

NASEM Planning Committee on Quantitative Skills Framework for Solid Earth Geophysics

MARK D. BEHN is an associate professor in the Morrissey College of Arts and Sciences at Boston College. Dr. Behn's research investigates the dynamics of Earth deformation in glacial, marine, and terrestrial environments through the use of a wide range of geophysical techniques. These techniques include the development of geodynamic models that relate laboratory-based rheologic and petrologic models to the large-scale behavior of the Earth, which are then applied to a spectrum of problems from basic science to societally-relevant issues. His research interests include dynamics of faulting, magmatism, and surface processes at mid-ocean ridges and continental rifts; seismic anisotropy and imaging of sub-asthenospheric mantle flow; evolution of the continental crust; and ice-sheet dynamics. He is the co-chair of the Geodynamics Focus Research Group for the Community Surface Dynamics Modeling System, was active in the MARGINS/GeoPRISMS program, and is a former fellow of the WHOI Deep Ocean Exploration Institute. Dr. Behn received his B.S. in geology from Bates College and a Ph.D. in marine geophysics from the Massachusetts Institute of Technology/WHOI Joint Program.

DIANE DOSER is a geophysicist at the University of Texas at El Paso. She has ongoing research projects in earthquake seismology, shallow subsurface geophysics (applied to groundwater, agricultural soils and critical zone studies), and the seismotectonics of Alaska and the El Paso region. She is also involved in projects related to geoscience/environmental science education. In 2010 she was the recipient of the University of Texas System Regents' Outstanding Teaching Award. From 2010 to 2015 she served as the editor-in-chief of the Bulletin of the Seismological Society of America and in 2016 received the Society's Distinguished Service Award. In 2019 she was named a fellow of the Geological Society of America. She earned her B.S. in Applied Geophysics from Michigan Technological University and her M.S. and Ph.D. in Geophysics from the University of Utah. She also was a Bantrell Postdoctoral Fellow in Geophysics at the Seismological Laboratory of the California Institute of Technology.

CINDY EBINGER is a professor and Marshall-Heape Chair in the Department of Earth and Environmental Sciences at Tulane University. Her current research aims to understand the partitioning of strain between faulting and magmatic processes within continental and oceanic rift zones over time scales of hours to millennia and the longer-term evolution of continental rift zones from initiation to continental rupture. Her interest in continental rifts and plate boundary deformation began as an undergraduate at Duke University when she took part in a National Science Foundation-sponsored research project in the volcanically and seismically active East African rift zone. Dr. Ebinger served as a former president of the Tectonophysics Section of the American Geophysical Union (AGU) and was recently named an AGU Fellow for her "fundamental work on the evolution of continental rifts toward seafloor spreading in East Africa and afar." Dr. Ebinger earned her B.S. in geology from Duke University, S.M. from Massachusetts Institute of Technology (MIT), and Ph.D. in oceanography from the MIT/Woods Hole Oceanographic Institution (WHOI) Joint Program.

CRAIG PARTRIDGE is chair of the department of Computer Science at Colorado State University. His research revolves around various aspects of data networking. In his administrative work, he focuses on encouraging a larger and more diverse population of students

to study Computer Science and supporting CSU's data science program. He is a member of the Internet Hall of Fame, which recognized him for his contributions to Internet email and to the development of high performance Internet routers and encryption devices. He is a Fellow of the IEEE and ACM, and a member of the National Academies' Computer Science and Telecommunications Board. He received his A.B., M.Sc. and Ph.D. degrees from Harvard University.

LANCE A. WALLER is a professor in the Department of Biostatistics and Bioinformatics, Rollins School of Public Health, Emory University. He is a member of the National Academy of Science Board on Mathematical Sciences and Analytics and has served on National Academies Committees on Applied and Theoretical Statistics, Cancer Near Nuclear Facilities, Geographic Assessments of Exposures to Agent Orange, and Standoff Explosive Technologies. His research involves the development of statistical methods for geographic data including applications in environmental justice, epidemiology, disease surveillance, spatial cluster detection, conservation biology, and disease ecology. His research appears in biostatistical, statistical, environmental health, and ecology journals and in the textbook *Applied Spatial Statistics for Public Health Data* (2004, Wiley). Dr. Waller currently leads planning for the Data Science Initiative in Emory University's Woodruff Health Sciences Center. He received his Ph.D. in Operations Research from Cornell University