

Junle Jiang

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RESEARCH INTERESTS

Geodesy | Seismology | Geomechanics | Statistical Inference | Geohazards

My research goal is to understand the mechanisms and impacts of Earth's near-surface and crustal processes across spatial and temporal scales, ultimately improving hazard assessment, mitigation strategies, and sustainable resource exploration. Current projects focus on elucidating the characteristics and links between microseismicity, megaquakes, and crustal deformation, as well as related hazards such as tsunamis, landslides, and subsidence, due to tectonic and human activities. Our work integrates laboratory insights for geomaterials, theoretical and computational modeling, and seismo-geodetic and remote-sensing observations.

EDUCATION

Ph.D. , Geophysics, California Institute of Technology (Caltech), USA	2016
Ph.D. Minor , Computational Science and Engineering, California Institute of Technology, USA	2014
M.Sc. , Geophysics, California Institute of Technology, USA	2011
B.Sc. , Physics (Yuanpei Honors Program), Peking University (PKU), China	2009

PROFESSIONAL APPOINTMENTS

Assistant Professor, The University of Oklahoma (OU), USA	2020–Current
Postdoctoral Associate, Cornell University, USA	2018–2020
Green Postdoctoral Scholar, University of California, San Diego, USA	2016–2018
Research and Teaching Assistant, California Institute of Technology, USA	2009–2015

TEACHING

Instructor: Volcanoes & Earthquakes (GEOL 1003)	2026
Instructor: Physical Geology for Science & Engineering Majors (GEOL 1114)	2020–2024
Instructor: Global Geophysics (GPHY 4413/5413)	2022–2025
Instructor: Computational Geophysics (GPHY 5023)	2021–2025
Instructor: Remote Sensing & Space Geodesy (GPHY 5970)	2021–2023
Instructor: Geophysical Journal Seminar (GPHY 6970)	2021–2025
Instructor: Data Analysis in Geoscience (GPHY 3013)	2023
Instructor: Introduction to Seismology (GPHY 4553)	2022
Co-Instructor: Frontiers of Geophysics (GPHY 2013)	2023–2025

HONORS & AWARDS

Research Excellence Award, Mewbourne College of Earth and Energy, OU, USA	2026
CAREER Award, National Science Foundation, USA	2025
Outstanding Reviewer for <i>Geophysical Research Letters</i> , American Geophysical Union, USA	2024
Faculty Success Program Fellowship, The University of Oklahoma, USA	2023
Cecil H. and Ida M. Green Postdoctoral Fellowship, University of California San Diego, USA	2016
Graduate Student Office Leadership Award, California Institute of Technology, USA	2016
Demetriades-Tsafka-Kokkalis Best Thesis Award in Seismo-Engineering, Prediction, & Protection, Caltech, USA	2016
Chinese Government Award for Outstanding Self-Financed Students Abroad, USA	2015
Outstanding Student Presentation Award, Tectonophysics Section, American Geophysical Union, USA	2015
Seismological Laboratory Graduate Fellowship, California Institute of Technology, USA	2011

Honor for Excellent Graduate (Summa cum laude), Peking University, China	2009
Petro China Scholarship, Peking University, China	2007
Dean's List Award for Academic Excellence, HKUST ¹ , Hong Kong SAR	2007
Student Exchange Program Scholarship, HKUST, Hong Kong SAR	2007
Inaugural PKU-Yale Joint Program Fellowship, Peking University, China	2006
Canon Scholarship, Peking University, China	2006
Tsung-Dao Lee Scholarship, Suzhou High School, China	2005

PROFESSIONAL MEMBERSHIP

Geothermal Resources Council (GRC) / Geothermal Rising	2020–Current
National Association of Geoscience Teachers (NAGT)	2020–Current
Asian Americans and Pacific Islanders in Geosciences (AAPiG)	2020–Current
Society of Exploration Geophysicists (SEG)	2020–Current
American Association for the Advancement of Science (AAAS)	2012–Current
Seismological Society of America (SSA)	2012–Current
American Geophysical Union (AGU)	2009–Current
Southern/Statewide California Earthquake Center (SCEC)	2009–Current

INVITED TALKS

SEG/AAPG IMAGE International Meeting, Houston, TX	2026
Department of Geology & Geophysics, Texas A&M University, College Station, TX	2026
IPACES ² Annual Meeting, Kunming, China	2025
Department of Earth Sciences, Southern Methodist University, Dallas, TX	2025
AOGS ³ Annual Meeting, PyeongChang, South Korea	2024
IPACES Annual Meeting, Beijing, China	2024
Hewett Club Lecture Series, University of California Riverside, Riverside, CA	2023
AGU Fall Meeting, Chicago, IL	2022
Center for Earthquake Research and Information, University of Memphis, Memphis, TN	2022
School of Earth Sciences Summer School, Zhejiang University, China (Online)	2022
SAGE/GAGE Community Science Workshop, Pittsburgh, PA	2022
Department of Geosciences Seminar, University of Montana, MT (Online)	2022
Earthquake Physics Seminar, University of Southern California, CA (Online)	2021
Berkeley Seismology Laboratory Seminar, University of California Berkeley, CA (Online)	2021
GeoSeminar, Department of Geosciences, University of Tulsa, OK (Online)	2021
Earthquake Science Center Seminar, United States Geological Survey, CA (Online)	2021
Shell Colloquium, School of Geosciences, The University of Oklahoma, Norman, OK	2020
Andes Seminar, Department of Earth and Atmospheric Sciences, Cornell University, Ithaca, NY	2019
SCEC Workshop about Physics-Based Earthquake Simulators, Menlo Park, CA	2019
Department of Earth, Atmospheric & Planetary Sciences, MIT, Cambridge, MA	2019
Keynote Talk, Southern California Earthquake Center Annual Meeting, Palm Springs, CA	2018
Department of Geology & Geophysics, Woods Hole Oceanographic Institution, Falmouth, MA	2018
SSA Fall Meeting, Denver, CO	2017
Department of Earth, Planetary, and Space Sciences, University of California Los Angeles, CA	2017
Scripps Institution of Oceanography, University of California San Diego, CA	2016
School of Earth & Space Sciences, University of Science & Technology of China, Hefei, China	2016

¹Hong Kong University of Science and Technology

²International Professionals for the Advancement of Chinese Earth Scientists

³Asia Oceania Geosciences Society

PEER-REVIEWED PUBLICATIONS

*Advised students are underlined; Supervised postdocs are marked with †.

Google Scholar Metrics (as of 5/1/2025): Citations: **2454**; h-index: **21**; i10-index: **22**.

28. Zhao, X.† and **Jiang, J.** (2026) Bayesian inference of fault slip heterogeneity and overlap: Application to the 2019 Ridgecrest earthquakes and afterslip, in press, *J. Geophys. Res. Solid Earth*. [Preprint: [doi:10.22541/essoar.176729497.75660708/v2](https://doi.org/10.22541/essoar.176729497.75660708/v2)]
27. Shodunke, G. O., **Jiang, J.**, and Bodunde, S. (2026). Influences of layered heterogeneity on poroelastic behavior of geological reservoirs, *Geophys. J. Int.*, 245(1), ggag026, [doi:10.1093/gji/ggag026](https://doi.org/10.1093/gji/ggag026).
26. Thapa, M., Pradhan, A., Chamlagain, D., **Jiang, J.**, and Regmi, N. (2026). Variability of landslide susceptibility models under different ground motion scenarios in Rasuwa District, Nepal, *Nat. Hazards*, 122, 61, [doi:10.1007/s11069-025-07752-9](https://doi.org/10.1007/s11069-025-07752-9).
25. Lambert, V. R., Erickson, B. A., **Jiang, J.**, Dunham, E. M., Kim, T., Ampuero, J.-P., Ando, R., Cappa, F., Dublanchet, P., Elbanna, A., Fialko, Y., Gabriel, A.-A., Lapusta, N., Li, M., Marcum, J., May, D., Mia, M., S., Ozawa, S., Pranger, C., Romanet, P., van Dinther, Y., Yang, Y. & Yun, J. (2025). Community-driven code comparisons for simulations of fluid-induced aseismic slip, *J. Geophys. Res. Solid Earth*, 130, e2024JB03060, [doi:10.1029/2024JB030601](https://doi.org/10.1029/2024JB030601).
24. Regmi, N. R., Walter, J. I., **Jiang, J.**, Orban, A. M., and Hayman, N. W. (2024). Spatial patterns of landslides in a modest topography of the Ozark and Ouachita Mountains, USA, *Catena*, 245, 108344, [doi:10.1016/j.catena.2024.108344](https://doi.org/10.1016/j.catena.2024.108344).
23. Caballero, E., Duputel, Z., Twardzik, C., Rivera, L., Klein, E., **Jiang, J.**, Liang, C., Zhu, L., Jolivet, R., Fielding, E., Simons, M. (2023). Revisiting the 2015 Mw=8.3 Illapel earthquake: Unveiling complex fault slip properties using Bayesian inversion, *Geophys. J. Int.*, 235(3), 2828-2845, [doi:10.1093/gji/ggad380](https://doi.org/10.1093/gji/ggad380).
22. Erickson, B. A., **Jiang, J.**, Lambert, V. R., Abdelmeguid, M., Almquist, M., Ampuero, J., Ando, R., Barbot, S. D., Cattania, C., Chen, A., Dal Zilio, L., Dunham, E. M., Elbanna, A. E., Gabriel, A., Harvey, T., Huang, Y., Kaneko, Y., Kozdon, J. E., Lapusta, N., Li, D., Li, M., Liang, C., Liu, Y., Ozawa, S., Pranger, C., Segall, P., Sun, Y., Thakur, P., Uphoff, C., van Dinther, Y., & Yang, Y. (2023). Incorporating full elastodynamic effects and dipping fault geometries in community code verification exercises for simulations of earthquake sequences and aseismic slip (SEAS), *Bull. Seismol. Soc. Amer.*, 113, 499–523, [doi:10.1785/0120220066](https://doi.org/10.1785/0120220066).
21. Materna, K., Barbour, A., **Jiang, J.**, and Eneva, M. (2022). Detection of aseismic slip and poroelastic reservoir deformation at the North Brawley Geothermal Field from 2009 to 2019, *J. Geophys. Res. Solid Earth*, 127, e2021JB023335, [doi:10.1029/2021JB023335](https://doi.org/10.1029/2021JB023335).
20. **Jiang, J.**, Erickson, B., Lambert, V., Ampuero, J.-P., Ando, R., Barbot, S., Cattania, C., Dal Zilio, L., Duan, B., Dunham, E., Gabriel, A.-A., Lapusta, N., Li, D., Li, M., Liu, D., Liu, D., Liu, Y., Ozawa, S., Pranger, C., van Dinther, Y. (2022). Community-driven code comparisons for three-dimensional dynamic modeling of sequences of earthquakes and aseismic slip, *J. Geophys. Res. Solid Earth*, 127, e2021JB023519, [doi:10.1029/2021JB023519](https://doi.org/10.1029/2021JB023519). News: [EOS Research Spotlight](#).
Wiley Top Downloaded & Top Cited Article 2022–2023.
19. **Jiang, J.**, Bock, Y., and Klein, E. (2021). Coevolving early afterslip and aftershock signatures of a San Andreas fault rupture, *Science Advances*, 7(15), eabc1606, [doi:10.1126/sciadv.abc1606](https://doi.org/10.1126/sciadv.abc1606). News: [OU News](#).
18. **Jiang, J.**, and Lohman, R. B. (2020). Coherence-guided InSAR deformation analysis in the presence of ongoing land surface changes in the Imperial Valley, California. *Remote Sens. Environ.*, 112160, [doi:10.1016/j.rse.2020.112160](https://doi.org/10.1016/j.rse.2020.112160).
17. Erickson, B. *, **Jiang, J.** *, Barall, M., Lapusta, N., Dunham, E. M., Harris, R., Abrahams, L., Allison, K., Ampuero, J.-P., Barbot, S., Cattania, C., Elbanna, A., Fialko, Y., Idini, B., Kozdon, J., Lambert, V., Liu, Y., Luo, Y., Ma, X., Segall, P., Shi, P., and Wei, M. (2020). The community code verification exercise for simulating sequences of earthquakes and aseismic slip (SEAS), *Seismo. Res. Lett.*, 91(2A), 874–890, [doi:10.1785/0220190248](https://doi.org/10.1785/0220190248). (* equal contributions)
16. Tymofyeyeva, E., Fialko, Y., **Jiang, J.**, Xu, X., Sandwell, D., Bilham, R., Rockwell, T. K., Blanton, C., Burkett, F., Gontz, A., and Moafipoor, S. (2019). Slow slip event on the southern San Andreas fault triggered by the 2017 Mw8.2 Chiapas (Mexico) earthquake. *J. Geophys. Res. Solid Earth*, 124(9), 9956-9975, [doi:10.1029/2018JB016765](https://doi.org/10.1029/2018JB016765). News: [EOS Research Spotlight](#).
Wiley Top Downloaded Article 2019–2020.
15. Gombert, B., Duputel, Z., Jolivet, R., Simons, M., **Jiang, J.**, Liang, C., Fielding, E. J., and Rivera, L. (2018). Strain budget of the Ecuador–Colombia subduction zone: A stochastic view, *Earth Planet. Sci. Lett.*, 498, 288–299, [doi:10.1016/j.epsl.2018.06.046](https://doi.org/10.1016/j.epsl.2018.06.046).
14. Xu, X., Ward, L., **Jiang, J.**, Smith-Konter, B., Tymofyeyeva, E., Lindsey, E., Sylvester, A. G., and Sandwell, D. T. (2018).

Surface creep rate of the Southern San Andreas Fault modulated by stress perturbations from nearby large events, *Geophys. Res. Lett.*, 45, 10259–10268, doi:10.1029/2018GL080137.

13. Michel, S., Avouac, J.-P., Lapusta, N., and **Jiang, J.** (2017). Pulse-like partial ruptures and high-frequency radiation at creeping-locked transition during megathrust earthquakes, *Geophys. Res. Lett.*, 44, 8345–8351, doi:10.1002/2017GL074725.
12. **Jiang, J.** and Lapusta, N. (2017). Connecting depth limits of interseismic locking, microseismicity, and large earthquakes in models of long-term fault slip, *J. Geophys. Res. Solid Earth*, 122, 6491–6523, doi:10.1002/2017JB014030.
11. Fan, W., Bassett, D., **Jiang, J.**, Shearer, P. M., and Ji, C. (2017). Rupture evolution of the 2006 Java tsunami earthquake and the possible role of splay faults, *Tectonophysics*, 721, 143–150, doi:10.1016/j.tecto.2017.10.003.
10. Yue, H., Simons, M., Duputel, Z., **Jiang, J.**, Fielding, E., Liang, C., Owen, S., Moore, A., Riel, B., Ampuero, J. P., and Samsonov, S. V. (2016). Depth varying rupture properties during the 2015 Mw 7.8 Gorkha (Nepal) earthquake, *Tectonophysics*, 714–715, 44–54, doi:10.1016/j.tecto.2016.07.005.
9. **Jiang, J.** and Fialko, Y. (2016). Reconciling seismicity and geodetic locking depths on the Anza section of the San Jacinto fault, *Geophys. Res. Lett.*, 43, 10663–10671, doi:10.1002/2016GL071113.
8. **Jiang, J.** and Simons, M. (2016). Probabilistic imaging of tsunamigenic seafloor deformation during the 2011 Tohoku-oki Earthquake, *J. Geophys. Res. Solid Earth*, 121, 9050–9076, doi:10.1002/2016JB013760. News: [EOS Research Spotlight](#).
7. **Jiang, J.** and Lapusta, N. (2016). Deeper penetration of large earthquakes on seismically quiescent faults, *Science*, 352(6291), 1293–1297, doi:10.1126/science.aaf1496. News: [New Yorker](#), [Phys.org](#).
6. Bletery, Q., Sladen, A., **Jiang, J.**, and Simons, M. (2016). A Bayesian source model for the 2004 great Sumatra-Andaman earthquake, *J. Geophys. Res. Solid Earth*, 121, 5116–5135, doi:10.1002/2016JB012911.
5. Duputel, Z., **Jiang, J.**, Jolivet, R., Simons, M., Rivera, L., Ampuero, J.-P., Riel, B., Owen, S. E., Moore, A. W., Samsonov, S. V., Culaciati, F. O., and Minson, S. E. (2015). The Iquique earthquake sequence of April 2014: Bayesian modeling accounting for prediction uncertainty, *Geophys. Res. Lett.*, 42, 7949–7957, doi:10.1002/2015GL065402.
4. Bletery, Q., Sladen, A., Delouis, B., Vallée, M., Nocquet, J.-M., Rolland, L., and **Jiang, J.** (2014). A detailed source model for the M_w 9.0 Tohoku-Oki earthquake reconciling geodesy, seismology, and tsunami records, *J. Geophys. Res. Solid Earth*, 119, 7636–7653, doi:10.1002/2014JB011261.
3. Minson, S. E., Simons, M., Beck, J. L., Ortega, F., **Jiang, J.**, Owen, S. E., Moore, A. W., Inbal, A., and Sladen, A. (2014). Bayesian inversion for finite fault earthquake source models - II: the 2011 great Tohoku-oki, Japan earthquake, *Geophys. J. Int.*, 198(2), 922–940. doi:10.1093/gji/ggu170.
2. Wei, S., Graves, R., Helmberger, D. V., Avouac, J.-P., and **Jiang, J.** (2012). Sources of shaking and flooding during the Tohoku-Oki earthquake: A mixture of rupture styles, *Earth Planet. Sci. Lett.*, 333–334(C), 91–100, doi:10.1016/j.epsl.2012.04.006.
1. Simons, M., Minson, S. E., Sladen, A., Ortega, F., **Jiang, J.**, Owen, S. E., Meng, L., Ampuero, J. P., Wei, S., Chu, R., Helmberger, D. V., Kanamori, H., Hetland, E., Moore, A. W., and Webb, F. H. (2011). The 2011 magnitude 9.0 Tohoku-oki earthquake: Mosaicking the megathrust from seconds to centuries, *Science*, 332(6036), 1421–1425, doi:10.1126/science.1206731.

PUBLICATIONS IN PROGRESS

29. Zhao, X.†, Dahm, T., Xu, C., **Jiang, J.**, Vasyara-Bathke, H., Wen, Y., Wang, X., Guo, Z., He, K. (2026?). Multi-fault structure and salt rheology revealed by the 2022 Hormozgan earthquake doublet, Iran, in revision, *Nature Comm.*
30. Thapa, M., **Jiang, J.**, Regmi, N., Walter, J. (2026?). Spectral analysis of multitemporal SAR imagery for multiscale landslide detection, mapping, and characterization, in revision, *Remote Sens. Environ.* [Preprint: doi:10.22541/au.175191581.15932054/v2]
31. Jeong, S.† and **Jiang, J.** (2026?) Frictional heterogeneity drives swarm-to-mainshock transition in fluid-induced seismicity, submitted to *Nature Geoscience*.
32. **Jiang, J.**, Viteri Lopez, J., Zhao, X.†(2026?). Bayesian posterior predictive analysis of megathrust earthquake models: From rupture heterogeneity to deformation and stress change, in revision, *J. Geophys. Res. Solid Earth*. [Preprint: doi:10.22541/essoar.173724260.05957944/v1]
33. Bodunde, S. and **Jiang, J.** (2026?). Characterizing early postseismic deformation and stress patterns in 3D poro-visco-elastic megathrust models, submitted to *J. Geophys. Res. Solid Earth*.
 - Kang, Z. and **Jiang, J.** (2026?) Spatiotemporal patterns and predictability of shallow slow slip sequences on Superstition Hills fault, to be submitted to *J. Geophys. Res. Solid Earth*.
 - **Jiang, J.**, Bodunde, S., Walter, J., Carpenter, B., Kang, Z., Zhao, X.†, Intraplate fault reactivation and crustal rheology from

decadal Pawnee seismicity, in prep.

- **Jiang, J.**, Ragon, T., Liang, C., and Simons, M., Bayesian inference of megathrust faulting during and after the 2010 Maule earthquake: Uncertainty, resolution, and information in joint inversions, in prep., *J. Geophys. Res. Solid Earth*.
- Chen, X. and **Jiang, J.**, Competing mechanisms for diffusional and rupture characteristics of earthquake swarms, in prep.
- **Bodunde, S.**, **Jiang, J.**, **Kang, Z.**, Walter, J., Carpenter, B., Microseismic evolution, fault reactivation, and crustal stress heterogeneity at Pawnee, Oklahoma, in prep.
- **Shodunke, G.**, **Jiang, J.**, **Bodunde, S.**, Well operation, induced stress, and seismicity characteristics at the Brawley geothermal field inferred from 4D InSAR observations and hydromechanical models, in prep. for *Geophys. Res. Lett.*
- **Jiang, J.**, Resolving 4D Ridgecrest geodetic strain field and links to seismicity, in prep.

OTHER PUBLICATIONS

1. **Shodunke, G. O.**, Naqvi, S. A. M., **Jiang, J.**, Salehi, S., Nygaard, R., Modeling and Projection for Stress and Deformation for the Turtle Geothermal Project, 2026 Pacific Section AAPG / SPE Western Regional Joint Meeting, Bakersfield, California, USA, April 2026. doi:10.2118/232899-MS
2. **Jiang, J.**, Regmi, N., Walter, J., Carpenter, B., Hayman, N. (2024). Satellite Remote Sensing and Geodesy for Hazard Monitoring, Resource Management, and Geoscience Advances in Oklahoma, Community white paper to the NASA Earth Surface & Interior Section. [Weblink].
3. Lapusta, N., et al. (inc. **Jiang, J.**) (2019). Modeling Earthquake Source Processes: From Tectonics to Dynamic Rupture, Report to the National Science Foundation. [Weblink].
4. **Jiang, J.** (2016). Probabilistic Imaging and Dynamic Modeling of Earthquake Source Processes, Ph.D. Dissertation, California Institute of Technology. doi:10.7907/Z9639MQC.

DATASETS

1. Zhao, X.† and **Jiang, J.** (2026). Geodetic Data and Models for “Bayesian inference of fault slip heterogeneity and overlap: Application to the 2019 Ridgecrest earthquakes and afterslip” [Data set]. Zenodo. doi:10.5281/zenodo.19141818.
2. **Thapa, M.**, **Jiang, J.**, Regmi, N., & Walter, J. (2026). Data Products for “Spectral Filtering of Multitemporal SAR Imagery for Multiscale Landslide Detection, Mapping, and Characterization” [Data set]. Zenodo. doi:10.5281/zenodo.19141789
3. **Thapa, M.**, Pradhan, A., Chamlagain, D., **Jiang, J.**, and Regmi, N. (2026), Data for “Variability of landslide susceptibility models under different ground motion scenarios in Rasuwa District, Nepal,” [Data set]. Zenodo. doi:10.5281/zenodo.17596537.
4. **Shodunke, G. O.**, **Jiang, J.**, and **Bodunde, S.** (2026). Models for “Influences of layered heterogeneity on poroelastic behavior of geological reservoirs,” [Data set]. Zenodo. doi:10.5281/zenodo.16941853.
5. Materna, K., Barbour, A., **Jiang, J.**, and Eneva (2022). Geodetic displacement data near North Brawley Geothermal Field, 2009-2019. Zenodo. doi:10.5281/zenodo.5949377.
6. **Jiang, J.**, Erickson, B., et al. (2021). Simulation Data for “Community-Driven Code Comparisons for Three-Dimensional Dynamic Modeling of Sequences of Earthquakes and Aseismic Slip (SEAS)” [Data set]. Zenodo. doi:10.5281/zenodo.6299674.
7. **Jiang, J.**, Bock, Y., and Klein, E. (2021). Data and Models for “Coevolving early afterslip and aftershock signatures of a San Andreas fault rupture” [Data set]. In *Science Advances*. Zenodo. doi:10.5281/zenodo.4278477.
8. **Jiang, J.**, and Lohman, R. (2020). Data for “Coherence-guided InSAR deformation analysis in the presence of ongoing land surface change in the Imperial Valley, California” [Data set]. In *Remote Sensing of Environment*. Zenodo. doi:10.5281/zenodo.3911193.
9. **Jiang, J.** and Simons, M. (2016). Data and Models for “Probabilistic imaging of tsunamigenic seafloor deformation during the 2011 Tohoku-oki Earthquake” [Data set]. In *J. Geophys. Res. Solid Earth*. Zenodo. doi:10.5281/zenodo.6896262.

GRANTS & PROPOSALS

NSF: National Science Foundation; **USGS**: United States Geological Survey; **SCEC**: Southern/Statewide California Earthquake Center (a **NSF/USGS**-funded consortium); **NASA**: National Aeronautics and Space Administration; **DISC**: OU Data Institute for Societal Challenges; **ESEDE**: Extreme Science and Engineering Discovery Environment.

Total awarded amount is about \$1.68M (PI) and \$0.34M (leading Co-PI).

External Research Grants

- NSF** [EAR-2442777], PI, CAREER: Bridging Multiscale Observations and Models of Megathrust Faulting and Subduction Zone Hazards, \$730K 2025–2030
NSF's most prestigious award for early-career faculty, recognizing excellence in integrated research and education
- NSF** [OAC-2538234], Collaborator (PI: H. Neeman), OneOklahoma Cyberinfrastructure Initiative Artificial Intelligence Consultants (OneOCII-AIC): Developing a Pipeline of CI Professionals in an EPSCoR Jurisdiction, \$1,800K 2025–2028
- NSF** [CNS-2503204], Collaborator (PI: H. Neeman), CC*Network-Campus: The OneOklahoma Friction Free Network 400GE (OFFN-400) at the University of Oklahoma, \$646K 2025–2027
- SCEC** [25154], PI, Joint Characterization of Transient Deformation and Repeating Earthquakes in California, \$24K 2025–2026
- NSF** [EAR-2520532], PI, Geothermal INTERN DCL – Constraining Rupture and Relaxation Dynamics of Crustal Fault Roots with Geodetic and Microseismic Observations, \$55K (*Funding for student research internship at Fervo Energy*) 2025
- NSF** [EAR-2418708], PI, Collaborative Research: Investigating Links Between Earthquake Swarms, Aseismic Processes, and Fault Zone Heterogeneity in Volcanic and Geothermal Areas, \$360K 2024–2027
- NSF** [EAR-2221569], PI, Constraining Rupture and Relaxation Dynamics of Crustal Fault Roots with Geodetic and Microseismic Observations, \$306K 2022–2026
- NASA** [80NSSC22K1723], Co-PI (35% credit; PI: N. Regmi), Monitoring Hillslope Dynamics Using SAR Time Series and Machine Learning, \$280K 2022–2026
- SCEC** [20113, 21065, 22079, 23144] PI, Advancing Simulations of Sequences of Earthquakes and Aseismic Slip (SEAS), \$109K 2018–2024
- SCEC** [22041], PI, Geodetic Imaging of Earthquakes, Fault Creep, Deformation, and Coastal Changes at the Southern Salton Sea Over Two Decades, \$26K 2022–2023
- SCEC** [20139], PI, Distinguishing Between Tectonic and Anthropogenic Processes in the Salton Sea Geothermal Field, \$27K 2020–2022
- SCEC** [18093], Co-PI (PI: Y. Fialko), Mechanisms of Unsteady Shallow Creep on Major Crustal Faults, \$28K 2018–2019
- SCEC** [17032], Co-PI (PI: Y. Fialko), Microseismicity, Geodetic Coupling, and Earthquake Variability on Heterogeneous Faults: A Case Study of the San Jacinto Fault, \$28K 2017–2018
- NSF XSEDE** [EAR-170014], PI, Integrated Simulation of Dynamic Earthquakes and Crustal Deformation, 120K computing units 2017–2021

Internal Research Grants

- OU DISC**, PI, 4-D Characterization of Fault-Fluid-Reservoir Systems for Secure, Sustainable, and Resilient Energy in Oklahoma, \$25K 2026–2027
- OU DISC**, PI, Physics-Informed Forecasting and Risk Assessment of Human-Induced Seismicity, \$10K 2024–2025
- OU VPRP** Faculty Travel Award, \$2.5K 2024

Pending/Planned Research Grants

- DOE Genesis**, PI, AI-Driven Multimodal Cross-Site Inference of 4D Fracture System Dynamics, \$681K 2026–2027
- USGS EHP**, PI, Seismo-Geodetic Imaging of Fault Reactivation in the 2024 Prague Sequence amid Decadal Fluid-Induced Stress Evolution, \$110K 2026–2027

Workshop Grants

- SCEC** [22123], PI (w/ B. Erickson, V. Lambert). Workshop for Advancing Simulations of Sequences of Earthquakes and Aseismic Slip (SEAS). [[Website](#)] 2022
- SCEC** [21139], PI (w/ B. Erickson, V. Lambert). Workshop for Advancing Simulations of Sequences of Earthquakes and Aseismic Slip (SEAS) — Fluids, 3D Modeling, and Future Directions. [[Website](#)] 2021
- SCEC** [20120], PI (w/ B. Erickson). Workshop for Advancing Simulations of Sequences of Earthquakes and Aseismic Slip (SEAS) — Free-Surface Effects in 2D/3D Models. [[Website](#)] 2020
- SCEC** [19110], PI (w/ B. Erickson). Workshop for Advancing Simulations of Sequences of Earthquakes and Aseismic Slip (SEAS) — Full Dynamics and 3D Effects. [[Website](#)] 2020
- SCEC** [18102], PI (w/ B. Erickson). Workshop for Advancing Simulations of Sequences of Earthquakes and Aseismic Slip (SEAS) — Exploring Complexity and Resolution. [[Website](#)] 2018
- SCEC** [17151], PI (w/ R. Harris, B. Erickson). A Joint Workshop: Rupture Dynamics Code Validation and Comparing

FIELDWORK EXPERIENCE

Shallow landslide field survey, Cavanal Hills, OK & AR (Co-PI, OU)	2023
Campaign GPS surveys for the San Jacinto fault, Anza, CA (PI: Y. Fialko, UCSD/SIO)	2016–2018
Sample collection and structure mapping of rock islands, Palau (PI: J. Kirschvink, Caltech)	2017
Seismic deployment at Anza, California (PI: F. Vernon, UCSD/SIO)	2016
Campaign GPS surveys across central Taiwan (PI: S.-B. Yu, Academia Sinica)	2011
Seismic surveys in the Salton Seismic Imaging Project (SSIP) (PI: J. Stock, Caltech)	2011

TEACHING EXPERIENCE

UG: Undergraduates; G: Graduate Students; CH: Credit Hour. S/F/Su: Spring/Fall/Summer Semesters.

** indicates newly developed courses. (Numbers) indicate enrollment numbers in each semester (~16 weeks).

The University of Oklahoma (Semester System)**Sole Instructor**

GEOL1003 Volcanoes & Earthquakes [UG; 3 CH]	2026F
GEOL1114 Physical Geology for Scientists and Engineers [UG; 4 CH]	2020F(37), 2022S(38), 2024F(26)
GPHY3013 Data Analysis in Geosciences** [UG; 3 CH]	2023S(5)
GPHY4553 Introduction to Seismology [UG/G; 3 CH]	2022S(7)
GPHY4413/5413 Global Geophysics [UG/G; 3 CH]	2022F(12), 2023F(13), 2024F(12), 2025F(13), 2026F
GPHY5920 Computational Geophysics** [G; 3 CH]	2021S(5), 2023S(3), 2025S(6)
GPHY5970 Remote Sensing & Space Geodesy** [UG/G; 3 CH]	2021F(8), 2023F(5)
GPHY5970 Geophysical Journal Seminar [G; 1 CH]	2022S(2), 2022F(5), 2023F(3), 2024F(5), 2025S(5), 2025F(4)
GPHY3440 Mentored Research Experience [UG; 3 CH]	2021S(1), 2022Su(1), 2023F(1), 2024Su(1), 2024F(1)
GPHY4953 Senior Thesis in Geophysics [UG; 3 CH]	2025Su(2)

Co-Instructor

GPHY2013 Frontiers of Geophysics** [UG; 3 CH]	2023S(6), 2025S(6)
GPHY6970 Machine Learning in Geosciences Seminar [G; 1 CH]	2021F(15)

Guest Lecturer

GEOL5001 Topics in Geosciences Seminar for First-Year Students [G; 1CH]	2022F(18), 2023F(23), 2024F(19), 2025F(19)
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Previous Institutions**Guest Lecturer**

EAS2550 Satellite-Based Remote Sensing [UG], Cornell University	2019S, 2020S
EAS7800 Earthquake Record Reading [G], Cornell University	2019S
Teaching & Learning in the Diverse Classroom Course, Cornell University	2020S
SIOG237 Space Geodesy [G], University of California San Diego	2017S, 2018S
Ge263 Computational Geophysics [G], Caltech	2012F

Graduate Teaching Assistant

Ge11d/102 Introduction to Geophysics [UG], Caltech	2013S, 2014S
Ge161 Plate Tectonics [G], Caltech	2011F
Ge263 Computational Geophysics [G], Caltech	2012F
ME/Ge266 Dynamic Fracture and Frictional Faulting [G], Caltech	2011S, 2013S

ADVISING & MENTORING**Thesis & Dissertation Advisor**

Zhenyu Kang (MS-PhD): InSAR observations and models of fault and aquifer deformation	2024–Current
Manoj Thapa (PhD, co-advised w/ N. Regmi): SAR-based landslide mapping and characterization	2023–Current

Segun Steven Bodunde (PhD): Strain-stress-seismicity evolution in megathrust and intraplate regions	2021–Current
Ganiyat Shodunke (PhD): Fluid extraction-induced deformation in heterogeneous geo-reservoirs	2021–Current
David A. Fleenor (MS, co-advised w/ J. Walter): Structures and mechanisms of icequakes	2026–Current
Jimmy L. Owen (MS): Seismicity characteristics for fluid migration	2026–Current
Jose A. Viteri Lopez (MS): Bayesian inference of earthquake source models [MS thesis]	2023–2025
Haoyu Li (MS): Comparison of ambient-noise seismic velocity and strain evolution [MS thesis]	2021–2023

Postdoctoral Supervisor

SeongJu Jeong: Induced seismicity and earthquake swarm dynamics	2025–Current
Xiong Zhao: Geodetic imaging and Bayesian inference of fault deformation	2025–Current

Thesis & Dissertation Committee Member

Francis F. Oyebanji (PhD, advised by N. Regmi)	2025–Current
Danial Mansourian (PhD, advised by H. Bedle)	2022–2025
Alex Vera Arroyo (PhD, advised by H. Bedle)	2022–2024
Zhuobo Wang (PhD, advised by X. Chen & M. Behm)	2022–2023
Rachel Neher (PhD, advised by J. Pigott)	2022–2023
Raymond Ng (PhD, advised by J. Walter & X. Chen)	2022–2023
Deepankar Dangwal (PhD, advised by X. Chen & M. Behm)	2022–2023
Jiwen Zhang (PhD, advised by X. Chen)	2020–2021

Undergraduate & Internship Research Advisor

Salim Al Harasi (OU; BS, Geophysics): Geophysical characteristics of Salton Sea geothermal field	2025
Abrar Al Maamari (OU; BS, Geophysics): Industrial operation and seismicity in Brawley geothermal field	2024–2025
Said Al Muzahmi (OU; BS, Geophysics): Risk analysis of Oklahoma induced earthquakes	2024
Jacqueline Silva (UTEP; BS, Geology): Time-frequency GNSS monitoring of California aquifers and geothermal fields	2024
Dawoud Al Hashemi (OU; BS, Geophysics): Regional variability in induced seismicity in OK/TX/KS	2023
Alexander Cordero (OU; MS, Geophysics): SAR-based landslide detection in Oklahoma and Arkansas	2023
Zhenyu Kang (Peking University; BS, Geophysics): Bayesian inversion of InSAR slow slip signals	2023
Maurine Oyugi (EarthScope Intern, JKUAT; BS, Geomatics): Oklahoma GNSS/seismicity analysis	2023
Calvin Rutkauskas (OU; BS, Geography & Geology): SAR analysis of induced earthquake damage in Texas	2022
John McKnight (OU; BS Geophysics): Oklahoma Cushing nodal array waveform analysis	2021
Gillian Quiros (UCSD; BS, Mathematics): Modeling nonlinear spring-slider dynamics	2017–2018
Xander Zheng (Caltech; BS, Computing & Math. Sciences): InSAR analysis of LA aquifer deformation	2012
Patrick Ferchaud (École Polytechnique; BS/MS, Geophysics): BEM earthquake modeling	2011

PROFESSIONAL & COMMUNITY SERVICE

The University of Oklahoma

Department

Institutional Representative, Southern/Statewide California Earthquake Center (SCEC)	2022–Current
Institutional Representative, Computational Infrastructure for Geodynamics (CIG)	2022–Current
Institutional Representative, EarthScope Consortium	2022–2023
Institutional Representative, UNAVCO WInSAR	2021–2023
Faculty Liaison, AGU Bridge Program	2022–2025
Creator & Organizer, Annual Virtual Information Session for Prospective Graduate Students	2021–Current
Member, Subsurface Energy Geophysics Search Committee	2025–Current
Member, Honors and Awards Committee	2021–Current
Member, Graduate Affairs Committee	2020–Current
Member, Computer Lab Committee	2020–Current
Member, Energy Transition Geophysics Search Committee	2023–2024

Member, Strategic Faculty Hire in Energy Geosciences Committee	2022–2023
Member, Reflection Seismology Centennial Planning Committee	2021–2023
Member, Teaching Evaluation Committee	2021–2022
Member, Petroleum Geosciences Vision Committee	2021
Member & DEI Advocate, Environmental Geophysics Search Committee	2020–2021
Co-Editor, Application to AGU Bridge Program Partnership	2020

College & University

Member, OU Data Institute for Societal Challenges (DISC)	2021–Current
Member, MCEE Dean Review Committee	2026
Member, MCEE Diversity, Equity & Inclusion Council	2021–2023
Panelist, OU New Faculty Orientation Panel	2022

Service for Broader Communities

Leadership / Committee Positions

Member, SZ4D MCS ⁴ Integrative Group	2023–Current
<i>SZ4D is a US-led community initiative for long-term interdisciplinary research on subduction zone geohazards, involving 3000+ scientists from 95 institutions. The MCS committee oversees core activities in system-scale data assimilation and model building.</i>	
Co-Founder/-Leader, SCEC SEAS ⁵ Community Code Verification Initiative	2017–2024
<i>SEAS is a community initiative that advances predictive modeling of fault system dynamics, involving 40+ PIs and 70+ students/postdocs from 43 research institutions (25 US & 18 non-US) in 13 countries.</i>	

Proposal Review

NSF Graduate Research Fellowship Program (GRFP)	Panel: 2021
NSF Postdoctoral Fellowship Program (EAR-PF)	Ad hoc: 2024
NSF Directorate for Geosciences (GEO)	Ad hoc: 2020, 2022, 2023, 2024, 2025, 2026; Panel: 2022, 2025, 2026
NASA Postdoctoral Program (NPP)	Ad Hoc: 2023, 2025, 2026
NASA Earth Science Division (ESD)	Panel: 2021, 2023, 2024
USGS Earthquake Hazards Program	Panel: 2019, 2020, 2023
Oak Ridge Institute for Science and Education (ORISE)	Ad hoc: 2024
ACS Petroleum Research Fund (PRF)	Ad hoc: 2023
Dutch Research Council (NWO)	Ad hoc: 2022
German Research Foundation (DFG)	Ad hoc: 2019

Textbook Review

Four Chapters in <i>Earth: Portrait of a Planet</i> , 8th ed., W. W. Norton	2023
Five Chapters in <i>The Solid Earth, An Introduction to Global Geophysics</i> , 3rd ed., Cambridge University Press	2024

Manuscript Review

Science; Science Advances; Nature; Journal of Geophysical Research: Solid Earth; Geophysical Journal International; Geophysical Research Letters; Earth and Planetary Science Letters; Geochemistry, Geophysics, Geosystems; Bulletin of the Seismological Society of America; Seismological Research Letters; The Seismic Record; Earth Planets and Space; Scientific Reports; Seismica; Communications Earth & Environment; Tectonophysics; Earth and Space Science; Computers & Geosciences; Pure and Applied Geophysics; Remote Sensing of Environment; Remote Sensing; Journal of Hydrology; Journal of Geodesy; Journal of Geodynamics; Lithosphere; Geosciences; Energies; Sensors; Earthquake Science; Applied Sciences; Science China Earth Sciences; International Journal of Greenhouse Gas Control; IEEE Sensors, etc.

Reviewed ~120 manuscripts (including revisions) since 08/2020; 150+ in total.

Workshops and Meetings

Session Convener, “ <i>Transient Deformation and Creep Processes in the Earthquake Cycle</i> ,” Sessions at AGU Annual Meeting, San Francisco, CA, USA	2026
Session Chair, “ <i>Linking Subduction Zone Processes and Cascading Hazards in Alaska, Cascadia, Chile, and Beyond</i> ,” Sessions at SSA	

⁴Subduction Zones in 4 Dimensions – Modeling Collaboratory for Subduction

⁵Sequences of Earthquakes and Aseismic Slip

Annual Meeting, Pasadena, CA, USA	2026
Panel Moderator, USGS Northern California Earthquake Hazards Workshop	2024
Panelist, SCEC Community Stress Drop Workshop	2024
Session Chair, “ <i>Faults and Earthquakes: Networks, Precursors, Monitoring Systems and Numerical Modelling Techniques</i> ,” Oral Session at AOGS Annual Meeting, PyeongChang, Gangwon-do, South Korea	2024
Session Convener, “ <i>Characteristics and Mechanics of Fault Zone Rupture Processes, From Micro to Macro Scales</i> ,” Oral Session at SSA Annual Meeting, Anchorage, AK, USA	2024
Liaison & Judge, Outstanding Student Paper Award (OSPA) of AGU Annual Meeting	2017–2024
Panel Organizer & Moderator, “ <i>System-Level Models and Earthquake Forecasting</i> ,” SCEC Annual Meeting	2022
Session Chair, “ <i>State-of-the-Art Observations and Modeling of Earthquake Source Processes</i> ,” Oral Sessions at AGU Fall Meeting, New Orleans, LA, USA	2021
Session Chair, “ <i>Earthquake Rupture Revealed by Kinematic Source Imaging</i> ,” Oral Sessions at AGU Fall Meeting, New Orleans, LA, USA	2017

Mentoring Roles

Mentor, EarthScope RESESS ⁶ Undergraduate Summer Internship Program	2024
Mentor, EarthScope International Undergraduate Summer Internship Program	2023
Mentor, Asian Americans & Pacific Islanders in Geosciences (AAPIiG) Mentoring Pod Program	2022–2023

Service & Synergistic Activities at Previous Institutions

Member, Inclusion, Diversity & Equity in Earth and Atmospheric Sciences (IDEEAS), Cornell University	2019–2020
Awardee, Postdoctoral Leadership Program, Cornell University	2018–2019
Organizer, IGPP Geophysics Seminar, Scripps Institution of Oceanography, UC San Diego	2016–2018
Event Organizer & Speaker, International Student Programs & Center for Diversity, Caltech	2011–2015
Member, Board of Directors, Graduate Student Council, Caltech	2011–2014
Option Representative for Geophysics (2011–2013); Under-Represented Student Advocate (2011–2013); Treasurer (2012–2013); Director at Large (2013–2014)	
Organizer, Dix Seismological Laboratory Seminar, Caltech	2011–2012
Executive Committee, Chinese Students and Scholars Association, Caltech	2010–2012
Director for Sports and Outdoor Activities (2010–2011); President (2011–2012)	

EDUCATION & OUTREACH

Guest speaker, Westmoore High School, Oklahoma City, OK	2025–2026
Geosciences Day, The University of Oklahoma, Norman, OK	2022–2026
Seminar speaker, Birch Aquarium, Scripps Institution of Oceanography, UCSD, CA	2016–2017
Tour leader for K-12 students, Tectonic Observatory & Seismological Laboratory, Caltech, CA	2010–2015
Invited class speaker, Huntington Middle School, San Marino, CA	2011–2012
Teaching assistant and speaker, Blair High School, Pasadena, CA	2010–2011

SELECTED CONFERENCE PRESENTATIONS

Only oral, students’, or post-2020 presentations are listed. Advised students and postdocs† are marked.

1. **Jiang, J.**, Shodunke, G. O., and Bodunde, S., Geothermal reservoir hydromechanics inferred from 4D InSAR deformation history matching in the Salton Trough, California, IMAGE Conference, August 2026. (*Oral Presentation*)
2. **Jiang, J.**, Viteri Lopez, J. and Zhao, X.†, Ensemble Analysis of Large Megathrust Earthquakes: From Rupture Heterogeneity to Stress Changes and Ground Motion, SSA Annual Meeting, Pasadena, CA, April 2026. (*Poster Presentation*)
3. **Jiang, J.**, Bodunde, S., Kang, Z., Shodunke, G. O., Thapa, M., and Zhao, X.†, Leveraging Multitemporal InSAR Products for Geohazards and Geomechanics Research: Characterizing Data Quality and Lessons Learned, SSA Annual Meeting, Pasadena, CA, April 2026. (*Poster Presentation*)
4. **Jiang, J.**, Zhao, X.†, Kang, Z., Resolving Spatiotemporal Variabilities of Fast and Slow Slip on California Crustal Faults, SSA

⁶Research Experiences in Solid Earth Sciences for Students

Annual Meeting, Pasadena, CA, April 2026. (*Oral Presentation*)

5. Shodunke, G. O., Naqvi, S. A. M., **Jiang, J.**, Salehi, S., Nygaard, R., Modeling and Projection for Stress and Deformation for the Tuttle Geothermal Project, AAPG / SPE Western Regional Joint Meeting, Bakersfield, April 2026. (*Oral Presentation*)
6. Shodunke, G. O., **Jiang, J.**, and Bodunde, S., Constraining Reservoir Deformation and Stress Evolution in Brawley Geothermal Field Using Well Operation History, InSAR Observations, and Poroelastic Modeling, AGU Fall Meeting, New Orleans, December 2025. (*Oral Presentation*)
7. Jeong, S.†, **Jiang, J.**, Modeling Fluid-Induced Earthquake Swarm-to-Mainshock Transition at the St. Gallen Geothermal Site, AGU Fall Meeting, New Orleans, December 2025. (*Poster Presentation*)
8. Zhao, X.†, **Jiang, J.**, How Can Fault Slip Inversions Be Reliable? Insights from Bayesian Analysis of the 2019 Ridgecrest Earthquakes and Afterslip, AGU Fall Meeting, New Orleans, December 2025. (*Oral Presentation*)
9. Zhao, X.†, Dahm, T., **Jiang, J.**, Xu, C., Multi-Fault Structure and Rheological Properties in the Hormuz Salt Layer from Co- and Post-seismic Observations of the 2022 Hormozgan Doublet, Iran, AGU Fall Meeting, New Orleans, December 2025. (*Poster Presentation*)
10. Kang, Z., **Jiang, J.**, Fault-Aquifer Interaction in the Salt Lake Valley of Utah Inferred from Multitemporal InSAR Deformation and Poroelastic Models, AGU Fall Meeting, New Orleans, December 2025. (*Poster Presentation*)
11. Kang, Z., **Jiang, J.**, Spatiotemporal Patterns and Predictability of Shallow Slow Slip Sequences on the Superstition Hills Fault, AGU Fall Meeting, New Orleans, December 2025. (*Poster Presentation*)
12. **Jiang, J.**, Taira, T. Joint Characterization of Transient Deformation and Repeating Earthquakes in California, SCEC Annual Meeting, September 2025. (*Poster Presentation*)
13. Lambert, V., Erickson, B., **Jiang, J.**, Dunham, E. M., Kim, T., Agajanian, M., Ampuero, J.-P., Ando, R., Cappa, F., Cattania, C., Duan, B., Dublanchet, P., Elbanna, A., Fialko, Y., Gabriel, A.-A., Karki, P., Lapusta, N., Li, D., Li, M., Liu, D., Magen, Y., Marcum, J., May, D., Mia, M. S., Ozawa, S., Pranger, C., Romanet, P., Scuderi, M., Thakur, P., van Dinther, Y., Verwijs, R., Yang, Y., Yun, J., Community Code Verification Exercises for Simulations of Earthquake Sequences and Aseismic Slip (SEAS): Effects from Fluids and Fault Friction Evolution, SCEC Annual Meeting, September 2025. (*Poster Presentation*)
14. **Jiang, J.**, Posterior Exploration and Predictive Analysis of Bayesian Finite-Fault Earthquake Models, IPACES Annual Meeting, Kunming, China, July 2025. (*Oral Presentation*)
15. Lambert, V., Erickson, B., **Jiang, J.**, Romanet, P., Thakur, P., Community Code Verification Exercises for Simulations of Earthquake Sequences and Aseismic Slip (SEAS): Effects from Fluids and Fault Friction Evolution, EGU General Assembly, April 2025. (*Poster Presentation*)
16. Bodunde, S., **Jiang, J.**, Viteri Lopez, J., Walter, J., Carpenter, B., Microseismic Evolution, Fault Reactivation, and Stress Heterogeneity of Crustal Faults at Pawnee, Oklahoma, AGU Fall Meeting, Washington DC, December 2024. (*Poster Presentation*)
17. Viteri Lopez, J. and **Jiang, J.**, Posterior Exploration and Predictive Analysis of Bayesian Finite-Fault Earthquake Models, AGU Fall Meeting, Washington DC, December 2024. (*Poster Presentation*)
18. Kang, Z., **Jiang, J.**, Bayesian Inference of 2017 Shallow Slow Slip Evolution on the Superstition Hills Fault, California, AGU Fall Meeting, Washington DC, December 2024. (*Oral Presentation*)
19. Thapa, M., **Jiang, J.**, and Regmi, N., Enhancing Landslide Detection with Low-Latency SAR Imagery: A Spectral Analysis Approach for Improved Accuracy and Mapping, AGU Fall Meeting, Washington DC, December 2024. (*Poster Presentation*)
20. Silva, J., Viteri Lopez, J., **Jiang, J.**, Time-Frequency Analysis of GPS Displacements for Monitoring Changes in Aquifers and Geothermal Fields in California, AGU Fall Meeting, Washington DC, December 2024. (*Poster Presentation*)
21. **Jiang, J.**, Postseismic Evolution of Crustal Faults in California and Oklahoma, 2024 SCEC Annual Meeting, September 2024. (*Poster Presentation*)
22. Regmi, N. R., Walter, J. I., **Jiang, J.**, and Hayman, N. W., Characteristics of Landslides in the Ozark and Ouachita Mountains, USA, GSA Annual Meeting, Anaheim, CA, USA, September 2024. (*Poster Presentation*)
23. Shodunke, G. O., **Jiang, J.**, and Bodunde, S., Hydromechanical Impacts of Rock Layer Heterogeneity on Poroelastic Deformation and Fluid Flow in Geothermal Fields: A 3D Finite-Element Modeling Approach, 43rd Annual Technical Conference of the National Association of Black Geoscientists, Atlanta, GA, USA, September 2024. (*Poster Presentation*)
24. **Jiang, J.**, Interactions of Slow and Fast Slip, Small and Large Quakes, and Fluids in Crustal Faults, IPACES Annual Meeting,

Beijing, China, July 2024. (*Oral Presentation*)

25. **Jiang, J.**, Bodunde, S., Walter, J., Carpenter, B., Viteri Lopez, J., Crustal Rheological Layering Revealed in Multiscale Signals of Natural and Anthropogenic Processes at Pawnee, Oklahoma, Asia Oceania Geosciences Society Annual Meeting, Pyeongchang, Gangwon-do. South Korea, June 2024. (*Oral Presentation*)
26. **Jiang, J.**, Viteri Lopez, J., Bodunde, S., Connecting Probabilistic and Physical Perspectives on Megathrust Rupture Processes, Japan Geoscience Union Meeting, Makuhari, Chiba, Japan, May 2024. (*Oral Presentation*)
27. **Jiang, J.**, Bodunde, S., Walter, J., Carpenter, B., Viteri Lopez, J., Crustal Rheological Layering Revealed in Multiscale Signals of Natural and Anthropogenic Processes at Pawnee, Oklahoma, SSA Annual Meeting, Anchorage, AK, April 2024. (*Poster Presentation*)
28. **Jiang, J.**, Taira, T., Probing Transient Rheology and Spatial Heterogeneity of Faults Using Repeating Earthquakes and Deformation Data, SSA Annual Meeting, Anchorage, AK, April 2024. (*Poster Presentation*)
29. Chen, X., **Jiang, J.**, Uchide, T., Sagae, K., Earthquake Swarms as a Window to Characterize Transient Processes, SSA Annual Meeting, Anchorage, AK, April 2024. (*Oral Presentation*)
30. Viteri Lopez, J. and **Jiang, J.**, Posterior Exploration of Bayesian Kinematic Finite-Fault Earthquake Source Models, SSA Annual Meeting, Anchorage, AK, April 2024. (*Poster Presentation*)
31. Thapa, M., **Jiang, J.**, and Regmi, N., Optimizing Landslide Detection and Validation through Sentinel-1 Radar Imagery: Case Studies of Hokkaido and Hiroshima in Japan, SSA Annual Meeting, Anchorage, AK, April 2024. (*Poster Presentation*)
32. Thapa, M., Pradhan, A., Chamlagain, D., **Jiang, J.**, and Regmi, N. Landslide Susceptibility Assessment using Earthquake Ground Motion for Different Return Periods in Rasuwa District, Central Nepal, SSA Annual Meeting, Anchorage, AK, April 2024. (*Poster Presentation*)
33. Bodunde, S., **Jiang, J.**, Spatiotemporal Evolution of Postseismic Stress and Aftershocks following the 2010 Mw8.8 Maule Earthquake, SSA Annual Meeting, Anchorage, AK, April 2024. (*Poster Presentation*)
34. Shodunke, G. O., **Jiang, J.**, and Bodunde, S., Hydromechanical Impacts of Rock Layer Heterogeneity on Poroelastic Deformation and Fluid Flow in Geothermal Fields: A 3D Finite-Element Modeling Approach, SEG/SPE/SPWLA Workshop, Norman, OK, March 2024. (*Poster Presentation*)
35. Bodunde, S., **Jiang, J.**, Microseismic Evolution, Fault Reactivation, and Stress Heterogeneity of Crustal Faults at Pawnee, Oklahoma, SEG/SPE/SPWLA Workshop, Norman, OK, March 2024. (*Oral Presentation*)
36. Chen, X., **Jiang, J.**, Influences of Intrinsic Fault Characteristics and External Processes on Swarm Migration and Duration, AGU Fall Meeting, San Francisco, CA, December 2023. (*Oral Presentation*)
37. Bodunde, S., **Jiang, J.**, Three-Dimensional Numerical Modeling of Stress and Deformation Variability in the Aftermath of Large Subduction Earthquakes, AGU Fall Meeting, San Francisco, CA, December 2023. (*Poster Presentation*)
38. Lambert, V., Erickson, B., **Jiang, J.**, Dunham, E. M., Abdelmeguid, M., Agajanian, M., Almquist, M., Ampuero, J.-P., Ando, R., Barbot, S., Bodunde, S., Cattania, C., Chen, A., Dal Zilio, L., Duan, B., Elbanna, A. E., Gabriel, A.-A., Harvey, T., Huang, Y., Kaneko, Y., Kim, T., Kozdon, J. E., Lapusta, N., Li, D., Li, M., Liang, C., Liu, D., Liu, Y., Marcum, J., Mia, M., Ozawa, S., Pranger, C., Romanet, P., Segall, P., Sun, Y., Thakur, P., Uphoff, C., van Dinther, Y., Verwijs, R., Yang, Y., Community Code Verification Exercises for Simulations of Earthquake Sequences and Aseismic Slip (SEAS): Effects from Dipping Faults and Full Elastodynamics to Fluids and Fault Friction Evolution, AGU Fall Meeting, San Francisco, CA, December 2023. (*Poster Presentation*)
39. **Jiang, J.**, Bodunde, S., Oyugi, M., Walter, J., and Carpenter, B., Steady and Transient Crustal Signals from Joint GNSS-Seismicity Analyses in Oklahoma, ES-SSA Annual Meeting, Dallas, TX, October 2023. (*Oral Presentation*)
40. Bodunde, S., **Jiang, J.**, Deciphering Time-Dependent Deformation and Stress Fields of Intraplate Seismicity: Effects of Poroelasticity, Viscoelasticity, Fault Slip and Fault Orientation, ES-SSA Annual Meeting, Dallas, TX, October 2023
41. **Jiang, J.**, Geodetic and Microseismic Signatures of Crustal Faulting Following Large Earthquakes, AGU Fall Meeting, Chicago, IL, December 2022. (*Invited Oral Presentation*)
42. Bodunde, S., **Jiang, J.**, Characterizing Spatial Patterns and Timescales of Early Postseismic Deformation of Megathrust Earthquakes, AGU Fall Meeting, Chicago, IL, December 2022. (*Poster Presentation*)
43. Li, H., **Jiang, J.**, Comparing Ambient-Noise-Based Seismic Velocity Variations with Dynamic and Static Strain Changes Associated with Major Earthquake Rupture at Parkfield, AGU Fall Meeting, Chicago, IL, Dec. 2022. (*Poster Presentation*)

44. Shodunke, G. O., **Jiang, J.**, and Bodunde, S., Investigating the Effects of Permeability and Porosity on Reservoir Deformation and Pore Pressure Evolution at Geothermal Fields, AGU Fall Meeting, Chicago, IL, December 2022. (*Poster Presentation*)
45. Lambert, V., **Jiang, J.**, Erickson, B., Abdelmeguid, M., Almquist, M., Ampuero, J.-P., Ando, R. Barbot, S., Bodunde, S., Cattania, C., Chen, A., Dal Zilio, L., Duan, B., Dunham, E. M., Elbanna, A. E., Gabriel, A.-A., Harvey, T., Huang, Y., Kaneko, Y., Kim, T., Kozdon, J. E., Lapusta, N., Li, D., Li, M., Liang, C., Liu, D., Liu, Y., Ozawa, S., Pranger, C., Segall, P., Sun, Y., Thakur, P., Uphoff, C., van Dinther, Y., Yang, Y., Community Code Verification Exercises for Simulations of Earthquake Sequences and Aseismic Slip (SEAS): From 3D, Full Elastodynamics and Dipping Faults to Fluids and Fault Friction Evolution, AGU Fall Meeting, Chicago, IL, December 2022. (*Poster Presentation*)
46. **Jiang, J.**, Geodetic Pursuit of Aseismic Forces for Micro-earthquake Processes, SAGE/GAGE Community Science Workshop, Pittsburgh, PA., June 2022. (*Invited Oral Presentation*)
47. **Jiang, J.**, Bock, Y., and E. Klein, Imaging multiscale fault zone dynamics following the 2004 Parkfield rupture, AGU Fall Meeting, New Orleans, LO, December 2021. (*Oral Presentation*)
48. **Jiang, J.**, Erickson, B., Lambert, V., Abdelmeguid, M., Almquist, M., Ampuero, J.-P., Ando, R. Barbot, S., Cattania, C., Chen, A., Dal Zilio, L., Duan, B., Dunham, E. M., Elbanna, A. E., Gabriel, A.-A., Harvey, T., Huang, Y., Kaneko, Y., Kozdon, J. E., Lapusta, N., Li, D., Li, M., Liang, C., Liu, D., Liu, Y., Ozawa, S., Pranger, C., Segall, P., Sun, Y., Thakur, P., Uphoff, C., van Dinther, Y., Yang, Y. Community Code Verification Exercises for Simulations of Earthquake Sequences and Aseismic Slip (SEAS): 3D Effects, Fully Dynamic Ruptures, and Dipping Fault Geometries. AGU Fall Meeting, New Orleans, LO, December 2021. (*Poster Presentation*)
49. **Jiang, J.**, and Lohman, R. B., Characterizing tectonic and anthropogenic ground deformation history in the Imperial Valley, California, using Sentinel-1 InSAR time series, AGU Fall Meeting, San Francisco, CA, December 2019. (*Oral Presentation*)
50. **Jiang, J.** (2019), Perspectives from the SCEC Sequences of Earthquakes and Aseismic Slip (SEAS) Project, SCEC workshop on “How Physics-Based Earthquake Simulators Might Help Improve Earthquake Forecasts,” June 18, 2019. (*Invited Oral Presentation*)
51. **Jiang, J.**, Bock, Y., and E. Klein, Imaging slip evolution on the San Andreas fault due to the 2004 Parkfield earthquake, AGU Fall Meeting, Washington D.C., December 2018. (*Oral Presentation*)
52. **Jiang, J.**, and Erickson, B. A. Advancing Simulations of Sequences of Earthquakes and Aseismic Slip (SEAS). SCEC Annual Meeting, September 2018. (*Invited Oral Presentation*)
53. **Jiang, J.** and Fialko, Y., Mechanisms of unsteady shallow creep on major crustal faults, AGU Fall Meeting, New Orleans, LA, December 2017. (*Oral Presentation*)
54. **Jiang, J.** and Simons, M., Multiscale probabilistic imaging of tsunamigenic seafloor deformation during the 2011 Tohoku-oki earthquake, SSA Fall Meeting, Denver, CO, April 2017. (*Invited Oral Presentation*)
55. **Jiang, J.** and Lapusta, N., Variability of earthquake slip and arresting depths in fault models, 20th International Congress of Theoretical and Applied Mechanics (ICTAM), Montreal, Canada, August 2016. (*Oral Presentation*)
56. **Jiang, J.** and Simons, M., Bayesian exploration of coseismic seafloor deformation process during 2011 Tohoku-Oki earthquake using near-field tsunami records, AGU Fall Meeting, San Francisco, CA, December 2014. (*Oral Presentation*)
57. Kirschvink, J. and **Jiang, J.**, Potential Seismic and Tsunami Hazard from the Palau Trench, as viewed from molluscan grazing notches in uplifted coral atolls, GSA Annual Meeting, October 2014. (*Oral Presentation*)
58. **Jiang, J.**, Lapusta, N., and Noda, H., Re-evaluating the seismogenic potential of creeping fault regions: implications from models with rate-and-state friction and enhanced coseismic weakening, AGU Fall Meeting, San Francisco, CA, USA, December 2013. (*Invited Oral Presentation*)
59. **Jiang, J.**, and Lapusta, N., Depth Extent of Large Earthquake Rupture and Patterns of Microseismicity: Effect of Dynamic Weakening below the Seismogenic Depth, International Summer School on Earthquake Science (iSSEs), Earthquake Research Institute (ERI), University of Tokyo, September 2013. (*Oral Presentation*)
60. **Jiang, J.**, and Lapusta, N., Do Large Earthquakes Penetrate below the Seismogenic Zone? Potential Clues from Microseismicity, AGU Fall Meeting, San Francisco, CA, USA, December 2012. (*Oral Presentation*)
61. **Jiang, J.**, and Lapusta, N., Interaction of Dynamic Rupture and Heterogeneous Fault Strength over Multiple Earthquake Cycles. 3rd James K. Knowles Lectures & Caltech Solid Mechanics Symposium, January 2012. (*Oral Presentation*)