Graduate Study in Paleoclimatology and Paleoceanography



Oregon State University and University of Oregon

Little is known about how climate variability will respond to global warming or how regional climate will change. Paleoclimatic data provide information on climate variability beyond the range of modern human experience.

Project PALEOVAR is a coordinated approach to understand the interaction between short-term variability and the climatic mean state over the past 50,000 years.



Past Climate Variability: Understanding Mechanisms and Interactions with the Mean State

PALEOVAR Faculty Advisors:

Oregon State University, College of Oceanic and Atmospheric Sciences

- Dr. Nicklas Pisias—Paleoceanographic reconstruction, geostatistics
- Dr. Alan Mix—Ocean and continental paleoclimate, isotope geochemistry
- Dr. Andreas Schmittner—Coupled atmosphere-ocean-biogeochemical models

Oregon State University, Department of Geosciences

- Dr. Ed Brook—Ice core paleoclimatology and atmospheric chemistry
- Dr. Peter Clark—Paleoclimatology and glaciers and ice sheets
- Dr. Steve Hostetler (USGS)—Regional and global atmospheric climate models

University of Oregon, Department of Geography

 Dr. Pat Bartlein—Continental climate reconstruction and statistical modeling

For more information about applying for graduate fellowships within PALEOVAR contact Nick Pisias at npisias@coas.oregonstate.edu.

For more information about the project and links to academic programs go to: http://www.paleovar.org

Data sources include ice cores and speleothem (cave formation) records from continental settings and marine sedimentary records.

Data analysis techniques include the adaptation of state-of-the-art statistical methods to the study of paleoclimate time series. Integration of paleoclimate data with a hierarchy of models include a global Earth System Model of Intermediate Complexity and regional and global scale atmospheric general circulation models.

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