Michelle Goman (Geography Department)
Sabbatical Year Activities Academic Year 2015-2016

I spent the year visiting the Department of Earth and Planetary Sciences at U.C. Berkeley.

Research and Curricular Development

I continued my research on reconstructing the paleohistory of extreme flood events recorded at Petaluma Marsh with Dr Lynn Ingram, my U.C. Berkeley host. This involved analysis of seed material from the cores and training at Lawrence Livermore Lab Center for Accelerator Mass Spectrometry (CAMS) in radiocarbon dating with host Dr. Susann Zimmerman.

During the spring semester I collaborated with Philip Kaijankoski of Far Western. I undertook a pollen analysis of sediments obtained from core sites associated with an archaeological project in South San Francisco. The findings of this research are included in the site report to the San Francisco Public Utilities Commission (see below).

The spring and summer were spent researching and preparing for participation in an archaeological excavation in Guerrero, Mexico. This also involved having my SSU lab inspected and certified as an APHIS USDA permitted soil lab. I developed and expanded the SQUAL pollen reference collection. The director of this NSF funded project is Dr Gerardo Gutierrez (U.C. Boulder). I am directing the geoarchaeological analysis of the soils for plant remains. The field season was very successful and my lab at SSU is now filled with boxes of soil awaiting analysis.

During the fall semester I sat in on and observed a U.C. Berkeley Geography course called “Communicating Climate Change”.

Publications and Conference Abstracts

I was able to devote time to multiple manuscripts during my sabbatical year. These manuscripts are in review, revision or accepted. I attended 3 conferences.

1. Preliminary Results from Laguna Minucúa a potentially annually resolved record of climate and environmental change for the past ~5000 years in the Mixteca Alta of Oaxaca, Mexico. Michelle Goman, Arthur Joyce, Steve Lund, Charlotte Pearson, William Guerra, Darren Dale, Douglas E. Hammond (under revision for Quaternary International)

3. Late Holocene Environmental Reconstructions from Lake Solai, Kenya, Michelle Goman, Gail Ashley, R. Bernhart Owen, Victoria Hover, Dev Maharjan (revised and resubmitted to The Professional Geographer).


Funding Applications

During the fall semester my focus was on grant writing submitting two NSF Grants: Reconstructing a millennial long record of extreme precipitation events in the Greater North Bay Region, California (requested $207,623: Geography and Spatial Science) and Impact of Prehispanic Climate Change on the Mixtec Region of Oaxaca, Mexico (requested $435,136: Dynamics of Coupled Natural and Human Systems). The proposals were not funded in this cycle, however, the reviews were positive and I will be resubmitting these over the course of the next two years. In the spring I submitted a pre-proposal with a Berkeley Engineering faculty to the LA water municipality. This is pending. I also submitted an SSU provost mini-grant application which was awarded.
Service to Dept, SSU and Discipline

During the spring semester I provided a teaching evaluation for one of our lecturers in the Dept of Geography as well as participated in numerous departmental meetings due to prospective large organizational changes to the department. I attended a Copeland Creek Advisory Committee Meeting. I continued my participation in the SSU naturalist training program through my sabbatical by leading two teaching hikes to interns. I gave a guest lecture to the SSU Science 120 class in the Fall semester, as well as several guest lectures to U.C. Berkeley course EPS 80: Environmental Science.

I was on the local organizing committee for the International Limnogeology Congress (ILIC6) held in Reno (summer 2015). I also organized four oral sessions at the annual meeting of the Association of American Geographers held in San Francisco in March-April of 2016. I continued by duties as Secretary of the GSA Limnogeology Division.