

# Scientific Committee on Antarctic Research, Geosciences Group

## U.S. Representatives

Samantha Hansen, The University of Alabama  
Julia Smith Wellner, The University of Houston  
Hongjie Xie, The University of Texas, San Antonio

## Group Scope

To identify and promote geological and geophysical research areas relevant to our understanding of the Antarctic continent and surrounding oceans

## Critical Issues Being Discussed

- Concerns regarding instrumentation removal and loss of long-term geodetic/geophysical data series
  - Important for understanding solid Earth-cryosphere-hydrosphere-atmosphere interactions
- Role of OPP in the future National Geophysical Facility (NGF) is unclear
  - How will polar geoscience needs be met?

## Current Projects/Activities

- INStabilities and Thresholds in ANTarctica (INSTANT) Scientific Research Program
  - Quantify Antarctic contribution to past and future sea-level change
  - Collaboration with physical and biological sciences
- Solid Earth-Ice Interactions
  - White paper outlining needs for future research (geodetic, geophysical, in-situ measurements) is forthcoming

## Future Directions

- Significant efforts directed at understanding role of sub-glacial properties/processes on ice-sheet dynamics
  - Combining observations and modeling
- Progress strongly depends on logistics support as well as international and interdisciplinary collaboration
  - Any PRB activities that could help facilitate these aspects would be beneficial.