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EDUCATION

Ph.D., Brown University, Geophysics	1988
M.S., Brown University, Geophysics	1984
B.S., University Sci-Tech of China, Geophysics, with Highest Distinction	1982

PROFESSIONAL HISTORY

Chair, InterRidge Program Office and Steering Committee (InterRidge coordinates and promotes international, multi-disciplinary research of deep-sea geological, hydrothermal, and biological processes at global mid-ocean ridges. Its program office is hosted at the Woods Hole Oceanographic Institution, USA, in 2007-2009.) http://www.interridge.org	2007-2009
Faculty Chair, Woods Hole Oceanographic Institution, Summer Student Fellow/Minority Fellow Program	2005-2007
Tenured Scientist Executive Committee, Woods Hole Oceanographic Institution, Member	2004-2007
Woods Hole Oceanographic Institution, Senior Scientist,	Present-
MIT/WHOI Joint Program in Oceanography, Joint Committee in Marine Geology & Geophysics, Member,	2002-2006
Institut de Physique du Globe de Strasbourg, France, Visiting Professor and Scientist,	2009
Univ. of Paris & CNRS, France, Visiting Professor and Scientist,	1999
Woods Hole Oceanographic Institution, Associate Scientist Tenured,	1996
Woods Hole Oceanographic Institution, Associate Scientist,	1992-1996
Southern California Earthquake Center, Visiting Fellow,	1991-1992
Woods Hole Oceanographic Institution, Assistant Scientist,	1988-1992
U. S. Geological Survey, Menlo Park CA, Visiting Scientist,	1987-

HONORS & AWARDS

Guo Mo-Ruo Medal for Distinguished Academic Achievements, Univ. Sci-Tech of China,	1982
Charles E. Culpeper Young Scientist Award, Culpeper Foundation/Woods Hole Oceanographic Institution	1989
Fellowship, NSF Southern California Earthquake Center,	1992
Faculty Co-author, Ruth & Paul Fye Best Student Paper Award w/ student G. Ito, MIT/WHOI,	1996
Faculty Co-author, Outstanding Student Paper Award w/ student G. Ito, 1995; w/ student M. Behn, 2000; w/ student E. Van Ark, 2002, w/ student Yen Joe Tan, 2013, American Geophysical Union	2013
Scientist Fellowship, French Ministry for Education and Research,	1999, 2009
Top Author/Top Paper in Earthquake Research, 1993-2003, ISI Essential Science Indicators http://www.esi-topics.com/earthquakes/interviews/JianLin.html	2003

Elected Fellow of Geological Society of America	2007
Elected Fellow of American Association for the Advancement of Science (AAAS)	2008
Awarded Henry Bryant Bigelow Chair for Excellence in Oceanography, Woods Hole Oceanographic Institution	2009
Delivered Distinguished Ocean Sciences Lecture, AOGS-Western Pacific AGU Joint Assembly, Singapore	2012

PROFESSIONAL ENGAGEMENT

<i>Editorial Advisory Board, EOS, Transactions of American Geophysical Union,</i>	2013-
<i>Associate Editor, Journal of Geophysical Research,</i>	1992-1994
<i>Editor, AGU Geophysical Monograph 148, Mid-Ocean Ridges: Hydrothermal Interactions Between the Lithosphere and Oceans,</i>	2003-2004
<i>Senior Guest Editor, Deep-Sea Research II,</i>	2005-2006
<i>Invited Editor, Chinese Science Bulletin (CSB),</i>	2003-2004
<i>Editorial Board,</i>	
Advances in Earth Sciences,	2008-2009
Science in China (Series D - Earth Sciences),	2008-
Earthquake Science,	2008-
National Science Review,	2013-
<i>Theme Editor, Geophysics, Geochemistry, Geosystems (G3),</i>	2009-
<i>American Geophysical Union</i>	
Chair, Tectonophysics Spring Meeting Committee,	1992-1993
Maurice Ewing Medal Committee,	1996-1998
History of Geophysics Committee,	1999-2000
Chair, Tectonophysics Outstanding Student Paper Selection Committee,	2000
AGU Index Committee,	2003-2006
Chair, Tectonophysics Meeting Committee, AGU 2006 Western Pacific Geophysics Meeting, Beijing,	2005-2006
Advisory Board for the AGU Natural Hazards Focus Group,	2011-
<i>National Research Council/National Academies Committee, Review of the Tsunami Warning and Forecast System and Overview of the Nation's Tsunami Preparedness,</i>	2008-2010
<i>National Science Foundation</i>	
Ocean Sciences Review Panel,	1995-1996
Committee on Polar Aerogeophysical Research Facility, Polar Program,	1996-1998
National Science Foundation of China, Geophysics Review Panel,	2006
National Science Foundation of China, South China Sea Deep Science Program Review Panel,	2011-
<i>U.S. RIDGE (Ridge Inter-Disciplinary Global Experiments) Program</i>	
Steering Committee,	1995-1999
RIDGE Relevancy Review Panel,	1996
RIDGE Post-doc Fellow Review Panel,	1998
<i>InterRidge (Initiative for International Cooperation in Ocean Ridge Research) Program</i>	
Steering Committee, Chair,	2007-2009
Steering Committee, Ad-hoc Member,	1999-2004
Co-chair, Circum-Antarctic Ridges Working Group,	2012-
Chair, Hotspot-Ridge Interactions Working Group,	2000-

Chair, 4-D Architecture of Oceanic Lithosphere Working Group,	1998-1999
<i>Ocean Drilling Program, Tectonics Review Panel, Liaison to Lithosphere Panel</i>	1994-1996
<i>U.S. Geological Survey, National Earthquake Hazard Reduction Program Review Panel,</i>	1993
<i>Southern California Earthquake Center,</i>	1991-1998
<i>International Union of Geological Sciences (IUGS)/UNESCO, Year of the Planet Earth 2005-07 Initiative, Ocean Science Task Team</i>	2004
<i>Sea Education Association</i>	Overseer, 2010-2011 Trustee, 2011-
<i>Professional Societies</i>	
American Geophysical Union,	1982-
Sigma Xi Scientific Research Society,	1986-
Geological Society of America,	1992-
American Association for the Advancement of Science,	1994-
Seismological Society of America,	2000-
Asia Oceania Geosciences Society,	2008-
International Professionals for Advancement of Chinese Earth Sciences (IPACES),	Associate Chair, 2002-2003 Chair, 2003-2004
Woods Hole Diversity Advisory Committee [weblink], Member and Website Group Chair,	2004-
Woods Hole Oceanographic Institution Diversity Committee,	Co-chair, 2010
Advisory Committee, State Key Laboratory of Marine Geology, Tongji Univ.,	2005-
Advisory Committee, Ocean Science Center of the China Ocean Mineral Resources R&D Association, Shanghai,	2008-
Advisory Committee, Key Laboratory of Marginal Sea Geology, Chinese Academy of Sciences, Guangzhou,	2012-
<i>Convener/Co-convener</i>	
InterRidge Symposium, "Ridge Segmentation—Progress Towards Predictive Models" (w/ Searle & Sinton), Durham, UK	1993
U.S. RIDGE Workshop, "Experimental Approaches to Ridge Segment Structure and Dynamics" (w/ Karson & Sinton), Boston, MA	1994
InterRidge Workshop, "4-D Architecture of the Oceanic Lithosphere" (w/ Parson & Mevel), Boston, MA	1994
IPACES Workshop, "Asian Tectonics: From Continents to Margins to Arcs" (w/ Feng & Chen), Shanghai, China	2002
1st InterRidge Theoretical Institute, "The Thermal Regime of Oceanic Crust and Dynamics of Hydrothermal Circulation" (w/ German), Pavia, Italy	2002
Deep Ocean Exploration Institute Workshop, "Seafloor Geodesy: Prospects and Challenges", (w/ Hirth & McGuire), Woods Hole, MA	2002
InterRidge Symposium/Workshop, "Ridge-Hotspot Interaction: Recent Progresses and Prospects for Enhanced International Collaboration", (w/ Dyment), Brest, France	2003
InterRidge Workshop, "Opportunities and Contributions of Asian Countries to InterRidge Next Decade Initiative", (w/ Chen), Beijing, China	2003
Summer Theoretical Institute, "International Advanced Research in Marine Geo-Biosciences", (w/ Yang & Liu), Qingdao, China	2004
Deep Ocean Exploration Institute Workshop, " Interactions between Tsunamis and Underwater Geological Processes ", (w/ Stephen, ten Brink, Jin, and Goodman), Woods Hole, MA	2006

Elisabeth and Henry Morss Jr. Colloquium, " Lessons from the 2004 Indian Ocean Tsunami ", (w/ Jin), Woods Hole, MA	2006
Qingdao Ocean Sciences Summer School, "International Advances in Deep-Sea Marine Geo-Biological Research",	2008
InterRidge Science and Policy Workshop, " Deep-Sea Mining of Seafloor Massive Sulfides: A Realty for Science and Society in the 21st Century ", Woods Hole, MA	2009
Tongji Ocean Sciences Summer Short Course: " Oceanic Lithosphere Evolution and Dynamics ", Shanghai, China	2010
<u>Second International Ocean Sciences Summer School & Ph.D. Forum, "Multidisciplinary Research of Geo-Bio-Chemical Interactions in the Ocean and at the Seafloor"</u>	2011

OCEANOGRAPHIC EXPEDITIONS

<i>Shipboard Geophysicist</i> , SEABEAM mapping, gravity, and magnetics of the Mid-Atlantic Ridge, R/V Conrad,	1989
<i>Shipboard Geophysicist</i> , TOBI sonar and rock dredging of the Mid-Atlantic Ridge, British RRS Darwin,	1992
<i>Co-principal Investigator</i> , Hydrosweep mapping, HMR1 sonar, gravity, and magnetics of the western flank of the Mid-Atlantic Ridge, R/V Ewing,	1992
<i>Co-chief Scientist</i> , Hydrosweep, HMR1, gravity, and magnetics of the eastern flank of the Mid-Atlantic Ridge, R/V Ewing,	1996
<i>Co-chief Scientist</i> , Ocean bottom seismic refraction and multi-channel reflection experiments on the Mid-Atlantic Ridge, R/V Ewing,	1996
<i>Shipboard Geophysicist</i> , SIMRAD mapping and rock dredging of the Mid-Atlantic Ridge south of Azores, French R/V L'Atalante,	1998
<i>Geophysicist and Logging Scientist</i> , Ocean Drilling Program Leg 184, South China Sea tectonics and links to East Asian monsoon, R/V JOIDES Resolution,	1999
<i>Co-chief Scientist</i> , Rock dredging, SEABEAM mapping, gravity, and magnetics of the Southwest Indian Ridge, R/V Knorr,	2000/2001
<i>Co-chief Scientist</i> , Rock dredging and geophysical survey of the Southwest Indian Ridge, R/V Melville	2003
<i>US Chief Scientist</i> , Deep-towed geological mapping and water column survey of hydrothermal vents at the East Pacific Rise , R/V DaYangYiHao (Ocean #1)	2005
<i>US Chief Scientist</i> , Deep-towed geological mapping and water column survey of hydrothermal vents at the Southwest Indian Ridge and coring of sediments in the 2004 mega-earthquake and tsunami region off Sumatra, Indonesia, R/V DaYangYiHao (Ocean #1) [Interviews: A 'Book' of Ancient Sumatran Tsunamis . Worlds Apart, But United by the Oceans. Uncharted Territory]	2005/2006
<i>Lead US Co-PI and Coordinator</i> , High-resolution geological mapping, near-bottom photography, and water column survey of hydrothermal vents at the Southwest Indian Ridge using WHOI's autonomous underwater vehicle ABE (Autonomous Benthic Explorer) and geological sampling using TV-guided grabber, R/V DaYangYiHao [Interviews: Scientists Discover First Seafloor Vents on Ultraslow-Spreading Ridges, A Ridge Too Slow	2007
<i>Lead US Co-PI and Coordinator</i> , Investigation of seafloor geology and hydrothermal vents at the equatorial East Pacific Rise and western Galapagos Spreading Center using WHOI's autonomous underwater vehicle ABE, R/V DaYangYiHao,	2008
<i>Geophysicist</i> , Investigation of the aftershocks of the 27 Feb. 2010 magnitude 8.8 Chile earthquake using ocean bottom seismometers, F/V Gardar,	2010
<i>Geophysicist</i> , Investigation of marine geophysics, geochemistry, and hydrothermal vents of the Southeast Indian Ridge, Korean icebreaker R/V Aaron,	2011

<i>Co-principle Investigator</i> , First deep-tow magnetic survey of the South China Sea, R/V HaiYangLiuHao (Ocean #6),	2012
<i>Co-Chief Scientist</i> , Investigation of underwater earthquake faults and marine archeological sites, Aegean Sea, off Crete, Greece, T/V Theni,	2013
<i>Co-Chief Scientist</i> , IODP Expedition 349, South China Sea tectonics: Opening of the South China Sea and its implications for southeast Asian tectonics, climates, and deep mantle processes since the late Mesozoic, R/V JOIDES Resolution,	Jan.-March 2014

EARTHQUAKES INVESTIGATED

Geodetic modeling of crustal deformation caused by the 1987 Whittier Narrows, California, and 1954 Fairview Peak-Dixie Valley, Nevada, earthquakes (work conducted at USGS)

Investigation of viscoelastic and static stress changes caused by the 1857 Fort Tejon, San Andreas, 1957 Gobi, Mongolia, 1960 Chile, 1972 San Fernando, 1983 Coalinga, 1985 Kettleman Hills, 1992 Landers, 1994 Northridge, 1995 Chile, 1999 Hector Mine, 1999 Chi-Chi, Taiwan, 2003 San Simeon, California, 2003 Zemmouri, Algeria, 2008 Wenchuan, China, 2010 Haiti, 2010 Chile earthquakes, and 2011 Japan earthquake and tsunami (work conducted at USGS and Woods Hole Oceanographic Institution)

[Fragmented Structure of Seafloor Faults May Dampen Effects of Earthquakes](#)

Investigation of earthquakes on oceanic transform faults and mid-ocean ridges in the Atlantic, Indian, and Pacific Oceans (work conducted at Woods Hole Oceanographic Institution)

[Coulomb 3](#), a graphic-rich software of calculating deformation and stress change for earthquake, tectonic, and volcano research and teaching.

EDUCATION PROGRAMS

Principal Advisor for MIT/WHOI Graduate Students:

Garrett Ito, Ph.D., 1996 (now Professor, Univ. Hawaii)

Thesis: "Mantle plume-midocean ridge interaction: Geophysical observations and mantle dynamics"

Javier Escartin, Ph.D., 1996 (now Scientist, Univ. of Paris/CNRS, France)

Thesis: "Ridge segmentation, tectonic evolution, and rheology of slow-spreading oceanic crust"

Jennifer Georgen, Ph.D., 2001 (now Assistant Professor, Old Dominion University)

Thesis: "Interactions between mantle plumes and mid-ocean ridges: Constraints from geophysics, geochemistry, and geodynamical modeling"

Allegra Hosford Scheirer, Ph.D., 2001 (now Research Geophysicist, Stanford Univ.)

Thesis: "Crustal accretion and evolution at slow and ultra-slow spreading mid-ocean ridges"

Mark Behn, Ph.D., 2002 (now Associate Scientist, WHOI)

Thesis: "The evolution of lithospheric deformation and crustal structure from continental margins to oceanic spreading centers"

Emily Van Ark, Ph.D., 2007 (now Teacher at Washtenaw International High School)

Thesis: "Seismic and gravitational studies of melting in the mantle's thermal boundary layers"

Patricia M. Gregg, Ph.D., 2008 (COAS Institutional Post-doc, Oregon State University)

Thesis: "The dynamics of oceanic transform faults: Constraints from geophysical, geochemical, and geodynamical modeling"

Min Ding, Ph.D. student, 2009-

Research Paper Advisor for:

S.-M. Lee, Ph.D., 1994, MIT/WHOI (now Associate Professor, Seoul National University, Korea)

A. Freed, Ph.D., 1997, Univ. Arizona (now Associate Professor, Purdue Univ.)

R. Katzman, Ph.D., 1997, MIT (deceased)

W. Shaw, Ph.D., 2000, MIT/WHOI (now Research Assistant Professor, Naval Graduate School)

J. McGuire, Ph.D., 2000, MIT (now Associate Scientist, WHOI)

Z. Zhang, Ph.D., 2007, Peking Univ. (now Post-doc Researcher, Institute of Geology, China Seismological Bureau)

J. Zhu, Ph.D., Peking Univ., 2008 (now at Woods Hole Oceanographic Institution)

R. Lataste, CNRS, Toulouse, France, 2003-2005

T. Wang, Ph.D., Peking U. 2011 (now Post-doc, Tongji University)

T. Zhang, Ph.D., Wuhan U., 2011 (now, Scientist, 2nd Institute of Oceanography, State Oceanic Administration)

F. Zhang, Ph.D., WHOI Visiting Student/South China Sea Institute of Oceanology, 2012-

Y. Suo, Ph.D., WHOI Visiting Student/Ocean University of China, 2012-

M. Tang, Ph.D., WHOI Visiting Student/South China Sea Branch, State Oceanic Administration, 2012-

Z. Zhou, Ph.D., WHOI Visiting Student/Tongji University, 2013-

Supervisor/co-supervisor for WHOI Post-doc Fellows:

C. Ruppel, 1992-93 (now Scientist, U.S. Geological Survey, Woods Hole, MA)

T. Matsumoto, 1994-95 (now Professor, Ryukyu University, Japan)

B. West, 1997-98 (now Research Scientist, Exxon Research Center)

A. Li, 2000-02 (now Associate Professor, Houston Univ.)

J. Chaytor, 2006-09 (now Scientist, U.S. Geological Survey, Woods Hole, MA)

F. Klein, 2009-11 (now Assistant Scientist, Dept. of Marine Chemistry & Geochemistry, Woods Hole Oceanographic Institution)

Advisor for WHOI Summer Student Fellows:

E. Smail, Albion College, 1998

K. Wallace, Brown Univ., 2000

G. Applebee, College of Charleston, 2006

R. Barkan, Tel Aviv Univ., Israel, 2007

Y.J. Tan, Lafayette College, 2013

Courses Taught at MIT/WHOI:

Computational Geophysical Modeling (w/ Behn and Marchal)

Computational Geodynamics Modeling (w/ Zuber)

Advanced Marine Geophysics (w/ Tivey & Evans)

Seminar in Oceanic Faulting and Earthquakes (w/ Hirth & McGuire)

Mechanisms of Faulting and Earthquakes (w/ Hirth & McGuire)

Introduction to Marine Geophysics (substitution)

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