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**SEARCHING FOR TRACES OF THE SOUTHERN DISPERSAL:  
ENVIRONMENTAL AND HISTORICAL RESEARCH ON THE EVOLUTION OF  
HUMAN DIVERSITY IN SOUTHERN ASIA AND AUSTRALO-MELANESIA**

**Post-doctoral Appointments**

Applications are sought for two (2) post-doctoral researchers at the Leverhulme Centre for Human Evolutionary Studies at the University of Cambridge, to work on a multidisciplinary project investigating the dispersal of humans out of Africa. The aim of the project is to test the hypothesis of a Southern Dispersal of modern humans (from East Africa to southern Asia) by integrating palaeoenvironmental and palaeoanthropological data. The project has two complementary strategies – to generate new evidence for the occupation of Southern Asia and Australo-Melanesia by modern humans (archaeological excavations, dating of new and old archaeological sites, fossils and palaeoenvironmental features), and to compile, analyse and synthesise existing archaeological, palaeobiological and palaeoenvironmental evidence (building databases of archaeological sites, fossil remains and associated features in southern Asia, build sea-level maps, examine archaeological assemblages and human remains in Arabia, South and Southeast Asia, carry out computer simulations to address the rate, direction and demography of potential population expansions). The project will thus establish the environmental likelihood of such a dispersal event, and the degree of empirical support from existing palaeoanthropological data.

The successful candidates will work closely with an interdisciplinary team. The candidate will work most closely with Dr Marta Mirazón Lahr, the Principal Investigator of the project, and Dr Michael Petraglia, Co-Investigator. The candidate will also interface with dating experts and earth scientists at Oxford, Cambridge and Wales, including Dr Stephen Stokes, Prof Tjeerd van Andel, and Dr Geoff Duller.

The successful candidates will be expected to be involved in several aspects of the project, from fieldwork to analytical studies, but with emphasis towards:

1. building an archaeological database for the period concerned and computer simulation models, integrating palaeogeographical and palaeoclimatic evidence (3 year post)
2. building a palaeobiological database for the region

The successful candidate will be expected to hold a Ph.D. in a relevant field, to have research experience in anthropology, archaeology, or a related field, and to be able to work with quantitative and mapping techniques. Relevant work experience may include morphological or population genetic analytical skills, an understanding of Palaeolithic technology, development of palaeo-environmental maps, and archaeological site mapping, as well as experience in the development and management of large databases, GIS applications, and computer simulations. A willingness to engage in inter-disciplinary collaboration is essential. The positions will involve possible fieldwork opportunities in Saudi Arabia and India, and are available from 1 October 2003, or another date by agreement.

**Salary:**

1 year postdoctoral award, £18,265 per annum

3 year postdoctoral award, £18,265 - £22,191 per annum, according to experience

The project is funded by NERC, as part of the EFCHED programme. The project involves the University of Cambridge, the University of Oxford, the University of Wales, and collaborating scholars in Arabia and South Asia.

**Project Aims**

This project addresses four major scientific issues with four aims:

- 1) To investigate the palaeoenvironmental context for a Southern Dispersal Route out of Africa by establishing the nature of the palaeoenvironment (including sea-levels) along southern Asia during Stage 4;  
*Objective:* To build palaeoenvironmental maps for the southern Asian coastal areas based on sea-level reconstructions and the compilation of palaeoecological data into a palaeoenvironmental archive.
- 2) To study the morphology of present and past populations along the suggested route with the explicit intent of testing their similarities and differences through time;  
*Objective:* To carry out a comparative study of the late Pleistocene and early Holocene human fossil record of East Africa, India and Australia, involving the collection of new data, as well as the compilation of existing data into a comprehensive palaeobiological archive for these regions.
- 3) To study aspects of the Middle Palaeolithic record of Saudi Arabia and India, including the dating of key archaeological sites in the former  
*Objective:* To date Middle Palaeolithic stratigraphic sequences in India and palaeolake sediments associated with Middle Stone Age lithic industries in the Arabian Peninsula through SAR optical dating and to carry out a comparative study of the early Upper Pleistocene/Middle Stone Age/Middle Palaeolithic archaeological record of the Arabian Peninsula and Indian coast.

- 4) To explore the pattern of population movement (direction, rate, permanency) along the hypothesised route through geographically and demographically explicit simulations of population expansions from Africa to southern Asia.  
*Objective:* To carry out geographically specific simulations of population movement along the hypothesised route, altering demographic and ecological parameters.

## Applications

Applications should be sent to Dr Marta Mirazón Lahr, Leverhulme Centre for Human Evolutionary Studies, University of Cambridge, Downing Street, Cambridge, CB2 3DZ, to reach her no later than 15 July 2003.

Applications (two copies) should consist of: an application form (available at <http://www.human-evol.cam.ac.uk/opportunities.htm>, in PDF form, or by request from Ms Madeline Watt, [mmw23@cam.ac.uk](mailto:mmw23@cam.ac.uk); phone +44 (0)1223 763419); a CV; a two page summary of research experience and interests, and how these relate to the project; and the names and addresses of two referees.

## For further details

EFCHED

<http://www.nerc.ac.uk/funding/thematics/efched/>

LCHES

<http://www.human-evol.cam.ac.uk>

University of Cambridge

<http://www.cam.ac.uk/>

Further enquiries can be made to Dr Marta Mirazón Lahr at [m.mirazon-lahr@human-evol.cam.ac.uk](mailto:m.mirazon-lahr@human-evol.cam.ac.uk), or telephone +44 (0)1223 335463.

The University of Cambridge is an equal opportunities employer.