haplogroups in Europe, and associated with hunter-gatherer populations. The U5b haplogroup is thought to have arisen in Europe between 20,000 and 24,000 years ago.

"While a wave of farming peoples from the Near East replaced these hunter-gatherers, some of their lineages may have persisted longer in the far south of the Iberian peninsula and on off-shore islands and were then transported to the melting pot of Carthage in North Africa via Phoenician and Punic trade networks," Mastisoo-Smith said in a statement. The haplogroup is rare in modern populations and all of the reported carriers of the subgroup are of European ancestry from Spain, Portugal, England, Ireland, Scotland, the US, and Germany.

Because Phoenicians are thought to originate in Lebanon, the researchers also compared the ancient mitochondrial genome to mitochondrial genomes from 47 modern Lebanese people. Only two were of the U5b2 lineage and none were of the U5b2c1 subgroup. Interestingly, the researchers found that the ancient Phoenician was most closely related to a modern-day sample from Portugal.

The researchers noted that previous analyses have found modern individuals from North and Northwest Africa who were from the U5b haplogroup, although because there are very few full mitochondrial genomes available, it is unknown whether any are specifically of the U5b2c1 subgroup. A separate group of researchers previously found a U5b1b1 subgroup that clustered in some North African populations.

"Given that haplogroup U5b2c1 has not been previously reported in North Africa, we suggest that the ancestry of our young man is likely traced to some population across the Mediterranean, which is consistent with his proposed European cranial traits," the authors wrote in their paper.

They added that additional research on ancient DNA from Phoenician remains is ongoing, and that this work will help to "better understand the origins and impact of Phoenician peoples and their culture throughout the Mediterranean region and beyond and better reconstruct ancient population migrations and trade and exchange networks, and the degree to which these influenced genetic variation seen in the Mediterranean region today."

Please visit the site: https://www.genomeweb.com/sequencing/dna-sequencing-traces-ancient-phoenician-rare-european-ancestral-group

PRE-COLUMBIAN MEDITERRANEAN 'ROUND' SHIP DISCOVERED FOR THE FIRST TIME BY UNDERWATER ARCHAEOLOGY EXPEDITION IN BULGARIA'S BLACK SEA ZONE, BY IVAN DIKOV

The world's first ever well preserved sunken "round ship", a medieval Mediterranean ship which was a precursor to the Age of Discovery vessels such as the ones on which Christopher Columbus crossed the Atlantic, has been discovered in Bulgaria's Black Sea zone by a large-scale underwater archaeology project, the Black Sea M.A.P.

The sunken "Western Mediterranean, possibly Venetian" ship (as it has been described) from the 13th-14h century is said to be a "discovery of global significance" because the round ship type (also known as "cog") had been known from historical sources but a fully preserved one had never been seen since the Late Middle Ages – until its present discovery in Bulgaria's Black Sea waters.

The other most intriguing sunken ships discovered by the archaeologists from Black Sea M.A.P. are a Byzantine ship from the late 9th or early 10th century, and an Ottoman Turkish vessel from the 18th-19th century.

The Black Sea Maritime Archaeology Project (Black Sea M.A.P.), which started in September 2015, is being carried out by the Center for Maritime Archaeology of the University of Southampton, the Sozopol-based Center for Underwater Archaeology at the Bulgarian Ministry of Culture, and the National Institute and Museum of Archaeology in Sofia.

The three year project, which is funded by the Expedition and Education Foundation (EEF), is also assisted by the University of Connecticut, USA; the Maritime Archaeological Research Institute, Södertörn (MARIS), Södertörn University, Sweden; and the Hellenic Center for Marine Research, Greece.

The results from the second voyage of the project, which took place on September 1-26, 2016, in the zone between Bulgaria's Rezovo in the south and Cape Galata near Varna, have been presented publicly in Bulgaria's Black Sea of Burgas by Prof. Jon Adams from the University of Southampton and Assoc. Prof. Lyudmil Vagalinski, Assoc. Prof. Krum Bachvarov, and Assist. Prof. Kalin Dimitrov from Bulgaria's National Institute and Museum of Archaeology in Sofia.

Please visit the site: http://archaeologyinbulgaria.com/2016/10/01/pre-columbian-mediterranean-round-ship-discovered-for-the-first-time-by-underwater-archaeology-expedition-in-bulgarias-black-sea-zone/

2,800-YEAR-OLD URARTIAN SEWAGE SYSTEM UNEARTHED IN VAN

An ancient Urartian sewage system, which was first discovered during excavations in 2004 in the Çavuştepe Castle in the eastern province of Van, has been unearthed.

This year's works in the castle in the Gürpınar district of Van recently came to an end, after unearthing ancient vineyards, walls, cisterns, temples and palace structures.

The 2,800-year-old sewage system, which was discovered in the castle in 2004, was finally unearthed under the structures in the western part of the castle. The sewage is one meter in width and 30 meters in length and covered with fine stones.

The head of the Culture and Tourism Ministry-supported excavations, Rafet Çavuşoğlu, an associate professor in the Archaeology Department of Yüzüncü Yıl University, said the Çavustepe Castle was particularly important in history because it was once located on a major trading route.

"The Urartians thought carefully about what to build and where. They did everything in line with a project. When establishing this city 2,800 years ago, the Urartians made an urban plan and built structures according to infrastructure. This is very important to us. We found an engineering marvel here," Çavuşoğlu said.
He added that the sewage system was built with stone and inside was a gutter through which water flowed.

'A very good system'

"This work defines civilization to us. It shows how ancient civilization was developed. There is also a toilet in the palace section. The toilet water flows outside through the sewage system, which reveals that the Urartians were a very civilized society," Çavuşoğlu said.

"During the construction of houses today, an excellent system is planned with schools, hospitals, mosques and infrastructure. Urartians did the same 2,800 years ago," he added.

The city established around the castle was nearly one kilometer in diameter and surrounded by protective walls, according to the excavations head.

"Measures were taken against the danger of enemies. Large dikes were opened up on both the eastern and western sides. They made their defense system in this way," Çavuşoğlu stated.

Please visit the site: http://www.hurriyetdailynews.com/2800-year-old-urartian-sewage-system-unearthed-in-van.aspx?pageID=238&nid=104338

GOLD FOUND IN 8TH CENTURY BC SARCOPHAGI DISCOVERED IN TURKEY'S ÇANAKKALE PROVINCE, BY NURBANU KIZIL

Municipal workers trying to fix broken water pipes in Turkey's northwestern Çanakkale province found three ancient sarcophagi from the 8th century B.C. during the excavation. One of the two sarcophagi which were opened on Wednesday has gold jewelry, while the remaining one is expected to be opened on Friday.

According to reports, the sarcophagi were found in Kemer Village in Biga district and local authorities immediately informed the gendarmerie and archeology museum officials regarding the issue.

Gendarmerie have placed barrier tape around the excavation

The sarcophagi are thought to be an extension of the necropolis (ancient Greek cemetery with elaborate tombs) in the ancient Greek city of Parium, which is only two kilometers away from Kemer.

Parium was founded in 709 B.C. and served as a 'customs station' with its two harbors. Archeologists arrived at the excavation site to unearth the sarcophagi but told the locals that they would not be able to open the coffins until Wednesday.

The claims by some who said that they saw gold jewelry inside a sarcophagus were proved to be correct when officials opened two of the sarcophagi, revealing a handful of gold beads, a ring, three bullet-sized gold pieces, two brooches and a mirror without a handle.

İsmail Güler, who owns the field in which sarcophagi were found, told the press that he never thought such historical artifacts would be found in his land.

"I hope this will also benefit us," he said.

Biga Peninsula hosted many civilizations including Kumtepe (circa 4000 BC) and Troy (circa 3500-3000 BC).

Archaeologists in Turkey, which has historically been a home to many civilizations, frequently find significant historical artifacts throughout the country, in efforts to shed light on early human civilizations.

Please visit the site: http://www.dailysabah.com/history/2016/09/29/gold-found-in-8th-century-bc-sarcophagi-discovered-in-turkeys-canakkale-province [Go there for pix]

ARCHAEOLOGIST DISCOVERS FLOOR MOSAIC FROM ANCIENT ROMAN CITY AUGUSTA TRAIANA IN BULGARIA'S STARA ZAGORA, BY IVAN DIKOV

The newly found Ancient Roman mosaic floor dates back to the beginning of the 4th century AD, reports local news site InfoZ.

It has been discovered by archaeologist Assist. Prof. Mariya Kamisheva from the Stara Zagora Regional Museum of History.

The Augusta Traiana - Vereia Archaeological Preserve also made the news as recently as the spring of 2016 with the discovery of two huge family tomb sarcophagi.

The Ancient Roman city of Ulpia Augusta Traiana was probably founded ca. 107 AD by Roman Emperor Trajan (r. 98-117 AD) (after whom it was named) on the site of a previously existing Ancient Thracian settlement called Beroe. (Some recent research indicates it might have been founded by Trajan's successor, Emperor Hadrian (r. 117-138 AD).) It quickly became the second most important city in the Roman province of Thrace after Philipopolis (Trimontium), today's Plovdiv.

The newly found Roman mosaic floor has been discovered during rescue excavations along the Ruski Street in Stara Zagora.

The mosaic, which has a total area of 60 square meters and is made up of colorful tesserae, used to decorate the floor in the main hall of local Roman Era aristocrats' rich home.

It used to feature a central image of a pagan deity which, however, was scratched out after the adoption of Christianity in the Late Antiquity. For the time being, the originally portrayed deity has not been identified.

Beautiful and relatively well preserved Ancient Roman floor mosaics are no rare finds in the Augusta Traiana - Vereia Archaeological Preserve in Bulgaria's Stara Zagora.

The newly found mosaic is comparable to the already famous mosaic entitled "Dionysus's Procession", also known as "Silenus with Bacchantes", depicting Dionysus's tutor and companion Selenus leading two dancing bacchantes, according to lead archaeologist Kamisheva, the Monitor daily reports.

The "Dionysus's Procession" mosaic was discovered by Kamisheva and fellow archaeologist Dimitar Yankov back in 2011. Since then, it has been restored with a total of USD 45,588 in funding from the the American Research Center in Sofia and the America for Bulgaria Foundation, Sofia-based NGOs, and exhibited in the Antiquity Hall of the Stara Zagora Regional Museum of History.

The lead archaeologist says that not unlike "Dionysus's Procession" the newly discovered mosaic was created at about the same time. Both decorated the floors of rich homes inside the fortress walls of the Roman city of Augusta Traiana.

The residential building where the new mosaic floor has been found was located next to one of the main streets of Augusta Traiana.

Large stone slabs have survived from the pavement of the street which had east-west orientation. Next to them, the archaeological team has found Antiquity glass and numerous bronze coins which are yet to be studied. A foundry workshop was also probably located nearby judging by the discovery of traces of molten iron.

For the time, the fate of the newly found Ancient Roman mosaic floor. It will probably be dismantled, and later restored and exhibited whenever sufficient funding is procured.

Please visit the site: http://archaeologyinbulgaria.com/2016/09/28/archaeologist-discovers-floor-mosaic-from-ancient-roman-city-augusta-traiana-in-bulgarias-stara-zagora/

MORE TOMBS UNCOVERED IN ETRUSCAN VULCI - CONTAIN RINGS, VASES, ORNAMENTS

Archaeologists working in the Etruscan necropolis of Vulci near Viterbo have found 17 tombs containing a variety of ornaments and jewellery left by relatives of the deceased to facilitate their passage to the afterlife.

The tombs, dating back to between the third and ninth century BC, were found in the area known as Poggetto Mengarelli, where in recent months an illegal excavation by looters led archaeologists to uncover the now-famous Tomb of the Golden Scarab, that of an Etruscan princess buried around 700 B.C.

Objects found on Thursday include silver rings, bronze ornaments and vases discovered in a man's tomb.

Another tomb belonging to a young girl contains gold earrings and two siren statues. Further burial spots nearby hold a bronze mirror and other metal objects such as rings and a painted vase.

"The number of tombs present in this small area is impressive," said Alfonsina Russo, Archaeology Superintendent for Rome, adding that the objects found inside them were extremely varied and crossed the entire history of the Etruscans.

Carlo Casi, scientific director of the Vulci Foundation, said the excavations would continue and he expected much more to be uncovered.

Please visit the site: http://www.ansa.it/english/news/lifestyle/arts/2016/09/29/more-tombs-uncovered-in-etruscan-vulci_d0b7017b-00a2-4d28-9b74-bfe880be8b0f.html

5,000-YEAR-OLD GRAPE SEEDS FOUND IN IZMIR ARCHAEOLOGICAL SITE

Grape seeds dating back 5,000 years were the latest discovery of an archaeological research that has been carried out near an 8,500-year-old mound located in the western Izmir province.

The seeds were uncovered in Yassıtepe Mound located in Bornova district, which is very close to the nearby 8,500-year-old Yeşilova Mound, the oldest settlement near Turkey's third largest city Izmir.

The seeds are presumed to be that of the renowned Bornova Muscat grape. The head of the excavation team, Assoc. Prof. Zafer Derin said that the seeds, which were found in carbonized form at the bottoms of pottery, could be the oldest grape remains in the Izmir area. Derin added that the seeds could help reveal important details regarding life in Western Anatolia during antiquity.

Anatolia is regarded as one first the regions were grapes are being cultivated in history, with western provinces of Izmir, Aydın and Manisa being the most prominent centers of grape production in Turkey.

In the excavation carried out by the Ege University with the support of the Ministry of Tourism and Culture, Izmir and Bornova municipalities, more than 300 pieces belonging to the Neolithic and early Bronze ages were unearthed to be examined.

The unearthed objects were displayed in an exhibition at Bornova Municipality's visitor center at the Yeşilova Mound.

Please visit the site: http://www.dailysabah.com/history/2016/10/09/5000-year-old-grape-seeds-found-in-izmir-archaeological-site

FAMED CHINESE TERRACOTTA WARRIORS COULD HAVE BEEN MADE WITH THE HELP OF THE GREEKS, ARCHAEOLOGISTS REVEAL, BY HANNAH FURNESS

Western explorers settled in China more than 1,500 years earlier than experts had believed, new research has revealed, after archaeologists found the famous Terracotta Warriors could have been made with the help of the Greeks.

The 8,000 statues, which guard the mausoleum of the First Emperor, are likely to have been made under the guidance of a European sculptor who worked with locals at the site and took influence from Ancient Greece.

An extensive study of sites in Xinjiang Province, China, have revealed European-specific mitochondrial DNA, suggesting Westerners travelled, settled and died there before and during the time of the First Emperor: 1,500 years earlier than currently accepted.

The discoveries have been hailed as "more important than anything in the last 40 years" surpassing even the discovery of the Terracotta Army itself in significance. They are thought to be the first documented contact between Western and Chinese civilizations ever recorded.

They came about during excavations across the site by Mausoleum archaeologists, which have now been documented for television by the National Geographic Channel and BBC.

Key findings include evidence that treasures in the tomb of the First Emperor were created with the help of the West, with inspiration from the statues of Ancient Greece.

The tomb complex itself was found to be "much bigger than first thought" - at 38 square miles, 200 times bigger than Egypt's Valley of the Kings - with two roads out of it identified with drone technology.

I imagine that a Greek sculptor may have been at the site to train the localsProf Lukas Nickel

Experts are particularly excited by the discovery of DNA suggesting Westerners lived in the area during the time of Qin Shi Huang, from 259 to 210 BC.

Dr Li Xiuzhen, Senior Archaeologist at the Emperor Qin Shihuang's Mausoleum Site Museum, said: “We now have evidence that close contact existed between the First Emperor’s China and the West before the formal opening of the Silk Road. This is far earlier than we formerly thought.”

Evidence of that contact, experts believe, can be found in the style of the Terracotta Warriors, with "no tradition of building life-sized human statues" identified in China before then.

Prof Lukas Nickel, chair of Asian Art History at the University of Vienna, believes the tomb of the First Emperor was influenced by the arrival of Greek statues in Central Asia in the century following Alexander the Great.
“I imagine that a Greek sculptor may have been at the site to train the locals," he said.

Dr Xiuzhen added: “We now think the Terracotta Army, the Acrobats and the bronze sculptures found on site have been inspired by ancient Greek sculptures and art”.

Prof Zhang Weixing, lead archaeologist at the tomb site, said: “The archaeological work undertaken here recently is more important than anything in the last 40 years.
"By systematically examining the First Emperor’s main tomb and subsidiary burials we have discovered something more important even than the Terracotta Army.”

Other findings from the site include the mutilated bones of young women, believed to be high ranking concubines, burie with precious jewellery made from pearls and gold.

The skull of a young man, believed to be Prince Fu Su, the First Emperor's eldest son, was also found with a crossbow bolt embedded in it.

The full findings will be broadcast on the National Geographic Channel in the US, and one BBC Two this Sunday.

Rachel Morgan, commissioning editor for the BBC, said: “It is thrilling to think that these discoveries, using cutting technologies and the forensic techniques of the 21st century, have the potential to alter what we know about the origin and formation of one of the world's most powerful countries today and the relationships forged between ancient civilizations."

Dan Snow, who presents the show, said: "It is extraordinary to think that history as we know it is changeable."

The Greatest Tomb on Earth, a one-hour special hosted by Dan Snow, Dr Alice Roberts and Dr Albert Lin will air on BBC Two on Sunday, October 16 at 8pm.

Please visit the site: http://www.telegraph.co.uk/news/2016/10/12/famed-chinese-terracotta-warriors-could-have-been-made-with-the/

QUEEN SHEBA'S PERFUME

Lifting the veil on of Queen Sheba's perfume It is one of the oldest fragrances in the world. Nicolas Baldovini's team at the Institut de chimie de Nice (CNRS/UNS) has just discovered the components that give frankincense its distinctive odor: two molecules found for the first time in nature, named "olibanic acids" by the scientists. Their research results* have just been published online, on the website of the journal Angewandte Chemie International Edition.

It is mentioned more than twenty times in the Bible, where it is one of the gifts offered by the Three Wise Men. Frankincense (also called olibanum1), one of the world's oldest fragrances, is a gum resin that exudes from the bark of Boswellia trees, which grow in countries bordering the Red Sea and the Gulf of Aden. It has been used for more than 6,000 years by every civilization, from Mesopotamia to the present. Regularly burned during religious ceremonies, it contributes to the very particular smell of churches. Despite its long history and the large amount of research dedicated to it, the exact nature of the molecules that give frankincense its distinctive fragrance surprisingly remained unknown.

Nicolas Baldovini and his team at the Institut de chimie de Nice (CNRS/UNS), which specializes in fragrances, have just succeeded in identifying them for the first time. The chief difficulty lay in finding methods of analysis precise enough to characterize these odorous substances, which are present in the fragrance in very small quantities (a few hundred ppm2), and therefore all the more difficult to detect.
To do so, the researchers used three kilos of essential oil of frankincense from Somalia, from which they isolated a purified sample of approximately 1 mg of two odorant constituents, through a series of distillations, extractions, and chromatography analyses. A group of researchers trained to recognize the typical odor of frankincense proved necessary to assist in this work, for only the human nose is sensitive enough to detect these constituents in small quantities in a mixture. The team then had to determine the molecular structure of these substances using nuclear magnetic resonance (NMR, the equivalent of an MRI applied to molecules). The two molecules, which give frankincense its "old church" smell have been identified as (+)-trans- and (+)-cis-2- octylcyclopropyl-1-carboxylic acids. Moreover, this is the first time that these compounds have been discovered in nature. In order to irrefutably confirm their characterization established using spectral analysis, the team then synthesized each of these components-which they named "olibanic acids" (from olibanum, another name for frankincense)-and used synthesis to demonstrate they were identical to the natural components.

Thanks to this discovery, perfume makers can now produce these molecules artificially in unlimited amounts, and use them in different perfumes.

Notes
1 Olibanum, a medieval Latin word, derives from the Greek ho libanos.
2 Ppm: parts per million.
*Olibanic Acids as Key Odorants of Frankincense. Céline Cerutti-Delasalle, Mohamed Mehiri, Cecilia Cagliero, Patrizia Rubiolo, Carlo Bicchi, Uwe J. Meierhenrich and Nicolas Baldovini. Angewandte Chemie International Edition. Published online on October 4, 2016 (print version forthcoming).

DOI: 10.1002/anie.201605242R2

Please visit the site: http://popular-archaeology.com/issue/fall-2016/article/lifting-the-veil-on-queen-of-sheba-s-perfume

ANCIENT GREEKS 'MAY HAVE INSPIRED CHINA'S TERRACOTTA ARMY' - ARCHAEOLOGISTS SAY DESIGN OF CLAY WARRIORS SUGGESTS CLOSE CONTACT BETWEEN EAST AND WEST 1,500 YEARS BEFORE MARCO POLO, BY MAEV KENNEDY

Greek craft workers may have helped inspire the most famous Chinese sculptures ever made – the 8,000 warriors of the Terracotta Army who have been watching over the tomb of the first emperor of China for more than 2,000 years.

Archaeologists and historians working on the warriors say they now believe that the figures' startlingly lifelike appearance could have been influenced by the arrival in China of ancient Greek sculptures, and even that Greek sculptors made their way there to teach their designs.

Li Xiuzhen, a senior archaeologist at the site, said recent discoveries, including that of ancient European DNA recovered from sites in Xinjian province from the time of the first emperor, were overturning traditional thinking about the level of contact between Asia and Europe more than 1,500 years before the travels of Marco Polo.

"We now have evidence that close contact existed between the first emperor's China and the west before the formal opening of the Silk Road. This is far earlier than we formerly thought," she said. "We now think the Terracotta Army, the acrobats and the bronze sculptures found on site, have been inspired by ancient Greek sculptures and art."

Lukas Nickel, chair of Asian art history at Vienna University, and one of the team working on the history of the figures, said: "I imagine that a Greek sculptor may have been at the site to train the locals."

The Terracotta Army , unearthed from pits in Xi'an, was discovered in 1974 by a farmer, who was terrified to see a human face staring up at him from among the cabbages. Many other pits of terracotta soldiers have been found, but the older ones are small and usually very stylised. The Xi'an figures, safeguarding Qinshihuang, the first emperor, with their weapons, horses and war chariots, are life size and sculpted in extraordinary detail down to elaborate hairstyles and decorative knots tying sections of their armour.

Archaeological discoveries from both eastern and western sites have already shown the extent of very early trade. The Silk Road, with its caravan stops and trading posts, was formally established in the third century Han dynasty, but many of the trade routes were far older. Chinese historians recorded the arrival of Roman traders; by the time of the emperor Augustus Chinese silk was streaming into Rome and many of its wearers were being denounced as effete and immoral by commentators including Seneca.

The new discoveries will be outlined in a documentary, The Greatest Tomb on Earth, jointly made by the BBC and National Geographic, which will be shown on BBC Two on 16 October.

Please visit the site: https://www.theguardian.com/science/2016/oct/12/ancient-greeks-may-have-inspired-china-terracotta-army-sculptors-ancient-dna [See also http://www.bbc.com/news/world-asia-china-37624943]

IN GREEK WARRIOR'S GRAVE, RINGS OF POWER (AND A MIRROR AND COMBS), BY NICHOLAS WADE

A trove of beautifully engraved gold rings and gemstones, found in the untouched grave of an ancient Greek warrior last year, were possessions from his culture, not loot from the nearby island of Crete, archaeologists now believe.

The gold rings, they say, were rings of power. These items served as insignia of the elite who ruled the local inhabitants of Pylos, the town on the southwestern coast of Greece where the warrior's grave was found.

The grave throws light on a dramatic historical process, the extension of the Minoan culture of Crete to southern Greece, where it formed the basis of Mycenaean civilization, the first in mainland Europe.

Mycenaean rulers such as Achilles, Agamemnon and Odysseus were the heroes of Homer's epics, and Mycenaean civilization, even though it collapsed shortly after 1200 B.C., was the forerunner of the classical Greek era that arose some 700 years later.

The grave was discovered last year by Jack L. Davis and Sharon R. Stocker, a husband-and-wife team at the University of Cincinnati, and is judged by other archaeologists to be one of the richest tombs to have been found in Greece in the last half-century. The warrior was buried around 1450 B.C., a date derived from pottery found around the grave. His facial appearance has been reconstructed from his skull by Lynne Schepartz and Tobias Houlton of the University of the Witwatersrand in Johannesburg.

The gold rings, engraved gemstones and many other items in the grave bear Minoan themes, so they could have been plunder from a raid on Crete. But Dr. Davis and Dr. Stocker believe otherwise, noting that objects in the grave are echoed in the iconography of the gold rings, they write in an article to be published in the journal Hesperia.

The grave contained a bronze mirror and six ivory combs, accessories the archaeologists were surprised to find in a warrior's tomb. But Greek warriors wore their hair long, and Spartan warriors are known to have combed their hair before battle. And the mirror may have had a ritual significance: One of the gold rings depicts a goddess holding a similar mirror.

Another object both in the grave and shown on the rings is a staff. A twisted piece of metal found in the grave appeared at first to be a meat hook. But when untwisted it turned out to be the head of a horned animal, probably a bull, with a socket and nail hole as if to be mounted on a staff. A goddess is holding just such a staff on one of the gold rings.

The staff almost certainly indicates that the warrior held authority of some kind, religious or civil.

The archaeologists do not yet know if the warrior and those who buried him were Minoans or Mycenaeans steeped in Minoan culture.

"Whoever they are, they are the people introducing Minoan ways to the mainland and forging Mycenaean culture," Dr. Davis said. "They were probably dressing like Minoans and building their houses according to styles used on Crete, using Minoan building techniques."

The warrior's grave "is telling us that right from the beginning there were people on the mainland who knew what Minoan culture meant and were bringing it to the mainland for a specific reason, that of establishing themselves in positions of power," he said.

By 1400 B.C., half a century after the warrior's death, that power had been extended to the province of Messenia and 20 district capitals, all paying taxes to their Mycenaean overlords, who ruled in Pylos from the so-called Palace of Nestor, named after the Homeric hero.

Cynthia W. Shelmerdine, an expert on the Aegean Bronze Age at the University of Texas, said she agreed that the rings and gemstone seals in the warrior's grave represented administrative and political power. "These things clearly have a power connection," she said, whether or not the rings were used in the Minoan way for sealing objects.

The grave, whether dug by Minoans or Mycenaeans, "fits with other evidence that the elites on the mainland are increasingly closely connected to the elites on Crete," Dr. Shelmerdine said.

The Mycenaeans continued to use Minoan themes, such as gymnasts leaping over bulls, in their art and administration until the end of the palatial period. But by classical times the memory of Minoan culture had faded, and survived mostly in the myth of Ariadne, the daughter of King Minos, who showed Theseus how to kill the dreaded Minotaur and escape from the labyrinth at Knossos.

A version of this article appears in print on October 4, 2016, on page D3 of the New York edition with the headline: Unearthing Ancient Greek Roots.

Please visit the site: http://www.nytimes.com/2016/10/04/science/greece-archaeology-pylos-griffin-warrior.html [Go there for pix]

X-RAYS REVEAL ARTISTRY IN AN ANCIENT GREEK VASE

Under beams of X-rays, the colors of art become the colors of chemistry. The mysterious blacks, reds and whites of ancient Greek pottery can be read in elements -- iron, potassium, calcium and zinc -- and art history may be rewritten.

That's the power of a growing collaboration between the Cantor Arts Center's Art + Science Learning Lab, art and science faculty, and the Stanford Synchrotron Radiation Lightsource (SSRL) at SLAC National Accelerator Laboratory.

Having a facility like SSRL just up the hill from the Cantor's conservation lab lends a unique opportunity for students to probe cultural mysteries with advanced scientific tools, says Susan Roberts-Manganelli, director of the Learning Lab. About two years ago, she started a fellowship for science students interested in studying art conservation. She works closely with SSRL scientific staff to mentor students bringing delicate, valuable art objects to SLAC in search of discoveries that benefit art and science.

"We can do a lot of testing here at the Cantor," Roberts-Manganelli says. "But some studies need more robust collaboration and more powerful X-rays to actually get answers to our questions."

One such study, done by Kevin Chow, BS '13, when he was a senior in collaboration with Stanford, SLAC and the Getty Conservation Institute, took a deeper look at the techniques of the ancient Greek potters, which are difficult to reproduce and not entirely understood. Using a technique called synchrotron X-ray fluorescence, the team was able to uncover surprising steps in the production process that challenge the conventional understanding.

"Under what they thought was a single coat, they found other instances of painting that the naked eye could not see," says Chow's advisor Jody Maxmin, associate professor of art and art history and of classics. "It was thrilling to learn that a very humble vase -- hundreds of these were produced for the Festival of Athena every four years -- shows certain standards of aesthetic excellence. The artist invested more in his work than we had given him credit for."

Such collaborations spark scientific innovation as well. Well-conserved art objects allow researchers to look at uniquely complex materials of a certain age that generate intriguing chemistry questions and require new techniques, says SLAC staff scientist Apurva Mehta, who is also an affiliated faculty member at the Stanford Archaeology Center. "We had to find a way to see all layers of the Greek pot in detail, which is something we want to do for other materials that might be used in batteries or electronics."

For Maxmin, seeing science students step boldly into art history is inspiring. So is watching her colleagues learn things in fields not their own. "We are complicating the issues, and that's good," she says. "By looking across disciplines we are enabling unconventional friendships and discoveries."

Roberts-Manganelli concurs: "You can't do science, art history or conservation in isolation. We all thought we could at one time, but now we realize we are stronger and better as a group."

Source: SLAC National Accelerator Laboratory

Please visit the site: https://archaeologynewsnetwork.blogspot.gr/2016/10/x-rays-reveal-artistry-in-ancient-greek.html#45rxsGel5pgHgulU.97

700 BOTTLES CONTAINING ANCIENT ANTIDEPRESSANTS, HEART MEDICATION FOUND IN ISTANBUL, BY NURBANU KIZIL

Researchers carrying out excavations at the ancient Greek city of Bathonea located in Istanbul's Avcılar district have found hundreds of unguentaria - small ceramic or glass bottles - containing traces of antidepressants and heart medications. The finding could have significant implications for the history of Istanbul, as it provides the first concrete evidence proving the siege of Constantinople by a joint Avar-Sassanid force in 626.

According to reports, around 700 unguentaria were found in the Bathonea excavations carried out off the banks of Küçükçekmece Lake in Avcılar district.

The excavations at Bathonea were launched in 2007 and are jointly led by Kocaeli University and the Ministry of Tourism and Culture. Teams consisting of hundreds of students and historians from Selçuk University, Ege University and Istanbul University, as well as many foreign historical institutions take part in the excavations. They are currently led by Dr. Şengül Aydıngün, an associate professor from Kocaeli University.

Aydıngün said that the latest excavation work has focused on laboratory, storage and analysis and has brought together hundreds of pieces of ceramics to form unguentaria.

She noted that 700 is a significant number for the ancient period, marking the first time that such an amount has been found in a single archaeological dig.

"Some of them are still being repaired, but meanwhile we have also found pestles of various sizes, mortars, and a stove, indicating that there was a pharmaceutical production center here" Aydıngün said, and added that there are specific plants on the site, which make up the essence of many medicines.

The analysis of residue found in unguentaria has reportedly been conducted by the state-run Scientific and Technological Research Council (TÜBİTAK) in Gebze district.

TÜBİTAK findings suggested that the residue contained Methanone and Phenanthrene, which are substances used for depression and have a soothing impact.

Professor Aydıngün continued by saying that a large fire residue has been found in Bathonea excavation site, and it can almost be seen on all structures throughout.

The carbon samples of the residue are reportedly analyzed by Wroclaw Archeology and Ethnography Institute in Poland and the findings could have immense implications for the history of Istanbul as they could provide concrete proof for the Avar invasions which took place between 620 and 640.

"If this is clarified, Bathnoea excavations will add a new page in the history of Istanbul" Aydıngün said.

Bathonea excavation site has been home to the traces of oldest agricultural activities in Europe dating back to 7,000 BC, as well as Hittites dating back to 2,000 BC. The ports of Bathonea have also been used by the Vikings in the 9th and 11th centuries.

Please visit the site: http://www.dailysabah.com/history/2016/10/16/700-bottles-containing-ancient-antidepressants-heart-medication-found-in-istanbul

3,800-YEAR-OLD 'TABLEAU' OF EGYPTIAN BOATS DISCOVERED, BY OWEN JARUS

More than 120 images of ancient Egyptian boats have been discovered adorning the inside of a building in Abydos, Egypt. The building dates back more than 3,800 years and was built near the tomb of pharaoh Senwosret III, archaeologists reported.

The tableau, as the series of images is called, would have looked upon a real wooden boat said Josef Wegner, a curator at the Penn Museum at the University of Pennsylvania, who led the excavation. Only a few planks remain of the wooden boat, which would have been constructed at Abydos or dragged across the desert, Wegner said. In ancient Egypt, boats were sometimes buried near a pharaoh's tomb.

The largest images are nearly 5 feet (1.5 meters) in length and show "large, well-rendered boats depicted with masts, sails, rigging, deckhouses/cabins, rudders, oars and in some cases rowers," wrote Wegner in an article published in the International Journal of Nautical Archaeology. Some images are small and simple, the smallest reaching only about 4 inches (10 centimeters) in length, wrote Wegner.

Though 120 boat images survive today, there would have been more incised on the building walls in ancient times, Wegner wrote. In addition to the boats, the tableau contains incised images of gazelle, cattle and flowers, he noted.

Near the entranceway of the building - whose interior is about 68 feet by 13 feet (21 by 4 m) - archaeologists discovered more than 145 pottery vessels, many of which are buried with their necks facing toward the building's entrance. "The vessels are necked, liquid-storage jars, usually termed 'beer jars' although probably used for storage and transport of a variety of liquids," wrote Wegner in the journal article.The existence of the building was first noted in a 1904 report by an Egypt Exploration Fund (EEF) team that worked at Abydos between 1901 and 1903. However, that team didn't have time to excavate the building and didn't know what was in it; "they came down on the very top of the boat building. They saw the vault of it but abandoned work," Wegner said.

The archaeologists don't know who drew the tableau or why they created it. "We can't conclusively answer that on the basis of what's preserved," Wegner told Live Science. However, the researchers think multiple people created the tableau within a short period of time, he added.

One possibility is that the people who built the boat also created the tableau, he said. Or, perhaps, a group of people taking part in a funerary ceremony after the death of pharaoh Senwosret III etched the images onto the building walls. Yet another possibility is that a group of people gained access to the building after the pharaoh died and created the tableau. Archaeologists found that a group of individuals entered the building at some point after the pharaoh's death and took the boat apart, reusing the planks.

Archaeologists are also puzzled over the purpose of all the pottery found near the entrance of the building. It's possible that those attending a funerary ceremony could have spilled liquid from the pots on the ground on purpose. "Potentially a massive

decanting of liquid, likely predominantly water, at the entrance of the building was a way of magically floating the boat," Wegner wrote in the paper. The boat would not have been literally floated if this ceremony took place.

Another possibility is that the wooden boat was transported on a wooden sledge across the desert. In that case, "water and other liquids may have been used to lubricate and solidify the ground along the path of the boat as it was pulled from the floodplain to its desert resting place," wrote Wegner, adding that "the ceramic vessels used in this journey may themselves have taken on a ritual significance, and both boat and jars were then buried together as ceremonial interment of objects associated with royal mortuary rites."

The team plans to carry out excavations in the future that may help solve the various mysteries, he said.

Wegner's team, in cooperation with Egypt's Ministry of State for Antiquities, carried out the excavations of the building between 2014 and 2016.

Please visit the site: http://www.livescience.com/56695-ancient-egypt-boat-tableau-discovered.html [Go there for pix]