

BARBARA ROMANOWICZ - Curriculum Vitae

Married, 2 children

see following web pages: http://seismo.berkeley.edu/wiki_br/Main_Page

Education

- 1970-74 Ecole Normale Supérieure, "Sèvres", Paris, France, major in Pure Mathematics
- 1972 Maîtrise de Mathématiques Pures, Université Paris 6.
- 1973 Agrégation de Mathématiques, Paris, France
- 1975 Master of Science in Applied Physics, Harvard University
- 1975 Doctorat de 3e cycle in Astronomy, Université Paris 6.
- 1979 Doctorat d'Etat, Université Paris 7, Spécialité Géophysique.

Employment

- 1978-79 Attachée de Recherches, C.N.R.S., Institut de Physique du Globe, Paris.
- 1979-81 Post Doctoral Associate, M.I.T., Cambridge, Mass.
- 1981-86 Chargée de Recherches, C.N.R.S., I. P. G., Paris.
Director, Geoscope Program
- 1986-90 Directeur de Recherches, C.N.R.S., I. P. G., Paris.
Director, Geoscope Program
- 1991-2016 Professor of Geophysics, University of California at Berkeley
- 1991-2011 Director, Berkeley Seismological Laboratory (<http://www.seismo.berkeley.edu>)
- 2002-2006. Chair, Department of Earth and Planetary Science, U.C. Berkeley
- 2011-pres Chaire de Physique de l'Intérieur de la Terre, Collège de France, Paris
- 2016-pres Professor of the Graduate School, University of California at Berkeley

Academic Awards and Distinctions:

- 1989 French Academy of Sciences Prize (Fonds Doistau-Blutet)
- 1990 Fellow, American Geophysical Union
- 1992 Silver Medal of the Centre National de la Recherche Scientifique (French NSF)
- 1999 A. Wegener Medal of the European Union of Geosciences
- 2001 Fellow, American Academy of Arts and Sciences
- 2003 Gutenberg Medal, European Geophysical Society
- 2004 Beno Gutenberg Lecturer, American Geophysical Union
- 2005 Member, National Academy of Sciences
- 2008 Chevalier de la Légion d'Honneur, France
- 2009 Inge Lehmann Medal of the American Geophysical Union
- 2010 Miller Professor, Univ. of California, Berkeley
- 2011 Harry Reid Medal of the Seismological Society of America
- 2013 Martin Meyerson Berkeley Faculty Research Lecturer
- 2013 Elected Member, Académie des Sciences, France
- 2018 Elected Foreign Member, Polish Academy of Sciences
- 2019 Elected Fellow of the IUGG
- 2019 Emil Wiechert Medal of the German Geophysical Society (DGG)

Research Interests

Trained in "pure" mathematics, I became a solid earth geophysicist through a series of chance circumstances, eventually specializing in seismology. My primary research interest has been the development of new tomographic methodologies to improve resolution in the imaging of deep earth structure using seismic waves, with application at the global and continental scale, with the goal of improving our understanding of the internal circulation that drives plate tectonics on our planet. I

have also worked on earthquake source problems. Another research interest I developed in the last 15 years following the discovery of the earth's continuous low frequency "hum", present even in the absence of earthquakes, is to help elucidate the coupling processes between the atmosphere/ocean and solid earth that give rise to this phenomenon ". Since the mid-1980's, in addition to contributing to the development of data collection infrastructure in geophysics, including global and regional networks of sensors and associated open archives, I have spent much of my energy advocating for the geophysical instrumentation of the ocean floor, a necessary component for improving illumination of the earth's interior. I also have an interest in planetary science, and was the original PI on the Mars'96 mission which aimed to install a seismometer on Mars, but failed. Four of my former PhD students (2 in France and 2 in the US) are currently involved in the InSight mission which recently successfully landed on the planet Mars.

Organizational and Administrative Responsibilities

Geophysical data collection, curation and distribution

- 1981-90 Founding Director, Geoscope Program
Geoscope is a global three component digital network of broad band seismographs deployed under the sponsorship of the Institut National des Sciences de l'Univers of C.N.R.S, France. It is still alive and active today.
- 1985 Co-founder, ORFEUS (European data center for seismological broadband data)
- 1986 Co-founder, Federation of Digital Seismic Networks (FDSN)
- 1988-1990 PI, seismometer system, Mars'92 mission (CNES) to Mars (failed at launch in 1994)
- 1991-1993 Member, Global Seismic Network Standing Committee, IRIS (Incorporated Research Institutions for Seismology)
- 1991-2011 As Director of the Berkeley Seismological Laboratory, modernised and expanded the Berkeley broadband seismic network (BDSN) in northern California; founded the REDI program (Rapid Earthquake Data Integration), with access to broadband data in real time for earthquake monitoring - a precursor to the CISN; founded and developed BARD (Bay Area Regional Geodetic Array, with real time access to data) in collaboration with the US Geological Survey in Menlo Park, Ca.
- 1992 Founder, NCEDC (Northern California Earthquake Data Center, an online open archive collaboratively operated out of UC Berkeley with the US Geological Survey)
- 1994-1996 Member, Ocean Seismic Network committee (USA)
- 1994-1997 Founding Member and secretary, International Ocean Network Steering Committee
- 1997-2001 Chair, International Ocean Network Committee.
- 1998-2000 Member, advisory committee for "SCiGN" program (Southern California Integrated Geodetic Network)
- 1998-2000 Member, TriNet Scientific Council (southern California seismic network)
- 1998-1999 Member IRIS* Planning Committee
- 1999-2003 Chair, Global Seismic Network Standing Committee, IRIS*
- 2000-2002 Member, Steering Committee, "Plate Boundary Observatory" of Earthscope (USA)
- 2000-2011 Founding member, California Integrated Seismic Network (CISN) Steering Co. (Chair 2000-01 and 2009-10)
- 2001-2004 Member, Ocean Observatories Steering Committee (DEOS,NSF)
- 2002-pres PI, MOBB experiment (Monterey Bay Ocean floor Broad Band project), in collaboration with MBARI (<http://www.mbari.org/shake/MOBB>)
- 2005-2006 Member, Planning Committee, IRIS (Incorporated Research Institutions for Seismology)
- 2008-2013 Member, Scientific Advisory Committee, GEOSCOPE program
- 2011-2012 Member, Planning Committee, IRIS

National and Institutional Review Panels

- 1984-1986 Member, Comité National, CNRS, Section 13 (Scientific Panel of CNRS in solid earth

- geophysics)
- 1991-1994 Member, Instruments and Facilities Review Panel, N.S.F.
- 1991 Member, Geophysics Review Panel, N.S.F. (Spring 1991)
- 1996 Member, NSF review panel for CHiPR (National Science Center for High Pressure Research)
- 1997 Member, Site review team for Department of Earth and Space Sciences, UCLA.
- 1997 Member, review committee for the Department of Earth and Planetary Sciences, Harvard University
- 1997-2002 Member, NRC** Committee on the "Science of Earthquakes"
- 1999 Member, International Review Team for Earthquake Research Institute., Tokyo, Japan
- 2004 Member, Committee of Visitors, NSF/EAR — Instruments and Facilities Program for Geosciences
- 2006 Member, Review Committee, Institute of Geophysics, University of Reykjavik, Iceland.
- 2006- 2008 Member, Board on Earth Sciences and Resources (BESR), NRC.
- 2006- 2010 Member, National Earthquake Prediction Evaluation Council
- 2006- 2011 Member, Visiting Committee Department of Geophysics, University of Alaska at Fairbanks
- 2006- pres Member, Visiting Committee Colorado School of Mines, Department of Geophysics
- 2008 Member, review committee of Helmholtz's foundation Geoforschungs Zentrum, Potsdam (Germany)
- 2008-2011 Member, Geophysics Panel, NSF
- 2008 Co-Chair, Long Range Science Plan for seismology team (NSF/IRIS)
- 2008-09 Seismology Coordinator, scientific review of the technical capabilities of the International Monitoring System (ISS'09)
- 2011 Member, International Midterm Evaluation Committee of the Norwegian CoEs (SFF-II)
- 2015 Chair, Review Committee, Department of Terrestrial Magnetism, Carnegie Institution of Science
- 2015 Member, Review Committee, Department of Earth Sciences, Oxford U

Advisory boards/committees

- 1991-2001 Member, Advisory Council to the Southern California Earthquake Center (Chair, 1991-1994)
- 1997-1998 Member, CHiPR advisory board.
- 2004-2008 Member Scientific Advisory Board, Institut de Recherche pour le Développement, France
- 2007-2008 Member, advisory committee (COSS) for College de France, Paris.
- 2007-2009 Member, Conseil d'administration, Institut de Physique du Globe, Paris, France
- 2012 Member, Scientific advisory Committee, Dept of Geology, Ecole Normale Supérieure, Paris
- 2012-2014 Member, Conseil d'Etablissement, Collège de France, Paris
- 2015-pres Member, advisory board of the Max Planck Institute for Solar System Research, Goettingen, Germany
- 2016- pres Member of the Scientific Council, European Research Council (ERC).
- 2016- pres Member, Advisory Committee for the EPOS program (European Plate Observing System)
- 2018- pres Member Strategic Advisory Committee, Faculty of Mathematics and Natural Sciences, Univ. of Oslo, Norway

Service to professional societies

- 1991-1997 Member, Board of Directors of Seismological Society of America.
- 1994-1996 Member, Fellows Committee, American Geophysical Union

- 1994-1996 President Elect, Seismology Section, American Geophysical Union
- 1996-1998 President, Seismology Section, American Geophysical Union
- 2000-2003 Member of the IASPEI Bureau (International Association for Seismology and Physics of the Earth's Interior)
- 2006-2007 Member, Union Fellows Committee, American Geophysical Union
- 2007-2008 Chair, Union Fellows Committee, American Geophysical Union
- 2010-11 Member, Lehmann medal committee, American Geophysical Union
- 2011 Member, Arthur Holmes Medal Committee, European Geophysical Union.
- 2011 Member, Evaluation Committee for the Depart. of Earth Sciences, ETH, Zurich
- 2012 Member, International Review Committee, Earth Observatory of Singapore
- 2012-2014 Chair, Section 16, National Academy of Sciences
- 2013 Member, Search Committee for the President of IRIS (Incorporated Research Institutions for Seismology).
- 2013-2014 Member Holmes Medal Committee, EGU
- 2016 Chair, Seismology Fellows Committee, AGU.

Journal Editorship

- 1988-1989 Editor, Geophysical Research Letters (AGU Journal)
- 1995-2000 Chief Editor, Physics of the Earth and Planetary Interiors.
- 2007-2016 Reviewing Editor for the journal "Science"

Organization of Meetings, workshops, institutes

- 1992 Organizer, Workshop on broadband seismology, UC Berkeley
- 1990's-2000s Involved in organization of several IRIS workshops.
- 2003 Founding member of CIDER. Lead Organizer, CIDER Workshop (Cooperative Institute for Deep Earth Research).
- 2004-2012 Director, CIDER and lead organizer, Summer Program
- 2009 Lead Organizer CIDER Community workshop, Marconi Center , May 17-21,2009
- 2010 Lead Organizer, SEDI International Meeting, U.C. Santa Barbara (CA), July 18-23, 2010
- 2012-2018 Director CIDER-II program, PI, NSF FESD grant and coordinator, 2012 Summer Program, KITP, Santa Barbara (CA), July 1-Aug 8, 2012
Member, organizing committee, CIDER summer programs, from 2004-2017.
- 2010-2013 Co-Chair (2011) and Chair (2013) Gordon Research Conference on "Interior of the Earth"

International Workshops organized at the Collège de France, Paris

- 2011 Organizer, 1 day Workshop on "Structure, Composition and Dynamics of the earth's core",
- 2012 Organizer, 2 day Workshop on "Deep mantle structure and dynamics", Collège de France, Paris
- 2013 Lead Organizer (with Claude Jaupart), 2 day Workshop on "Structure and Dynamics of the Lithosphere/Asthenosphere System"
- 2014 Lead Organizer (with Philippe Lognonné), 2 day Workshop on "Structure and Dynamics of Earth-like Planets"
- 2016 Lead Organizer (with Patrick Cordier), 2 day Workshop on "Flow in the Deep Earth"
- 2017 Lead Organizer (with Yann Klinger), Nov 30, Dec 1, 2018 Workshop on "Great Earthquakes: Observation and Modeling"
- 2018 Co-Organizer, June 21-22, 2018, Workshop on "50 years of Plate Tectonics: then, now and beyond"
- 2018 Lead organizer (with Alex Schubnel) Nov 19-20 workshop on "Intermediate and Deep Earthquakes: observations and modeling"

BR has supervised ~30 PhD's and ~20 post-docs and is the author of ~250 publications in peer reviewed journals, given numerous invited seminars and invited talks at international conferences. She has taught both undergraduate and graduate courses at IPG Paris and UC Berkeley since 1976.

PhD and MSc students supervised:

Brandon, Catherine	Thèse de 3e cycle Paris 1985
Ghorabi, Moncef	Thèse de 3e cycle Paris 1985
Monfret, Tony	Thèse de l'Université Paris 7, 1987 (currently researcher in Nice, France)
Mocquet, Antoine	Thèse de l'Université Paris 7, 1987 (currently Prof. in Rennes, France)
Lognonné, Philippe	Thèse de l'Université Paris 7, 1989 (currently Professor in Paris, France, PI InSight seismology on Mars)
Bourjot, Laurence	Thèse de l'Université Paris 7, 1991
Bohn, Theodore	Masters of Science, U.C. Berkeley, 1992
Bussy, Martine	Thèse de l'Université Paris 7, 1993
Nawab, Ramin	Thèse de l'Université Paris 7, 1994
Le Stunff, Yves	PhD UC Berkeley 1995 (currently senior researcher Total, France)
Antolik, Michael	PhD UC Berkeley 1996 (currently researcher at DARPA)
Pasyanos, Michael	PhD, UC Berkeley 1996 (Currently senior researcher at LLNL)
Mégnin, Charles	PhD UC Berkeley 1999
Bréger, Ludovic	PhD UC Berkeley 1999 (Currently at Barclays Corp.??)
Kuo, Chaincy	PhD UC Berkeley 2000 (Currently researcher at LBNL)
Tkalcic, Hrvoje	PhD UC Berkeley 2001 (currently Senior Fellow, Australian National University)
Gung, Yuancheng	PhD UC Berkeley 2003 (currently assoc. prof. Taiwan National Univ.)
Rousset Sebastien	MS 2004 UC Berkeley
Panning, Mark	PhD UC Berkeley 2004 (currently senior researcher at JPL.)
Cao, Aimin	PhD UC Berkeley, 2005 (currently senior researcher at SMU)
Rhie, Junkee	PhD UC Berkeley 2006 (Professor Seoul University)
To, Akiko	PhD UC Berkeley 2006 (researcher at Jamstec, Japan)
Shulgin, Alexey	MA 2005- UC Berkeley
Lekic, Vedran	PhD 2009 UC Berkeley- Now Associate Professor, U. of Maryland
Dou, Shan	Ms 2010 UC Berkeley
Cottaar, Sanne	PhD 2013 UC Berkeley- Now Lecturer, Cambridge Univ. UK
Zheng, Zhao (Allen)	PhD 2014 UC Berkeley- (research scientist at Halliburton, Houston, Tx.)
French, Scott	PhD 2014 UC Berkeley - now on the technical staff at GOOGLE Inc.
Cai, Meng	Ms 2014 UC Berkeley
Meschede, Matthias	PhD, IPG Paris 2015, now researcher at Univ. of Munich
Clouzet, Pierre	PhD Candidate, IPG Paris (2013-2017), now post-doc at UPMC, Paris
Ibourichène, Anais	PhD Candidate, IPG Paris (2014-2018)
Salmi, Laura	MS 2016 UC Berkeley, now researcher at RMS
Robson, Alexander	PhD Candidate 2015- pres. UC Berkeley
Chen, Li Wei	PhD Candidate 2016-pres. UC Berkeley
Adourian, Sévan	PhD Candidate 2017-pres., UC Berkeley
Mathurin Wamba	PhD Candidate 2016-pres., IPG Paris

Post Doctoral scientists supervised:

Xiang Dong Li (1991-95); Joseph Durek (1994-98); Eric Clevede (1996-98); Michael Pasyanos (96-97); Michael Antolik (96-97); Yann Capdeville (Miller PostDoc, 2000-03); Peggy Hellweg (2001-2004); Federica Marone (2003-06), Yuancheng Gung (2003-04); Mark Panning (2004-06), Fabio Cammarano (2005-08), Nicolas Houlié (2006-09), Huaiyu Yuan (2007-2013), Laurent Stehly (2008-09), Paul Cupillard (2008-10), Yder Masson (2011-2015), Sergi Ventosa (2011-2015), James Barron (2011-2013), Thomas Bodin (Miller Post Doc, 2012-2015); Florian Rickers (2013-2014), Haydar Karaoglu (2014-2017), Marco Calo (2013-2015), Joanne Adam

(2013-2016); Kaiqing Yuan (2014-2017), Corinna Roy (2015-2018), Daniel Frost (2016-pres), Satish Maurya (2017-pres).