

SECOND INTERNATIONAL SYMPOSIUM ON BIOMOLECULAR ARCHAEOLOGY
STOCKHOLM 2006

(NB! All events take place at G-salen unless otherwise indicated. Presenting author underlined)

Wednesday 6 september

18:00– REGISTRATION & PRE-SYMPOSIUM PUB

20:00 AT WALLENBERGLABORATORIET

Thursday 7 september

08:30 REGISTRATION & COFFEE

10:00 Official opening by professor **Arne Jarrick**, Deputy Secretary General for the Humanities and Social Sciences, Swedish Research Council, and professor Kerstin Lidén, Organizing Committee, Archaeological Research Laboratory

Food production and consumption

*Session chair: **Julia Lee-Thorp**, Dept of Archaeological Sciences, University of Bradford, U.K.*

10:10 KEYNOTE: Biogeochemical approaches offer new perspectives on old problems (Julia Lee-Thorp)

10:40 Nitrogen ($\delta^{15}\text{N}$) isotope fractionation: Are humans special? (Noreen Tuross)

11:00 Collagen turnover in the adult femoral mid-shaft modelled using environmental radiocarbon tracer measurements (Robert E. M. Hedges, John G. Clement, C. David Thomas & Tamsin C. O'Connell)

11:20 COFFEE

11:50 Detecting milk in the palaeodiet with Calcium isotopes (Nan-chin Chu, Gideon Henderson & Robert Hedges)

12:10 Pots and perfumes: Luxury consumption in the Late Bronze Age eastern Mediterranean? (Val Steele & Ben Stern)

12:30 Pottery use and the transition to agriculture in Southern Scandinavia: New evidence from organic residue analysis (Oliver E. Craig, Marcus Forster, Ben Stern, Søren H. Andersen, Eva Koch, Anders Fischer, Andrew Stott & Carl P. Heron)

12:50 Flashes in the frying-pan? On the culture of food and the interpretation of ancient subsistence data (Sven Isaksson)

13:10 LUNCH & POSTER SESSION

Settlement and spatial organisation

*Session chair: **Henk Kars**, Institute for Geo- and Bioarchaeology, Vrije Universiteit Amsterdam, the Netherlands*

14:10 KEYNOTE: Anthroposols and the past: A review of current research and future opportunities (Henk Kars)

14:40 Detection and characterisation of organic inputs into anthropogenic sediments from a Bronze Age Syrian royal tomb (Matthew A. James, Anna Mukherjee, Francesca Robertson, Peter Pfälzner & Richard P. Evershed)

15:00 An assessment of the value of soil proteomics for archaeological prospection (S. Oonk, E. Cappellini, J. Kool, H. Kars & M. Collins)

15:20 Death comes to town: Tuberculosis, urbanisation and natural selection (Ian Barnes & Mark Thomas)

15:40 COFFEE

Migration and cultural transmission

*Session chair: **Mark Thomas**, Centre for Genetic Anthropology, University College London, U.K.*

16:10 KEYNOTE: Diffusing culture, migrating genes: Milking the origins of Europeans (Mark Thomas)

16:40 The raw material of Pleistocene bone points: cave bear bones as paleolithic resource? (Michael Hofreiter, Martina Pacher, Peter Gravlund , Nadin Rohland, Roland Pfeiffer & Michael P. Richards)

17:00 Origins of agriculture in Southwest Asia (Susan Thaw & Terry Brown)

17:20 Phylogeny and ancient DNA of wild and domestic pigs provides new evidence for human dispersal routes in Island Southeast Asia and the Pacific (Keith Dobney, Greger Larson, Thomas Cucch & Masakatsu Fujita)

17:40 Aurochs or domesticated cattle? Ancient DNA analyses of early animal husbandry in Northern Germany (Amelie Scheu, Joachim Burger, Sönke Hartz, Ulrich Schmöcke, Dirk Heinrich, Anne Tresset & Ruth Bollongino)

18:00 WALK TO RECEPTION AT THE
ROYAL SWEDISH ACADEMY OF SCIENCES

18:30– Reception and guided tour of the Royal Swedish Academy of Sciences
20:00 by Dr **Jonas Förare**, Science Editor and Press Officer at the Academy

Friday 8 September

Migration and cultural transmission (continued)

Session chair: Mark Thomas, Centre for Genetic Anthropology, University College London, U.K.

09:00 On the impossibility of proving the authenticity of a human aDNA Sequence
(Joachim Burger & Peter Forster)

09:20 The first farmers: An aDNA study on early Neolithic skeletons of Central Europe (Wolfgang Haak, Peter Forster, Barbara Bramanti, Shuichi Matsumura, Kurt W. Alt & Joachim Burger)

Degradation/diagenesis

Session chair: Matthew Collins, Dept of Biology and Archaeology, University of York, U.K.

09:40 KEYNOTE: Decomposition pathways: Too difficult to unravel? (Matthew Collins)

10:10 Beeswax residues in Chalcolithic (6000 year old) ceramic vessels from Israel (Dvory Namdar, Ronny Neumann, Yuval Goren, Yossi Sladezki & Steve Weiner)

10:30 COFFEE

11:00 Destruction of archaeological bone: The role of specific bacteria in experimental degradation of 700 year-old human bone (Delia Taylor & Ronald A Dixon)

11:20 DNA in bones - where is it, and how can we get at it? (M. Thomas P. Gilbert, Paula F. Campos, Oliver Craig, Emma M. Svensson, Anders Götherström, Gordon Turner-Walker, Elizabeth Peacock, Jørgen Dissing & Eske Willerslev)

11:40 Tracking down human contamination in ancient human teeth (María Lourdes Sampietro, M. Thomas P. Gilbert, Oscar Lao, David Caramelli, Martina Lari, Jaume Bertranpetit & Carles Lalueza-Fox)

12:00 Miscoding lesions in ancient DNA templates (Jonas Binladen, M. Thomas P. Gilbert & Eske Willerslev)

12:20 LUNCH & POSTER SESSION

New techniques

Session chair: Anders Götherström, Evolutionary Biology Centre, Uppsala University, Sweden

13:20 KEYNOTE: Methodological studies on ancient DNA and ancient DNA methods (Anders Götherström)

13:50 Testing Bayesian models of natural selection and sequence damage using ancient DNA data sets (Simon Ho & Tim Heupink)

14:10 New developments in proteomics for the analysis of archaeological organic residues (Caroline Solazzo & Christian Rolando)

14:30 New investigations into the Pistacia resin aboard the Ulu Burun shipwreck (B. Stern, C. Heron, T. Tellefsen & M. Serpico)

14:50 COFFEE

15:20 A comparative study of GC/C/IRMS and *irm*-LC/MS: Implications for palaeodietary studies in archaeology (Noah V. Honch, James S. O. McCullagh & Robert E.M. Hedges)

15:40 Stable hydrogen isotopes and trophic levels in archaeological material (Linda M. Reynard & R. E. M. Hedges)

16:00 Compound-specific determination of δD values of animals for the reconstruction of ancient diet (David Chivall, Nicola Brandon, Sebastian Payne & Richard P. Evershed)

16:20–17:00 Closing discussion (Kerstin Lidén, Julia Lee-Thorp, Henk Kars, Mark Thomas, Matthew Collins & Anders Götherström)

19:00 BANQUET AT CAFÉ ARRHENIUS

Saturday 9 September

09:00– Excursion to Birka. Gathering at Stadshuskajen (see excursion guide)

17:00