

Xiaotao Yang

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GitHub: <https://github.com/xyyangpsp>

EDUCATION

- Ph.D.** in Geophysics, Indiana University, Bloomington, IN 08/2011 – 10/2016
 Dissertation: Lithospheric Imaging in Illinois Basin and Its Tectonic Implications
 Advisory Committee: Gary L. Pavlis (Chair), Michael Hamburger, Kaj Johnson, Hersh Gilbert, Stephen Marshak
- M.Sc.** in Geophysics, University of Chinese Academy of Sciences, Beijing, China 09/2008 – 07/2011
 Thesis: Seismic Travel-Time Tomography of Crustal Structure in Yunnan, China
 Advisory Committee: Yi Xu (Chair), Jianhua Liu, Weiwei Jiang, Peifen Xu
- B.Sc.** in Geophysics, China University of Geosciences (Wuhan), Hubei, China 09/2004 – 06/2008
 Thesis: Loess Magnetic Fabric Characteristic Analysis in Chaohu Basin, Anhui
 Thesis Director: Yufen Zhang

PROFESSIONAL APPOINTMENTS

- | | | |
|-------------------------------------|-------------------------|-------------------|
| Purdue University | Assistant Professor | 08/2020 - present |
| Harvard University | Research Associate | 06/2019 - 08/2020 |
| Mentor: Dr. Marine Denolle | | |
| University of Massachusetts Amherst | Postdoctoral Researcher | 11/2016 - 05/2019 |
| Mentor: Dr. Haiying Gao | | |

RESEARCH INTERESTS

Structure and tectonic evolution of Earth's lithosphere and deep interior
 Earthquake hazards, volcano seismology, geohazards
 Dynamics of subduction systems
 Automation of array-based seismic data processing

EXTERNAL FUNDING

NSF Geophysics, PI: Investigating Lithospheric Heterogeneity of the North American Craton with Multiple Seismological Methods. \$299,993. 8/2023 – 7/2026
 DOE CarbonSafe Initiative, Co-PI: Rock Physics and Regional Seismic Studies in support of BP CARBONSAFE. \$483,062. 6/2024-5/2027

MANUSCRIPTS IN PREPARATION (*-student)

Yang, X., Stevens Goddard, A., Liu, L., Ridgway, K., Schmitt, D., & Li, H. (*in preparation*).
 Seismic evidence of pre-subsidence doming in the North American cratonic interior

*Sassard, V., **Yang, X.**, Elliott, J., & Liu, L. (*in preparation*). Incipient slab tear along the
 Alaska subduction margin

*Kupres, C. A., **Yang, X.**, Maurer, J., & Lizik, Y. (*in preparation*). Changes in seismic velocity
 below Okmok Volcano

Haney, M., Miller, D., Hotovec-Ellis, A., Thurber, C., Dietterich, H., **Yang, X.** (in

preparation). Time-lapse seismic velocity changes coincident with dome emplacement at Great Sitkin Volcano, Alaska

PEER-REVIEWED PUBLICATIONS (*-student)

*Kupres, C. A., **Yang, X.**, Haney, M., & Roman, D. C. (*in review*). Sustained co-eruptive increase in seismic velocity below Great Sitkin Volcano due to magma extrusion, *Geophysical Research Letters*

Jadamec, M. A., Pavlis, G., **Yang, X.**, Fischer, K. M., Wei, S. S., Mann, M. E., & Schaeffer, A. (*in review*). Synthesis of the Seismic Structure of the Greater Alaska Region: Geodynamics Implications. In N. A. Ruppert, J. T. Freymueller, & M. A. Jadamec (Eds.), *AGU Monograph: Tectonics of Alaska and Western Canada*. American Geophysical Union Wiley.

Yang, X., Liu, L., Stevens Goddard, A., Fischer, K., Peng, L. (*in revision*). Termination and inversion of cratonic basins caused by lithospheric delamination, *Nature Geoscience*

Yang, X., Mann, M. E., Fischer, K. M., Jadamec, M. A., Wei, S. S., Pavlis, G., & Schaeffer, A. (*in press*). Synthesis of the Seismic Structure of the Greater Alaska Region: Continental Lithosphere. In N. A. Ruppert, J. T. Freymueller, & M. A. Jadamec (Eds.), *AGU Monograph: Tectonics of Alaska and Western Canada*. American Geophysical Union Wiley.

Pavlis, G. L., Jadamec, M. A., Mann, M. E., **Yang, X.**, Schaeffer, A., Wei, S. S., & Fischer, K. M. (*in press*). Synthesis of the Seismic Structure of the Greater Alaska Region: Subducting Slab Geometry. In N. A. Ruppert, J. T. Freymueller, & M. A. Jadamec (Eds.), *AGU Monograph: Tectonics of Alaska and Western Canada*. American Geophysical Union Wiley.

Wang, Y., Cao, Z., Peng, L., Liu, L., Chen, L., Lundstrom, C., Peng, D., & **Yang, X.** (2023). Secular craton evolution due to cyclic deformation of underlying dense mantle lithosphere. *Nature Geoscience*. <https://doi.org/10.1038/s41561-023-01203-5>

Yang, X., Roman, D. C., Haney, M., Kupres, C. A. (2023). Double reservoirs imaged below Great Sitkin Volcano, Alaska, explain the migration of volcanic seismicity, *Geophysical Research Letters*, 50, e2022GL102438. <https://doi.org/10.1029/2022GL102438> *News coverage by [Purdue EAPS](#)*

Yang, X., Bryan, J., Okubo, K., Jiang, C., Clements, T., & Denolle, M. A. (2022). Optimal stacking of noise cross-correlation functions. *Geophysical Journal International*, 232(3), 1600–1618. <https://doi.org/10.1093/gji/ggac410>

Yang, X., H. Gao (2020). Segmentation of the Aleutian-Alaska subduction zone revealed by full-wave ambient noise tomography: implications for the along-strike variation of volcanism, *Journal of Geophysical Research-Solid Earth*, doi: 10.1029/2020JB019677 ***The story was reported by 4 news websites and 2 science blogs***

Gao H., **X. Yang**, Maureen Long, John Aragon (2020). Seismic Evidence for Crustal Modification Beneath the Hartford Rift Basin in the Northeastern United States, *Geophysical Research Letters*, doi: 10.1029/2020GL089316

Gilbert, H., J. Boschelli, C. Chen, **X. Yang**, G. Pavlis, M. Hamburger, S. Marshak, T. Larson, and J. Rupp (*in revision*). Crustal layering in the U.S. midcontinent and its role in the evolution of the Illinois Basin, *Geology*

Lü, Z., H. Gao, J. Lei, **X. Yang**, S. Rathnayaka, C. Li (2019). Crustal and upper mantle structure of the Tien Shan orogenic belt from full-wave ambient noise tomography, *Journal of Geophysical Research-Solid Earth*

Yang, X., H. Gao, S. Rathnayaka, C. Li (2019). A comprehensive quality analysis of empirical Green's functions at Ocean Bottom Seismometers in Cascadia, *Seismological Research Letters*, doi:

10.1785/0220180273

Yang, X., H. Gao (2018). Full-Wave Seismic Tomography in the Northeastern United States: New Insights into the Uplift Mechanism of the Adirondack Mountains, *Geophysical Research Letters*, 45, doi: 10.1029/2018GL078438. * **news coverage in UMass News, Phys.org, and AGU GeoSpace blog (See [Media links on my website for details](#))** *

Chen, C., H. Gilbert, K. Fischer, C. Andronicos, G. Pavlis, M. Hamburger, S. Marshak, T. Larson, **X. Yang** (2018). Lithospheric discontinuities beneath the U.S. Midcontinent - signatures of Proterozoic terrane accretion and failed rifting, *Earth and Planetary Science Letters*, 481, doi: 10.1016/j.epsl.2017.10.033

Yang, X., G. Pavlis, M. Hamburger, S. Marshak, H. Gilbert, T. Larson, C. Chen, N. S. Carpenter (2017). Detailed Crustal Thickness Variations beneath the Illinois Basin Area: Implications for Crustal Evolution of the Midcontinent, *Journal of Geophysical Research-Solid Earth*, 122, doi: 10.1002/2017JB014150. * **highlighted by the editor as "Exploring hypotheses for thick crust under the Illinois Basin" on July 13, 2017** *

Marshak, S., S. L. Domrois, C. Abert, T. Larson, G. L. Pavlis, M. W. Hamburger, **X. Yang**, H. Gilbert, and C. Chen (2017), The basement revealed: Tectonic insight from a DEM of the Great Unconformity, USA cratonic platform, *Geology*, doi: 10.1130/G38875.1

Yang, X., G. Pavlis, Y. Wang (2016). A Quality Control Method for Teleseismic P-Wave Receiver Functions, *Bulletin of the Seismological Society of America*, 106(5), 1948–1962, doi:10.1785/0120150347

Chen, C., H. Gilbert, C. Andronicos, M. Hamburger, T. Larson, S. Marshak, G. Pavlis, **X. Yang** (2016). Shear velocity structure beneath the central United States: implications for the origin of the Illinois Basin and intraplate seismicity. *Geochemistry, Geophysics, Geosystems*, doi: 10.1002/2015GC006206

Xu, Y., S. Wang, L. Zhang, **X. Yang** (2015). Crust and upper mantle structure and its relations with magma activity of the Tengchong volcanic area. *Progress in Geophysics (in Chinese)*, 30(3), 1034-1038, doi: 10.6038/pg20150306

Xu, Y., J. Liu, Z. Huang, **X. Yang** (2014). Upper Mantle Velocity Structure and Dynamic Features of the Tibetan Plateau. *Chinese Journal of Geophysics (in Chinese)*, 57 (12), 4085-4096

Yang, X., G. Pavlis, M. Hamburger, E. Sherrill, H. Gilbert, S. Marshak, J. Rupp, T. Larson (2014). Seismicity of the Ste. Genevieve Seismic Zone based on Observations from the EarthScope OIINK Flexible Array. *Seismological Research Letters*, 85(6), 1285-1294 * **news coverage in Indiana University News and St. Louis Public radio (See [Media links on my website for details](#))** *

Xu, Y., **X. Yang**, J. Liu (2013). Tomographic Study of Crustal Velocity Structures in the Yunnan Region Southwest China. *Chinese Journal of Geophysics (in Chinese)*, 56(6), 1904-1914

Xu, Y., **X. Yang**, Z. Li, J. Liu (2012). Seismic Structure of the Tengchong Volcanic Area Southwest China from Local Earthquake Tomography. *Journal of Volcanology and Geothermal Research*, 239-240, 83-91

Yang, X., Y. Xu, J. Liu, Z. Li (2011). Seismic Tomography in the Tengchong Volcanic Area and Its Tectonic Implication. *Chinese Journal of Geophysics (in Chinese)*, 54(8), 2050-2059.

CONFERENCE PRESENTATIONS

The Variation of Lithospheric Structures below Rifts and Basins within the North American Craton and its Tectonic Implications, at 2022 AGU Fall Meeting. Chicago, IL. December 2022

Double reservoirs imaged below the Great Sitkin volcano explain the migration of eruption

seismicity, at the SZ4D community workshop. Houston, TX. November 2022

Seismic Imaging of the Ups and Downs of the North American Midcontinent, at the SAGE/GAGE 2022 community workshop. Pittsburgh, PA. June 2022

Seismic Constraints on the Structure of Alaska: A Review, at the SAGE/GAGE 2022 community workshop. Pittsburgh, PA. June 2022

Seismic Velocity Changes below the Great Sitkin Volcano in Central Aleutian Islands Associated with Recent Eruptive Activities, at the GeoPRISMS Volatiles workshop. Bozman, MT. May 2022

Seismic Imaging of the Ups and Downs of the North American Midcontinent, at the SSA Annual meeting. Bellevue, WA. April 2022

Seismic Constraints on the Structure of Alaska: A Review, at *2021 AGU Fall Meeting*. New Orleans, LA. **(Invited talk)**

Optimize the Stacking of Noise Correlation Functions, at 2021 SSA annual Meeting. Online.

Ground Motions along the Cascadia Margin Revealed by Virtual Earthquakes, at *2020 American Geophysical Union (AGU) Fall Meeting*. Washington, DC.

Imaging the cratonic lithosphere beneath the Illinois Basin and the Adirondack Mountains, at *2019 Seismological Society of America (SSA) Annual Meeting*. Seattle, WA. **(Invited talk)**

Seismic evidence of mantle wedge controls on volcano distribution along Aleutian-Alaska, at *2019 Seismological Society of America (SSA) Annual Meeting*. Seattle, WA. **(Invited talk & SSA press highlight)**

Seismic characteristics of the southern New England crust revealed by full-wave ambient noise tomography, at *2019 Northeastern Section 54rd Annual Meeting*. Portland, ME.

Seismic evidence of mantle wedge controls on volcano distribution along Aleutian-Alaska, at *2019 GeoPRISMS Theoretical and Experimental Institute*. San Antonio, TX.

The Cause and Effect of Slab Segmentation in the Aleutian-Alaska Subduction System, at *2018 American Geophysical Union (AGU) Fall Meeting*. Washington, DC.

Modification of lithospheric structure via subduction, terrane accretion, and rifting: Preliminary results from the SEISConn broadband experiment, Connecticut, USA, at *2018 American Geophysical Union (AGU) Fall Meeting*. Washington, DC. (Co-author)

Full-Wave Tomography in Alaska/Aleutian from Ocean to Continent, at *2018 IRIS Workshop*. Albuquerque, NM

Quality Analysis of Empirical Green's Functions for Ocean Bottom Seismometers in Cascadia, at *2018 IRIS Workshop*. Albuquerque, NM

Seismic Evidence of Asthenosphere Upwelling Driving the Uplift of the Adirondack Mountains, at *2018 Northeastern Section 53rd Annual Meeting*. Burlington, VT.

Link the Crustal Structure with Seismicity and Tectonic Terranes in the Northern Appalachians, at *2018 Northeastern Section 53rd Annual Meeting*. Burlington, VT.

The Correlation of Crustal Velocity Structures with Seismicity Patterns in the Northern Appalachians, at *2017 American Geophysical Union (AGU) Fall Meeting*. New Orleans, LA.

Investigating the Quality of Empirical Green's Functions from the Cascadia Initiative and ENAM OBS Experiments, at 2017 OBS Symposium, Portland, ME.

Uplift of the Intracratonic Adirondack Mountains Driven by Asthenospheric Upwelling, at *2017 Gordon Research Conferences on Interior of the Earth*. South Hadley, MA.

Uplift of the Intracratonic Adirondack Mountains Driven by Asthenospheric Upwelling, at *2017 EarthScope National Meeting*. Anchorage, AK.

Lithospheric Discontinuities in Illinois Basin and Their Tectonic Implications: Results from the EarthScope OIINK Experiment, at *2015 American Geophysical Union (AGU) Fall Meeting*. San Francisco, CA.

Tectonic Implications of Lithospheric Discontinuities in the Ozark Plateau and Southern Illinois Basin, Midcontinent USA, at *2015 EarthScope National Meeting*. Stowe, VT.

Quantitative and Interactive Quality Control on Teleseismic P-Wave Receiver Functions, at *2015 Indiana University Crossroads Geology Conference*, Bloomington, IN

Impacts of Sediments in Illinois Basin on Plane-Wave Migration using P-to-S Conversions, at *2014 Joint SEG-AGU Summer Research Workshop on Advances in Active and Passive Full Wavefield Seismic Imaging: From Reservoirs to Plate Tectonics*. Vancouver, BC Canada.

Lithosphere under Southern Illinois Basin based on Ozark-Illinois-Indiana-Kentucky (OIINK) Flexible Array Experiment, *2013 AGU Fall Meeting*. San Francisco, CA.

Recent Seismicity in Ozark-Illinois Basin Boundary: Results from the EarthScope OIINK Flexible Array Experiment, *2013 EarthScope National Meeting*, Raleigh, NC.

Recent Seismicity in Southern Illinois and Southern Missouri: Initial Results from the EarthScope OIINK Flexible Array Experiment, *2012 AGU Fall Meeting*, San Francisco, CA.

INVITED DEPARTMENT SEMINAR TALKS

Investigate Volcanism and Eruption Dynamics along the Alaska Subduction Margin, at *Indiana University Bloomington*. April 2023

Lithospheric Imaging from the Illinois Basin to the Aleutian-Alaska Subduction Zone, at *University of Toronto*. April 2022

Lithospheric Imaging from Continental Interior to Subduction Margin, at Zhejiang University Earth Data Program, March 2022

Master the Stacking of Noise Correlation Functions, at GaGgle seminar series. January 2022

When Seismology Meets Bigdata and High-Performance Computers, at *GeoData* seminar series. February 2021

Lithospheric Imaging from the Illinois Basin to the Aleutian-Alaska Subduction Zone, at *GYP SUM seminar series*. November 2020

Seismic imaging of the Aleutian-Alaska subduction zone with details, at *UIUC*. October 2020

Investigate Lithospheric Dynamics and Interactions from Margins to Interiors through High-Resolution Seismic Imaging, at *Nevada Seismological Lab, University of Nevada, Reno*. Reno, NV. May, 2019

Investigate Lithospheric Dynamics and Interactions from Margins to Interiors through High-Resolution Seismic Imaging, at *Purdue University*. West Lafayette, IN. April, 2019

Seismic imaging of slab segmentation and correlation with volcano distribution along the Aleutian-Alaska subduction zone, at *University of Texas Institute of Geophysics*. Austin, TX. February, 2019

Seismic imaging of slab segmentation and its correlation with volcano distribution along the Aleutian-Alaska subduction zone, at *University of Massachusetts Amherst*. Amherst, MA. February, 2019

Study the structure and evolution of the lithosphere using large seismic arrays, at *South Dakota School of Mines & Technology*. Rapid City, SD. March, 2018.

Recent seismicity of the Ozark-Illinois Basin boundary in North America: based on observations from the OIINK project, at *Institute of Geodesy and Geophysics, Chinese Academy of Sciences & China University of Geosciences (Wuhan)*. Wuhan, China. June, 2013

Plane-wave migration for seismic broadband array data: a 3-D seismic wavefield imaging technique, at *Institute of Geodesy and Geophysics, Chinese Academy of Sciences & China University of Geosciences (Wuhan)*. Wuhan, China. June, 2013

TEACHING & MENTORING

Teaching “Earthquakes & Volcanoes”, “Computer-Aided Data Analysis in Geosciences”, “Seismic Methods”, “Introduction to Seismology”

Lecturing for New Graduate Seminar at the Department of Earth, Atmospheric, and Planetary Sciences, Purdue University

Lecturing for “*Tectonophysics*” for graduate students and senior undergraduates taught by Michele Cooke and Haiying Gao at University of Massachusetts Amherst (2017), focusing on:

- Gravity anomalies

Mentoring of students

- Purdue University: graduates (Cody Kupres, Vince Sassard, Ya-Li Lizik, Haoyu Li), undergraduates (Noah Trupin, Charlie Schaffer, Emersyn Harriman)
- UMass Amherst: graduates (Cong Li, Sampath Rathnayaka, Meng Liu), undergraduate student (Amelia Midgley), and a visiting scholar (Lihong Zhao, Ziqiang Lyu) at the Seismology Lab, University of Massachusetts Amherst

Lecturing for “*Advanced Seismology*” for graduate students taught by Gary Pavlis at Indiana University (2014), focusing on two topics:

- Earthquake magnitude
- The reflection and transmission of seismic waves at velocity interfaces

Lab assistant for the course of “*Earthquakes and Volcanoes*” for undergraduate students taught by Anna Jessee at Indiana University (2015). Lab topics:

- Fractions and faulting (the occurrence of earthquakes)
- Elasticity and the influence of temperatures and other factors

LEADERSHIPS

05/2013 – 12/2014, **President**, Indiana University Geophysical Society, the Student Chapter of Society of Exploration Geophysicists

- Raised funding from the Department of Geological Sciences, Indiana University
- Served as liaison to the departmental chair
- Led the organization and execution of the Geology Open House (Science Fest) Committee at Indiana University in October 2013 and October 2014
- Managed the development of new society website in Spring 2014
- Coordinated the organization of a field trip to Shawnee National Forest in Spring 2014

04/2005 – 04/2007, **Founder, President, & Associate Editor**, *Sparkle Magazine*, the first geoscience-focused campus magazine at China University of Geosciences (Wuhan)

- Raised funding for the publication from the Institute of Geophysics and Geomatics, China University of Geosciences (Wuhan)
- Publication received Best Campus Student Publications Award in Fall 2006

AWARDS & HONORS

SSA Global Travel Grant, 2022
GeoPRISMS Theoretical and Experimental Institute Travel Award, 2019
College of Arts and Sciences Travel Award, Indiana University, Fall 2015
EarthScope National Meeting Student Scholarship (Travel Award), 2013, 2015, 2017
SEG/ExxonMobil Student Education Program Travel Award, 2014
Student Extracurricular Activity Award, China University of Geosciences, 2005, 2006 and 2007
Distinguished Student in Geology Field Camp, China University of Geosciences, August 2006
Outstanding Team Award in Paper-Framework Bridge Design Contest, China University of Geosciences (Wuhan), April 2005

COMPUTING SKILLS

Software developed:

- *RFeditor*: an automated teleseismic P-wave receiver function quality control program written in C++, with the option of enabling Graphical User Interface. The package is archived on Zenodo: <https://doi.org/10.5281/zenodo.4327655>
- *SeisGo*: A ready-to-go Python toolbox for seismic data analysis. The package is archived on Zenodo: <https://doi.org/10.5281/zenodo.5873724>
- *StackMaster*: A collection of methods for data stacking. The package is available on PyPI repository and archived on Zenodo: <https://doi.org/10.5281/zenodo.5951013>.

Programming languages: C/C++, FORTRAN, MATLAB, Unix Shell, Python, Julia

Software mastered: Antelope Datascope Database, Petrel, BasinMod, Seismic Unix, Seismic Analysis Code (SAC), ParaView

High-Performance Computing: Big Red II parallel computing cluster at Indiana University running on Cray Linux Environment, Karst high-throughput computing cluster at Indiana University running Red Hat Enterprise Linux 6, parallel computing resources at the Massachusetts Green High Performance Computing Center, Rice and Bell community clusters at Purdue University

FIELD EXPERIENCES

2021-2022, Greater Lafayette Region, IN
PI, Broadband deployment to monitor rivers and groundwater

08/2019, Seattle, Washington
Field Assistant, Nodal and broadband survey in Seattle Basin

08/2011 - 10/2015, Missouri, Illinois, Indiana, Kentucky
Field Assistant, OIINK Experiment

- Built vaults for Flexible Array seismic stations
- Installed Guralp CMG-3T and CMG-40T sensors
- Operated configuration and testing of RT130 digitizers
- Monitored the stations through both on-site service and real-time system
- Conducted quality assurance of seismic waveform records
- Managed seismic data through Antelope Datascope Database
- Maintained station metadata for the experiment
- Communicated with IRIS DMC in data archiving for the experiment

09/2009, Hubei, China
Field Assistant, Magnetotellurics Survey in Western Hubei, China

- Assisted in surveying a 200-km profile with multi-frequency measurements

12/2005, Fujian, China

Field Assistant, Mining Area Ground Penetrating Radar Survey

- Contributed in completing a 500-m profile for dense GPR measurements

EXTRACURRICULAR SHORT COURSES

SEG/ExxonMobil Student Education Program on “Multi-Disciplinary Subsurface Integration in Exploration and Production from Plates to Pores”, October 24-26, 2014

We Made a Discovery! Now What: 3-D Seismic Data Interpretation by Fred W. Schroeder from Noble Energy Inc., at Rocky Mountain Rendezvous. Laramie, WY, September 2014

Non-Mathematical Overview of Modeling, Migration, Velocity Analysis and Full Waveform Inversion by J. Bee Bednar from Panorama Technologies. SEG Virtual Course, July 2014

Petroleum Systems Short Course at Indiana University presented by James Handschy from ConocoPhillips Company. Bloomington, IN, May 2014

Advanced Short Course on Seismic Data Processing at Northwestern University presented by IRIS and EarthScope. Evanston, IL, August 2013

PROFESSIONAL SERVICES

Reviewer for *GRL, JGR, SRL, G-Cubed, JAES, Geology, Nature Communication, Precambrian Research, BSSA, EPSL*

Member of the Advisory Council for Graduates & Post-docs, College of Natural Sciences, University of Massachusetts Amherst, 2017 - 2019

Convener of SSA Annual Meeting session “Advances in Seismic Interferometry: Theory, Computation and Applications”, 2020, 2021

Primary convener of 2019 AGU Fall Meeting session “*Multidisciplinary Studies on the Aleutian-Alaska Subduction Zone and Associated Lithosphere Dynamics*”, 2019

Primary convener of 2022 AGU Fall Meeting session “*Structure, Tectonics, and Earthquake Hazards of Cratons*”, 2022

Judge for Outstanding Student Presentation Award at AGU Fall Meeting, 2017, 2018

Judge for GeoPRISMS Best Student Presentation Award at AGU Fall Meeting, 2018, 2019

Primary convener and chair of 2017 AGU Fall Meeting session “*Eastern North American Margin: Multidisciplinary Studies*”, 2017

VOLUNTEERING EXPERIENCES

“[Rock The Earth](#)” YouTube channel to share advances in seismology and tectonics with the public. September 2020 - the present

Eureka! Spring Workshop on Geosciences for 8th to 12th-grade girls. Amherst, MA, February 2018

Eureka! Summer Workshop on Geosciences for 8th to 12th-grade girls. Amherst, MA, July 2017

TV program “*The Friday Zone*” - Episode 1511 - Dig in the Dirt by WTIU, PBS from Indiana University, October 2014

Indiana University Science Fest. Bloomington, IN, 2013, 2014

Sunshine Charity for Children. Beijing, China, 2010-2011

MEMBERSHIPS

American Geophysical Union
Geological Society of America
Seismological Society of America
Society of Exploration Geophysicists
American Association of Petroleum Geologists