

Junle Jiang

Webpage: <https://jjle.github.io>

School of Geosciences, Mewbourne College of Earth and Energy
The University of Oklahoma, Norman, OK 73019, USA

Email: jiang@ou.edu

Office: +1 (405) 325-3253

RESEARCH INTERESTS

Geodesy | Seismology | Geomechanics | Statistical Inference | Geohazards

My research goal is to understand the mechanisms and impacts of the Earth's near-surface and crustal processes across spatiotemporal scales and improve effective hazard assessment/mitigation and sustainable resource exploration. Current projects focus on elucidating the characteristics of and links between microseismicity, megaquakes, and crustal deformation, as well as associated hazards such as tsunamis, landslides, and subsidence, due to tectonic and human activities through an integration of laboratory-based insights on geomaterial behavior, theoretical and computational modeling, and seismogeodetic 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–Present |
| 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 |

PH.D. DISSERTATION

Jiang, J. (2016), Probabilistic Imaging and Dynamic Modeling of Earthquake Source Processes, California Institute of Technology. [doi:10.7907/Z9639MQC](https://doi.org/10.7907/Z9639MQC). (Advisors: Mark Simons & Nadia Lapusta)

HONORS AND AWARDS

| | |
|---|------|
| 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, Hong Kong University of Science and Technology, Hong Kong | 2007 |
| Student Exchange Program Scholarship, Hong Kong University of Science and Technology, Hong Kong | 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 |

REFEREED PUBLICATIONS

1. 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.
2. 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*, doi:10.1016/j.catena.2024.108344.
3. 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.
4. 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.
5. 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.
6. **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. News: **EOS Research Spotlight. Wiley Top Downloaded & Top Cited Article 2022–2023.**
7. **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. News: **OU News.**
8. **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.
9. 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. (* equal contributions)
10. Tymofeyeva, 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. News: **EOS Research Spotlight. Wiley Top Downloaded Article 2019–2020**
11. 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.
12. Xu, X., Ward, L., **Jiang, J.**, Smith-Konter, B., Tymofeyeva, 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.
14. **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.
15. 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.
16. 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.
17. **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.
18. **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.

19. **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.
20. 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.
21. 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.
22. 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.
23. 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.
24. 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.
25. 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

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

26. Viteri Lopez, J. and **Jiang, J.** (2025) Bayesian posterior exploration and predictive analysis of finite-fault earthquake models, in revision, *J. Geophys. Res. Solid Earth*. [Preprint: doi:10.22541/essoar.173724260.05957944/v1].
 27. Thapa, M., **Jiang, J.**, Regmi, N., Walter, J. (2025) 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/v1].
 28. Shodunke, G. O., **Jiang, J.**, and Bodunde, S. (2025) Influences of layered heterogeneity on poroelastic behavior of geological reservoirs, under review after revision, *Geophys. J. Int.*
 29. Bodunde, S. and **Jiang, J.**, (2025?) Characterizing deformation and stress patterns of early postseismic megathrust processes in 3D poro-visco-elastic models, under review, *J. Geophys. Res. Solid Earth*.
 30. Thapa, M., Pradhan, A., Chamlagain, D., **Jiang, J.**, and Regmi, N. (2025?). Variability of landslide susceptibility models under different ground motion scenarios in Rasuwa District, Central Nepal, under review, *Nat. Hazards*.
 31. Zhao, X.†, Dahm, T., **Jiang, J.**, Vasyara-Bathke, H., Xu, C., Wen, Y., Wang, X., Guo, Z., He, K. (2025?) Multi-fault structure and Hormuz salt rheology inferred from co- and post-seismic observations of the 2022 Hormozgan doublet, Iran, under review, *Nature Comm.*
- Kang, Z. and **Jiang, J.**, Spatiotemporal patterns and predictability of shallow slow slip sequences on Superstition Hills fault, in prep. for *J. Geophys. Res. Solid Earth*.
 - Jeong, S.† and **Jiang, J.**, From swarms to mainshock: Unraveling seismic transitions on heterogeneous faults at the St. Gallen geothermal site, in prep. for *Geophys. Res. Lett.*
 - **Jiang, J.**, Ragon, T., Liang, C., and Simons, M., Bayesian inference of megathrust faulting during and after the 2010 Maule earthquake: 1. Quantifying uncertainty, resolution, and information in joint inversions, in prep., *J. Geophys. Res. Solid Earth*.
 - **Jiang, J.**, Ragon, T., Liang, C., and Simons, M., Bayesian inference of megathrust faulting during and after the 2010 Maule earthquake: 2. Quantifying source properties in complex subduction zone structures, in prep., *J. Geophys. Res. Solid Earth*.
 - Zhao, X.† and **Jiang, J.**, Bayesian analysis of fault slip roughness, scaling, and overlap: Application to the 2019 Ridgecrest earthquakes and afterslip, in prep. for *J. Geophys. Res. Solid Earth*.
 - **Jiang, J.**, Bodunde, S., Walter, J., Carpenter, B., Viteri, J., Intraplate fault reactivation and rheological layering revealed by decadal Pawnee seismicity, in prep.
 - Chen, X. and **Jiang, J.**, Competing mechanisms for diffusional and rupture characteristics of seismic swarms, in prep.

- Bodunde, S., **Jiang, J.**, Viteri Lopez, J., Walter, J., Carpenter, B., Microseismic evolution, fault reactivation, and stress heterogeneity of crustal faults at Pawnee, Oklahoma, in prep.
- Shodunke, G., **Jiang, J.**, Bodunde, S., Al Maamari, A., 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.*
- Oyebanji, F., Hougen, D., Walter, J., Hayman, N., **Jiang, J.**, Dimitrios, D., and Regmi, N., Quantifying landslide-rainfall relationships in the Ozark and Ouachita mountains of US Southern Mid-continent, in prep.

OTHER PUBLICATIONS

1. Lapusta, N., et al. (inc. **J. Jiang**), 2019. Modeling Earthquake Source Processes: From Tectonics to Dynamic Rupture, Report to the National Science Foundation. [[Weblink](#)].
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](#)].

DATASETS

1. Shodunke, G. O., **Jiang, J.**, and Bodunde, S., Models for “Influences of layered heterogeneity on poroelastic behavior of geological reservoirs,” [Data set]. Zenodo. [doi:10.5281/zenodo.16941853](https://doi.org/10.5281/zenodo.16941853).
2. **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](https://doi.org/10.5281/zenodo.6299674).
3. 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](https://doi.org/10.5281/zenodo.5949377).
4. **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](https://doi.org/10.5281/zenodo.4278477).
5. **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](https://doi.org/10.5281/zenodo.3911193).
6. **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](https://doi.org/10.5281/zenodo.6896262).

INVITED TALKS

| | |
|---|------|
| International Professionals for the Advancement of Chinese Earth Scientists (IPACES) Annual Meeting, Kunming, China | 2025 |
| Department of Earth Sciences, Southern Methodist University, Dallas, TX | 2025 |
| International Professionals for the Advancement of Chinese Earth Scientists (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 |
| AGU Fall Meeting, San Francisco, CA | 2013 |
| State Key Laboratory of Earthquake Dynamics, China Earthquake Administration, Beijing, China | 2012 |

GRANTS & PROPOSALS

Note: **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; **ACS**: American Chemical Society; **DISC**: OU Data Institute for Societal Challenges; **ESEDE**: Extreme Science and Engineering Discovery Environment.

External Research Grants

| | |
|---|-----------|
| 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 |
| NSF [EAR-2442777], PI, CAREER: Bridging Multiscale Observations and Models of Megathrust Faulting and Subduction Zone Hazards, \$730K | 2025–2030 |
| 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 (Supplemental Funding) | 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 (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, Physics-Informed Forecasting and Risk Assessment of Human-Induced Seismicity, \$10K | 2024–2025 |
| OU VPRP Faculty Travel Award, \$2.5K | 2024 |

Pending Research Grants

| | |
|---|-----------|
| USGS EHP , PI, Unraveling the Transition from Earthquake Swarms to Mainshock Sequences on Heterogeneous Faults, \$100K | 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 Simulations of Earthquake Sequences and Aseismic Slip. [Website] | 2018 |

TEACHING EXPERIENCE

UG: Undergraduates; G: Graduate Students; CH: Credit Hour. S/F/Su: Spring/Fall/Summer Semesters. Newly developed courses are marked in **boldface**. (Numbers) indicate enrollment numbers in each semester (~16 weeks).

The University of Oklahoma (Semester System)

Sole Instructor

| | |
|---|--|
| 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) |
| 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) |
|---|--|

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 zone deformation | 2024–Present |
| Manoj Thapa (PhD, co-advised w/ N. Regmi): Landslide detection and characterization | 2023–Present |
| Segun Steven Bodunde (PhD): Strain-stress-seismicity evolution in megathrust and intraplate regions | 2021–Present |
| Ganiyat Shodunke (PhD): Fluid extraction-induced deformation in heterogeneous geo-reservoirs | 2021–Present |
| 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–Present |
| Xiong Zhao: Geodetic imaging and Bayesian inference of faulting | 2025–Present |
| Thesis & Dissertation Committee Member | |
| Francis F. Oyebanji (PhD, advised by N. Regmi) | 2025–Present |
| 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 |
| Jiewen 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 induced earthquakes | 2024 |
| Jacqueline Silva (UTEP; BS, Geology): Time-frequency analysis of California GNSS data | 2024 |
| Dawoud Al Hashemi (OU; BS, Geophysics): Regional variability in induced seismicity | 2023 |
| Alexander Cordero (OU; MS, Geophysics): SAR-based landslide detection | 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 | 2022 |
| John McKnight (OU; BS Geophysics) OK 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 aquifers | 2012 |
| Patrick Ferchaud (École Polytechnique; BS/MS, Geophysics): BEM modeling | 2011 |
| FIELD 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 survey across central Taiwan (PI: S.-B. Yu, Academia Sinica) | 2011 |
| Seismic survey, Salton Seismic Imaging Project (SSIP) (PI: J. Stock, Caltech) | 2011 |
| PROFESSIONAL & COMMUNITY SERVICE | |
| The University of Oklahoma, College of Earth & Energy (MCEE), School of Geosciences (SOG) | |
| Institutional Representative, Statewide California Earthquake Center (SCEC) | 2024–Present |
| Institutional Representative, Southern California Earthquake Center (SCEC) | 2022–2024 |
| Institutional Representative, Computational Infrastructure for Geodynamics (CIG) | 2022–Present |
| Institutional Representative, EarthScope Consortium | 2022–2023 |
| Institutional Representative, UNAVCO WInSAR | 2021–2023 |
| Faculty Liaison, AGU Bridge Program | 2021–Present |
| Member, OU Data Institute for Societal Challenges (DISC) | 2021–Present |
| Member, SOG Honors and Awards Committee | 2021–Present |

| | |
|--|--------------|
| Member, SOG Graduate Affairs Committee | 2020–Present |
| Member, SOG Computer Lab Committee | 2020–Present |
| Member, SOG Energy Transition Geophysics Search Committee | 2023–2024 |
| Member, MCEE Diversity, Equity, & Inclusion Council | 2021–2023 |
| Organizer, SOG Virtual Information Session for Prospective Graduate Students | 2021–2023 |
| Member, Strategic Faculty Hire in Energy Geosciences Search Committee | 2022–2023 |
| Member, OU Reflection Seismology Centennial Planning Committee | 2021–2023 |
| Member, SOG Teaching Evaluation Committee | 2021–2022 |
| Member and DEI Advocate, SOG Environmental Geophysics Search Committee | 2020–2021 |
| Member, SOG Petroleum Geosciences Vision Committee | 2020 |
| Co-Editor, SOG Application to AGU Bridge Program Partnership | 2020 |

Service for Broader Communities

Paper Reviewer:

Science; Science Advances; 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; Earth Planets and Space; Scientific Reports; Communications Earth & Environment; Tectonophysics; Earth and Space Science; Computers and Geosciences; Pure and Applied Geophysics; Remote Sensing of Environment; Remote Sensing; Lithosphere; Geosciences; Energies; Sensors; Earthquake Science; Applied Sciences; Science China Earth Sciences, International Journal of Greenhouse Gas Control, IEEE Sensors, etc. (130+ in total including revisions)

Textbook Reviewer:

| | |
|---|------|
| 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 |

Proposal Reviewer:

| | |
|---|---|
| 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; Panel: 2022 |
| NASA Postdoctoral Program (NPP) | Ad Hoc: 2023, 2025 |
| 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 |

Professional Communities:

| | |
|---|--------------|
| Member, SZ4D Modeling Collaboratory for Subduction (MCS) Integrative Group | 2023–Present |
| Co-Leader, Community Code Verification for SEAS (Sequences of Earthquakes and Aseismic Slip), Southern California Earthquake Center (SCEC) | 2017–2024 |
| Panel Moderator, Northern California Earthquake Hazards Workshop, United States Geological Survey | 2024 |
| Panelist, Community Stress Drop Workshop, Southern California Earthquake Center | 2024 |
| Mentor, EarthScope RESESS Undergraduate Summer Internship Program | 2024 |
| Mentor, EarthScope International Undergraduate Summer Internship Program | 2023 |
| Mentor, Asian Americans & Pacific Islanders in Geosciences (AAPiG) Mentoring Pod Program | 2022–2023 |
| Liaison & Judge, Outstanding Student Paper Award (OSPA) of AGU Annual Meeting | 2017–2022 |
| Panel Organizer & Moderator, Southern California Earthquake Center Annual Meeting | 2022 |
| Session Chair, “Faults and Earthquakes: Networks, Precursors, Monitoring Systems and Numerical Modelling Techniques,” Asia Oceania Geosciences Society Annual Meeting, Pyeongchang, Gangwon-do. South Korea | 2024 |
| Session Co-Convener, “Characteristics and Mechanics of Fault Zone Rupture Processes, From Micro to Macro Scales,” Oral Session at 2024 SSA Annual Meeting, Anchorage, AL, USA | 2024 |

Session Chair, “State-of-the-Art Observations and Modeling of Earthquake Source Processes,” Oral Sessions at 2021 AGU Annual Fall Meeting, New Orleans, LO, USA 2021

Session Chair, “Earthquake Rupture Revealed by Kinematic Source Imaging,” Oral Sessions at 2017 AGU Annual Fall Meeting, New Orleans, LO, USA 2017

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 and 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

Geosciences Day, The University of Oklahoma, Norman, OK 2022–2024

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

PROFESSIONAL SOCIETY & COMMUNITY MEMBERSHIP

Southern/Statewide California Earthquake Center (SCEC) 2009–Present

American Geophysical Union (AGU) 2009–Present

Seismological Society of America (SSA) 2012–Present

American Association for the Advancement of Science (AAAS) 2012–Present

Society of Exploration Geophysicists (SEG) 2020–Present

Geothermal Research Council (GRC) 2020–Present

National Association of Geoscience Teachers (NAGT) 2020–Present

Asian Americans and Pacific Islanders in Geosciences (AAPIiG) 2020–Present

SELECTED CONFERENCE PRESENTATIONS

Only oral, students’, or post-2020 presentations are listed. *Advised students are underlined; Supervised postdocs are marked with †.

1. 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.
2. 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.
3. 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.
4. 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.
5. 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.
6. 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.

7. **Jiang, J.**, Taira, T. Joint Characterization of Transient Deformation and Repeating Earthquakes in California, SCEC Annual Meeting, September 2025. (*Poster Presentation*)
8. 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*)
9. **Jiang, J.**, Posterior Exploration and Predictive Analysis of Bayesian Finite-Fault Earthquake Models, IPACES Annual Meeting, Kunming, China, July 2025. (*Oral Presentation*)
10. 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*)
11. 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*)
12. 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*)
13. 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*)
14. 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*)
15. **Jiang, J.**, Postseismic Evolution of Crustal Faults in California and Oklahoma, 2024 SCEC Annual Meeting, September 2024. (*Poster Presentation*)
16. 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*)
17. 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*)
18. **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*)
19. **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*)
20. **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*)
21. **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*)
22. **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*)
23. 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*)
24. 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*)
25. 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*)
26. 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*)
27. 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*)
28. 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*)

29. 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*)
30. 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*)
31. 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*)
32. 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*)
33. **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*)
34. 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
35. **Jiang, J.**, Geodetic and Microseismic Signatures of Crustal Faulting Following Large Earthquakes, AGU Fall Meeting, Chicago, IL, December 2022. (*Invited Oral Presentation*)
36. 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*)
37. 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*)
38. 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*)
39. 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*)
40. **Jiang, J.**, Geodetic Pursuit of Aseismic Forces for Micro-earthquake Processes, SAGE/GAGE Community Science Workshop, Pittsburgh, PA., June 2022. (*Invited Oral Presentation*)
41. **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*)
42. **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*)
43. **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*)
44. **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*)
45. **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*)
46. **Jiang, J.**, and Erickson, B. A. Advancing Simulations of Sequences of Earthquakes and Aseismic Slip (SEAS). SCEC Annual Meeting, September 2018. (*Invited Oral Presentation*)
47. **Jiang, J.** and Fialko, Y., Mechanisms of unsteady shallow creep on major crustal faults, AGU Fall Meeting, New Orleans, LA,

December 2017. (*Oral Presentation*)

48. **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*)
49. **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*)
50. **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*)
51. 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*)
52. **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*)
53. **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*)
54. **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*)
55. **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*)