CURRICULUM VITA

JAMES B. GAHERTY
Lamont Research Professor
Associate Director, Division of Seismology-Geology-Tectonophysics
Adjunct Professor, Department of Earth and Environmental Sciences
Lamont-Doherty Earth Observatory of Columbia University
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blogs: http://blogs.ei.columbia.edu/tag/east-africa-rift/
http://blogs.ei.columbia.edu/tag/earths-tectonic-plates

EDUCATION:

Ph.D., Geophysics, Massachusetts Institute of Technology, June, 1995.
Dissertation: *Structure and Anisotropy of the Upper Mantle*

M.S., Geology, University of Michigan, December, 1990.

B.S., Geophysics, Brown University, May, 1986.

EMPLOYMENT HISTORY:

Lamont-Doherty Earth Observatory of Columbia University
Adjunct Professor, Dept. of Earth and Environmental Sciences *2014-present*
Associate Director, Div. of Seismology-Geology-Tectonophysics *2013-present*
Lamont Research Professor *2012-present*
Lamont Associate Research Professor *2010-2012*
Doherty Research Scientist *2006-2010*
Doherty Associate Research Scientist *2003-2006*
Georgia Institute of Technology, School of Earth and Atmospheric Sciences
Assistant Professor *1998-2003*
Massachusetts Institute of Technology, Dept Earth, Atmospheric, and Planetary Sciences
Post-Doctoral Associate *1995-1998*
Graduate Research and Teaching Assistant *1990-1995*
University of Michigan, Department of Geological Sciences
Graduate Research and Teaching Assistant *1988-1990*
ICF Technology Inc., Fairfax, VA
Environmental Geologist *1986-1988*

PROFESSIONAL AWARDS:

Sigma Xi Outstanding Young Faculty, Georgia Institute of Technology, 2002.

RESEARCH INTERESTS:

Structure, dynamics, and composition of the Earth's crust and mantle inferred from seismic observations and geodynamical modeling. Current research is focused on:
1) characterizing seismic velocity and anisotropy in the upper mantle and relating them to tectonic structure and patterns of convective flow;
2) evaluating thermal, compositional (volatile), and partial-melt control on deformation;
3) characterizing the seismicity and structure of fault zones to better understand mechanisms of earthquake nucleation and triggering.

MAJOR LEADERSHIP ACTIVITIES

Lamont Senior Management: Associate Director, Division of SGT
OBSIP Program: LDEO PI, service on OBSIP Management Council
IRIS: Board of Directors (Vice Chair), multiple Standing Committees (Chair)

MAJOR FIELD EXPEDITIONS AND DATA PRODUCTS:

SEGMeNT Continental Dynamics Experiment, Malawi-Tanzania, July 2013-Nov 2015
Chief Scientist, OBS cruises (3), *M/Vs Ndunduma and Chilembwe*, Lake Malawi, 2015.
Co-PI, PASSCAL broadband deployment, 2013-2015.
Broadband: 55 onshore, 7 OBS; Short-period: 27 OBS;
https://doi.org/10.7914/SN/YQ_2013

ENAM Community Seismic Experiment, SE US margin, April 2014-April 2015
Chief Scientist, broadband OBS Deployment, *R/V Endeavor*, April 2014.
Co-PI, PASSCAL broadband deployment, North Carolina, 2014-2015.
30 OBS, 3 onshore stations; https://doi.org/10.7914/SN/YO_2014

NoMELT Marine Geophysics Experiment, central Pacific, Dec 2011-Jan 2013
Co-Chief Scientist, MCS/refraction and OBS/MT deployment, *R/V Langseth*, Dec 2011.
27 broadband OBS, 34 short-period OBS, 7 MT, ~1200 km MCS;
https://doi.org/10.7284/903770

CD-Papua Continental Dynamics Experiment, eastern Papua New Guinea, 2010-2011
Chief Scientist, broadband OBS cruises (2), *R/V Revelle* and *M/V Miss Rankin*
Co-PI, PASSCAL broadband deployment, Papua New Guinea, 2010-2011.
30 onshore stations, 8 OBS; https://doi.org/10.7914/SN/ZN_2010

Karonga Earthquake Aftershock Mobilization, Malawi, Jan-Apr 1010.
Co-PI, PASSCAL seismic deployment. Six stations;
https://doi.org/10.7914/SN/YI_2010

SCOOBA MARGINS Experiment, Gulf of California, 2005-2006
Chief Scientist, broadband OBS cruises (2), *R/V New Horizon*, Oct 2005, Oct 2006.
15 OBS; http://ds.iris.edu/mda/ZL?timewindow=2005-2006

Canadian Northwest Seismic Experiment (CaNoE), northern Canada, May 2003-Oct 2005.
Co-PI, PASSCAL broadband deployment
59 broadband stations; https://doi.org/10.7914/SN/XN_2003

FAIM Refraction Experiment, western Atlantic, June 2001
Co-Chief Scientist, OBS/refraction cruise, *R/V Maurice Ewing*
https://doi.org/10.7284/901204

ASWMS Automated Surface-Wave Measuring System, 2014
USArray phase-velocity data product and code download
https://ds.iris.edu/ds/products/aswms/

REFEREED PUBLICATIONS (*indicates student author; ` indicates Post-Doc author):

*Accardo, N.A., J.B. Gaherty, D.J. Shillington, C.J. Ebinger, A.A. Nyblade, G.J. Mbogoni, P.R.N. Chindandali, R.W. Ferdinand, G.D. Mulibo, G. Kamihanda, D. Keir, C. Scholz, K. Selway, J.P. O'Donnell, G. Tepp, R. Gallacher, K. Mtelela, J. Salima, A. Mruma, Surface-wave imaging of the weakly-extended Malawi Rift from ambient-noise and teleseismic Rayleigh waves from onshore and lake-bottom seismometers, *Geophys. J. Int.*, 209, 1892-1905, doi:10.1093/gji/gg133, 2017.

Shillington, D.J., J.B. Gaherty, C.J. Ebinger, C.A. Scholz, K. Selway, A.A. Nyblade, P.A. Bedrosian, C. Class, S.L. Nooner, M.E. Pritchard, and SEGMeNT team, Acquisition of

a unique onshore/offshore geophysical and geochemical dataset in the northern Malawi (Nyasa) rift, *Seism. Res. Lett, 87* (6), 1406-1416, doi:10.1785/0220160112, 2016.

`Lin, P.Y., J.B. Gaherty, G. Jin, J.A. Collins, D. Lizarralde, R.L. Evans, and G. Hirth, High-resolution seismic constraints on flow dynamics in the oceanic asthenosphere, *Nature*, *535* , 538-541, doi:10.1038/nature18012, 2016.

*Eilon, Z., G.A. Abers, and J.B. Gaherty, A joint inversion for Vs and anisotropy: The Woodlark Rift, Papua New Guinea", *Geophys. J. Int.,* doi: 10.1093/gji/ggw177, 2016.

`Bao, X., C.A. Dalton, G. Jin, J.B. Gaherty, and Y. Shen, Imaging Rayleigh-wave attenuation with USArray, *Geophys. J. Int.*, doi: 10.1093/gji/ggw151, 2016.

Roy, M., S. Gold, A. Johnson, R. Osuna-Orozco, B. Holtzman, and J.B. Gaherty, Macroscopic coupling of deformation and melt migration at continental interiors, with applications to the Colorado Plateau, *J. Geophys. Res.,* doi: 10.1002/2015JB0121492015, 2016.

Abers, G.A., Z. Eilon, J.B. Gaherty, G. Jin, YH. Kim, M. Obrebski, and C. Dieck, Southeast Papuan crustal tectonics: Imaging extension and buoyancy of an active rift, *J. Geophys. Res.,* 121, 951-971, doi: 10.1002/2015JB012621, 2016.

*Eilon, Z., G.A. Abers, G. Jin, and J.B. Gaherty, Imaging Continental Breakup using Teleseismic Body Waves: The Woodlark Rift, Papua New Guinea, *Geochem. Geophys. Geosyst,* 16, 2529–2548, doi:10.1002/2015GC005835, 2015.

*Jin, G., J.B., Gaherty, G.A. Abers, Y. Kim, Z. Eilon, and R. Buck, Shear Velocity Structure of the D'Entrecasteaux Islands, Papua New Guinea from Rayleigh Wave Tomography, *Geochem. Geophys. Geosyst,* 16, 3808–3824, doi:10.1002/2015GC005840, 2015.

*Jin, G. and J.B. Gaherty, Surface-wave phase-velocity tomography based on multi-channel cross correlation, *Geophys. J. Int., 201,* 1383-1398, doi: 10.1093/gji/ggv079, 2015.

*Sarafian, E., R.L. Evans, J.A. Collins, J. Elsenbeck, G.A. Gaetani, J.B. Gaherty, G. Hirth and D. Lizarralde, The electrical structure of the central Pacific upper mantle constrained by the NoMelt experiment, *Geochem. Geophys. Geosyst., 16*, doi:10.1002/2014GC005709, 2015.

*James, E.J., C.A. Dalton, and J.B. Gaherty, Rayleigh wave phase velocities in the Atlantic upper mantle, *Geochem. Geophys. Geosyst. 15*, 4305–4324, doi:10.1002/ 2014GC005518, 2014.

*Vidales-Basurto, C.A., R.R. Castro, C.I. Huerta, D.F. Sumy, J.B. Gaherty, and J.A. Collins, An attenuation study of body waves in the south-central region of the Gulf of California, México, *Bull. Seism. Soc. Am.*, 104, 2027-2042, doi: 10.1785/0120140015, 2014.

*Eilon, Z., G.A. Abers, G. Jin, and J.B. Gaherty, Anisotropy beneath a highly extended continental rift, *Geochem. Geophys. Geosyst.*, 15, doi:10.1002/2013GC005092, 2014.

`Dalton, C. and J.B. Gaherty, Seismic anisotropy in the continental crust of northwestern Canada, *Geophys. J. Int.,* 193, 338-348, doi: 10.1093/gji/ggs108, 2013.

*Wang, Y., D.W. Forsyth, C.J. Rau, N. Carriero, B. Schmandt, J.B. Gaherty, and B. Savage, Fossil Slabs Attached to Unsubducted Fragments of the Farallon Plate, *Proc. Nat. Acad. Sci.*, *110*, 14, doi:10.1073/pnas.1214880110, 2013

*Sumy, D., J.B. Gaherty, W.-Y. Kim, T. Diehl, and J. Collins, The mechanisms of earthquakes and faulting in southern Gulf of California, *Bull. Seism. Soc. Am.*, 103, doi: 10.1785/0120120080, 2013.

`Dalton, C., J. B. Gaherty, and A.M. Courtier, Crustal VS structure in northwestern Canada: Imaging the Cordillera-craton transition with ambient-noise tomography, *J. Geophys. Res.*, doi:10.1029/2011JB008499, 2011.

*Courtier, A.M., J.B. Gaherty, J. Revenaugh, M.G. Bostock, and E.J. Garnero, Seismic anisotropy associated with continental lithosphere accretion beneath the CANOE array, northwestern Canada, *Geology*, **38**, 887–890, doi: 10.1130/G31120.1, 2010.

*Mercier, J.-P., M.G. Bostock, J.F. Cassidy, K. Dueker, J.B. Gaherty, E.J. Garnero, J. Revenaugh, and G. Zandt, Body-wave tomography of western Canada, *Tectonophys*. **475**, 480-492, doi:10.1016/j.tecto.2009.05.030, 2009.

*Hansen, S.E., J.B. Gaherty, S.Y. Schwartz, A.J. Rodgers, and A.M.S. Al-Amri, Seismic velocity structure and depth-dependence of anisotropy in the Red Sea and Arabian Shield from surface-wave analysis, *J. Geophys. Res.,* **113**, B10307, doi:10.1029/2007JB005335, 2008.

*Mercier, J.-P., M.G. Bostock, P. Audet, J.B. Gaherty, E.J. Garnero, J. Revenaugh, The teleseismic signature of fossil subduction: Northwestern Canada, *J. Geophys. Res*., 113, B04308, doi:10.1029/2007JB005127, 2008.

Gaherty, J.B. and R.A. Dunn, Evaluating hotspot-ridge interaction in the Atlantic from regional-scale seismic observations, *Geochem.Geophys.Geosyst.*,**8**, Q05006, doi:10.1029 / 2006GC001533,2007.

*Delorey, A.A., R.A. Dunn, and J.B. Gaherty, Surface Wave Tomography of the Upper Mantle Beneath the Reykjanes Ridge with Implications for Ridge-Hotspot Interaction, *J. Geophys. Res*., **112**, B08313, doi:10.1029/2006JB004785, 2007.

`Gu, Y.J., S.C. Webb, A. Lerner-Lam, and J.B. Gaherty, Upper-mantle structure beneath the eastern Pacific Ocean ridges, *J. Geophys. Res*. **110**, B06305, doi:10.1029/2004JB003381, 2005.

Gaherty, J.B., D. Lizarralde, J. Collins, G. Hirth, and S.Kim, Mantle deformation during slow seafloor spreading constrained by observations of seismic anisotropy in the western Atlantic, *Earth Planet. Sci. Lett.*, **228**, 255-265, 2004.

Lizarralde, D., J.B. Gaherty, J.A. Collins, G. Hirth, and S. Kim, Spreading-rate dependence of melt extraction at mid-ocean ridges from far-offset seismic data, *Nature,* **432**,744-747, 2004.

Gaherty, J.B., A surface-wave analysis of seismic anisotropy beneath eastern North America, *Geophys. J. Int*., **158**,1053-1066, 2004.

Butler, R., Lay, T., Creager, K., Earle, P., Fischer, K., Gaherty, J., Laske, G., Leith, B., Park, J., Ritzwoller, M., Tromp, J. and Wen, L., The Global Seismographic Network Surpasses Its Design Goal, *EOS Trans. AGU*, **85**, 225, 229, 2004.

Gaherty, J.B., Seismic evidence for hotspot-induced buoyant flow beneath the Reykjanes Ridge, *Science*, **293**, 1645-1647, 2001.

`Freybourger, M., J.B. Gaherty, and T.H. Jordan, Structure of the Kaapval craton from surface waves, *Geophys. Res. Lett.*, **28**, 2489-2492, 2001.

*Saltzer, R., J.B. Gaherty, and T.H. Jordan, What does vertical shear-wave splitting measure when the azimuthal anisotropy varies with depth?, *Geophys. J. Int.*, **141**, 374-390, 2000.

Gaherty, J.B., Y. Wang, T.H. Jordan, and D.J. Weidner, Testing plausible upper-mantle compositions using fine-scale models of the 410-km discontinuity, *Geophys. Res. Lett.*, **26**, 1641-1644, 1999.

Gaherty, J.B., M. Kato, and T.H. Jordan, Seismological structure of the upper mantle: A regional comparison of seismic layering, *Phys. Earth Planet. Inter.*, **110**, 21-41, 1999.

Lay, T., E.J. Garnero, C.J. Young, and J.B. Gaherty, Scale-lengths of shear velocity heterogeneity at the base of the mantle from *S* wave differential travel times, *J. Geophys. Res.*, **102**, 9887-9909, 1997.

Gaherty, J.B., T.H. Jordan, and L.S. Gee, Seismic structure of the upper mantle in a central Pacific Corridor, *J. Geophys. Res.*, **101**, 22,291-22,309, 1996.

Gaherty, J.B. and T.H. Jordan, Lehmann Discontinuity as the base of an anisotropic layer beneath continents, *Science*, **268**, 1468-1471, 1995.

Gaherty, J.B. and B.H. Hager, Compositional vs. thermal buoyancy and the evolution of subducted lithosphere, *Geophys. Res. Lett.*, **21**, 141-144, 1994.

Gaherty, J.B. and T. Lay, Investigation of laterally heterogeneous shear velocity structure in D" beneath Eurasia, *J. Geophys. Res.* **97**, 417-435, 1992.

Gaherty, J.B., T. Lay, and J.E. Vidale, Investigation of deep slab structure using long-period *S* waves, *J. Geophys. Res.* **96**, 16349-16367, 1991.

SUBMITTED:

*Accardo, N.A., D.J. Shillington, J.B. Gaherty, C.A. Scholz, C.J. Ebinger, A.A. Nyblade, P.R.N. Chindandali, G. Kamihanda, T. McCartney, D. Wood, R.W. Ferdinand, Implications for Growth and Interaction of Large Border Faults in the Malawi Rift from 3D Seismic Refraction Imaging, *J. Geophys. Res.*, submitted, 2017.

NON-REFEREED REPORTS:

Gaherty, J.B., C. Dalton, and V. Levin, A three-dimensional model of crustal structure in the central and eastern US derived from broadband ambient-noise surface waves and receiver functions, *USGS Open File Report*, 2011.

Gaherty, J.B., G. Hirth, and G. A. Abers, Report on MARGINS Workshop: Interpreting Upper-Mantle Images, *MARGINS Newsletter*, No. 17, 1-5, Fall 2006.

Gaherty, J.B., T.-K. Hong, and L. Zhao, Regionalization of crustal and upper-mantle Q structure in eastern Eurasia using multiple regional waves, *Proceedings of the 28th Annual Seismic Research Review*, 2006.

Jordan, T.H., J.B. Gaherty, M. Kato, and O. van Genebeek, Regional upper-mantle structures and their interpretation in terms of small-scale, anisotropic heterogeneities, *Proceedings of the 18th Annual Seismic Research Symposium*, Lewkowicz, McPhetres, and Reiter, Ed., Phillips Laboratory, pp. 361-370, 1996.

Jordan, T.H. and J.B. Gaherty, Stochastic modeling of small-scale, anisotropic structures in the continental upper mantle, *Proceedings of the 17th Annual Seismic Research Symposium*, Lewkowicz, McPhetres, and Reiter, Ed., Phillips Lab., pp. 433-444, 1995.

Jordan, T.H. and J.B. Gaherty, Polarization anisotropy and the small-scale structure of the continental upper mantle, *Proceedings of the 16th Annual Seismic Research Symposium*, Cipar, Lewkowicz, and McPhetres, Ed., Phillips Lab., pp. 189-195, 1994.

TEACHING:

Columbia University

Fall, 2003 – Spring, 2004:		Seismology-Geology-Tectonophysics Seminar
Spring, 2008:	EESC G9945:	Seismology Seminar: Topics (w/ Ekstrom, Nettles)
Fall, 2008:	EESC G9945:	Seismology Seminar: Topics (w/ Ekstrom, Nettles, Abers)

Spring, 2009:	EESC G9945:	Seismology Seminar: Topics (w/ Ekstrom, Nettles, Abers)
Fall, 2009:	EESC G9945:	Seismology Seminar: Topics (w/ Ekstrom, Nettles, Abers)
Spring, 2010:	EESC G9945:	Seismology Seminar: Topics (w/ Ekstrom, Nettles, Abers)
Fall, 2010:	EESC G9945:	Seismology Seminar: Topics (w/ Ekstrom, Nettles, Abers)
Spring, 2011:	EESC G9945:	Seismology Seminar: Topics (w/ Ekstrom, Nettles, Abers)
Fall, 2011:	EESC G9945:	Seismology Seminar: Topics (w/ Ekstrom, Nettles, Abers)
Spring, 2012:	EESC G9945:	Seismology Seminar: Topics (w/ Ekstrom, Nettles, Abers)
Fall, 2012:	EESC G9945:	Seismology Seminar: Topics (w/ Ekstrom, Nettles, Abers)
Spring, 2013:	EESC G9945:	Seismology Seminar: Topics (w/ Ekstrom, Nettles, Abers)
Fall, 2013:	EESC G9945:	Seismology Seminar: Topics (w/ Ekstrom, Nettles, Abers)
Spring, 2014:	EESC G9945:	Seismology Seminar: Topics (w/ Ekstrom, Nettles, Abers)
Fall, 2014:	EESC G9945:	Seismology Seminar: Topics (w/ Ekstrom, Nettles, Webb)
Spring, 2015:	EESC G9945:	Seismology Seminar: Topics (w/ Ekstrom, Nettles, Webb)
Fall, 2015:	EESC G9945:	Seismology Seminar: Topics (w/ Ekstrom, Webb)
Spring, 2016:	EESC G9945:	Seismology Seminar: Topics (w/ Nettles, Webb)
	EESC G9455:	Tectonophysics Seminar: Continental Rifting (w/ Shillington, Buck)
	EESC W4947:	Plate Tectonics
Fall, 2016:	EESC G9945:	Seismology Seminar: Topics (w/Ekstrom, Nettles, Webb)
	EESC G9455	Tectonophysics Seminar: East-coast Earthquakes (w/ Savage, Shillington, Waldhauser)
Spring, 2017:	EESC G9945:	Seismology Seminar: Topics (w/ Ekstrom, Nettles, Webb)
Fall, 2017:	EESC G9945:	Seismology Seminar: Topics (w/ Ekstrom, Nettles, Webb)
	EESC W4947:	Plate Tectonics

Georgia Institute of Technology

Spring, 1998:	EAS 3513:	Physics of the Earth's Interior
Fall, 1998:	EAS 8012b:	Geophysics Research Seminar
Winter, 1999:	EAS 8133b	Geodynamics
Spring, 1999:	EAS 3513:	Physics of the Earth's Interior
Fall, 1999:	EAS 6311:	Physics of the Solid Earth
Spring, 2000:	EAS 3602:	Earth System Physics (50% with Fu)
Fall, 2000:	EAS 6311:	Physics of the Solid Earth
Spring, 2001:	EAS 3602:	Earth System Physics (50% with Fu)
Fall, 2001:	EAS 6312:	Geodynamics
Spring, 2002:	EAS 2601:	Earth Processes

STUDENTS AND POST-DOCS SUPERVISED:

Post-Doctoral Scientists Supervised: Po Chen, Colleen Dalton, Patty Lin, Charlie Wilson, Emily Hopper (current)

Post-Doctoral Scientists Co-Mentored: Ben Holtzman, Einat Lev

***PhD Advisor / Co-Advisor*:** Helen Janiszewski, Ge Jin, Danielle Sumy, Natalie Accardo (current), Chris Carchedi (current), Joshua Russell (current)

PhD Advisory Committee: Zach Eilon, Anna Foster, Raj Moulik, Ashley Shuler, Steven Veitch, Claire Bendersky, Celia Eddy (current), Rachel Marzen (current)

External PhD Committee: Sam Bell (Brown), Dayanthie Weeraratne (Brown), Yinjie Yang (Brown), X. Zhang (Utrecht), Sangmyung Kim (Georgia Tech), X. Chen (Georgia Tech), Jeff Margin (Georgia Tech)

Undergraduate Interns: 10 total

MEDIA AND PUBLIC OUTREACH

Guest commentator on earthquakes and related disasters: CBS Early Show, CNN Anderson Cooper 360, WNYC Brian Lehrer Show. Available links:
https://www.youtube.com/watch?v=dVjsHW5gVIk&feature=youtu.be
https://www.youtube.com/watch?v=nZYTZEmbbjM
http://www.wnyc.org/story/154446-earthquake-questions-answered/

Scientific Blogs:
http://blogs.ei.columbia.edu/tag/east-africa-rift/
http://blogs.ei.columbia.edu/tag/earths-tectonic-plates

PROFESSIONAL COMMITTEES AND SERVICE:

Incorporated Research Institutions in Seismology (IRIS):
- OBSIP Management Council, 2012-present
- Chairman, Data Services Standing Committee, 2015-2016
- Coordinating Committee, 2008-2011 (Chair), 2015-2016
- Data Services Standing Committee, 2014-2015
- Vice Chairman, Board of Directors, 2008-2011
- Board of Directors, 2006-2008.
- PASSCAL Strategic Planning Workshop, 2005.
- Global Seismic Network Standing Committee, 2001-2004.

NSF OBSIP Management Committee, 2007-2012

Associate Editor, *G-cubed*, 2003-2009, 2011-2013 (LAB theme)

Co-Convener, Future of Amphibious Array Workshop, Snowbird, UT, Oct 2014

Co-Chair, "Fluids and Magma" Thematic Working Group, EarthScope Program, 2008-2013.

Co-Convener, Experiments with Portable Ocean Bottom Seismographs (EPBOBS) Workshop, Snowbird, UT, Sept. 2010.

Co-Convener, MARGINS Theoretical Workshop "Interpreting Mantle Images", Woods Hole, May 2006.

NSF Proposal Review Panel, Marine Geology and Geophysics Program (2002); Geophysics program (2003); Margins program (2005), CNIC program (2014)

Science Foundation of Ireland Proposal Review Panel, Geosciences, 2009, 2010

American Geophysical Union:
- Co-convener, "Structure and Dynamics of Suboceanic Mantle", JpGU-AGU joint session, 2016 JpGU meeting
- Co-convener, "New Views on the Lithosophere-Asthenosphere Boundary", 2010 Fall Meeting
- Co-convener, "Seismology From Crust to Core: The Science of the Global Seismographic Network", 2004 Joint Assembly.
- Co-convener, "Structure and Dynamics of the Oceanic Upper Mantle", 2003 Fall Meeting.
- Co-convener, "Hotspots and Dynamics of the Oceanic Mantle", 2002 Spring Meeting.
- Co-convener, "Shear-wave Splitting -- a search for consensus", 1998 Spring Meeting.
- Selection committee, Student Paper Award, Seismology Section, 1997 Fall Meeting, 1999 Spring Meeting.

Referee, National Science Foundation, *Nature*, *Science, Geophys. Res. Lett., J. Geophys. Res., Earth Planet. Sci. Lett., Pageoph, Phys. Earth Planet. Int., Geophys. J. Int.*

MEMBERSHIP IN PROFESSIONAL AND HONOR SOCIETIES:

American Geophysical Union, Seismological Society of America