

Dr. Elizabeth J. Cassel
Assistant Professor of Geological Sciences
University of Idaho
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EDUCATION

Ph.D., Stanford University, Geological and Environmental Sciences: June 2010
Dissertation: "Cenozoic Landscape Evolution of the Northern Sierra Nevada and Western Basin and Range: Implications for Tectonics, Climate, and Topography"
Advisor: Stephan A. Graham; Committee: Christopher Henry, C. Page Chamberlain, Donald Lowe, and George Hilley

B.A., Carleton College, Geology, *Magna Cum Laude*: June 2003
Thesis: "The Sedimentary Succession and its Evolution at Morgan Beach, Cape Liptrap, Australia"

PRIMARY RESEARCH INTERESTS

Understanding and quantifying sedimentary basin evolution, past surface topography, and orogenesis; reconstructing drainage morphology, hydrology, and climate through chemo- and chronostratigraphy, source-to-sink clastic sedimentology and provenance analysis; sediment lag times and exhumation rates via detrital (U-Th)/(He-Pb) double dating; subduction and slab rollback mechanics; Eocene paleoclimate and orogen-climate dynamics; secondary hydration processes in glass; methods in stable isotope geochemistry

APPOINTMENTS

Jan. 2014 – present	Assistant Professor Dept. of Geological Sciences, University of Idaho Moscow, ID
Sept. 2011 – Jan. 2014	Jackson Distinguished Postdoctoral Fellow & Lecturer Jackson School of Geosciences, The University of Texas at Austin Austin, TX
July 2010 – July 2011	Visiting Assistant Professor of Geosciences Dept. of Earth & Environment, Franklin & Marshall College Lancaster, PA
Sept. 2004 – June 2010	Graduate Research and Teaching Assistant Geological and Environmental Sciences Dept., Stanford University Stanford, CA
June 2008 – Aug. 2008	Intern, Sources and Seals Team, New Play Concepts ExxonMobil Upstream Research (Supervisor: Dr. Rene Jonk) Houston, TX
March 2005 – July 2009	Field Researcher (Patagonia, China, New Zealand, SW MT) Sedimentary Research Group, Stanford University, Stanford, CA
Aug. 2003 – Aug. 2004	Geographic Information Systems Analyst

Earth & Space Sciences and Marine Sciences Departments
(Supervisors: Dr. David Finlayson, Prof. David Montgomery)
University of Washington, Seattle, WA

- June 2002 – June 2003 **Australia Program Researcher**
KECK Consortium Project (Advisor: Prof. Thomas Gardner)
Cape Liptrap, Australia and Carleton College, Northfield, MN
- Aug. 2002 – May 2003 **Southeast Alaska Pluton Emplacement, Project Researcher**
NSF Research Project (Advisor: Prof. Cameron Davidson)
Wrangell, AK and Carleton College, Northfield, MN
- Sept. 2002 – June 2003 **Teaching and Laboratory Assistant**
Geology Dept., Carleton College
(Supervisors: Prof. Clint Cowan, Prof. Bereket Haileab)
Northfield, MN

RESEARCH GRANTS

CAREER: The Fall of Mountains: Reconstructing Extensional Collapse in the North American Cordillera from the Surface Record

Source: NSF Faculty Early Career Development Program
Investigators: **Sole PI: E. Cassel**
Total Award: \$729,932
Period Covered: 6/1/19 to 5/31/24

Collaborative Research: Quantifying Paleotopography and Paleoclimate to Test Geodynamic Models in the Peruvian Andes

Source: NSF-EAR Tectonics Program
Investigators: **Lead PI: E. Cassel**
 Co-PIs: C. Poulsen, B. Yanites, D. Breecker
Total Award: \$430,083 (UI)
Period Covered: 5/18/16 to 5/17/19 with no-cost extension to 5/17/20

Collaborative Research: Paleogeographic Record of Contractional to Extensional Tectonics in the Cordilleran Hinterland, Nevada

Source: NSF-EAR Tectonics Program
Investigators: **Lead PI: E. Cassel**
 Co-PIs: D. Stockli, M. Smith, B. Jicha, B. Singer
Total Award: \$297,000
Period Covered: 9/1/13 to 8/31/16 with no-cost extension to 8/31/18

Hydration and Stability of Natural Glasses on Geologic Timescales

Source: University of Idaho Seed Grant Program
Investigators: **Sole PI: E. Cassel**
Total Award: \$11,890
Period Covered: 7/1/14 to 6/30/15

FIELD TRIPS LED/CO-LED & FIELD GUIDES DEVELOPED

UT-Austin Undergraduate Honors Field Trip to southern Peru (w/D. Breecker and M. Cloos), 2019

Origin and Depositional History of the Eocene Chumstick Basin, Central WA: Stratigraphy & Sedimentation Class Field Work, 2017, 2018, 2019
Basin Evolution and Resource Potential, Eocene Chukanut Basin, Western WA: Basin Analysis Class Field Work, 2018, 2019
Cenozoic History of the John Day Basin, OR: Stratigraphy & Sedimentation Class Field Work, 2017
Jurassic Terrane Accretion in Idaho and Oregon: Field Geology 1 Class Field Work, 2017
Paleozoic and Mesozoic sedimentation in the Bighorn Basin, WY: Basin Analysis Class Trip, 2016
Carbonate Rocks of the Paleozoic in Challis, ID: Stratigraphy & Sedimentation Class Field Work, 2014, 2015
Sedimentary Systems of Death Valley, CA: Franklin & Marshall College Undergraduate Majors Trip, 2011
Convergent Margins II: Arc to Accretionary Wedge, Stanford Graduate Student Field Trip, 2009

FIELD EXPERIENCE

Basin and Range and Cordilleran Hinterland: Eocene – Miocene sedimentary basin evolution, volcanism, and surface topographic history
Northern Sierra Nevada, Great Valley, and Coast Ranges, California: Cretaceous – Pliocene sedimentary, volcanic, and geomorphic history
Southern Peru: Volcanism, forearc basin sedimentation, and surface uplift of the Andes
Southwest Montana and western Wyoming: Paleocene – Pliocene terrestrial sedimentary basins and Absaroka volcanism
Southern British Columbia and Central Washington State: Eocene sedimentary basin record, extension in the intermontane region, and accretion of Siletzia
Pacific and Inland Northwest: Pliocene – Quaternary volcanic and geomorphic history
Western U.S Cordillera: Mesozoic – Cenozoic Sevier & Laramide Thrust Belts and Forelands
Snake River Region, Oregon-Idaho border: Mesozoic Terrane Accretion and emplacement of the Idaho batholith; Eocene Challis Volcanism
Taiwan: Recent uplift, incision, and landscape geomorphology
Central Oregon: Cascades volcanism, volcanoclastic sedimentation, and landscape geomorphology, Ancestral Cascades and John Day Basin sedimentation
Greek Isles: Aegean extension and subduction channel metamorphism
Northern Italy: Tuscan metamorphic core complex extension
Southern Arizona and California: Miocene metamorphic core complex formation and underplating of the Pelona-Orocopia-Rand schist
New Zealand: Taranaki Basin Miocene deep-water slope succession
Patagonia, Southern Chile: Mesozoic Magallanes deep marine basin sequence
Western China and Tibet: Songpan-Ganzi Mesozoic turbidity current deposits
Cape Liptrap, SE Australia: Last Glacial Maximum shoreface sedimentary succession
Southeast Alaska: Cretaceous pluton crystallization and contact metamorphism

PUBLICATIONS

H-index: 12; i10-index: 12 (Google Scholar)
(*graduate student, ^undergraduate student)

Peer-reviewed Publications

Canada, A.C.*, Cassel, E.J., Stockli, D.F., Smith, M.E., Jicha, B.R., and Singer, B.S., 2019, Accelerating exhumation in the Eocene Sevier-Laramide hinterland: Implications from

- detrital zircon (U-Th)/(He-Pb) double dating: *Geological Society of America Bulletin*, v. 132, pp. 198-214, 10.1130/B35160.1.
- Canada, A.C.*, Cassel, E.J., McGrew, A.J., Smith, M.E., Stockli, D.F., Foland, K.A., Jicha, B.R., and Singer, B.S., 2019, Eocene exhumation and extensional basin formation in the Copper Mountains, Nevada, U.S.A.: Active Margins in Transition—Magmatism and Tectonics through Time: An Issue in Honor of Arthur W. Snoke, *Geosphere*, v. 15, pp. 1577-1597, 10.1130/GES02101.1.
- Bershaw, J., Cassel, E.J., Carlson, T.B.*, Streig, A.R., and Streck, M.J., 2019, Volcanic Glass as a proxy for Cenozoic elevation and climate in the Cascade Mountains, Oregon, USA: *Journal of Volcanology and Geothermal Research*, v. 381, pp. 157-167, 10.1016/j.jvolgeores.2019.05.021.
- Cassel, E.J., Smith, M.E., and Jicha, B., 2018, The Impact of Slab Rollback on Earth's Surface: Uplift and Extension in the Hinterland of the North American Cordillera: *Geophysical Research Letters*, 45, 10,996–11,004, 10.1029/2018GL079887.
- Huntington, K.W., Klepeis, K., Cassel, E.J., Currie, C.A., DiBiase, R.A., Riebe, C.S., and Zeitler, P., 2018, Ch. 4: Understanding the Dynamic Interactions Between Earth-Surface Processes and Tectonics, *in* Huntington, K.W., and Klepeis, K.A., with 66 contributors, Challenges and opportunities for research in tectonics: Understanding deformation and the processes that link Earth systems, from geologic time to human time. A community vision document submitted to the U.S. NSF, 84 pp., 10.6069/H52R3PQ5.
- Cassel, E.J., and Breecker, D.O., 2017, Long-term Stability of Hydrogen Isotope Ratios in Hydrated Volcanic Glass, *Geochimica et Cosmochimica Acta*, v. 200, p. 67-86, 10.1016/j.gca.2016.12.001.
- Smith, M.E., Cassel, E.J., Jicha, B.R., Singer, B.S., and Canada, A.C.*, 2017, Hinterland drainage closure in response to Farallon flat slab removal, Nevada, U.S.A., *Earth and Planetary Science Letters*, v. 479, p. 156-169, 10.1016/j.epsl.2017.09.023.
- Smith, M.E., Carroll, A.R., Jicha, B., Cassel, E.J., and Scott, J., 2015, Paleogeographic record of Eocene Farallon slab rollback beneath western North America: REPLY, *Geology*, v. 43, p. 364.
- Cassel, E.J., Breecker, D.O., Henry, C.D., Larson, T.E., and Stockli, D.F., 2014, Profile of a paleo-orogen: High topography across the present-day Basin and Range from 40 to 23 Ma, *Geology*, v. 42, no. 11, p. 1007-1010.
- Smith, M.E., Carroll, A.R., Jicha, B., Cassel, E.J., and Scott, J., 2014, Paleogeographic record of Eocene Farallon slab rollback beneath western North America, *Geology*, v. 42, no. 12, p. 1039-1042.
- Long, S.P., Henry, C.D., Muntean, J.L., Edmondo, G.P., and Cassel, E.J., 2014, Early Cretaceous construction of a structural culmination, Eureka, Nevada, U.S.A.: Implications for out-of-sequence deformation in the Sevier hinterland, *Geosphere*, v. 10, p. 564-584.
- Cassel, E.J., Grove, M., and Graham, S.A., 2012, Eocene drainage evolution and erosion of the Sierra Nevada batholith across northern California and Nevada, *American Journal of Science*, v. 312, no. 2, p. 117-144.

- Cassel, E.J., Graham, S.A., Chamberlain, C.P., and Henry, C.D., 2012, Early Cenozoic Topography, Morphology, and Tectonics of the Northern Sierra Nevada and Western Basin and Range, *Geosphere*, April 2012, v. 8, no. 2, p. 229-249.
- Henry, C.D., Hinz, N.H., Faulds, J.E., Colgan, J.P., John, D.A., Brooks, E.R., Cassel, E.J., Garside, L.J., Davis, D.A., and Castor, S.B., 2012, Eocene–Early Miocene paleotopography of the Sierra Nevada–Great Basin–Nevadaplano based on widespread ash-flow tuffs and paleovalleys, *Geosphere*, v. 8, no. 1, p. 1-27.
- Cassel, E.J., and Graham, S.A., 2011, Paleovalley morphology and fluvial system evolution of Eocene-Oligocene sediments ('auriferous gravels'), northern Sierra Nevada, California: Implications for climate, tectonics, and topography, *Geological Society of America Bulletin*, v. 123, no. 9/10, p. 1699-1719.
- Cassel, E.J., Graham, S.A., and Chamberlain, P.C., 2009, Cenozoic tectonic and topographic evolution of the northern Sierra Nevada, California, through stable isotope paleoaltimetry in volcanic glass: *Geology*, v. 37, no. 6, p. 547-550.
- Cassel, E.J., Calvert, A.T., and Graham, S.A., 2009, Age, geochemical composition, and distribution of Oligocene ignimbrites in the northern Sierra Nevada, California: implications for landscape morphology, elevation, and drainage divide geography of the Nevadaplano: *International Geology Review*, v. 51, no. 7, p. 723-742.
- Gardner, T.W., Webb, J., Davis, A.G., Cassel, E.J., Pezzia, C., Merritts, D.J., and Smith, B., 2006, Late Pleistocene landscape response to climate change: eolian and alluvial fan deposition, Cape Liptrap, southeastern Australia: *Quaternary Science Reviews*, v. 25, p. 1552-1569.
- Cassel, E., 2003, The Late Quaternary Sedimentary Succession and its Evolution at Morgan Beach, Cape Liptrap, Australia: *KECK Proceedings*, v. 16.

Manuscripts in Press and Review

- Foster-Baril, Z.F.*, Cassel, E.J., Leier, A., Archibald, S.B., and Vervoort, J., Eocene basin evolution in the North American Cordilleran hinterland, southern British Columbia, *accepted* for *Basin Research* 2020.
- White, E.J.*, Cassel, E.J., and Breecker, D.O. A comparison of modern paleoaltimetric proxies in the Peruvian Central Andes, southern Peru, *in review* for *Geology* 2020.
- Aron, P.G., Poulsen, C.J., Fiorella, R.P., Levin, N.E., Acosta, R.P., Yanites, B.J., and Cassel, E.J., Spatiotemporal variability of stable water isotopes in central Andean precipitation, *in review* for *Journal of Geophysical Research – Atmospheres* 2020.

Manuscripts in Revision

- Cassel, E.J., Fricke, H., Rossetto-Harris, G., Yancey, T.E., and Evanoff, E., *in revision*, Precipitation records of air mass mixing across the Rocky Mountains at the Eocene-Oligocene Transition, *Geophysical Research Letters*.

Rubino, E. *, Leier, A., Cassel, E.J., Archibald, S.B., Foster-Baril, Z. *, and Barbeau, D., *in revision*, Insights into intermontane basins and crustal heterogeneity from detrital zircon Hf-isotopes, southern Canadian Cordillera, *Geology*.

FELLOWSHIPS, HONORS & PRE-DOCTORAL GRANTS

2020 UI College of Science Early Career Faculty Award
2019 CAREER Grant Research highlighted in UI News & President's Letter
2015 Research highlighted in and interviewed for an article in *Scientific American*
2015 Research highlighted in and interviewed for an article in *Ars Technica*
2015 Highlighted in and interviewed for UI College of Science Research Highlight
2011 – 2013 Jackson Distinguished Postdoctoral Fellowship, Jackson School of Geosciences, University of Texas – Austin
2007 – 2008 Hoagland Teaching Assistantship, School of Earth Sciences, Stanford University (School-wide)
2005 – 2007 Stanford Graduate Fellowship, Stanford University (University-wide)
2006 – 2008 McGee Research Grant, School of Earth Sciences, Stanford University
2006 – 2007 American Association of Petroleum Geologists Grant-in-Aid
2006 – 2007 Geological Society of America Student Grant
2006 – 2007 Northern California Geological Society Graduate Research Grant
2003 Distinction in Geology (exemplary work on senior comprehensive project), Carleton College
2003 Phi Beta Kappa
2003 Sigma Xi Scientific Society Member
2002 – 2003 Duncan Stewart Fellowship, Geology Department, Carleton College

INVITED EXTERNAL PRESENTATIONS

2019 University of Texas-Austin Undergraduate Honors Field Trip Co-leader
University of New Mexico
University of Washington
University of British Columbia
2018 University of Wyoming
2017 University of Nevada-Reno
Portland State University
Montana State University
NSF Feedbacks Among Climate, Erosion, and Tectonics II, Oregon
2016 Northern Arizona University
University of North Carolina
2015 NSF Feedbacks Among Climate, Erosion, and Tectonics I, Taiwan
Oregon State University
University of Idaho Board of Regents Meeting
American Geophysical Union Fall Meeting
Geological Society of Nevada Five-year Symposium
2014 Geological Society of America Annual Meeting

TEACHING AND ADVISING

Current Advisees:

PhD: Haley Thorensen

MS: Erin Young-Dahl

Undergraduate Theses: Natalya Usachenko, Kate Brooks, Taylor Templeton

Degree Completed:

PhD: Andrew Canada

MS: Zachary Foster-Baril, Emily White

Undergraduate Theses: Sierra Wallace, Eric Stauffer, Alexandra Adams, Cameron Carlson, Emily White (Co-advised, Sonoma State Univ.); Nikki Seymour, UT-A; Amanda Wilson, UT-A, Gabriella Rossetto (Co-advised, Colorado College)

Committees:

Completed: Jens Hegg, PhD; Audrey Warren, MS; Luke Schwab, MS; Aaron Rodriguez, MS; Jeff Larimer, MS

Current: Beverly Rice, PhD; Kelsey Wetzal, MS

Current Courses

Stratigraphy and Sedimentation; Basin Analysis; Stable Isotopes; Advanced Sedimentology

Previous Courses

Continental Tectonics; Introductory Historical Geology; Introductory Environmental Geoscience; Geology Field Methods; Geologic and Historical Aspects of the California Gold Rush; Cenozoic Paleoclimate Records; Western Cordillera Paleotopography

Funding and Honors Awarded to CASSEL RESEARCH GROUP Students

- H. Thoresen* NSF Graduate Research Fellowship Honorable Mention (2020), Rocky Mtn. Sec. SEPM (2020), Tobacco Root Geological Society (2020), UI-GPSA (2020)
- E. Young-Dahl* Tobacco Root Geological Society (2020), UI-GPSA (2020)
- A. Canada* Geological Sciences Nominee for College of Science PhD award (2019), Society of Economic Geologists (2017), Nevada Petroleum & Geothermal Society (2017), AAPG (2016, 2015), Rocky Mtn. Assoc. of Geologists (2016), SEPM (2016, 2015), GSA (2016, 2015), Tobacco Root Geological Society Scholarship (2017, 2016), Geological Society of Nevada-Elko Ch. (2018, 2017, 2016, 2015), UI-COS Travel Grant (2015), Outstanding Graduate Student Award - UI Geological Sciences (2016, 2015), UI-GPSA (2016, 2017, 2018); *Best Student Presentations:* AAPG Annual Convention (2018), Rocky Mountain Rendezvous (2016), Geological Society of Nevada Symposium (2015).
- E. White* NSF Graduate Research Fellowship (2017-2020); GSA-ExxonMobil Grant (2017, 2018), SEPM (2018), AWG Brunton Award (2017), UI-COS Travel Grant (2018, 2016), Rocky Mtn. Section GSA (2017, 2016), UI-GPSA (2016 – 2018).
- Z. Foster-Baril* Rocky Mtn. Section SEPM Fluvial Sedimentology Award (2016), GSA (2016), Rocky Mtn. Section GSA (2016), UI-COS Travel Grant (2016), Nugent Geology Scholarship (2015).
- N. Usachenko*[^] UI Office of Undergraduate Research SURF Fellowship (2020)
- S. Wallace*[^] COS Dean's Award: Geol. Sciences Undergraduate Research Award (2020)
- E. Stauffer*[^] College of Science Undergraduate Research Award (2017), UI Office of Undergraduate Research Grant (2016), Rocky Mtn. Section GSA (2016), AAPG L. Austin Weeks Undergraduate Research Grant (2016).
- A. Adams*[^] Hill Undergraduate Research Fellowship (2015-2016), Tobacco Root Geological Society Scholarship (2015).

SERVICE

NATIONAL AND INTERNATIONAL COMMUNITIES

- 2017 Co-chair: GSA Annual Meeting session on Grand Challenge #3: Future Directions in Tectonics
- 2016 – 2017 Co-author: Grand Challenges Report, NSF Future Directions in Tectonics
- 2016 Session Leader and Workshop Participant: NSF Future Directions in Tectonics

- 2015 – 2017 Invited Speaker, Participant, and White-paper Contributor: NSF FACET I Conference, Taiwan and NSF FACET II, Oregon
- 2015 NSF-EAR Tectonics Panel Member
- 2010 Invited Speaker and Participant: GSA Penrose Conference, Origin and Uplift of the Sierra Nevada, California

REVIEWER NSF-EAR: Tectonics, Integrated Earth Systems, Landscape Geomorphology, and Postdoctoral Fellowship; ACS-Petroleum Research Fund; DFG (German Research Fund); Geology; Geological Society of America Bulletin; Earth and Planetary Science Letters; Geochimica et Cosmochimica Acta; Lithosphere; Journal of Volcanology and Geothermal Research; Geosphere; Journal of Structural Geology; Journal of Sedimentary Research; Paleo-3; American Journal of Science, Basin Research

PROFESSIONAL MEMBERSHIPS

Geological Society of America, American Geophysical Union, Geological Society of Nevada, Earth Science Women's Network

UNIVERSITY

- 2019 – 2020 Athena Member (UI association for promotion of an inclusive and equitable climate for women); Athena Annual Awards Committee
- 2015 – 2020 Geological Sciences Mineral Separation Facilities Manager
- 2016 – 2019 Geological Sciences Dept. Representative: College of Science Faculty Council
- 2017 – 2019 Geological Sciences Dept. Graduate Admissions Committee Member
- 2015 – 2018 Geological Sciences Dept. Curriculum Committee Member
- 2015 – 2016 University of Idaho Creative and Scholarly Activities Committee Member
- 2015 – 2016 Geological Sciences Structure/Tectonics Search Committee Member
- 2014 Geological Sciences Groundwater Hydrology Search Committee Member
- 2014 – 2015 Organizer, Geological Sciences Department Seminar
- 2014 – 2020 Faculty Advisor: UI Men's and Women's Ultimate Frisbee Teams
- 2012 – 2013 Judge: Jackson School of Geosciences Research Symposium
- 2011 Co-Leader, Earth & Environment Dept. Field Trip to Death Valley, F&M
- 2010 – 2011 Faculty Advisor & Coach, F&M Women's Ultimate Frisbee Team
- 2009 – 2010 GES Department Seminar Committee, Stanford University
- 2007 – 2008 Geochronology Faculty Search Student Committee, Stanford University
- 2007 – 2008 Organizer, "Brown Bag" Student Research Seminar, Stanford University
- 2007 Organizer, "Convergent Margins" Department Field Trip, Stanford University
- 2006 Organizer, Silicic Volcanism Seminar, Stanford University

OUTREACH

- 2019 Co-leader (w/Daniel Breecker and Mark Cloos): University of Texas-Austin Honors Program Undergraduate Field Trip to southern Peru, March 2019
- 2017-2020 Mentor and Adviser: TBA + TRIO-INSPIRE Summer Lab Internships (2 high school students/year from underrepresented groups in STEM)
- 2017-2020 Host and Producer: "Tuff Talk, a Podcast for, by, and about women in Earth Sciences"
- 2016 Adviser: University of Puerto Rico – Mayaguez Undergraduate Student Internships, Field Portion

PROFESSIONAL DEVELOPMENT

- 2016 NAGT UI Geological Sciences Department Curriculum Workshop

2015 Geological Society of America Curriculum Development Workshop
2009 SERC Preparing for an Academic Career in the Geosciences Workshop
2008 SPODDS-Chevron Sequence Stratigraphy Short Course

CONFERENCE PRESENTATIONS & PAPERS

(*graduate student, ^undergraduate student)

Young-Dahl, E. *, Cassel, E.J., and Smith, M.E., 2020, Reconstructing Eocene Paleotopography of the Rocky Mountains using Stable Isotope Paleoaltimetry of Hydrated Volcanic Glass, Geological Society of America Abstracts with Programs, v. 52.

Thoresen, H.E. *, and Cassel, E.J., 2020, Eocene Basin Record of Metamorphic Core Complex Exhumation in the Western United State Cordillera, Geological Society of America Abstracts with Program, v. 52.

Cassel, E.J., Breecker, D.O., Smith, M.E., White, E.J. *, Adams, A.J. ^, and Jicha, B.R., 2019, The Evolution of Cordilleran Topography in the Americas: Records of Surface Uplift and the Onset of Orogenic Collapse, American Geophysical Union Fall Meeting.

Cassel, E.J., Smith, M.E., Jicha, B., and Fricke, H., 2018, Records from Coast to Coast: New Topographic Insights across the Paleogene Cordilleran Hinterland Plateau: Geological Society of America Abstracts with Programs, v. 50.

White, E.J. *, Cassel, E.J., and Breecker, D.O., 2018, The Topography of the Modern and Ancient Central Andean Orocline: A Comparison using Volcanic Glass Paleoaltimetry, Southern Peru, Geological Society of America Abstracts with Programs, v. 50.

Canada, A.S. *, Cassel, E.J., and Smith, M.E., 2018, Multi-Isotope Geochemistry of the Eocene Elko Formation, Northeastern Nevada: AAPG Annual Convention and Exhibition, May 2018, Search and Discovery Article #90323.

Cassel, E.J., Smith, M.E., Adams, A.C. ^, and Jicha, B., 2017, The Cordilleran Orogen in the Eocene: Topography, Drainage Systems, and Tectonic Implications: Geological Society of America Abstracts with Programs, v. 49, no. 6, doi: 10.1130/abs/2017AM-308658.

Huntington, K.W., Klepeis, K., Cassel, E.J., Currie, C.A., DiBiase, R.A., Kirby, E., Lang, K.A., Pazzaglia, F., Riebe, C.S., and Zeitler, P., 2017, Understanding the Dynamic Interactions Between Earth-Surface Processes and Tectonics: Opportunities for Progress from Outcrop to Global Scales: Geological Society of America Abstracts with Programs, v. 49, no. 6, doi: 10.1130/abs/2017AM-308720.

Canada, A.S. *, Cassel, E.J., Smith, M.E., and Stockli, D.F., 2017, Connecting landscape changes in exhumation to lacustrine sedimentation and surface deformation in a unique hinterland basin, Northeast Nevada: Geological Society of America Abstracts with Programs, v. 49, no. 6, doi: 10.1130/abs/2017AM-308542.

White E.J. *, and Cassel E.J., 2017, Preliminary Results from Volcanic Glass Paleoaltimetry and Miocene Stratigraphy of the Central Andes, Southern Peru: Geological Society of America Abstracts with Programs, v. 49, no. 6, doi: 10.1130/abs/2017AM-308437.

Foster-Baril, Z.F. *, Cassel, E.J., Leier, A., and Archibald, S.B., 2017, Eocene Basin Records of Volcanism, Topography, and Tectonics in the North American Cordilleran Hinterland,

- Southern British Columbia: Geological Society of America Abstracts with Programs, v. 49, no. 6, doi: 10.1130/abs/2017AM-307655.
- Stauffer, E. A., and Cassel, E.J., 2017, Glass-Water Hydrogen Isotope Fractionation in Recent Volcanic Glass: Geological Society of America Abstracts with Programs, v. 49, no. 6, doi: 10.1130/abs/2017AM-308686.
- Rubino, E. *, Leier, A., Archibald, S.B., Cassel, E.J., Foster-Baril, Z.F. *, Barbeau, D.L., Sexton, J., 2017, Detrital Zircon U-Pb Provenance of Eocene Sediments in Southern British Columbia and Northern Washington: Record of a Collapsing Orogen: Geological Society of America Abstracts with Programs, v. 49, no. 6, doi: 10.1130/abs/2017AM-302741.
- Carlson, T.B. *, Bershaw, J., and Cassel, E.J., 2017, Deuterium Values from Hydrated Volcanic Glass: A Paleoelevation Proxy for Oregon's Cascade Range: Geological Society of America Abstracts with Programs, v. 49, no. 6, doi: 10.1130/abs/2017AM-305065.
- Cassel, E.J., 2017, Links between Climate, Erosion, and Tectonics in the North American Cordilleran Hinterland: NSF FACET II Workshop, July 2017.
- Canada, A.S. *, Cassel, E.J., Stockli, D.F., Smith, M.E., Jicha, B.R., and Singer, B.S., 2017, The Paleogene Tectonic Evolution of High Elevation Lake Basins in the North American Cordilleran Hinterland: NSF FACET II Workshop, July 2017.
- Canada, A.S. *, Cassel, E.J., Stockli, D.F., Smith, M.E., Jicha, Brian R., and Singer, Brad S., 2017, The Elko Basin: An unconventional basin in the hinterland of the Sevier orogenic belt: American Association of Petroleum Geologists, Rocky Mountain Section Meeting, May 2017.
- Canada, A.S. *, and Cassel, E.J., 2017, The Elko Formation: A paleogeographic record of lake basin formation and topographic evolution during Carlin-type gold mineralization: Geological Society of Nevada, Elko Chapter Meeting, April 2017.
- Cassel, E.J., Stockli, D.F., Smith, M.E., and Canada, A.C. *, 2016, A multi-proxy study of topography and sediment provenance across the Eocene Cordilleran hinterland, Geological Society of America Annual Meeting, September 2016.
- Canada, A.C. *, Cassel, E.J., Stockli, D.F., Smith, M.E., Jicha, B.R., and Singer, B.S., 2016, Early Cenozoic extension and accommodation in the Basin and Range: Implications from apatite and zircon double dating, Geological Society of America Annual Meeting, September 2016.
- Foster-Baril, Z.F. *, Cassel, E.J., Leier, A. and Archibald, S.B., 2016, Eocene basin evolution in the North American Cordilleran hinterland, southern British Columbia, Geological Society of America Annual Meeting, September 2016.
- Rubino, E. *, Leier, A., Archibald, S.B., and Cassel, E.J., 2016, Sedimentary and detrital zircon data from Eocene strata exposed in the hinterland of the southern Canadian Cordillera: Implications for basin evolution in a collapsing orogen, Geological Society of America Annual Meeting, September 2016.

- Canada, A.C.*, Cassel, E.J., Stockli, D.F., Smith, M.E., Jicha, B.R., and Singer, B.S., 2016, Linking detrital zircon double dating with chronostratigraphy in the Eocene Elko Basin, Geological Society of America Rocky Mountain Section Meeting, May 2016.
- Foster-Baril, Z.F.*, Cassel, E.J., Leier, A. and Archibald, S.B., 2016, Reconstructing Eocene topography and volcanism in the North American Cordilleran hinterland, southern British Columbia, Geological Society of America Rocky Mountain Section Meeting, May 2016.
- White, E.J.^, Cassel, E.J., Anfinson, O., and Henry, C.D., 2016, Heavy mineral analysis of Eocene sediments deposited on the high elevation North American Cordilleran plateau, Geological Society of America Rocky Mountain Section Meeting, May 2016.
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