

## Board Member and Staff Biographies

---

### BOARD MEMBERS

**George M. Hornberger**, NAE, is the Ernest H. Ern Professor of Environmental Sciences at the University of Virginia. He is also a fellow of the American Geophysical Union, a member of the Geological Society of America and the American Geological Institute, and has served on numerous NRC boards and committees, including chair of the Commission on Geosciences, Environment, and Resources. Dr. Hornberger was recognized in 2007 as one of Virginia's Outstanding Scientists for his work in environmental science and hydrology.

**Gregory B. Baecher**, NAE, is chair of the Committee on Geological and Geotechnical Engineering. He is Glenn L. Martin Institute Professor of Engineering at the University of Maryland and serves as a consultant to government and industry on risks associated with civil infrastructure and natural hazards. Dr. Baecher served on the faculty of the Civil Engineering Department at the Massachusetts Institute of Technology from 1976-1988, and as CEO of ConSolve Incorporated an environmental software company in Lexington, Massachusetts, from 1988 to 1995. His fields of expertise include risk analysis, water resources engineering, and statistical methods. He has served on the Water Science and Technology Board, the Board on Infrastructure and the Constructed Environment, and multiple NRC study panels. He received his Ph.D. in geotechnical engineering from the Massachusetts Institute of Technology.

**Dr. Steve Bohlen** is President of Joint Oceanographic Institutions, a consortium of 29 premier oceanographic research institutions that serves the U.S. scientific community through management of large-scale, global research programs in the fields of marine geology and geophysics and oceanography. Known for leadership of U.S. scientific ocean drilling and ocean observing initiatives, JOI has helped facilitate discovery and advance global understanding of the Earth and its oceans through effective systems engineering and program management. Dr. Bohlen was graduated from Dartmouth College in 1974 and received a Ph.D. in geochemistry from the University of Michigan in 1979. After three years as a Postdoctoral Research Fellow at UCLA, he joined the faculty at the State University of New York at Stony Brook,

where he was an Assistant and then tenured Associate Professor in the Department of Earth and Space Sciences. His research focused on the chemical and physical evolution of the Earth's continental lithosphere. In 1988, Dr. Bohlen accepted a research position with the U.S. Geological Survey in Menlo Park, CA and held a joint appointment at Stanford University as a Consulting Professor. In 1995 he became the Associate Chief Geologist for Science at the USGS in Reston, VA, where he was responsible for the health and direction of the research programs of the Geologic Division.

**Keith C. Clarke** is a research cartographer and Professor in the Geography Department at the University of California, Santa Barbara. He holds the Ph.D. from the University of Michigan, specializing in Analytical Cartography. Dr. Clarke's recent research has been on environmental simulation modeling, modeling urban growth using cellular automata, the analysis and modeling of land use change, and on the early history of remote sensing. He is the former North American Editor of the International Journal of Geographical Information Science and is series editor for the Prentice Hall Series in Geographic Information Science. He served as President of the Cartographic and Geographic Information Society in 2000-2001, and was elected as an ACSM fellow in 2004. A recipient of the USGS's John Wesley Powell Award, he has also received awards from the UK Leverhulme Trust and the Fulbright-Hays commission. Dr. Clarke has chaired two NRC ad-hoc Committees, has been a member of the Mapping Science Committee since 2004, and has chaired the committee since 2006.

**David J. Cowen** is former chair of the Department of Geography, co director of the Center for GIS and Remote Sensing, and a Carolina Distinguished Professor of Geography at the University of South Carolina. He is the 2005 recipient of the ESRI Lifetime Achievement Award in GIS. He chaired the Mapping Science Committee of the National Research Council for six years and is a National Associate of the National Academy of Sciences. He is also the current chair of the NRC Study Committee "Land Parcel Databases: A National Vision". He has held several important positions including being the president of the Cartographic and Geographic Information Society, the US Delegate to the International Geographical Union Commission on Geographic Information Systems and chair of the

Association of American Geographers Geographic Information Systems Specialty Group. Dr. Cowen earned B.A. and M.A. degrees from the State University of New York at Buffalo and a Ph.D. degree in geography from Ohio State University in 1970.

**William E. Dietrich**, NAS, is a member of the Department of Earth and Planetary Science at the University of California, Berkeley. He also has an appointment in the Department of Geography and the Earth Sciences Division of Lawrence Berkeley National Laboratory, and is affiliated with the Archeological Research Facility. He is co-founder of the National Center for Airborne Laser Mapping and a member of the National Center for Earth-surface Dynamics. His Berkeley-based research group is focusing on mechanistic, quantitative understanding of the form and evolution of landscapes and the linkages between ecological and geomorphic processes. He has numerous publications and honors, including being named a member for the National Academy of Sciences and a fellow at the American Academy of Arts and Sciences, both in 2003.

**Roger M. Downs** is Professor of Geography and head of the Department of Geography at The Pennsylvania State University. Previously, he has held a permanent position at Johns Hopkins University, and sabbatical positions at Colgate University, the University of Washington, and the National Geographic Society. He holds B.A. (first class) and Ph.D. degrees from the University of Bristol, and has received honors from the National Geographic Society, the Association of American Geographers, and the National Council for Geographic Education. He has served as writing coordinator for the Geography Education Standards Project, and chaired the NRC study on Learning to Think Spatially: GIS as a Support System in the K-12 Curriculum. He has published three books and nearly 100 articles, reports, and reviews.

**Jeff Dozier** is a Professor in the Donald Bren School of Environmental Science and Management at the University of California, Santa Barbara. He founded the Bren School and served as its first Dean for six years. Dr. Dozier earned his Ph.D. in geography from the University of Michigan. His research interests are in the fields of snow hydrology, Earth system science, remote sensing, and information systems. Much of his research integrates environmental science with computer science and technology. He was the Senior Project Scientist for NASA's Earth Observing System when the configuration for the

system was established. He also helped found the MEDEA group, which investigates the use of classified data for environmental research, monitoring, and assessment. Dr. Dozier has chaired or served on numerous NRC committees concerned with data and computational sciences. These include the Committee on Geophysical and Environmental Data (member 1999-present, chair 2005-present), Workshop on Intersections between Geospatial Information and Information Technology, Committee on Coping with Increasing Demand on Government Data Centers, Computer Science and Telecommunications Board, and Study on the Long-Term Retention of Selected Scientific and Technical Records of the Federal Government (chair). He is a fellow of the American Geophysical Union and the American Association for the Advancement of Science and an Honorary Professor at the Academia Sinica's Institute of Remote Sensing Applications. He received the NASA Public Service Medal and the NASA and Department of Interior William T. Pecora Award.

**Katherine H. Freeman** is Professor and Associate Head for Graduate Programs and Research in the Department of Geosciences at The Pennsylvania State University. She holds a B.S. from Wellesley College, and a M.S. and Ph.D. in geology from Indiana University. Her research in molecular and isotopic biogeochemistry and paleoclimate proxies has been recognized by awards from professional societies including SEPM and EAOG and her educational contributions have been recognized at both the college and university level at Penn State. She is an Associate Editor for *Annual Review of Earth and Planetary Sciences*. Dr. Freeman has served on a number of NRC committees, including Basic Research Opportunities in the Earth Sciences (BROES), and the standing committee on the Origin and Evolution of Life (COEL).

**Rhea Graham** is Water Resource Manager for the Pueblo of Sandia, a federally-recognized Indian tribe in Bernalillo, New Mexico. A registered engineering geologist in Oregon, Ms. Graham was the first Director for the Planning and Communications Division of the New Mexico Interstate Stream Commission in Santa Fe, which adopted the first state water plan in 2003. She was the last Director of the U.S. Bureau of Mines, from 1994-1996, in the U.S. Department of the Interior. Her project experience addressing resource management issues with state, tribal and federal government agencies in the rapidly urbanizing West draws upon her graduate training in oceanography to evaluate the impacts of global climate change on water supplies. She is a fellow of

the Geological Society of America and the National Association of Black Geologists and Geophysicists.

**Russell J. Hemley**, NAS, is Senior Staff Scientist in the Geophysical Laboratory of the Carnegie Institute of Washington. His research explores the chemistry of materials over a broad range of thermodynamic conditions from low to very high pressures. Dr. Hemley did his graduate work in physical chemistry at Harvard University (M.A., 1980; Ph.D. 1983). After a post-doctoral fellowship in theoretical chemistry at Harvard (1983-84), he joined the Geophysical Laboratory as a Carnegie Fellow (1984-86) and became a Staff Scientist in 1987. He is the recipient of the 1990 Mineralogical Society of America Award, and is a Fellow of the American Physical Society, the American Geophysical Union, and the American Academy of Arts and Sciences. He was elected as a member of the National Academy of Sciences in 2001. In 2005, he was awarded the Balzan Prize in Mineral Physics.

**Murray W. Hitzman** is head of the Department of Geology and Geological Engineering at the Colorado School of Mines (CSM) and has been at CSM since 1996 as a Professor of Economic Geology. Prior to this, he spent 11 years in the minerals industry. In addition to discovering the carbonate-hosted Lisheen Zn-Pb-Ag deposit in Ireland, he worked on porphyry copper and other intrusive-related deposits, precious metal systems, volcanogenic massive sulfide deposits, sediment-hosted Zn-Pb and Cu deposits, and iron oxide Cu-U-Au-LREE deposits throughout the world. Dr. Hitzman spent two and a half years in Washington, D.C., working first in the U.S. Senate and later in the White House Office of Science and Technology Policy on environmental and natural resource issues. He has received numerous awards and published approximately 120 papers. He received his Ph.D. in Geology from Stanford University in 1983. He served on the NRC Panel on Technologies for Mining Industries and has been a member of the NRC's Committee on Earth Resources since 2001.

**V. Rama Murthy** is currently a Research Professor in the Institute of Meteoritics at the University of New Mexico. Prior to this, he served as the Institute of Technology Distinguished Professor of Geology and Geophysics at the University of Minnesota, Minneapolis. He received M.S. and Ph.D. degrees from Yale and has held positions as Research Fellow at Cal Tech and faculty member at University of California, San Diego. At the University of Minnesota he has served as the Head of the school of Earth Sciences, Dean, Associate Vice President for Academic Affairs, and as Vice Provost. He has

received numerous honors and awards, including Fellow of the American Geophysical Union, Life Fellow of the Indian Geophysical Union, the Hayden Medal and Distinguished Alumni Award from the Indian School of Mines. His research interests span many areas of terrestrial and planetary geochemistry and geophysics, using isotopic and trace-element techniques. He has served on numerous committees including many at the U.S. National Science Foundation and National Research Council.

**Clayton Nichols** is retired from the U.S. Department of Energy's Idaho National Engineering and Environmental Laboratory where he served as Division Director for Research and Development. Dr. Nichols is an executive with 40 years of private sector, academic and federal research contract management and major procurement experience. He has also served as the office manager responsible for ramping down the National Uranium Resource Evaluation Program, as the program manager for reservoir engineering in the National Geothermal Program, and as an associate professor in the Department of Geology at Boise State University. His technical expertise includes the geosciences, environmental restoration, fossil energy, and renewable energy. Recent management responsibilities have focused on planning, implementation and review of cross-agency environmental science and applied technology programs. He has been responsible for major initiatives in environmental science and technology roadmapping (vadose zone fate and transport), biotechnology, technology planning for long-term institutional management, and global climate science baseline research. Dr. Nichols received the Presidential Meritorious Service Award in 2000. He holds a Ph.D. in Geology from the University of Oklahoma.

**Raymond A. Price** is Professor Emeritus in the Department of Geological Sciences and Geological Engineering at Queen's University, Kingston, Ontario. His research interests include structural geology and tectonics, environmental geoscience, radioactive waste disposal, and science and public policy. His previous positions include assistant deputy minister of the Department of Energy, Mines and Resources (Canada); director-general of the Geological Survey of Canada; president of the Geological Society of America; and president of the Inter-Union Commission on the Lithosphere (International Council of Scientific Unions). He is a fellow of the Royal Society of Canada and the American Association for the Advancement of Science, and a foreign associate of the National

Academy of Sciences. He has served on the NRC Commission on Geoscience, Energy and Resources and on many NRC studies including the Panel to Review the U.S. Geological Survey's Energy Resources Program and the Committee on Future Roles, Challenges, and Opportunities for the U.S. Geological Survey.

**Barbara A. Romanowicz**, NAS, received an M.S. from Harvard (in 1975), a Ph.D. in Astronomy from the Université of Paris 6 (1975) and a Ph.D. in Geophysics from Université of Paris 7 (in 1979). From 1981 to 1990 she was the Chargé de Recherches at the Institute Physique du Globe and the director of the Geoscope Program. Since 1991 she has been a professor of geophysics and director of the Seismographic Station at the University of California, Berkeley. She is a member (and fellow) of the American Geophysical Union and the National Academy of Sciences. She received the Silver Medal of the Centre National de la Recherche Scientifique and the French Academy of Sciences Prize. She served as member of the NRC Panel on Seismological Research Requirements for a Comprehensive Test Ban Monitoring System. Her research involves earthquake seismology and solid earth geophysics.

**Joaquin Ruiz** is the Dean of the College of Science and a Professor of Geosciences at the University of Arizona. From 1995 to 2000, Dr. Ruiz served as the Head of the University of Arizona's Department of Geosciences. Dr. Ruiz is an expert in radiogenic isotopes applied to the study of regional tectonics, origin of magmas, and hydrothermal ore deposits. He is a fellow of the Geological Society of America and Society of Economic Geologists, and was elected to the Mexican Academy of Science in 2006. He has served as a member of the U.S. National Committee for the International Association for Volcanology and Chemistry of the Earth's Interior; a member of the National Science Foundation's Instrumentation Panel, with the Division on Earth Sciences; and a panel member of the Facilities Program and Centers for Excellence in Science and Technology Program, with the Directorate of Education. Dr. Ruiz has published over 200 articles in the field of geochemistry. He received a B.Sc. in Geology and a B.S. in Chemistry from the University of Miami, an M.S. and Ph.D. in Geology from the University of Michigan, Ann Arbor.

**Mark Schaefer** is Executive Vice President of ZedX, Inc. and is a principal of Asyet International, companies that work to advance technologies for sustainable development. Most recently he was CEO

of the Global Environment and Technology Foundation, and prior to that, President and CEO of NatureServe. From 1996 to 2000 Dr. Schaefer served as Deputy Assistant Secretary for Water and Science of the U.S. Department of the Interior. Previously, he was Acting Director of the U.S. Geological Survey, Assistant Director for Environment in the White House Office of Science and Technology Policy, and Senior Staff Associate and Director of the Washington Office of the Carnegie Commission on Science, Technology, and Government. He also served for number of years with the U.S. Environmental Protection Agency. A biologist by training, he received a B.A. from the University of Washington, and Ph.D. from Stanford University.

**William W. Shilts** is Chief of the Illinois State Geological Survey (ISGS) and State Geologist of Illinois. Dr. Shilts earned his Ph.D. from Syracuse University. He was employed by the Geological Survey of Canada in 1970 as Research Scientist in the Terrain Sciences Division. From 1973 to 1986 he was Head of the Sedimentology and Mineral Tracing Section before serving for a year as Head of the Sedimentology Research Group. From 1987 to 1995 he was the Canadian Survey's Senior Quaternary Scientist, and from 1992 to 1995 he was Head of the Environmental Geochemistry Section in the Mineral Resources Division. Since joining the ISGS, Dr. Shilts has made detailed, three-dimensional geologic mapping a priority and has strengthened Survey efforts to create a comprehensive energy utilization program.

**Russell E. Stands-Over-Bull** is a project geologic advisor with Anadarko Petroleum Company, and serves as a member of the adjunct faculty for the Earth Science Department, Montana State University-Bozeman. He has expertise in petroleum geology, unconventional gas reservoirs, sequence stratigraphy, and energy development on Native American lands. Dr. Stands-Over-Bull served as President for Arrow Creek Resources, Inc. from 2002-2004. He has worked as with Barrett Resources Corporation, where he focused on finding exploration opportunities in the US Rockies. From 1991 to 2000, he was affiliated with BP and AMOCO Production Company as a sedimentologist and geologist. He holds a Ph.D. and M.S. degree from the Colorado School of Mines, and a B.S. degree from Montana State University-Bozeman, all in geology.

**Terry C. Wallace** is the Principal Associate Director of Science, Technology, and Engineering at Los Alamos National Laboratory (LANL), responsible for

all basic science programs at LANL and coordinating the activities of the four science and engineering directorates. During the period of 2005 to June 2006, Wallace was the Associate Director of Strategic Research, which encompassed LANL's science program offices and the five line divisions that implemented those programs and supported LANL's nuclear weapons, threat reduction, and energy security missions. Before becoming the Associate Director for Strategic Research, Wallace was the Division leader of the Earth and Environmental Sciences Division. Wallace returned to Los Alamos in 2003 after spending 20 years as a professor of geosciences and an associate in the applied mathematics program at the University of Arizona. He has an international reputation in geosciences as applied to national security issues. Wallace holds Ph.D. and M.S. degrees in geophysics (California Institute of Technology) and B.S. degrees in geophysics and mathematics (New Mexico Institute of Mining and Technology). He is the author or coauthor of more than 80 peer-reviewed publications on seismology and tectonics, including ground-based nuclear explosion monitoring and forensic seismology. Wallace is a Fellow of the American Geophysical Union (AGU), and in 1992 he received the AGU's Macelwane Medal, and has served as President of the Seismological Society of America, Chairman of the Incorporated Institutions for Research in Seismology, and authored the position paper for the American Geophysical Union on the verifiability of a comprehensive test ban treaty. He has testified before Congress on the comprehensive test ban and participated in numerous National Academy panels, including ones on research in support of comprehensive test ban monitoring. For 2000-2006 Wallace was the Chair on the National Research Council's Committee on Seismology and Geodynamics.

**Thomas J. Wilbanks** is Corporate Research Fellow at the Oak Ridge National Laboratory, where he leads the laboratory's energy, environmental, science, and technology programs. A former President of the Association of American Geographers, Dr. Wilbanks's research interests are in processes and mechanisms for realizing sustainable development, energy and environmental policy, and institutional capacity building. He was awarded Honors by the Association of American Geographers (1986), the Distinguished Geography Educator's Award of the National Geographic Society (1993), and is a fellow of the American Association for the Advancement of Science.

## STAFF

**Anthony R. de Souza** is currently Director of the Board on Earth Sciences and Resources at the National Research Council in Washington, D.C. Previously, he was executive director of the National Geography Standards Project, secretary general of the 27th International Geographical Union Congress, editor of *National Geographic Research & Exploration*, and editor of the *Journal of Geography*. He has held positions as a professor and as a visiting teacher and scholar at the George Washington University, University of Wisconsin, University of Minnesota, University of California-Berkeley, and University of Dar es Salaam in Tanzania. He has served as a member of NRC committees. He holds B.A. (honors) and Ph.D. degrees from the University of Reading in England, and has received numerous honors and awards, including the Medalla al Benito Juarez in 1992 and the Gilbert Grosvenor honors award from the Association of American Geographers in 1996. His research interests include the processes and mechanisms of economic development and human-environment relationships. He has published several books and more than 100 articles, reports, and reviews.

**Paul M. Cutler** is a Senior Program Officer for the Board on Earth Sciences and Resources of The National Academies. He directs the Geographical Sciences Committee, the Mapping Science Committee, and studies in Earth science, geographical science, and geographic information science. Before joining the BESR staff, Dr. Cutler was a senior program officer in the Academies' Polar Research Board, where he directed studies in polar and atmospheric science. Before joining the Academies, he was an assistant scientist and lecturer in the Department of Geology and Geophysics at the University of Wisconsin, Madison. His research is in glaciology, hydrology, Earth surface processes, meteorology, and quaternary science, and he has conducted fieldwork in Alaska, Antarctica, arctic Sweden, the Swiss Alps, Pakistan's Karakoram mountains, the midwestern United States, and the Canadian Rockies. Dr. Cutler received an M.Sc. in geography from the University of Toronto, and a Ph.D. in geology from the University of Minnesota.

**Elizabeth Eide**, Senior Program Officer with the Board on Earth Sciences and Resources, is a geologist with specialization in isotope geochronology applied to crustal processes, including oil and gas exploration. Prior to working with the NRC, she worked for twelve years at the Geological Survey of Norway where she constructed and managed an

<sup>40</sup>Ar/<sup>39</sup>Ar geochronology laboratory, and managed personnel, budget and research matters as administrator/researcher for two departments. She received her Ph.D. in geology from Stanford University and a B.A. in geology from Franklin and Marshall College.

**David A. Feary** holds BS and MS degrees from the University of Auckland and a PhD from the Australian National University. His professional career includes 7 years lecturing in the Department of Geology at the Australian National University, followed by 15 years at the Australian Geological Survey (AGSO; now Geoscience Australia). As a research scientist in AGSO's marine program, his marine geology and geophysics research concentrated on the high-resolution seismic expression of carbonate sequences within different climatic regimes. He sailed on numerous research cruises as shipboard scientist or Chief Scientist, including two Ocean Drilling Program legs. He represented the Australia-Canada-Chinese Taipei-Korea ODP Consortium on ODP management committees, and managed research support and research project activities. He also worked as a consultant to the petroleum exploration industry in the Gippsland Basin and on the Northwest Shelf. He has been a Senior Program Officer at the NRC since 1999.

**Anne M. Linn** is a Senior Program Officer with the Board on Earth Sciences and Resources of the National Academies. She has been with the board since 1993, directing the USA World Data Center Coordination Office, and staffing a wide variety of geophysics, climate, and data policy studies. She served as Secretary of the ICSU Panel on World Data Centers for 8 years, and was a member of the ICSU Ad Hoc Committee on Data for 3 years. Prior to joining the staff of the National Academies, Dr. Linn was a visiting scientist at the Carnegie Institution of Washington and a postdoctoral geochemist at the University of California, Berkeley. She received a Ph.D. in geology from the University of California, Los Angeles.

**Ronald F. Abler** is a Senior Scholar at the National Academies and a Vice President of the International Geographical Union. He was executive director of the Association of American Geographers (AAG) from 1989 through 2002 and professor of geography at The Pennsylvania State University from 1967 to 1995. From 1984 to 1988, Dr. Abler was director of the Geography and Regional Science Program at the National Science Foundation, where he coordinated the establishment in 1988 of the National Center for Geographic Information and Analysis. Dr. Abler's

research explores the ways different societies have used intercommunications technologies at different times and places. He has written numerous research articles and is coauthor or editor of several books. Most recently he edited *Global Change and Local Places: Estimating, Understanding, and Reducing Greenhouse Gases*. Dr. Abler was president of the AAG (1985-1986). He has received the Centenary Medal of the Royal Scottish Geographical Society (1990), Association of American Geographers Honors (1995), the Victoria Medal of the Royal Geographical Society/Institute of British Geographers (1996), and the Samuel Finley Breese Morse Medal of the American Geographical Society (2004). He earned his B.A., M.A., and Ph.D. (1968) in geography at the University of Minnesota.

**Ann G. Frazier**, Program Officer, has 25 years of experience in science and engineering, including 10 years with the USGS in geographic sciences. She focused on land cover change, urban growth, ecological modeling, and application of geographic analysis and remote sensing in interdisciplinary environmental studies. Prior to the USGS, Ann worked for 13 years in the aerospace industry on the Space Shuttle and Space Station Programs. Ann has a B.A. in Physics/Astronomy, an M.S. in Space Technology, a Certificate in Environmental Management, and an M.S. in Geography.

**Samantha L. Magsino** is a Program Officer with the National Research Council's Board on Earth Sciences and Resources. She was previously a geologist with the Washington State Geologic Survey where she produced earthquake hazard maps and served as a technical advisor to the state on volcanic hazards. She was the science coordinator for a National Science Foundation facility at The University of Texas at Austin conducting aerogeophysical surveys in Antarctica, and has worked for the Center for Nuclear Waste Regulatory Analyses at the Southwest Research Institute conducting geophysical investigations near the proposed Yucca Mountain Nuclear Waste Facility in support of volcanic hazard assessment. She holds M.S. and B.S. degrees in geology from Florida International University.

**Jennifer T. Estep** is a Financial Associate with the Board on Earth Sciences and Resources. She's been with BESR, starting as a Senior Project Assistant, since 1994. Prior to BESR, she worked in the Geotechnical Board, the Aeronautics and Space Engineering Board, and the National Materials Advisory Board, all in the Commission on Engineering and Technical Systems. She attended

Western Maryland College and then Towson State University studying Business Administration.

**Verna J. Bowen** began employment at the National Research Council as an administrative assistant in the Commission on Engineering and Technical Systems' executive office in 1982 and later joined the Manufacturing Studies Board as an administrative assistant. After the board completed its work, she moved to the Commission on Geosciences, Environment, and Resources where she worked in the same capacity for several months with the Board on Radioactive Waste Management before joining the Board on Earth Sciences and Resources in 1995. Currently, she serves as a financial and administrative associate for three of the board's standing committees and their ad hoc committees.

**Caetlin M. Ofiesh** is a Research Associate with the Board on Earth Sciences and Resources. Since graduating from Amherst College with a B.A. in Geology, where she focused on structural geology and tectonics, she has worked in the Boulder, Colorado office of Environmental Defense, and spent a semester teaching geology to high school sophomores in Zermatt, Switzerland. Prior to that, she interned at the American Geological Institute in Alexandria, Virginia, and worked as a research assistant at the University of Virginia's School of Engineering, where she published a paper on global food and water supply issues.

**Jared P. Eno** is a Senior Program Assistant with the Board on Earth Science and Resources. Before coming to the National Academies, he interned at Human Rights Watch's Arms Division, working on the 2004 edition of the *Landmine Monitor Report*. Jared received his A.B. in physics from Brown University.

**Nicholas D. Rogers** is a Senior Program Assistant with the Board on Earth Sciences and Resources. He received a B.A. in history, with a focus on the history of science and early American history, from Western Connecticut State University in 2004. He began working for the National Academies in 2006 and has primarily supported the Board on Earth Sciences and Resources on earth resource and geographical science issues.

**Tonya Fong Yee** is a program assistant with the Board on Earth Science and Resources. She received her B.S. in business administration with a focus on marketing, from the University of Florida in Gainesville, Florida. Before coming to the National Academies, she interned at Substance Abuse and Mental Health Services Administration, working on the Safe Schools/Healthy Students Initiative.