

Craig Howard Jones

Department of Geological Sciences
Campus Box 399
University of Colorado, Boulder
Boulder, CO 80309-0399
cjones@colorado.edu

Education

Ph.D., Geophysics Massachusetts Institute of Technology, "A Geophysical and Geological Investigation of Extensional Structures, Great Basin, Western United States," Peter H. Molnar, advisor.	October, 1987
B.S., Geophysics and Planetary Science (with honors) California Institute of Technology.	June, 1981

Professional Experience

Professor	July 2015-
Associate Professor	August 1998-June 2015
Research Assistant Professor Dept. of Geological Sciences	September 1996-June 1998
Fellow	June 1999-
Research Associate CIRES University of Colorado, Boulder	December 1993-August 1998
Research Asst. Professor Research Associate	March 1992-November 1993
Postdoctoral Research Fellow Center for Neotectonic Studies, University of Nevada Reno.	January 1991-February 1992
Staff Scientist (part-time) California Institute of Technology.	November 1990-December 1990
Research Fellow in Geophysics California Institute of Technology.	November 1989-October 1990
Weizmann Postdoctoral Fellow California Institute of Technology.	November 1987-October 1989
Research Assistant (Teaching Assistant Jan-May 1985) Massachusetts Institute of Technology.	1981-1987
Research Assistant California Institute of Technology.	June - September, 1980

Teaching Experience: (*Italicized* are courses developed by me)

Geology 1012, Exploring Earth for Scientists	Fall 2020, 2022, 2024
Geology 5001, <i>Physics and Chemistry of the Earth</i> (with Lang Farmer)	Fall 2004, 2006, 2008, Spring 2012, 2014, 2016, 2018, 2020, 2023
Geology 4717/5717, <i>Field Seminar in Western U.S. Tectonics</i>	Spring 2000, 2002, 2003, 2005, 2007, 2009, 2011, 2013, 2015, 2017, 2020, 2023
Geology 5690, <i>Tectonic History of the Western U.S.</i>	Fall 1999, Spring 2002, F 2003, 2005, S 2010, F 2013, 2016, S 2021, 2024
Geology 4714/5714, Field Geophysics	Fall 1998, 2000, 2003, 2005, 2008-2013, 2015-20, 2022-4
Geology 6650 Earthquake Seismology (with A. F. Sheehan)	Fall 2017
Geology 5703, Tectonics seminar	Fall 2015, Spring 2018, Fall 2019
First year seminar FYS-0049 How Mountains Made Modern America	Fall 2018
Geology 1020, Introduction to Earth History	S 1999, Fall 2000, 2001, 2002, S 2004, 2005, F2006, S2008, 2011, 2012, 2014
Geology/Phys/Astr 6650, Geophysics seminar	Fall 2009
Geology 5700, Seminar on uplift of Rockies and adjoining areas (with Bob Anderson)	Fall 2005
Geology 5750, Extensional Tectonics of the Basin and Range (1 semester hour)	Spring 1998
Geology 1140, Our Dynamic Earth II (non-majors geophysics/geology)	Spring 1996
Geology 6650, Physics and History of the Rocky Mountains and Colorado Plateau (with A. F. Sheehan)	Spring 1994
Seminar: History and Physics of the Basin and Range (with S. G. Wesnousky)	Spring 1992
Teaching Asst., M.I.T. Field Geophysics Camps	1983, 1985, 1987

Field Experience (major projects only)

Passive seismology experiment, Sierra Nevada (SNEP)	Spring 2005-2007
Paleomagnetic sampling, Utah/Colorado and California	Fall 2000, 2002-2004, 2007
Short-period/broadband array experiment, Marlborough region, South Island, New Zealand	December 2000-May 2002
Short-period array experiment, China Lake Naval Weapons Center	November 1998-May 2000
Teleseismic tomography experiment, Sierra Nevada	May 1997-October 1997
Teleseismic CPGB experiment deployment, Utah and Nevada	October 1994-June 1995
Teleseismic and refraction experiment deployment, Sierra Nevada	June-Oct, 1993; June-Oct 1994
Paleomagnetic sampling, Lake Mead area	several months from 1988 to 1995

Seismological deployment, Sierra Nevada	May-Oct 1988
Geologic mapping, Alexander Hills (Death Valley area)	several months, 1984-1986
Microearthquake deployment, northern Utah	Aug-Oct 1983
MIT Field Geophysics Camps (as T.A.), southern Nevada and SE Calif.	1983, 1985, 1987

Computer Experience

Operating systems/computers: UNIX, Macintosh, DOS, some older OSes.

Languages: Fortran, Basic (and RealBasic), C, Tk/Tcl, Perl, Xojo.

Most of the programming has focused on data reduction, analysis, and display and has included creation of interactive codes with a graphical interface, including several self-contained GUI geophysical software programs.

Awards, Honors and Fellowships

Outstanding Paper, SGT section, Geol. Soc. Am.	2018
Exceptional reviewer, <i>Geosphere</i>	2012
Exceptional reviewer, <i>GSA Today</i>	2008
Best Presentation for 2005 (Past Presidents' Award), Colorado Scientific Society	2005
Geological Society of America Fellow	2002
Geological Society of America Distinguished Service Award	2001
Editors' Citation for Excellence in Refereeing, <i>Tectonics</i>	1989
Weizmann Postdoctoral Fellow, California Institute of Technology	1987-1989
Amoco Fellowship, Massachusetts Institute of Technology	1986-1987
Chevron Fellowship, California Institute of Technology	1980-1981

Professional Service

Council, Geological Society of America	July 2023-June 2027
Chair, Geophysics Ph.D. Program Committee, Univ. Colorado	August 2009-
Editor (with three others), theme issue of <i>Geosphere</i> on Sierra Nevada	2023-5
Associate Editor, <i>Geosphere</i>	December 2004-
Penrose Conferences and Thompson Field Forums Committee	July 2022-June 2025
Co-lead 2022 Thompson Field Forum in the Sierra Nevada	June 2022
Publications Committee, Geological Society of America	July 2014-June 2018
Associate Chair for Graduate Studies, Geological Sciences	July 2011-June 2014
GSA Nominations committee (emergency replacement)	2013
Member, NSF Earthscope panel	2010-2012
Co-chair, Continental Deformation Thematic Working Group for EarthScope Science	October 2008--2010
Publications Committee, Geological Society of America	July 2004-June 2007
Organizing Committee, “Thermal Processes in the Context of EarthScope” workshop	March 2004
Electronic Journal Committee, Geological Society of America	Summer 2003
Associate Editor, <i>Tectonics</i>	2000-2003
Technical Program co-chair, 1999 Geological Society of America national meeting (also entails membership in GSA’s Annual Program Committee, 1998-2000)	
Editorial board, <i>Geology</i> magazine	1990-1992
Reviewed articles for <i>Science</i> , <i>Nature</i> , <i>Geology</i> , <i>Tectonics</i> , <i>Geological Society of America Bulletin</i> , <i>Bulletin of the Seismological Society of America</i> , <i>Tectonophysics</i> , <i>Geophysical Journal International</i> , <i>Geosphere</i> , <i>Journal of Geophysical Research</i> , <i>Geophysical Research Letters</i> , <i>GSA Today</i> , <i>Geol. Soc. America Special Papers</i> , <i>G-cubed</i> , <i>Earth and Planetary Science Letters</i> , <i>Seismotectonics of Nepal Himalaya</i> special volume and <i>Reviews in Mineralogy and Geochemistry</i> .	

Professional Affiliations

American Geophysical Union
 Geological Society of America

Students Advised

- Charlie Wilson, Ph.D., “Constraining Lithospheric Deformation Mechanisms with Teleseismic Conversions,” 2003.
- Joya Tétreault, Ph.D., “Paleomagnetic, structural, and seismological evidence for oblique-slip deformation in fault-related folds in the Rocky Mountain Foreland, Colorado Plateau, and central Coast Ranges”, November 2006.

Heidi Reeg, M.S., “Seismic Structure of the Crust and upper Mantle of the Sierra Nevada, California,” August 2008.

William Levandowski, Ph.D., "Geophysical investigations of the origins and effects of density variations in the crust and upper mantle beneath the western and central United States", March 2014.

Melissa Bernardino, PhD, “Decrypting the upper mantle seismic structure of the Sierra Nevada, CA and vicinity: Insights from Vp/Vs, anisotropy, and attenuation,” defended May 2019.

Kyren Bogolub, PhD, “Geophysical characteristics of the High Plains of Colorado and the Sierra Nevada, California”, defended April, 2021.

Elize Chaves, MS student, graduated May 2023.

Student Committees

Jacob Sims (committee meeting Oct 2024)

Shunjie Han (comprehensive exam, spring 2023; PhD defense July 2024)

Mengyu Wu (comprehensive exam, fall 2022; PhD defense, Dec. 2023)

Chaunming Liu (comprehensive exam, April 2021, PhD defense July 2023)

Enrique Chon (comprehensive exam, Dec. 2020, committee mtg Jan 2023, PhD defense May 2023)

Jefferson Yarce (PhD defense, spring 2020)

Lindsay Harrison (advisory (1st year) committee), Jan 2020

Vanessa Gabel (advisory committee) Oct 2019, Dec 2020, May 2023, Jan 2024;
comprehensive exam April 2021, thesis defense January 2025.

Hongda Wang (comprehensive exam, April 2020, PhD defense April 2021)

Lili Feng (PhD defense, August 2019)

Wei Mao (comprehensive exam, April 2019, committee meeting Oct. 2020, defense March 2021)

Ashley Bellas (comprehensive exam, Nov 2018, PhD defense March 2021)

Nadine Reitman (comprehensive exam, May 2018, committee meeting spring 2019, 20, PhD defense Oct. 2020)

Anne Fetrow (comprehensive exam, Nov 2018, 1st year PhD committee meeting, fall 2016, other mtgs ‘17, ‘19, ‘20, ‘21; PhD defense April 2022)

Barra Peak (advisory (1st year) committee, fall 2019, comprehensive exam November 2021, committee meeting fall 2022, 2023, chair PhD committee, defense April 2024)

Katherine Pfeiffer (1st year MS meeting, fall 2016)

Jim Mize (1st year MS meeting, fall 2016; MS defense 2017)

Jiayi Xie (comprehensive exam, fall 2014, PhD defense May 2016)

Xi Liu (comprehensive exam, fall 2014, PhD defense May 2016)

Dan Zietlow (comprehensive exam, fall 2012, PhD defense March 2016)

Colin Sturrock (1st year committee meeting, fall 2015, comprehensive exam Dec 2017, committee meeting spring 2019, 2020, PhD defense 2021)

Rachel Havranek (1st year committee meeting, fall 2015)

Rachel Landman (comprehensive exam, fall 2012, PhD defense fall 2015)

Colin O'Rourke (comprehensive exam, fall 2012, PhD defense fall 2015)

William Yeck (comprehensive exam, fall 2011, PhD defense, spring 2015)

Joshua Johnson (MS defense, April 2015)

Jenny Nakai (comprehensive exam, summer 2014, PhD defense April 2018)

Weisen Shen (PhD defense, March 2014)

Danny Feucht (comprehensive exam, fall 2013; PhD summer 2017)

Lesley Butcher (MS defense, summer 2013)

Henry Berglund (MS defense, summer 2010)

Kevin Befus (MS defense, Spring 2010)

Nan Zhang (Physics, comprehensive exam fall 2009, PhD defense spring 2011)

Katherine Dayem (Ph.D. committee, summer 2009)

Walter Szeliga (comprehensive exam, spring 2008; PhD defense summer 2010)

Fan-Chi Lin (Physics, comprehensive exam committee, spring 2008; PhD defense fall 2009)

Wei Leng (comprehensive exam committee, spring 2008; PhD defense spring 2010)

Morgan Moschetti (comprehensive exam, physics, spring 2007; PhD defense summer 2009)

Chris Harig (comprehensive exam, spring 2007; PhD defense, summer 2010)

Nate Bradley (comprehensive exam, spring 2007; PhD defense Summer 2010)

Greg Benson (geophysics comprehensive exam, fall 2006)

Katherine Dayem (comprehensive exam, fall 2005)

Gaspar Monsalve (comprehensive exam, spring 2005)

Mary Beth Cheversia (preliminary/comprehensive exam, fall 2004, ongoing mtgs, 2005-7, PhD defense summer 2010)

Treasure Bailey (preliminary exam, spring 2004, comprehensive exam spring 2005, ongoing mtgs 2006, PhD defense 2010)

Vicki Rystrom (M.S., 2003)

Eric Cannon (preliminary exam, spring 2002)

Oliver Boyd (preliminary exam, spring 2002; comps, 2002; PhD 2004)

Lynda Lastowka (M.S., defended summer 2001)

Otina Fox (preliminary exam, fall 2000)

Students Supervised (not thesis advisor)

Colin Shaw, M.S. student, mapping in Gale Hills, southern Nevada, fall 1994 to spring, 1995.

Sierran Paradox Experiment fieldwork, summer 1997, undergraduates working under me under NSF Research Experiences for Undergraduate (REU) grant: Seth Mueller, Jason Edwards, Amy Jiron, Karen Doty, Sarah Keyser.

Jason Edwards, undergraduate, earthquake locations in the southern Sierra, fall 1997 (presented talk at Seismological Society of America meeting)

Kevin Reitz, earthquake locations in the southern Sierra, summer 1998 (on Sierran REU NSF grant).

David Oliver, undergraduate, literature searching for seismic velocity structures, fall 1999.

Daniel Brothers, working under supervision of grad student Charlie Wilson, picking arrival times of teleseisms for New Zealand and Coso datasets, 2002

Mariela Salas, SMART student (from Univ. Puerto Rico), assisting Joya Tetreault in California paleomag study (her project to do magnetostratigraphy of Etchegoin Fm), summer 2003

Byron Boyle, mentorship/SURF, magnetostratigraphy of Mesozoic sediments, Colorado Plateau, spring/summer 2003 (working mainly with Joya Tetreault)

Max Knop, assisting in fieldwork, California paleomag project, summer 2003.

Asa Firestone, independent study on paleomagnetism in western Colorado, fall 2004.

Amanda Thomas, IRIS intern from Georgia Inst. Technology, Sierra Nevada seismology, summer 2005.

Will Levandowski, IRIS intern from Princeton Univ., Sierra Nevada Seismology, summer 2006.

Ashley Grijalva, RESESS intern from Univ. Texas, El Paso, Pn tomography, summer 2012.

Publications

CU Students indicated by italics

Refereed Publications (including ms accepted for publication)

Bogolub, K. R., & Jones, C. H. (2022). Quantifying the cryptic topography of the High Plains. *Tectonics*, 41, e2022TC007370, doi: 10.1029/2022TC007370.

Ryan, J., A. M. Frassetto, O. Hurd, **C. H. Jones**, J. Unruh, G. Zandt, H. Gilbert, and T. J. Owens, Unusually Deep Earthquakes in the Central Sierra Nevada: Foundering Ultramafic Lithosphere?, *Geosphere*, 16 (1), 357-377, doi: 10.1130/GES02158.1, 2020.

Bernardino, M., C. H. Jones, W. Levandowski, I. Bastow, T. J. Owens, H. Gilbert, A multicomponent Isabella anomaly: Resolving the physical state of the Sierra Nevada upper mantle from Vp/Vs-anisotropy tomography, *Geosphere*, 15, 2018-2042, 2019. doi: 10.1130/GES02093.1.

- Levandowski, W. B., C. H. Jones, L. A. Butcher and K. Mahan, Lithospheric density models reveal evidence for Cenozoic uplift of the Colorado Plateau and Great Plains by lower-crustal hydration, *Geosphere*, 14, 1150-1164. doi:10.1130/GES01619.1, 2018.*
- Levandowski, W. B., and C. H. Jones, Linking Sierra Nevada, California uplift to subsidence of the Tulare basin using a seismically derived density model, *Tectonics*, 34, 2349-2358, doi: 10.1002/2015TC003824, 2015.*
- Molnar, P., P. England, C. H. Jones, Mantle dynamics, isostasy, and the construction and support of high terrain, *JGR*, 120 (3), 1932-1957, doi: 10.1002/2014JB011724, 2015.*
- Jones, C. H.,** Reeg, H., G. Zandt, H. Gilbert, T. J. Owens, J. Stachnik, P-wave tomography of potential convective downwellings and their source regions, Sierra Nevada, California, *Geosphere*, in press, doi:10.1130/GES00961.1, 2014.
- Levandowski, W.B., C.H. Jones, W. Shen, M.H. Ritzwoller and V. Schulte-Pelkum, Crustal and upper mantle density variations beneath the western U.S.: Origins of topography in the Western US: Mapping crustal and upper mantle density variations using a uniform seismic velocity model, *J. Geophys. Res.*, doi: 10.1002/2013JB010607, 2014*
- Unruh, J. R., E. Hauksson, and C. H. Jones, Internal deformation of the Southern Sierra Nevada microplate associated with foundering lower lithosphere, California, *Geosphere*, 10(1), 107-128, doi:10.1130/GES00936.1, 2014.*
- Levandowski, W., C. H. Jones, H. Reeg, A. Frassetto, H. Gilbert, G. Zandt, and T. J. Owens, Seismological estimates of means of isostatic support of the Sierra Nevada, *Geosphere*, 9(6), 1552-1561, doi: 10.1130/GES00905.1, 2013.*
- Farmer, G.L., A. F. Glazner, W. T. Kortmeier, M. A. Cosca, C. H. Jones, J. E. Moore, R. A. Schweickert, Mantle lithosphere as source of post-subduction magmatism, northern Sierra Nevada, California, *Geosphere*, 9(5), 1102-1124, doi: 10.1130/GES00885.1, 2013.*
- Gilbert, H., Y. Yang, D. W. Forsyth, C.H. Jones, T.J. Owens, G. Zandt, and J.C. Stachnik, Imaging lithospheric foundering in the structure of the Sierra Nevada, *Geosphere*, 8(6), 1310-1330, doi: 10.1130/GES00790.1, 2012*
- Schulte-Pelkum, V, G. P. Biasi, A. F. Sheehan, and C. H. Jones, Differential motion between upper crust and lithospheric mantle in the Central Basin and Range, *Nature Geoscience*, 4(9), 619-623, doi: 10.1038/NGEO1229, 2011.*
- Frassetto, A., G. Zandt, H. Gilbert, T. J. Owens, and C. H. Jones, Structure of the Sierra Nevada from receiver functions and implications for lithospheric foundering, *Geosphere*, 7(4), 898-921, doi: 10.1130/GES00570.1, 2011.*
- Yang, Y.; M. H. Ritzwoller, and C. H. Jones, Crustal structure determined from ambient noise tomography near the magmatic centers of the Coso region, southeastern California, *Geochem. Geophys. Geosyst.*, 12 (2), Q02009, DOI:10.1029/2010GC003362, 2011.*
- Jones, C. H.,** G. L. Farmer, B. Sageman, and S. Zhong, Hydrodynamic Mechanism for the Laramide Orogeny, *Geosphere*, 7(1), 183-201, doi: 10.1130/GES00575.1, 2011.

- Frassetto, A., G. Zandt, H. Gilbert, T. J. Owens, and **C. H. Jones**, Improved imaging with phase-weighted common-conversion-point stacks of receiver functions, *Geophys. J. Int.*, doi: 10.1111/j.1365-246X.2010.04617.x, 182 (1), 368-374, 2010.
- Mueller, K., G. Kier, T. Rockwell, and **C. H. Jones**, Quaternary rift-flank uplift of the Peninsular Ranges in Baja and Southern California by removal of mantle lithosphere, *Tectonics*, doi:10.1029/2007TC002227, 28, TC5003, 2009.
- Tetreault, J., C. H. Jones*, E. Erslev, M. Hudson, S. Larson, and S. Holdaway, Paleomagnetic and structural evidence for oblique-slip in a fault-related fold, Grayback Monocline, Colorado, *Geol. Soc. Am. Bull.*, 120 (7/8); p. 877–892; doi: 10.1130/B26178.1, 2008.
- Boyd, O. S., M. K. Savage, A. F. Sheehan, C. H. Jones*, Illuminating the plate interface structure beneath Cook Strait, New Zealand with receiver functions, *J. Geophys. Res.* 112 (B6), B06310, <http://dx.doi.org/10.1029/2006JB004552>, 2007
- Gilbert, H., **C. Jones**, T. J. Owens, and G. Zandt, Imaging Sierra Nevada Lithospheric Sinking, *EOS*, 88 (21), pp. 225 & 229, May 22, 2007
- Jones, C. H.**, G. L. Farmer, and J. R. Unruh, Tectonics of Pliocene removal of lithosphere of the Sierra Nevada, California, *Geol. Soc. Am. Bull.*, 116 (11/12), 1408-1422, 2004.
<http://www.gsa-journals.org/gsaonline/?request=get-abstract&doi=10.1130%2FB25397.1>
- Wilson, C. K., C. H. Jones*, A. F. Sheehan, P. Molnar, *O. S. Boyd*, Distributed deformation in the lower crust and upper mantle beneath a continental strike-slip fault zone: Marlborough fault system, South Island, New Zealand, *Geology*, 32, 837-840, 2004.
<http://www.gsa-journals.org/gsaonline/?request=get-abstract&doi=10.1130%2FG20657.1>
- Zandt, G., H. Gilbert, T. J. Owens, M. Ducea, J. Saleeby, and **C. H. Jones**, Active foundering of a continental arc root beneath the southern Sierra Nevada, California, *Nature*, 431, 41-46, 2004.
- Boyd, O., C. H. Jones*, A. F. Sheehan, Foundering lithosphere imaged beneath the southern Sierra Nevada, California, USA, *Science*, 305, 660-662, 2004.
<http://www.sciencemag.org/cgi/content/short/305/5684/660>
- Molnar, P. H., and **C. H. Jones**, A test of laboratory based rheological parameters of olivine from an analysis of late Cenozoic convective removal of mantle lithosphere beneath the Sierra Nevada, California, USA, *Geophysical Journal International*, doi: 10.1111/j.1365-246X.2004.02138, 156, 555-564, 2004.
- Wilson, C. K., C. H. Jones*, and *H. J. Gilbert*, A single-chamber silicic magma system inferred from shear-wave discontinuities of the crust and uppermost mantle, Coso geothermal area, California, *J. Geophysical Research*, 108 [B5], 10.1029/2002JB001798, 2003.
<http://www.agu.org/pubs/crossref/2003/2002JB001798.shtml>
- Jones, C. H.**, User-driven Integrated Software Lives: “PaleoMag” Paleomagnetism Analysis on the Macintosh, *Computers and Geosciences*, 28 (10), 1145-1151, 2002.

- Wannamaker, P. E. , J. M. Bartley, A. F. Sheehan, **C. H. Jones**, A. R. Lowry, Trevor A. Dumitru, Todd A. Ehlers, W. S. Holbrook, G. L. Farmer, M. J. Unsworth, D. B. Hall, D. S. Chapman, D. A. Okaya, B. E. John, and J. A. Wolfe, Great Basin-Colorado Plateau transition in central Utah: An interface between active extension and stable interior, *in* The Geologic Transition, High Plateaus to Great Basin: A symposium and field guide: The Mackin Volume, ed. by M. C. Erskine, J. E. Faulds, J. M. Bartley and P. Rowley, *Utah Geol. Assoc. UGA-30/Amer. Assoc. Petr. Geol. Guideb. GB78*, Cedar City, Utah, September 20-23, p. 1-38, 2001.
- Jones, C. H.**, L. J. Sonder, and J. R. Unruh, Lithospheric gravitational potential energy and past orogenesis: Implications for conditions of initial Basin and Range and Laramide deformation, *Geology*, 26, 639-642, 1998. [http://www.gsaonline.org/gsaonline/?request=get-abstract&doi=10.1130%2F0091-7613\(1998\)026%3C0639:LGPEAP%3E2.3.CO%3B2](http://www.gsaonline.org/gsaonline/?request=get-abstract&doi=10.1130%2F0091-7613(1998)026%3C0639:LGPEAP%3E2.3.CO%3B2).
- Jones, C. H.**, and R. A. Phinney, Seismic structure of the lithosphere from teleseismic converted arrivals observed at small arrays in the southern Sierra Nevada and vicinity, California, *Journal of Geophysical Research*, 103, 10,065-10,090, 1998.
- Unruh, J.R., Sonder, L.J., and **Jones, C.H.**, Relation of gravitationally driven lithospheric extension to low slip-rate faults and regional seismic hazards in the western United States, in Lund, W.R., ed., Proceedings Volume, Basin and Range Province Seismic-Hazards Summit, Western States Seismic Policy Council: *Utah Geological Survey Miscellaneous Publication* 98-2, p. 167-179, 1998.
- Sheehan, A. F., **C. H. Jones**, M. K. Savage, S. Ozalaybey, and J. M. Schneider, Contrasting lithospheric structure beneath the Colorado Plateau and Great Basin: Initial results from Colorado Plateau - Great Basin PASSCAL experiment, *Geophysical Research Letters*, 24 (21), 2609-2612, 1997.
- Jones, C.H.**, J. R. Unruh, and L. J. Sonder, The role of gravitational potential energy in active deformation in the southwestern United States, *Nature*, 381 (6577), 37-41, 1996.
- Wernicke, B., R. Clayton, M. Ducea, **C. H. Jones**, S. Park, S. Ruppert, J. Saleeby, J. K. Snow, L. Squires, M. Flidner, G. Jiracek, R. Keller, S. Klemperer, J. Luetgert, P. Malin, K. Miller, W. Mooney, H. Oliver, and R. Phinney, Origin of high mountains in the continents: The southern Sierra Nevada, *Science*, 271, 190-193, 1996.
- Sheehan, A. F., G. A. Abers, **C. H. Jones**, and A. Lerner-Lam, Crustal thickness variations across the Colorado Rocky Mountains from teleseismic receiver functions, *J. Geophys. Res.*, 100, 20,391-20,404, 1995.
- Park, S. K., R. Clayton, M. Ducea, B. Wernicke, **C. H. Jones**, and S. Ruppert, Project combines seismic and magnetotelluric surveying to address the Sierran root question, *EOS*, 76 (30), 297-8, July 25, 1995.
- Wesnowsky, S. G., and **C. H. Jones**, Slip partitioning, spatial and temporal changes in the regional stress field, and the relative strength of active faults in the Basin and Range, *Geology*, 22, 1031-1034, 1994. [http://www.gsaonline.org/gsaonline/?request=get-abstract&doi=10.1130%2F0091-7613\(1994\)022%3C1031:OSSPSA%3E2.3.CO%3B2](http://www.gsaonline.org/gsaonline/?request=get-abstract&doi=10.1130%2F0091-7613(1994)022%3C1031:OSSPSA%3E2.3.CO%3B2)

- Sonder, L. J., **C. H. Jones**, S. L. Salyards, and K. M. Murphy, Vertical-axis rotations in the Las Vegas Valley Shear Zone, southern Nevada: Paleomagnetic constraints on kinematics and dynamics of block rotations, *Tectonics*, 13 (4), 769-788, 1994.
<http://www.agu.org/journals/tc/tc9404/94TC00352.pdf>
- Savage, M. K., Li Li, J. P. Eaton, **C. H. Jones**, and J. N. Brune, Earthquake refraction profiles of the root of the Sierra Nevada, *Tectonics*, 13 (4), 803-817, 1994.
- Jones, C. H.**, H. Kanamori, and S. W. Roecker, Missing roots and mantle “drips:” Regional P_n and teleseismic arrival times in the Southern Sierra Nevada and vicinity, California, *J. Geophys. Res.*, 99 (B3), 4567-4601, 1994.
- Jones, C. H.**, B. P. Wernicke, G. L. Farmer, J. D. Walker, D. S. Coleman, L. W. McKenna, and F. V. Perry, Variations across and along a major continental rift: An interdisciplinary study of the Basin and Range Province, western USA, *Tectonophysics*, 213, 57-96, 1992.
- Magistrale, H., H. Kanamori, and **C. H. Jones**, Forward and inverse three-dimensional P-wave velocity models of the southern California crust, *J. Geophys. Res.*, 97, 14,115-14,135, 1992.
- Jones, C. H.**, and S. G. Wesnousky, Variations in strength and slip rate along the San Andreas Fault system, *Science*, 256, 83-86, 1992.
- Jones, C. H.**, Is extension in Death Valley accommodated by thinning of the mantle lithosphere beneath the Sierra Nevada, California?, *Tectonics*, 6, 449-473, 1987.
- MIT 1985 Field Geophysics Course (**C. H. Jones**, M. R. Nelson, G. Abers, C. Decker, J. Hegley, R. Herrmann, M. Kohn, T. Madden, R. Manikkalingam, J. Matarese, D. Meinholz, P. Molnar, and C. Ruppel) and S. Biehler, A geophysical investigation of the northern Panamint Valley, Inyo County, California: Evidence for possible low-angle normal faulting at shallow depth in the crust, *J. Geophys. Res.*, 92, 10427-10441, 1987.
- Nelson, M. R., and **C. H. Jones**, Paleomagnetism and crustal rotations along a shear zone, Las Vegas Range, southern Nevada, *Tectonics*, 6, 13-33, 1987.
- Refereed Publications as a minor member of a large group:
- Fliedner, M.M., S. Ruppert, and Southern Sierra Nevada Continental Dynamics Working Group (**C. H. Jones** 9th of 14 listed), Three-dimensional crustal structure of the southern Sierra Nevada from seismic fan profiles and gravity modeling, *Geology*, 24, 367-370, 1996.
- Invited Publications (no peer review)
- Jones, C. H.**, and J. B. Saleeby, Introduction: Geodynamics and Consequences of Lithospheric Removal in the Sierra Nevada, California. *Geosphere*, 9(2), 188–190.
doi:10.1130/GES00907.1, 2013.
- Sonder, L. J., and **C. H. Jones**, Western United States extension: How the West was widened, *Annual Review of Earth and Planetary Sciences*, 27, 417-462, 1999.
<http://arjournals.annualreviews.org/doi/abs/10.1146/annurev.earth.27.1.417>
- Jones, C. H.**, How faults accommodate plate motion [Perspective], *Science*, 300, 1105-1106, 2003. <http://www.sciencemag.org/cgi/content/summary/300/5622/1105>

Non-Refereed Publications

Jones, C. H., C. Henry, E. Cassel, J. Wakabayashi, 2023, Old or Young: The Topographic Evolution of the Sierra Nevada (Thompson Field Forum report), *GSA Today*, v. 33 (9), pp. 30-33.

Jones, C. H., H. Gilbert, G. Zandt, and T. Owens, The Sierra Nevada EarthScope Project: A first report from the broadband FlexArray, *IRIS Newsletter*, pp. 12-14, Nov. 2006.
<http://www.iris.edu/news/IRISnewsletter/2006/3/2006_Issue3NewsletterHi.pdf>

Wilson, C. K., and C. H. Jones, Using Antelope for PASSCAL field data management, *IRIS DMS Electronic Newsletter*, 4, no. 2,
<http://www.iris.washington.edu/newsletter/vol4no2/page3.htm>, 2002.

Jones, C. H., L. J. Sonder, and J. R. Unruh, Reply to Comment on “Lithospheric gravitational potential energy and past orogenesis: Implications for conditions of initial Basin and Range and Laramide deformation”, *Geology*, 27, 475-476, 1999.

Jones, C. H. (on behalf of the field team of the CPGB experiment), The 1994-5 Colorado Plateau-Great Basin PASSCAL Experiment, *IRIS newsletter*, 15 (1), 1-4, 1996a.

Jones, C. H., Opinions: On NSF proposal submitting policies and the changing role of junior faculty, [Geol. Soc. Amer.] *Structural Geology and Tectonics Division Newsletter*, 15 (1), 11, 1996b.

Conference field guide

Cassel, E., C. D. Henry, **C. H. Jones.** and J. Wakabayashi, Old or Young? The Topographic Evolution of the Sierra Nevada; Field Guide for the 2022 GSA Thompson Field Forum June 20-27, 2022, 252 pp.

Book Reviews

Jones, C.H., Journeys West, book review of "Rough-hewn Land," by Keith Heyer Meldahl, *Nature Geoscience*, 5 (8), p. 519, 2012.

Jones, C. H., Review of “Exploring the Highest Sierra,” by James G. Moore, *Geotimes*, February, 2001.

Papers submitted or in preparation

Jones, C.H., The Late Cretaceous Dynamics of the Mojave Waistland, California, for submission to *GSA Special Paper* entitled *Jurassic-Paleogene tectonic evolution of the North American Cordillera*, S. Gordon, R. Miller, M. Rusmore, and B. Tikoff, editors. Submitted July 2024; revised December 2024 & January 2025.

Jones, C.H. Geophysics of the Sierra Nevada, for submission to *GSA Field Guide*, The Sierra Nevada: Old or Young?: The Topographic Evolution of the Sierra Nevada, C.D. Henry and C. H. Jones, editors. Submitted January 2025.

Jones, C.H. Sierran Elevation Hypotheses: A Brief History, for submission to *GSA Field Guide*, The Sierra Nevada: Old or Young?: The Topographic Evolution of the Sierra Nevada, C.D. Henry and C. H. Jones, editors. Submitted January 2025.

Books

Burger, H. R., A. F. Sheehan, and **C. H. Jones**, *Introduction to Applied Geophysics*, W. W. Norton, New York, 2006. (Reissued 2023 by Cambridge Univ. Press).

Jones, C. H., *The Mountains that Remade America: How Sierra Nevada Geology Impacts Modern Life*, Univ. California Press, Berkeley, 338 pp+ xx, 2017.

Books in preparation

Henry, C. D., **C. H. Jones** (eds.), The Sierra Nevada: Old or Young?: The Topographic Evolution of the Sierra Nevada, *Geol. Soc. Amer. Field Guide*, to be submitted by August 2024. [I will have some authored material in this volume]

Burger, H. R., A. F. Sheehan, **C. H. Jones**, W. Levandowski. *Introduction to Applied Geophysics*, 2nd ed., Cambridge Univ. Press.

Computer Programs

Jones, C. H., R. Ripperdan, and J. Kirschvink, “PaleoMag,” an interactive paleomagnetism analysis code for the Apple Macintosh, 1990-2018 (in use at more than 18 different institutions on four continents; limited compatibility updating continuing), <http://cires.colorado.edu/people/jones.craig/PMag3.html>.

Jones, C.H., Geophysical software suite (software for Burger textbook, continuing to maintain and update), 2006-present.

Archived Geophysical Datasets

(IRIS has eliminated project-specific data pages but now provides DOIs for data sets; the datasets can be accessed and queried online through <http://www.iris.edu/SeismiQuery/> using the year and network code. Information on such datasets is also listed at <http://www.fdsn.org/citation.htm>)

Wilson, C. K., **C. H. Jones**, A. F. Sheehan, P. H. Molnar, M. K. Savage, and T. Stern, Marlborough New Zealand Short Period Arrays, c. 0.8 Tb, dataset xb00, XB01, XB02, doi: 10.7914/SN/XB_2000, 2002.

Jones, C. H., and R. A. Phinney, Coso Geothermal Field Short-Period Array experiment, *PASSCAL YA98, YA99, YA00*, 150 Gb of continuous data, dataset YA98, YA99, YA00, doi: 10.7914/SN/YA_1998, 2000.

Jones, C H., and R. A. Phinney, Sierran Paradox Experiment, *PASSCAL XJ 97*, 54 Gb of continuous data, doi: 10.7914/SN/XJ_1997, 1998.

Jones, C. H., A. F. Sheehan, M. K. Savage, Colorado Plateau-Great Basin Experiment, *PASSCAL XH-94, XH-95, and 97-001*, doi: 10.7914/SN/XH_1994, 1997.

Abstracts (not peer reviewed)

Jones, C.H., A Purely Extensional Origin to the Pelona-Orocopia-Rand Schist exposures?, *Geol. Soc. Am. Abstr. Prog.*, v 56 (5), paper 23-9, doi: 10.1130/abs/2024AM-404918, 2024.

Jones, C.H., Consequences of the Mojave Waistland, *Geol. Soc. Am. Abstr. Prog.*, v. 55 (6), paper 68-9, doi: 10.1130/abs/2023AM-395448, 2023

Jones, C.H., The Mysterious Seismotectonics of the Interior of the Sierra Nevada-Great Valley Plate, *Geol. Soc. Am. Abstr. Prog.*, v. 54 (5), paper 66-11, doi: 10.1130/abs/2022AM-383731, 2022.

Jones, C. H., The Gravitational Potential Energy Construct: Strengths and Weaknesses in Understanding Orogenesis, *Geological Society of America Abstracts with Programs*, abstract 165-3. Vol 53, No. 6, doi: 10.1130/abs/2021AM-369463, 2021.

Jones, C. H., M. Bernardino, A Passive Seismological View of The Coso Volcanic System, *Geological Society of America Abstracts with Programs*, abstract 16-5, Vol. 53, No. 4, doi: 10.1130/abs/2021CD-363017, May, 2021.

Bernardino, M. J., C. H. Jones, Screening for elastic multipathing effects on teleseismic body waves, *JpGU-AGU Joint Meeting 2020*, SSS17-P11, July 2020.

Jones, C. H., The 85 Ma Trainwreck: Deconstructing the debris that made the Cordilleran Orogen of today (invited), *Geol Soc. Am. Abstracts with Programs*, v. 51 (5), doi: 10.1130/abs/2019AM-339562, 2019.

Bogolub, Kyren, C. H. Jones, S. W. Roecker, Finding Focus in the Pn Shadow Zone of the Sierra Nevada with P Coda Migration, *Seismol. Soc. Am. Ann. Mtg*, Seattle, WA, 25 April 2019, <<https://seismosoc.secure-platform.com/a/gallery/rounds/7/details/4094>>, 2019.

Bogolub, Kyren, C. H. Jones, S. W. Roecker, Illuminating the Sierra Nevada Pn Shadow Zone with 2.5D Full-waveform Forward Modeling, *Am. Geophys. Union Fall Meeting*, DI23A-0406, 2017.

Bernardino, M., C. H. Jones, W. Levandowski, Foundering of Heterogeneous Material, Sierra Nevada, California, *GSA Abstract with Program*, 49 (6), doi: 10.1130/abs/2017AM-307287, 2017.

Bernardino, Melissa, C. H. Jones, and G. Monsalve, Upper mantle anisotropic attenuation of the Sierra Nevada and surroundings, *Am. Geophys. Union Fall Meeting*, T13C-2724, 2016

Bogolub, Kyren, and C. H. Jones, Decoding cryptic topography in the High Plains of Colorado, *Geological Society of America Abstracts with Programs*. Vol. 48, No. 7, Paper 317-6, doi: 10.1130/abs/2016AM-287837□□

Jones, C.H., W. Levandowski and K. Bogolub, A Plains attack on the Cordillera, *Geological Society of America Abstracts with Programs*. Vol. 48, No. 7, paper 203-7, doi: 10.1130/abs/2016AM-287793, 2016 [DOI not resolving properly, 10/16]□□

Bernardino, M., C. H. Jones, W. Levandowski, tectonic underpinings of the Sierra Nevada and surroundings: Resolving the physical state of the upper mantle using teleseismic shear waves, *Geological Society of America Abstracts with Programs*. Vol. 48, No. 7, paper 267-9, doi: 10.1130/abs/2016AM-286826.

- Bernardino, M., C. H. Jones, W. Levandowski, S-wave tomographic model of the Sierra Nevada, California: Constraining thermal and compositional effects through Vp/Vs, anisotropy, and attenuation, AGU Fall meeting, abstract S23C-2712, 2015.*
- Jones, C. H., W. Levandowski, M. Bernardino, and S. Roecker, Resolving the character of the cryptic crust of the western Sierra Nevada, California. Geological Society of America *Abstracts with Programs*. Vol. 47, No. 7, p.463, 2015.**
- Jones, C.H.,** Was there a Laramide "flat slab"? , AGU Fall meeting, abstract T22B-03, 2014 □ □
- Levandowski, W, C. H. Jones, 3D density model of the western US lithosphere: Insights on chemistry, temperature, topography, and intraplate stress, AGU Fall meeting, abstract T43C-4742, 2014. □ □*
- Levandowski, W, C. H. Jones, L. A. Butcher, K. Mahan, and G. L. Farmer, Top-down or bottom-up? Intraplate deformation in the western North American interior recorded and controlled by lithology, Geological Society of America *Abstracts with Programs*. Vol. 46, No. 6, p.787, 2014.*
- Jones, C. H., H. Reeg, G. Zandt, H. Gilbert, T. J. Owens, and J. Stachnik, Slab, drip, or peeling lithosphere: Teleseismic P-wave tomography and the Isabella anomaly of the southwestern Sierra Nevada, California, AGU Fall meeting, S21A-2381, 2013.**
- Bernardino, M. J., C. H. Jones, Understanding complex teleseismic wave propagation in the Sierra Nevada through vertical-component P-wave receiver functions, AGU Fall Meeting, S31C-2366, 2013*
- Levandowski, W, C. H. Jones, G. C. Oliver Constraining age of delamination with thermal models: a multidisciplinary view of the Sierra Nevada, CA , AGU Fall Meeting, T31D-2550, 2013.*
- Butcher, L. A., K. H. Mahan, C. H. Jones, G L. Farmer, Colorado Plateau uplift through deep crustal hydration? AGU Fall Meeting, T42B-03 2013.*
- Jones, C. H.,** Volume balancing seismic tomography: Quantitative tests of the origin of the Isabella Anomaly and the Sierra Nevada, GSA Annual Meeting, Paper 316-3, *GSA Abstracts with Programs*, 45 (7), p. 727, 2013.
- Jones, C. H., K. Mahan, L. Butcher, W. Levandowski, and G. L. Farmer, Elevating the West: Is the answer in Plains sites? (invited) , GSA Annual Meeting, Paper 14-1, *GSA Abstracts with Programs*, 45 (7), p. 55, 2013.**
- Butcher, L. A., K. Mahan, C. H. Jones, and G. L. Farmer, Deep crustal hydration of the Colorado Plateau and implications for Laramide uplift, GSA Annual Meeting, Paper No. 14-2, *GSA Abstracts with Programs*, 45 (7), p. 55, 2013.*
- Levandowski, W., C. H. Jones, L. A. Butcher, and K. Mahan, Uplift of the Colorado Plateau by lithospheric removal and minor crustal hydration: insights from quantitative density models, GSA Annual Meeting, Paper No. 316-8, *GSA Abstracts with Programs*, 45 (7), p. 727, 2013.*
- Jones, C. H., S. Zhong, B. Sageman, and G. L. Farmer, How might the bottom matter? Provocations from an alternative model of the Laramide orogeny (invited), GSA Annual Meeting, Paper No. 293-6, *GSA Abstracts with Programs*, 45 (7), p. 676, 2013.**
- Levandowski, W. B., C. H. Jones and J. Unruh, Gravitational potential energy and principle strain orientations in Southern California, *Seismol. Res. Letts.*, 84 (2), 378, 2013.*
- Levandowski, W., C. H. Jones; W. Shen; M. H. Ritzwoller; V. Schulte-Pelkum. Density, buoyancy and gravitational potential energy in the Western U.S. , *EOS Trans AGU*, 93, Fall Mtg. Suppl., abstract T21E-2627, 2012.*
- Jones, C. H., K. Mahan, and G. L. Farmer, Post-Laramide Epiorogeny through Crustal Hydration?, *EOS (Trans. Am. Geophys. Union)*, 92 (Fall Suppl.), abstract T11B-2309, 2011.**

- Levandowski, W., C. H. Jones, M. H. Ritzwoller, W. Shen, H. J. Gilbert, Buoyancy sources in the Western U.S.: Two case studies at different scales, EOS Trans AGU, 92, Fall Mtg. Suppl., abstract T11B-2308, 2011.*
- Frassetto, A., H. J. Gilbert, G. Zandt, O. Hurd, J. C. Ryan, **C. H. Jones**, and T. J. Owens, Seismic character of the crust and upper mantle beneath the Sierra Nevada (Invited), , *EOS Trans AGU, 92, Fall Mtg. Suppl., abstract T53A-2483, 2011.*
- Harig, C., S. Zhong, **C. H. Jones**, Controls On Subduction Dip Angles And Their Effects On Deformation In The Overriding Plate, *Geol. Soc. Am. Abstr. Prog., 42 (5), 78 (Abstract 24-1), 2010.*
- Jones, C. H.**, Deviatoric stress vs. strength in continental deformation, with examples from the western U.S., *Geol. Soc. Am. Abstr. Prog., 42 (5), 79 (Abstract 24-11), 2010.*
- Levandowski, W., C. H. Jones, A. Frassetto, G. Zandt, H. Gilbert, T. J. Owens, Buoyancy and downwelling: distribution of eclogite in the Sierra Nevada Geol. Soc. Am. Abstr. Prog., 42 (5), Geol. Soc. Am. Ann. Mtg., Abstract 74-11, 2010.*
- Ritzwoller, M H, Y. Yang, A. L. Levshin, M. P. Barmin, **C. H. Jones**, Subsurface Characterization Beneath the Coso Geothermal Field by Ambient Noise Tomography, *Eos Trans. AGU, 90(52), Fall Meet. Suppl., Abstract U51C-0038, 2009.*
- Schulte-Pelkum, V, G. P. Biasi, A. F. Sheehan, **C. H. Jones**, New Moho Depths Corroborate an Ancient Lithospheric Remnant Under the Central Basin and Range, *Eos Trans. AGU, 90(52), Fall Meet. Suppl., Abstract V53A-08, 2009.*
- Jones, C. H.**, G. L. Farmer, B. Sageman, and S. Zhong, Rethinking the Laramide: Limited Laramide shallow subduction enhanced by hydrodynamic effects in the asthenospheric wedge, *Eos Trans. AGU, 89(53), Fall Meet. Suppl., Abstract U54A-01, 2008.*
- Reeg, H., C. H. Jones, H. Gilbert, T. J. Owens, and G. Zandt, Tomographic observations connecting convective downwellings with lithospheric source regions, Sierra Nevada, California, Eos Trans. AGU, 89(53), Fall Meet. Suppl., Abstract S32B-06. 2008.*
- Levandowski, W., H. Reeg, C. H. Jones, G. Zandt, T. J. Owens, and H. Gilbert, Constraints on lithology of downwelling lithosphere from the Sierra Nevada, California, Eos Trans. AGU, 89(53), Fall Meet. Suppl., Abstract U51B-0044, 2008.*
- Frassetto, A., H. Gilbert, G. Zandt, T. J. Owens, and **C. Jones**, Seismic character of the crust and upper mantle beneath the Sierra Nevada, *Eos Trans. AGU, 89(53), Fall Meet. Suppl., Abstract S32B-05, 2008.*
- T. J. Owens, I. D. Bastow, N. Badger, G. Zandt, **C. Jones**, and H. Gilbert, Shear wave anisotropy beneath the Sierra Nevada: Implications for lithospheric foundering and mantle flow, *Eos Trans. AGU, 89(53), Fall Meet. Suppl., Abstract S33B-1956 , 2008.*
- Ryan, J. C., A. Frassetto, O. Hurd, G. Zandt, H. Gilbert, T. Owens, and **C. Jones**, Focal Mechanisms for Deep Crustal Earthquakes in the Central Foothills and Near Yosemite National Park in the Sierra Nevada, California, *Eos Trans. AGU, 89(53), Fall Meet. Suppl., Abstract S33B-1957, 2008.*
- Gilbert, H., Y. Yang, D. W. Forsyth, **C. H. Jones**, T. J. Owens, and G. Zandt, Bounds of foundering in the southern Sierra Nevada, *Eos Trans. AGU, 89(53), Fall Meet. Suppl., Abstract U54A-04, 2008.*
- Zandt, G., H. Gilbert, **C. Jones**, and T. J. Owens, Insights on Lithospheric Delamination from the Sierra Nevada Earthscope Project (SNEP), *Geol. Soc. Am Abstr. Prog., 40 (6), p. 396, abstract 263-7, 2008.*
- Owens, T., H. Gilbert, G. Zandt, **C. Jones**, Lithospheric Foundering: Constraints from the Sierra Nevada EarthScope Project, 33rd Intl. Geol. Congress, Oslo, Norway, Aug. 2008. <
<http://www.cprm.gov.br/33IGC/1345703.html>>

- Levandowski, W., C. Jones, G. Nolet, and B. Phinney, Mysterious Moho Beneath the Southern Sierra Nevada, Analyzed with Beam-Formed Receiver Functions, Eos Trans. AGU, 88 (52), Fall Mtg. Suppl., Abstract T33A-1148, 2007.*
- Tetreault, J. L. and C. H. Jones, Paleomagnetic and Seismologic Evidence for Oblique-Slip Partitioning to the Coalinga Anticline From the San Andreas Fault, Eos Trans. AGU, 88 (52), Fall Mtg. Suppl., Abstract T43A-1099, 2007.*
- Reeg, H., C. H. Jones, H. Gilbert, T. Owens and G. Zandt, Teleseismic Travel-Time Tomography of the Sierra Nevada and its Foundering Lithosphere, Eos Trans. AGU, 88 (52), Fall Mtg. Suppl., Abstract T33A-1150, 2007.*
- Badger, N. B., I. D. Bastow, T. J. Owens, G. Zandt, C. H. Jones, and H. Gilbert, Shear wave anisotropy beneath the Sierra Nevada range: Implications for lithospheric foundering and upper mantle flow, Eos Trans. AGU, 88 (52), Fall Mtg. Suppl., Abstract T33A-1149, 2007.*
- Zandt, G., H. Gilbert, A. Frassetto, T. Owens, and C. Jones, Insights on Lithospheric Foundering from the Sierra Nevada Earthscope Project (SNEP), Eos Trans. AGU, 88 (52), Fall Mtg. Suppl., Abstract T31E-01, 2007.*
- Jones, C. H., G. L. Farmer, B. Sageman, and S. Zhong, Exploring An Alternative Explanation For The Laramide Orogeny, Geological Society of America Abstracts with Programs, Vol. 39, No. 6, p. 53, 2007.*
- Bailey, T.L., G. L. Farmer, C. Jones, Reassessing Magmatic Space-Time-Composition Patterns in the Colorado Mineral Belt, USA, Eos Trans. AGU, 88(23), Jt. Assem. Suppl., Abstract V23C-03, 2007.*
- Levandowski, W., C. H. Jones, Receiver functions from medium aperture broadband beams and the Moho of the Sierra Nevada, California, Eos Trans. AGU, 87(52), Fall Meet. Suppl., Abstract S54A-03, 2006.*
- Byerly, K., T. J. Owens, H. Crotwell, J. Julia, H. Gilbert, G. Zandt, C. H. Jones, Bulk crustal properties of the Sierra Nevada, Eos Trans. AGU, 87(52), Fall Meet. Suppl., Abstract S43A-1358, 2006.*
- Bastow, I. D., T. J. Owens, G. Zandt, C. Jones, H. Gilbert, J. Julia, SKS splitting analyses from the Sierra Nevada Earthscope Project: Insights into lithospheric foundering, Eos Trans. AGU, 87(52), Fall Meet. Suppl., Abstract S43A-1361, 2006.*
- Gilbert, H., C. Jones, T. Owens, G. Zandt, Observations of lithospheric foundering, Eos Trans. AGU, 87(52), Fall Meet. Suppl., Abstract S54A-01, 2006.*
- Frassetto, A., I. D. Bastow, O. Hurd, G. Zandt, H. J. Gilbert, T. J. Owens, and C. H. Jones, Crustal anisotropy, deep crustal earthquakes, and the Moho hole beneath the west-central Sierra Nevada, California, Eos Trans. AGU, 87(52), Fall Meet. Suppl., Abstract T52B-02, 2006.*
- Hurd, O., A. Frassetto, G. Zandt, H. Gilbert, C. Jones, and T. J. Owens, Deep Crustal Earthquakes and Repeating Earthquakes in the West-Central Sierra Nevada, Western USA, Eos Trans. AGU, 87(52), Fall Meet. Suppl., Abstract S43A-1360, 2006.*
- Thomas, A, C. Jones, H. Reeg, H. Gilbert, G. Zandt, and T. Owens, Teleseismic travel times, the Isabella anomaly, and the missing Moho, from the Sierra Nevada EarthScope experiment, Eos Trans. AGU, 86(52), Fall Meet. Suppl., Abstract S51A-1061, 2005*
- Schulte-Pelkum, V., and C. Jones, Surface Tectonics-Matched SKS Splitting: Vertically Coherent Mantle Deformation or Crustal Anisotropy?, Eos Trans. AGU, 86(52), Fall Meet. Suppl., Abstract S51A-0974, 2005*
- Byerly, K., J. Julia, T. J. Owens, H. Gilbert, G. Zandt, and C. Jones. Sierra Nevada Earthscope Project: Constraints on the Sierran Seismic Structure From Regional Waveform Modelling?, Eos Trans. AGU, 86(52), Fall Meet. Suppl., Abstract S51A-1062, 2005*

- Burdick, S., G. Zandt, H. Gilbert, **C. Jones**, and T. Owens, Moho Structure of the Central Sierra Nevada From an EarthScope Flex Array Deployment?, *Eos Trans. AGU*, 86(52), Fall Meet. Suppl., Abstract S41E-05, 2005
- Jones, C. H.**, G. Zandt, T. J. Owens Jr., and H. Gilbert, The Sierra Nevada Earthscope project: Motivations, status, and early results, *Geological Society of America Abstracts with Programs*, Vol. 37, No. 7, p. 59, 2005.
- Jones, C. H.**, The lost world: Preserving analyses for future workers, *Geological Society of America Abstracts with Programs*, Vol. 37, No. 7, p. 416, 2005.
- Boyd, O S, M. K. Savage, A. F. Sheehan, **C. H. Jones**, Deep Seismic Discontinuity Structure Beneath New Zealand, *EOS*, 85 (47) (fall meeting supplement), abstract T21B-0523, 2004.
- Tétreault, J. L., **C. H. Jones**, Three-dimensional studies of oblique deformation within Laramide folds, *Geol. Soc. Am. Abstr. Prog.*, 35, 2004 (presentation 8 Nov. 2004, 2:45 pm)
- Gilbert, H. J., **C. H. Jones**, and G. Zandt, Anisotropy at the base of the Sierra Nevada batholith as inferred from passive seismic observations: Trigger or result of root removal, *Geol. Soc. Am. Abstr. Prog.*, 35, 2004
- Jones, C. H.**, G. L. Farmer, J. R. Unruh, and P. Molnar, Consequences of Removal of Cold Mantle Lithosphere: Uplift, Extension and Contraction in California (and Maybe Even Changes to the San Andreas) *EOS Trans. AGU*, 84(46), Fall Mtg. Suppl., Abstract S22A-0419, 2003
- Tétreault, J. L., **C. H. Jones**, and B. Boyle, Paleomagnetic Vertical Axis Rotations Caused by Oblique Deformation Within the Grand Hogback Monocline, Colorado Plateau, *EOS Trans. AGU*, 84(46), Fall Mtg. Suppl., Abstract GP41C-0055, 2003
- Wilson, C. K., **C. H. Jones**, P. H. Molnar, A. F. Sheehan, O. Boyd, M. Savage, and T. Stern, Evidence for distributed lower crustal deformation within a continental strike-slip fault zone: Marlborough Fault System, South Island, New Zealand, *EOS Trans. AGU*, 84(46), Fall Mtg. Suppl., Abstract S22A-0422, 2003
- Jones, C. H.**, G. L. Farmer, P. Molnar, and J. R. Unruh, Delamination of the Sierra Nevada: Seismological observations and tectonic implications, IRIS annual meeting, Tenaya Lodge, Fish Camp, Calif., June, 2003.
- Tétreault, J. L., and **C. H. Jones**, Paleomagnetic constraints on oblique deformation within folds, Colorado Plateau, western USA, *Geol. Soc. Abstr. Prog.*, 35 (5), 13, 2003.
- Molnar, P., and **C. H. Jones**, Bounds on the Average Viscosity Coefficient of the Lithosphere from Convective Removal of that Beneath the Sierra Nevada, abstract MR51A-08, Fall Meeting, Amer. Geophys. Union, 2002.
- Boyd, O.S., A.F. Sheehan, **C. H. Jones**, Attenuation Tomography of the Southern Sierra Nevada in the Presence of Strong Anisotropy *Eos* 83 (47) Fall Meeting Suppl., abstract T12F-08, 2002
- Wilson, C. K., **C. H. Jones**, H. Gilbert, Single-chamber Silicic Magma System Inferred From Shear-wave Discontinuities of the Crust and Uppermost Mantle, Coso Geothermal Area, California, *Eos* 83 (47) Fall Meeting Suppl., abstract T12A-1304, 2002
- Jones, C. H.**, C. K. Wilson, H. Gilbert, and R. A. Phinney, Regional decollements and their interaction with a silicic magmatic system constrained by passive seismological observations, southwestern Great Basin, *Geol. Soc. Am. Abstr. Prog.*, 34(6), 177-8, 2002.
- Jones, C. H.**, G. L. Farmer, and J. R. Unruh, Impact of the removal of sub-Sierra Nevada eclogitic root upon the Basin and Range, Coast Ranges, and San Andreas Fault, California, *Geol. Soc. Am. Abstr. Prog.*, 34(6), 510, 2002.

- Tetreault, J.*, and **C. H. Jones**, Testing Monoclines for Dextral Shear: Paleomagnetic Results From the Nacimiento Uplift, Northern New Mexico, *EOS*, Fall 2001 AGU Meeting, abstract GP11A-0187, 82 (47), F313, 2001.
- Wilson, C. K.*, **C. H. Jones**, A. F. Sheehan, Lithospheric Structure of a Continental Strike-Slip Boundary, Marlborough Fault Zone, South Island, New Zealand, *EOS*, Fall 2001 AGU Meeting, abstract T11D-0882, 82 (47), F1103, 2001.
- Gilbert, H.*, *C. K. Wilson*, **C. H. Jones**, and A. F. Sheehan, Imaging the Coso geothermal area crustal structure with an array of high-density mini-arrays, *EOS*, Fall 2000 AGU meeting abstract S12A-11, 81 (48), F899, 2000.
- Jones, C.H.**, Horizontal folds as both contractional and strike-slip shear zones?, *Geol. Soc. Am. Abstr. with Program*, 32 (7), p. A29, 2000.
- Wilson, C. K.*, and **C. H. Jones**, Relationship of crustal discontinuities at the Coso Geothermal Area to regional structures of the southwestern Great Basin, *EOS*, 80, [suppl. to no. 46], p. F666, 1999.
- Jones, C. H.**, and R. A. Phinney, Prospecting for the petrology of the upper mantle: Teleseismic shear waves in the Sierra Nevada, California, *Geol. Soc. Amer. Abstr. Prog.*, 31, no. 7, A-481, 1999.
- Jones, C. H.**, L. J. Sonder, J. R. Unruh, Body forces in western U.S. deformation: Engine, steering, or radio?, *EOS*, 79, [suppl. to no. 45], p. F207, 1998.
- Unruh, J. R., L. J. Sonder, and **C. H. Jones**, Assessing the role of buoyancy forces in seismogenic deformation of southern California, *EOS*, 79, [suppl. to no. 45], p. F205, 1998.
- Edwards, J.*, and **C. H. Jones**, Seismicity Of The Southern Sierra Nevada From Two Portable Experiments, *Seismological Research Letters*, 69, p. 162, 1998.
- Sheehan, A. F., *N. D. Hughes*, and **C. H. Jones**, Microearthquake field study of the Front Range of Colorado, *Seismological Research Letters*, 69, p. 161, 1998.
- Unruh, J. R., **C. H. Jones**, and L. J. Sonder, Slow, gravity-driven lithospheric extension in the Western United States, *Seismological Research Letters*, 69, p. 141, 1998.
- Jones, C. H.**, and R. A. Phinney, The Sierran Paradox Seismic Experiment: Anisotropy, Tomography, and Isostasy, *EOS*, 78 [suppl. to no. 46], F493-4, 1997.
- Phinney, R. A., and **C. H. Jones**, Structure of the Mantle Lid Across the Basin and Range: Sierra Nevada Transition, *EOS*, 78, F708, 1997 [N.B.: Paper was withdrawn due to illness, but Jones gave talk on similar material in its place].
- Jones, C. H.**, and R. A. Phinney, Southern Sierra Nevada structure: The use of small arrays for determination of high resolution teleseismic receiver functions, *EOS*, 77 [suppl. to no. 46], F464, 1996.
- Jones, C. H.**, L. J. Sonder, and J. R. Unruh, Implications of topography for tectonics of the SW U.S., *Geol. Soc. Am. Abstr. Prog.*, 28 (7), A-513, 1996b.
- Sheehan, A.F., **C. H. Jones**, M. K. Savage, S. Ozalaybey, *J. E. Bartsch*, *J. Schneider*, and K. G. Dueker, Initial results from the 1994-1995 Colorado Plateau–Great Basin PASSCAL experiment: Receiver functions, surface waves, and shear wave splitting across the Colorado Plateau, *8th Annual IRIS Workshop*, Semi-ah-moo, Washington, 19-23 June 1996.
- Jones, C. H.**, A. F. Sheehan, L. J. Sonder, M. K. Savage, and S. Ozalaybey, Isolating crustal versus mantle sources of isostatic support of the Colorado Plateau, *EOS*, 76 [suppl. to no. 46], F619, 1995a.
- Phinney, R. A., and **C. H. Jones**, Study of strain release by detection of sub-microearthquake arrays and matched filters, *EOS*, 76 [suppl. to no. 46], F396, 1995.

- Bump, H.*, K. Dueker, A. F. Sheehan, **C. H. Jones**, A. Levander, D. McNamara, R. Palmer, G. Biasi, and G. Humphreys, Colorado Plateau crust and upper mantle structure from the Deep Probe natural source experiment, *EOS*, 76 [suppl. to no. 46], F604, 1995.
- Sheehan, A. F., **C. H. Jones**, M. K. Savage, S. Ozalaybey, K. G. Dueker, and *J. E. Bartsch*, The 1994-1995 Colorado Plateau - Great Basin PASSCAL experiment: Imaging the lithosphere with a broadband seismic array, *EOS*, 76 [suppl. to no. 46], F604, 1995.
- Jones, C. H.**, R. A. Phinney, and C. B. Parker, Lithospheric structure from teleseismic *P* to *S* conversions at small arrays, Southern Sierra Nevada, California, XXI IUGG, XXI General Assembly, A408, 1995b.
- Jones, C. H.**, R. A. Phinney, and C. B. Parker, Lithospheric structure from teleseismic *P* to *S* conversions at small arrays, Southern Sierra Nevada, California, *EOS*, 75 (44, suppl.), 584, 1994.
- Phinney, R. A. , **C. H. Jones**, and C. B. Parker, Reflection and refraction imaging of the crust under the southern Sierra Nevada using local and regional earthquakes recorded by small arrays, *EOS*, 75 (44, suppl.), 584, 1994.
- Salyards, S. L. , **C. H. Jones**, and L. J. Sonder, Magnetostratigraphy and stratigraphic correlations of the Miocene age Horse Spring Formation, Clark County, Nevada, and tectonic implications, *EOS*, 75 (44, suppl.), 201, 1994
- Phinney, R. A., **C. H. Jones**, and C. B. Parker, Study of crustal and upper mantle structure under the Sierra Nevada: the teleseismic array experiment, *EOS*, 75 (16, suppl.), 242, 1994.
- Phinney, R. A., **C. Jones**, and C. Parker, Study of Sierra Nevada structure using small passive arrays, *EOS*, 74 (34, suppl.), 414, 1993.
- Chen, Y. H., S. W. Roecker, **C. Jones**, and J. Gombert, Three-dimensional elastic wave velocity structure of the crust and upper mantle beneath the southern Great Basin, *EOS*, 74 (34, suppl.), 419, 1993.
- Jones, C. H.**, Isostasy and its implications for the structure of the Sierra Nevada, *Geol. Soc. Am. Abstr. Progs.*, 25 (5), A59, 1993.
- Jones, C. H.**, P. H. Molnar, S. W. Roecker, R. B. Smith, and D. Hatzfeld, Possible expression of low-angle normal faulting in the seismicity of the Hansel Valley-Pocatello Valley region, Utah and Idaho, *Geol. Soc. Am. Abstr. Progs.*, 25 (5), A60, 1993.
- Qian, H. X., **C. H. Jones**, and H. Kanamori, Seismotectonics of southern Sierra Nevada, California, *EOS*, 71, 1559, 1990.
- Salyards, S., **C. Jones**, and L. Sonder, Magnetostratigraphy of the lower Horse Spring Formation, Lake Mead region, Nevada, and tectonic implications, *Geol. Soc. Am. Abstr. with Prog.*, 22, [3], 80, 1990.
- Molnar, P., S. Gardner, **C. Jones**, S. Luria, H. Lyon-Caen, R. McCaffrey, M. Nelson, S. Roecker, and K. Shedlock, Aftershock relocations as a possible earthquake predictor with applications to the 1984 Borah Peak, Idaho, earthquake, *EOS*, 66, 980, 1985.
- Burchfiel, B. C., J. D. Walker, D. W. Klepacki, K. V. Hodges, P. G. Tilke, P. D. Crowley, **C. H. Jones**, and G. A. Davis, The Kingston Range detachment system: Structures at the eastern edge of the Death Valley extensional zone, southeastern California, *Geol. Soc. Am. Abstr. Prog.*, 17, 345, 1985.
- Jones, C.**, Paleomagnetism of the Kingston Range, San Bernardino County, California: A tectonic interpretation, *EOS*, 64, 686, 1983.

Colloquia (since 2000)

Rocky Mountain Map Society, “How the Sierra Nevada Made Colorado,” Denver, Colorado, 10 September 2019.

Mineral King (campfire talk), “The Hidden Geology of the Sierra Nevada”, Sequoia National Park, 4 August 2018, 27 July 2019.

Powder Keg Brewing Company, "Making the Rockies by Drowning Colorado," Tuesday Nerd Talks, 20 February 2018.

Center for Environmental Journalism and CIRES, CU, "More than just mountains", 8 February 2018

Center for Environmental Journalism, seminar for Ted Scripps Fellows in Environmental Journalism, 8 February 2018.

UNAVCO, Boulder, "How modern Colorado emerged from the Sierra Nevada," Lunchtime Series Seminar, 2 February 2018.

Sequoia National Park, "Mysterious origins of the southern Sierra Nevada", Ash Mountain headquarters, Sequoia National Park, 19 October 2017.

University of California at Davis, Wednesday seminar, "The Significance of the Sierran Orogen", 18 October 2017.

University of California Press lunchtime talk, "How—And Why—Yosemite Changed America", Oakland California, 17 October 2017.

California State University at Fresno, Earth and Environmental Sciences Seminar, "The continuing mysteries surrounding the elevation of the Sierra Nevada", 12 October 2017.

Mono Lake Committee talk, "Refreshments with Refreshing 'Ologists" series, "Water law plus geology", Lee Vining, California, 11 October 2017.

Yosemite National Park, Yosemite Forum, "How—And Why—Yosemite Changed America", 10 October 2017.

Colorado State University, "Making the Rockies by drowning Colorado", 3 March 2016.

Ball Aerospace, Boulder, "Making the Rockies by drowning Colorado", 11 September 2015.

Luxembourg University, "Studying the Mountains that Remade America: The Origin of the Sierra Nevada of California," 6 June 2015.

Denver Museum of Nature and Science, "Making the Rockies by drowning Colorado", 3 February 2015.

Denver Geophysical Society, “Exploring an alternative explanation for the Laramide Orogeny,” 12 July 2012

Univ Wyoming, “Exploring an alternative explanation for the Laramide Orogeny,” 27 February 2012

USGS Lakewood, "Exploring an alternative explanation for the Laramide Orogeny," 13 December 2011

Univ. Kansas, "Exploring an alternative explanation for the Laramide Orogeny," 17 November 2011

New Mexico State, "Exploring an alternative explanation for the Laramide Orogeny," 10 November 2011

(Lecturer, CIDER workshop, Berkeley, Calif., July 2011).

Purdue Univ. (Crough Memorial Lecture), "Exploring an alternative explanation for the Laramide Orogeny," 28 April 2011.

Colorado State Univ., "Exploring an alternative explanation for the Laramide Orogeny," 7 February 2011

University of Utah, "Exploring an alternative explanation for the Laramide Orogeny," 28 February 2008

Caltech, "Exploring an alternative explanation for the Laramide Orogeny," 30 November 2007.

Scripps Institute of Oceanography (UCSD), Sierra Nevada talk, October 15, 2007.

Yosemite National Park, monthly Yosemite Forum talk, "Raising the Sierra: New insights into an old problem", October 9, 2007.

Northwestern University, "Sierra Nevada: Testing Mantle Foundering as a Tectonic Engine", invited colloquium, May 26, 2006.

University of California at Berkeley, "The Sierra Nevada: Type Locale of a Different Tectonic Engine?", invited Seisology Lab colloquium, April 25, 2006.

Princeton University, "Bob's Bookends: Receiver Functions and Tectonics In and Near the Southern Sierra Nevada, California", Phinney retirement colloquium, invited, May 16, 2005.

Colorado Scientific Society, Haunted By A Cryptic Orogen: The Sierra Nevada And Its Impact On The Evolution Of California, 19 January 2005.

Ball Aerospace, Boulder, Untitled talk on the Sierra Nevada, 19 November 2004.

Colorado State University, "Haunted by a Cryptic Orogen: Pliocene Deformation Under the Sierra Nevada and its Implications for Intracontinental Deformation," 1 December 2003.

University of New Mexico Dept. of Earth and Planetary Sciences, "Haunted by a Cryptic Orogen: Pliocene Deformation Under the Sierra Nevada and its Implications for Intracontinental Deformation", 18 April 2003

Victoria University of Wellington, New Zealand, "Haunted by a Cryptic Orogen: Pliocene deformation under the Sierra Nevada of California," 31 May 2002.

University of Otago, Dunedin, New Zealand, "Haunted by a Cryptic Orogen: Pliocene deformation under the Sierra Nevada of California," 30 May 2002.

Institute for Geological and Nuclear Sciences, Lower Hutt, New Zealand, "Beyond Plate Tectonics: Body Forces and the Mantle in the Western United States," 25 May 2001.

Geophysics Section of the Royal Society of New Zealand, Wellington, "Beyond Plate Tectonics: Body Forces and the Mantle in the Western United States," 17 May 2001.

Northwestern University, 26 May 2000, two talks (Sierra Nevada and Coso).

University of California, Riverside, 9 May 2000.