

International Workshop on Methods in Quaternary Paleocology

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A total of 25 students from six different countries were chosen from over 40 applicants to attend the International Workshop on Methods in Quaternary Paleocology. The majority of students were from either Argentina or Chile but other countries such as Colombia, Uruguay, France and Germany were also represented.

Students participated in half-day lectures given by eight professors dealing with five major topics: Cathy Whitlock (USA) on charcoal records and analyses; Patricio Moreno (Chile), on high-resolution pollen records; Alan Cooper (Australia) on the extraction and analyses of fossil DNA; Ricardo Villalba (Argentina) on dendrochronology and dendroecology; Christopher Moy (USA) on new methods of radiocarbon and stable isotope analyses; Julio Betancourt (USA), Antonio Maldonado (Chile) and Claudio Latorre (Chile) on methods, analyses and case studies in arid lands paleoecology. The course also involved several laboratory demonstrations involving charcoal analyses, coring equipment, tree rings and rodent middens from the Atacama Desert.

Aside from the lectures, students were also given the opportunity of presenting their work as talks and posters, followed by comments on methods and results from the course professors and attendees. These presentations dealt with a variety of topics on South American paleoclimatology, paleoecology, biogeography, and archeology using a diverse array of methods and proxies. Among these were fossil pollen records, rodent middens, diatoms, chironomids, phytoliths, dendrochronology, glacial geology and modern analogue techniques. Research covered a vast geographic area, ranging from the Bogotá wetlands in Colombia to the southern cone of South America, along the Atlantic coast of Uruguay and Argentina, as well as the Bolivian Altiplano and the coastal Atacama Desert along the Pacific coast down to the Patagonian ice-fields. This lively round of discussions and the high quality presentations stimulated interactions not only between students and professors, but also kindled possible interactions among students from different countries.



Figure 1: Workshop participants - 25 students from 6 different countries

Exporting training to developing countries

Our motivation for organizing this workshop was owed to the difficulties of developing top researchers in Latin America, as many do not have the resources and training required to carry out the state-of-the-art research performed in developed nations. In most cases, paleoclimatological research is carried out by groups that are inaccessible to Latin American students. One method of tackling this problem was to bring specialists from the different fields of paleoclimatology and paleoecology to South America. This allows students to gain first-hand access to the finest knowledge and expertise.

A better education for future researchers from Latin America will also increase the development of new and better quality geo-historical records, helping to bridge the information gap between nations. The importance of this issue cannot be understated. Interhemispheric comparisons over the last 1000 years are plagued by poor quality records owing to the lack of high-resolution paleoclimate archives.

One important recommendation is that whenever international research efforts are undertaken at sites within a developing nation, the researchers from the developed countries allocate a portion of their time to sharing and teaching their experience to local scientific communities,

regardless of whether they are established researchers or potential researchers in the making.

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