

Michael E. Wyession
Curriculum Vitae
October, 2012

PRESENT POSITION:

Department of Earth and Planetary Sciences
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Web: <http://epsc.wustl.edu/seismology/michael/web/index.html>

DATE OF BIRTH December 6, 1961**CITIZENSHIP** USA**PLACE OF BIRTH** Jersey City, New Jersey**EDUCATION:**

Ph.D. (Geophysics), Northwestern University, 1991
Sc.B. (Geophysics), Brown University, 1984

ACADEMIC DISTINCTIONS:

Missouri Teachers Association Service Award, 2012.
NAGT Distinguished Lectureship, 2009.
IRIS and SSA Distinguished Lectureship, 2005.
NSF Presidential Faculty Fellowship, 1997-2002.
Distinguished Faculty Award, Washington University, 2000.
Innovation Award of the St. Louis Science Academy, 1999.
Washington University's First Residential College Faculty Fellow, 1998-2001.
Kemper Foundation Faculty Award to Improve Learning, 1993, 1999.
Lilly Foundation Teaching Fellowship, 1995.
Packard Foundation Fellowship for Science and Engineering, 1992-1997.
AAAS Mass Media Science and Engineering Fellowship, 1988.
President's Fellowship, Northwestern University, 1986.

PROFESSIONAL EXPERIENCE:

Associate Professor, Washington University, 1997 - present.
Assistant Professor, Washington University, 1991- 1997.
Faculty Member (part-time), University College, Northwestern University, 1989-1991.
Graduate Assistant, Northwestern University, 1986-1991.
High School Math and Physics Teacher, Staten Island (N.Y.) Academy, 1984-1986.

PROFESSIONAL SOCIETIES:

American Association for the Advancement of Science
American Geophysical Union

Geological Society of America
 Incorporated Research Institutions for Seismology
 National Association of Geoscience Teachers
 Seismological Society of America
 Sigma Xi

RESEARCH INTERESTS: Earthquake seismology, earth structure, mantle-core dynamics, intraplate seismicity, and geophysical education.

PROFESSIONAL ACTIVITIES:

IRIS - Incorporated Research Institutions for Seismology:

Chair, Education and Outreach Committee, 2005-2010.
 Meetings and Publications Committee, 2005-2010.
 Membership Committee, 2005-2010.
 Planning Committee, 2003-2005.
 Elections Committee, 2003-2004.
 Legal Affairs Committee, 2004.
 Secretary, Executive Committee, 1998-2001.
 Global Seismic Network Committee, 1998.
 Co-Organizer, IRIS Annual Workshop, Hawaii, June, 2002.
 Co-Facilitator of IRIS Annual Workshop, Yosemite, CA, May, 1999.

EarthScope:

Education and Outreach Committee, 2012-present.
 Coauthor, *EarthScope Science Plan for 2010-2020*, 2010.
 Deep Earth Structure working group, 2008-2010.
 Co-Facilitator of NSF EarthScope Workshop, Snowbird, Utah, October, 2001.

LRSPS – Long Range Science Plan for Seismology:

Coauthor, *Seismological Grand Challenges in Understanding Earth's Dynamic Systems*, 2009.

CIG - Computational Infrastructure for Geodynamics:

Seismology Working Group, 2005-present.
 Co-Organizer, CIG/SPICE Workshop, Jackson, NH, Oct., 2007.
 Host, Workshop on CIG/EarthScope Seismic Imaging (70 people), Washington University, St. Louis, Oct 31-Nov 2, 2006.
 Steering Committee, 2003-2004.

ESLI – Earth Science Literacy Initiative:

Chair, 2008-present.
 Online workshop organizer, May, 2008.
 Writing workshop organizer, July, 2008.

NAS - National Academy of Science:

NRC (National Research Council) National Science Education Framework Committee,
 Leader of Earth & Space Design Team, 2010 – 2011.
 COSG –Committee on Seismology and Geodynamics, Vice-Chair, 2007-present.

Achieve, Inc.: Co-leader for Earth and Space Science for the writing of the national K-12 *Next Generation Science Standards*, 2011-present.

RIDGE: Education and Outreach Committee, RIDGE 2000, 2006-present.
 Consultant, GLOBE proposal for RIDGE 2000 E&O, 2006-present.

NSF – National Science Foundation:

Mathematics-Geophysics Panel member, 2005 and 2007.
 COMPRES Panel member, 2002.

AGU – American Geophysical Union:

Editor, *Geophysical Research Letters*, 2009-present.
 Co-organizer of AGU meeting session on Seismology Education, Fall, 2011.
 Co-organizer of AGU meeting session on Earth Science Literacy, Fall, 2008.
 Studies of the Earth's Deep Interior Committee (SEDI), 1994-1998 (Chair, 1996-1998).
 Co-editor, *The Core Mantle Boundary Region*, AGU Monograph, 1998.
 Seismology Editor, *Eos*, AGU, 1998-1999.
 Associate Editor, *Journal of Geophysical Research*, AGU, 1994-1996.
 Associate Editor, *Computational Seismology*, AGU, 1992-1994.
 Co-organizer of AGU meeting session on Water in the Deep Mantle, Fall, 2005.
 Organizer of AGU meeting session on the Core-Mantle Boundary, Fall, 2000; Fall, 1998;
 Fall, 1996.

NASA – National Air and Space Administration:

Designer and instructor of rotating geology training course for NASA engineers, 2009 - present.

OTCE – On The Cutting Edge: A Community Resource Transforming Geoscience Education:

Co-PI, 2010-2015.
 Co-organizer, Workshop on Structure, Tectonics, and Geophysics, Knoxville, TN, July, 2012.
 Organizer, Online Geophysics Workshop, June, 2012.
 Co-organizer, Workshop for New Geoscience Faculty, Williamsburg, VA, June, 2011.
 Co-organizer, *Visualizing Seismic Waves for Research and Teaching*, 6-week online virtual workshop, February-March, 2011.
 Co-organizer, *Teaching Geophysics in the 21st Century Workshop*, Jackson Hole, WY, August, 2007.

NAGT – National Association of Geoscience Teachers:

Advisory Board, Building Strong Geoscience Departments, 2007-present.

OOI – Ocean Observatories Initiative:

Program Advisory Committee, 2008-2009.

SSA – Seismological Society of America:

Organizer of meeting session on educational seismology, Santa Fe, NS, Apr, 2008.

GSA – Geological Society of America:

Organizer of meeting session on Earth Science Literacy, Portland, OR, Oct., 2009.

Pearson (Prentice Hall) Education:

Co-author, National K-8 Science Program, 2008-present.

Consultant for and author of secondary educational science textbooks, 2001-present.

Consultant for middle school curriculum development, 2006–present.

Professional development for high school science teachers, 2003–present.

The Teaching Company:

Author and lecturer for video course (48 half-hour lectures) on “How the Earth Works,” 2008.

Author and lecture for video course (36 half-hour lectures) on “Geologic Wonders of the World,” 2012.

Other Professional Activities:

Consultant and co-host of “Journey to the Earth’s Core,” a television series produced by Wall-to-Wall Media for the History Channel, March, 2011.

Consultant to PBS for Earth science-related video products, 2009-present.

Board of Advisors, Earth and Planetary Science Letters, 2001-2007.

Contributor to the "Glossary of Geology," published by the American Geological Institute, 2003.

Consultant for Earth Science Museum Exhibits (Smithsonian Institution Natural History Museum, American Museum of Natural History (New York), National Geographic).

Peer reviewer of articles for *Nature*, *Science*, *Journal of Geophysical Research*, *Geology*, *Geophysical Research Letters*, *Pure and Applied Geophysics*, *Physics of the Earth and Planetary Interiors*, *Earth and Planetary Science Letters*, *Geophysical Journal International*, *GSAToday*, *EOS*, and other journals, as well as proposals for the National Science Foundation.

INVITED LECTURES AND PRESENTATIONS:

March, 1992 St. Louis University, St. Louis, MO

October, 1992 Brown University, Providence, RI

February, 1993 Illinois University, Champaign-Urbana, IL

July, 1993 Washington University, George Engelmann Math and Science Institute
Scholar Research Program

October, 1993 University of South Carolina, Columbia, SC

November, 1993 University of Wisconsin, Madison, WI: Lewis G. Weeks annual
endowed lecture

April, 1994 Washington University, Computational Imaging Focus Group

June, 1994	Washington University, Dedication of the Alvin Goldfarb Auditorium
July, 1994	Washington University, George Engelmann Math and Science Institute Scholar Research Program
July, 1994	St. Louis Mensa Society
February, 1995	Scripps Inst., La Jolla, CA: Workshop on the future of Ocean Bottom Seismometers
March, 1995	University of Missouri, Columbia, MO
April, 1995	Washington University, Biochemistry Retreat Invited Keynote Lecture
July, 1995	Washington University, George Engelmann Math and Science Institute Scholar Research Program
December, 1995	Washington University, Century Club Lecture
March, 1996	University of Michigan, Ann Arbor, MI
June, 1996	Incorporated Research Institutions for Seismology (IRIS), Blaine, WA
July, 1996	Institute for Religion in an Age of Science (IRAS), Isle of Shoals, NH
August, 1996	Washington University, University Management meeting
February, 1997	University of Washington, Seattle, WA
March, 1997	Washington University, Arts & Sciences Executive Board
March, 1997	Northwestern University, Evanston, IL
July, 1997	NSF Young Scholars Program, Washington University
October, 1997	Washington University, Alumni Annual Meeting
November, 1997	Washington University, School of Architecture
May, 1998	University of New Mexico, Albuquerque, NM
October, 1998	St. Louis Science Center, St. Louis, MO
February, 1999	St. Louis Zoo, Washington U. Dept. Pediatrics Research Retreat, St. Louis, MO
June, 1999	Junior Academy, Washington University
July, 1999	Junior Academy, Washington University
November, 1999	St. Louis Zoo, St. Louis Science Academy Lecture Series, St. Louis, MO
May, 2000	Washington University, Lifelong Learning Institute
August, 2000	Junior Academy, Washington University
October, 2000	Physics Department, Truman State University, Kirksville, MO
November, 2000	Pew Conference (Keynote Address), Washington University
January, 2001	Dept. Geological Sciences, Illinois University, Champaign-Urbana, IL
February, 2001	Missouri Science Teachers' Conference (Keynote Address), Osage Beach, MO
May, 2001	Eliot Honors Convocation, Washington University
February, 2002	Dept. Earth, Atmospheric, and Planetary Sciences, MIT
April, 2002	Dept., Geological Sciences, Arizona State University
September, 2002	Ocean Mantle Dynamics Workshop, Snowbird, Utah
March, 2003	Structure and Evolution of the Antarctic Plate (SEAP) Workshop, Boulder, Colorado
March, 2003	National Science Teachers Association (NSTA) Conference, Philadelphia, PA
April, 2003	Great-Plains USArray Workshop, Manhattan, Kansas
May, 2003	St. Louis University, St. Louis, MO

May, 2003	Cooperative Institute for Deep Earth Research (CIDER) Workshop, Marshall, CA
September, 2003	150th Anniversary, Washington University
November, 2003	National Science Teachers Association (NSTA) Conference, Kansas City, KS
January, 2004	Computational Infrastructure for Geodynamics Workshop, Los Angeles, CA
April, 2004	National Science Teachers Association (NSTA) Conference, Atlanta, GA
May, 2004	Brown University, Providence, RI
August, 2004	Olathe School District, Olathe, KS
September, 2004	Indiana School Districts, Merrillville, Indianapolis, Jefferson, IN
September, 2004	Carnegie Institute of Geophysics, Washington, DC
October, 2004	EarthScope Workshop, Portland, OR
October, 2004	Northwestern University, Evanston, IL
October, 2004	University of Arkansas, Fayetteville, Arkansas
November, 2004	National Science Teachers Association (NSTA) Conference, Indianapolis, IN
December, 2004	National Science Teachers Association (NSTA) Conference, Richmond, VA
January, 2005	Washington University, Univ. Management Team Meeting
February, 2005	New Mexico Museum of Science and Natural History, Albuquerque, NM
February, 2005	Washington University, EPSc Brownbag
March, 2005	UC Berkeley, Berkeley, CA
March, 2005	St. Louis Public Library, Creve Couer, MO
March/Apr, 2005	National Science Teachers Association (NSTA) Conference, Dallas, TX (2 lectures)
April, 2005	Trinity Presbyterian Church, University City, MO
April, 2005	Washington University Alumni Dinner, New York, NY
May, 2005	Smithsonian Institution, Washington, DC
May, 2005	Maryland Museum of Science, Baltimore, MD
May, 2005	Washington University, Graduation Weekend Alumni Lecture
June, 2005	Houston Science Museum, Houston, TX
June, 2005	Houston Washington U Alumni Association, The Houstonian, Houston, TX
June, 2005	Department of Earth Science, Rice University, Houston, TX
June, 2005	American Museum of Natural History, New York, NY
July, 2005	Washington University, STARS Student Scholar Research Program
July, 2005	Field Museum, Chicago, IL
September, 2005	Arizona Museum of Science, Phoenix, AZ
September, 2005	Science-On-Tap, St. Louis, MO
October, 2005	Washington University Alumni & Development, Public Affairs, and Undergraduate Admission Luncheon, St. Louis, MO
October, 2005	Washington University Alumni Club of St. Louis, St. Louis, MO
October, 2005	St. Louis Science Center, St. Louis, MO

October, 2005	National Science Teachers Assoc. (NSTA) Conference, Hartford, CT
October, 2005	IACA (International Advisory Council on Asia), Shanghai, China
October, 2005	Peking University, Dept. of Geophysics, Beijing, China
November, 2005	New York Science Teachers Conference, Ellenville, NY
November, 2005	National Science Teachers Assoc. (NSTA) Conference, Chicago, IL
November, 2005	Denver Museum of Nature and Science, Denver, CO
November, 2005	Washington University, Lifelong Learning Institute
November, 2005	National Science Teachers Assoc. (NSTA) Conference, Nashville, TN
January, 2006	Yale University, Dept Geology and Geophysics, New Haven, CT
February, 2006	SUNY Stony Brook, Dept of Geosciences, Stony Brook, NY
April, 2006	National Science Teachers Assoc. (NSTA) Conference, Anaheim, CA
May, 2006	Washington University, Graduation Weekend Alumni Lecture
June, 2006	The Teaching Company, Chantilly, VA
July, 2006	Washington University, Regional Secretary Board Meeting
August, 2006	Institute for Religion in an Age of Science, Star Island, New Hampshire
September, 2006	University of Minnesota, Department of Geology and Geophysics, Minneapolis, MN
October, 2006	St. Louis Science Center, St. Louis, MO
October, 2006	Washington University, Eliot Society
October, 2006	California Science Teachers Association (CSTA) Conference, San Francisco, CA
October, 2006	IRIS Seismology Workshop, Geological Society of America Annual Meeting, Philadelphia, PA
November, 2006	National Science Teachers Assoc. (NSTA) Conference, Baltimore, MD
December, 2006	National Science Teachers Assoc. (NSTA) Conference, Salt Lake City, UT
March, 2007	National Science Teachers Assoc. (NSTA) Conference, St. Louis, MO (5 lectures: NESTA, EarthScope, IRIS (2), Prentice Hall)
April, 2007	St. Louis City High School Science Teachers Professional Development
May, 2007	Washington University, Reunion College
August, 2007	COMPRES sponsored VLAB (Virtual Laboratory for Earth and Planetary Materials) Conference, Univ. Minnesota, Minneapolis, MN
August, 2007	Teaching Geophysics Workshop, On the Cutting Edge, Jackson Hole, WY
September, 2007	Keynote Address, Society of Exploration Geophysics, San Antonio, TX
October, 2007	National Science Teachers Assoc. (NSTA) Conference, Detroit, MI
November, 2007	Washington Alumni Canary Islands Cruise (3 lectures).
December, 2007	National Science Teachers Assoc. (NSTA) Conference, Birmingham, AL
March, 2008	National Science Teachers Assoc. (NSTA) Conference, Boston, MA
April, 2008	Maryland High School Science Teachers Professional Development, Greenbelt, MD

April, 2008	Linda Hall Science Library Endowed Lecture, Kansas City, KS
June, 2008	Missouri Scholars Program, Columbia, MO
August, 2008	Smithsonian lectures on Art&Science (4 lectures jointly with art historian Mariana Carpinisan), Washington, DC
September, 2008	Coalition for Earth Science Education (CESE) Conference, Ithaca, NY
September, 2008	Tennessee High School Science Teachers Professional Development, Memphis, TN
October, 2008	Science Café Lecture, St. Louis Science Center Program, Maplewood, MO
October, 2008	Washington University, Parents' Council Meeting Keynote Address
October, 2008	National Science Teachers Assoc. (NSTA) Conference, Charlotte, NC
November, 2008	National Science Teachers Assoc. (NSTA) Conference, Portland, OR
November, 2008	National Science Teachers Assoc. (NSTA) Conference, Cincinnati, OH
December, 2008	Mid-Continent EarthScope Workshop, San Francisco, CA
December, 2008	American Geophysical Union Fall Meeting, San Francisco, CA (2 Invited lectures)
December, 2008	ESLI Town Hall Presentation, AGU Meeting, San Francisco, CA
January, 2009	CNISS Energy Development Meeting, Belize City, Belize
February, 2009	Missouri High School Science Teachers Professional Development, St. Louis, MO
March, 2009	NASA Geology Training Workshop, Kennedy Space Center, Cape Canaveral, FL
March, 2009	World President's Organization, New York, NY
March, 2009	NAGT Distinguished Lecture, Millikin University, Decatur, IL
March, 2009	National Science Teachers Assoc. (NSTA) Conference, New Orleans, LA
April, 2009	Washington University Alumni & Development Lecture, New York, NY
April, 2009	NAGT Distinguished Lecture, Colby College, Waterville, ME
May, 2009	NASA Geology Training Workshop, Jet Propulsion Labs, Pasadena, CA
June, 2009	COMPRES Workshop, Bretton Woods, NH
August, 2009	American Chemical Society, Washington, DC
August, 2009	NASA Geology Training Workshop, Johnson Space Center, Houston, TX
September, 2009	Washington University, "Beyond Brookings" Alumni lecture
September, 2009	NASA Geology Training Workshop, Marshall Space Flight Center, Huntsville, AL
October, 2009	National Science Teachers Assoc. (NSTA) Conference, Minneapolis, MN
November, 2009	National Science Teachers Assoc. (NSTA) Conference, Fort Lauderdale, FL
November, 2009	Washington University, Global Zero, St. Louis, MO
December, 2009	National Science Teachers Assoc. (NSTA) Conference, Phoenix, AZ
December, 2009	PIXAR Lecture Series, San Francisco, CA

January, 2010	Division of National and Homeland Security, Argonne National Laboratory, Argonne, IL
January, 2010	NASA Geology Training Workshop, Jet Propulsion Labs, Pasadena, CA
February, 2010	Indiana Science Teachers Conference, Indianapolis, IN
February, 2010	Earth System Science Workshop, American Geological Institute, Houston, TX
February, 2010	On the Cutting Edge (OTCE), Deep Earth Workshop, Keynote Address, Online
March, 2010	Southern Illinois University, Geology Department, Carbondale, IL
March, 2010	National Science Teachers Assoc. (NSTA) Conference, Philadelphia, PA
April, 2010	NASA Geology Training Workshop, Goddard Space Center, Greenbelt, MD
April, 2010	NASA Geology Training Workshop, NASA Langley, Newport News, VA
May, 2010	NASA Geology Training Workshop, Jet Propulsion Labs, Pasadena, CA
July, 2010	NASA Geology Training Workshop, Kennedy Space Center, Cape Canaveral, FL
September, 2010	Washington University, Office of General Counsel Retreat, St. Louis, MO
September, 2010	Washington University, Alumni and Development/Admissions Meeting, St. Louis, MO
October, 2010	Washington University, Global Zero, St. Louis, MO
October, 2010	National Science Teachers Assoc. (NSTA) Conference, Kansas City, KS
November, 2010	National Science Teachers Assoc. (NSTA) Conference, Baltimore, MD
November, 2010	Online Webinar on the Development of New Science Education Standards, Pearson
November, 2010	NASA Geology Training Workshop, Johnson Space Center, Houston, TX
December, 2010	National Science Teachers Assoc. (NSTA) Conference, Nashville, TN
March, 2011	National Science Teachers Assoc. (NSTA) Conference, San Francisco, CA
April, 2011	Iowa State University, Department of Geology, Ames, IA
April, 2011	Washington University, University presentation on the 2011 Japan earthquake, St. Louis, MO
April, 2011	Washington University, Japanese Studies, St. Louis, MO
April, 2011	Washington University, Alumni Weekend Presentation, St. Louis, MO
June, 2011	New Mexico Science Teachers Conference, Santa Fe, NM
July, 2011	NASA Geology Training Workshop, Johnson Space Center, Houston, TX
July, 2011	National Association of Geoscience Teachers, Webinar
October, 2011	Scientific American Cruise, Mediterranean Sea (5 lectures)

October, 2011	National Science Teachers Assoc. (NSTA) Conference, Hartford, CT
November, 2011	National Science Teachers Assoc. (NSTA) Conference, New Orleans, LA
November, 2011	Washington University, Lifelong Learning Institute, St. Louis, MO
November, 2011	Pearson Education, K-12 Professional Development, Webinar
December, 2011	National Science Teachers Assoc. (NSTA) Conference, Seattle, WA
February, 2012	Wednesday Club, Ladue, MO
March, 2012	National Science Teachers Assoc. (NSTA) Conference, Indianapolis, IN
March, 2012	NASA Geology Training Workshop, Kennedy Space Center, Cape Canaveral, FL
April, 2012	St. Louis Science Center Café, St. Louis, MO
April, 2012	Washington University, Alumni Weekend Presentation, St. Louis, MO
June, 2012	Pearson Education, K-12 Professional Development, Webinar
July, 2012	Illinois Science Teachers Association, Elgin, IL
September, 2012	Pearson Education, K-12 Professional Development, Webinar
October, 2012	Pearson Education, K-12 Professional Development, Webinar

FUNDING (since 1992):

- W. M. Keck Foundation: Planetary geodynamics equipment purchases (P.I. – R. Arvidson, Washington University); June, 1992; \$230,000.
- Pew Midstates: Undergraduate Student Research Assistance; June 1, 1992 to May 31, 1993; \$7,122.
- NSF-EAR-9205368: "Diffracted wave studies of the structure of the core-mantle boundary"; July 1, 1992 to June 31, 1994; \$110,000.
- David and Lucille Packard Fellowship for Science and Engineering; 1992-1997, \$500,000.
- Washington University Research Grant: Purchase of Broadband seismometer (with D. Wiens); 1993; \$32,000.
- Kemper Faculty Grant to Improve Learning; 1993-1994, \$11,500.
- NSF-EAR-9319324: "The Missouri to Massachusetts Broadband Seismometer Deployment: Collaborative Studies of Mantle Structure"; June 1, 1994 to December 31, 1996; \$79,267 (total of \$366,603 including Brown Univ. and Univ. of Illinois parts).
- NSF-REU-Supplement: "Research Experience for Undergraduates, Supplement to NSF MOMA Project", July 1, 1994 to December 31, 1996; \$30,369.
- NSF-EAR-9417542: "Seismic Studies of the Lowermost Mantle and Core-Mantle Boundary"; January 1, 1995 to December 31, 1996; \$80,451.
- NSF-EAR-9417494: "Acquisition of an Erasable Optical Jukebox for Analysis of Seismic Data" (with D. Wiens); 1995; \$27,401.
- NSF-DUE-9455417: "Educational Earthquake Visualization": April 15, 1995 to April 15, 1998; \$138,133.
- Lilly Teaching Fellowship, 1995-1996, \$6,500.
- NSF-EAR-9614199: "Upgrade of Computational Facilities for Seismology Research" (with D. Wiens, D. Zhao, G. Al-eqabi, and P. Shore); 1996; \$36,203.
- NSF-EAR-9629018: Presidential Early Career Award for Science and Engineering; 1997-2003, \$500,000.

- NSF-EAR-9712311: "CSEDI Collaborative Laboratory, Seismological, & Geodynamical Study of the Transition Zone Within and Near Subducting Slabs": July 1, 1997 to June 30, 1999; \$199,000 (Co-PIs: A. Hofmeister, R. Phillips, D. Wiens, D. Zhao).
- NSF-MRI-9977670: "Acquisition of a Parallel Computer for Research and Research Training in Science at Washington University" (PI: W.-M. Suen; Co-PIs - C. Bernard, B. Pickard, M. Wickerhauser, M. Wyssession); 1999-2003; \$1,208,403.
- NSF-EAR-9903260: "Collaborative Research: The Florida to Edmonton Broadband Seismic Deployment" (with K. Fischer); 2001-2004, \$157,072.
- NSF-REU-9903260: "Research Experience for Undergraduates, Supplement to NSF Collaborative Research: The Florida to Edmonton Broadband Seismic Deployment"; 2001, \$5,000.
- Kemper Faculty Grant to Improve Learning; (with U. Goodenough and C. Bernard) 1999-2000, \$16,006.
- NSF-EAR-0207751: "Mapping Small-Scale Structure Above the Core-Mantle Boundary;" 2002-2007, \$300,000.
- NSF-EAR-0207737: "Acquisition of a New Geophysics Computer System" (Co-PI with D. Wiens); 2002-2006, \$96,999.
- NSF: IRIS Undergraduate Internship, 2005-2006, \$5,765.
- NSF: EarthScope EAR-0544731: "Seismic Travel Times and Attenuation Measurements: An EarthScope Data Product;" 2006-2010, \$215,135. (Current)
- NSF: EAR-0832415: Collaborative Research: "The Earth Science Literacy Initiative" (with John Taber, IRIS); 2008-2010, \$128,121.
- NSF: EAR-0929946: "Development of New Rotational Seismometers of High Sensitivity" (with Ram Cowsik and Doug Wiens); 2009-2011, \$389,949.
- NSF: EAR-0842295: "Acquisition of a New Linux-Based Computer System for Geophysical Research" (with Doug Wiens); 2009-2011, \$74,881.
- NSF: EAR-0838426: Collaborative Research: "Investigation of Sources of Intraplate Volcanism Using PASSCAL Broadband Instruments in Madagascar, The Comores, and Mozambique (MACOMO) (with Doug Wiens and Andy Nyblade); 2010-2014, \$725,417. (Total budget is \$958, 348.) (Current)
- NSF: DUE-1022844: Collaborative Research: "On the Cutting Edge: A Community Resource Transforming Geoscience Education (OTCE)" (with Barbara Tewksbury (Hamilton College), Heather Macdonald (William and Mary), Cathy Manduca (Carleton), Rachel Beane (Bowdoin), David McConnell (North Carolina State), Katryn Wiese (City College of San Francisco), Dave Mogk (Montana State)); 2010-2015, \$124,495. (Total budget is \$4,999,777.) (Current)
- NSF: EAR-0952154: Collaborative Research: "Superior Province Rifting EarthScope Experiment (SPREE)" (with Suzan van der Lee, Donna Jurdy, and Seth Stein (Northwestern), Doug Wiens (WashU), Justin Revenaugh (Univ Minnesota), Andrew Frederiksen (Univ Manitoba), Fiona Darbyshire (Univ Quebec)), 2010-2014, \$448,212. (Total budget is 1,091,814.) (Current)

STUDENTS SUPERVISED AND CO-SUPERVISED:

An-Ning Zhu: Post-Doctoral Assistant, 6/93 - 5/95.

Saadia Baqer: Post-Doctoral Assistant, 10/97 - 6/02.

Ghassan Al-Eqabi: Post-Doctoral Assistant, 2/95 - present.

Graduate Students:

Raul Valenzuela Wong: Ph.D., 12/96.

Keith Koper: Ph.D., 8/98.

Jesse Fisher Lawrence: Ph.D., 8/04.

Garrett Euler: Graduate Student, 1/05 – present.

Other graduate students partially advised with research (Jacob Lesgold, Lilla Bartkó, Stacey Robertson, Brian White, Moira Pyle, David Heeszel).

Undergraduate Students Advised in Research:

Nikil Dharan, 9/2012 – present; Chris Menard, 05/2011 – 05/2012; Hannah Rabinowicz, 09/2010 – 05/2011; Angela Goodiel, 06/2010 – present; Brittany Huhmann: 09/2007 – 09/2008; Hesham Humbazazza: 09/2005 – 6/2006; Tara Mayeau: 06/2005 – 08/2005; Eboni Collins: 09/2003 – 5/2005; Scott Parton: 09/2003 - 12/2004; Kurt Solander: 05/2002 - 8/2003; Jessica Lin: 09/2002 - 05/2002; Emily Carter: 8/2002 - 5/2003; Juliana Rakosky: 6/2002 - 8/2002; Tracy Portle: 5/2002 - 6/2002, 5/2003-8/2003; Rakhi Kasat: 9/2000 - 5/2001; Laquesha Andrews: 9/2000 - 5/2001; Paul Geisting: 6/2000 - 9/2000; Brian Yanites: 5/1999 - 8/2001; Tim Huff: 5/1999 - 5/2000; Megan Murphy: 8/1998 - 7/2002; Itai Gurari: 5/1998 - 5/2000; Ranjini Mahinda: 8/1997 - 5/1999; Jared Leavitt: 9/1997 - 5/1998; Amy Langenhorst: 6/1997 - 9/1997, and 6/1998 - 9/1998; Jacob Owen: 5/1997 - 8/1997, and 5/1998 - 8/1998; Jeffrey Watts: 5/1997 - 8/1997; Mason Mitchell-Daniels: 8/1996 - 5/1997; Chris Wolpert: 6/1996 - 8/1996; Jeremy Voligny: 1/1996 - 6/1996; Manjali Gupta: 8/1995 - 6/1996; Brian Murray: 6/1995 - 8/1997; Martha Neustadt: 3/1995 - 8/1996; Andrew Hovland: 8/1994 - 6/1995; Brian Hicks: 8/1993 - 8/1995; Rachel Sakata: 8/1993 - 6/1995; Jessica Butler: 11/1992 - 9/1994; Diane Pietrzak: 9/1992 - 5/1993; Joyce Wilson, 1992; Lilla Bartkó, 1992.

COURSES TAUGHT:

Physical Geology - EPS 119A (Fall-1991).

*Ring of Fire: Earthquakes, Volcanoes, and Plate Tectonics - EPS 130A (Fall-1993; Fall-1994; Fall-1997; Fall-2006)

*Evolution of the Earth - EPS 200A (Spring-1993; Fall-1996; Fall-1998; Fall-2000; Fall-2001; Fall-2002)

*Earth and the Environment - EPS 201 (Fall-2004; Fall-2006; Fall-2008; Fall-2010; Fall-2012)

*Epic of Evolution - Biol/EPS/Phys 210A (Spring-2000; Spring-2001; Spring-2002; Spring-2003, Spring-2005, Spring-2006, Spring-2008, Spring-2009, with C. Bernard and U. Goodenough; Spring-2010, with U. Goodenough and C. Will)

*Energy and the Environment – EPS 219 (Spring-2011, Spring-2012; with P. Gibbons)

Earth Forces – EPS 353 (Spring-2006; Spring-2008, with D. Wiens; Spring-2010; Spring-2012)

Introduction to Geophysics - EPS 450 (Fall-1992; Fall-1995, with D. Wiens)

**Introduction to Seismology - EPS 452 (Spring-1997, with D. Wiens; Spring-1998; Spring-2000; Spring-2002; Fall-2003; Fall-2005; Fall-2007; Fall-2009; Fall-2011)

- *Interior of the Earth - EPS 453 (Spring-1992; Spring-1994, with R. Phillips; Spring-1999, Spring-2001, Spring-2003, with D. Wiens; Spring-2005; Spring-2007, Spring-2009, Spring-2011, with D. Wiens)
- Undergraduate Research Seminar - EPS 498 (Fall-2003, with R. Phillips)
- Geodynamics - EPS 559 (Spring-1994, with R. Phillips; Spring-1997, with D. Wiens; Spring-2004)
- *Advanced Seismology - EPS 561 (Fall-1995, with D. Wiens)
- Geophysics Seminar - EPS 595 (Fall-1991, with D. Wiens; Fall-1992, with D. Wiens)
- *Topical Seminar in Geosciences - EPS 597 (Spring-1998, with L. Haskin; Spring-1999, with R. Dymek)
- **How the Earth Works – MLA 559 (Fall-2008)
- (* - Designed or co-designed the course)
- (** - Used my own textbook)

WASHINGTON UNIVERSITY AND EPSC RESPONSIBILITIES:

Department (Current):

- EPS Pew Midstates Consortium Representative, 1991- present
- EPS Undergraduate Program Development and Advising Committee, 1991- present (Chair, 1991-1997)
- EPS Curriculum and Teaching Committee Member, 1991- present
- EPS Graduate Recruitment, 1998 - 2001 (Chair); 2006 – present (Chair)

Department (Past):

- EPS Departmental Undergraduate Advisor, 1991-1997
- EPS United Way Representative, 1991- 1993
- EPS Tolman Fellowship Development, 1992
- Faculty Representative to the Graduate Council, 1992 - 1993
- EPS Computers and Data Management Committee, 2001 – 2005
- EPS Graduate Student Advisor, 2004 - 2005

University (Current):

- University Faculty Council, 2012 – present.
- University Speakers' Bureau, 2004-2006, 2010 – present.
- University Conflict of Interest/Disclosure Review Committee, 2009 – present.
- University Open Access Committee, 2009 – present.

University (Past):

- University Freshman Advisor; 1992-1993
- University Compton Scholar Selection Committee; 1992 - 1993
- University Secondary Education Certification Evaluation Committee, 1992-1993
- University Course Evaluation Task Force, 1995
- University Mathematics Task Force, 1995
- University Witherspoon Search Committee, 1996
- University Undergraduate Brochure Committee, 1996
- University Natural Sciences Curriculum Committee, 1996-1997
- University Special Major Committee, 1997 - 1999

University Disabled Students Committee, 1997
 University Undergraduate Council, 1997- 1999
 University Undergraduate Council (Steering Committee), 1998 - 1999
 Chair, University UC Information Dissemination Committee, 1998 - 1999
 University's First Resident Faculty Fellow, 1998 - 2001
 University Residential College Associates Team, 1998 - 2001
 University Undergraduate Teacher Preparation Board, 1998 - 2007
 University Four-Year Undergraduate Advisor, 1999 - 2004
 University Cluster Convener for clusters CL1600, 1777, 1801, 2002 – 2011.
 University Supercomputer Advisory Committee, 1999 – 2003
 University Discrimination and Title IX Grievance Committee, 2004 – 2009.

CURRENT COMMUNITY SERVICE

Clayton City School District Science Advisory Board, 2001 – present
 St. Louis Science Center Advisory Board, 2002 - 2008
 Volunteer lecturing, Public Schools, Clayton, MO

ABSTRACTS:

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