

Owen A. Anfinson
Curriculum Vitae

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EDUCATION AND APPOINTMENTS

2021-Present Associate Professor, Department of Geology, Sonoma State University
2015-2021 Assistant Professor, Department of Geology, Sonoma State University
2012-2015 Jackson School Distinguished Postdoctoral Fellow, Jackson School of
Geoscience, The University of Texas at Austin.
2012 Geological Survey of Canada, Research Geologist
2008-2012 Ph.D., Department of Geoscience, University of Calgary.
2005-2008 M.S., School of Earth and Environmental Science, Washington State
University.
2001-2005 B.A., Department of Geology, Gustavus Adolphus College, Minnesota.

PUBLICATIONS

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- Das, M., **Anfinson, O.A.**, Rowe, C.D., and *Schroeder, N. Age, sedimentology and deformation history of the Mesozoic Franciscan Accretionary Complex, Angel Island, California. *Geological Society of America Bulletin*.
<https://doi.org/10.1130/B37239.1>
- Senger, K., Shephard, G., Ammerlaan, F., **Anfinson, O.**, Audet, P., Coakley, B., Ershova, V., Faleide, J., *Horota, R., Iyer, H., Julian, J., Jones, M., Minakov, A., Odlum, M., *Sartell, A., Schaefer, A., Stockli, D., Vander Kloet, M. and Gaina, C. Arctic Tectonics and Volcanism: a multi-scale, multidisciplinary educational approach. *Geoscience Communication*. In Press.
- Anfinson, O.A.**, Odlum, M.L., Piepjohn, K., *Poulaki, E.M., Shephard, G.E., Stockli, D.F., **Levang, D., Jensen, M.A. and *Pavlovskaja, E.A., 2022. Provenance Analysis of the Andrée Land Basin and Implications for the Paleogeography of Svalbard in the Devonian. *Tectonics*, 41(11), e2021TC007103.
- Malusá, M.G, **Anfinson, O.A.**, and Stockli, D.F. 2022. (Mis)Identification of magmatic and exhumation ages by double dating of detrital mineral grains: insights from the Bergell-Gonfolite system (European Alps). *Chemical Geology*. v.606, p. 1-11, doi.org/10.1016/j.chemgeo.2022.120970
- Bero, D.A., **Anfinson, O.A.**, and Raymond, L., 2021. Reply to Discussion of ‘New insights on Franciscan Complex geology, architecture, depositional age, and provenance for the western Mt. Tamalpais area, Marin County, California’ by Graymer et al. (2021): Part 1. *International Geology Review*. DOI: 10.1080/00206814.2021.1919932
- Anfinson, O.A.**, Stockli, D.F., Miller, J.C., Möller, A., and Schlunegger, F., 2020. Tectonic Exhumation of the Central Alps Recorded by Detrital Zircon in the Molasse Basin, Switzerland. *Solid Earth*, v. 11, p. 1-24, doi.org/10.5194/se-11-1-2020

- Bero, D.A., **Anfinson, O.A.**, and Raymond, L., 2020. New insights on Franciscan Complex geology, architecture, depositional age, and provenance for the western Mt. Tamalpais area, Marin County, CA. *International Geology Review*. p.1-33 DOI:10.1080/00206814.2020.1785338.
- Ershova V.B., Ivleva A.S., Podkovyrov V.N., Khudoley A.K., Fedorov P.V., Stockli D., **Anfinson O.A.**, Maslov A.V., and Khubanov V., 2019. Detrital zircon record of the Mesoproterozoic to Early Cambrian sequences of NW Russia: implications for the paleogeography of the Baltic interior. *Journal of the Geological Society of Sweden*. Gff 141(4), p. 279-288. doi.10.1080/11035897.2019.1625073
- 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*, v. 119, p. 210-220, doi.org/10.1016/j.jog.2018.02.007
- Prokopiev, P., Ershova, V.B., **Anfinson, O.A.**, Stockli, D.F., Powel, J., Khudoley, Vasilev, D., Sobolev, N., and Petrov, E., 2018. Tectonics of the New Siberian Islands Archipelago: Structural Styles and Low-Temperature Thermochronology. *Journal of Geodynamics*, v.121, p.155-184, doi.org/10.1016/j.jog.2018.09.001
- 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*, v. 77, p.1163-1176, doi:10.1016/j.marpetgeo.2016.07.014
- 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. dx.doi.org/10.1016/j.tecto.2016.02.041
- 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*, v. 44 (2), p. 155-158, doi:10.1130/G37407.1
- 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
- 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:

- Odlum, M.L., **Anfinson, O.A.**, Poulaki, E., Shephard G., Stockli, D.F., and Gaina, C. Thermal record of deformation, exhumation, and fluid-rock interactions along the Billefjorden Fault Zone, Pyramiden, Svalbard. Submission to Tectonics
- Anfinson, O.A.** and Chapman, A.D. Insights on the depositional age and origin of the Sur Series, Salinian Terrane, California. Geosphere.

ABSTRACTS AND PRESENTATIONS

** Advised students*

- To be presented: Senger, K., Shephard, G., Ammerlaan, F., **Anfinson, O.**, Audet, P., Coakley, B., Ershova, V., Faleide, J., Horota, R., Iyer, H., Julian, J., Jones, M., Minakov, A., Odlum, M., Sartell, A., Schaefer, A., Stockli, D., Vander Kloet, M. and Gaina, C. Arctic Tectonics and Volcanism: a multi-scale, multidisciplinary educational approach. International Conference on Arctic Margins. Bremen, Germany
- To be presented: Riccardi, N., Chapman, A., **Anfinson, O.**, Figueroa, E., McKeon, O., Smyrak-Sikora, A., Odlum, M., Capaldi, T. Provenance of clastic rocks of the Inner Hornsund Trough, Svalbard: Implications for regional correlations and Devonian paleogeography. International Conference on Arctic Margins. Bremen, Germany
- *Ortega, Y, *Galarza, D., **Anfinson, O.A.** Geology From Above: Utilizing Drones and Photogrammetry to Construct a Virtual Geologic Field Trip. Geological Society of America Cordilleran Section Meeting, Spokane, WA. Abstract ID: 399777
- *Galarza, D., *Ortega, Y, **Anfinson, O.A.** Geology From Above: A Virtual Geologic Field Trip of the Sonoma Coast. Sonoma State University Research Symposium.
- Gaina, C., Shephard, G.E., Minakov, A., **Anfinson, O.**, Ershova, V., Schaeffer, A., Senger, K., Stockli, D., Coakley, B., Eivind Augland, L., Audet, P., Midtkandal, I., and Jones, M. A digital Circum-Arctic geoscience data repository from the NORRAM project. International Geologic Congress. Busan, Korea.
- *Simoneau, V., Wakabayashi, J., **Anfinson, O.A.** 2022 Are Olistostromes of the Great Valley Group, California Remnants of Forearc Mud Volcano Deposits or Submarine Landslide Deposits from Sea-Floor Horsts? Geological Society of America National Meeting, Portland, OR.

- Anfinson, O.A.**, Odlum, M., Poulaki, E., Shephard, G.E., Stockli, D., Levang, D., Jensen, M. and Piephohn, K. 2022. Provenance Analysis of the Andrée Land Basin and the Paleogeography of Svalbard in the Devonian. 9th International Conference on Arctic Margins, Ottawa, Canada.
- Senger, K., **Anfinson, O.A.**, Augland, L.E., C. Beier, Betlem, P., ... Tegner. 2022. Svalbox 2.0 – a networking project to facilitate the use of already collected HALIP samples from Svalbard and beyond. 9th International Conference on Arctic Margins, Ottawa, Canada.
- Shephard, G.E., Gaina, C., Heyn, B., Conrad, C.P., **Anfinson, O.A.**, Schaeffer, A., Senger, K.K. 2022. Exploring potential lower mantle structures and interactions for the origins of HALIP. 9th International Conference on Arctic Margins, Ottawa, Canada.
- *Keith, B.S., **Anfinson, O. A.**, and Coakley, B.J. 2022. Peri-Glacial Features Mapped in the Chukchi Borderland: Constraints on Ice Extent and Motion. 9th International Conference on Arctic Margins, Ottawa, Canada.
- Gaina, C., Shephard, G., Minakov, A., **Anfinson, O.A.**, Ershova, V., Schaeffer, A., Senger, K., Stockli, D., Coakley, B., Augland, L., Audet, P., Midtkandal, I., and Jones, M. 2022 A digital Circum-Arctic geological repository from the NORRAM project. European Geophysical Union, Vienna, AT.
- Anfinson, O.A.**, Odlum, M., Poulaki, E., Shephard, G.E., Stockli, D., Levang, D., Jensen, M. and Piephohn, K. 2022. Provenance Analysis of the Andrée Land Basin and the Paleogeography of Svalbard in the Devonian. European Geophysical Union, Vienna, AT
- *Keith, B.S., **Anfinson, O. A.**, and Coakley, B.J. 2022. Peri-Glacial Features Mapped in the Chukchi Borderland; Constraints on Glacial Extent and Motion. Geological Society of American Cordilleran section meeting. Las Vegas, NV.
- Das, M., Rowe, C.D., **Anfinson, O.A.**, and Mookerjee, M., 2022. Investigating deformation along a paleomegathrust: Insights from microstructural study of blueschist metachert from the Franciscan Complex, California. Geological Association of Canada annual meeting. Halifax, Canada.
- *Das, M., Rowe, C.D., **Anfinson, O.A.**, *Schroeder, N., *Jones, M., and *Lentini, F., 2021. Structural and depositional evolution of the Angel Island “terrane”, Franciscan Complex Forearc, California. AGU Annual Conference, New Orleans, LA.
- *Basich, L., Seymour, N., **Anfinson, O.A.**, Hourigan, J. 2021. The Age and Origin of Crystalline Gneiss in the Plomosa Mountains, West-Central, Arizona. Geological Society of America National Meeting, Portland, OR.
- *Schroeder, N., **Anfinson, O.A.**, Lentini, F, Jones, M., Rowe, C., and Das, M. 2021. The exhumational history and structural geology of Angel Island State Park, CA. Sonoma State University Research Symposium.
- Malusá, M.G, **Anfinson, O.A.**, and Stockli, D.F., 2021. Double dating (U–Pb) and (U–Th)/He) of detrital zircon from the Gonfolite Group (European Alps) and implications for the lag-time approach to detrital thermochronology. European Geophysical Union Annual Meeting, Vienna, Austria. EGU21-2608.
- Anfinson, O.A.**, Stockli, D.F., Schlunegger, F., and Malusa, M.G. Provenance analysis of Eocene to Miocene sedimentary strata derived from the Central Alps - Insights from detrital zircon Laser Ablation Split Stream (LASS)-ICP-MS

- depth-profiling. Geological Society of America National Meeting. Montreal, QB, Canada. Oct. 2020 (Virtual Meeting).
- *Finley, J., **Anfinson, O.A.**, Odlum, M., Levang, D., Poulaki, E., Gaina, C., Stockli, D., Shephard, G., and Pavlovskaja, E. Late Devonian Sediment Provenance of the Andrée Land Basin, Svalbard, Norway. Geological Society of American Cordilleran section meeting. Pasadena, CA. May 2020 Abstract #347362 (Accepted but canceled due to Covid 19 Pandemic).
- *Levang, D., **Anfinson, O.A.**, Odlum, M., Finley, J., Poulaki, E., Gaina, C., Stockli, D., Shephard, G., and Pavlovskaja, E. Early to Middle Devonian Paleogeographic Location of Svalbard, Norway. Geological Society of American Cordilleran section meeting. Pasadena, CA. May 2020. Abstract #347363 (Accepted but canceled due to Covid 19 Pandemic).
- *Levang, D., **Anfinson, O.A.**, Odlum, M., Finley, J., Poulaki, E., Gaina, C., Stockli, D., Shephard, G., and Pavlovskaja, E. 2020. Early Devonian Sediment Provenance of the Andrée Land Basin, Svalbard, Norway. Sonoma State University Research Symposium.
- Anfinson, O.A.**, Odlum, M., Shephard, G.E., Gaina, C., Stockli, D., Finley, J., and Levang, D. Provenance analysis of the Devonian Andrée Land Basin, Svalbard. AGU Chapman, Iceland. October 2019.
- Odlum, M.L., **Anfinson, O.A.**, Poulaki, E., Shephard G., Stockli, D.F., and Gaina, C. Thermal record of deformation, exhumation, and fluid-rock interactions along the Billefjorden Fault Zone, Pyramiden, Svalbard. AGU Chapman, Iceland. October 2019.
- *Dupuis, KE, **Anfinson, O.A.**, Waters, L., Frey, H.M., Rico, M., Richardson, K.J., and Camarena, G., 2019. The Provenance of Wine: The Role of Bedrock and Soil in Transferring Trace and Rare Earth Elements into Wine Grapes, Sonoma County, CA. Geological Society of American Cordilleran section meeting. Portland, OR. Abstract #329559
- Anfinson, O.A.**, Bero, D.A, Raymond, L. and Simoneau, V., 2019 Franciscan Complex structural architecture, depositional age, and provenance for west Mt. Tamalpais, CA Geological Society of American Cordilleran section meeting. Portland, OR. Abstract #329574
- *Dupuis, K., **Anfinson, O.A.**, *Richardson, K., Camarena, G., and Rico, M., 2019. Establishing a Geochemical Link Between Bedrock, Soil, and Grapes in Sonoma County. Sonoma State University Research Symposium.
- *Rico, M., **Anfinson, O.A.**, *Richardson, K., Camarena, G., Dupuis, K., and Waters, L., 2019. The Role of Bedrock in the Elemental Profile of Wine Grapes in Sonoma County, California. Sonoma State University Research Symposium.
- *Camarena, G., Mookerjee, M. and Anfinson, O.A., 2019 Reconstructing Landslide Plane Areas Using Seismic Refraction Tomography and Ground Penetrating Radar. 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.

- *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.
- 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
- Invited Submission: **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.
- 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-Apennines 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-Apennines 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.**, Lockley, M., Gulbranson, E., and Maxson, J., 2004. *Aquatilavipes demscottae*, a new ichnospecies from the Lower Cretaceous Dakota Formation of northeastern Utah: In: Midwest Paleoabstracts, First Annual Midwest Symposium of Student Paleontological Research, p. 12.
- 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, 2018, 2019, 2021, 2022, 2023; Winter 2019, 2020, 2021, 2022, 2023, 2024

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

GEOL 303: Advanced Topics in Geology, Spring 2024, Fall 2024

GEOL 309: Computer Applications in Geology, Spring 2016, 2017, 2018, 2019; Fall 2019, 2020, 2021, 2022, 2023, 2024

GEOL 311: Sedimentary Geology, Spring 2016, 2017, 2018, 2019, 2020, 2021, 2022, 2024

GEOL 312: Sedimentary Geology Field, Spring 2016, 2017, 2018, 2019, 2020, 2021, 2022, 2024

GEOL 320: Basin Analysis, Fall 2018, 2020

GEOL 420: Advanced Field Geology, Spring 2018, 2019, 2020, 2021, 2022

GEOL 426: Senior Thesis, 2015- 2016 (n=2), 2016-2017 (n=2), 2017-2018 (n=2), 2018-2019 (n=1), 2019-2020 (n=2), 2020-2021 (n=2), 2021-2022 (n=4)

GEOL 495: Independent Research, 2015-2016 (n=1), 2016-2017 (n=6), 2017-2018 (n=10), 2018-2019 (n=7), 2020-2021 (n=3), 2023-2024 (n=2)

University of Svalbard (2018-Present)-Guest Lecturer

AGx-51: Arctic Magmatism and Tectonics (Summer 2018, Summer 2019, Fall 2022, Fall 2024)

AWARDS, GRANTS AND FELLOWSHIPS

- 2024-2025 The Geologic Assembly of Svalbard: A Window into Arctic Tectonics. SSU Research Scholarship and Creative Activity Program (RSCAP). Amount: \$6,850.
- 2024 SST Professional Development Award, \$2500
- 2024 Arctic Field Grant- Research Council of Norway- Digitizing Svalbard: Hornsund and Storfjorden Digital Outcrop Model Data Acquisition Campaign and Virtual Field Guide Development for Educational Research. Lead PI- Rafael Horota, University of Svalbard. Amount: ~\$10,000 USD
- 2023-2024 SSU Research Scholarship and Creative Activity Program (RSCAP) Geology of California from Above- Increasing Drone use in SST. Amount: \$6900
- 2020-2023 The Research Council of Norway- INTPART, Co-PI, NORRAM II: 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. Amount: \$7,500,000 NOK (~\$746,000 USD). <https://norramarctic.wordpress.com/>
- 2022 SST Professional Development Award, \$2500
- 2021 Svalbox 2.0 – FAIR geoscientific data from Svalbard. Lead PI-Kim Senger, University of Svalbard. Amount: 500,000 NOK (\$58,000 USD).
- 2021 Senior thesis research student Nicolas Schroeder was awarded the SSU Virtual Research Symposium Best Poster Award
- 2021 NSF Major Research Instrumentation Award, 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).
- 2020-2021 Koret Scholars Award (\$5000 research funding for students and \$3000 fellowship)
- 2021-2025 The Research Council of Norway- INTPART: Geodynamic Model of the Arctic (POLARIS) Lead PI-Grace Shephard, University of Svalbard. Amount: 7,991,000 NOK (\$795,000 USD).
- 2020 SSU Research Scholarship and Creative Activity Program (RSCAP) Summer Fellowship (\$5000)
- 2019-2020 Nominated for the Sonoma State University Excellence in Teaching Award
- 2019 SST Innovation and Strategic Priorities Grant, \$9491
- 2019 SST Professional Development Award, \$1750
- 2019 NSF Travel Award, AGU Chapman, Selfoss Iceland, \$3500
- 2019 SST Innovation and Strategic Priorities, \$850

- 2019 Senior thesis research student Kylie Dupuis was awarded the American Women in Geoscience (Bay Area) outstanding student researcher award.
- 2019 Koret Scholars Award (\$4000 research funding for students and \$6000 fellowship)
- 2017-2020 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 (~\$695,000 USD)).
- 2018 Funded- AGU Chapman Conference Proposal- Large-scale volcanism in the Arctic: The role of the mantle and tectonics. Selfoss, Iceland. October 2019. Co-Conveners: Grace Shepard, Bernie Coakley and Carmen Gaina
- 2018 Center for Environmental Inquiry, Environmental Technology Grant (\$1850)
- 2018 Dean's Research Fellowship, SSU, (\$5500)
- 2018 The Waters Collaborative, SSU, (\$920)
- 2018 SSU Research Scholarship and Creative Activity Program (RSCAP) Summer Fellowship (\$5000)
- 2018 Senior thesis research student Victoria Simaneau was awarded the American Women in Geoscience (Bay Area) outstanding student researcher award.
- 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)
- 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 Senior thesis research student Maureen Redmond was awarded the American Women in Geoscience (Bay Area) outstanding student researcher award.
- 2017 Summer High School Internship Program, 2 students (\$1500)
- 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)-

2024-2025

Edwin Flores (BS; GEOL 495) Provenance of the Devonian Adriaabukta Formation in Svalbard.

Owen Mckeeon (BS GEOL 426) Paleogeography of Svalbard in the Devonian.

2023-2024

Yajaira Ortega (BS; GEOL 495) Geology From Above: Building a virtual geologic field guide of the Sonoma coast utilizing drones and 3D modeling

Daniel Galarza (BS; CS 495) Geology From Above: Building a virtual geologic field guide of the Sonoma coast utilizing drones and 3D modeling

2021-2022

Chiara Gardiner (BS; GEOL 426-Senior Thesis). Mapping of Franciscan conglomerates and their structural context, Angel Island State Park, CA.

Micheal Jones (BS; GEOL 426-Senior Thesis). Stratigraphy and Structural Makeup of Franciscan Strata, Angel Island State Park, CA.

Bradley Keith (BS; GEOL 426-Senior Thesis). An Overview of Newly Collected Swath-Bathymetry Data from Chukchi Borderland, Russian Arctic.

Luka Basich (BS; GEOL 426-Senior Thesis). The age and origin of crystalline gneiss in the Plomosa Mountains, west-central Arizona.

2020-2021

Nicolas Schroeder (BS; GEOL 426-Senior Thesis). Determining sediment sources and mapping of Franciscan Strata at Angel Island State Park, CA. Awarded SSU Virtual Research Symposium “Best Poster.”

Holden Hecht (BS; GEOL 495) 3D modeling with UAS acquired imagery

2019-2020

Devin Levang (BS; GEOL 426-Senior Thesis) and Jake Finley (BS; GEOL 426-Senior Thesis). Provenance analysis of the Devonian Andrée Land Basin, Svalbard. Both Students were awarded a \$750 “Student Research Award” from ORSP.

Meghan Pieratt (BS; GEOL 495) Geology from Above as a teaching resource

2018-2019

Kylie Dupuis- (BS; GEOL 426-Senior Thesis), Mayerline Rico, Graciela Camarena, Kalia Richardson (BS; GEOL 495). The provenance of wine determined through geochemical (Trace and Rare Earth Element) analysis of rock, soil, and wine grapes. All four students were awarded \$700 “Student Research Award” from ORSP.

Andrew Raidle, Holden Robinson, and Tim Dooley (BS; GEOL 495). 3D models and reconstruction of Sonoma county geologic outcrops through aerial imagery (structure from motion)

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 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- Apennines system. In 2020 Laura will defend her Ph.D in the Department of Geoscience, Stanford University.

University of Calgary:

2011-2012

Dylan Tullius (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

Chair-Unoccupied Aviation Systems Board (2017-present)

Member- Dispute Resolutions Board (2017-2019, 2021-Present)

Chair- Math Engineering Science Achievement (MESA) Advisory board (2024-Present)

Chair- Department of Geology RTP Committee (2021-Present)

Member- Radiation Safety Committee (2015-Present)

Chair- Dispute Resolutions Board (2019-2021)

Member- Unmanned Aviation Systems Board (2016-2017)

Member- Copland Creek Committee (2016-2018)

Member- Geology Department Tenure Track Search Committee (2017, 2018, 2020)

FIELD EXPERIENCE

- *Extensive department related field experience excluded (2015-2024: 15+ days in field per year)*

2024- (6 days) Collecting aerial imagery and on the ground photos to build a virtual field guide. Sonoma Coast, California.

2023- (12 days) Field training, sampling, and collecting aerial imagery. Kenai to Brooks Range, Alaska.

(3 days) Sampling and collecting aerial footage, Catalina Island, CA

2022- (5 days) Field training and aerial imagery, Svalbard, Norway

- 2021-** (5 days) Field Trip Leader- Northern California Coastal Field Trip with the Association for Women Geoscientists; (5 days) Mapping and sampling- Franciscan Complex, Angel Island State Park, CA
- 2020-** (8 days) Scouting and sampling- Franciscan Complex, Angel Island State Park, CA; (5 days) Sampling- Franciscan Complex, Sonoma Coast, California; (2 Days) Scouting for GSA Cordilleran Section meeting field trip (Co-leader), Salinian Terrane, CA (Trip canceled due to Covid-19).
- 2019-** (10 days) Wilson cycle film documentary, Norwegian Caledonides; (3 days) Sampling and Stratigraphy, Devonian Andrée Land Basin-Svalbard; (2 days) Stratigraphy- Franciscan Complex, California; AGU Chapman Iceland Field Trip (3 days)
- 2018-** (5 days) Sampling- Franciscan Complex, California; (10 days) UAS surveys of northern Californian geologic outcrops; (2 days) Stratigraphy and Scouting- Svalbard
- 2017-**(5 days) Sampling- Sur Series, Salinian Block, California; (3 days) Sampling and Stratigraphy- Franciscan Complex, 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

COMMUNITY INVITED PRESENTATIONS

Presenter- Wonderfest; To See a World in a Grain of Sand (2023)

Presenter- (Postponed due to Covid 19)- University of California, Berkeley, Isotope Geochemistry Seminar (2020)

Presenter- Northern California Geological Society (2019) <http://www.ncgeolsoc.org/wp-content/uploads/2019/04/April-2019-abstract-bio.pdf>

Presenter- Sacramento State University (2018)

Presenter- Minnesota Geological Survey, (2017)

Presenter- 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- Sonoma State University, Chemistry Department (2015)

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

Presenter- Exxon Mobile, Houston, TX (2015)

Presenter- University of Texas at Austin lecture series (n=3, 2012, 2014, 2015)

Presenter- Ice Age Floods Institute (n=2, 2009, 2010)

REVIEWED MANUSCRIPTS AND PROPOSALS

Basin Research (n=3, 2024, 2020, 2017); Geology (n=7, 2023, 2021, 2018, 2016, 2014, 2013, 2012); Earth Science Reviews (n=1, 2024); Norwegian Journal of Geology (n=1, 2020); Canadian Journal of Earth Science (n=1, 2020); Terra Nova (n=1, 2020); Arktos (n=3, 2020, 2018, 2017); NSF Tectonics Proposal (n=1, 2019); ACS Petroleum Research Fund (n=2, 2019, 2017); Geological Society of America Bulletin (n=1, 2018); Geological Society of America Books (n=2; 2018, 2017); AAPG Bulletin (2017); Book- “The sedimentology of detrital thermochronology”-Chapter 7 (2017); Tectonophysics (n=2; 2016, 2015); Lithosphere (2014); Journal of Asian Earth Sciences (n=2; 2014, 2012); OPUS Research Proposal, National Science Centre, Poland (n=1, 2015); Journal of the Geological Society of London (n=1, 2016); American Journal of Science (n=1, 2016)

OTHER ACADEMIC INVOLVEMENT AND SERVICE

Facilitator- Lesson Study (Windows and Mirrors) lead for Transformative Inclusion in Postsecondary STEM (TIPS) program 2023-2024

Participant- Transformative Inclusion in Postsecondary STEM (TIPS) program. 2022-2024

Participant- Building a Virtual Geologic Field Guide of Santa Catalina Island. February 2023.

Program Steering Committee- 9th International Conference on Arctic Margins- Geochronology and Tectonics. 2022. Ottawa, Canada

Session Convener- The Arctic connection - plate tectonics, mantle dynamics and paleogeography serving paleo-climate models and modern jurisdiction; European Geophysical Union Annual Meeting (Vienna, Austria, 2022)

Guest Science Editor- Phanerozoic Tectonics and Volcanism in the Arctic; Journal: AGU, Tectonics. 2022

Organizer and MC- AGU hosted Mount Fagradalsfjall Eruption Webinar. June 10, 2021. Recording Link: https://www.youtube.com/watch?v=u3QW22b9_Jg

Session Convener- The Arctic connection - plate tectonics, mantle dynamics and paleogeography serving paleo-climate models and modern jurisdiction; European Geophysical Union Annual Meeting (Vienna, Austria, 2021)

Conference Convener- AGU Chapman Conference 2019; Large-Scale Volcanism in the Arctic: The Role of the Mantle and Tectonics

<https://connect.agu.org/aguchapmanconference/upcoming-chapmans/arctic-volcanism>

(Conference Recap Video:

<https://www.youtube.com/watch?v=pbe92g5jzPw&feature=youtu.be>)

Session Chair- The Arctic Connection: Investigating the Tectonic Evolution of the Circum Arctic; American Geophysical Union Annual Meeting (Washington, DC, 2019)

Lecturer- University of Svalbard, Arctic Tectonics and Magmatism (AG 531/831), (2018, 2019)

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

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

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

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

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 Memberships- Geological Society of America, American Geophysical Union, International Association of Sedimentologists, North American Geoscience Teachers

CURRENT LABORATORY- SONOMA STATE UNIVERSITY

Heavy Mineral Separation Facility- Including Jaw Crusher, Disc Mill, Water Wheel, LST heavy liquids separation, and Frantz Barrier LB-1 Electromagnetic 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)
- 5 Unoccupied Aerial Vehicles- 3DR Solo, DJI Mavic Pro, DJI Mavic 2 Pro, DJI FPV, DJI Mavic 3 Pro

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