

**Directorate for Geosciences  
Division of Earth Sciences  
Integrated Earth Systems Program  
FY 2014 & FY 2015 Awards**

FY 2014

- EAR 14-11368 PI: Benjamin Houlton, University of California—Davis, [Collaborative Research: Bedrock Nitrogen and the Earth System: From Geobiological Mechanisms to Climate Change Forecasts](#)
- EAR 14-11779 PI: Bradley Singer, University of Wisconsin, [Collaborative Research: Dynamics of Caldera-Scale Rhyolitic Magma Systems](#)
- EAR 14-10317 PI: Adam Maloof, Princeton University, [Collaborative Research: Toward a Global Timeline of Biological and Ocean Geochemical Change During the Early Cambrian](#)

FY 2015

- EAR 15-16300 PI: Peter Kelemen, Columbia University, [Collaborative Research: Alteration of Mantle Peridotite: Geochemical Fluxes and Dynamics of Far from Equilibrium Transport](#)
- EAR 15-16680 PI: Fred Phillips, New Mexico Institute of Mining and Technology, [Collaborative Research: Tectonic and Climatic Forcing of Hydrological Systems in the Southern Great Basin: Implications for Ancient and Future Aquatic System Resilience](#)
- EAR 15-16361 PI: Robert Sohn, Woods Hole Oceanographic Institution, [Collaborative Research: The Response of Continental Hydrothermal Systems to Tectonic, Magmatic, and Climatic Forcing](#)