

Tales from the Field

Do you have an interesting and humorous story from your paleoenvironmental fieldwork? Write it down in 500 words or less and send it to us, so that we can publish it in PAGES News!

PROPER - Teaching Paleoclimate on a European Level

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In the context of the current Global Change discussion, a better understanding of the processes controlling Earth's (paleo-)climate is an inextricable prerequisite to improving projections of future climate. The complexity of the various aspects of the global climate system requires the multidisciplinary training of PhD students working in these fields. The new Marie Curie training network PROPER (Proxies in Paleoclimatology: Education and Research) implements a teaching network for PhD students from European countries.

PROPER is mainly funded within the 6th framework of the European Union but receives additional financial and logistical support from PAGES and the EGU. PROPER organizes five courses around the central goal "improving the understanding of the processes controlling Earth's climate". The topics range from a critical assessment of the tools used in paleoclimate research to a comprehensive examination of the processes controlling Earth's climate in space and time. In order to guarantee the highest possible teaching level, PROPER pools leading scientists from 18 institutions in 9 countries across Europe (Fig. 1).

PROPER will provide a series of training courses offering a comprehensive and in-depth assessment of the most relevant aspects of paleoclimate research. The main goal is to significantly broaden

the students' understanding of the processes that control Earth climate. The five courses are:

- Course 1: Proxies used in paleoceanography: basics and new developments (Hosts: Vrije Universiteit Amsterdam, Utrecht University, Bremen University and Royal NIOZ)- 3-12.06.2004. This course consisted of 3 integrated parts that provided a comprehensive, critical and in-depth overview on the "toolbox" used to reconstruct climate history.
- Course 2: Preservation potential of climate signals and ultra high-resolution climate archives (Host: Universitat Autònoma de Barcelona (UAB),

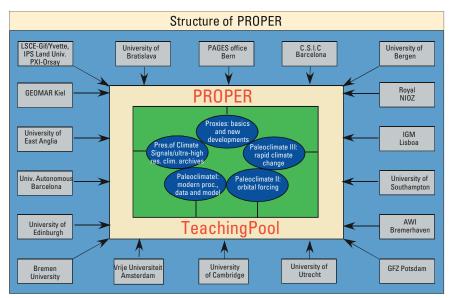


Fig.1: The structure of PROPER.

co-host Institute of Earth Sciences (CSIC Barcelona))- 7-13.11.2004 (application deadline 1.8.2004). This course will focus on the processes potentially affecting and distorting the archived climate record, in particular in ultra high-resolution marine and lacustrine settings, and its interpretation.

Courses 3 to 5 will provide a fully integrated data and computer model based assessment of the processes

controlling Earth's climate on different time scales.

- Course 3: Paleoclimate I: Integrating modern processes data evaluation and models (Host: University of Southampton)

 February-March2005. This course assesses key aspects of the modern climate system, e.g. the carbon cycle and its changes in past time slices.
- Course 4: Paleoclimate II: Orbital forcing data and models

- (Host: University of Bratislava) spring Early summer2005. This course focuses on the processes controlling long-term climate change on orbital time scales.
- Rapid climate change data and models (Host: LSCE Gif sur Yvette, Institut Pierre-Simon Laplace, CNRS-CEA, University of Paris Sud Orsay, Université de Versaille-UVSQ) Fall 2005. This final course offers an indepth overview of the most recent developments in reconstructing and understanding the processes involved in rapid climate change down to annual resolution.

We invite qualified PhD students and suitable post docs from the EU and other countries to attend these courses. Details of the application procedure can found on the PROPER website (www.propertraining.nl). Applications should be directed to proper@falw.vu.nl.



The Catalan Network of Palaeoclimatology (Palaeocat)

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Since June 2003, palaeoclimatologists and palaeoecologists from Catalan universities and research centres have been cooperating to promote research on past global climate changes in Catalonia (northeastern Spain). This palaeoclimatology network is supported by the Catalan government. The principal objective of the initiative is to promote research on the understanding of the nature, causes and effects of past climate changes. Special attention is devoted to studying the transformations undergone by human societies and natural systems related to climate variability, and to improving natural hazard management policies. In addition, emphasis is placed on strengthening international cooperation and networks,

increasing public understanding of palaeoclimate issues, and supporting student training.

The pluridisciplinary network of 40 scientists undertakes research on a broad range of time scales, at annual and millennial resolution, using instrumental, historical, phenological, sedimentological and geomorphological archives. The most frequently employed analytical techniques involve stable isotopes, organic and inorganic geochemistry, pollen, sedimentology, biota remains, and artefacts. Geochronology is based on radiocarbon, excess ²¹⁰Pb, ¹³⁷Cs fallout and uranium disequilibrium series. Research projects are undertaken in the western Mediterranean, especially in Catalonia but member groups also undertake research elsewhere; in marine (e.g. Mediterranean Sea, Atlantic and Pacific Ocean), lacustrine (e.g. Caspian Sea, Issikul and Baikal Lakes) and high mountain environments (e.g. Alps, Andes).

Activities to date have included three internal network meetings, for members to exchange experiences, and the creation of a web page, (see below) to present an overview of the network and links to Catalan palaeoclimate research groups. Network members have also participated in the compilation of a Current State Report of climate changes and implications in Catalonia (www.iecat.net/canviclimatic/). Another activity, planned for March 2005, is a two-day Open Meeting to analyze the interaction between