I am an associate professor in the Department of Geosciences at Virginia Tech where I run the Geodesy and Tectonophysics Laboratory (GTL). My research group currently collects millimeter precision GNSS/GPS data in the Chesapeake Bay, Tanzania, Kenya, and Uganda to measure vertical land motions and tectonic plate motions, as well as real-time centimeter precision positions in Tanzania for volcanic deformation signals. GTL also has active research projects based in China that leverage existing GNSS/GPS observations. My research group uses high performance computing and other numerical techniques to characterize the kinematics and investigate the dynamics of continental deformation.

I have been a member of the UNAVCO geodesy community for 17 years and the UNAVCO institutional representative for Virginia Tech since 2015. My research in GNSS geodesy and computational modeling has greatly benefited from the support and services of IRIS and UNAVCO, therefore I am keen to serve both communities as an EarthScope Board member. Over the past 6 years I have been deeply involved in the NSF EarthCube community, which has taught me the value of open science, FAIR data, and modern cyberinfrastructure. If elected as an EarthScope Board member, I would bring my UNAVCO and EarthCube experiences to the job. I would aim to help guide EarthScope, Inc. into an organization that exemplifies open data policies, provides easy access to low- and high-latency data, implements community-defined standards, and continues to support cutting-edge geophysical research. I would also advocate for continuing critical education and outreach programs that create a more inclusive and diverse geosciences workforce.