



Reaching New Peaks in Geoscience

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Paper No. 6
Presentation Time: 8:00 AM-6:00 PM

THE UNIVERSITY OF MINNESOTA, MORRIS - UNIVERSIDADE DE SAO PAULO COLLABORATIVE R.E.U. PROGRAM; COMPARATIVE ANALYSIS OF GLACIAL SEDIMENTS, WESTERN MINNESOTA AND PARANA STATE, BRAZIL

Add meeting dates to your calendar. 

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The University of Minnesota, Morris (UMM) and Universidade de São Paulo (USP) REU program involves field and laboratory research to determine the origin and history of glacial deposits of Quaternary age in west-central Minnesota and late Paleozoic age in Paraná state, Brazil. It is part of a long-established collaborative research effort between UMM and USP faculty and students. REU research employs varying geologic research techniques, including sediment analysis (characterization of till/tillite and other sediment lithologies), field mapping and correlation of late Paleozoic sedimentary facies, provenance studies (sedimentary petrography and geochemistry), and paleoecology assessments (micropaleontology, palynology, sedimentology and clay chemistry). In Minnesota research focuses on the deposits, history and dynamics of the Des Moines lobe; the Des Moines lobe may be an example of a surging ice sheet or an ice stream. In Brazil, detailed facies mapping has documented complex stratigraphic relationships and paleo-environments of glacial sediments in Paraná State. This research can be readily accomplished at the undergraduate level at relatively little expense yet contributes substantially to the understanding of both the Late Paleozoic and the late Pleistocene glaciations.

Safety and logistics require UMM and USP faculty and students work together in the field. This provides a wonderful opportunity for the U.S. students to work closely with an international peer. To encourage the bonding experience, Brazilian students visit UMM to become involved in the Quaternary research. This has been a very positive experience for all participants. Research projects are selected and designed by the participants. Frequently considered are: research subject, location of field area and geologic techniques employed. Both project ownership and team building is encouraged by frequent group fieldtrips and discussions. Additional team building activities include: the international travel experience, group living in a Brazilian B&B, and Brazilian/U.S. student socializing.

Research was funded by grants from the N.S.F.-R.E.U. Program (NSF-EAR 0353621 and NSF-EAR 0640575).

Session No. 180--Booth# 81

[T38. International Research Experiences for Undergraduates \(Posters\)](#)

Tuesday, 2 November 2010: 8:00 AM-6:00 PM

Hall D (Colorado Convention Center)

Geological Society of America *Abstracts with Programs*. Vol. 42, No. 5, p.439

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