

Name: Sarah Elianna Strano

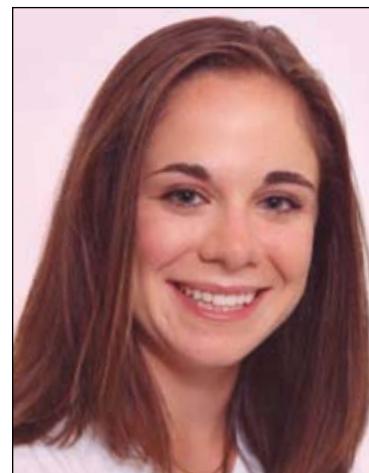
Majors: Geology and History

Honors and Awards:

- Chancellor's Undergraduate Research Fellowship
- Brackenridge Undergraduate Fellowship
- Finkle Fellow
- Freeman-Asia Grant
- The President's Volunteer Service Award, Goodwill Industries of Pittsburgh

Experience and Community Outreach:

- Field Researcher, Mongolia and France
- Intern, Defense Contracts Management Agency, Department of Defense
- Research Assistant, University of Pittsburgh
- Volunteer Teacher, English as a Second Language, Goodwill Industries
- Member, Sigma Alpha Lambda- National Leadership and Honors Organization



Publications

- **Strano, S.E.**, Rosenmeier, M.F., Soninkhishig, N. (2006). Lake Sediment Records of Holocene Climate Change in the Khanuy Valley, Arkhangai Aimag, North-Central Mongolia. AGU Fall meeting, San Francisco, CA, 12/2006.
- **Sarah, S.E.**, Rosenmeier, M.F. (2005). Late Holocene Sediment Records of the Khanuy Valley, Arkhangai Aimag, Mongolia. Undergraduate Research Fair, University of Pittsburgh, Pittsburgh, 04/2006.

Future Plans

"I have applied for a Fulbright in France next year and am also applying to graduate schools to complete a master's program and possibly a PhD program in geological/oceanographic sciences with a concentration on recent climate change."

Voting Information

Oakland, PA

Project Abstract

Sediment records were recovered from several lakes in conjunction with the "*Khanuy Valley Collaborative Project on Early Nomadic Pastoralism in Mongolia*". This multidisciplinary research effort has focused on the rich archaeological history of the Khanuy Valley and specifically the examination of so-called *khirigsuur* sites. These monumental Bronze Age structures consist of massive piled stone features and often yield human and horse burials. The stimulus for *khirigsuur* construction is poorly understood, although climate variability and consequent land-use changes may have served as contributing factors (e.g., climate amelioration as a root cause of population increase and use of *khirigsuurs* as territorial markers). Geochemical data suggesting high water levels and wet conditions are preserved in the lowermost deposits of the lakes. Sediment sequences dating to between ~1900 and 500 years before present exhibit structures characteristic of soil development and suggest lake bed exposure. Geochemical data from this interval support the inference for drying. Wetter conditions appear to have returned ~500 years ago. Archaeological evidence suggests that the Khanuy Valley was greatly populated between ~3200 and 2700 years before present, roughly coinciding with the wettest period recorded in the lake sites. Human occupation of the region may therefore have been linked to climate changes.

Project Faculty Advisor: Michael F. Rosenmeier, Department of Geology & Planetary Sciences, School of Arts and Sciences, Pittsburgh Campus

Undergraduate
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