

Geology was my first scientific love in college, and geophysics was my second. I became fascinated by earthquakes and what they could tell us about the Earth, its internal processes, and the forces that deform its surface. In my final year I saw a SAR interferogram of the 1995 Dinar, Turkey earthquake, and thought “I want to do that!” Time and again in my career, I have found the most interesting problems exist at the interface between geodesy and seismology – my doctoral research involved jointly inverting InSAR and teleseismic waveform data to produce robust models of the earthquake source. Since then, I have worked on using InSAR-derived earthquake locations to test Earth velocity models, on using aseismic slip to constrain future seismic sources, and on developing methods to detect repeating earthquakes that can supplement geodetic observations of fault creep. In many ways, a merger between UNAVCO and IRIS, and their corresponding communities, could be considered a large-scale reflection of what I have realized as a researcher – that there is valuable synergy between geodesy and seismology, and by working together we can tackle big and interesting problems.

Geophysics is a science driven by data, and the geophysical facilities that supply us with data are critical to the success of our science. Without these facilities installing and maintaining the instrumentation and infrastructure (both physical and cyber) that supply us with data, we cannot be successful. And without strong community governance of the geophysical facilities, through the EarthScope Consortium, the facilities will not be responsive to the needs of scientists. In my career to date, I have represented and supported the scientific community in various roles. As chair of the WInSAR Executive Committee I worked to facilitate greater access to proprietary SAR data and to develop short courses that broadened the accessibility of InSAR to nonspecialists. Through a decade of collaborations with UNAVCO in education and outreach, I have worked to train the next generation of researchers in professional development short courses, and to produce materials that expose students to geodetic data in undergraduate classrooms. And as a current member of the UNAVCO Board, I have been involved in planning and executing the changes that will bring our future geophysical facility into being, and in communicating the value of our facilities and our future needs to policymakers.

If elected, I will endeavor to represent the interests of the whole geophysical community, and to guide the EarthScope Consortium in what will be an exciting opportunity to shape our future – by embracing emergent technologies, upgrading and consolidating our instrumentation networks, diversifying our federal support and partnerships, enhancing and broadening the training we provide, and enabling robust two-way communications between the Board and community members. The future of geophysics is bright, and I am absolutely here for it!