Jens-Erik Lund Snee

jenseriklundsnee@gmail.com

Stanford University Department of Geophysics
397 Panama Mall, Mitchell Building 3rd Floor, Stanford, CA 94305-2210

Education

Stanford University
Stanford, CA
Ph.D. (*in progress*)
Geophysics (Zoback Stress & Crustal Mechanics Group)
Anticipated 2019

Stanford University
Stanford, CA
M.S.
Structural Geology & Tectonics
2013

University of Otago
Dunedin, New Zealand
Fulbright Fellowship
Geology
2011

Whitman College
Walla Walla, WA
B.A., *summa cum laude*
Geology & Politics double Honors majors
2009

Professional experience

Stanford University
2012–present (*intermittent*)
Teaching Assistant
- Helped teach, graded student work, and assisted students with labwork for 4 classes

Statoil
August 2013–October 2014
Exploration Geologist
- Responsible for regional mapping, prospect screening, and monitoring competitor activity in a Gulf of Mexico protraction area

U.S. Forest Service
August 2009–February 2010
Hydrologic Technician
- Inspected and helped permit mining projects in the Idaho Panhandle National Forests
- Cataloged and prioritized abandoned mines for permanent closure

U.S. Forest Service
June 2009–August 2009
Geological Society of America GeoCorps America Intern
- Assisted with mining regulation and remediation at the Idaho Panhandle National Forests

Aurora Water (utility)
June 2007–August 2007
Water Conservation Intern
- Maintained xeriscape demonstration gardens and helped teach water conservation classes

Jens-Erik Lund Snee

jenseriklundsnee@gmail.com

Stanford University Department of Geophysics
397 Panama Mall, Mitchell Building 3rd Floor, Stanford, CA 94305-2210

Professional activities & University service

April 2017–present	**Student seminar member: Departmental strategic planning process** Stanford University Department of Geological Sciences
January–April 2017	**Student member: Crustal Dynamics faculty search committee** Stanford University Department of Geological Sciences
2012–2015	**Supervised 2 Stanford undergraduate research students and 4 field assistants and interns** Stanford University
2014–present	**Contributor** *Sense & Sustainability* (http://bit.ly/1IlFOQy)
April–December 2015	**Volunteer Instructor** Stanford University GeoKids educational outreach program
March 2015	**Invited speaker: "The William Smith Map at Stanford: Bicentennial Celebration"** Stanford University Branner Earth Sciences Library
2012–2013	**Led 3 podcast interviews with Stanford University legal scholars** *Generation Anthropocene*
August 2012	**Article: "In the climate struggle, a hunt for realistic solutions"** *Grist* (http://bit.ly/QacIDP)
February 2011	**Invited Participant** United States–New Zealand Council: U.S.–New Zealand Partnership Forum
March–September 2010	**Volunteer for Science** U.S. Geological Survey Denver Argon Geochronology Laboratory

Teaching

Stanford University
2017 (*in progress*)

Teaching Assistant: Reservoir Geomechanics (ResGeo 202)
- Department of Geophysics / Stanford University Massive Open Online Course (MOOC)
- Facilitate online discussions and student questions; manage online course materials

Stanford University
2016

Teaching Assistant: Unconventional Reservoir Geomechanics (GP 208)
- Department of Geophysics
- 7 students

Stanford University
2012 & 2013

Teaching Assistant: Earth Materials: Rocks in Thin Section (GES 103)
- Department of Geological & Environmental Sciences
- 5 students Winter quarter 2012; 7 students Winter quarter 2013

Stanford University
2012

Teaching Assistant: Living on the Edge (GES 5)
- Department of Geological & Environmental Sciences
- 18 students

Stanford University
2012

Teaching Assistant: Structural Geology and Tectonics (GES 110)
- Department of Geological & Environmental Sciences
- 4 students

Jens-Erik Lund Snee

jenseriklundsnee@gmail.com

Stanford University Department of Geophysics
397 Panama Mall, Mitchell Building 3rd Floor, Stanford, CA 94305-2210

Geologic maps

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.nbmg.unr.edu/product-p/of2015-02.htm.

Journal articles and technical reports

Moscati, R.J., Premo, W.R., Snee, L.W., Miggins, D.P., Bohannon, R.G., and **Lund Snee, J.-E.** (*in preparation*). Geochemistry and U-Pb and argon geochronology of select rocks from northeast Afghanistan. U.S. Geological Survey Scientific Investigations Report.

Lund Snee, J.-E. and Zoback, M.D. 2016. State of stress in Texas: Implications for induced seismicity. *Geophysical Research Letters* 43: 10,208–10,214, doi:10.1002/2016GL070974.

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), doi:10.1130/GES01198.1.

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.

Conference posters

Lund Snee, J.-E., Zoback, M.D., and Walsh, F.R., III. 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.

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

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

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. Poster presented at the Geological Society of America Annual Meeting in 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. Poster presented at the Geological Society of America Cordilleran Section meeting in 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. Poster presented at the A.F. Cooper & R.J. Norris Symposium, November 2011 in Dunedin, New Zealand.

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

Jens-Erik Lund Snee

jenseriklundsnee@gmail.com

Stanford University Department of Geophysics
397 Panama Mall, Mitchell Building 3rd Floor, Stanford, CA 94305-2210

Talks

Lund Snee, J.-E., Zoback, M.D., and Walsh, F.R., III. Mapping relative principal stresses in the southern United States with application to predicting fault slip potential. Schatzalp 2nd Induced Seismicity Workshop, Davos, Switzerland. March 2017.

Lund Snee, J.-E. and Zoback, M.D. State of stress in Texas: Implications for induced seismicity. October 2016 Los Alamos National Laboratory State of Stress in the Earth conference, Santa Fe, NM.

Lund Snee, J.-E. and Zoback, M.D. Stress Map of Texas: Latest results and work in progress. May 2016 Stanford Center for Induced & Triggered Seismicity semi-annual meeting, Stanford, CA.

Lund Snee, J.-E. and Zoback, M.D. Initial results from the new Stress Map of Texas project. American Geophysical Union Fall Meeting, San Francisco, CA, paper S21C-04, December 2015.

Lund Snee, J.-E. Predicting overpressure using basin and petroluem system modeling software. November 2015 Stanford Basin & Petroleum System Modeling Affiliates Meeting, Stanford, CA.

Lund Snee, J.-E. and Zoback, M.D. Preliminary results from the new Stress Map of Texas project. October 2015 Stanford Center for Induced & Triggered Seismicity semi-annual meeting, Stanford, CA.

Lund Snee, J.-E. and Zoback, M.D. Launching the new Texas Stress Map project. June 2015 Stanford Rock & Borehole Geophysics Project annual meeting, Menlo Park, CA.

Lund Snee, J.-E., Miller, E.L., and Hourigan, J.K. Cenozoic volcanism, faulting, and basin development in the eastern Piñon Range and central Huntington Valley, Elko County, Nevada. Invited talk: May 2015 Geological Society of Nevada annual meeting, Reno, NV.

Awards

2017–2018	**Gerald J. Lieberman Fellowship**	Stanford University
2015	**Manus R. Foster Fellowship in Geophysics**	Stanford University
2013	**3rd Place, Best Student Geologic Map Competition**	Geological Society of America
2012–2013	**EdMap Research Grant ($17,500)**	U.S. Geological Survey
2011	**Fulbright Fellowship**	Study at University of Otago, New Zealand
2009	**Phi Beta Kappa**	Whitman College
2009	**Albert Ripley Leeds Prize in Geology**	Whitman College
2005–2009	**National Merit Scholar**	Whitman College

Jens-Erik Lund Snee

jenseriklundsnee@gmail.com

Stanford University Department of Geophysics
397 Panama Mall, Mitchell Building 3rd Floor, Stanford, CA 94305-2210

Skills

Basic computer	Microsoft Office suite (including Word, Excel, and PowerPoint), ArcGIS, Adobe Illustrator, Adobe InDesign, Adobe Photoshop, Adobe Acrobat Pro, Mac OSX, Microsoft Windows, Google Earth
Oil & gas	Landmark DecisionSpace Desktop, Petrel, Midland 2D Move, regional oil & gas exploration, geoscience interpretation on seismic reflection datasets, well log interpretation
Research	MATLAB, LaTeX, *in situ* stress orientation & magnitude interpretation, structural geology, stratigraphy, geologic mapping, geochronology, mineral separation and sample preparation, mass spectrometry, cathodoluminescence (CL) scanning electron microscopy (SEM)