Microscopic Indicators of Herbivore Extinctions and Invasions in Australasian-Pacific Prehistory.

The aim of this project is to use the presence/abundance of microscopic dung fungi spores preserved in swamp sediments and archaeological sites as indicators of extinctions and invasions of herbivores in past landscapes. This will be approached through the development of a taxonomic understanding of dung fungi remains preserved in modern and ancient sediments. The technique has proved successful in North America and Madagascar to explore megafauunal extinctions and the introduction of domestic ungulates into these regions.

The successful PhD candidate will develop this technique for application to archaeological and palaeoecological problems in the Australasian and Pacific region and be expected to participate in fieldwork in Papua New Guinea and neighbouring Pacific islands. The outcomes of this project will contribute to one of the most significant questions remaining in Pacific prehistory, that of when the pig, the major animal domesticate of the region, was first introduced to the region (Bellwood and White, 2005, Science 309: 381).

Resources and associations:
This is a well-resourced project conducted on established sites with an extensive palaeoecological research history. You will join a vibrant palaeoecological and archaeological group at ANU where you will have access to state-of-the-art laboratory facilities. You will be enrolled in the Archaeology and Palaeoanthropology Graduate Program and be based in the Department of Archaeology and Natural History, RSPAS.

Background of candidates:
We are seeking highly motivated and enthusiastic students with a background in biology, geography, archaeology, environmental science, or similar. Some field experience would be an advantage. A first class honours or research masters in a relevant field is required.

Applications and closing dates for international (IPRS) and local (APA) scholarships:
Interested applicants should submit an application for a graduate scholarship to ANU. The deadline for receipt of IPRS applications from international students is 31st August 2005; for APA/ANU/GSS scholarships for Australian and New Zealand students the deadline is 31st October 2005. The RSPAS also has funding available for tuition and full scholarships for outstanding students. The successful candidate will be expected to commence between 2nd Jan and 31st Mar 2006. Application forms for both international (IPRS) and local (APA) scholarships are available at http://www.anu.edu.au/sas/forms/
For further information about this project contact:

**Dr Simon Haberle**
Department of Archaeology and Natural History
Research School of Pacific and Asian Studies
ANU, Canberra 0200
Email: simon.haberle@anu.edu.au, tel: +61 2 6125 3373

or

**Dr Janelle Stevenson**
Department of Archaeology and Natural History
Research School of Pacific and Asian Studies
ANU, Canberra 0200
Email: janelle.stevenson@anu.edu.au, tel: +61 2 6125 3153

Relevant web links: