

Professional appointments

- U.S. Geological Survey**
2022–present
- RESEARCH GEOLOGIST
- Geologic Framework of the Intermountain West seamless digital geologic mapping project
 - Conducts geologic mapping, sedimentary basin and stratigraphic characterization, and analysis of geochronologic and geochemical data to study paleolandscape evolution
 - Studies tectonic stress, induced earthquakes, and seismic hazards
- U.S. Geological Survey**
2020–2022
- RESEARCH GEOLOGIST (MENDENHALL RESEARCH FELLOW)
- Stanford University**
2015–2020
- GRADUATE TEACHING ASSISTANT and RESEARCH ASSISTANT
- Teaching assistant for one classroom and one online course
- Statoil (Equinor)**
2013–2014
- EXPLORATION GEOLOGIST
- Regional and prospect-scale oil and gas exploration using reflection seismic and well data
 - Sedimentological fairway and basin analysis, stratigraphic correlations, and salt tectonics
 - Responsible for regional mapping, prospect screening, and monitoring competitor activity in a large Gulf of Mexico protraction area
- University of Otago**
2011
- FULBRIGHT FELLOW
- Stanford University**
2010–2013
- GRADUATE TEACHING ASSISTANT
- Teaching assistant for 4 classroom courses

Education

- Stanford University**
Stanford, CA
2020
- PH.D.
Geophysics
- Dissertation: *State of stress in North America: Seismicity, tectonics, and unconventional energy development*
 - Committee: Mark D. Zoback, Simon L. Klemperer, Norman H. Sleep, Peter H. Hennings
- Stanford University**
Stanford, CA
2013
- M.S.
Geological & Environmental Sciences
- Thesis: *Geology and geochronology of Cenozoic units in the Piñon Range and Huntington Valley, Nevada*
 - Committee: Elizabeth L. Miller, Joseph P. Colgan
- University of Otago**
Dunedin, New Zealand
2011
- FULBRIGHT FELLOWSHIP
- Thesis: *Characterization of faulted Australian Plate rocks and comparison with the Alpine Fault near Franz Josef, New Zealand*
 - Advisor: Virginia G. Toy
- Whitman College**
Walla Walla, WA
2009
- B.A., *summa cum laude*
Geology & Politics double Honors majors
- Phi Beta Kappa

Peer-reviewed journal articles

15. Schine, C.M.S., **Lundstern, J.-E.**, van Dijken, G., and Arrigo, K.R. *In review*. Earthquake activity and surface advection predict net primary production in a recurring bloom in the Southern Ocean. *Nature Geoscience*.
14. **Lundstern, J.-E.** 2024. Recent advances in characterizing the crustal stress field and perspectives on future applications of stress data. In Goteti, R., Finkbeiner, T., Ziegler, M.O., and Massiot, C. (eds.), *Geological Society, London, Special Publication 546: Characterization, Prediction and Modelling of the Crustal Present Day In-Situ Stresses*, doi:10.1144/SP546-2023-195.
13. **Lundstern, J.-E.**, Schwartz, T.M., Mercer, C.M., Colgan, J.P., Workman, J.B., and Morgan, L.E. 2024. Paleogene sedimentary basin development in southern Nevada, USA. *Lithosphere* 2024(1): 1–34, doi:10.2113/2024/lithosphere_2023_225.
12. **Lundstern, J.-E.**, Beaucé, E., and Teran, O.J. 2024. The importance of nodal plane orientation diversity for earthquake focal mechanism stress inversions. In Goteti, R., Finkbeiner, T., Ziegler, M.O., and Massiot, C. (eds.), *Geological Society, London, Special Publication 546: Characterization, Prediction and Modelling of the Crustal Present Day In-Situ Stresses*, doi:10.1144/SP546-2023-63.
11. Schwartz, T.M., Souders, A.K., **Lundstern, J.-E.**, Gilmer, A.K., and Thompson, R.A. 2023. Revised age and regional correlations of Cenozoic strata on Bat Mountain, Death Valley region, California, USA, from zircon U-Pb geochronology of sandstones and ash-fall tuffs. *Geosphere* 19(1): 235–257, doi:10.1130/GES02543.1.
10. **Lund Snee, J.-E.**, and Zoback, M.D. 2022. State of stress in areas of active unconventional oil and gas development in North America. *AAPG Bulletin* 106(2): 335–385, doi:10.1306/08102120151.
9. **Lund Snee, J.-E.**, and Miller, E.L. 2022. Magmatism, migrating topography, and the transition from Sevier shortening to Basin and Range extension, western USA. In Craddock, J.P., Malone, D.H., Foreman, B.Z., and Konstantinou, A. (eds.), *Tectonic Evolution of the Sevier-Laramide Hinterland, Thrust Belt, Foreland and Post-Orogenic Slab Rollback (150-20 Ma)*, Boulder, CO: Geological Society of America, doi:10.1130/2021.2555(13).
8. Miller, E.L., Raftrey, M., and **Lund Snee, J.-E.** 2022. Downhill from Austin and Ely to Las Vegas- U-Pb detrital zircon suites from the Eocene-Oligocene Titus Canyon Formation and associated strata, Death Valley, CA. In Craddock, J.P., Malone, D.H., Foreman, B.Z., and Konstantinou, A. (eds.), *Tectonic Evolution of the Sevier-Laramide Hinterland, Thrust Belt, Foreland and Post-Orogenic Slab Rollback (150-20 Ma)*, Boulder, CO: Geological Society of America, doi:10.1130/2021.2555(14).
7. Hennings, P.H., Nicot, J.P., Gao, R.S., DeShon, H.R., **Lund Snee, J.-E.**, Morris, A.P., Brudzinski, M.R., Horne, E.A., and Breton, C. 2021. Pore pressure threshold and fault slip potential for induced earthquakes in the Dallas-Fort Worth area of north-central Texas. *Geophysical Research Letters* 48(15): 1–9, doi:10.1029/2021GL093564.
6. **Lundstern, J.-E.**, and Zoback, M.D. 2020. Multiscale variations of the crustal stress field throughout North America. *Nature Communications* 11(1951): 1–9, doi:10.1038/s41467-020-15841-5.
5. Hennings, P.H., **Lund Snee, J.-E.**, Osmond, J., Dommissé, R., DeShon, H.R., and Zoback, M.D. 2019. Slip potential of faults in the Fort Worth Basin of north-central Texas, USA. *Bulletin of the Seismological Society of America*, doi:10.1785/0120190017.
4. **Lund Snee, J.-E.** and Zoback, M.D. 2018. State of stress in the Permian Basin, Texas and New Mexico: Implications for induced seismicity. *The Leading Edge* 32(2): 127–134, doi:10.1190/tle37020127.1.
3. **Lund Snee, J.-E.** and Zoback, M.D. 2016. State of stress in Texas: Implications for induced seismicity. *Geophysical Research Letters* 43(19): 10,208–10,214, doi:10.1002/2016GL070974.
2. **Lund Snee, J.-E.**, Miller, E.L., Grove, M., and Hourigan, J.K. 2016. Cenozoic paleogeographic evolution of the Elko Basin and surrounding region, northeast Nevada. *Geosphere* 12(2): 464–500, doi:10.1130/GES01198.1.

Peer-reviewed journal articles (*continued*)

1. **Lund Snee, J.-E.**, Toy, V.G., and Gessner, K. 2014. Significance of brittle deformation in the footwall of the Alpine Fault, New Zealand: Smithy Creek Fault zone. *Journal of Structural Geology* 64: 79–98, doi:10.1016/j.jsg.2013.06.002.

Technical reports, geologic maps, and other contributions

- Moscatti, R.J., Premo, W.R., Snee, L.W., Miggins, D.P., Bohannon, R.G., and **Lundstern, J.-E.** (*in prep.*). Geochemistry and U-Pb and Ar geochronology of select rocks from northeast Afghanistan. *U.S. Geological Survey Scientific Investigations Report*.
- Lundstern, J.-E.**, Schwartz, T.M., Ogilvie, I.A., Workman, J.B., Turner, K.J., and Alexander, K.A. (*in prep.*). Bedrock geologic map database of three-quarters of the Las Vegas 1°×2° quadrangle, southern Nevada: Contributions to the National Geologic Map. *U.S. Geological Survey Data Release*.
- Lundstern, J.-E.**, Berry, M.E., Schwartz, T.M., Workman, J.B., Woodring, D., Guth, P.L., Yount, J.C., Thompson, R.A., Turner, K.J., and Alexander, K.A. (*in prep.*). Geologic map of the Indian Springs 30'×60' quadrangle, southern Nevada. *U.S. Geological Survey Scientific Investigations Map*.
- Lundstern, J.-E.**, Berry, M.E., Schwartz, T.M., Workman, J.B., Woodring, D., Guth, P.L., Yount, J.C., Thompson, R.A., Turner, K.J., and Alexander, K.A. (*in prep.*). Geologic map database to accompany the geologic map of the Indian Springs 30'×60' quadrangle, southern Nevada. *U.S. Geological Survey Data Release*.
- Lundstern, J.-E.**, Mercer, C.M., and Morgan, L.E. 2023. U-Pb detrital zircon data and Ar feldspar data from middle Cenozoic sandstones and volcanic tuffs from southern Nevada, USA. *U.S. Geological Survey Data Release*, doi:10.5066/P9JCU656.
- Lundstern, J.-E.** and Zoback, M.D. 2023. Maximum horizontal stress orientation and relative stress magnitude (faulting regime) data throughout North America. *U.S. Geological Survey Data Release*, doi:10.5066/P90LS6QF.
- Lundstern, J.-E.** 2023. Second-generation stress maps for North America: Future directions and applications to petroleum and the energy transition. *Gussow 2023 Conference Extended Abstracts*, Canadian Energy Geoscience Association.
- Lund Snee, J.-E.** and Miller, E.L. 2022, 2020. Magmatism, migrating topography, and the onset of Basin and Range faulting. *Vision for Discovery: Geology and Ore Deposits of the Great Basin, Geological Society of Nevada 2022 Symposium Proceedings*.
- Lund Snee, J.-E.** and Zoback, M.D. 2019. State of stress in North American unconventional oil and gas producing basins. *William C. Gussow Geoscience Conference Extended Abstracts*, Canadian Society of Petroleum Geologists, doi:10.6084/m9.figshare.12084771.v1.
- Zoback, M.D. and **Lund Snee, J.-E.** 2019. Predicted and observed shear on pre-existing faults during hydraulic fracture stimulation. *Geophysical Society of Houston Journal* (reprinted from *SEG Technical Program Expanded Abstracts*) 10(1): 15–20, https://www.gshtx.org/publications/GSH_Journal/2019_September.aspx.
- Zoback, M.D. and **Lund Snee, J.-E.** 2018. Predicted and observed shear on pre-existing faults during hydraulic fracture stimulation. *SEG Technical Program Expanded Abstracts*: 3588-3592, doi:10.1190/segam2018-2991018.1.
- Lund Snee, J.-E.** and Zoback, M.D. 2017. Detailed new map of S_{Hmax} orientations and relative stress magnitudes in the south-central USA. *World Stress Map Newsletter* no. 2.
- Lund Snee, J.-E.** and Miller, E.L. 2015. Preliminary geologic map of Cenozoic units of the central Robinson Mountain volcanic field and northwestern Huntington Valley, Elko County, Nevada. *Nevada Bureau of Mines and Geology Open-File Report 15-2*. 2 plates, scale 1:24,000, 42 p., <http://pubs.nbmgs.unr.edu/product-p/of2015-02.htm>.

Awards

- 2019 Best Paper in *The Leading Edge* for “State of stress in the Permian Basin, Texas and New Mexico: Implications for induced seismicity”: Society of Exploration Geophysicists
- 2019 Best Poster: 1st place, Stanford School of Earth, Energy and Environmental Sciences Research Review
- 2018 A.I. Levorsen Memorial Award for Best Paper: Southwest Section of the AAPG Convention
- 2017–2018 Stanford University Gerald J. Lieberman Fellowship (\$54,400)
- Highly competitive award given annually to one student per School in the University in recognition of research accomplishments, teaching, and service
- 2015 Stanford University Manus R. Foster Fellowship in Geophysics (\$56,100)
- 2013 Best Student Geologic Map Competition: 3rd Place, Geological Society of America
- 2012–2013 U.S. Geological Survey EdMap Research Grant (\$17,500)
- 2011 Fulbright Fellowship—Study at the University of Otago, New Zealand
- 2009 Whitman College Albert Ripley Leeds Prize in Geology

Selected talks

- Lundstern, J.-E.** Next-generation stress maps of North America: Utility for understanding sources of stress and induced seismic hazards. U.S. Geological Survey Rocky Mountain Region Science Seminar, 1 February 2024. [*Virtual talk.*]
- Lundstern, J.-E.** The importance of nodal plane orientation diversity in earthquake focal mechanism stress inversions. American Rock Mechanics Association (ARMA) Induced Seismicity Technical Committee webinar, 12 January 2024. [*Invited talk.*]
- Lundstern, J.-E.** Second-generation stress maps for North America: Future directions and applications to petroleum and the energy transition. Gussow 2023 Conference, Banff, AB, Canada, 10 October 2023. [*Invited talk.*]
- Lundstern, J.-E.** Utility of next-generation stress maps for understanding induced seismic hazards and sources of intraplate stress. Colorado Scientific Society, Golden, CO, 11 May 2023. [*Invited talk.*]
- Lundstern, J.-E.** Next-generation stress maps of North America: Utility for understanding active tectonics and managing induced seismicity. Seminar, Department of Geophysics and Planetary Sciences, University of Science and Technology of China, virtual, 10 June 2023. [*Invited talk.*]
- Lundstern, J.-E.** Geomechanical considerations for understanding and managing induced seismicity. Permian Basin Section of the Society of Economic Paleontologists and Mineralogists (PBS-SEPM) Monthly Luncheon, Midland, TX, 21 February 2023. [*Invited talk.*]
- Lundstern, J.-E.** Earthquake hazards and geomechanical considerations for CO₂ storage site selection. CO₂ Conference, Midland, TX, 7 December 2022. [*Invited talk.*]
- Lund Snee, J.-E.** Successes and challenges for understanding and managing induced seismicity. Unconventional Reservoir Technology Conference (URTeC), Houston, TX, 22 June 2022. [*Invited talk; member of Risk and Mitigation of Induced Seismicity panel.*]

Selected talks (*continued*)

- Lund Snee, J.-E.** and Miller, E.L. Cenozoic magmatism, migrating topography, and the onset of Basin and Range faulting in Koutz, F.R. and Pennell, W.M., eds., *Vision for Discovery: Geology and Ore Deposits of the Great Basin*, Geological Society of Nevada 2020 Symposium Proceedings, Reno, NV, p. 1299–1300. [*Extended abstract; talk given May 2022.*]
- Lund Snee, J.-E.** A new-generation stress map for North America and insights for identifying relationships between stress and tectonic driving mechanisms. EON-ROSE (Earth-System Observing Network – Réseau d’Observation du Système terrestre) International Scientific Workshop, Nanaimo, B.C. (virtual), 25 April 2022. [*Talk.*]
- Lund Snee, J.-E.** Regional state of stress and potential use for improving PSHA. Workshop 1 – Hazard-Significant Issues and Available Data, Senior Seismic Hazard Analysis Committee (SSHAC) Level 3 workshop for Sodium nuclear power plant siting process, virtual, 12–14 April 2022. [*Invited speaker and workshop participant.*]
- Lund Snee, J.-E.** Next-generation stress mapping: Utility for understanding active tectonics and seismic hazards. U.S. Geological Survey Geologic Hazards Science Center Seminar (virtual), 8 March 2022. [*Invited talk.*]
- Lund Snee, J.-E.** Next-generation crustal stress maps: Their utility for understanding active tectonics and induced seismicity in the era of decarbonization. Geophysical Society of Indian Institute of Technology (Indian School of Mines) Dhanbad seminar (virtual), 18 January 2022. [*Invited talk.*]
- Lund Snee, J.-E.** and Zoback, M.D. State of stress in North America: Key observational constraints for geodynamic and geomechanical models. American Geophysical Union Fall Meeting: New Orleans, LA, abstract #T35B-08, 17 December 2021. [*Talk.*]
- Lund Snee, J.-E.,** Park, Y., Ellsworth, W., Beroza, G., and Zoback, M.D. Insights for evolution of induced earthquake clusters from a high-resolution catalog for Oklahoma. American Geophysical Union Fall Meeting: New Orleans, LA, abstract #S21A-04, 14 December 2021. [*Talk.*]
- Lund Snee, J.-E.** Use of new-generation tectonic stress maps to understand and manage induced seismicity. American Association of Petroleum Geologists Petroleum Structure and Geomechanics Division monthly webinar, 16 November 2021. [*Invited talk.*]
- Lund Snee, J.-E.** Use of stress information to understand and manage induced seismic hazards: Examples from areas of oil and gas development. American Association of Petroleum Geologists Petroleum Structure and Geomechanics Division annual business meeting, 15 October 2021. [*Invited talk.*]
- Lund Snee, J.-E.,** Schwartz, T.M., and Colgan, J.P. Record of Paleogene Sedimentary Basin and Fluvial System Development in Southern Nevada, USA, Geological Society of America Connects 2021, abstract #34-4, 10 October 2021, doi:10.1130/abs/2021AM-368375. [*Talk.*]
- Lund Snee, J.-E.** State of stress in North America and impacts for managing the hazard of induced seismicity. Denver Geophysical Society Monthly Luncheon, 14 January 2021. [*Invited talk.*]
- Lund Snee, J.-E.** Stress orientations and relative stress magnitudes throughout the North American plate. Microseismic Industry Consortium, University of Calgary & University of Alberta, 18 November 2020. [*Invited keynote talk.*]
- Lund Snee, J.-E.** and Zoback, M.D. State of stress and seismotectonics in the vicinity of the 9 August 2020 M_w 5.1 Sparta, North Carolina, earthquake. Geological Society of America Annual Meeting (virtual), 28 October 2020. [*Invited talk.*]
- Lund Snee, J.-E.** and Zoback, M.D. Stress orientation and relative stress magnitudes throughout the North American plate. Geological Society of America Annual Meeting (virtual), abstract #161-9, 28 October 2020, <https://gsa.confex.com/gsa/2020AM/meetingapp.cgi/Paper/353108>. [*Talk.*]

Conference posters and other abstracts

- Lundstern, J.-E.,** Hirsch, A.C., Boyd, O., Hickman, S.H., and Schleicher, L.S. Proposed wellbore re-entry to measure stress orientations and geophysical properties for earthquake hazard and minerals characterization in Minnesota. Geological Society of America Connects meeting, Denver, CO, doi:10.1130/abs/2022AM-379090, 10 October 2022. [*Poster.*]
- Lundstern, J.-E.,** Schwartz, T.M., Berry, M.B., Workman, J.B., Woodring, D., Guth, P.L., Yount, J.C., Thompson, R.A., Turner, K.J., and Colgan, J.P. Integrated 1:100,000-scale surficial and bedrock geologic mapping of the Indian Springs quadrangle, northwest of Las Vegas, Nevada, USA. Geological Society of America Connects meeting, Denver, CO, doi:10.1130/abs/2022AM-382047, 9 October 2022. [*Poster.*]
- Lund Snee, J.-E.,** Schwartz, T.M., Berry, M.E., Workman, J.B., Woodring, D., Guth, P.L., Yount, J., Thompson, R.A., Turner, K.J., and Colgan, J.P. Integrated 1:100,000-scale surficial and bedrock geologic mapping of the Indian Springs quadrangle, northwest of Las Vegas, Nevada, USA. Geological Society of America Connects 2022, Denver, CO, October 2022. [*Poster.*]
- Lund Snee, J.-E.,** Hirsch, A.C., Boyd, O.S., Hickman, S.H., and Schleicher, L.S. Proposed Minnesota wellbore re-entry to measure stress orientations and geophysical properties for earthquake hazard characterization. Geological Society of America Connects 2022, Denver, CO, October 2022. [*Poster.*]
- Schwartz, T.M., Souders, A.K., and **Lund Snee, J.-E.** What constitutes a believable maximum depositional age (MDA)? An example using new zircon U-Pb ages for the Cenozoic strata of Bat Mountain, Death Valley region, California. GSA Annual Meeting, Denver, CO, October 2022. [*Poster.*]
- Lund Snee, J.-E.,** Teran, O.J., and Singh, A. Considerations for using focal mechanisms to reliably estimate the state of stress in reservoir and induced seismicity settings. SEG/SPE Injection Induced Seismicity Workshop: A Decade of Learnings, Austin, TX, 8 June 2022. [*Poster.*]
- Lund Snee, J.-E.,** Schwartz, T.M., and Colgan, J.P. Age constraints and depositional setting of the earliest Cenozoic sedimentary rocks deposited in several ranges throughout southern Nevada, USA. Geological Society of America Joint Cordilleran/Rocky Mountain section meeting, Las Vegas, NV, doi:10.1130/abs/2022CD-374310, 17 March 2022. [*Poster.*]
- Schine, C., Tsiang, M., **Lund Snee, J.-E.,** Sergi, S., van Dijken, G., and Arrigo, K. Earthquake activity and surface advection are significant predictors of net primary production in a recurring bloom in the Pacific sector of the Southern Ocean. Ocean Sciences Meeting 2022, session DS08, 2 March 2022. [*Abstract.*]
- Lund Snee, J.-E.,** Schwartz, T.M., Workman, J.B., Colgan, J.P., Thompson, R., and Page, W.R. Preliminary 1:48,000-Scale Geologic Map of the Spotted Range and Adjacent Areas, South-Central Nevada, USA. Geological Society of America Connects 2021, paper 96-13, doi:10.1130/abs/2021AM-368661, 11 October 2021. [*Virtual poster.*]
- Lund Snee, J.-E.** and Zoback, M.D. State of stress in areas of induced seismicity across North America. American Geophysical Union Fall Meeting, paper MR019-0001, 16 December 2020.
- Bensi, M., Schleicher, L.S., **Lund Snee, J.-E.,** and Frantzis, C. Understanding the Impact of the North American Crustal Stress Field on Probabilistic Seismic Hazard Assessment (PSHA). American Geophysical Union Fall Meeting, paper NH039-0010, 16 December 2020. [*Virtual poster.*]
- Lund Snee, J.-E.** and Zoback, M.D. Multiscale variations of the stress field across North America: Insights for sources of intra-plate stress. American Geophysical Union Fall Meeting: San Francisco, CA, abstract #G41B-0730, December 2019. [*Poster.*]
- Lund Snee, J.-E.,** and Zoback, M.D. Principal stress orientations and relative magnitudes in unconventional oil and gas basins, Western Cordillera and central and eastern U.S.A. American Association of Petroleum Geologists (AAPG) Annual Convention and Exhibition, San Antonio, TX, poster P43, session 415, Theme 4), 21 May 2019. [*Poster.*]
- Hennings, P., **Lund Snee, J.-E.,** Nicot, J.-P., Horne, E.A., and Zoback, M.D. Impact of varied approaches for Fault Slip Potential

Conference posters and other abstracts (*continued*)

analysis in the Fort Worth Basin, Texas. American Association of Petroleum Geologists (AAPG) Annual Convention and Exhibition, San Antonio, TX, presentation P82, session 345, Theme 6, 21 May 2019. [*Abstract.*]

Lund Snee, J.-E. and Zoback, M.D. A second-generation stress map of the intraplate USA, and its utilization for managing the hazard of injection-induced seismicity. Schatzalp Workshop on Induced Seismicity, Davos, Switzerland, 14 March 2019. [*Poster.*]

Miller, Elizabeth L., Gottlieb, E.S., Hoiland, C.W., Konstantinou, A., **Lund Snee, J.-E.**, and Ruksznis, A. Some problems and progress in understanding the evolution of metamorphic core complexes (MCCs) of the northern Basin and Range. Geological Society of America Cordilleran Section Meeting, Flagstaff, AZ, 16 May 2018. [*Abstract.*]

Hennings, P.H., Osmond, J., **Lund Snee, J.-E.**, and Zoback, M.D. Slip potential of faults in the Fort Worth Basin. American Geophysical Union Fall Meeting, New Orleans, LA, paper S22B-05, December 2017. [*Abstract.*]

Lund Snee, J.-E., Zoback, M.D., and Walsh, F.R. Mapping relative principal stresses in the south-central United States with application to predicting fault slip potential. Schatzalp Workshop on Induced Seismicity, Davos, Switzerland, 16 March 2017. [*Poster.*]

Lund Snee, J.-E., Zoback, M.D., and Walsh, F.R. Crustal stress coherency at multiple scales: Utilization for assessing potential fault slip in response to fluid injection. American Geophysical Union Fall Meeting, paper NS43A-1922, San Francisco, CA, 15 December 2016. [*Invited poster.*]

Lund Snee, J.-E. and Zoback, M.D. Stress Map of Texas: Potential applications for triggered seismicity. SPE/SEG Workshop: Injection Induced Seismicity—Engineering Integration, Evaluation and Mitigation in Fort Worth, TX, 28–30 March 2016. [*Poster.*]

Lund Snee, J.-E., Miller, E.L., and Hourigan, J.K. 1:24,000 scale geologic mapping of Cenozoic units in Huntington Valley and the eastern Piñon Range, Elko County, Nevada. Geological Society of America Annual Meeting, Denver, CO, 28 October 2013. Paper #146-10.

Lund Snee, J.-E. and Miller, E.L. Geologic mapping, geochemistry, and detrital zircon geochronology in Huntington Valley and the eastern Piñon Range, northeast Nevada: Implications for the paleogeographic evolution of the Elko Basin and surroundings. Geological Society of America Cordilleran Section meeting, Fresno, CA, 21 May 2013. Paper #27-3.

Lund Snee, J.-E. and Toy, V.G. Characterization of faulted Australian Plate rocks and comparison with Alpine Fault rocks near Franz Josef, New Zealand. A.F. Cooper & R.J. Norris Symposium, November 2011, Dunedin, New Zealand. [*Poster.*]

Lund Snee, J.-E. and Carson, R.J. Terracettes: Animal, Vegetable, or Mineral? Geological Society of America Cordilleran Section meeting, Kelowna, BC, 9 May 2009. Paper #16-7. [*Poster.*]

Professional activities

- 2023–2024 **Conference organizing committee member:** Society of Exploration Geophysicists/Society of Petroleum Engineers (SEG/SPE) 7th Injection-Induced Seismicity Workshop, June 2024
- 2020–present **Organizing committee:** American Rock Mechanics Association (ARMA) Induced Seismicity Webinar series (monthly)
- 2017–present **Reviewer:** *Geophysical Research Letters*, *Geophysics*, *Journal of Geophysical Research: Solid Earth*, *AAPG Bulletin*, *Scientific Reports*, *International Journal of Earth Sciences*, *International Journal of Rock Mechanics and Mining Sciences*, *Seismological Research Letters*, Society of Exploration Geophysicists (SEG) extended abstracts, *Gulf Coast Association of Geological Societies (GCAGS) Journal*, American Chemical Society Petroleum Research Fund, U.S. Geological Survey internal manuscript review, National Science Foundation grant proposal review
- 2022 **Session co-convenor:** S31A, S32C, S35B, and S36A. Induced Seismicity and Caprock Failure in Carbon Sequestration and Geo-Energy Applications
- 2022 **Session co-convenor:** T3. Unraveling the History of the Rio Grande Rift: From Contraction to Extension and Evolution of the Rift, Geological Society of America (GSA) Joint Cordilleran–Rocky Mountain Section Meeting, 17 March 2022
- 2021 **Session co-convenor:** T2. Cenozoic Tectonism, Magmatism, Sedimentation, and Landscape Evolution in the Intermountain West, Geological Society of America (GSA) Annual Meeting, 10 October 2022
- 2020 **Session co-convenor:** S013. Past, Present, and Forecast of Induced Seismicity in the Permian Basin, Texas and New Mexico, American Geophysical Union (AGU) Fall Meeting, 8 December 2020
- 2018–2019 **Chair, Induced Seismicity technical sub-theme; Session Chair, Induced Seismicity and Water Management (session 345)**, American Association of Petroleum Geologists (AAPG) 2019 Annual Conference and Expo
- 2017–2018 **Organizer and white paper contributor: Sustainability in the Hydrocarbon Value Chain** Mexican Institute of Petroleum (IMP) international workshop, Mexico City, February 2018
- 2012–2015 **Supervisor for 2 undergraduate research students and 4 field assistants and interns** Stanford University
- 2014–2015 **Contributor**
Sense & Sustainability (<http://bit.ly/11lFOQy>)
- 2012–2013 **Interviewer for 3 podcasts featuring Stanford University legal scholars**
Generation Anthropocene
- 2012 **Article: “In the climate struggle, a hunt for realistic solutions”**
Grist (<http://bit.ly/QacIDP>)
- 2011 **Invited Participant**
United States–New Zealand Council: U.S.–New Zealand Partnership Forum

Other employment

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|----------------------------------|---|
| U.S. Forest Service 2009–2010 | <p>HYDROLOGIC TECHNICIAN</p> <ul style="list-style-type: none"> Inspected and helped permit mining projects in the Idaho Panhandle National Forests Cataloged and prioritized abandoned mines for permanent closure |
| U.S. Forest Service 2009 | <p>GEOLOGICAL SOCIETY OF AMERICA GEOCORPS AMERICA INTERN</p> <ul style="list-style-type: none"> Mine regulation and remediation at the Idaho Panhandle National Forests |
| Aurora Water 2007 | <p>WATER CONSERVATION INTERN</p> <ul style="list-style-type: none"> Water conservation teaching, legal research, and maintenance of demonstration gardens |

Theses & dissertations

- Lund Snee, J.-E.** 2020. State of stress in North America: Seismicity, tectonics, and unconventional energy development [*Ph.D. dissertation*]. Stanford University, 254 p., doi:10.13140/RG.2.2.27217.07523/1. Committee: Mark D. Zoback, Simon L. Klemperer, Norman H. Sleep, Peter H. Hennings.
- Lund Snee, J.-E.** 2013. Geology and geochronology of Cenozoic units in the Piñon Range and Huntington Valley, Nevada [*M.S. thesis*]. Stanford University, 263 p., doi:10.13140/RG.2.2.30243.25124. Committee: Elizabeth L. Miller and Joseph P. Colgan.
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Community and institutional service

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|--------------|---|
| 2023 | <p>Research Grade Evaluation committee member U.S. Geological Survey personnel promotion panel</p> |
| 2018–present | <p>Leader and organizer to advance gun violence prevention measures Stanford University</p> |
| 2018–2019 | <p>Annual Homeless Point-in-Time Count Sonoma County, CA</p> |
| 2017 | <p>Student member: Crustal Dynamics faculty search committee Stanford University Department of Geological Sciences</p> |
| 2015 | <p>Volunteer Instructor Stanford University GeoKids educational outreach program</p> |
| 2010 | <p>Volunteer for Science U.S. Geological Survey Denver Argon Geochronology Laboratory</p> |