

Owen A. Anfinson

Curriculum Vitae

Department of Geology 1801 East Cotati Ave (512) 963-4428
 Sonoma State University Rohnert Park, CA 94928 anfinson@sonoma.edu

EDUCATION AND APPOINTMENTS

- 2015-Present Assistant Professor, Sonoma State University, Sedimentary Geology
- 2012-2015 Jackson School Distinguished Postdoctoral Fellow, Jackson School of
 Geoscience, The University of Texas at Austin. Focus of Research:
 Detrital Zircon and Rutile Geo- Thermo- and Petro-chronology Applied
 to the Molasse Basin of Switzerland, Apenninic Foredeep of Italy,
 Russian Arctic, and Sverdrup Basin of Canada.
- 2012 Geological Survey of Canada, Research Geologist
- 2008-2012 Ph.D., Department of Geoscience, University of Calgary. Dissertation:
 New Insights into Arctic Tectonics: U-Pb, (U-Th)/He, and Hf Isotopic
 Data from the Franklinian Basin, Canadian Arctic Islands.
- 2005-2008 M.S., School of Earth and Environmental Science, Washington State
 University. Sediment Sources for Catastrophic Glacial Outburst Flood
 Rhythmites and Quaternary Eolian Deposits at the Hanford Reach
 National Monument, Washington.
- 2001-2005 B.A., Department of Geology, Gustavus Adolphus College, Minnesota.
 Minors: Geography and Anthropology/Sociology.

PUBLICATIONS

- Ershova, V.B., **Anfinson, O.A.**, Prokopiev, P., Khudoley, A.K., Stockli, D.F. Faleide, J.I., Gaina, C. and Malyshev, N. 2018. the Severnaya Zemlya Archipelago: deciphering multiple episodes of Paleozoic tectonic evolution within the Russian High Arctic. *Journal of Geodynamics*.
- Prokopiev, P., Ershova, V.B., **Anfinson, O.A.**, Stockli, D.F., Powel, J., Khudoley, Vasilev, D., Sobolev, N., and Petrov, E., (Accepted: In Press) Tectonics of the New Siberian Islands Archipelago: Structural Styles and Low-Temperature Thermochronology. *Journal of Geodynamics*.
- Anfinson, O.A.**, Malusá, M.G., Ottria, G., Dafov L.N., Stockli, D.F., 2016. Tracking coarse-grained gravity flows by LASS-ICP-MS depth-profiling of detrital zircon (Aveto Formation, Adriatic Foredeep, Italy). *Marine and Petroleum Geology*, DOI: 10.1016/j.marpetgeo.2016.07.014, v. 77, p.1163-1176.
- Anfinson, O.A.**, Embry, A.F., and Stockli, D.F., 2016, Geochronologic Constraints on the Permian-Triassic Northern Source Region of the Sverdrup Basin, Canadian Arctic Islands. *Tectonophysics*, v. 691, p. 206-219.
- Malusá, M.G, **Anfinson, O.A**, Dafov, L.D., and Stockli, D.F., 2016. Tracking Adria indentation beneath the Central Alps by detrital zircon U-Pb geochronology: implications for the Oligo-Miocene dynamics of the Adriatic Microplate, *Geology*, doi:10.1130/G37407.1, v. 44 (2), p. 155-158.
- Ivleva, A.S., Podkovyrov, V.N., Ershova, V.B., **Anfinson, O.A.**, Khudoley, A.K.,

Fedorov, P.V., Maslov, A.V., and Zlobin, D.Yu., 2016, Results of U–Pb LA–ICP–MS Dating of Detrital Zircons from Ediacaran–Early Cambrian Deposits of the Eastern Part of the Baltic Monocline, Doklady Earth Sciences, v. 468, Part 2, pp. 593–597. ISSN 1028_334X.

Anfinson, O.A., Leier, A.L., Dewing, K., Guest, B., Stockli, D., and Embry, A.F., 2013. Insights into the Phanerozoic tectonic evolution of the northern Laurentian margin: detrital apatite and zircon (U–Th)/He ages from Devonian strata of the Franklinian Basin, Canadian Arctic Islands, Canadian Journal of Earth Science. v. 50: 761–768, doi: 10.1139/cjes-2012-0177.

Anfinson, O.A., Leier, A.L., Gaschnig, R., Embry, A.F. and Dewing, K., 2012. U–Pb and Hf Isotopic Data from Franklinian Basin Strata: Insights into the Nature of Crockerland and the Timing of Accretion, Canadian Arctic Islands, Canadian Journal of Earth Science. v. 49, n. 11, 1316–1328, doi: 10.1139/e2012-067

***Anfinson, O.A.**, Leier, A.L., Embry, A.F., and Dewing, K. 2012. Detrital zircon geochronology and provenance of the Neoproterozoic to Late Devonian Franklinian Basin, Canadian Arctic Islands, Geological Society of America Bulletin, v. 124, n. 3/4, p. 415–430, doi: 10.1130/B30503.1

*See *'Awards, Grants, and Fellowships' section*

Anfinson, O.A., Lockley, Martin G., Kim, Sam H., Kim, Kyung S., and Kim, Jeong Y., 2009. First Report of the Small Bird Track *Koreanaornis* from the Cretaceous of North America: Implications for Avian Ichnotaxonomy and Paleoecology: Cretaceous Research, v. 30. Issue 4., p. 885–894.

In Preparation:

Anfinson, O.A. and Chapman, A.D. Insights on the depositional age and origin of the Sur Series, Salinian Terrane, California. Co-author is currently reviewing draft. Intended Submission: Geosphere

Anfinson, O.A., Stockli, D.F., Miller, J.C, and Schlunegger, F., Detrital Zircon and Rutile Geochronology and Petrochronology of the Central Northern Alpine Foreland Basin, Switzerland. Intended Submission: Geological Society of America Bulletin

ABSTRACTS AND PRESENTATIONS

**Presentations by advised students*

*Simoneau, V., **Anfinson, O.A.**, Bero, D.A., Adams, J. and Messinger, E. 2018. Detrital zircon U–Pb ages provide constraints on the depositional age and structure of the Franciscan Complex, Mt. Tamalpais, CA. Geological Society of American joint Cordilleran/ Rocky Mountain section meeting. Flagstaff, AZ.

*Hutchinson, S., Mookerjee, M., and **Anfinson, O.A.**, 2018. Introducing Structure from Motion techniques into undergraduate fold analysis projects. Sonoma State University Research Symposium.

*Russo, I., **Anfinson, O.**, Goman, M., Robinson, H. Dooley, T., Hole, C., and Hutchinson, S. 2018. Characterization of the alluvial fan reach of Copeland Creek, Sonoma County. Sonoma State University Research Symposium.

*Simoneau, V., **Anfinson, O.A.**, Bero, D.A., Adams, J. and Messinger, E. 2018. Detrital zircon U–Pb ages provide constraints on the depositional age and structure of

- the Franciscan Complex, Mt. Tamalpais, CA. Geological Society of American joint Cordilleran/ Rocky Mountain section meeting. Flagstaff, AZ.
- Mookerjee, M., Hutchinson, S., and **Anfinson, O.A.**, 2018. Introducing Structure from Motion techniques into undergraduate fold analysis projects. Structural Geology and Tectonics Forum, Tempe, AZ.
- Anfinson, O.A.**, Chapman, A.D., Grace, R., Peoples, J., Redmond, M., Fleming, K., and Chapman, A., 2017. Age constraints and correlation of “Sur Series” metasedimentary framework rocks: Implications for the origin of the Salinian Terrane, central California. Geological Society of America National Meeting, Seattle, WA.
- *Hutchinson, S., Mookerjee, M., and **Anfinson, O.A.**, 2017. Introducing Structure from Motion techniques into undergraduate fold analysis projects. Geological Society of America National Meeting, Seattle, WA.
- *Fleming, K., **Anfinson, O.A.**, Peoples, J., Redmond, M., Rico, M., and Chapman, A., 2017. Insight on the origin of the Sur Series within the Salinian Terrane, California evaluated through petrography, zircon LA-ICPMS U-Pb geochronology, and Hf isotopes. Geological Society of America Cordilleran Section Meeting, Honolulu, HI, Abstracts with Programs.
- *Redmond, M., **Anfinson, O.A.**, Rico, M., Fleming, K., Peoples, J., and Chapman, A., 2017. Detrital zircon U-Pb geochronology provides constraints on the depositional age of Sur Series metasediments within the Salinian Terrane, California. Geological Society of America Cordilleran Section Meeting, Abstracts with Programs.
- *Rico, M., **Anfinson, O.A.**, Redmond, M., Fleming, K., Peoples, J., and Chapman, A., 2017. Dealing with complexities of detrital zircon U-Pb geochronology in attempt to provide constraints on the depositional age of Sur Series metasediments with the Salinian Terrane, California. Sonoma State University Research Symposium.
- *Redmond, M., **Anfinson, O.A.**, Rico, M., Fleming, K., Peoples, J., and Chapman, A., 2017. Detrital zircon U-Pb geochronology allows for a conclusive depositional age of the Sur Series metasediments of the Salinian Terrane, California. Sonoma State University Research Symposium.
- *Fleming, K., **Anfinson, O.A.**, Peoples, J., Redmond, M., Rico, M., and Chapman, A., 2017. Insight on the origin of the Sur Series within the Salinian Terrane, California evaluated through petrography, zircon LA-ICPMS U-Pb geochronology, and Hf isotopes. Sonoma State University Research Symposium.
- *Peoples, J., **Anfinson, O.A.**, Fleming, K., Redmond, M., Rico, M. and Chapman, A., 2017. Lithologies of the Sur Series, Salinian Block, California. Sonoma State University Research Symposium. Ershova, V.E.,
- Anfinson, O.A.**, Prokopiev, A., Khudoley, A., Stockli, D.F., Faleide, J.I., Gaina, C., 2016. Detrital Zircon (U-Th)/He ages from Paleozoic Strata of the Russian High Arctic Record Multiple Episodes of Paleozoic Tectonic Evolution. 3rd Circum Arctic Structural Evolution workshop, Hannover, Germany
- Ershova, V.E., Prokopiev, A., **Anfinson, O.A.**, Khudoley, A., Stockli, D.F., Faleide, J.I., Gaina, C., 2016. Detrital Zircon (U-Th)/He ages from Paleozoic Strata of the

- Russian High Arctic Record Multiple Episodes of Paleozoic Tectonic Evolution. GSA Annual Conference, Denver, CO
- Prokopiev, A., Ershova, V.E, Khudoley, A., **Anfinson, O.A.**, Stockli, D.F., Faleide, J.I, Gaina, C., Sobolev, N. and Petrov, E. 2016. Structural Analysis and Detrital Zircon (U/Th)/He ages from the Paleozoic Strata of the NW Novaya Zemlya Archipelago (Russian High Arctic). GSA Annual Conference, Denver, CO.
- Malusá, M.G, **Anfinson, O.A.**, Dafov, L.D., and Stockli, D.F., 2016. Dating strike-slip motion along the Insubric Fault by detrital zircon U-Pb geochronology. Geological Society of Italy Annual Meeting, Naples, Italy.
- *White, E.J., Cassel E.J., **Anfinson, O.A.**, and Henry, C.D. 2016. Heavy mineral analysis of Eocene sediments deposited on the high-elevation North American Cordilleran Plateau. GSA Rocky Mountain Section Meeting. Moscow, ID.
- Anfinson, O.A.**, Malusá, M.G., Dafov L.N., Stockli, D.F. and Ottria, G., 2016. Provenance of far traveled gravity flows unraveled by LASS-ICP-MS depth-profiling of detrital zircon (Aveto Formation, Adriatic Foredeep, Italy). Sonoma State University Faculty Research Exposition.
- Smith, B., Fleming, K. and Anfinson O.A. 2016. Refining the Paleozoic Geologic History of the Yreka Terrane, Eastern Klamath Mountains, CA. Sonoma State University Research Symposium.
- *White, E.J., Cassel E.J., **Anfinson, O.A.**, and Henry, C.D. 2016. Heavy mineral analysis of Eocene sediments deposited on the high-elevation North American Cordilleran Plateau. Sonoma State University Research Symposium.
- Ershova, V.B., **Anfinson, O.A.**, Prokopiev, A.V., Khudoley, A.K., Stockli, D., Faleide J.I., Gaina, C., and Malyshev, N. 2016. (U-Th)/He Ages of Detrital Zircons From Paleozoic Strata of the Severnaya Zemlya Archipelago (Russian High Arctic): implication for testing the different tectonic models. EGU General Assembly, Vienna, Austria. EGU2016-9783
- Anfinson, O.A.**, Stockli, D.F., Stockli, L.D. and Malusà, M.G. 2015. Detrital zircon LASS-ICP-MS petrochronologic depth profiling for determining source-to-sink relationships in the Central Alps. AGU Annual Conference, San Francisco, CA. (Invited Submission)
- Prokopiev, A.V., Ershova, V.B., **Anfinson, O.A.**, Khudoley, A.K., Vasiliev, D.A. and Stockli, D. 2015. Mesozoic-Cenozoic Tectonic History of New Siberia Islands. International Conference On Arctic Margins, Trondheim, Norway.
- Prokopiev, A.V., Ershova, V.B., **Anfinson, O.A.**, Khudoley, A.K., Vasiliev, D.A. and Stockli, D. 2015. Tectonics of New Siberia Islands: structural styles and Zircon U-Th/He ages. 3P Arctic Conference and Exhibition, Stavanger, Norway.
- Ershova, V.B., **Anfinson, O.A.**, Prokopiev, A.V., Khudoley, A.K., and Stockli, D. 2015. First (U-Th)/He ages of detrital zircons from Paleozoic strata of the Severnaya Zemlya Archipelago (Russian High Arctic). AGU Annual Conference, San Francisco, CA.
- Anfinson, O.A.**, Stockli, D.F., and Smye, A.J. 2014 New Techniques of LASS-ICPMS Depth Profiling Applied to Detrital Zircon from the Central Alps-Appennines System. AGU Annual Conference, San Francisco, CA.
- *Dafov, L.N., **Anfinson, O.A.**, Malusá, M.G., Stockli, D.F. 2014. Provenance of Oligo-Miocene Strata from the Adriatic Foredeep of the Alps-Appennines System

Determined through Detrital-Zircon U-Pb Geochronology. AGU Annual Conference, San Francisco, CA.

- Anfinson, O.A.**, Embry, A.F. and Stockli, D.F. 2014. Geochronologic and Petrochronologic Constraints on the Permian-Triassic Northern Source Region of the Sverdrup Basin, Canadian Arctic Islands. GSA Annual Conference, Vancouver, Canada.
- *Dafov, L.N., **Anfinson, O.A.**, Malusá, M.G., Stockli, D.F. 2014. Detrital-Zircon U-Pb Geochronologic Constraints on Provenance of Adriatic turbidites (Alps-Apennines system). GSA Annual Conference, Vancouver, Canada.
- Anfinson, O.A.**, Stockli, D.F., Miller, J.C., and Smye, A.J. 2014. Detrital Zircon and Rutile Geochronology and Petrochronology of the Central Northern Alpine Foreland Basin, Switzerland. International Sedimentologic Congress, Geneva, Switzerland.
- Embry, A.F. and **Anfinson, O.A.** 2014. The Initiation of the Rift Phase of the Amerasian Basin (Arctic Ocean). CSPG Geoconvention, Calgary, AB, Canada
- Anfinson, O.A.**, 2014. Utilizing Detrital Heavy Minerals for Provenance Analysis: Case Studies from Arctic, Swiss and Italian Basins. Jackson School of Geoscience, University of Texas at Austin Seminar Series, Austin, TX.
- Anfinson, O.A.**, Stockli, D.F., and Miller J.C., 2013. Detrital Zircon and Rutile Geochronology and Geochemistry of the Central Northern Alpine Foreland Basin, Switzerland. GSA Annual Conference, Denver, CO.
- Anfinson, O.A.**, Embry, A.F., and Stockli D.F., 2013. Insights on the Origin of the Crockerland Terrane: U-Pb, Hf, and He Detrital Zircon Data from the Canadian Arctic Islands. 3P Arctic Conference and Exhibition, Stavanger, Norway.
- Embry, A.F. and **Anfinson, O.A.** 2013. A History of Crockerland – The Little Arctic Terrane that Could. 3P Arctic Conference and Exhibition, Stavanger, Norway.
- Embry, A.F. and **Anfinson, O.A.** 2013. A History of Crockerland – The Little Arctic Terrane that Could. Canadian Society of Petroleum Geology, Calgary, AB, Canada.
- Anfinson, O.A.** 2013. Detrital Geochronologic and Thermochronologic Data from the Franklinian Basin, Canadian Arctic Islands: Insights into Phanerozoic Arctic Tectonics. Jackson School of Geoscience, University of Texas at Austin Seminar Series, Austin, TX.
- *Benyon, C., Leier, A., Leckie, D., Webb, A., **Anfinson, O.A.**, Hubbard, S.M., Heikkinen, C., and Gehrels, G. 2012. Sediment provenance of the Lower Cretaceous McMurray Formation, Alberta, Canada: Insights from detrital zircon geochronology. GSA Annual Conference, Charlotte, NC.
- Anfinson, O.A.** 2012. New Insights into Arctic Tectonics: U-Pb, (U-Th)/He, and Hf Isotopic Data from the Franklinian Basin, Canadian Arctic Islands. Circum Arctic Lithospheric Evolution Conference, Calgary, AB.
- Anfinson, O.A.**, 2012. New Insights into Arctic Tectonics and the Geologic History of a Missing Continent: U-Pb, (U-Th)/He, and Hf Isotopic Data from the Franklinian Basin, Canadian Arctic Islands. University of Montana, Geoscience Colloquium Series, Missoula, MT.

- Anfinson, O.A.** and Leier, A.L., 2011. New Insights into Arctic Tectonics: U-Pb, (U-Th)/He, and Hf Isotopic Data from the Franklinian Basin, Canadian Arctic Islands. GSA Annual Conference, Minneapolis, MN.
- Gaylord, D.R., Foit, N., and **Anfinson, O.A.**, 2011. Tephrochronology of Late Pleistocene and Holocene Dune Deposits, Hanford Reach National Monument, WA. GSA Annual Conference, Minneapolis, MN.
- Anfinson, O.A.** and Leier, A.L., 2011. U-Pb Geochronology and U-Th/He Thermochronology Applied to the Clastic Strata of the Franklinian Basin, Canadian Arctic Islands. CSPG, Calgary, AB, Canada.
- *Tullius, D.T., **Anfinson, O.A.**, Leier, A.L. Pederson, P.K., Guest, B. 2011. Outcrop Stratigraphy and Sedimentology of the Lower Cretaceous Isachsen Formation of the Sverdrup Basin, Ellef Ringnes Island, Arctic Canada. CSPG, Calgary, AB, Canada.
- Anfinson, O.A.** and Leier, A.L., 2011. Detrital Zircon Analysis Applied to the Neoproterozoic-Devonian Franklinian Basin, Canadian Arctic Islands. AAPG, Calgary, AB, Canada.
- Anfinson, O.A.** and Leier, A.L., 2010. Detrital Zircon Geochronology and Provenance Analysis Applied to the Franklinian Basin, Canadian Arctic Islands. GeoCanada, Calgary, AB, Canada.
- Anfinson, O.A.**, Gaylord, D.R., Pope, M.C., and Cabbage, P.R., 2009. Detrital Zircon Geochronology Applied to Late Quaternary Megaflood Deposits from the Channeled Scabland, WA. GSA Annual Meeting, Portland, OR.
- Anfinson, O.A.**, Gaylord, D.R., Pope, M.C., and Vervoort, J.D., 2009. Detrital Zircon Geochronology as a Tool to Assess the Provenance of Post-Last Glacial Maximum Glacial Outburst Flooding on the Northern and Central Channeled Scabland, WA. GSA Cordilleran Section Meeting, Las Vegas, NV.
- Anfinson, O.A.**, Gaylord, D.R., and Vervoort, J.D., 2009. Glacial Outburst Flood Pathways and Provenance of Late Pleistocene Sedimentary Deposits in the Northern and Central Channeled Scabland, Washington. GSA Annual Meeting, Denver, CO.
- Anfinson, O.A.**, Gaylord, D.R., Pope, M.C., Cabbage, P.R., Glover, J.F., Baar, E.E., and Vervoort, J.D., 2008. Provenance of Pleistocene Megaflood Deposits and Late Ordovician Cordilleran Passive Margin Sediments by LA-ICPMS Detrital Zircon Analysis. Goldschmidt, Vancouver, BC, Canada.
- Gaylord, D.R., Pope, M.C., **Anfinson, O.A.**, Cabbage, P.R., Baar, E.E., and Vervoort, J.D., 2008. Provenance of Late Pleistocene Megaflood and Late Ordovician Cordilleran Passive Margin Sedimentary Deposits by LA-ICPMS Detrital Zircon Analysis. Goldschmidt, Vancouver, BC, Canada.
- Anfinson, O.A.**, 2007. Tracking the Floods: Detrital Zircon Geochronology and the Channeled Scabland. Keynote speaker for Ice Age Floods Institute Erratics Chapter Meeting, Wenatchee, WA.
- Gaylord, D.R., Pope, M.C., Cabbage, P.R., Glover, J.F., **Anfinson, O.A.**, Baar, Eric E., and Vervoort, Jeffrey D. 2007. Provenance of Glacial Outburst Flood Deposits in the Channeled Scabland, WA: Influence of Glacial Lake Missoula, Melt Water, Snake River, and Bonneville Flood Sources. GSA Annual Meeting, Denver, CO.

- Anfinson, O.A.** and Gaylord, D.R., 2007. Genetic Relations Between Catastrophic Glacial Outburst Flood Sediment Sources, Quaternary Eolian Deposits, and Atmospheric Dust at Hanford Reach National Monument. GSA Cordilleran Section Meeting, Bellingham, WA.
- Anfinson, O.A.**, Gulbranson, E.L., and Maxson, J.A. 2005. A New Ichnospecies of *Aquatilavipes* from the Albian-Cenomanian Dakota Formation of Northeastern Utah. Midwest Symposium of Student Paleontological Research, Madison, WI.
- Anfinson, O.A.**, Gulbranson, E.L., and Maxson, J.A. 2004. A New Ichnospecies of *Aquatilavipes* from the Albian-Cenomanian Dakota Formation of Northeastern Utah. GSA Annual Meeting, Denver, CO.
- Anfinson, O.A.**, Gulbranson, E.L., Maxson, J.A., and Swanson, B.A. 2003. Non-Marine to Marginal-Marine Transgressive Sequence of the Cretaceous Dakota Formation in Northeastern Utah. GSA Annual Meeting, Seattle, WA.

TEACHING

Sonoma State University (2015-Present)

Teaching Reviews- <http://www.ratemyprofessors.com/ShowRatings.jsp?tid=2080447>

GEOL 102: Our Dynamic Earth, Fall 2015, 2016, 2017

SCI 120: A Watershed Year: The Russian River Watershed, Fall, 2017

GEOL 309: Computer Applications in Geology, Spring 2016, 2017, 2018

GEOL 311: Sedimentary Geology, Spring 2016, 2017, 2018

GEOL 312: Sedimentary Geology Field, Spring 2016, 2017, 2018

GEOL 427: Advanced Field Geology, Spring 2018

GEOL 426: Senior Thesis, 2015- 2016 (n=2), 2016-2017 (n=2), 2017-2018 (n=2)

GEOL 495: Independent Research, 2015-2016 (n=1), 2016-2017 (n=6), 2017-2018 (n=10)

AWARDS, GRANTS AND FELLOWSHIPS

- 2018 SSU Research Scholarship and Creative Activity Program (RSCAP) Summer Fellowship (\$5000)
- 2017 June 1, 2016 to February 1, 2017 – Anfinson et al. 2012a was the #1 most cited article in the Geological Society of America Bulletin (monthly metric) (see supporting documents)
- 2017 Dean's Research Fellowship, SSU, (\$5500)
- 2017 The Research Council of Norway- INTPART: Co-PI, Changes at the Top of the World through Volcanism and Plate Tectonics: Norwegian-Russian-North American Arctic research and education. Lead PI Carmen Gaina. (University of Oslo) (\$5,680,000 NOK (\$669,000 USD)).
<https://norramarctic.wordpress.com/>
- 2017 The Waters Collaborative, SSU, (\$920)
- 2017 Sustainability in the classroom course redesign for GEOL 311/312 (\$3000)
- 2017 Arizona State University funding from NSF grant for student analytical support (3 students, \$1800)
- 2017 Summer High School Internship Program, 2 students (\$1500)

- 2017 *Re-Submission (First Submission Not Funded)*- NSF Proposal: Co-PI, MRI: Acquisition of a Variable Pressure Scanning Electron Microscope with integrated EBSD, EDS, and CL along with sample preparation, carbon coater. Lead PI- Matty Mookerjee (Sonoma State University) (\$431,214).
- 2017 SSU Research Scholarship and Creative Activity Program (RSCAP) Summer Fellowship (\$3000)
- 2017 SSU School of Science and Technology professional development award (\$782)
- 2016 Koret Scholars Award (\$4000 research funding for students and \$6000 fellowship)
- 2016 SSU Faculty SOURCE Award (\$1500 for student research)
- 2016 Arizona State University funding from NSF grant for student analytical support (4 students, \$2400)
- 2016 SSU sponsored Student SOURCE Award (4 students, \$2500 total)
- 2016 SSU S3 NSF Research Grant (\$3000 research funding for students and \$3000 fellowship)
- 2016 SSU School of Science and Technology professional development award (\$1650)
- 2015 SSU Research Scholarship and Creative Activity Program (RSCAP) January Fellowship (\$2400)
- 2015 SSU School of Science and Technology professional development award (\$1528)
- 2015 California State Lottery Funds for new faculty development, Frantz Barrier Magnetic Separator (\$27,000)
- 2015 Sonoma State University Office of Undergraduate and Creative Experience (SOURCE) Awards. Faculty Award (\$1000); Student awards (2 students, \$1500 total)
- 2012-2015 Awarded the Jackson School of Geoscience Distinguished Postdoctoral Fellowship (\$60,000 salary, \$10,000 research funding annually)
- 2014 Acquired Undergraduate Research Assistantship funding from the Jackson School of Geoscience (Spring and Fall 2014, ~\$2000 per semester)
- 2012 Nominated for the Canadian Journal of Earth Science Best Paper Award
- 2011 Northern Studies Training Program (\$2390)
- 2010-2012 SUNBEAM Arctic Research Grant (Spring 2012, \$4000; Fall 2011, \$4000; Summer 2011, \$5000; Spring 2011, \$4000; Fall 2010, \$4000)
- 2009 Dr. Alfred A. Levinson Memorial Graduate Scholarship in Mineralogy/Geochemistry (\$1000)
- 2008 University of Calgary Deans Entrance Scholarship (\$6000)
- 2008 NASA Space Grant Fellowship (\$2500)
- 2007 NASA Space Grant Fellowship (\$2500)
- 2007 Joseph E. Mills Endowment Award (\$900)
- 2006 Robert J. and Ruth A. Weimer Student Research Grant SEPM (\$500)
- 2006 H. Walter & Jeannette Praetorius Exxon Graduate Fellowship (\$1400)

UNDERGRADUATE AND GRADUATE SUPERVISION

-Research presented by the below students noted with an * in the “abstracts and presentations” section

***Sonoma State University (2015-Present)-
2017-2018***

Izzac Russo (BS; GEOL 426-Senior Thesis), Tim Dooley, and Holden Robinson (BS; GEOL 495). Mitigating flood damage on Copeland Creek through analysis of the Copeland Creek Alluvial Fan.

Tim Downing (BS; GEOL 495), Bringing Geologic wonders of Sonoma County to life through 3D imaging and printing.

Lucia Tropeano (BS; GEOL 495), Geology from Above: Sharing Aerial Geologic Videos with the general public through Instagram.

Victoria Simaneau (BS; GEOL 426-Senior Thesis), Elijah Messinger (BS), Joe Adams (BS), Justin Casaus (BS), and Anthony Gamboa (BS)- (GEOL 495)- Depositional Ages and Provenance of Franciscan Strata, Mt. Tamapalais, CA. Included 2 Students as part of the Student High school Internship Program (Rebecca Fernandez and Nick Roland)

2016-2017

Maddison Leffler (BA), James Peoples (BS), and Mayerline Rico (BS)- (GEOL 495)- Determining the Origin of the Sur Series within the Salinian Terrane, California

Maureen Redmond (BS)- (GEOL 426-Senior Thesis)- Detrital zircon U-Pb geochronology provides constraints on the depositional age of Sur Series metasediments within the Salinian Terrane, California

Kaitlyn Fleming (BS)- (GEOL 426-Senior Thesis) Insight on the origin of the Sur Series within the Salinian Terrane, California evaluated through petrography, zircon LA-ICPMS U-Pb geochronology, and Hf isotopes

2015-2016

Emily White (BS)- (GEOL 426-Senior Thesis)- Sediment provenance of Oligocene strata in the Ruby Range of Northern Nevada. Provided letters of recommendation for Emily and she has been accepted to the Ph.D program at the University of Idaho.

Betsy Smith (BS)- (GEOL 495)- Mapping and Petrography of the Lovers Leap region of the Eastern Klamath Terrane, CA. Was awarded two SSU source awards and won numerous two awards at the SSU Research Symposium.

Kaitlyn Fleming (BS) (GEOL 495)- Paleozoic history of the Yreka Terrane Eastern Klamath Mountains. With letters of support received the American Association of Petroleum Geologist L. Austin Weeks AAPG Undergraduate Grant (\$500).

University of Texas:

2014-2015-

Laura Dafov (BS)- Constraints on the provenance of Adriatic turbidites of the Alp-Appennines system. Currently a Ph.D candidate at the Department of Geoscience, Stanford University.

University of Calgary:

2011-2012

Dylan Tulus (MS) Lead Advisor- Dr. Andrew Leier, Depositional history and reservoir characteristics of the Isachsen Sandstone, Ellef Ringnes Island, Canadian Arctic.

Christine Benyon (MS) Lead Advisor- Dr. Andrew Leier, Provenance of the Cretaceous Athabasca Oil Sands, Canada: Implications of Continental-Scale Sediment Transport.

Maureen Hill (MS) Lead Advisor- Dr. Bernard Guest, Structural geology and thermochronology of Borup Fiord Pass Ellesmere Island.

SONOMA STATE UNIVERSITY COMMITTEES AND BOARD MEMBERSHIP

Elected Member- Dispute Resolutions Board (2017-Present)

Chair-Unmanned Aviation Systems Board (2016-present)

Member- Radiation Safety Committee (2015-Present)

Member- Copland Creek Committee (2016-present)

Member- Geology Department Tenure Track Search Committee (2016, 2017)

FIELD EXPERIENCE

- *Extensive department related field experience excluded (2015-2017: 10+ days in field per semester)*

2017-(5 days) Sampling- Sur Series, Salinian Block, California; (3 days) Sampling and Stratigraphy- Franciscan Formation, Mt. Tamalpais, California; (4 days) Sampling and Stratigraphy, Morrison Roof Pendant/Gabilan Range, Eastern Sierra Nevada, Nevada.

2016- (1 week) Sampling- Sur Series, Salinian Block, California, (1 week) Sampling and Scouting- Salinian Block, California

2015- (3 days) Sampling and mapping- Eastern Klamath Mountains, California

2014-(2 weeks) Sampling and stratigraphy- Molasse Basin, Switzerland; (3 days) ISC field excursion (FTB-8), Molasse Basin, Switzerland

2013-(3 weeks) Sampling and stratigraphy- Molasse Basin, Switzerland; Lepontine Dome, Italy and Switzerland; South Alpine Foredeep, Italy. (2 weeks) Sampling- Tertiary Piedmont Basin, Italy; Voltri Massif, Italy; Dora Maira, Italy; Lepontine Dome, Italy; Molasse Basin, Switzerland

2012-(2 weeks) Field assistant- Canadian Rockies, Alberta, Canada

2011-(3 weeks) Mapping, stratigraphy and sampling- Sverdrup Basin, Ellesmere Island, NU, Canada. (2 weeks) Field assistant- Canadian Rockies, Alberta, Canada

2010-(3 weeks) Mapping, stratigraphy and sampling- Sverdrup Basin, Ellef Ringnes Island, NU, Canada

2007-(3 weeks) Sampling and Stratigraphy- Channeled Scablands source area, WA, ID, MT; (3 weeks) Sampling- Hanford Reach National Monument, WA

2006-(2 weeks) Sampling and Stratigraphy- Hanford Reach National Monument, WA

2005-(3 weeks) Casting, drawing, and mapping- Dinosaur tracks expedition, Lake Powell, UT

2004-(3 weeks) Teaching Assistant, Reconstructing Rivers REU, Dinosaur National Park, San Rafael Swell, UT

2003-(4 weeks) Participant, Reconstructing Rivers REU, Dinosaur National Park, UT

CURRENT LABORATORY- SONOMA STATE UNIVERSITY

Heavy Mineral Separation Facility- Including Jaw Crusher, Disc Mill, Water Wheel, LST heavy liquids separation, Frantz Barrier LB-1 Magnetic Separator

ANALYTICAL AND TECHNICAL EXPERIENCE

-Extensive analytical experience acquired at the following universities: University of Texas at Austin, University of Calgary, University of Arizona, University of Kansas, Washington State University, and University of Idaho

- U-Th-Pb geochronology (PhotonMachines Analyte G.2 Excimer Laser, Thermo Element2 HR-ICP-MS)
- (U-Th)/He thermochronology (PhotonMachines 75W Diode laser, Blazers Prisma QMS-200 quadrupole mass spectrometer, Thermo Helix SFT magnetic sector mass-spectrometer, Bruker GT-K1 3D optical profiler)
- Cathodoluminescence and BSE imaging (Scanning Electron Microscope, JEOL JSM-6490LV)
- Grain size analysis (Malvern Mastersizer, Ro-Tap Sieve)

COMMUNITY OUTREACH

Presenter- Minnesota Geological Survey, (2017)

Mentor- Career Exploration Workshop, Geological Society of America Cordilleran Section Meeting, Honolulu, HI (2017)

Presenter and Panel Member- Sonoma County Meeting on Flooding of Copland Creek, Rohnert Park, CA (2017)

Presenter- Geological Perspectives on Flooding in Copland Creek, Lichau and Roberts Rd Residents, Cotati Fire Department, Rohnert Park, CA (2017)

Presenter- Santa Rosa Gem and Mineral Society, (2017)

Presenter- Humboldt State University, Geology Department, Arcata, CA (2016)

Presenter- Fountaingrove District American Viticultural Area Designation Event (2016)

Presenter- Sonoma State University Fall Convocation (2016)

Presenter- SSU, Chemistry Department (2015)

Presenter- San Francisco State University, Geology Department (2015)

OTHER ACADEMIC INVOLVEMENT AND SERVICE

Referee- Geological Society of America Books (n=2; 2018, 2017)

Referee- AAPG Bulletin (2017)

Referee- Basin Research (2017)

Referee- ACS Petroleum Research Fund (n=1, 2017)

Referee- "The sedimentology of detrital thermochronology-Chapter 7" (2017)

Participant- Circum Arctic Structural Evolution Conference, Hannover, Germany (2017)

Session Chair- American Geophysical Union National Conference, Emerging trends, novel applications, and applied studies in detrital geochronology, Session ID: 13132 (2016)

Participant- Structural Geology and Tectonics Forum, Sonoma State University (2016)

Referee- Journal of the Geological Society of London (2016)

Referee- American Journal of Science (2016)

Participant- Sonoma State School of Science and Technology- STEM Faculty Learning Program (WIDER) (2015-2016)

Participant- North American Geoscience Teachers- Workshop for Early Career Geoscience Faculty, William and Mary College (2015)
 Referee- Arktos (2015)
 Referee- Tectonophysics (n=2; 2016, 2015)
 Referee- Geology (n=4; 2016, 2014, 2013, 2012)
 Referee- Lithosphere (2014)
 Referee- Journal of Asian Earth Sciences (n=2; 2014, 2012)
 Referee- OPUS Research Proposal, National Science Centre, Poland (2015)
 Judge- University of Texas GSEC research symposium (2014)
 Judge- University of Texas Geoscience Leadership Organization for Women (GLOW) Award (2015)
 Scribe and Participant- NSF Summit on the Future of Undergraduate Geoscience Education (2014)
 Participant- GSA Short course #512: Using Laser Ablation Split Stream (LASS) Geochronology and Petrochronology to Address Tectonic and Petrologic Questions
 Volunteer- North American Laser Ablation Workshop (2015)
 Current Membership- Geological Society of America, American Geophysical Union, International Association of Sedimentologists, American Association of Petroleum Geologists, North American Geoscience Teachers

TEACHING ASSISTANTSHIPS

University of Calgary (2008-2012)

GLGY 595- Basin Analysis, Spring 2012
 GLGY 471- Geology, Engineering, and the Environment, Fall 2011
 GLGY 435- Geologic Field Methods II, Summer 2011
 GLGY 555- Global Geology, Spring 2011
 GLGY 423- Mineralogy, Fall 2010
 GLGY 373- Surficial Processes, Spring 2010
 GLGY 337- Introduction to Geologic Field Methods, Summer 2009
 GLGY 595- Basin Analysis, Spring 2009
 GLGY 471- Geology, Engineering, and the Environment, Fall 2008

Washington State University (2005-2008)

GEOL 101- Principles of Geology, Fall 2005, Spring 2006, Summer 2006, Fall 2006, Spring 2007, Fall 2007, and Spring 2008
 GEOL 320- Sedimentary Petrology, Fall 2006 and Fall 2007.

Gustavus Adolphus College (2001-2005)

GEO 111- Introduction to Geology, Fall 2003 and Spring 2004.
 NSF REU- Reconstructing Rivers (Grant number: NSF EAR0139373 & 0244188), Summer 2004