Maureen D. Long
Bruce D. Alexander ’65 Professor of Earth and Planetary Sciences, Yale University

Professional Preparation

1996-2000	B.S. Geology with Physics minor, Rensselaer Polytechnic Institute (RPI), Troy, NY
2000-2006	Ph.D. Geophysics, Massachusetts Institute of Technology (MIT), Cambridge, MA
2006-2008	Postdoctoral associate/fellow, Carnegie Institution for Science

Appointments

2021-present	Chair, Department of Earth and Planetary Sciences, Yale
2021-present	Bruce D. Alexander ’65 Professor of Earth and Planetary Sciences, Yale
2018-2021	Director of Graduate Studies, Department of Earth and Planetary Sciences, Yale
2017-present	Professor of Earth and Planetary Sciences, Yale
2016-2017	Associate Professor of Geology and Geophysics, Yale
2009-2015	Assistant Professor of Geology and Geophysics, Yale

Research Interests

- Observational seismology and mantle dynamics; imaging of seismic anisotropy
- Subduction zone dynamics and processes; subduction and the mantle flow field
- Structure and dynamics of the lowermost mantle and the core-mantle boundary region
- Structure, evolution, and deformation of the continental crust and mantle lithosphere

Professional Affiliations

American Geophysical Union (since 1999), Seismological Society of America (since 2009), Geological Society of America (since 2017)

Selected Honors and Recognition

2020	Finalist, Blavatnik National Awards for Young Scientists
2019	Graduate Mentor Award, Yale Graduate School of Arts and Sciences
2016	James B. Macelwane Medal, American Geophysical Union (AGU)
2016	Fellow, American Geophysical Union
2016-2017	EarthScope Distinguished Speaker
2015	Kavli Frontiers of Science Fellow, National Academy of Sciences
2012	NSF Faculty Early Career Development (CAREER) Award
2012	Outstanding Reviewer, Geophysical Journal International
2011-2013	Alfred P. Sloan Research Fellowship (Physics)
2010	Editors’ Citation for Excellence in Refereeing, JGR-Solid Earth

Selected Public Outreach, Mentoring, and DEI (Diversity, Equity, Inclusion) Activities

2022	Participant, AGU Mentoring Network
2021	Panelist, SSA Connects Mentoring Session on grant and proposal writing (virtual)

2021	Unlearning Racism in Geosciences (URGE) program – Yale pod participant, key contributor to several pod deliverables, co-author of Yale pod GSA/AGU poster
2020, 2021	Research talk, Yale Warrior-Scholar Project (via zoom)
2020	Facilitator, Yale EPS department workshop on racial equity
2020	"College Insider" podcast interview, Women in STEM Initiative's Athena Project
2020	Mentor, Científico Latino Graduate School Mentorship Initiative (CL-GSMI)
2019	Volunteer judge, New Haven Science Fair, New Haven, CT
2018	Co-convener, session on "Cultivating and sustaining effective teacher-scientist partnerships," Connecticut Science Educators Annual Conference
2015-present	Founder and coordinator, Field Experiences for Science Teachers (FEST) program

Selected Recent Publications

(**denotes graduate advisee; **denotes undergraduate advisee*)

Goldhagen, G., Ford, H. A., **Long, M. D.,** 2022. Evidence for a lithospheric step and pervasive lithospheric thinning beneath southern New England. *Geology*, in press.

Wolf, J.*, **Long, M. D.,** Leng, K., Nissen-Meyer, T., 2022. Constraining deep mantle anisotropy with shear wave splitting measurements: Challenges and new measurement strategies. *Geophys. J. Int.,* 230, 507-527, doi:10.1093/gji/ggac055.

Löberich, E., **Long, M. D.,** Wagner, L. S., Qorbani, E., Bokelmann, G., 2021. Constraints on olivine deformation from SKS shear-wave splitting beneath the southern Cascadia subduction zone back-arc. *Geochem. Geophys. Geosyst.*, 22, doi:10.1029/2021GC010091.

Creasy, N.*, Pisconti, A., **Long, M. D.,** Thomas, C., 2021. Modeling of seismic anisotropy observations reveals plausible lowermost mantle flow directions beneath Siberia. *Geochem. Geophys. Geosyst.*, 22, doi:10.1029/2021GC009924.

Long, M. D., Wagner, L. S., Evans, R. L., King, S. D., Mazza, S. E., et al., 2021. Evaluating models for lithospheric loss and intraplate volcanism beneath the Central Appalachian Mountains. *J. Geophys. Res.*, 126, doi:10.1029/2021JB022571.

Wolf, J.*, **Long, M. D.,** Nissen-Meyer, T., Leng, K., 2022 (online in 2021). Sensitivity of SK(K)S and ScS phases to heterogeneous anisotropy in the lowermost mantle from global wavefield simulations. *Geophys. J. Int.*, 228, 366-386, doi:10.1093/gji/ggab347.

Luo, Y.*, **Long, M. D.,** Karabinos, P., Kuiper, Y., Rondenay, S., et al., 2021. High-resolution Ps receiver function imaging of the crust and mantle lithosphere beneath southern New England and tectonic implications. *J. Geophys. Res.*, 126, doi:10.1029/2021JB022170.

Mondal, P.*, **Long, M. D.,** 2020. Strong seismic anisotropy in the deep upper mantle beneath the Cascadia backarc: Constraints from probabilistic finite-frequency SKS splitting intensity tomography. *Earth Planet. Sci. Lett.*, 539, 116172, doi:10.1016/ j.epsl.2020.116172.

Creasy, N.*, Miyagi, L., **Long, M. D.,** 2020. A library of elastic tensors for lowermost mantle anisotropy studies and comparison with seismic observations. *Geochem. Geophys. Geosyst.*, 21, doi:10.1029/2019GC008883.

Lopes, E.**, **Long, M. D.,** Karabinos, P., Aragon, J. C.**, 2020. Shear wave splitting and upper mantle anisotropy beneath the southern New England Appalachians: Constraints from the dense SEISConn array. *Geochem. Geophys. Geosyst.* 21, doi:10.1029/2020GC009401.

Gao, H., Yang, X., **Long, M. D.,** Aragon, J. C., 2020**. Seismic evidence for crustal modification beneath the Hartford Rift Basin in the Northeastern United States. *Geophys. Res. Lett.,* 47, doi:10.1029/2020GL089316.

Long, M. D., Benoit, M. H., Evans, R. L., Aragon, J. C.**, Elsenbeck, J., 2020. The MAGIC experiment: A combined seismic and magnetotelluric deployment to investigate the structure, dynamics, and evolution of the central Appalachians. *Seismol. Res. Lett.*, 91, 2960-2975, doi:10.1785/0220200150.