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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

COTTER, James F.P.¹, ROCHA-CAMPOS, A.C.², BACCI, D.C.² and ANDERSON, Heidi³, (1)Geology Discipline, University of Minnesota, Morris, 600 East 4th Street, Morris, MN 56267, (2)Instituto des Geosciências, Universidade de São Paulo, Sao Paulo, 05450-001, Brazil, (3)Department of Geosciences and Natural Resources, Western Carolina University, Cullowhee, NC 28723, cotterjf@morris.umn.edu

The University of Minnesota, Morris (UMM) and Universidade de Sao 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 Parana 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 Parana 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.

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Session No. 180--Booth# 81

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

Hall D (Colorado Convention Center)

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