



Undergraduate Student Research Training Opportunity

The Department of Anthropology at The Ohio State University is offering Undergraduate Student Research Training positions. The trainee position offers a unique opportunity for students to get intensive training and mentoring in the interdisciplinary study of complex social-ecological systems.

The interdisciplinary study of complex social-ecological systems is funded by a Faculty Early Career Development (CAREER) Award to Dr. Mark Moritz, Assistant Professor. The study examines how mobile pastoralists in the Logone floodplain in the Far North Province of Cameroon coordinate their movements to avoid conflict and overgrazing in a land tenure system that is commonly described as open access, a situation generally regarded as leading to a tragedy of the commons. The hypothesis is that this management system is best understood as a case of emerging complexity, in which individual decision-making, coordination of movements among pastoralists, and participation in a information sharing network result in the emergence of a complex adaptive system in which access to and use of grazing resources is managed. The hypothesis will be tested in a multidisciplinary study of pastoral mobility that integrates spatial and ethnographic analyses as well as multi-agent simulations and analytical modeling. Understanding how these emergent systems work is critical for the management of rangelands across West Africa, most of which have some form of open access.

About the training:

- 1.) Undergraduate student research trainees will design their own independent research within the larger study of pastoral management of open access in the Logone floodplain. Students will be mentored at all stages of the research cycle, from design to writing, at OSU and in the field in Cameroon.
- 2.) Undergraduate student research trainees are expected to write research proposals and submit their research for IRB review; to apply for funding from OSU programs (e.g., Office of Undergraduate Research) and outside programs; to present their research at the Denman Undergraduate Research Forum (May 13, 2009); and co-author a paper for publication for in a peer-reviewed journal.
- 3.) Undergraduate student research trainees are also expected to take courses in anthropology that are aimed at training students how to conduct scientific research within interdisciplinary projects of social-ecological systems, including pastoral systems (e.g., *ANTHRO 650: Research Design and Ethnographic Methods*, *ANTHRO 620.05 Cultural Ecology*). Students are also encouraged to take relevant courses in other departments, e.g., modeling

- courses in the Department of Evolution, Ecology and Organismal Biology and Geographical Information Systems courses in the Department of Geography.
- 4.) Undergraduate student research trainees are expected to participate in data collection and data analysis, and to mentor fellow students.
 - 5.) The traineeship offers research-training opportunities in the Far North Province of Cameroon. In the field, the focus will be on training in data collection methods including: qualitative interviews, surveys, social network analysis, and different formal methods like freelists. Researchers from the Cameroonian counterpart CARPA will provide assistance in the field and opportunities to learn how to collaborate with host-country experts.
 - 6.) At Ohio State, undergraduate students will have access to the projects' lab facilities to learn and conduct ethnographic, statistical, and spatial analysis, multi-agent simulations, and analytical modeling of complex social-ecological systems.
 - 7.) The traineeship may offer applicants financial support for fieldwork and conference travel. Of course, financial support is based on continued satisfactory progress in the program.

Eligibility:

- Students from all disciplines are welcome to apply. The traineeship is not restricted to anthropology majors.
- The traineeship is open for students in their junior or senior year with a cumulative GPA of 2.7 or higher.

Deadline:

- Applications are due no later than April 15th, 2009 in order to be considered for the 2009-10 undergraduate traineeship. Students who are selected for the traineeship will be notified by May 15, 2009.

Materials required for the application:

- An application form for the undergraduate student traineeship (see below);
- An unofficial transcript from each college or university attended, listing all courses taken, grades and degrees earned;
- A letter of recommendation from a person acquainted with the applicant's academic program, scholastic ability, or professional performance. Applicants are advised to select referees who are familiar with their best work, particularly in anthropology or related disciplines;
- A statement describing your reasons for applying for the Undergraduate Research Traineeship, your relevant background, including previous work & research experience, and the ways in which your areas of research interests are congruent with the project (maximum 500 words).



THE OHIO STATE UNIVERSITY

Department of Anthropology

Application Form

To apply for the Undergraduate Research Traineeship in Complex Social-Ecological Systems, please fill out this form completely and together with the other application materials send to:

Dr. Mark Moritz, Department of Anthropology, The Ohio State University, 4034 Smith Laboratory, 174 W. 18th Avenue, Columbus, OH 43210-1106. For more information call me at +1 (614) 247-7426 or send me an email at moritz.42@osu.edu or mark.moritz@gmail.com.

Name: _____

Are you a U.S. citizen or permanent resident? Yes_____ No_____

Mailing address: _____

Email: _____

Phone: _____

Major(s): _____

If you are applying for minority student support, please indicate your ethnicity: ____ African-American, ____ Latino, ____ American Indian, ____ Native Alaskan, ____ Other (please specify) _____.