

HERSH J. GILBERT

Purdue University, Department of Earth and Atmospheric Sciences
550 Stadium Mall Drive
West Lafayette, Indiana 47907
phone: (765) 496-9518 email: hersh@purdue.edu

Professional Preparation

Bachelor of Arts, Washington University in St. Louis, May 1996
Major: Physics; Minor: Earth and Planetary Science

Ph.D. University of Colorado at Boulder 2001,
Geophysics

Positions Held

Purdue University

Assistant Professor, Fall 2006 – present

University of Arizona

Postdoctoral Research Associate, October 2002 – 2006

University of Colorado at Boulder,

Postdoctoral Research Associate, October 2001 – September 2002

Refereed publications

- Gilbert, H.**, C. Jones, T. J. Owens, and G. Zandt, Imaging Sierra Nevada Lithospheric Sinking, *Eos*, 88, 225-229, 2007.
- Gilbert, H.**, A. A. Velasco, and G. Zandt, Preservation of Proterozoic terrane boundaries within the Colorado Plateau and implications for its tectonic evolution, *Earth Planet. Sci. Lett.*, 258, 237-248, 2007.
- Gilbert, H.**, S. Beck, and G. Zandt, Lithospheric and upper mantle structure of central Chile and Argentina, *Geophys. J. Int.*, 165, 383-398, 2006.
- Calkins, J. A., G. Zandt, **H. J. Gilbert**, and S. L. Beck, Crustal images from San Juan, Argentina, obtained using high frequency local event receiver functions, *Geophys. Res. Lett.*, 33, L07309, doi:10.1029/2005GL025516, 2006.
- Sakaguchi, K., **H. Gilbert**, and G. Zandt, Converted wave imaging of the Toba Caldera, Indonesia, *Geophys. Res. Lett.*, 33, L20305, doi:10.1029/2006GL027397, 2006.
- Gilbert, H. J.**, and A. F. Sheehan, Images of crustal variations in the intermountain west, *J. Geophys. Res.*, 109, B03306, doi:10.1029/2003JB002730, 2004.
- Zandt, G., **H. Gilbert**, T. J. Owens, M. Ducea, J. Saleeby, and C. H. Jones, Active foundering of a continental arc root beneath the southern Sierra Nevada in California, *Nature*, 431, 41-46, 2004.
- Gilbert, H. J.**, A. F. Sheehan, K. G. Dueker, and P. Molnar, Receiver functions in the western United States, with implications for upper mantle structure and dynamics, *J. Geophys. Res.*, 108(B5), 2229, doi:10.1029/2001JB001194, 2003.
- Wilson, C. K., C. H. Jones, and **H. J. Gilbert**, Single-chamber silicic magma system inferred from shear wave discontinuities of the crust and uppermost mantle, Coso geothermal area, California, *J. Geophys. Res.*, 108(B5), 2226, doi:10.1029/2002JB001798, 2003.

Gilbert, H. J., et al., Upper mantle discontinuity structure in the region of the Tonga Subduction Zone, *Geophysical Research Letters*, 28, 1855-1858, 2001.

Field Experience

SNEP Array design, deployment, maintenance, California and Nevada, 2005-7

COARSE Array deployment and maintenance, Arizona, 2003-2005.

Marlborough New Zealand short-period arrays, PASSCAL deployment, 2001

Coso passive short-period arrays, PASSCAL deployment-California, 1999&2000

CD-ROM, PASSCAL deployment-New Mexico, Colorado, 1999

Synergistic Activities

Educational: I am currently involved in supervising multiple research projects with students at Purdue University and am working with graduate and undergraduate students on ongoing projects at the University of Arizona.

Classroom teaching: I have included a large amount of data and new observations from active research projects in a new undergraduate tectonics class that I am developing in the Earth and Atmospheric Sciences department at Purdue University.

Recent Collaborators

Megan Anderson (Colorado College), Susan Beck (Arizona), Ken Dueker (Wyoming), Matt Fouch (ASU), John Geissman (New Mexico), Craig Jones (Colorado), Randy Keller (Oklahoma), Peter Molnar (Colorado), John Oldow (Idaho), Tom Owens (South Carolina), Anne Sheehan (Colorado), Cathy Snelson (NMT), Danny Stockli (Kansas), Aaron Velasco (UTEP), George Zandt (Arizona)

Ph.D. Advisor

Anne Sheehan, University of Colorado, Boulder

Postdoctoral Advisors

Susan Beck and George Zandt, University of Arizona