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of Greek Chemists)

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Πληροφοριακό Δελτίο της Ελληνικής Αρχαιομετρικής Εταιρείας

- Οκτώβριος 2010 -

"Δος μοι πα στω και ταν γαν κινάσω." ΑΡΧΙΜΗΔΗΣ

Newsletter of the Hellenic Society of Archaeometry

- October 2010 -

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ΣΥΝΕΔΡΙΑ - CONFERENCES/WORKSHOPS

ICONEA 2010, 15-17 DECEMBER,
SENATE HOUSE, UNIVERSITY OF
LONDON, CALL FOR PAPERS

ICONEA 2010 will take place on the 15, 16 and 17th of December at Senate House, University of London, close to the British Museum.

This is to celebrate ICONEA's affiliation to the Institute of Musical Research of the University of London. Please visit www.iconea.org

The principal theme is: Musical Exchanges between Ancient Egypt and the Near East, during, before and after the Hyksos Kings.

Because of the highly specialised theme papers of general Mediterranean archaeomusicology will also be considered.

We have extended the scope of the conference to musical performance and compositions inspired by the theme. Should you wish to contribute, please let us know as soon as possible.

Please fill the attached registration form and follow instructions.

We very much look forward to your presence in London.

For all further information, please send an email to rdumbrill@iconea.org or phone +44(0)207751 5770 / +44(0)7930 150 600

Richard Dumbrill and Irving Finkel

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6-7 Νοεμβρίου 2010

Τόπος διεξαγωγής: Μουσείο Νεώτερης Κεραμικής
Μελιδόνη 4-6 Κεραμεικός

Το εισαγωγικό αυτό σεμινάριο, θα παρουσιάσει την εξελικτική ιστορική πορεία των υφασμάτων και θα θέσει τις βάσεις για περαιτέρω εμβάθυνση στις νέες εξελίξεις και τους τρόπους της προληπτικής συντήρησης, σε ένα τόσο ευπαθή υλικό όπως είναι το ύφασμα. Θα εμπλουτίσει τις γνώσεις των ενδιαφερόμενων με τις ιδιότητες των υλικών κατασκευής π.χ. μεταλλικά νήματα, βαφές κ.α. και θα δώσει απαντήσεις για την σωστή διατήρηση των αντικειμένων (μεταφορά, μεταχείριση, αποθήκευση, τύποι προθηκών, πτητικοί οργανικοί ρυπαντές, κ.α.). Το σεμινάριο απευθύνεται σε επαγγελματίες και φοιτητές ανάλογων ιδιοτήτων όπως: συντηρητές, μουσειολόγους, αρχαιολόγους, ιστορικούς, διαχειριστές εκκλησιαστικών συλλογών, ιδιώτες συλλέκτες κ.α.

Το θεωρητικό μέρος του μαθήματος συνοδεύεται από πρακτικά εργαστήρια στα οποία οι σπουδαστές έχουν την δυνατότητα να γνωρίσουν τρόπους αποθήκευσης και έκθεσης έργων τέχνης με την χρησιμοποίηση κατάλληλων υλικών και μεθόδων βάσει των σημερινών προδιαγραφών.

Οι ενδιαφερόμενοι θα έχουν την δυνατότητα να φέρουν και δικά τους έργα τέχνης, προκειμένου να συζητηθούν μεμονωμένες περιπτώσεις φθορών και διατήρησής τους.

Εισηγητής σεμιναρίου:

Δρ. Χρήστος Χ. Καρύδης

Μεταδιδασκτορικός Ερευνητής, Διαγνωστικό Κέντρο Τέχνης Ορμούλιας & Getty Institute
Διδάσκων, Α.Π.Θ και ΑΤΕΙ Ιονίων Νήσων

Κόστος σεμιναρίου: 120 Ευρώ (90 ευρώ φοιτητικό).

Πληροφορίες και εγγραφές: Δρ. Αφροδίτη Καμάρα, τηλέφωνο 210 65 10 549.

e-mail: info@timeheritage.gr

**INTERNATIONAL ARCHAEOLOGICAL
SYMPOSIUM ON COOKING POTS,
DRINKING CUPS, LOOM WEIGHTS AND
ETHNICITY IN BRONZE AGE CYPRUS
AND NEIGHBOURING REGIONS,
NICOSIA, 6TH – 7TH NOVEMBER 2010**

The Anastasios G. Leventis Foundation and the Department of History and Archaeology of the University of Cyprus invite you to the

INTERNATIONAL ARCHAEOLOGICAL SYMPOSIUM ON COOKING POTS, DRINKING CUPS, LOOM WEIGHTS AND ETHNICITY IN BRONZE AGE CYPRUS AND NEIGHBOURING REGIONS, Nicosia, 6th – 7th November 2010, *Conference Hall: Foundation Anastasios G. Leventis 40, Gladstonos street*

<http://www.ucy.ac.cy/goto/archreun/el-GR/InternationalArchSymposium.aspx>

For the organizing Committee

Ourania Kouka

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ΘΕΣΕΙΣ ΕΡΓΑΣΙΑΣ/ΥΠΟΤΡΟΦΙΕΣ –
JOB VACANCIES/FELLOWSHIPS

ASCSA NEH FELLOWSHIPS 2011-2012
(PENDING FUNDING)

Founded in 1881, the American School of Classical Studies at Athens is the most significant resource in Greece for American scholars in the fields of ancient and post-classical studies in Greek language, literature, history, archaeology, philosophy, and art, from pre-Hellenic times to the present. It offers two major research libraries: the Blegen, with 94,000 volumes dedicated to the ancient Mediterranean world; and the Gennadius, with 117,000 volumes and archives devoted to post-classical Hellenic civilization and, more broadly, the Balkans and the eastern Mediterranean. The School also sponsors excavations and provides centers for advanced research in archaeological and related topics at its excavations in the Athenian Agora and Corinth, and it houses an archaeological laboratory at the main building complex in Athens. By agreement with the Greek government, the School is authorized to serve as liaison with the Hellenic Ministry of Culture and Tourism on behalf of American students and scholars for the acquisition of permits to conduct archaeological work and to study museum collections.

In the sixteen years since its inception, the NEH Fellowship program at the American School has demonstrated its effectiveness by supporting projects for 36 scholars with distinguished research and teaching careers in the humanities.

Those Eligible: Postdoctoral scholars and professionals in relevant fields including architecture or art who are U.S. citizens or foreign nationals who have lived in the U.S. for the three years immediately preceding the application deadline. Applicants must hold their Ph.D. or equivalent terminal degree at the time of application.

Terms: Two fellowships, six months in duration. Stipend per month is \$4,200 for a total of \$25,200 for six months. Term is from January 1 through to June 30, 2012. School fees will be deducted from the fellowship stipend. Fellows will pay for travel costs, housing, board, and other living expenses from the stipend. A final report is due at the end of the award period, and the ASCSA expects that copies of all publications that result from research conducted as a Fellow of the ASCSA be contributed to the relevant library of the School.

Note that this change in the duration of the NEH Fellowships is for the 2011-2012 year only.

Application: Submit Associate Member application online on the ASCSA web site at www.ascsa.edu.gr, along with additional required material: a) Short project abstract. b) A statement of the project (up to five pages), including desired number of months in Greece, a timetable, explicit goals, a selected bibliography, and the importance of the work, the methodologies involved, where applicable, and the reasons it should occur at the ASCSA. c) Curriculum vitae with list of publications. d) Three letters of reference

from individuals familiar with the applicant's work and field of interest who can comment on the feasibility of the project and the applicant's ability to complete it successfully.

Website: www.ascsa.edu.gr

E-mail: application@ascsa.org

DEADLINE: DECEMBER 1, 2010.

The awards will be announced during March 2011, pending notification of funding from the NEH. Awardees will be expected to accept the award within two weeks of notification of funding.

The American School of Classical Studies at Athens does not discriminate on the basis of race, age, sex, sexual orientation, color, religion, ethnic origin, or disability when considering admission to any form of membership or application for employment.

NEH FELLOWSHIPS 2011-2012 APPLICATION INFORMATION

The following items should be attached to the Associate Member application submitted online on the ASCSA web site:

1. Short abstract of the project (up to 300 words).
2. A statement of the project (up to five pages), including desired number of months in Greece, a timetable, explicit goals, a selected bibliography, and the importance of the work, the methodologies involved, where applicable, and the reasons it should occur at the American School of Classical Studies at Athens. The applicant's name should appear on each page.
3. Current curriculum vitae, including a list of publications. If you are not a US citizen, state US visa status /date of residence.
4. Three letters of reference from individuals familiar with your work and field of interest. These letters should comment on the feasibility of the project and the applicant's ability to carry it out successfully. Please include a list of names, positions, and addresses of the referees.

NEH Fellows will be expected to reside primarily at the American School in Greece (though research may be carried out elsewhere in Greece), contribute to and enhance the scholarly dialogue, as well as contribute to and expand scholarly horizons at the School.

The following criteria will be used by the Selection Committee when considering applications.

1. Are the objectives and approaches clearly stated and coherent?
2. Will the project result in an important and original contribution?
3. Are the research perspectives and methodologies appropriate?

4. Is the projected timetable reasonable for the tenure of the fellowship?
5. What resources are necessary? Does the American School provide resources that are not available at the home institution?
6. Will residence in Greece contribute substantially to the success of the project?
7. Please address how you might contribute to, and enhance, the scholarly dialogue at the American School.
8. In what ways might this project expand scholarly horizons at the American School?

Application submitted online on the ASCSA web site at www.ascsa.edu.gr no later than December 1, 2010.

NEH Fellowships
American School of Classical Studies at Athens
6-8 Charlton Street
Princeton, NJ 08540-5232
E-mail: application@ascsa.org Web site: www.ascsa.edu.gr



FELLOWSHIPS: FOR 2010-11, AT CAARI **(NICOSIA, CYPRUS)**

THE CYPRUS AMERICAN ARCHAEOLOGICAL RESEARCH INSTITUTE (CAARI) in Nicosia, Cyprus, welcomes scholars and students specializing in archaeology, history, and culture of Cyprus and the eastern Mediterranean. CAARI is located in central Nicosia close to the Cyprus Museum, major libraries, and the main business and commercial district. In addition to hostel accommodation for a total of twelve residents, the institute has excellent research facilities: a 10,000-volume library, comprehensive map and artifact collections, archival material, and facilities for Internet, scanning, and photography. For further information on CAARI: <http://www.caari.org>

CAARI FELLOWSHIPS: FOR INFORMATION ON APPLICATION PROCEDURES AND DEADLINES PLEASE SEE: <http://www.caari.org/Fellowships.htm> or CAARI at Boston University 656 Beacon Street, Fifth Floor. Boston, MA 02215;
Email: caari@bu.edu

THE DANIELLE PARKS MEMORIAL FELLOWSHIP: 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 in 2011 are invited especially from students of antique Cyprus. While in Nicosia, the fellow will reside at CAARI.

THE HELENA WYLDE SWINY AND STUART SWINY FELLOWSHIP: NOT OFFERED IN 2011. One grant of US\$1000 to a graduate student of any nationality in a U.S. or Canadian college or university to pursue a research project relevant to an ongoing field project in Cyprus; to be used to fund research time in residence at CAARI and to help defray costs of travel. Residence at CAARI is required.

THE ANITA CECIL O'DONOVAN FELLOWSHIP: One grant of US\$1000 to a graduate student of any nationality, studying in any nation, to pursue a research project relevant to an ongoing field project in Cyprus; to be used to fund research time in residence at CAARI and to help defray costs of travel. Residence at CAARI is required.

CAARI SENIOR SCHOLAR IN RESIDENCE: An established scholar who commits to stay at least 30 days in succession at CAARI, ideally in the summer, 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 not covered.

2 NEW CAARI/COUNCIL OF AMERICAN OVERSEAS RESEARCH CENTER (CAORC) RESEARCH FELLOWSHIPS Two new fellowships funded by the U.S. Department of State Bureau of Educational and Cultural Affairs through a grant from CAORC, designed for scholars who already have their PhDs, who are US citizens, and whose research and teaching would derive significant benefit from a month's research

time on the island. Each award brings US\$5500 toward transport, living expenses, and lodging at CAARI (required), and an additional US\$250 for research expenses on the island. Information and application form at <http://www.caari.org/Fellowships.htm> .

COUNCIL OF AMERICAN OVERSEAS RESEARCH CENTER (CAORC) MULTI-COUNTRY FELLOWSHIP PROGRAM: 2008 GETTY RESEARCH EXCHANGE FELLOWSHIP PROGRAM FOR THE MEDITERRANEAN BASIN AND MIDDLE EAST: Expanded to two award categories. A) 9 awards of up to \$12,000 for US doctoral candidate or Ph.D.s and B) 4 awards of up to \$8000 for US students pursuing Master's degrees. All to pursue research in two or more countries outside the US, at least one of which hosts a participating American overseas research center (CAARI is among these centers). Preference given to comparative or cross-regional research. Information: <http://www.caorc.org/programs/getty.htm> or director@caari.org.cy.

FELLOWSHIPS IN ART HISTORY AT FOREIGN INSTITUTIONS: Four US\$22,500-per-year Kress Institutional Fellowships in the History of European Art for a two-year research appointment in association with one of a list of foreign institutes, among them CAARI. Restrictions:

Restricted to pre-doctoral candidates in the history of art. Nominees must be U.S. citizens or individuals matriculated at an American university. Dissertation research must focus on European art before 1900. Candidates must be nominated by their art history department.

For information: info@kressfoundation.org FULBRIGHT SCHOLARS PROGRAM for postdoctoral research in Cyprus: <http://www.fulbrightonline.org/>

FULBRIGHT STUDENT PROGRAM for pre-doctoral research in Cyprus: <http://www.fulbrightonline.org/>.

RESEARCH TECHNICIAN AT NERC **RADIOCARBON FACILITY** **(ENVIRONMENT), EAST KILBRIDE, UK**

Further details including information on how to apply for this post can be found by following the link to Glasgow University: <http://www.gla.ac.uk/about/jobs/>

Closing date: 24 September 2010

Reference Number 00021-7

Location SUERC (East Kilbride)

College / Service College of Science and Engineering

Department SUERC

Job Family Tech & Related

Position Type Full Time

Salary Range £25,751 - £28,983 (grade 6)

Job Purpose

To manage and deliver high quality technical support to the NERC Radiocarbon Facility (NRCF) which provides radiocarbon analyses and scientific advice for the UK Earth and Environmental Science community and for technical development and in-house research programmes.

NRCF is hosted by SUERC (Scottish Universities Environmental Research Centre) in East Kilbride.

Main Duties and Responsibilities

1. Responsible for day-to-day management and running of laboratory space, including specialised equipment, apparatus and consumables.
2. Responsible for chemical pre-treatment and preparation of samples for radiocarbon and stable carbon isotope analysis and applying expertise and skills as a specialist technician to develop procedures applicable to novel sample types and to offer intellectual and practical input to method development.
3. Responsible for operation, maintenance and modification of specialised vacuum rigs, including fault analysis, repair and development.
4. Operation and maintenance of other specialised analytical equipment including elemental analyser, stable isotope mass spectrometer.
5. Data handling and interpretation using Microsoft Excel and Access packages and the laboratory's relational database.
6. Responsibility for allocated projects includes communicating with facility scientific staff, academics and postgraduate students.
7. Participate in team meetings/discussions, leading on technical elements as appropriate.

8. Provide training in use of specialised equipment, materials and techniques to post-graduate research students, visiting and in-house academics.

9. Supporting and initiating methodological developments for user community and in-house research with NRCF's scientific staff.

10. Producing risk assessments and laboratory procedures and to be responsible for safe operation of specialised equipment and chemicals. Day to day responsibility for health and safety during training of post-graduate students and for specified working areas and equipment.

Knowledge, Qualifications, Skills and Experience

Knowledge/Qualifications

Essential

A1. HND, VQ3, Highers or equivalent plus 4 years relevant work experience or 5-6 years work experience in a relevant technical or scientific role.

A2. Up to date knowledge of laboratory safety legislation.

Desirable

B1. Degree/Higher degree in radiocarbon science, organic geochemistry or related discipline.

Skills

Essential

C1. Proven ability to use specialised analytical equipment.

C2. Strong aptitude in analytical chemistry, including working with small samples.

C3. Data manipulation skills and ability to interpret quality control and sample data.

C4. Ability to work independently and as part of a team.

C5. Ability to exercise initiative and flexibility, including managing laboratory technique changes, coordinate workloads and be self-motivated.

C6. Good eye for detail.

C7. High level of oral and written communication skills including the ability to liaise effectively with a wide range of people.

C8. Work ethic and commitment to quality of output to contribute to NRCF's profile nationally and internationally.

C9. Good IT skills and ability to record data accurately and maintain good records of all laboratory activities.

Desirable

D1. Current knowledge of relevant research/specialised techniques in radiocarbon science.

D2. Ability and enthusiasm to contribute to the overall well-being and development of NRCF.

D3. Wider IT skills to support NRCF's day to day computing requirements (database operation, server backup, occasional troubleshooting).

Experience

Essential

E1. 4 years relevant work experience and qualifications outlined above and or 5-6 years work experience in a relevant technical or scientific role.

E2. Experience in sample preparation for carbon isotope ratio analysis.
E3. Experience of development work, project management and completion.

Desirable

F1. Experience in radiocarbon and/or isotope geochemical techniques.
F2. Experience in isotope mass spectrometry.
F3. Experience in operating vacuum systems

Job Features

Dimensions

The postholder will be responsible for delivery and management of specific technical work programmes, contributing to the workload of the NERC Radiocarbon Facility (NRCF, hosted by SUERC) which has an annual budget of c. £950K.

NRCF provides radiocarbon analytical support and scientific advice and training to approximately 20 PhD students and 50 academic/NERC centres and survey staff, project leaders per year, associated with NERC-supported projects. NRCF has an in-house research programme and on-going technique development to meet the emerging needs of its user community and NERC's scientific priorities. Approximately 1300 radiocarbon analyses and stable carbon isotope analyses are completed annually with support from SUERC's two accelerator mass spectrometers.

Planning and Organising

Organising day to day work and planning for days/weeks ahead but with flexibility to accommodate changing priorities. Planning and carrying out development work with scientific staff and/or external researchers and students and supporting in-house research.

Decision Making

Identifying, diagnosing and proposing solutions to problems eg with equipment.

Investigate and acquire laboratory materials cost effectively.

Design and support experiments with scientific staff and influence decisions on work direction in response to emerging results.

Internal/External Relationships

Internal: Establish good working relationships with NRCF staff, the AMS team and other SUERC staff. NRCF technical and scientific staff interactions may include: managing own work programme within context of other lab priorities; communicating progress and ideas to other staff; developing methods with other staff; contributing to general housekeeping and ensuring there is balance between various lab priorities.

Communication with NCRF lab administrator will include placing orders/receiving deliveries of laboratory equipment and chemicals, and other administrative tasks as required.

External: NRCF's user community of academic and post-doctoral researchers and postgraduate students during visits to the laboratory and to provide support and training where required. NERC staff during visits to NRCF. To liaise with engineers and external reps for ordering and maintaining equipment and lab supplies and discussing requirements for specialised equipment.

Problem Solving

Requirement to use initiative and judgement to resolve technical issues within an area of expertise.

Provide specialised technical advice to assist with the resolution of problems relating to equipment and experiments as appropriate.

Problem solving issues related to effective working of the lab.

Any relevant problems relating to analytical work and method developments.

Devise analytical strategies beyond those routinely in use at NRCF.

Other

The postholder will be part of a team supporting the facility's user community with a wide variety of sample types as well as supporting in-house research and development work. The postholder needs to be adaptable and should be enthusiastic about participating in both routine and new areas of work.

Terms & Conditions

Salary will be on the Technical & Related, level 6, £25,751 - £28,983 per annum. This post has initial funding for 3 years.

The successful applicant (if aged under 60) will be eligible to join the Universities' Superannuation Scheme.

Further information regarding the scheme is available from the Superannuation Officer, who is also prepared to advise on questions relating to the transfer of Superannuation benefits.

All research and related activities, including grants, donations, clinical trials, contract research, consultancy and commercialisation are required to be managed through the University's relevant processes (e.g. contractual and financial), in accordance with the University Court's policies.

NEW POSITION ANNOUNCEMENT, THE CYPRUS INSTITUTE (CYI), DIRECTOR OF SCIENCE AND TECHNOLOGY IN ARCHAEOLOGY RESEARCH CENTRE (STARC)

The Cyprus Institute (www.cyi.ac.cy) is a novel, non-profit research and educational institution, with a scientific and technological orientation, pursuing issues of regional importance and of global significance in the Eastern Mediterranean, the Middle East and North Africa. The development of CyI involves the progressive launching of several cross-disciplinary research centres. STARC is being jointly developed in collaboration with Centre de Recherche et de Restauration des Musées de France (C2RMF) and is intended to serve as an important research resource for CyI, Cyprus and the Eastern Mediterranean region, and as a gateway between the EU and the region for advancing science and technology in archaeology and cultural heritage.

Position Description:

The Director of STARC will be responsible for the conduct of all affairs of the research center, and will report to the Vice President for Research of CyI. He/she will work in Cyprus, and will be offered a professorial appointment with tenure, with an internationally attractive salary and benefits package, commensurate to his/her high degree of responsibility and qualification.

A more detailed description of the the profile and responsibilities of the successful candidate can be found at: <http://www.cyi.ac.cy/node/936>

For further information contact Prof. Loukas Kalisperis (l.kalisperis@cyi.ac.cy). To be assured full consideration, applications should be received by November 15, 2010 via e-mail to jobs@cyi.ac.cy. Please show the following reference in the subject heading: STARC-00-21. Recruitment will continue until the position is filled.

Dr Vasiliki (Lina) Kassianidou
Associate Professor
Archaeological Research Unit
Department of History and Archaeology
University of Cyprus
P.O. Box 20537
CY-1678 Nicosia, CYPRUS
tel. 357 22 893564
fax. 357 22 674101
<http://www.ucy.ac.cy/~arkasian.aspx>

RICHARD SEAGER FELLOWSHIP @ **INSTAP STUDY CENTER FOR EAST** **CRETE**

The (new) 2011 Richard Seager Doctoral Fellowship (\$4000) will be awarded to a qualified applicant for work to be done in the spring and summer at the INSTAP Study Center for East Crete. The fellowship is intended for scholars in the field of Aegean Bronze Age/Early Iron Age who are working to complete their PhD Dissertation.

Applications are due 1 November 2010.

Please see the website for details:

<http://www.friendsofinstapstudycenter.net//Friends/eblast/>

SPECIALIST POSITION, KCCAMS/UCI FACILITY, IRVINE, CALIFORNIA, USA

Initial salary range \$45K - \$55K (plus full benefits)

The Department of Earth System Science at UC Irvine has an immediate opening for a Specialist to support operations of the W. M. Keck Carbon Cycle Accelerator Mass Spectrometer (KCCAMS).

The overall mission of the Keck facility is to use isotopes (primarily ^{14}C) to study the carbon cycle and its relationship with climate. We use ^{14}C as a dating tool for placing paleoclimate records in time, and we also use $\delta^{13}\text{C}$ and $\Delta^{14}\text{C}$ measurements in soils, sediments, land and marine biota, carbonates, organic matter, atmospheric gases, and individual organic compounds, as tracers for the carbon cycle.

We seek a highly motivated experimental scientist to work as a specialist in ^{14}C Accelerator Mass spectrometry. The successful applicant will work in a team that performs research and development of techniques to study the carbon cycle. Following the appropriate training, the successful candidate will assist in the processing of in-house and external samples for research in terrestrial carbon cycling through the KCCAMS sample preparation laboratory, help visiting researchers and students, help on training of laboratory assistants, and also participate in sample measurement using our AMS compact system, data analysis, and technical development as part of the overall activity of this research group. The successful applicant will also be encouraged to collaborate scientifically in program areas of the laboratory.

Applicants should have an M.S. or higher degree in Physics, Chemistry or Earth Science, or equivalent experience. Experience in AMS sample preparation and spectrometer operation and familiarity with carbon cycle research and radiocarbon methods is desired. Appointment level and salary will be commensurate with qualifications and experience, based on University of California salary scales. The Specialist series are term positions, and the appointment will initially be made for two years. However, it is anticipated that this will be a long term position, contingent on continued funding for the laboratory.

Your application must be followed by cover letter, a curriculum vitae including names and contact information for three referees, and should be address to Dr. John Southon or Dr. Guaciara Santos, Dept of Earth System Science, U.C. Irvine, Irvine, CA 92697-3100; email jsouthon@uci.edu, gdossant@uci.edu. For further details please contact Dr. John Southon on +1 (949) 824-3674 or visit our web-page at www.ess.uci.edu/ams

The University of California, Irvine is an equal opportunity employer committed to excellence through diversity.

AMERICAN RESEARCH CENTER IN SOFIA (ARCS) FUNDING OPPORTUNITIES 2011

Dear Colleagues,

We are glad to bring to your attention the following funding opportunities. These archaeological programs are organized by the American Research Center in Sofia (ARCS) and The Field Museum (FM), Chicago, and supported by America for Bulgaria Foundation (ABF).

PROGRAM ANNOUNCEMENT – INTERNATIONAL COLLABORATIVE ARCHAEOLOGICAL AND BIOARCHAEOLOGICAL RESEARCH PROGRAM

The American Research Center in Sofia (ARCS) invites proposals for the International Collaborative Archaeological and Bioarchaeological Research Program (ICAB), to be implemented with the support of the America for Bulgaria Foundation (ABF).

Program Description: The program promotes international collaboration between scholars from Bulgaria, the US, and other nations, especially the Balkans. The intent of ICAB is to fund archaeological and bioarchaeological research, including fieldwork, museum, and/or laboratory research. The program strongly encourages proposals from researchers interested in employing and developing innovative analytical techniques that will advance the scientific study of the human past. Projects which promise to provide opportunities for training undergraduate and graduate students are especially welcome.

The program requires that Bulgarian and American researchers serve as co-Primary Investigators (PIs) on the grant. It is expected that there will be substantial collaboration on the part of each team. The American PI must apply through an accredited US institution to which the award will be granted. That institution will be responsible for financial oversight of the grant.

Requests for funding must be in US Dollars and should not under normal circumstances exceed \$50,000 for one year. Requests for funding smaller projects are especially welcome. The final publication must be entirely in both Bulgarian and English or entirely in English, whichever of these two options the two PIs decide would be best.

Eligibility Requirements: Applicants must meet all of the following eligibility requirements at the time of application: The Bulgarian applicant must have a masters or doctoral degree and English proficiency. He or she must hold a permanent position in a Bulgarian research institute, museum, or university. The American applicant must have a doctoral degree from an accredited university and hold a position in an accredited US institution, or be an advanced doctoral student in an accredited university. American doctoral students are required to apply as senior personnel with their dissertation advisor and a Bulgarian counterpart as the Primary Investigators.

Grant Application Location: Application materials are available at www.arcsotia.org. Per request Dr. Emil Nankov (ehn2@cornell.edu) and Mrs. Dilyana Ivanova (divanova@fieldmuseum.org) will also provide the application package, which consists of two forms: ICAB11.1 and ICAB Standard Budget Form.

Application Submission: All application materials must be received no later than December 1, 2010. Applications received later than December 1 will not be considered. Submit a hard copy of the proposal materials as well as a CD with an electronic copy to **each of the following:** ICAB Proposal Coordinator, Department of Anthropology, The Field Museum, 1400 S Lake Shore Drive, Chicago, IL 60605-2496, USA, AND Archaeology Program Officer, American Research Center in Sofia, 75 Vasil Petleshkov Str., Sofia 1510, Bulgaria.

Inquiries: Inquiries about eligibility and application can be sent in English via email to abf@fieldmuseum.org or ehn2@cornell.edu. Inquiries in Bulgarian can be addressed to Mrs. Dilyana Ivanova at divanova@fieldmuseum.org and Dr. Emil Nankov at ehn2@cornell.edu

PROGRAM ANNOUNCEMENT COLLABORATIVE HIGH-RISK ANTHROPOLOGICAL AND ARCHAEOLOGICAL RESEARCH (HRAR)

The American Research Center in Sofia (ARCS) invites proposals for the Collaborative High-Risk Anthropological and Archaeological Research Program (HRAR), to be implemented with the support of the America for Bulgaria Foundation (ABF).

Program Description: The intent of this program is to encourage scholars to assess the feasibility of an archaeological research project, and to encourage the use of innovative research methods. Proposals with a high risk of failure are less likely to receive funding from traditional research grant programs, but they also may have a great potential for advancement of the discipline. The collaborative high-risk program intends to give an opportunity to risky projects by providing small awards that permit investigators to assess the feasibility of an archaeological research project. Funding is provided for developing pilot archaeological projects that have challenges related to the development of innovative, but untested, research methodologies. Funding also can be requested for research that has severe time restraints due to social, environmental, or political circumstances. The information gathered during the assessment phase of research then may be used as a basis for preparing a more fully developed research program.

The program promotes international collaboration between scholars from Bulgaria and the Balkans with those from the US, and other nations in Western Europe. The intent of the program is to fund archaeological and bioarchaeological research, including field work, museum and/or laboratory research.

Projects are required to be collaborative with at least one Bulgarian co-primary investigator (PI) and one international co-PI from the US or Western Europe. The project must focus on issues central to Bulgarian or Balkan archaeology. The program requires that international and Bulgarian researchers serve as co-Primary Investigators (PIs) on the grant. The international PI from the US or Western Europe must apply through an accredited institution with which the international researcher is affiliated and to which the grant will be made. That institution will be responsible for financial oversight of the

grant. All projects funded through this program are required to acknowledge ARCS and ABF in presentations and publications that derive from the research.

Since these funds are intended to support preliminary high-risk research, requests for funds should not under normal circumstances exceed \$30,000 for a one-year period. Requests for smaller projects are especially welcome. Applicants, however, are encouraged to apply for other ARCS archaeology programs once the tested research methods have been developed and refined. Requests for funding must be in US Dollars.

Eligibility Requirements: At the time of application submission, applicants must meet all of the following eligibility requirements: The international co-PI must have a Ph.D. from an accredited academic institution. The Bulgarian co-PI must have a Masters or a Ph.D. from an accredited academic institution. The Bulgarian co-PI must hold a permanent position in a Bulgarian research institute, museum, or university. Applicants must demonstrate evidence of English proficiency. Applications must be made through an institution in the US or Western Europe to which the grant can be awarded, and which will assume financial oversight of the award.

Grant Pre-Application Location: Application materials are available for download at www.arcsafia.org. Per request Dr. Emil Nankov (ehn2@cornell.edu) and Mrs. Dilyana Ivanova (divanova@fieldmuseum.org) will also provide the pre-application package, which consists of two forms: HRAR11.1 and HRAR Standard Budget Form.

Pre-Application Submission: Pre-Applications will be reviewed on a rolling basis, but should be submitted approximately six months prior to the onset of the proposed research. All pre-applications must be submitted in hard copy as well as a CD with an electronic copy to each of the following addresses: HRAR Coordinator, Department of Anthropology, The Field Museum, 1400 S Lake Shore Drive, Chicago, IL 60605-2496 AND Archaeology Program Officer, American Research Center in Sofia, 75 Vasil Petleshkov Str., Sofia 1510, Bulgaria

Inquiries: Inquiries about eligibility and pre-application can be sent in English via email to abf@fieldmuseum.org or ehn2@cornell.edu. Inquiries in Bulgarian can be addressed to Mrs. Dilyana Ivanova at divanova@fieldmuseum.org and Dr. Emil Nankov at ehn2@cornell.edu.

PROGRAM ANNOUNCEMENT THE AMERICA FOR BULGARIA FOUNDATION POSTDOCTORAL FELLOWSHIP IN ARCHAEOLOGY AT THE FIELD MUSEUM OF NATURAL HISTORY

The America for Bulgaria Foundation and the Anthropology Department at The Field Museum invite proposals for the America for Bulgaria Foundation Postdoctoral Fellowship starting in the fall of 2011.

Program Description: This program is intended for scholars who recently obtained their Ph.D. in archaeology or bioarchaeology to conduct postdoctoral research in residence at the Field Museum of Natural History in Chicago, IL. The program strongly encourages proposals from researchers interested in employing and developing innovative analytical techniques that will advance the scientific study of the human past. During the duration of the fellowship the Fellow will have the opportunity to implement and carry out their own postdoctoral research, which should result in major publications.Â In conjunction

with their independent research, the Fellow also is expected to assist with the establishment and implementation of a formal procedure for funding international collaborative archaeological and bioarchaeological research and archaeological site and museum preservation and conservation programs through ABF.

The ideal candidate will be a Bulgarian native who has obtained their Ph.D. within the last ten years and who plans to continue their academic research in Bulgaria. Non-Bulgarian scholars whose research centers in Bulgaria and on the Balkan region also are welcome to apply. The fellowship provides a salary of \$40,000 per academic year (9 months) plus benefits, as well as an additional \$2,000 for research expenses.

Eligibility Requirements: Applicants must demonstrate that they will have completed all requirements for the Ph.D., including the filing of the dissertation, prior to the beginning of the tenure of the fellowship. Advanced proficiency in English must also be demonstrated.

Application Materials Location: Application materials are available on the webpage of the American Research Center in Sofia: www.arcsofia.org . Per request Dr. Emil Nankov (ehn2@cornell.edu) and Mrs. Dilyana Ivanova (divanova@fieldmuseum.org) will also provide the application (POSTDOC11.1).

Application Submission: All application materials must be received no later than November 15. Applications received later than November 15 will not be considered. Submit a hard copy of the proposal materials as well as a CD with an electronic copy to each of the following: ABF Postdoctoral Fellowship Coordinator, Department of Anthropology, The Field Museum, 1400 S Lake Shore Drive, Chicago, IL USA 60605-2496, **AND** Archaeology Program Officer, American Research Center in Sofia, 75 Vasil Petleshkov Str., Sofia 1510, Bulgaria

Inquiries: Inquiries about eligibility and application can be sent in English via email to abf@fieldmuseum.org or ehn2@cornell.edu. Inquiries in Bulgarian can be addressed to Mrs. Dilyana Ivanova at divanova@fieldmuseum.org and Dr. Emil Nankov at ehn2@cornell.edu

Best wishes,

Dr. Emil Nankov
Archaeology Program Officer
American Research Center in Sofia
75 Vasil Petleshkov Str.
Sofia 1510, Bulgaria
+359 2 947 9498
+359 879 121 902

UNIVERSITY OF CINCINNATI, DEPARTMENT OF CLASSICS, MARGO TYTUS VISITING SCHOLARS PROGRAM

The University of Cincinnati Classics Department is pleased to announce the Margo Tytus Visiting Scholars Program. Tytus Fellows, in the fields of philology, history and archaeology will ordinarily be at least 5 years beyond receipt of the Ph. D. Apart from residence in Cincinnati during term, the only obligation of Tytus Fellows is to pursue their own research. Fellowships are tenable during the regular academic year (October 1 to June 10).

There are two categories of Tytus Fellowships, long-term and short-term.

Long Term Fellows will come to Cincinnati for a minimum of one academic quarter (two and a half months) and a maximum of three during the regular academic year. They will receive a monthly stipend of \$1000 plus housing and a transportation allowance.

Short Term Fellows will come to Cincinnati for a minimum of one month and a maximum of two during the regular academic year. They will receive housing and a transportation allowance.

Both Long Term and Short Term Fellows will also receive office space and enjoy the use of the University of Cincinnati and Hebrew Union College Libraries. While at Cincinnati Tytus Fellows will be free to pursue their own research.

The University of Cincinnati Burnam Classics Library is one of the world's premier collections in the field of Classical Studies (<http://www.libraries.uc.edu/libraries/classics/>). Comprising 250,000 volumes, the library covers all aspects of the Classics: the languages and literatures, history, civilization, art, and archaeology. Of special value for scholars is both the richness of the collection and its accessibility -- almost any avenue of research in the classics can be pursued deeply and broadly under a single roof. The unusually comprehensive core collection, which is maintained by three professional classicist librarians, is augmented by several special collections such as 15,000 nineteenth century German Programmschriften, extensive holdings in Palaeography, Byzantine and Modern Greek Studies. At neighboring Hebrew Union College, the Klau Library, with holdings in excess of 450,000 volumes, is rich in Judaica and Near Eastern Studies.

Application Deadline: January 15.

A description of the Tytus Program and an application form is available online at <http://classics.uc.edu/index.php/tytus>. Questions can be directed to program.coordinator@classics.uc.edu.

Getzel M. Cohen
Professor of Classics and History

Director, Tytus Visiting Scholars Program
Phone: 513-556-1951; Fax: 513-631-1715
Dept. of Classics, 410 Blegen Library, University of Cincinnati, Cincinnati, Ohio 45221-0226



ΑΝΑΚΟΙΝΩΣΕΙΣ - ANNOUNCEMENTS

PROJECT CHARISMA ARCHLAB : 3RD CALL

Dear Colleagues,

The European project CHARISMA provides transnational access to the most advanced scientific instrumentation and knowledge, allowing scientists, conservators, curators, archaeologists and art historians to enhance their research at the forefront of their field.

The ARCHLAB Transnational Access programme:

Among other activities, CHARISMA offers free access to the extensive scientific archives of 6 museums and research institutions :

- Centre de recherche et de restauration des musées de France, Palais du Louvre, Paris, FR;
- The National Gallery, London, UK ;
- The British Museum, London, UK ;
- Opificio delle Pietre Dure, Firenze, IT ;
- Museo Nacional del Prado, Madrid, ES ;
- Instituut Collectie Nederland, Amsterdam, NL.

This project allows the user to be welcomed for a 4 to 5 days period in the one of the host institutions.

The third call for ARCHLAB Transnational Access applications (2010) is now open, with a deadline of Monday 15th November 2010.

Full information is available on the CHARISMA website (www.charismaproject.eu) from which the application form can be downloaded.

We look forward to receiving your proposals.

CALL FOR PAPERS: TEXTILE PRODUCTION AND CONSUMPTION

We are very proud to announce that The Danish National Research Foundation's Centre for Textile Research at the University of Copenhagen will publish the latest and groundbreaking research in the series at Oxbow Books 'Ancient Textile Series'. The theme of the publication will be:

Textile Production and Consumption in the Ancient Near East Archaeology, Epigraphy, Iconography

CTR (The Danish Research Council's Centre of Textile Research) is a Centre of Excellence founded by the National Research Council to broaden, further, and invest in textile research at an international level. CTR's main goal is to promote on an international level all activities leading to a better knowledge of textiles and to coordinate both work methods and methods of analysis used by specialists in textiles, and to coordinate fellow researchers' efforts to promote research in textiles. (For further information on CTR see www.ctr.hum.ku.dk).

With this invitation CTR would like to encourage fellow colleagues and up-coming researchers to contribute to the field of textile research.

All papers relating to textile production, and/or textile consumption, within an archaeological, scientifically, text- or art-related scope will be welcomed.

Paper proposals

Paper proposals should be approximately one page and the article should be no more than 35 pages. Please send your paper proposal on the Registration Template no later than 31st October 2010 to ctr@hum.ku.dk and koefoed@hum.ku.dk marked "Paper proposal for Product&Consumpt".

Please see separate attachment for CTR publication guidelines.

Publication

Contributors are invited to submit a paper for publication in the CTR Ancient Textile Series Publication Textile Production and Consumption in the Ancient Near East: Archaeology, Epigraphy, Iconography. The publication is scheduled for 2011 by Oxbow Books, Oxford.

Henriette Koefoed
Agnete Visti Lassen
Editor, CTR (M.Phil., Cantab)
Editor Assistant, CTR (Cand.Mag., PhD stipendiat)

Marie-Louise Nosch
Eva Andersson Strand

Director,
Associate Professor,
Danish National Research Foundation's Centre of Textile Research

Please copy and fill in this form to submit your proposal:

Paper proposal for the CTR Ancient Textiles Series Publication, Oxbow Book, Oxford :
Textile Production and Consumption in the Ancient Near East
Archaeology, Epigraphy, Iconography

Name and title

Private address

Institution address

e-mail

Phone numbers

Please note:

Paper proposals should be 300-500 words.

Deadline is 31st October 2010 to ctr@hum.ku.dk and koefoed@hum.ku.dk marked
"Paper proposal Product&Consumpt".

Paper proposal relating to the overall theme of Textile Production and Consumption will
be given priority

Paper title:

Abstract: (300-500 words):

These guidelines are valid for all CTR publications.

Textile Production and Consumption in the Ancient Near East
Archaeology, Epigraphy, Iconography

DEADLINE: 31st October 2010 Submission of Manuscripts

Please provide

1. A hard copy of the text marked up with the position for the figures and tables.
2. An electronic copy of the text in Microsoft Word, Times New Roman or a Unicode Font, with the following files:

- text and bibliography (in one), both as Word file and PDF file
 - list of figures with captions, incl. acknowledgements of source and copyright
 - all figures as separate files
 - unicode fonts used, attached if you use ‘unconventional’ scripts
3. Where relevant, written permission from copyright holders or reproduce any copyright material.
 4. Please include any acknowledgements in the first footnote.

GENERAL RULE: Spelling and punctuation should follow standard British English, except in the case of American contributors. French and German texts are also welcome.

HEADINGS and SUB-HEADING

Please use the styles provided and type upper and lower case characters, NOT in capitals. There are three ready-made styles:

- Bold for the top level
- Bold/Italic for the second level
- Italic for the third level

We don’t need the text to elaborately formatted, but italics should be in italics. Do not put in running headers or double columns.

ABBREVIATIONS

- c. = circa
Fig. or Figs. = Figure(s)
Pl. or Pls. = Plate(s)

Italicize e.g., i.e., et al., *ibid.*, etc. This includes the common-place terms, such as vice versa, that is not abbreviated. All other abbreviations should follow the Chicago manual of Style format.

DATES

Period spelled out with ‘th’, ‘rd’, ect. (century, millennium, ect.)
Please use BC and AD

REFERENCES

Please give your references in Footnotes. The full bibliographical information should be in a bibliography at the end of the text.

Please refer in the following way:

- Author (last name only!) year, page, e.g. Nosch 2000, 321.
- For additional citations in a single endnote, separate them with semi –colon (;) e.g. Nosch 2010, 223; Smith 2001, 333.
- For 2 authors in a single citation. Author & author year, page, e.g. Smith & Nosch 2004, 402.

- We will also use the conventions for multiple authors, et al., e.g. Smith et al. 2004, 402.
- Please write out all page numbers in full, e.g. Nosch 2001, 321-355 (NOT Nosch 2001, 321-55 and NOT Nosch 2001, 321 ff.)

NUMBERS

All numbers in the running text should be written as follows:

- Numbers 1-10 will be spelled out: e.g. One NOT 1; nine balloons NOT 9 balloons
- Numbers 11 and above should be in Arabic numerals: 12 NOT twelve, 371 NOT three hundred and seventy-one
- The exception to this is if the number is the first words in the sentence, e.g. ‘Twenty archaeologists pelted my house last night with spindle-whorls’. NOT ‘20 archaeologists pelted my house last night with spindle-whorls last night’.

QUOTATIONS

All quotations should be in double quotation marks.

Evelyn e.g. said to Marie-Louise, “I can’t believe there are so many of you textile people around!”

BIBLIOGRAPHY

Authors

Authors should be written with family name first, then the abbreviated first name. Title of work in Italics.

Wild, J. P. 1970 *Textile Manufacture in the Northern Roman Provinces*

If there are two authors:

Walton, P & Eastwood G. 1983 *A brief guide to cataloguing of archaeological textiles*

Editors

One editor is noted in the following way:

Walton Rodgers, P. 1999 *Dyes in the Hochdorf Textiles*. In J.

Banck-Burgess (ed.), *Hochdorf IV, Die textilfunde aus dem späthallstattischen Fürtengrab von Eberdinge-Hochdorf (Kreis Ludwigsburg) und weitere Grabtextilen aus Hallstatt- und Latenezeitlichen Kulturgruppen*, 240-245.

Two editors are noted in the following way:

Wild, J. P. 2000 *Textile Production and Trade in Roman Literature and Written Sources*. In D. Cardon & M. Fegère (eds.), *Archaeologie des textiles des origines au Ve siècle, Actes du colloque de Lattes*, oct.

1999, *Monographie Instrumentum* 14, 209-213.

Abbreviations

Please provide a list of abbreviations for the journals and series quoted in your text.

ILLUSTRATIONS

- Please provide a list figures and, where necessary, copyright permissions.

- Please number your illustrations. If tables and figures are incorporated into the text, they should still be numbered and there should be a numbered reference to them in the text.
- Please list all your captions in a separate file, even if they are included in the text.
- Please save all illustrations and tables as SEPARATE FILES and NOT embedded in the text.
- Please provide a hard-copy print out of all your images as well as any electronic version, so that we can check them as we proceed.

Image formatting

- TIFF or EPS: These are our preferred formats for scanned images.
- Scan photos and slides at 300 dpi.
- Scan b/w line artwork at 600 dpi.
- Scan mixed line and tone illustrations at 600 dpi.
- We prefer not to have JPEGs where possible, but if there is no other option we can accept them providing they are high resolution (NOT 72 dpi taken from the Internet).

Please contact Henriette if you have any questions, e-mail: koefoed@hum.ku.dk

Henriette Koefoed
(M.Phil Egyptology, Cantab)
Research Assistant and Editorial Assistant
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koefoed@hum.ku.dk
<http://ctr.hum.ku.dk>

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jack.m.sasson@vanderbilt.edu

INTERNET SITES

BRITISH LIBRARY POSTS GREEK MANUSCRIPTS TO WEB, BY ASSOCIATED PRESS

LONDON — One of the world's most important caches of Greek manuscripts is going online, part of a growing number of ancient documents to hit the Web in recent years. The British Library said Monday that it was making more than a quarter of its 1,000 volume-strong collection of handwritten Greek texts available online free of charge, something curators there hope will be a boon to historians, biblical scholars and students of classical Greece alike.

Although the manuscripts — highlights of which include a famous collection of Aesopic fables discovered on Mount Athos in 1842 — have long been available to scholars who made the trip to the British Library's reading rooms, curator Scot McKendrick said their posting to the web was opening antiquity to the entire world.

More at

<http://www.bostonherald.com/news/international/europe/view.bg?articleid=1284609&src=rss>

Paul Halsall

drhalsall@gmail.com

<http://www.fordham.edu/halsall> Internet History Sourcebooks Project
University of Manchester academic staff.

POLISH ARCHAEOLOGY IN THE MEDITERRANEAN (PAM) ON-LINE

The Polish Archaeology in the Mediterranean, Reports, appears annually, in English, presenting the full extent of archaeological, geophysical, restoration and study work carried out by expeditions from the Polish Centre of Mediterranean Archaeology, University of Warsaw.

The PCMA is present in the Near East and northeastern Africa (Egypt, Sudan, Cyprus, Syria, Lebanon, Iran and Kuwait, formerly also in Iraq). Projects cover all periods from prehistory and protohistory through the Islamic age, emphasizing in particular broadly understood Greco-Roman culture and Early Christianity in the southern and eastern parts of the Mediterranean.

Since July 2010 volumes 1-18 (1988-2006) are available on-line at:

<http://www.centrumarcheologii.uw.edu.pl/index.php?id=617&L=0>

The web-site includes a search-engine to search through the volumes of PAM.

Both paper version of PAM and of other publications of the Polish Centre of Mediterranean Archaeology of the Warsaw University, could be acquired via the mentioned web-site.

From "Rafal Kolinski" kolinski@amu.edu.pl

ΝΕΕΣ ΕΚΔΟΣΕΙΣ – NEW PUBLICATIONS

CSA NEWSLETTER SEPTEMBER, 2010, ISSUE – VOLUME XXIII, NO. 2

Announcing that the September, 2010, issue – Volume XXIII, No. 2 – of the _CSA Newsletter_ is now available at <http://csanet.org/newsletter/#fall10>

Publishing Data in Open Context: Methods and Perspectives Getting project data onto the web with Penelope. -- Eric C. Kansa and Sarah Whitcher Kansa
<http://csanet.org/newsletter/fall10/nlf1001.html>

Digital Antiquity and the Digital Archaeological Record (tDAR): Broadening Access and Ensuring Long-Term Preservation for Digital Archaeological Data A new and ambitious digital archaeology archive. -- Francis P. McManamon, Keith W. Kintigh, and Adam Brin
<http://csanet.org/newsletter/fall10/nlf1002.html>

Website Review: Kommos Excavation, Crete Combining publication media to achieve better results. -- Andrea Vianello
<http://csanet.org/newsletter/fall10/nlf1003.html>

The New Acropolis Museum: A Review
Some pluses, some minuses. -- Harrison Eiteljorg, II
<http://csanet.org/newsletter/fall10/nlf1004.html>

Aggregation for Access vs. Archiving for Preservation Two treatments for old data. -- Harrison Eiteljorg, II
<http://csanet.org/newsletter/fall10/nlf1005.html>

Miscellaneous News Items

An irregular feature.

<http://csanet.org/newsletter/fall10/nlf1006.html>

Two important notes.

1. There will be added information for "Miscellaneous News Items" when the underlying issue(s) regarding display of text in Internet Explorer have been fully examined.

2. In the course of discussion between Newsletter author, Andrea Vianello, and Newsletter editor, Nick Eiteljorg, Dr. Vianello suggested the need for an investigation of the possibilities for publishing field work results via a website. He believes - and Dr. Eiteljorg agrees - that neither the needs nor the possibilities are well-defined. The two men have determined to explore this in coming issues of the Newsletter, and they ask that you contact them with your ideas about the real demands of a website for presenting the results of a field project. (For the moment, please, only comments about the requirements to be met, not the means.) The operating assumption is that the website is to be THE publishing venue, though paper publications may exist already. Given that assumption, what are the requirements for the project?

CURRENT ANTHROPOLOGY, VOLUME **51, NUMBER 5, (OCTOBER 2010)**

is now available at

<http://www.journals.uchicago.edu/toc/ca/2010/51/5?ai=sj&ui=58sr&af=H>

Anthropological Currents

Current Anthropology October 2010, Vol. 51, No. 5: 571-572.

Citation | Full Text | PDF Version (90 KB)

Current Applications

Y. A. Orr

Current Anthropology October 2010, Vol. 51, No. 5: 573.

Citation | Full Text | PDF Version (128 KB)

Articles

The 12.9-ka ET Impact Hypothesis and North American Paleoindians Vance T. Holliday and David J. Meltzer Current Anthropology October 2010, Vol. 51, No. 5: 575-607.

Abstract | Full Text with Enhancements | PDF Version (663 KB)

Excess: The Struggle for Expenditure on a Caribbean Sugar Plantation Samuel Martínez Current Anthropology October 2010, Vol. 51, No. 5: 609-628.

Abstract | Full Text | PDF Version (241 KB)

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Books

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Michalis Kontopodis

Current Anthropology October 2010, Vol. 51, No. 5: 717-719.

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Norman B. Schwartz

Current Anthropology October 2010, Vol. 51, No. 5: 719-720.

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Mashing and Fermenting in Deep Time (McGovern's Uncorking the Past: The Quest for Wine, Beer, and Other Alcoholic Beverages) David John Goldstein Current Anthropology October 2010, Vol. 51, No. 5: 720-722.

Citation | Full Text | PDF Version (92 KB)

Books Received

Current Anthropology October 2010, Vol. 51, No. 5: 722-724.

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**ANALYSING POTTERY. PROCESSING -
CLASSIFICATION - PUBLICATION. STUDIA
ARCHAEOLOGICA ET MEDIEVALIA X.
BRATISLAVA, 2010, B. HOREJS, R. JUNG
AND PETER PAVÚK (EDS.)**

DinA4 size, soft cover, 325 pages, ISBN: 978-80-223-2748-0, price 45,00 ?

The volume looks back at two scientific meetings, both discussing the basic question of how to deal with large amounts of pottery from long-term excavations. Due to the important role of methodology, we have actively sought out contributions from a wider range of geographic regions and chronological periods. Thus, this volume includes studies from Greece, Egypt, Anatolia, Italy, and Central Europe, covering periods from Bronze Age to Early Medieval. A table of contents is attached below. For more information please see

http://archeologia.fphil.uniba.sk/attachments/Horejs_Jung_Pavuk_press.pdf

Since this subject was bit too narrow for our publishing house, the volume will be made available by alternate means, either via book exchange (contact me) or online at <http://www.vml-verlag.de/e/detail.php?ISBN=978-80-223-2748-0>

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EΙΔΗΣΕΙΣ - NEWS RELEASE

ARCHAEOLOGISTS ON CRETE FIND SKELETON COVERED WITH GOLD FOIL IN 2,700-YEAR-OLD GRAVE, BY NICHOLAS PAPHITIS

Greek archaeologists have found an ancient skeleton covered with gold foil in a grave on the island of Crete, officials said Tuesday.

Excavator Nicholas Stampolidis said his team discovered more than 3,000 pieces of gold foil in the 7th-century B.C. twin grave near the ancient town of Eleutherna.

Cemeteries there have produced a wealth of outstanding artifacts in recent years.

The tiny gold ornaments, from 1 to 4 centimetres (0.4 to 1.5 inches) long, had been sewn onto a lavish robe or shroud that initially wrapped the body of a woman and has almost completely rotted away but for a few off-white threads.

"The whole length of the (grave) was covered with small pieces of gold foil — square, circular and lozenge-shaped," Stampolidis told The Associated Press. "We were literally digging up gold interspersed with earth, not earth with some gold in it."

The woman, who presumably had a high social or religious status, was buried with a second skeleton in a large jar sealed with a stone slab weighing more than half a ton. It was hidden behind a false wall, to confuse grave robbers.

Experts are trying to determine the other skeleton's sex.

The grave also contained a copper bowl; pottery; perfume bottles imported from Egypt or Syria and Palestine; hundreds of amber, rock crystal and faience beads; as well as a gold pendant in the form of a bee goddess that probably was part of a rock crystal and gold necklace.

"If you look at it one way up, it's shaped like a lily," said Stampolidis, a professor of archaeology at the University of Crete who has worked at Eleutherna for the 25 years. "Turned upside down, you see a female figure holding her breasts, whose lower body is shaped as a bee with wings. The workmanship is exquisite."

The ruins of Eleutherna stand on the northern foothills of Mount Ida — the mythical birthplace of Zeus, chief of the ancient Greek gods. Past excavations have discovered a citadel, homes and an important cemetery with lavish female burials.

The town flourished from the 9th century B.C. — the dark ages of Greek archaeology that followed the fall of Crete's great Minoan palatial culture — and endured until the Middle Ages.

You can read it here:

[http://www.google.com/hostednews/canadianpress/article/ALeqM5gX5SVZzbhOKVnP
Ca5pNoCvFIePew?docId=4661350](http://www.google.com/hostednews/canadianpress/article/ALeqM5gX5SVZzbhOKVnP
Ca5pNoCvFIePew?docId=4661350)

Some photographs are provided on this blog:

[http://archaeologynewsnetwork.blogspot.com/2010/09/archaeologists-on-crete-find-
skeleton.html](http://archaeologynewsnetwork.blogspot.com/2010/09/archaeologists-on-crete-find-
skeleton.html)

The pendant of the bee goddess has certainly received some influences from afar (Egypt, Syria-Palestine).

Pictures of the pendant:

[http://lh4.ggpht.com/_BfC6j03vee0/TKL0YcPYCUI/AAAAAAAAAFcU/z_QL-
wydOxg/26f4-thumb-large_thumb%5B9%5D.jpg?imgmax=800](http://lh4.ggpht.com/_BfC6j03vee0/TKL0YcPYCUI/AAAAAAAAAFcU/z_QL-
wydOxg/26f4-thumb-large_thumb%5B9%5D.jpg?imgmax=800)

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5-thumb-large_thumb%5B9%5D.jpg?imgmax=800](http://lh5.ggpht.com/_BfC6j03vee0/TKL0ZWlxD_I/AAAAAAAAAFc/lin8L_m8Zjc/26f
5-thumb-large_thumb%5B9%5D.jpg?imgmax=800)

EGYPTIAN DESERT EXPEDITION **CONFIRMS SPECTACULAR** **METEORITE IMPACT**

A 2008 Google Earth search led to the discovery of Kamil crater, one of the best-preserved meteorite impact sites ever found. Earlier this year, a gritty, sand-blown expedition reached the site deep in the Egyptian desert to collect iron debris and determine the crater's age and origins.

One day within the last several thousand years, a rare metallic meteorite travelling over 12 000 km/hour smashed into Earth's surface near what is today the trackless border region between Egypt, Sudan and Libya. The impact of the 1.3 m, 10-tonne chunk of iron generated a fireball and plume that would have been visible over 1000 km away, and drilled a hole 16 m deep and 45 m wide into the rocky terrain.

Since then, the crater had sat undisturbed by Earth's geologic and climatic processes, which usually render all but the very largest terrestrial impact craters invisible. It was also, as far as is recorded, unseen by humans.

Searching for craters in Google Earth

But that changed in 2008, when the crater was spotted during a Google Earth study conducted by mineralogist Vincenzo De Michele, then with the Civico Museo di Storia Naturale in Milan, Italy. He was searching for natural features, when by chance he saw the rounded impact crater on his PC screen.

De Michele contacted an astrophysicist, Dr Mario Di Martino, at the INAF (National Institute for Astrophysics) observatory in Turin, who, together with Dr Luigi Folco, of Siena's Museo Nazionale dell'Antartide, organised an expedition to the site in February this year.

It took over a year to plan and obtain permissions for the journey; in the meantime, and in collaboration with Telespazio, e-Geos and the Italian space agency ASI, the Kamil region was analysed using satellite data and in particular high-resolution radar images provided by the ASI-operated COSMO-SkyMed satellite constellation.

Expedition to the Egyptian desert

The two-week, 40-person expedition included Egyptian and Italian scientists, as well as numerous local support workers, and was conducted as part of the 2009 Italian-Egyptian Year of Science and Technology (EISY). It was also supported with funding by ESA's Space Situational Awareness (SSA) programme.

Three-day drive to reach Kamil crater

After a tiring, GPS-guided, three-day drive across the desert in 40°C heat, the team reached the crater.

They collected over 1000 kg of metallic meteorite fragments, including one 83-kg chunk thought to have split from the main meteorite body shortly before impact (it was found 200 m away from the crater). The joint team also conducted a thorough geological and topographical survey, using ground-penetrating radar to create a 3D digital terrain model. Geomagnetic and seismic surveys were also carried out.

Ground truth for small-scale impact craters

The researchers were stunned to find that Kamil crater, named after a nearby rocky outcrop, remains pristine, and must have been created relatively recently.

"This demonstrates that metallic meteorites having a mass on the order of 10 tonnes do not break up in the atmosphere, and instead explode when they reach the ground and produce a crater," says ESA's Dr Detlef Koschny, Head of Near Earth Objects segment for the SSA programme.

Kamil crater has become the target of intense interest for geologists, astrophysicists and even archaeologists.

"We are still determining the geochronology of the impact site, but the crater is certainly less than ten thousand years old -- and potentially less than a few thousand. The impact may even have been observed by humans, and archaeological investigations at nearby ancient settlements may help fix the date," says Dr Folco.

The data gathered during the expedition will be very useful to ESA's SSA activities for risk assessment of small asteroids with orbits that approach Earth, a category to which the Kamil impactor originally belonged.

Please visit the site:

<http://www.sciencedaily.com/releases/2010/09/100923081902.htm>

BULGARIAN ARCHAEOLOGISTS FIND **2300-YEAR-OLD COFFIN**

Bulgarian archaeologists have uncovered two ancient graves during excavations in the Necropolis of Mesambria in the Black Sea town of Nessebar.

The team led by Aneliya Bozhkova and Petya Kiyashkina, co-head of the archaeology team and head of the museum "Ancient Nessebar", opened a stone tomb found deep into the ground.

In one of the two ancient graves, the excavators discovered a wooden coffin dating back to the 3rd century BC.

The two graves will be researched carefully over the coming days. They are not the only exciting discovery at the ancient Greek colony Black Sea colony of Mesambria made in the past weeks.

Please visit the site: http://www.novinite.com/view_news.php?id=120467

PYRAMID CONSTRUCTION - NORWEGIAN RESEARCHER UNLOCKS CONSTRUCTION SECRETS

Scientists from around the world have tried to understand how the Egyptians erected their giant pyramids. Now, an architect and researcher at the Norwegian University of Science and Technology (NTNU) says he has the answer to this ancient, unsolved puzzle.

Researchers have been so preoccupied by the weight of the stones that they tend to overlook two major problems: How did the Egyptians know exactly where to put the enormously heavy building blocks? And how was the master architect able to communicate detailed, highly precise plans to a workforce of 10,000 illiterate men?

A 7-million-ton structure

These were among the questions that confronted Ole J. Bryn, an architect and associate professor in NTNU's Faculty of Architecture and Fine Art when he began examining Khufu's Great Pyramid in Giza.

Khufu's pyramid, better known as the Pyramid of Cheops, consists of 2.3 million limestone blocks weighing roughly 7 million tons. At 146.6 meters high, it held the record as the tallest structure ever built for nearly 4000 years.

What Bryn discovered was quite simple. He believes that the Egyptians invented the modern building grid, by separating the structure's measuring system from the physical building itself, thus introducing tolerance, as it is called in today's engineering and architectural professions.

The apex point a key

Bryn has studied the plans from the thirty oldest Egyptian pyramids, and discovered a precision system that made it possible for the Egyptians to reach the pyramid's last and highest point, the apex point, with an impressive degree of accuracy. By exploring and making a plan of the pyramid it is possible to prepare modern project documentation of not just one, but all pyramids from any given period.

As long as the architect knows the main dimensions of a pyramid, he can project the building as he would have done it with a modern building, but with building methods and measurements known from the ancient Egypt, Bryn says.

In a scientific article published May 2010 in the Nordic Journal of Architectural Research, Bryn discusses aspects that can explain the construction of a multitude of the Egyptian pyramids by taking the building grid, and not the physical building itself, as the starting point for the analysis.

A new map

If the principles behind Bryn's drawings are correct, then archaeologists will have a new "map" that demonstrates that the pyramids are not a "bunch of heavy rocks with unknown structures" but, rather, incredibly precise structures.

Ole J. Bryn's findings will be presented and explained at the exhibition The Apex Point in Trondheim from September 13th to October 1st. The exhibition is an official part of the program to celebrate the centenary (1910-2010) of the Norwegian University of Science and Technology.

About the author:

Ole J. Bryn is a former practising architect, and currently holds a position as Associate Professor at the Faculty of Architecture and Fine Art, the Norwegian University of Science and Technology (NTNU) in Trondheim, Norway.

The development of Bryn's theories on the building grids used in Egyptian pyramids has benefited from cooperation with Dr. Michel Barsoum, Grosvenor and Distinguished Professor at the Department of Materials Science and Engineering, Drexel University, Philadelphia.

Story Source:

The above story is reprinted (with editorial adaptations by ScienceDaily staff) from materials provided by The Norwegian University of Science and Technology (NTNU) <http://www.ntnu.no/>

Please visit the site:

<http://www.sciencedaily.com/releases/2010/09/100924084615.htm>

8,000-YEAR-OLD SEAL UNEARTHED IN WESTERN TURKEY

Archaeologists have unearthed a seal believed to be 8,000 years old during excavations in the Yeşilova Tumulus, one of the oldest settlements in western Turkey.

Associate Professor Zafer Derin, who has been leading the excavations from Ege University's Department of Archaeology, said they found a historical artifact that proved that settlement in the western province of Izmir began some 8,500 years ago.

"The seal is dated back to 6,200 B.C. It is evident that the seal belonged to an administrator. This bull-shaped seal is one of the oldest seals ever unearthed in Anatolia. We've unearthed many important findings during the excavations at this site since 2005. Some 700 pieces have been sent to museums for display. We give 150 pieces every year. This region is very important in terms of both tourism and science," he said.

Bornova Mayor Kamil Okyar Sındır recalled that the area was a third-degree archaeological-protected site. "We have organized an architectural project competition for this area and a jury is now evaluating projects. When the project is chosen, we will establish an exhibition and education center. This structure will be a model for the world. Education workshops and seminars will be given in the center and people will learn about the history of İzmir and Bornova."

Please visit the site: <http://www.hurriytdailynews.com/n.php?n=seal-of-8000-years-unearthed-in--2010-09-20> [Go there for image]

TWO TUMULUSES FOUND IN TURKEY'S ANCIENT DASKYLEION

Archaeologists have discovered two tumuluses during the excavations in the ancient city of Daskyleion in the northwestern province of Balikesir.

Associate Professor Kaan Iren from the Mugla University who heads the excavation team, told reporters, "we found a gate in one of the tumuluses which leads to a grave chamber. There were remains of two skeletons in the grave. We believe that they belonged to noble people or to members of the royal family."

"We also unearthed remains of a wooden desk in the tumulus. A glass bracelet, a silver earring, a perfume bottle and more than 30 coins were brought to daylight during the excavations," he said.

Iren said that they would carry out DNA analysis on the skeletons and flesh the skulls to identify the bodies.

Located some 30 kilometers away from Balikesir's Bandirma town, the ancient city was named after the King of Lydia "Daskylos". The king was sent to exile from Sardis because of dynasty conflicts and lived here for years.

During the excavations in 1954-1960, Turkish archeologist Prof. Dr. Ekrem Akurgal exposed a big Persian Province in the location.

Phrygians, Lydians, and Persians lived in the area including Alexander the Great's Hellenistic period and Byzantine period. The first civilization was Phrygia which covered all 7th century B.C. Antique sources specify a city of Phrygia called "Afneon".

They lived here from the end of 8th century B.C. until the beginning of the 7th century B.C.

The Lydian civilization in Daskyleion took place between 7th century and mid 6th century. Later, Lydians and Persians lived in the region under Persian reign from 6th century and 4th century B.C. which was followed by the Macedonian Alexander the Great's reign. Then, from 321 B.C. to Roman era, "Hellenistic" period took place.

Please visit the site: http://www.worldbulletin.net/news_detail.php?id=64200

GREEK ARCHAEOLOGISTS UNCOVER ANCIENT TOMBS

Greek archaeologists on Thursday announced the discovery of 37 ancient tombs dating back to the iron age in a cemetery near the ancient Macedonian capital of Pellas.

Discoveries at the site included a bronze helmet with a gold mouthplate, with weapons and jewellery, in the tomb of a warrior from the 6th century BC.

A total of 37 new tombs were discovered during excavation work this year, adding to more than 1,000 tombs since work began in 2000, researchers said.

The tombs date from 650-280 BC, covering the iron age up to the Hellenistic period (323-146 BC).

The tombs contain iron swords, spears and daggers, plus vases, pottery and jewellery made of gold, silver and iron.

According to the researchers, the excavated area only represents five percent of the total site.

Please visit the site:

http://news.yahoo.com/s/afp/20100916/sc_afp/greecearchaology_20100916190042

[Go there for pict]

BABIL ARCHAEOLOGIST POINTS TO OLDEST UNIVERSITY IN RECORDED HISTORY, REPORTED BY BASHAR ALYAWI

A leading archaeologist in Babil province has identified the cuneiform texts found in the Tall Harmal excavations to the south of Baghdad last century as belonging to the oldest scientific seat of learning in history.

A joint archaeological project between Baghdad University and the German Archaeological Institute took place in the spring of 1997 and in the autumn of 1998 at the Old Babylonian site of Tall Harmal.

Among many important findings were several Old Babylonian archives containing about 3000 documents.

Dr. Ahmad Majid explained on Thursday that these documents which date back to the second millennium BC came from an Old Babylonian institute of higher education called the “Harmal University”.

"All these texts are important as they cover scientific inventions and various other important subjects such as economics, mathematics, medicine and astronomy."

"This late Sheikh Taha Baqir al-mark was the first to arrive at the archaeological site and to say that Harmal University is the oldest scientific university in history."

"The name of the university was not known then as it is now. It was given the title “Dibba Omic” which, in the ancient Babylonian language, means the Institute or the House of Wisdom”.

Dr. Majid said that graduates from the university would be given a diploma and the honorary title “specialized writer”.

Indicating the high level of scientific development in the heyday of Tall Harmal, Majid pointed out, “[Evidence of] the right triangle was found in Tal Harmal, thousand of years before the existence of the Pythagoras theory in mathematics...a cuneiform text was discovered, which contains a solution to the right-angled triangle equation.”

According to Majid, this indicates that this important scientific breakthrough was made through the university’s research, alongside other developments in mathematics, astronomy, economics and medicine.

The archaeologist Ahmed Majid currently chairs the Department of Archaeology at the Faculty of Arts in Babil University.

Reported by Bashar Alyawi

Rn/Ka/AKnews

<http://www.aknews.com/images/cms-image-000007131.jpg>

Please visit the site: <http://www.aknews.com/en/aknews/1/180358/>

2000-YEAR-OLD PILLS FOUND IN GREEK SHIPWRECK - HEALTH

In 130 BC, a ship fashioned from the wood of walnut trees and bulging with medicines and Syrian glassware sank off the coast of Tuscany, Italy. Archaeologists found its precious load 20 years ago and now, for the first time, archaeobotanists have been able to examine and analyse pills that were prepared by the physicians of ancient Greece.

DNA analyses show that each millennia-old tablet is a mixture of more than 10 different plant extracts, from hibiscus to celery.

"For the first time, we have physical evidence of what we have in writing from the ancient Greek physicians Dioscorides and Galen," says Alain Touwaide of the Smithsonian Institution's National Museum of Natural History in Washington DC.

The box of pills was discovered on the wreck in 1989, with much of the medicine still completely dry, according to Robert Fleischer of the Smithsonian's National Zoological Park, also in Washington DC.

Herbal remedies

Fleischer analysed DNA fragments in two of the pills and compared the sequences to the GenBank genetic database maintained by the US National Institutes of Health. He was able to identify carrot, radish, celery, wild onion, oak, cabbage, alfalfa and yarrow. He also found hibiscus extract, probably imported from east Asia or the lands of present-day India or Ethiopia.

"Most of these plants are known to have been used by the ancients to treat sick people," says Fleischer. Yarrow staunches the flow of blood from wounds, and Pedanius Dioscorides, a physician and pharmacologist in Rome in the first century AD, described the carrot as a panacea for a number of problems. "They say that reptiles do not harm people who have taken it in advance; it also aids conception," he wrote around 60 AD.

The concoctions have also thrown archaeobotanists a few curve balls.

Preliminary analyses of the ancient pills suggest they contain sunflower, a plant that is not thought to have existed in the Old World before Europeans discovered the Americas in the 1400s. If the finding is confirmed, botanists may need to revise the traditional history of the plant and its diffusion, says Touwaide – but it's impossible for now to be sure that the sunflower in the pills isn't simply from recent contamination.

Quacks no more

Drugs described by Dioscorides and another Greek physician known as Galen of Pergamon have often been dismissed as ineffectual quackery.

"Scholars and scientists have often dismissed the literature on such medicines, and expressed doubt about their possible efficacy, which they attributed only to the presence of opium," says Touwaide. He hopes to resolve this debate by exploring whether the plant extracts in the pills are now known to treat illnesses effectively.

He also hopes to discover therian – a medicine described by Galen in the second century AD that contains more than 80 different plant extracts – and document the exact measurements ancient doctors used to manufacture the pills. "Who knows, these ancient medicines could open new paths for pharmacological research," says Touwaide.

The team presented their findings yesterday at the Fourth International Symposium on Biomolecular Archaeology in Copenhagen, Denmark.

Please visit the site: <http://www.newscientist.com/article/dn19436-2000yearold-pills-found-in-greek-shipwreck.html>

ANCIENT NUBIANS SELF-MEDICATED THROUGH BEER ANTIBIOTIC TETRACYCLINE FERMENTED WITH ALCOHOL, BY WYNNE PARRY

About 1,500 years before the modern world discovered the antibiotic tetracycline, North Africans were fermenting and consuming it, probably for most of their lives, according to a chemical analysis of the bones of people who lived along the Nile.

The ancient human remains were recovered near the Sudanese-Egyptian border, where species of tetracycline-producing bacteria inhabit the soil. This region, in Northeastern Africa, was once known as Nubia. Much of it was flooded when the Nile River was dammed.

The practice of brewing beer was widespread in the region, including in Ancient Egypt to the north, and the researchers think the Nubians fermented *Streptomyces* or related species with their grain to brew a thick, sour beer spiked with tetracycline. And everyone, from about 2 years old and up, consumed it. [Gallery: Amazing Egyptian Discoveries]

The researchers suspect the Nubians added the bacteria knowing its benefits, though they likely didn't realize the compounds were antibiotics.

"It wasn't a one-time event, because it was all throughout their bones," said Mark Nelson, senior director of chemistry at Paratek Pharmaceuticals, Inc., and an expert in tetracyclines. He performed the chemical analysis on bones from several individuals, which revealed significant amounts of tetracycline.

Ancient medicine

This finding has been decades in the making. The first evidence emerged in 1975, when George Armelagos, now a professor of anthropology at Emory University, was studying the bones and found that under ultraviolet light, a fluorescent yellow-green band appeared on the bones. The phenomenon was known to be evidence of exposure to tetracycline among modern people, but at first Armelagos dismissed it.

A few years later, a graduate student of Armelagos saw the same fluorescent band on bones from the ancient Nubians, and pointed out that tetracycline is a naturally-derived drug. That's when Armelagos realized he had seen what could be evidence of ancient antibiotic use.

"My heart stopped," said Armelagos. "It's like if you were unwrapping a mummy and you saw Ray-Ban sunglasses."

The modern world discovered tetracycline in 1948, about 20 years after the first antibiotic, penicillin, was isolated, according to Nelson, an editor of "Tetracyclines in Biology, Chemistry and Medicine" (Birkhäuser Basel, 2002).

After years of searching soils for micro-organisms that produced compounds toxic to disease-causing bacteria but safe for humans, a soils microbiologist named William Albrecht found a bronze-colored colony of bacteria in a Missouri hay field. Dubbed *Streptomyces aureofaciens*, it yielded the first tetracycline, called aureomycin, which, to researchers' delight, inhibited the growth of a wide range of bacteria. Aureomycin became the first broad-spectrum antibiotic, according to Nelson.

But Armelagos' initial report, in 1981, that these ancient Nubians may have intentionally used tetracycline, sparked controversy, he said. Critics claimed the yellow-green label originated after the people died, as the result of decay.

Armelagos said attempts to extract the tetracycline from the remains were unsuccessful, until Nelson offered to help out. Nelson, a medicinal chemist, used a colorless, poisonous, and highly corrosive acid – hydrogen fluoride – to dissolve the bones and essentially extract the tetracycline to prove it was the source of the label.

"This is the first real, definitive demonstration that this is tetracycline," Armelagos said.

Not in your liquor store

There was also the question of whether these people intended to consume the tetracycline, or if the label came from moldy grain eaten out of necessity.

"When we first found this, I just assumed that they were consuming this as a famine food," Armelagos said. But he has found that 90 percent of this group of Nubians had bones labeled with tetracycline, and that the evidence for the antibiotic was so extensive that the exposure was unlikely to have been accidental.

The ancient Egyptian practice of brewing beer, documented through archeology and ancient art, is believed to have been a long-standing practice in the region at the time. Brewing beer using fermentation mixtures containing *Streptomyces*, which excrete tetracycline, appeared to be the only way these people could have produced the quantity of the antibiotic necessary to explain the fluorescent signal, according to Armelagos. So they likely intentionally added the bacteria to their fermenting brews.

Evidence of tetracycline, though in smaller amounts, has also been found in Egyptians, Jordanians and Christians to the south, he said.

In addition to producing an alcoholic buzz, this ancient beer spiked with tetracycline would have cleared up bacterial infections and their symptoms, like diarrhea, as well as killed off harmful bacteria in the brew. Although it's not yet clear how much tetracycline the people consumed regularly – Armelagos thinks it's more than the dosage required to prevent acne – it appeared to have some side effects, including reducing bone loss among older women and increasing iron-deficiency.

The brew would not be appealing to modern beer drinkers.

"We talk about this as a beer; it's not a Heineken or Bud Light," he said. Armelagos had his graduate student brew it once, describing the result as a sour porridge.

"They said it's not bad. That's, I think, the best you can say about it," Armelagos said.

Their work was published in the September issue of the American Journal of Physical Anthropology.

Please visit the site: <http://www.livescience.com/health/ancient-nubians-fermented-antibiotics-with-alcohol-100909.html>

EGYPTIAN PAPYRUS FOUND IN ANCIENT IRISH BOG

Irish scientists have found fragments of Egyptian papyrus in the leather cover of an ancient book of psalms that was unearthed from a peat bog, Ireland's National Museum said on Monday. The papyrus in the lining of the Egyptian-style leather cover of the 1,200-year-old manuscript, "potentially represents the first tangible connection between early Irish Christianity and the Middle Eastern Coptic Church", the Museum said.

"It is a finding that asks many questions and has confounded some of the accepted theories about the history of early Christianity in Ireland." Ragnall O Floinn, head of collections at the Museum, said the manuscript, now known as the "Faddan More Psalter", was one of the top ten archaeological discoveries in Ireland.

It was uncovered four years ago by a man using a mechanical digger to harvest peat near Birr in County Tipperary, but analysis has only just been completed. O Floinn told AFP the illuminated vellum manuscript encased in the leather binding dated from the eighth century but it was not known when or why it ended up in the bog where it was preserved by the chemicals in the peat.

"It appears the manuscript's leather binding came from Egypt. The question is whether the papyrus came with the cover or if it was added. "It is possible that the imperfections in the hide may allow us to confirm the leather is Egyptian. "We are trying to track down if there somebody who can tell us if this is possible. That is the next step."

O Floinn said the psalter is about the size of a tabloid newspaper and about 15 percent of the pages of the psalms, which are written in Latin, had survived. The experts believe the manuscript of the psalms was produced in an Irish monastery and it was later put in the leather cover.

"The cover could have had several lives before it ended up basically as a folder for the manuscript in the bog," O Floinn said. "It could have travelled from a library somewhere in Egypt to the Holy Land or to Constantinople or Rome and then to Ireland."

The National Museum in Dublin plans to put the psalter on public display for the first time next year.

Please visit the site: <http://www.physorg.com/news202991457.html>

NAUTILUS SETS SAIL FROM HAIFA PORT FOR SEA-FLOOR RESEARCH

* Nautilus, Robert Ballard's (who discovered the Titanic) modern research ship, has left Haifa Port on a voyage to study the sea floor off the coast of Israel. Leading the expedition are scientists from the Leon H. Charney School of Marine Sciences at the University of Haifa. *

A unique and first of its kind project has set sail from the coast of Haifa. The Nautilus – a research ship owned by oceanographer Robert Ballard, who discovered the wreck of the RMS Titanic – has set out on a voyage to research the sea floor off the coast of Israel, in those areas in which Israel has rights (which reach beyond the territorial waters). Heading this expedition are marine researchers from the Leon H. Charney School of Marine Sciences at the University of Haifa.

Nautilus is a research ship fully equipped with state-of-the-art technologies for sea-floor research, and includes diving robots, elaborate control rooms and more. Taking Ballard's place as captain of the ship on this voyage is Israel Prize winner and Director of the Leon H. Charney School of Marine Sciences, Prof. Zvi Ben-Avraham. He will be heading the ship over the coming two weeks, during which time the team will study the Mediterranean floor. Prof. Ben-Avraham, along with the School's scientists, mapped out each and every step of this expedition.

"This unique collaboration gives expression to the central emphasis that the University of Haifa has decided to place on marine research, a resource that promises many discoveries in a variety of areas: economy, medicine, energy, biology, and more. The future is in the sea and this voyage is a first step towards understanding the mystery of a region that is so close to us yet still so far and unknown," said Prof. Aaron Ben-Ze'ev, President of the University of Haifa.

For more details contact Rachel Feldman • Tel: +972-4-8288722 Communications and Media Relations University of Haifa press@univ.haifa.ac.il

Please visit the site: <http://newmedia-eng.haifa.ac.il/?p=3545> [Go there for pix]

HODDER CLEANS HOUSE AT FAMED ÇATALHÖYÜK DIG, BY MICHAEL BALTER

Researchers finishing the dig season at Turkey’s Çatalhöyük—a 9500-year-old site famed for its art and symbolism at the dawn of agriculture—got a big shock last week. Stanford University archaeologist Ian Hodder, who has directed excavations since 1993, told the heads of the dig’s specialty labs that they would be asked to step down beginning in 2012, when publication of current work will be completed. It’s “the night of the long knives,” says one long-time team member, who asked not to be identified.

Such a mass dismissal is highly unusual at long-running archaeological excavations. But in a 29 August e-mail to the team explaining his decision, Hodder stressed that he was not dissatisfied with anyone’s work. Rather, the e-mail said, the project “needs new energy—that is, new questions, new theoretical perspectives, ... new methods.”

Hodder, who began digging at Çatalhöyük to test his new ideas about how archaeology should be done, told ScienceInsider that “it was time for a shake-up” as the dig enters the last decade of his 25-year plan for excavations. “It has been a really remarkable team,” Hodder says.

But, “I have felt over recent years that the project was getting comfortable with itself and so not challenging each other or me or the assumptions that we were all taking for granted.”

Many team members, some of whom have been working with the project since the mid-1990s, are stunned and confused. So far, however, they have declined to comment publicly as they must work with Hodder for at least another year. The decision affects the leaders of most of the big labs at the privately funded dig, such as ceramics, stone tools, archaeobotany, animal remains, and human remains. Field excavators, who actually dig up the artifacts for the specialists to study, are not affected.

Hodder says he plans to recruit new lab leaders for the next phase of excavations, planned for 2012–18, although he has not yet spelled out what new questions he intends to pursue.

Please visit the site: <http://news.sciencemag.org/scienceinsider/2010/09/hodder-cleans-house-at-famed-ata.html>

ANCIENT NUBIANS MADE ANTIBIOTIC BEER

Chemical analysis of the bones of ancient Sudanese Nubians who lived nearly 2000 years ago shows they were ingesting the antibiotic tetracycline on a regular basis, likely from a special brew of beer. The find is the strongest yet that antibiotics were previously discovered by humans before Alexander Fleming discovered penicillin in 1928.

“I’m going to ask Alexander Fleming to hand back his Nobel Prize,” joked chemist Mark Nelson, who works on developing new tetracyclines at Paratek Pharmaceuticals and is lead author of the paper published June in the American Journal of Physical Anthropology.

Nelson found large amounts of tetracycline in the bones tested from the ancient population, which lived in the Nubian kingdom (present day Sudan) between 250 A.D. and 550 A.D. and left no written record.

“The bones of these ancient people were saturated with tetracycline, showing that they had been taking it for a long time,” Nelson said in a press release August 30. “I’m convinced that they had the science of fermentation under control and were purposely producing the drug.”

“This discovery will provide a whole new framework for understanding the relationship between microbes and antibiotics,” said anthropologist Dennis Van Gerven of University of Colorado at Boulder. “There might have been other populations that were also doing the same thing, anywhere that there were these microbes. This is going to drive other scientists to start this search, and that is incredibly important.”

Scientists have suspected this population was ingesting tetracycline since they first noticed a florescent yellow-green appearance of the bones under ultraviolet light, indicative of tetracycline.

“When we reported that in 1981, it was met with a lot of skepticism,” said anthropologist George Armelagos of Emory University, who made the original discovery and is co-author of this new study. “If you were unwrapping an Egyptian mummy and suddenly it had Ray-Ban sunglasses on it, that’s what it was like with us.”

Tetracycline latches on to calcium and gets deposited in bones, which is how it can be detected in fossils. The ultraviolet light technique said little about how much tetracycline there was in the bone, and it was hard to convince others it wasn’t simply a produced of microbial contamination of the bones, or a one-time beer event.

Nelson was able to solve the problem by dissolving the bones in hydrogen flouride, the nastiest acid on the planet, he said. He was able to clearly identify the amount and identity of the tetracycline in the bones. It was in all the bones, including those of a four-year-old child.

Armstrong, who specializes in reconstructing ancient diets, proposed that the Nubians made the tetracycline in their beer. There is evidence they knew how to make it, he says. Tetracycline is produced by a soil bacteria called streptomyces, which is how it was discovered by modern society in the 1940s. Streptomyces thrives in warm, arid regions such as that of ancient Nubia, and likely contaminated a batch of beer.

They must have known how to propagate the beer because they were doing it to make wine, Nelson says. There was also so much of it in their bones that it is near impossible that the tetracycline-laced beer was a fluke event.

To make sure that making the antibiotic beer was possible, Armstrong had his graduate students give it a try.

“What they were making wasn’t like a Bud Light but a cereal gruel,” Armstrong said. “My students said that it was ‘not bad,’ but it is like a sour porridge substance. The ancient people would have drained the liquid off and also eaten the gruel.”

The Nubians likely noticed the antibiotics cured them of bacterial infection. It may have had negative effects as well: If taken in too large quantities the antibiotic can also cause iron deficiency because it latches on to the iron in the body.

Streptomyces produces a golden-colored bacterial colony that would have floated on top of the beer and likely encouraged its propagation. Gold was revered by the ancient cultures.

When and why the antibiotic beer secret was lost is a mystery. It is not the first technology to disappear with the disappearance of cultures. Armstrong is continuing to look for the tetracycline in the bones of different cultures. He says he has already found preliminary evidence it is in bones of people who date to as late as 1300 to 1400 A.D.

Armstrong hopes this find might also help explain why animals have been found with antibiotic resistance in Northern Africa where there is no previous evidence of antibiotics being used.

About a quarter of the grain in Africa is still made into beer, Armstrong says.

Images: 1) Ancient Egyptian figures show workers grinding, baking and fermenting grain to make beer and bread./Andreas Praefcke. 2) Green florescence in Nubian skeletons indicating tetracycline-labeled bone./Armstrong.

See Also:

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String theory has finally made a prediction that can be tested with experiments — but in a completely unexpected realm of physics.

The theory has long been touted as the best hope for a unified “theory of everything,” bringing together the physics of the vanishingly small and the mindbendingly large. But it has also been criticized and even ridiculed for failing to make any predictions that

could be checked experimentally. It's not just that we don't have big enough particle accelerators or powerful enough computers; string theory's most vocal critics charge that no experiment could even be imagined that would prove it right or wrong, making the whole theory effectively useless.

Now, physicists at Imperial College London and Stanford University have found a way to make string theory useful, not for a theory of everything, but for quantum entanglement.

"We can use string theory to solve problems in a different area of physics," said theoretical physicist Michael Duff of Imperial College London. "In that context it's actually useful: We can make statements which you could in principle check by experiment." Duff and his colleagues describe their findings in a paper in *Physical Review Letters* September 2.

String theory suggests that matter can be broken down beyond electrons and quarks into tiny loops of vibrating strings. Those strings move and vibrate at different frequencies, giving particles distinctive properties like mass and charge. This strange idea could unite all the fundamental forces, explain the origins of fundamental particles and connect Einstein's general relativity to quantum mechanics. But to do so, the theory requires six extra dimensions of space and time curled up inside the four that we're used to.

To understand how these extra dimensions could hide from view, imagine a tightrope walker on a wire between two high buildings. To the tightrope walker, the wire is a one-dimensional line. But to a colony of ants crawling around the wire, the rope has a second dimension: its thickness. In the same way that the tightrope walker sees one dimension where the ants see two, we could see just three dimensions of space while strings see nine or ten.

Unfortunately, there's no way to know if this picture is real. But although string theorists can't test the big idea, they can use this vision of the world to describe natural phenomena like black holes.

Four years ago, while listening to a talk at a conference in Tasmania, Duff realized the mathematical description string theorists use for black holes was identical to the mathematical description of certain quantum systems, called quantum bits or qubits.

Qubits form the backbone of quantum information theory, which could lead to things like ultrafast computers and absolutely secure communication. Two or more qubits can sometimes be intimately connected in a quantum state called entanglement. When two qubits are entangled, changing one's state influences the state of the other, even when they're physically far apart.

"As I listened to his talk, I realized the kind of math he was using to describe qubit entanglement was very similar to mathematics I had been using some years before to describe black holes in string theory," Duff said. When he looked into it, the mathematical formulation of three entangled qubits turned out to be exactly the same as the description of a certain class of black holes.

In the new study, Duff and his colleagues push the similarity one step further. They used the mathematics of stringy black holes to compute a new way to describe four entangled qubits, an open question in quantum information theory.

“We made statements that weren’t previously known using string theory techniques,” Duff said. “Whether the result is some fundamental principle or some quirk of mathematics, we don’t know, but it is useful for making statements about quantum entanglement.”

What’s more, these statements are precise and experimentally provable, unlike previous suggestions for ways to test string theory, Duff says.

“So in a way, there’s bad news and good news in our paper,” he said.

“The bad news is, we’re not describing the theory of everything. The good news is, we’re making a very exact statement which is either right or wrong. There’s no in between.”

Duff emphasized that this is only a test of string theory as it relates to quantum entanglement, not as a description of the fundamental physics of the universe. The battle over string theory as a theory of everything rages on.

“Already I can imagine enemies sharpening their knives,” Duff said.

And they are. A chorus of supporters and critics, including Nobel laureate and string theory skeptic Sheldon Glashow and string theorists John Schwarz of Caltech, James Gates of the University of Maryland, and Juan Maldacena and Edward Witten of the Institute for Advanced Study in Princeton agree that Duff’s argument is “not a way to test string theory” and has nothing to do with a theory of everything.

Mathematician Peter Woit of Columbia University, author of the blog Not Even Wrong, thinks even claiming that the new paper is a test of quantum entanglement is going too far.

“Honestly, I think this is completely outrageous,” he said. Even if the math is the same, he says, testing the quantum entangled system would only tell you how well you understand the math.

“The fact that the same mathematical structure appears in a quantum mechanical problem and some model of black holes isn’t even slightly surprising,” he said. “It doesn’t mean that one is a test of the other.”

Witten takes a more optimistic view of the theory’s chances, pointing out that the mathematics of string theory have turned out to be coincidentally useful in other areas of physics before.

“In general, this kind of work shows that string theory is useful, and in fact by now it has been useful in many different ways,” Witten said in an email to Wired.com.

“One might surmise that a physics theory that has proved to be useful in so many different areas of physics and math is probably on the right track,” he added. “But that is another question.”

Please visit the site: http://www.wired.com/wiredscience/2010/09/antibiotic-beer/?utm_source=feedburner&utm_medium=feed&utm_campaign=Feed%3A+wiredscience+%28Blog+-+Wired+Science%29

PALAEOLITHIC FUNERAL FEAST **UNEARTHED IN NORTHERN ISRAEL**

The remains of a huge 12,000 year old feast have been found in a cave in Northern Israel.

Archaeologists working in Hilazon Tachtit found what they thought was a late Palaeolithic campsite, when they discovered tools and animal bones.

However they soon realised they were looking at a large burial site, with huge numbers of animal bones.

They found the remains of at least three aurochs - giant extinct cattle - and over 70 tortoise skeletons.

The site, from the era known as the Natufian phase, had at least 28 human bodies, ranging from babies to those who would have been elderly for the time - aged about 45.

Natalie Munro from the University of Connecticut in the US and Leore Grossman from the Hebrew University in Jerusalem were especially interested to find two pit-like depressions in the centre of the cave that were too small for habitation.

Instead, the depressions contained these animal bones. One depression had the auroch remains which had been butchered. The other contained the tortoise bones and shells, which were mostly intact, and some of which were burned.

The team drew the conclusion that the tortoises had been cooked and the meat had then been removed. This was the best evidence that the animals had been killed and cooked for eating, not killed as a sacrifice.

In the depressions they found three adult bodies - one was definitely a middle-aged woman and two others were likely also female - one of these was buried with the body of a foetus.

The middle aged woman probably died of natural causes, and was buried with a strange assortment of individual animal bones. These included the pelvis of a leopard, the wingtip of an eagle, and the skull of a stone marten - all animals with distinctive fur or feathers.

The woman herself had some unusual physical characteristics, probably congenital malformations which very likely led to a life-long limp.

Although the researchers couldn't recover any soft material from the clay soil, this combination of unusual features made them think that the woman had a particular significance for the culture, and that her burial was commemorated with a feast.

Evidence of such huge feasts has previously been found only in later archaeological sites, including some Neolithic sites in other areas of Israel, so this research, published in PNAS, is the earliest evidence for feasting on this scale.

The people who left these remains would have expended a great deal of effort to catch these huge wild cattle, and gather large numbers of tortoises.

All over the modern world, feasting rituals still celebrate the dead, including Western wakes and the Mexican Day of the Dead, when relatives hold dinners in cemeteries.

Please visit the site: <http://www.bbc.co.uk/news/science-environment-11153902>

BULGARIAN ARCHAEOLOGIST STUMBLES UPON 2 ANCIENT THRACE TOMBS

Bulgarian archaeologist Nikolay Ovcharov has discovered two tombs of Ancient Thracian rulers near the famous rock city and sanctuary of Perperikon.

The tombs are dated to 1100-1000 BC judging by the pottery and ceramics found in them, which are characteristic of the later Bronze Age and the early Iron Age.

One of the most interesting finds in the tombs is a bronze coin with the face of Emperor Alexander the Great, dated to the 4th century BC.

Prof. Ovcharov believes this is a clear evidence that the tomb was venerated as a shrine by the Thracians in the Antiquity for a long time after its original creation.

The archaeological team stumbled across the two tombs as they were working on diverting a tourist path away from a spot of excavations at Perperikon, the holy city of the Thracians.

The tombs are situation in an east-west direction, with the buried notable facing the rising sun, a clear sign of a sun cult.

The excavations have revealed ritual hearths and others signs of sacrifices that were connected with the traditions of venerating the dead as godly creatures.

Please visit the site: http://www.novinite.com/view_news.php?id=119743
