

Kurtis Charles Burmeister

CAMPUS: Geology Department, California State University, 6000 J Street MS6043, Sacramento, CA 95819, USA

HOME: 5605 Hirsch Circle, Elk Grove, CA 95757, USA

CAMPUS 916.278.5635 **MOBILE** 209.471.8998

WEB www.kburmeister.com **EMAIL** k.burmeister@csus.edu

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Education

Ph.D., Structural Geology, University of Illinois at Urbana-Champaign (2005)

Aspects of deformation and strain in the Appalachian fold-thrust belt (New York) and the shear zones of the Sveconorwegian orogen (Norway), Dr. Stephen Marshak, Advisor

M.A., Vertebrate Paleontology, University of California, Santa Barbara (2000)

Biostratigraphic, systematic, and paleogeographic implications of new Late Triassic vertebrate fossils from the Morondava Basin of west-central Madagascar, Dr. André R. Wyss, Advisor

B.A., Biological Sciences, University of California, Santa Barbara (1996)

Nanotyrannus lancensis, an independently evolving genus of tyrannosaurid from the latest Cretaceous (late Maastrichtian) of North America, Dr. André R. Wyss, Advisor

Jesuit High School (Sacramento), Carmichael, California

Academic & Research Appointments

Current / Upcoming Academic Appointments

- Assistant Professor (tenure track), [Geology Department, California State University, Sacramento](#) (2020 - present)
- Adjunct Associate Professor, [Department of Geology, University of Illinois at Urbana-Champaign](#) (2011 - present)
- Co-Director, [Wasatch-Uinta Geology Summer Field Camp, Park City, Utah](#) (2007 - present)
- Faculty, [Wasatch-Uinta Geology Summer Field Camp, Park City, Utah](#) (2003 - present)

Previous Academic Appointments

- Associate Professor (with tenure), [Dept of Earth & Environmental Sci., Univ. of the Pacific, Stockton, CA](#) (2011 - 2020)
- Lecturer, [Department of Geological Sciences, SUNY Geneseo](#) (Summer, 2020)
- Lecturer, [Geology Department, California State University, Sacramento](#) (Spring 2019)
- Visiting Associate Professor, [Department of Geology, University of California, Davis](#) (Sabbatical, 2017-2018)
- Assistant Professor, [Department of Earth & Environmental Sciences, Univ. of the Pacific, Stockton, CA](#) (2005 - 2011)
- Assistant Professor (tenure track), [Department of Geology, California State University, Bakersfield](#) (2004 - 2005)
- Teaching Assistant, [Department of Geology, University of Illinois at Urbana-Champaign](#) (2000 - 2001)
- Teaching Assistant, [Department of Geological Sciences, University of California, Santa Barbara](#) (1997 - 2000)

Previous Research Appointments

- Visiting Scholar, [Department of Earth Sciences, University of Southern California, Los Angeles, CA](#) (2003 - 2004)
- Research Assistant, [Department of Geology, University of Illinois at Urbana-Champaign](#) (2001 - 2004)
- Field Engineer Intern (FEI), [Schlumberger, ANADRILL-MWD, Anaco, Venezuela, SA](#) (2001)

Current Research Interests

- **Convergent Systems:** Evolution of structural styles and strain partitioning in active and ancient convergent margins;
- **Rock Fabrics:** Analysis of penetrative strain and anisotropy of magnetic susceptibility (AMS) fabrics as tools for resolving deformation histories; quantifying relationships among primary (deposition/compaction), tectonic strain, and magnetic fabrics
- **Sierra Nevada Volcanic Arcs:** Resolving the geologic evolution of the Sierra Nevada Jurassic volcanic arc through geology mapping, grain- and macroscopic -scale rock fabric analysis, paleomagnetic analyses, and geochemistry
- **Geoscience Education:** Field safety leadership, the effect of cognitive loads on field safety; three- and four-dimensional spatial relationships; Geologic mapping, cross section construction, and field methods

Scholarship & Creative Activities

†Indicates student co-author

Peer-Reviewed Publications

1. Giorgis, S.D., Horsman, E., **Burmeister, K.C.**, †Rost, R., †Herbert, L., †Pivarunas, A., and †Braunagel, M., 2019, *Paleomagnetic constraints on emplacement rates of intrusions in the shallow crust*: Journal of Geophysical Research, v. 46, DOI: doi.org/10.1029/2019GL084025 [[Link to article](#)]
2. Börk, K., and **Burmeister, K.C.**, 2019, *Cases and places: a field-based approach to teaching natural resources and environmental law*: Journal of Legal Education, v. 68, n. 2., p. 338-356. DOI: 10.2139/ssrn.3253986 [[Link to article](#)]
3. Ferré, E.C., Gébelin, A., Till, J.L., Sassier, C., **Burmeister, K.C.**, 2014, *Deformation and magnetic fabrics in ductile shear zones: A review*: Tectonophysics, v. 629, p. 179-188, DOI: 10.1016/j.tecto.2014.04.008 [[Link to article](#)]
4. Hayman, N.W., **Burmeister, K.C.**, Kawamura, K., Anma, R., and Yamada, Y., 2011, *Submarine Outcrop Evidence for Transpressional Deformation Within the Nankai Accretionary Prism, Tenryu Canyon, Japan*, IN Ogawa, Y. et al. (eds.), *Accretionary Prisms and Convergent Margin Tectonics in the Northwest Pacific Basin*; Modern Approaches in Solid Earth Sciences, Springer, vol. 8, p. 197-214, DOI 10.1007/978-90-481-8885-7-10. [[Link to article](#)]
5. Kawamura, K., Kanamatsu, T., Kinoshita, M., Saito, S., Shibata, T., Fujino, K., Misawa, A., and **Burmeister, K.C.**, 2009, *Redistribution of Sediments by Submarine Landslides on the Eastern Nankai Accretionary Prism*: D.C. Mosher et al. (eds.), *Submarine Mass Movements and Their Consequences*, Advances in Natural and Technological Hazards Research, Vol 28, p. 313-322, DOI: 10.1007/978-90-481-3071-9. [[Link to article](#)]
6. **Burmeister, K.C.**, Harrison, M.J., Marshak, S., Ferré, E.C., †Bannister, R.A., and Kodama, K.P., 2009, *Comparison of Fry strain ellipse and AMS ellipsoid trends to tectonic fabric trends in very low-strain sandstone of the Appalachian fold-thrust belt*: Journal of Structural Geology, v. 31, n. 9, p. 1028-1038, DOI: 10.1016/j.jsg.2009.03.010 [[Link to article](#)]
7. Werner, D. and **Burmeister, K.C.**, 2007, *An overview of the history and economic geology of the natural cement industry at Rosendale; Ulster County, New York*: Journal of ASTM International, Special Issue of on North American Natural Cement, v. 4, n. 6, DOI: 10.1520/JAI100672 [[Link to article](#)]
8. **Burmeister, K.C.**, J.J. Flynn, J.M. Parrish, and A.R. Wyss., 2006, *Paleogeographic and biostratigraphic implications of new early Mesozoic terrestrial vertebrate fossils from Poamay, central Morondava Basin, Madagascar*. In Harris et al. (eds.) *The Triassic-Jurassic terrestrial transition*. New Mexico Museum of Natural History and Science Bulletin, v. 37, p. 457-475. [[Link to article](#)]
9. Sylvester, A.G., **Burmeister, K.C.**, and Wise, W.S., 2002, *Faulting and effects of associated shaking at Pisgah Crater Volcano caused by the 16 October 1999 Hector Mine earthquake (Mw 7.1), central Mohave Desert, California*: Bulletin of the Seismological Society of America, v. 92, p. 1333-1340, DOI: 10.1785/0120000921. [[Link to article](#)]

Publications Submitted / In-Press

Burmeister, K.C., Leeds, T., Wilkerson, M.S., and Marshak, S., *Geologic map of the New York Recess of the Northern Appalachian Foreland Fold-Thrust Belt, Hudson Valley, New York. 1:10,000*: submitted to Paleontological Research Institution, Cornell University in January 2022, currently under peer-review.

Wu, C., Nittrouer, J.A., Barefoot, E.A., **Burmeister, K.C.**, *Reconstructing backwater hydrodynamics from fluvial-deltaic deposits using stratigraphic inversion: an example from the Tullig Sandstone, Western Irish Namurian Basin, Co. Clare, Ireland*: Submitted to Geological Society of America Bulletin for publication in Fall 2021 (Tracking number B36475)

Publications In Preparation

Burmeister, K.C., Atchison, C.A., Bohacs, K.M. *Recognizing the impact of environmental loads on student learning; an unexpected outcome of the COVID pandemic on field education*. (manuscript 75% complete, in preparation for April 2022 submission to COVID Pandemic special issue of Journal of Geoscience Education)

Burmeister, K.C., Marshak, S., and Wilkerson, M.S., *Structural architecture of the northern Appalachian fold-thrust belt*: (cross section restoration 90% complete, manuscript 70% written).

Burmeister, K.C., Giorgis, S.D., and Jones, A.D., *Modified Busk-Kink method for constructing quick admissible cross sections of parallel folds*: in prep for Journal of Geoscience Education (figures 75% complete, manuscript 50% written, assessment data collection completed but needs processing & interpretation)

Textbooks In Preparation

Bohacs, K.M., Oliveri, S.R., Barriault, A.G., **Burmeister, K.C.**, *Field safety in uncontrolled environments: a process-based guidebook*, 2nd edition. Geological Society of America, in prep.

Burmeister, K.C., Wilkerson, M.S., and Marshak, S., *Basic Methods of Structural Geology, 2nd edition*; Prentice Hall Publishers, Upper Saddle River, New Jersey (revisions to chapters 50% complete., redrafting/updating figures 40% complete)

Field Guidebooks

Marshak, S., **Burmeister, K.C.**, †Sen, P., †Yakolev, P., and Kuiper, Y., 2009, *Structures of the Hudson-Valley fold-thrust belt in the Appalachian foreland of eastern New York*, in F. Vollmer (ed.) Guidebook - New York State Geological Association, Meeting, v. 81, p. 1.1-1.18. [[Link to article](#)]

Burmeister, K.C., and Marshak, S., 2006. *Along-strike changes in the architecture of a fold-thrust belt: An example from the Hudson Valley, New York*, in F.J. Pazzaglia (ed.), GSA Field Guide 8, Excursions in Geology and History: Field Trips in the Middle Atlantic States: Geological Society of America Field Guide 8, p. 199-216. [[Link to article](#)]

Burmeister, K.C., and Marshak, S., 2003, *Examples of along-strike changes in fold-thrust belt architecture; structural geology of the Rosendale natural cement region, Ulster County, New York*, in E.L. Johnson (ed.) Guidebook - New York State Geological Association, Meeting, v. 75, p. 238-266.

General Interest, Professional Reports, Film

Egger, A., Atchison, C., **Burmeister, K.C.**, Rademacher, L., Ryker, K., and Tikoff, B., 2021, Invited contribution –*Teaching with Online Field Experiences: New resources by the community, for the community*: National Association of Geoscience Teachers, In the Trenches, v.11, n.1. [[Link](#)]

Burmeister, K.C., 2020, *Seven strategies for success at field camp*, GSA Today, v. 30, n. 5-6., p. 56. [[Link](#)]

Burmeister, K.C., 2017, *The art of making observations*, In Wurtz, M.J. (ed.) John Muir Observer Journal: University of the Pacific Press, Stockton, CA.

†Woodward, T., 2013, *The End of the World*: **Burmeister, K.C.** and Rademacher, L.K. (executive producers). Description: a documentary film following Geology and Spanish students from the University of the Pacific on a week-long field trip to the Chilean Patagonia.

Rubin, P.A., **Burmeister, K.C.**, and Folsom, M., 2006. *Karst Resource Management: groundwater protection and developmental considerations in the Kingston-Rosendale aquifer system; Ulster County, NY*: Report submitted to Scenic Hudson regarding The Landing DGEIS Project, Kingston, NY, 18 p.

Burmeister, K.C., 2003. *Mines of the Rosendale natural cement region: windows into ancient mountains for a graduate student from the Midwestern plains*: Natural News, Century House Historical Society, v.4, n.4, p.4-6.

Burmeister, K.C., 2001. *Water-based drilling mud resistivities; comparison of measured data with values estimated using methods outlined in the Schlumberger Log Interpretation Charts*: Schlumberger ANADRILL-MWD, Anaco, Venezuela, SA, 19 p.

Conference Presentations

1. Petterson, R., **Burmeister, K.C.**, Atchison, C.L., Skinner, S.M., Jones, A.D., and †Finley, J.M., 2021, *Virtual Field Trips as a tool for reducing anxieties and refocusing cognitive loads during in-person field activities*: presented at 2021 AGU Fall Meeting, New Orleans, LA,
2. **Burmeister, K.C.**, Petterson, R., Skinner, S.M., and Jones, A.D., 2021, *Virtual post-activity walkthroughs - using virtual field trips to provide students with meaningful feedback and opportunities for reflection on in-person geologic exercises*: presented at 2021 AGU Fall Meeting, New Orleans, LA,
3. Rademacher, L.K., **Burmeister, K.C.**, Ryker, K., Atchison, C.L., Egger, A.E., Shipley, T., and Tikoff, B., 2021, *The lasting impacts of the COVID pandemic on teaching and learning without the field*: Geological Society of America Abstracts with Programs. Vol 53, No. 6, doi: 10.1130/abs/2021AM-368918
4. Atchison, C.L., **Burmeister, K.C.**, Egger, A.E., Rademacher, L.K., Ryker, K., and Tikoff, B., 2020, *COVID-19: kick-starting a community-driven effort to build inclusive and accessible field experiences*: presented at 2020 Fall Meeting, AGU, San Francisco, CA, 7-11 Dec, ED018-02 [[Link](#)]
5. **Burmeister, K.C.**, Bohacs, K.M., Atchison, C.L., Rademacher, L.K., Riggs, E.M., Wu, J., and †McKay, J., 2020, *The need for a SAFER system for quantifying risk to physical, intellectual, and emotional health faced by geoscientists in the field*: presented at 2020 Fall Meeting, AGU, San Francisco, CA, 7-11 Dec [[Link](#)] [[Poster](#)]
6. Rademacher, L.K., Ryker, K., Shipley, T.T., **Burmeister, K.C.**, and Atchison, C.L., Tikoff, B., Egger, A.E., 2020, *How well did it work? The Transition to Online Field Camps in the Summer of COVID-19*: Geological Society of America Abstracts with Programs. Vol 52, No. 6, doi: 10.1130/abs/2020AM-356539 [[Link](#)]
7. Hollister, R.J., **Burmeister, K.C.**, Giorgis, S.D., and Warner, N.H., 2020, *A refined photogrammetry workflow for consistently high-resolution virtual 3D models of geologic specimens shared on Sketchfab*: Geological Society of America Abstracts with Programs. Vol 52, No. 6, doi: 10.1130/abs/2020AM-358097 [[Link](#)]
8. **Burmeister, K.C.**, Atchison, C.L., Egger, A.E., Rademacher, L.K., Ryker, K., and Tikoff, B., 2020, *Meeting the challenge - how the geoscience community provided robust online capstone experiences in response to the COVID-19 pandemic*: Geological Society of America Abstracts with Programs. Vol 52, No. 6, doi: 10.1130/abs/2020AM-358012. [[Link](#)]
9. †Meghani, N.A., †Jones, A.D., †Thurston, O., Christie, M., Gran, K.B., Stewart, M.A., and **Burmeister, K.C.**, 2020, *Universal Design for Learning (UDL) at the Wasatch-Uinta Field Camp - COVID-19 restrictions lead to a new accessible capstone experience for students*: Geological Society of America Abstracts with Programs. Vol 52, No. 6, doi: 10.1130/abs/2020AM-357499 [[Link](#)]
10. †Wu, C., Nittrouer, J., Barefoot, E.A., and **Burmeister, K.C.**, 2020, *Stratigraphic evidence for non-uniform hydrodynamics in the Tullig Sandstone, Western Irish Namurian Basin, Co. Clare, Ireland*: Geological Society of America Abstracts with Programs. Vol 52, No. 6, doi: 10.1130/abs/2020AM-355853 [[Link](#)]
11. **Burmeister, K.C.**, Giorgis, S.D., and †Jones, A.D., 2018, *A surprisingly undeformed remnant of the Jurassic volcanic arc in the northern Sierra Nevada: Mount Tallac roof pendant, Desolation Wilderness Area, Eldorado County, California*: Geological Society of America Abstracts with Programs. Vol. 50, No. 6, doi: 10.1130/abs/2018AM-323569
12. Giorgis, S.D., **Burmeister, K.C.**, †Bladis, M., †Havener, P., †Perpall, B., †Herbert, L.A., †Deahn, M., and †Kahler, L., 2018, *Paleomagnetic analysis of Middle Jurassic Sierra Nevada dikes in the southernmost Mount Tallac roof pendant, Desolation Wilderness Area, Eldorado County, California*: Geological Society of America Abstracts with Programs. Vol. 50, No. 6, doi: 10.1130/abs/2018AM-319136
13. Giorgis, S.D., †Rost, R., Horsman, E. †Herbert, L.A., **Burmeister, K.C.**, 2017, *Landslide potential in areas of active magmatism: constraints on minimum rates of emplacement from paleomagnetic data, Trachyte Mesa laccolith, Henry Mountains, UT*: GSA Thompson Field Forum on Catastrophic Mega-Scale Landslide Failure of Large Volcanic Fields, Bryce Canyon City.
14. †Wu, C., Nittrouer, J., **Burmeister, K.C.**, 2017, *Impacts of variable channel hydraulics on the stratigraphic record: an example provided from the Tullig Sandstone, Western Irish Namurian Basin*: American Geophysical Union Abstracts with Programs, abstract #EP33A-1915.
15. †Hartwig, M., †Herbert, L.A., Giorgis, S.D., **Burmeister, K.C.**, Hayman, N.W., Anma, R., 2017, *Preliminary analysis of anisotropy of magnetic susceptibility and paleomagnetic fabrics within exhumed portions of the Nankai accretionary complex, Kii Peninsula, Japan*: Geological Society of America Abstracts with Programs. Vol. 49, No. 6, doi: 10.1130/abs/2017AM-303176
16. †Jones, A.D., †Arnold, V.A., †Robinson, J.M., †Severson, A.R., **Burmeister, K.C.**, Vollmer, F.W., 2017, *Analysis of petrofabrics in the Jurassic Tuttle Lake Formation near Grass Lake; Mount Tallac roof pendant, El Dorado County, CA*: Geological Society of America Abstracts with Programs. Vol. 49, No. 6, doi: 10.1130/abs/2017AM-303176

17. †Lopez, A.R., †Herbert, L.A., †Wu, C., †Sacklett, H.L., Giorgis, S.D., **Burmeister, K.C.**, Nittrouer, J., 2017, *A companion of Rf/phi and AMS fabrics in strata involved in the Variscan fold-thrust belt; western Irish Namurian Basin, County Claire, Ireland*: Geological Society of America Abstracts with Programs. Vol. 49, No. 6, doi: 10.1130/abs/2017AM-303176
18. †Herbert, L.A., †Perpall, B.A., Giorgis, S.D., **Burmeister, K.C.**, 2017, *Exploring paleomagnetism as a tool for resolving the timing of igneous intrusions in the Mount Tallac metamorphic roof pendant; Desolation Wilderness Area, Eldorado National Forest, CA*: Geological Society of America Abstracts with Programs. Vol. 49, No. 6, doi: 10.1130/abs/2017AM-303176.
19. Wurtz, M.J., †Jones, A.D., **Burmeister, K.C.**, Rademacher, L.K., 2017, *Using John Muir's Archives in the Field in support of developing observational skills and establishing a sense of place*: Geological Society of America Abstracts with Programs. Vol. 49, No. 6, doi: 10.1130/abs/2017AM-303176
20. †Robinson, J.M., †Jones, A.D., **Burmeister, K.C.**, †Severson, A.R., †Noethe, S.A., Stewart, M.A., 2016, *Preliminary outcrop-scale Rf/φ petrofabric analysis of conglomerate from the Jurassic Tuttle Lake Formation; Mount Tallac roof pendant, El Dorado County, CA*: Geological Society of America Abstracts with Programs. Vol. 48, No. 7, doi: 10.1130/abs/2016AM-285297 **Winner of Sigma Gamma Epsilon National Council Best Undergraduate Poster Award at 2016 Annual Meeting of the Geological Society of America**
21. †Jones, A.D., **Burmeister, K.C.**, Giorgis, S.D., 2016, *3D Visualization skills – do students possess the training and confidence needed to succeed at capstone summer field courses?:* Geological Society of America Abstracts with Programs. Vol. 48, No. 7, doi: 10.1130/abs/2016AM-285297
22. †Noethe, S.A., Stewart, M.A., **Burmeister, K.C.**, Severson, A.R., 2016, *Petrographic and Geochemical Analysis of Igneous Dikes and Keiths Dome Pluton in the Grass Lake Area in the Mount Tallac Roof Pendant; Eldorado County, California*: Geological Society of America Abstracts with Programs. ol. 48, No. 5, doi: 10.1130/abs/2016NC-275490
23. **Burmeister, K.C.**, Kuiper, Y.D., †Mainwaring, N.E., Anma, R., Orihashi, Y., and †Shiomi, K., 2016, *Petrography and provenance of the northernmost Shawangunk Formation; Hudson Valley, New York*: Geological Society of America Abstracts with Programs. Vol. 48, No. 2, doi: 10.1130/abs/2016NE-272876
24. †Lopez, A.R., **Burmeister, K.C.**, †Avalos, R.M., †Stokes, M.F., Nittrouer, J.A., Carter, M.J., Giorgis, S.D., and Corsetti, F.A., 2015, *Petrofabric analysis of samples from the Cyclothem sequences of the western Irish Namurian Basin (WINB) deformed within the Variscan foreland fold-thrust belt*: Geological Society of America Abstracts with Programs. Vol. 47, No. 7, p.532.
25. †Dwyer, S.M., Nittrouer, J.A., **Burmeister, K.C.**, Carter, M.J., and †Stokes, M.F., 2014, *Preliminary assessment of structural controls on the spatial relationships among fluvial systems in the Carboniferous western Irish Namurian Basin, County Clare, Ireland*: Geological Society of America Abstracts with Programs. Vol. 46, No. 6, p.352.
26. †Severson, A.R., †Klemm, B.M., **Burmeister, K.C.**, †Wilson, A.D., †Noethe, S.A., and Stewart, M.A., 2014, *Preliminary geologic map of the Grass Lake area in the southernmost Mount Tallac roof pendant; Desolation Wilderness Area, Eldorado County, California*: Geological Society of America Abstracts with Programs. Vol. 46, No. 6, p.563.
27. **Burmeister, K.C.**, Flynn, D.O., and Giraldez, A., 2014, *A Big History Perspective on Silver: The Little Big History Project Panel – International Big History Association 2014 Conference, San Rafael, CA*, p.17.
28. †Klemm, B.M., **Burmeister, K.C.**, Giorgis, S.D., and Vollmer, F.W., 2013, *Post-folding vertical flattening strain fabrics in mechanically rigid rocks deformed under sub-metamorphic conditions in a foreland fold-thrust belt*: Geological Society of America Abstracts with Programs. Vol. 45, No. 7, p.592. **Winner of Sigma Gamma Epsilon Austin A. Sartin Best Undergraduate Poster Award at 2013 Annual Meeting of the Geological Society of America (first place out of 100 entries)**
29. Wilkerson, M.S., **Burmeister, K.C.**, and Marshak, S., 2013, *Application of Quick-Look analysis techniques for refining map and cross-sectional interpretations through the Hudson Valley fold-thrust belt near Rosendale, New York*: Geological Society of America Abstracts with Programs. Vol. 45, No. 7, p.808.
30. **Burmeister, K.C.**, and Brown, P.E., 2013, *First 50 years of the Wasatch-Uinta field camp; bringing a traditional field camp into the 21st century*: Geological Society of America Abstracts with Programs. Vol. 45, No. 7, p.567.
31. **Burmeister, K.C.**, Nittrouer, J.A., Phillips, A.C., and †Bryk, A.B., 2012, *Nucleation of growth faults along dewatering structures within the Namurian Tullig Formation; Killard Bay, western County Clare, Ireland*: Geological Society of America Abstracts with Programs, Vol. 44, No. 7, p. 594.
32. †Klemm, B.M., Vollmer, F.W., **Burmeister, K.C.**, 2012, *Preliminary finite strain and fabric analysis of conglomerate from the Shawangunk Formation; northern Appalachian fold-thrust belt, Hudson Valley, New York*: Geological Society of America Abstracts with Programs, Vol. 44, No. 7, p. 241.
33. †Gunderson, M., Vollmer, F.W., †Mainwaring, N.E., **Burmeister, K.C.**, Walker, J.R., Kuiper, Y.D., 2012, *Kinematic Analysis of the Rosendale Thrust Fault; Northernmost Central Appalachian Fold-Thrust Belt, New York*: Geological Society of America Abstracts with

Programs, Vol. 44, No. 7, p. 240. **Winner of Sigma Gamma Epsilon Austin A. Sartin Best Undergraduate Poster Award at 2012 Annual Meeting of the Geological Society of America (first place out of 97 entries)**

34. †Sen, P., Carrell, J.E., **Burmeister, K.C.**, Marshak, S., 2012, *Compiling Digital Geo-Referenced Geologic Maps: A Method for the Non-Specialist*: Geological Society of America Abstracts with Programs, Vol. 44, No. 7, p. 550.
35. Rademacher, L.K., **Burmeister, K.C.**, McIntosh, P.J., †Brown, C.J., †Hargrave, K.L., 2012, *Using Informal Collaborations Between Residential Learning Communities and K-12 Schools to Foster Student Learning and Support Earth Science Curriculum Standards*: Geological Society of America Abstracts with Programs, Vol. 44, No. 7, p. 99.
36. †McDaniel, G.R., Rademacher, L.K., Faul, K.L., Brunell, M., and **Burmeister, K.C.**, 2011, *The Impact of Microbial Communities on Water Quality in an Acid Mine Drainage Impacted Watershed*: American Geophysical Union Abstracts with Programs, Vol. 43, No. 5, p. 122.
37. †Sen, P., Marshak, S., **Burmeister, K.C.**, †Majerczyk, C., †Yakolev, P., and Kuiper, Y.D., 2011, *The structure of transitions between culminations and depressions in the Leeds-Roberts Hill segment of the Hudson Valley fold-thrust belt, eastern New York*: Geological Society of America Abstracts with Programs, Vol. 43, No. 5, p. 629.
38. †McDaniel, G.R., Rademacher, L.K., Faul, K.L., and **Burmeister, K.C.**, 2011, *The fate of the trace metals in an urban watershed impacted by acid mine drainage*: Geological Society of America Abstracts with Programs, Vol. 43, No. 5, p. 122.
39. †Crawford, L.E., **Burmeister, K.C.**, †Penfold, M., Wilkerson, M.S., and Marshak, S., 2010, *Compiling a GIS-based geologic map from multiple legacy formatted data sources*: Geological Society of America Abstracts with Programs, Vol. 42, No. 5, p. 274.
40. †Yakolev, P., Kuiper, Y.D., Marshak, S., **Burmeister, K.C.**, †Sen, P., 2010, *Transitions in structural styles and trends within the northern Appalachian Hudson Valley fold-thrust belt near Catskill, New York*: Geological Society of America Abstracts with Programs, Vol. 42, No. 1, p. 85.
41. Kawamura, K., Anma, R., Sakaguchi, A., **Burmeister, K.C.**, Hayman, N., Dilek, Y., Moore, G.F., 2010, *Geologic architecture and submarine landslides of Nankai accretionary prism revealed using Shinkai6500 and Kaiko7000*: Abstracts of 2010 Blue Earth Symposium (3rd March, Tokyo), JAMSTEC, BE10-P115.
42. Kawamura, K., Ogawa, Y., Anma, R., **Burmeister, K.C.**, Moore, G.F., Yokoyama, S., Hayman, N.W., 2009, *New insights of deep-sea geologic architectures using submersibles: examples from the Nankai Trough*: Abstracts with Programs - Geological Society of America, Vol. 41, No. 7, p. 426.
43. †Sen, P., **Burmeister, K.C.**, Marshak, S., †Yakolev, P.V., and Kuiper, Y.D., 2009, *Along-strike variation of deformation intensity in the Hudson Valley fold-thrust belt between Leeds and Coxsackie, New York*: Abstracts with Programs - Geological Society of America, Vol. 41, No. 7, p. 459.
44. Rademacher, L.K., **Burmeister, K.C.**, †Colafrancesco, K.C., Brodie, C., and Jacobson, S., 2009, *Establishing a residential learning community in the earth and environmental sciences*: Abstracts with Programs - Geological Society of America, Vol. 41, No., p. 93.
45. †Colafrancesco, K.C., Rademacher, L.K., **Burmeister, K.C.**, †Giovannoni, S.C., †Kief, J.M., and †Suter, J.B., 2009, *Chemical evolution and hydrology of northern Sierra Nevada mineral springs*: Abstracts with Programs - Geological Society of America, Vol. 41, No. 7, p. 666.
46. Kawamura, K., Kanamatsu, T., Kinoshita, M., Saito, S., Shibata, T., Fujino, K., Misawa, A., **Burmeister, K.C.**, 2009, *Redistribution of sediments by submarine landslides on the eastern Nankai Accretionary Prism: Submarine Mass Movements and Their Consequences*, 4th International Symposium, Theme 2, n. 26.
47. **Burmeister, K.C.**, 2008, *Modified Busk-Kink method for constructing quick admissible cross sections of parallel folds*: Geological Society of America Abstracts with Programs, Vol. 40, No. 6, p. 489.
48. **Burmeister, K.C.**, Hayman, N., Anma, R., Yamada, Y., Dilek, Y., Ogawa, Y., and Kawamura, K., 2008, *Structural geology of the Nankai accretionary prism; Tenryu Submarine Canyon, Japan*: Geological Society of America Abstracts with Programs, Vol. 40, No. 6, p. 512
49. Kawamura, K., Anma, R., **Burmeister, K.C.**, Hayman, N., Dilek, Y., Hara, H., Yamada, Y., and Kanamatsu, T., 2008, *Subduction-related gravitational collapse through exhumation and seismogenic turbidites in the Nankai accretionary prism*: Geological Society of London (Burlington House) - Conference on Gravitational Collapse at Continental Margins, p. 23.
50. †Galon, M.A., †Kerns, S.M., **Burmeister, K.C.**, Paterson, S.R., 2008, *STRAIN3D: a new computer program for the graphical and statistical analysis of 2D and 3D strain*: Abstracts with Programs - Geological Society of America, Vol. 40, No. 1, p. 65.
51. **Burmeister, K.C.**, And Werner, D., 2007, *America's finest natural cement: the history and economic geology of the Rosendale natural cement region, Ulster County, New York*: Abstracts with Programs - Geological Society of America, Vol. 39, No. 6, p. 628

52. **Burmeister, K.C.**, Harrison, M.J., Marshak, S., Ferre, E.C., †Bannister, R.A., and Kodama, K., 2007, *Interpreting Tectonic Fabrics From AMS And Normalized Fry Measurements In Low-Strain Sandstone Of The Appalachian Fold-Thrust Belt*: Abstracts with Programs - Geological Society of America, Vol. 39, No. 6, p. 234
53. Kawamura, K., **Burmeister, K.C.**, Ogawa, Y., and Dilek, Y., 2007, *Possible cyclic post-seismic normal faulting during off-scraping in accretionary prism development: examples from Nankai and Boso complexes, Japan*: Abstracts with Programs - Geological Society of America, Vol. 39, No. 6, p. 453
54. Marshak, S., Harrison, M., and **Burmeister, K.C.**, 2007, *Puzzling interactions between the northern and central segments of the sinuous Appalachian foreland fold-thrust belt in New York and Pennsylvania*: Abstracts with Programs - Geological Society of America, Vol. 39, No. 6, p. 538
55. †Barberis, V.B., Rademacher, L.K., and **Burmeister, K.C.**, 2007, *Conducting a campus waste audit: techniques and strategies for designing a successful inventory of materials in a solid waste stream*: Abstracts with Programs - Geological Society of America, Vol. 39, No. 4, p.28
56. Rubin, P.A., **Burmeister, K.C.**, and Folsom, M., 2006, *Karst Resource Management: groundwater protection and developmental considerations in the Kingston-Rosendale aquifer system; Ulster County, NY*: Proceedings of the 2005 National Cave and Karst Management Symposium, Albany, NY, Vol. 17, p. 34.
57. **Burmeister, K.C.**, †Bannister, R.A., Marshak, S., and Ferré, E.C., 2004, *Comparison of AMS and strain-analysis results; resolving shortening directions in low-strain rocks of a fold-thrust belt*: Abstracts with Programs - Geological Society of America, Vol. 36, No.5, p. 434.
58. Ferré, E.C., Teyssier, C., **Burmeister, K.C.**, and †Sidman, D., 2004, *The magnetic fabric of high strain shear zones; a review*: Abstracts with Programs - Geological Society of America, v. 36, p. 436.
59. †Bannister, R.A., **Burmeister, K.C.**, and Marshak, S., 2004, *Using JavaScript to standardize digital photomicrographs for Fry strain analysis; Binnewater Sandstone, central Hudson Valley, New York*: Abstracts with Programs - Geological Society of America, Vol. 36, No. 3, p. 41-42.
60. **Burmeister, K.C.**, Marshak, S., and Wilkerson, M.S., 2003, *Influence of mechanical stratigraphy on the 3-D structural architecture of the Northern Appalachian fold-thrust belt; Rosendale, New York*: Abstracts with Programs - Geological Society of America, Vol. 35, No. 6, p. 642.
61. **Burmeister, K.C.**, and Marshak, S., 2002, *Affects of along-strike changes in stratigraphy on fold-thrust belt structural style and geometry; an example from the Northern Appalachian Mountains, central Hudson Valley, New York*: Abstracts with Programs - Geological Society of America, Vol. 34, No. 6, p. 371.
62. **Burmeister, K.C.**, Flynn, J.J., Parrish, J.M., Whatley, R.L., and Wyss, A.R., 2000, *Biostratigraphic and biogeographic implications of new middle to Late Triassic fossil vertebrates; Morondava Basin, Madagascar*: Abstracts of the 2000 Meeting of the Western Association of Vertebrate Paleontologists, Museum of Northern Arizona, Flagstaff.
63. Sylvester, A.G., **Burmeister, K.C.**, and Wise, W., 1999, *Faulting and effects of associated shaking on Pisgah Crater cinder cone by the Hector Mine, 16 October 1999, earthquake (M 7.1), central Mojave Desert, California*: Abstracts of the 1999 Fall Meeting. Supplement to EOS Transactions, AGU. Vol. 80, No., 46, p. 19.
64. **Burmeister, K.C.**, Flynn, J.J., Parrish, J.M., and Wyss, A.R., 1999, *New fossil vertebrates from the northern Morondava Basin, Madagascar, and the recovery of micro-vertebrates from coprolites*: Abstracts of the 1999 California Paleontological Conference. PaleoBios. Vol. 19, No. 1, suppl., p. 3.

Grants: External Sources

1. National Science Foundation #8186859, IUSE - EHR: Collaborative research: Safe Field Experience Reporting (SaFER) system: Quantifying the spectrum of risk to physical and psychological health faced by geoscientists in the field (lead PI, \$300,000, submitted 1/2022)
2. National Science Foundation #8186866, IUSE - ESL: Collaborative research: Building self-advocacy in students through assessment of universal and technical skill development during field experiences (co-PI, \$300,000, submitted 1/2022)
3. National Science Foundation #2119762, GP-UP: Collaborative Proposal: Developing a diverse hydrology workforce through an undergraduate hydrological research experience in a coastal California watershed (Senior Personnel, \$350,000, 2021)
4. National Science Foundation #2044411, IUSE - EHR: Collaborative research: Safe Field Experience Reporting (SaFER) system: Quantifying the spectrum of risk to physical and psychological health faced by geoscientists in the field (lead PI, \$299,134, submitted unsuccessfully 2020)

5. National Science Foundation #2029920 EAR - Tectonics, RAPID: Teaching field geology without classes in the field – providing a robust educational experience through digital resources (lead PI, \$89,945; 2020)
6. American Chemical Society – Petroleum Research Fund, Backwater control on fluvial-deltaic stratigraphy, tested in the Western Irish Namurian Basin, County Clare, Ireland (Co-PI, \$50,000; through Rice University, 2016)
7. GSA-ExxonMobil Field Camp Excellence Award, grant in support of program development (\$10,000; 2013)
8. American Honda Foundation, A sustainability living laboratory for the development of citizen scientists (Co-PI, \$60,000; submitted unsuccessfully 2010)
9. United States Geological Survey EDMAP Grant, Architecture of fold-thrust belt structures along the Helderberg Escarpment in the Hudson Valley, New York (Co-PI, \$14,515; 2009)
10. National Science Foundation #0808205 GEOED Grant: Can cohort experiences increase interest and participation in the earth and environmental sciences at an urban undergraduate institution? (Co-PI, \$159,000; 2008)
11. United States Geological Survey EDMAP Grant, Mapping and structural analysis of the Leeds to Coxsackie segment of the Hudson Valley fold-thrust belt, New York (Co-PI, \$14,972; 2008)
12. Sigma Xi, Grants in Aid of Research, Magnetic susceptibility anisotropy analysis of rocks associated with deformation in the Appalachian fold-thrust belt, New York (\$939; 2003)
13. Geological Society of America Graduate Research Grant #7353-03, Strain analysis in the Appalachian New York recess at Rosendale: a study of the effects of along-strike changes in mechanical stratigraphy on strain magnitudes in fold-thrust belts (\$2,300; 2003)
14. United States Geological Survey EDMAP Grant, Geologic mapping of the Rosendale natural cement region, a portion of the northern Appalachian fold-thrust belt, Ulster County, New York (\$14,271; 2003)
15. Norwegian-American Marshal Fund, Collaborative field studies of Precambrian geology in southern Norway (\$6,300; 2001)

Grants: Internal Sources

1. Incentive for Developing External Awards (IDEA) Grant: Safe Field Experience Reporting (SaFER) system: Quantifying the spectrum of risk to physical and psychological health faced by geoscientists in the field (\$2,500, 2021)
2. Eberhardt Institutional Priority Grant: Wilderness First Responder Certification – increasing the safety and effectiveness of field-based transformative liberal arts experiences for our students (\$3,432, 2019)
3. Pacific Fund Undergraduate Research Grant, Detrital zircon analysis of metavolcaniclastic strata within the Mount Tallac pendant; Desolation Wilderness, El Dorado County, California (\$500; Co-PI with undergraduate E. Chiappe, 2018)
4. Committee on Academic Planning and Development Travel/Small Project Grant: Using Collections of the Royal Geological Survey, London, to Help Develop a Sense of Place Among Students on Introductory Field Trips (\$3,500, Co-PI with Prof. Michael Wurtz, 2017)
5. Pacific Fund Undergraduate Research Grant, Preliminary Fabric Analysis of Exhumed Accretionary Complexes from the Kii Peninsula, Japan (\$500; Co-PI with undergraduate O. Sue, 2017)
6. Pacific Fund Undergraduate Research Grant, Characterization of magnetic fabrics intermediate dikes cutting the Mt Tallac roof pendant, Eldorado County, CA (\$500; Co-PI with undergraduate L. Herbert, 2017)
7. Eberhardt Institutional Priority Grant: Improving Safety on Cross-Disciplinary Field Experiences (\$3,500, Co-PI with Dr. Karrigan Bök, 2017)
8. Thomas J. Long Foundation CORE Curriculum Development Fellowship: Exploring the Geology & History of Scotland, the birthplace of modern Earth science & environmental awareness (\$4,920; 2016)
9. Technology in Education Committee (TEC) Grant: Overcoming challenges with three dimensional visualization skills using an augmented reality sandbox (\$7,242; 2015)
10. Committee on Academic Planning and Development Travel/Small Project Grant, Developing combined multi-day field trips in Geology & Environmental Science: a truly unique opportunity for interdisciplinary active learning experience (\$3,311; Co-PI with Dr. Karrigan Bök, 2015)
11. Pacific Fund Undergraduate Research Grant, Grain scale strain analysis of the Tuttle Lake Conglomerate in the Mount Tallac region; Desolation Wilderness, El Dorado County, California (\$500; Co-PI with undergraduate J. Robinson, 2015)

12. University of Pacific Faculty Research Committee Scholarly Activity Grant, Resolving historical patterns of trench axis-parallel deformation along the Nankai Trough, east-central Japan (\$2,752; 2014)
13. Pacific Fund Undergraduate Research Grant, Geologic Mapping of the Grass Lake study area; Desolation Wilderness Area, Eldorado National Forest, California (\$2,480; 2013)
14. Pacific Fund Undergraduate Research Grant, Petrographic analysis of Jurassic igneous intrusive rocks from the Grass Lake study area; Desolation Wilderness Area, Eldorado National Forest, California (\$500; Co-PI with undergraduate B. Klemm, 2013)
15. Pacific Fund Undergraduate Research Grant, Sly Park Mapology: Providing Hands-On GESCpatial Education to Sly Park Science Camp Students (\$500; Co-PI with undergraduate C. Colburn, 2013)
16. Pacific Fund Undergraduate Research Grant, Radiometric age dating of clay minerals created by slip along the Rosendale thrust fault; northern Appalachian Mountains, New York (\$500; Co-PI with undergraduate N. Mainwaring, 2012)
17. Pacific Fund Summer Research Fellowship Grant, Radiometric age dating of clay minerals created by slip along the Rosendale thrust fault; northern Appalachian Mountains, New York (\$4,500; Co-PI with undergraduate N. Mainwaring, submitted unsuccessfully 2012)
18. Pacific Fund Summer Research Fellowship Grant, Resolving the geologic evolution of the Mount Tallac region with geologic mapping of crosscutting relationships; Desolation Wilderness, Eldorado County, California (\$4,500; Co-PI with undergraduate B. Klemm, 2012)
19. Pacific Fund Undergraduate Research Grant, Normalized Fry Strain Analysis of the Mechanically Rigid Shawangunk Conglomerate, Central Hudson Valley, New York (\$500; Co-PI with undergraduate B. Klemm, 2012)
20. University of Pacific The Technology in Education Committee Fund, Petrofabric Microanalysis Laboratory: a transformative tool for enhancing student experiential learning in the Department of Earth & Environmental Sciences (\$19,994.23; 2012)
21. University of Pacific Faculty Research Committee Scholarly Activity Grant, Mechanics and timing of pluton emplacement at Mt. Tallac in the northern Sierra Nevada; Desolation Wilderness, El Dorado County, California (\$2,109; 2011)
22. Pacific Fund Grant, Establishing the REELL Sustainability Resource Center in support of the new McConchie Hall Living Laboratory for Interactive Learning About the Earth and the Environment (\$6,004; 2010)
23. Undergraduate Summer Research Fellowship, Developing a simplified, standardized method for compiling GIS compatible geologic maps (\$4,375; Co-PI with undergraduate L. Crawford, 2010)
24. University of Pacific Seed & Bridge Grant, Translation of legacy format geologic maps into a digital geodatabase: publishing bedrock geologic maps of the Hudson Valley fold-thrust belt (\$2,538; 2010)
25. Undergraduate Summer Research Fellowship, Using Illite crystallinity to determine maximum temperature conditions of rocks exhumed along the Tokai thrust fault, Nankai Trough, Japan (Co-PI with undergraduate K.N. McLaughlin, \$4,500; 2009)
26. University of Pacific Eberhardt Research Fellowship, Fault kinematics as a tool for interpreting cyclic, post-seismic extension within the Boso Peninsula accretionary prism (\$3,950; 2009)
27. Thomas J. Long Foundation CORE Curriculum Development Fellowship (\$5,000; 2009)
28. University of Pacific Faculty Research Committee Scholarly Activity Grant, Fault kinematics as a tool for interpreting cyclic, post-seismic extension within the Boso Peninsula accretionary prism, Japan (\$2,950; 2007)
29. University of Pacific Faculty Research Committee Scholarly Activity Grant, Preliminary study of magnetic fabrics in the very low-strain rocks of a monoclinial fold: East Kaibab monocline, Colorado Plateau, Utah (\$3,090; 2006)

Academic Awards

- Finalist, Thomson Reuters' Land Use & Environment Law Review's Top Five Most Reprinted Papers: *Karrigan Bork, Kurtis Burmeister (2019) Cases and places: a field-based approach to teaching natural resource and environmental law. 68 J. Legal Educ. 338-356. (2021)*
- *Antarctic Service Medal of the United States of America*: awarded by United States Department of Defense, the United States Antarctic Program, and the National Science Foundation for the 2003–2004 field season (June, 2006)
- *Elected Member*: Sigma Xi Research Society, University of Illinois (2003)
- *Morris M. & Ada B. Leighton Award for Graduate Research*: Department of Geology, University of Illinois (2001, 2002, 2003)
- *Best Student Poster Presentation*: California Paleontological Conference, California Institute of Technology, Pasadena (1999)

Invited Research Lectures

1. **Closing Lecture, University of California System Field Safety Leadership Retreat**, February 25-27, Lake Arrowhead Lodge, California, *"The field safety ratio and why understanding your spectrum of risk is critical to working in uncontrolled environments"* (2022)
2. Century House Historical Society, *"Economic Geology of the Rosendale Natural Cement Region"* (2021)
3. Albion College, Department of Earth & Environment, *"Welcome to Jurassic arc insights from a surprisingly undeformed remnant in the Sierra Nevada"* (2021)
4. Sonoma State University, Dept of Geology (delivered jointly with collaborator & former student Allison D. Jones, 2021)
5. **University of Minnesota - Twin Cities**, Department of Earth and Environmental Sciences, *"Reevaluating cognitive load in field activities; leveraging field safety leadership, novelty space, and place-based learning to realign student focus"* (2021)
6. State University of New York at New Paltz, Department of Geological Sciences, *"History and Economic Geology of the Rosendale Natural Cement District"* (2020)
7. Sacramento State University, Department of Geology (2020)
8. University of the Pacific, Department of Geological & Environmental Sciences (2020)
9. **Van Tuyl lecturer, Colorado School of Mines**, Department of Geology and Geological Engineering, *"Welcome to Jurassic arc insights from a surprisingly undeformed remnant in the Sierra Nevada"* (2019)
10. **Wisconsin Geological & Natural History Survey**, *"Learning a lot from very little: evolution of a geologic mapper"* (2019)
11. **University of Nevada Reno**, Department of Geological Sciences and Engineering, *"Welcome to Jurassic arc insights from a surprisingly undeformed remnant in the Sierra Nevada"* (2018)
12. **University of Southern California**, Department of Earth Sciences (2018)
13. San Jose State University, Department of Geology (2018)
14. California State University at Fullerton, Department of Geological Sciences (2018)
15. State University of New York at New Paltz, Department of Geology (2018)
16. State University of New York at Geneseo, Department of Geological Sciences (2018)
17. **Northern California Geological Society**, Orinda, CA (2018)
18. California State University at Chico, Department of Geological & Environmental Sciences (2018)
19. Sacramento State University, Department of Geology (2018)
20. University of Illinois, Department of Geology (2017)
21. **Distinguished Faculty Guest Lecture**, Pacific Honors Seminar, University of the Pacific (2017)
22. Institute for Rock Magnetism & Department of Geological Sciences, University of Minnesota, *"Exploring the third dimension in compressional tectonic systems when data are limited; insights from geologic mapping & fabric analysis"* (2017)
23. Department of Earth Sciences, Rice University, *Structural geology of the western Irish Namurian Basin fold-thrust belt, County Clare, Ireland* (2016)
24. **College of Geoscience, School of Life and Environmental Sciences, University of Tsukuba**, Japan (2015)
25. California State University at Chico, Department of Geological & Environmental Sciences (2015)
26. **Rice University**, Department of Earth Science (2014)
27. **The Hutton Club** – Earth Surface Processes & Physical Geography, University of Edinburgh, School of Geoscience, Scotland, *"What's beneath W. M. Davis' Little Mountains: the interplay between fold-thrust belt structures & landscape"* (2014)
28. Hartwick College, Department of Geology (2014)
29. State University of New York at Oneonta, Department of Geology (2014)

30. Northeastern Illinois University, Department of Physics & Geology (2014)
31. Sacramento State University, Department of Geology (2012)
32. Sonoma State University, Department of Geology (2012)
33. San Jose State University, Geology Department (2012)
34. State University of New York at New Paltz, Department of Geological Sciences (2011)
35. **NSF GeoPRISMS Subduction Cycles and Deformation Implementation Workshop**, Austin, TX (2011)
36. Fresno State University, Department of Earth & Environmental Sciences (2010)
37. San Francisco State University, Department of Geology (2009)
38. NSF Cutting Edge Workshop on Teaching Petrology & Structural Geology in the 21st Century, GSA, Houston, TX (2008)
39. Integrated Ocean Drilling Program Kanto Asperity Project, 3rd International Workshop, Chiba University, Japan (2008)
40. **Fukada Geological Institute**, Honkomagome, Bunkyo-ku, Tokyo, Japan (2008)
41. University of Illinois, Department of Geology (2008)
42. **Graduate School of Life and Environmental Sciences, University of Tsukuba**, Japan (2007)
43. Chico State University, Department of Geology (2007)
44. **Northern California Geological Society**, Orinda, CA (2007)
45. American Natural Cement Conference, Washington DC (2006)
46. San Jose State University, Department of Geology (2006)
47. **University of Iowa**, Department of Geology (2005)
48. American Natural Cement Conference, Rosendale, New York (2005)
49. San Joaquin Well Logging Society, Bakersfield, CA (2005)
50. **University of Southern California**, Department of Earth Sciences (2004)
51. **University of Missouri**, Department of Geological Sciences (2004)
52. State University of New York at New Paltz, Department of Geological Sciences (2004)

Participant - Research-Related Workshops, Field Trips & Certifications

- *StraboSpot2 Rollout Course & Workshop*: StraboSpot Research Group - University of Kansas, University of Wisconsin, Texas A&M University (May 18-21, 2021)
- *NSF Improving Undergraduate STEM Education (IUSE) Program Overview with a Focus on Level 1 and Building Capacity Submissions, Including New to IUSE EHR submissions*: Informational webinar hosted by NSF and the American Association for the Advancement of Science (2020)
- *Geology of the western metamorphic belt and Sierra Nevada batholith in the Feather River region of Northern California*: Structural Geology & Tectonics Seminar, University of California at Davis (2018)
- *Geology of the Northern Walker Lake Belt in NE California and W. Nevada*: Structural Geology & Tectonics Seminar, University of California at Davis (2017)
- *Statistical Treatment of Structural Geology Data*: GSA/NSF 4th Biennial Structural Geology & Tectonics Forum, Sonoma State University (2016)
- *United States Geological Survey & Association of American State Geologists Workshop on Digital Mapping Techniques*: Sacramento, CA (2010)

- *Advanced Earth Science and Technology Organization (AESTO) 3rd Annual International Proposal Development Workshop on the Integrated Ocean Drilling Program (IODP) Kanto Asperity Project: Keyaki Kaikan, Nishi-Chiba Campus, Chiba University, Chiba, Japan (2008)*
- *National Science Foundation Proposal Workshop for New Investigators in the Antarctic: Washington DC (2004)*

Teaching Effectiveness

Courses Taught

Wasatch-Uinta Geology Summer Field Camp, Park City, Utah

Intensive capstone course in geologic mapping & cross section construction, kinematic analysis, regional stratigraphy, and scientific writing, for geology majors from the Univ. of Illinois, Univ. of Wisconsin, Univ. of Minnesota-Duluth, Purdue University, University of Nebraska-Lincoln, University of Iowa, and Michigan State Univ. (Co-Director 15 years, taught 19 times: lecture, field)

Core / Upper-Division Courses Taught

- Field Geology (taught 11 times: lecture, lab, field)
- Field Techniques (taught 1 time: lecture, field)
- Structural Geology Field (taught 1 time: field)
- Structural Geology & Tectonics (taught 8 times: lecture, lab, field exercise with economic geology focus)
- Spatial Analysis & GIS (taught 8 times: lecture, lab)
- Stratigraphy (co-taught 1 time: lecture & lab)

Introductory Level Courses Taught

- Physical Geology, Non-Field (taught 19 times: lecture, lab, 1-day field trip)
- Physical Geology, Field (taught 22 times: lecture, lab, 4-day field trip)
- Earth Science (taught 1 time: lecture)
- Environmental Science (taught 1 time: lecture, lab)

Field-Intensive Courses Taught

- Field Studies: Geology & History of Scotland (taught 4 times: lecture, extended field trip)
- Field Studies: Geology & History of the Colorado Plateau (taught 4 times: lecture, extended field trip)
- Field Studies: Geology of southwest North America a (co-taught 2 time: lecture, extended field trip)
- Field Studies: Geology of the Chilean Patagonia (co-taught 1 time: lecture, extended field trip)
- Field Studies: Paleontology in the Field (taught 3 times: lecture, extended field trip)
- Field Studies: Geology of the Appalachian Fold-Thrust Belt (taught 3 times: lecture, extended field trip)
- Field Studies: Geology of Hawaii (co-taught 2 times: lecture, extended field trip)

Graduate Level Courses Taught

- Tectonic Evolution of North America (taught 1 time: lecture, field)

Seminar Courses Taught

- Professional Development Seminar in Geological & Environmental Sciences (taught 2 times: weekly seminar)
- Living on Planet Earth (co-taught 7 times: seminar)

- PACIFIC Freshman Seminar on Sustainability & the Environment (taught 4 times: lecture)

Teaching Assistant, University of Illinois & University of California, Santa Barbara

Structural Geology, Introduction to Geologic Field Methods, Introduction to Geologic Mapping, Summer Field Geology, Physical Geology, Geology of National Parks, Vertebrate Paleontology, Field Studies in Paleontology, Principles of Paleontology, General Biology, Geologic Data Analysis, Field Studies in SW Arizona and SE California, Field Studies in Scotland, Field Studies in Western Ireland

Special Education Teaching Assistant, Arden Middle School, Sacramento, California

Teacher's aid in 7-8 grade special education classroom. Community service through Jesuit High School, spring semester, 1991.

Advising of Student Research

California State University, Sacramento

1. **Jake M. Finley** – Master's Thesis, Geology: Provenance and age of sediment in Mount Tallac pendant, central Sierra Nevada, California (advisor, 2021 - present)
2. **Patrick McCarthy** – Master's Thesis, Geology: Provenance and petrofabric evolution of the Shawangunk Formation, Central Hudson Valley, New York (advisor, 2020 - present)
3. **Rick Fewtrell** – Master's Thesis, Geoscience Education: Applications for sense of place in geoscience education (advisor, 2020 - present)

University of the Pacific

4. **Jordan Seale** – Geology, Independent Research: Petrography of coarse clastic facies within the Sailor Canyon Formation. (advisor, 2019 - 2020)
5. **Emily Chiappe** – (MS student, University of Maryland) Geology, Independent Research: Detrital zircon analysis within the Middle Jurassic Tuttle Lake Formation. (advisor, 2018 - 2019)
6. **Victoria Arnold** – (MS student, San Jose State University) Geology, Independent Research: 3D visualization of penetrative strain fabrics throughout the Sierra Nevada. (advisor, 2017 - 2019)
7. **Lauren Herbert** – (MS, Colorado School of Mines) Geology, Independent Research: Brittle and ductile deformation within the Tallac Roof Pendant, Desolation Wilderness, CA (advisor, 2016 - 2018)
8. **Katie Ortega** – (PhD student, University of Illinois) Geology, Independent Research: Magnetic fabric analysis of rocks from the Sierra Nevada, Ireland, and Japan. (advisor, 2017)
9. **Kelly O'Moore** – Film Studies, Independent Research & Capstone Experience: Developing video tools for increasing interest and participation in the Geological & Environmental Sciences. (advisor, 2016 - 2017)
10. **Carter Hafif** – Geology, Independent Research: Incorporating subsurface geology into augmented reality sandboxes (advisor, 2016 - 2017)
11. **Olivia Sue** – Geology, Independent Research: Fry strain analysis of Miocene rocks exhumed within the Kii accretionary prism, southeastern Japan (advisor, 2015 - 2018)
12. **Allison Jones** (MS, University of Wisconsin) – Geology, Independent Research: R/ϕ strain analysis of deformed conglomerate in the Tallac Roof Pendant, Desolation Wilderness, CA (advisor, 2015 - 2017)
13. **Jessica Robinson** (MS, University of Connecticut) – Geology, Senior Thesis: Geologic mapping and outcrop-scale strain analysis in the Tallac Roof Pendant, Desolation Wilderness, CA (advisor, 2014 - 2016)
14. **Alexis Lopez** (PhD student, Univ of North Carolina; MS, CSU Chico) – Geology, Senior Thesis: Grain-scale strain and magnetic fabric analysis of Carboniferous rocks collected from the Namurian Basin, Western Ireland (advisor, 2014 - 2017)
15. **René Avalos** – Geology, Independent Research: Grain-scale strain and magnetic fabric analysis of Carboniferous rocks collected from the Namurian Basin, Western Ireland (advisor, 2014 - 2015)
16. **Erik Fulmer** – Geology, Independent Research: 3D analysis of strain in conglomerate from the Tuttle Lake Fm in the Mt Tallac pendant, Desolation Wilderness, CA (advisor, 2014 - 2015)
17. **Kaitlin Tanel** – Geology, Independent Research: 3D analysis of strain in conglomerate from the Tuttle Lake Fm in the Mt Tallac pendant, Desolation Wilderness, CA (advisor, 2014 - 2015)

18. **Andrew D. Wilson** – Geology, Senior Thesis: developing a method for outcrop-scale 3D analysis of strain in conglomerate from the Tuttle Lake Fm in the Mt Tallac pendant, Desolation Wilderness, CA (advisor, 2013 - 2014)
19. **Brittany Klemm** – Geology, Senior Thesis: Brittany is mapping structural fabrics to resolve the deformation history of rocks in the Mt Tallac pendant, Desolation Wilderness, CA; Normalized Fry Strain Analysis of the Mechanically Rigid Shawangunk Conglomerate, Central Hudson Valley, New York (advisor, 2011 - 2014)
20. **Christina Colburn** – (*Earth Science Teacher, Lodi Unified School District*) Geology, Senior Thesis: Sly Park Mapology: a hands-on GESCpatial experience for 6th grade students at the Sacramento City Unified School district's Sly Park Environmental Education Center (advisor, 2012 - 2014)
21. **Keaton Chiu** – Environmental Studies, Internship: Keaton aided with program and administrative functions associated with training of volunteer personnel, public relations, and community outreach (advisor, Summer 2012)
22. **Nikki (Mainwaring) Campbell** – Geology, Senior Thesis: Nikki is working to resolve the timing of slip on a northern Appalachian thrust fault through the radiometric dating of authigenic illite collected from fault gouge (advisor, 2011 - 2013)
23. **Alicia Valenzuela** – Geology, Independent Research: Alicia compiled a geodatabase of current recycling infrastructure at the University of the Pacific (advisor, 2011)
24. **Gabriella McDaniel** (*MS, Univ of Oregon*) – Geology, Senior Thesis: Gabby used GIS to help her track water quality impacts of microbial communities in an acid mine drainage impacted drainage (co-advisor, 2010 - 2011)
25. **Luke Crawford** (*Staff Geologist at GEOCON Geotechnical and Environmental Consultants*) – Geology, Senior Thesis: Luke and I are developing new methods for importing vector-based map documents into ArcGIS (advisor, 2010 - 2011)
26. **Andria Ellis** (*PhD, Univ of Wisconsin, currently at USGS Hawaiian Volcano Observatory*) – Geology, Independent undergraduate research: Andi conducted geologic mapping in the Hudson Valley fold-thrust belt of New York as part of a USGS-EDMAP funded project (advisor, 2009 - 2010).
27. **Shoko Yamamoto** (*MS, Univ of Kobe*) – Environmental Science, Independent undergraduate research: Shoko used ArcGIS as a tool for examining post-earthquake fire hazards in densely populated areas; Kobe, Japan (advisor, 2010)
28. **Kari McLaughlin** – Geology, Senior Thesis: conducted XRD experiments on samples collected during a recent submarine survey to determine pressure and temperature conditions in the hanging wall of the Tokai thrust, Nankai Trough, Japan (advisor, 2008 - 2009)
29. **Kaitlen Colafrancesco** (*MS, Univ of the Pacific*) – Environmental Science, Independent undergraduate research: Kaitlen used GIS and field sampling to conduct an investigation of the geochemical evolution of spring waters from Tuolumne Meadows, Yosemite National Park (co-advisor, 2009)
30. **Samantha Wildman** – International Relations, Independent undergraduate research: Samantha developed a survey tool for assessing the success of first-year sustainability programs at the University of the Pacific (advisor, 2009)
31. **Shawn Kerns** – Computer Science, Independent undergraduate research: Shawn worked on a computer program called AMSAVE that was designed to compile data from AMS analyses (advisor, 2008 - 2009)
32. **Steven Giovannoni** – Geology & Environmental Science, Senior Thesis: Steven used GIS to characterize the relationship between water quality and land use in the Lower Calaveras River watershed (co-advisor, 2007 - 2009)
33. **Matthew Galon** – Geology & Computer Science, Senior Thesis: Matt used the Python programming language to compile STRAIN3D, a new computer program for the graphical and statistical analysis of 2D and 3D strain (advisor, 2007 - 2008)
34. **Vanessa Barberis** (*MS at Indiana Univ, currently Education Solutions Rep at Waste Management*) – Environmental Science, Senior Thesis: Vanessa conducted the very first student-organized assessment of the types and quantities of material in Pacific's solid waste stream and assessed its environmental and financial impacts (co-advisor, 2006 - 2007)
35. **Stefanie Argintean** – Biological Science, Masters Thesis: Stefanie used GIS as part of her study of increasing morbidity of Chlamydia and Gonorrhea cases in San Joaquin County, California: understanding infection patterns through GIS analysis of cases (co-advisor, 2006 - 2007)

University of Illinois

36. **Samuel Noethe**, Senior Thesis: *Geochemistry of intermediate Jurassic intrusive rocks within the Tallac Roof Pendant, Desolation Wilderness, CA* (co-advisor, 2015 - 2016)
37. **Pragnyadipta Sen**, Doctoral Thesis: *Controls on fluid flow and vein growth in the northern Appalachian foreland fold-thrust belt* (advisory committee member, 2007 - 2014)
38. **Chris Majerczyk**, Masters Thesis: *Geology of the Roberts Hill area in the Hudson Valley fold-thrust belt, Greene County, eastern New York* (advisory committee member, 2006 - 2010)

39. **Roger Bannister** (MS UMN-Duluth & MS Penn State, currently Hydrogeologist, GIS Analyst & Manager at Groundwater & Environmental Services, Inc.), Senior Thesis: *Normalized Fry analysis of grain-scale strain in the Binnewater Sandstone near Rosendale; Ulster County, New York* (advisor, 2003 - 2004)

Rice University

40. **Chenliang Wu**, Doctoral Dissertation: *Retrodeformation of strata in the Western Irish Namurian Basin* (advisory committee member, 2015 - 2020)
41. **Maya Stokes** (PhD candidate, MIT), Senior Thesis: *Synsedimentary deformation in prodelta sedimentary deposits: the role of failures in shelf to deep-water sediment transport in the Western Irish Namurian Basin* (advisory committee member, 2014 - 2016)
42. **Stacy Dwyer**, Masters Thesis: *Structural controls on spatial relationships among fluvial systems in the Carboniferous western Irish Namurian Basin, County Clare, Ireland* (advisory committee member, 2013 - 2014)

Arizona State University

43. **Allison Severson** (PhD, CO School Mines, Minnesota State Geological Survey), related to Masters Thesis: *Preliminary geologic map of the Grass Lake area in the southernmost Mount Tallac roof pendant; Desolation Wilderness Area, Eldorado County, California* (advisor, 2013 - 2016)

University of California, Santa Barbara

44. **Aaron Pan** (PhD, S. Methodist Univ, currently Executive Director, Don Harrington Discovery Center), Independent undergraduate research: *Developing new methods for preparation of microfossils from carbonaceous coprolite matrix using organic acid* (advisor, 1998 - 1999)
45. **Kelly Sheldrake**, Independent undergraduate research: *Classification of Isalo Group semionotid scales* (advisor, 1999)

Emergency Response, Mental Health, Safety Training & Certifications

- Instructor Recertification, Wilderness & Remote First Aid with 2021 Curriculum Update: *American Red Cross* (1/20/2022)
- Instructor Recertification with 2021 Curriculum Update, First Aid/CPR/AED: *American Red Cross* (1/20/2022)
- Wilderness First Responder Certification: *NOLS Wilderness Medicine* (Class 17484, 1/13/2022)
- Epinephrine Auto-Injector Certification: *NOLS Wilderness Medicine* (1/13/2022)
- Adult, Child, Infant CPR, AED, and Airway Management Certification: *NOLS Wilderness Medicine* (1/13/2022)
- Driving Safely, Driving Smarter: *CSU Learn* (2021)
- Instructor Recertification, Wilderness & Remote First Aid: *American Red Cross* (2021)
- Instructor Recertification, First Aid/CPR/AED: *American Red Cross* (2021)
- Adult and Pediatric First Aid/CPR/AED Certification: *American Red Cross* (2021)
- ALGEE Mental Health First Aid Certification: *National Council for Behavioral Health* (1/15/2021)
- ALGEE Mental Health First Aid Certification: *Muslim-American Society-Social Services Foundation* (2019)
- Instructor Certification, Wilderness & Remote First Aid: *American Red Cross* (2019)
- Instructor Certification, First Aid/CPR/AED: *American Red Cross* (2018)
- Wilderness & Remote First Aid Certification: *American Red Cross, University of the Pacific* (2017)
- Adult First Aid, CPR & AED Certification: *American Red Cross, University of the Pacific* (2017)
- First Aid When Help Is Delayed Certification: *American Red Cross* (2011)
- Field Safety Leadership Certification: *ExxonMobil Upstream Geoscience Corp, GSA Annual Meeting, Minneapolis, MN* (2011)

Participant - Teaching-Related Workshops, Field Trips & Certifications

- *StraboSpot2 Rollout Course & Workshop*: StraboSpot Research Group - University of Kansas, University of Wisconsin, Texas A&M University (May 18-21, 2021)
- *Know Before You Go: Pre-Orientation Program Trailers as an Approach to Support Inclusion by Demystifying Field Experiences*: Workshop, U-FERN (Undergraduate Field Experiences Research Network) Meeting (2021)
- *Geological Society of America/ExxonMobil Annual Field Seminar in the Bighorn Basin of north-central Wyoming*: energizing and enhancing education of geology students and faculty by introducing them to the breadth and challenges of integrated basin and petroleum systems analysis (2019)
- *Strengthening students' spatial thinking skills*: Short Course, Geological Society of America Annual Meeting, Indianapolis, IN (2018)
- *Taking Students into the Field on Their Own Time: Using the Free, NSF-Funded Flyover Country Mobile App to Design Student Self-Guided Field Experiences*: Short Course, Geological Society of America Annual Meeting, Seattle, WA (2017)
- *Teen Science Cafés – Broaden Your Recruiting and Research Impacts*: Workshop, Geological Society of America Annual Meeting, Seattle, WA (2017)
- *CapSciCom Science Communication Seminar*: Workshop sponsored by Capitol Science Communicators, Powerhouse Science Center, World of Wonders Museum, Portal to the Public Network, & National Science Foundation (Award #1224129), Sacramento, CA (2016)
- *Poster Presentation Success: How to Design, Prepare and Present a Winning Poster*: AGU Career Center Webinar (2015)
- *Science Storytelling Video Workshop*: AGU Short Course, American Geophysical Union Annual Meeting, San Francisco, CA (2014)
- *Modern Digital Geologic Mapping Techniques*: GSA Short Course, Geological Society of America Annual Meeting, Denver, CO (2013)
- *Field Safety Leadership School*: ExxonMobil Upstream Geoscience Corp, GSA Annual Meeting, Minneapolis, MN (2011)
- *National Science Foundation GeoPRISMS Subduction Cycles and Deformation Implementation Workshop*: Austin, TX (2011)
- *Introduction to Geographic Information Systems (GIS) Using ArcGIS for Geological and Environmental Science Applications*: ESRI Short Course, Geological Society of America Annual Meeting, Denver, CO (2010)
- *United States Geological Survey & Association of American State Geologists Workshop on Digital Mapping Techniques*: Sacramento, CA (2010)
- *Burgess Shale Foundation's Centennial Celebration International Paleontological Research Exchange Program (IPREP)*: Field, British Columbia, Canada (2009)
- *Teaching Petrology & Structural Geology in the 21st Century*: National Science Foundation Cutting Edge Workshop, GSA Annual Meeting, Houston, TX (2008)
- *Strategic Persuasion – A Seminar in Effective Negotiations, Problem Solving, and Conflict Resolution*: National Science Foundation Cutting Edge Pre-AGU Career Development Workshop, San Francisco, CA (2007)
- *Developing Effective Courses*: National Science Foundation Cutting Edge Workshop, College of Siskiyous, Weed, CA (2006)
- *Early Career Faculty in the Geosciences – Teaching, Research, and Managing Your Career*: National Science Foundation Cutting Edge Workshop, College of William and Mary, Williamsburg, VA (2005)

Multidisciplinary Curriculum Development Efforts

- **Videography, 3D Photosphere compilation, & field trip reconnaissance, Rainbow Basin, CA** (2021 - present), After completing the COVID19 vaccination process, Dr. Skinner and I received permission from President's office to conduct several days of fieldwork in the vicinity of Rainbow Basin in the Mojave Desert of southeastern CA. The primary goal of this trip was to collect videos, drone footage, and photospheres for use with GEOL 111B in late spring 2021. These materials will also be used to support the GEOL 184 field trip scheduled for November 2021.
- **Geology and History of Scotland** (2016 - present), A series of lectures, readings, and student presentations designed to integrate a traditional, week-long overview of the geology of the Scotland. In collaboration with trip co-leaders, M. Wurtz (University Library, Holt-Atherton Special Collection Librarian), Dr. L. Rademacher (Dept of Geological & Env. Science) Dr. Michael Stewart (Univ. of Illinois), and Dr. Scott Giorgis (State Univ. of New York at Geneseo).

- **Geology and History of Exploration on the Colorado Plateau** (2012 - present), A series of lectures, readings, and student presentations designed to integrate a traditional, week-long overview of the geology of the Colorado Plateau with the regions complex human history. In collaboration with trip co-leaders, M. Wurtz (Univ. Library, Holt-Atherton Special Collection Librarian), Dr. Ryo Anma (Univ. of Tsukuba), and Dr. L. Rademacher (Dept of Geological & Env. Science).
- **Analytical Geomorphology** (2015 - 2020), A hybridization of previous Geomorphology (GESC 120) and GIS/Spatial Analysis (GESC 102) courses to serve the new Geological & Environmental Sciences degree tracks. In collaboration with Dr. Karen Gran (Univ. of Minnesota - Duluth) and Dr. Nicholas Werner (State Univ. of New York at Geneseo).
- **John Muir's observations & Geology of California** (2014 - 2020), Integration of drawings and writings by John Muir into curriculum for California Geology (GESC 61) field trips to northern California. In collaboration with M. Wurtz (Univ. Library, Holt-Atherton Special Collection Librarian).
- **Pacific's Connection to WWII Internment of Japanese-Americans at Tulelake, CA** (2014 - 2020), Integration of materials highlighting the internment of Japanese-Americans from the University of the Pacific community during WWII at associated stops during California Geology (GESC 61) field trips to northern California. In collaboration with M. Wurtz (Univ. Library, Holt-Atherton Special Collection Librarian).
- **Cases & Places** (2015 - 2018), An adaptation of the introductory-level field trip experience for use in Environmental Law courses at the University of Pacific's McGeorge School of Law. The result was a four-day field trip designed to introduce law students to specific locations associated with significant milestones in caselaw. These experiences help them develop a deeper appreciation for the social, cultural, and scientific aspects of these locations. In collaboration with Dr. Karrigan Børk (UC Davis School of Law).
- **Geology & Poetry of Chilean Patagonia** (2010 - 2011), Field-trip based exploration of the relationships between the geology and Chilean cultural heritage, including the works of Pablo Neruda. In collaboration with trip co-leaders, Dr. L. Rademacher (Dept of Earth & Env. Science) and Drs. T. Roberts and M. Camps (Dept of Modern Languages).
- **Philosophy in the field** (2007 - 2014), A series of multidisciplinary exercises that introductory-level students on multi-day field trips can use as a springboard for reflecting on the concept of nature and in turn on the relationship between naturalness and morality. In collaboration with trip co-leader, Dr. T. Raterman (Dept of Philosophy).

Teaching/Mentoring Honors & Awards

- *Bighorn Basin Field Award*: Geological Society of America/ExxonMobil (2019)
- *First Place, What a Geologist Sees Contest*: W.W. Norton & Company, National Meeting of the Geological Society of America, Seattle, WA (2017)
- *First Place, What a Geologist Sees Contest*: W.W. Norton & Company, National Meeting of the Geological Society of America, Baltimore, MD (2015)
- *First Place, What a Geologist Sees Contest*: W.W. Norton & Company, National Meeting of the Geological Society of America, Vancouver BC (2014)
- *Field Camp Award for Excellence in Educational, Technical, Safety, & Diversity*: Geological Society of America & ExxonMobil (2013)
- *Best Presentation Award*: Preview Day Event, representing Dept of Earth & Environmental Sciences (2013)
- *Star of Pacific Award for Extraordinary Contribution to the Undergraduate First-Year Experience*: College of the Pacific (2009)
- *Thomas J. Long Foundation CORE Fellowship for Achievement & Innovation in General Education Courses*: College of the Pacific (2009)
- *Elected Associate Member of Eta Upsilon Chapter of Sigma Gamma Epsilon* (2008)
- *List of Teachers Ranked as Excellent by their Students*: University of Illinois, Office of Instructional Resources (Fall 2000, Spring 2001, and Fall 2001)
- *Academic Senate, Center for Effective Teaching and Instructional Support (CETIS) Distinguished Teaching Assistant Award*: University of California at Santa Barbara (highest campus teaching honor, 2000)
- *Mucker's Coterie Award for Commitment to Excellence in Undergraduate Education*: Department of Geological Sciences, University of California at Santa Barbara (2000)
- *Undergraduate Mentor*: College of Letters and Science, University of California at Santa Barbara (2000)

Field Experience

- Sierra Nevada Mapping of brittle and ductile structures, Jurassic Mt Tallac pendant (2012 - present)
- New York Mapping & strain analysis, Hudson Valley foreland fold-thrust belt (2001 - present)
- Ireland Evolution of syn-sedimentary structures, tectonic history of the Namurian Basin (2012 - 2022)
- Japan Submarine & surface surveys of active and ancient accretionary complexes Nankai Trough, Kii Peninsula, Boso Peninsula (2007 - 2018)
- Nevada Reconnaissance mapping, Roberts Mtn Thrust, Simpson Park Range (2007)
- Antarctica Mapping & biostratigraphy, Seymour Island (2003 - 2004)
- Mexico Mapping & strain analysis, Alacitos fold-thrust belt, Baja California (2003)
- Venezuela Assessment of tools for estimating drilling fluid resistivity (2001)
- Norway Kinematic survey of Mesoproterozoic Sveconorwegian shear zones (2001)
- Brazil Structural & metamorphic isograd mapping in the Araçuaí orogenic belt (2000)
- California Mapping of new fault ruptures & strong motion evidence, Pisgah Crater Volcano (1999)
- Iowa Hydrological survey of Cambrian-Ordovician aquifer system (1998)
- California Geodetic surveys of creep on San Andreas & McGee Creek fault systems (1997 - 1998)

Marine Experience

- *Shipboard Scientist, R/V Yokosuka and submersible SHINKAI 6500 (JAMSTEC):* deep-sea survey of active structures in an accretionary prism, Nankai Trough, Pacific Ocean (2008)
- *Shipboard Scientist, R/V L.M. Gould (NSF-USAP):* geologic mapping and stratigraphic analysis of Seymour Island, Antarctic Peninsula (2002 – 2003)

Service to the Institution

University / College Level Service

California State University, Sacramento

- Alternate Senator, Academic Senate (2021 - 2022)
- Member, Executive Safety Committee (2021 - present)

University of the Pacific

- Chair, Committee for Academic Planning and Development (2016 - 2019)
- Faculty Advisor, Transfer Orientation (2016)
- Member, Curriculum Subcommittee, College of the Pacific Planning Our Own Future Initiative (2015 - 2016)
- Member, Academic Council, Faculty Senate of the University of the Pacific (2013 - 2016)
- Author, Safety Manual for Student Drivers of Rental Vehicles on Extended Field Trips, author for University of the Pacific Office of Budget & Risk Management (2014)
- Member, College of the Pacific Academic Facilities Improvement Committee (2012 - 2015)
- Member, College of the Pacific Courses and Standards Committee (2012 - 2015)
- Chair, Faculty Development Leave Committee: Daniel Kasser, Dept Visual Arts (2013 - 2014)
- Member, University of the Pacific Sustainability Committee (2011-2012)

- Member, College of the Pacific Sustainability Committee Resource Working Group (2010 - 2011)
- Member, College of the Pacific Sustainability Committee Infrastructure Working Group (2010 - 2011)
- Co-Director, Residence for Earth & Environmental Living and Learning (REELL) campus learning community (with Dr. L. Rademacher and Dr. S. Jacobson, 2007 - present)
- Member, Global Stewardship Week Program, Development and Implementation Committee (2006)

Department / Program Level Service

Wasatch-Uinta Geology Field Camp

- Director (2007 - present)
- Webmaster (2005 - present) [<http://fieldcamp.org>]

Geology Department, California State University, Sacramento

- Committee Service
 - Chair, Field Curriculum Committee (2021 - present)
 - Member, Budget Committee (2021 - present)
 - Member, Curriculum Committee (2021 - present)
 - Member, Assessment Committee (2021 - present)
 - Member, Growth Committee (2020 - present)
 - Member, Graduate Committee (2020 - present)
 - Web Content Manager (2020 - present)
- Wilderness and Remote First Aid for Field Geologists
 - Geology Department, California State University at Sacramento (2022)

Department of Earth & Environmental Sciences, University of the Pacific

- Facilitated establishment of the J.R. McNey Sigma Gamma Epsilon Fellowship to support student initiatives (2008)
- Authored successful application for chapter installation (2008)
- Graphic artist, drafting departmental logos, promotional items, posters, flyers, newsletters, etc. (2005 - 2020)
- Newsletter, Editor (2008 - 2020)
- Social Media Administrator: Website, Blog, and Digital Kiosk (2012 - 2017)
- Distinguished Guest Lecture Series, program coordinator (2005 - 2017)
- Webmaster (prior to campus-wide switch to content management system, 2005 - 2007)

Department of Geology, University of Illinois

- Graduate Student Council, founding member & President (2001-2003)
- Annual Research Review, founder (2001)

Service to Student Groups & Organizations

- Delta Delta Delta Sorority: Phi Rho Chapter Academic Advisor (nominated, 2007 - 2019)
- Pacific Geocentric Society – Pacific Geology Club: faculty advisor (nominated, 2007 - 2018)
- Students for Environmental Action Committee: faculty advisor (nominated, 2006 - 2014)

- PACIFIC Mountains, Ocean, and Valley Experience (MOVE) Event & Freshman Kickoff, Yosemite Valley: faculty mentor, (2008 - 2010)
- Preview Day, Natural Sciences Lecture: event designed to encourage underrepresented high school students to consider science majors in college, Panel Member (2006)
- UCSB College of Letters and Science Undergraduate Mentorship Program: mentor (1999-2000)

Participant - Professional Development Workshops & Certifications

- *Building a Better Fieldwork Future: evidence-based tools for helping field researchers, instructors, and students prevent, intervene in, and respond to sexual harassment and assault.* University of California, Davis (2022)
- *Web Publisher Training:* Division of Information Resources & Technology, CSUS (2020)
- *StepUP Bystander Intervention Facilitator Training:* Becky Bell, University of Arizona (2020)
- *SafeZone Training for Creating Safe Spaces for LGBTQ students, staff, and faculty in Organizations:* Pride Center, California State University, Sacramento (2020)
- *Bystander Intervention Training:* California State University (2020)
- *Data Security & FERPA Training:* California State University (2020)
- *Discrimination, Harassment, and Retaliation Prevention Program - Non-Supervisors:* California State University (2020)
- *Equity and contemporary concerns in the classroom:* CSUS Center for Teaching & Learning (2020)
- *Driver Safety & Defensive Driving certification:* University of the Pacific (2017)
- *Preventing Harassment certification:* University of the Pacific Office of Human Resources (2013)
- *Building Strong Geoscience Departments:* National Science Foundation Cutting Edge Workshop, University of the Pacific, Stockton, CA (2011)
- *Strategies for Successful Recruitment of Geoscience Majors – Conceptual Framework and Practical Suggestions:* National Science Foundation Cutting Edge GSA Education Division and NAGT Sponsored Short Course, GSA Annual Meeting, Denver, CO (2007)

Service to the Community

Diversity, Equity, & Inclusion

- Invited Panel Participant, *How can professional organizations support interdisciplinary collaborations on Undergraduate Field Experiences Research Network (U-FERN) topics:* hosted by Dr. Kari O'Connell, 2022 UFERN Network Meeting, Oregon State University, (2022)
- Project Advisor, *National Science Foundation IUSE-ESL - How students develop a sense of belonging in the scientific community through undergraduate field courses,* Oregon State University, (PI) Dr. Kari O'Connell (2021)
- Program Redesign Consultant, *Providing an inclusive alternative to field camp at Temple University.* Hired to advise the redesign of departmental field-based curriculum to increase diversity, equity, and inclusion as part of an effort to realign learning outcomes and increase yield, Temple University, PI Dr. Alexandra Davatzes (2021-2022)
- Leader, *Confronting Racism in the Field - A Discussion for Field Camp Instructors, National Association of Geoscience Teachers, Cooperative Field Training Program* (2020)

COVID-19 Response

- Leader & host, *Round Table Discussion on Teaching Field Courses Online, Earth Educators Rendezvous, National Association for Geoscience Teachers,* Online (2021) [\[Link\]](#)
- Co-Organizer, *Designing & Implementing Field Experiences Through Distance Learning, a NSF-sponsored biweekly webinar series in support of field camp instructors transitioning to online teaching formats,* co-led with Chris Atchison (5/16, 5/30, 6/13, 6/27, 7/11 - 2020) [\[Link\]](#)

- Co-Organizer, *Tech Thursday Webinars*, a NSF-sponsored biweekly webinar series in support of field camp instructors transitioning to online teaching formats, co-led with Drs Basil Tikoff and Chris Atchison (4/16, 4/23, 4/30, 5/7 - 2020) [\[Link\]](#)
- Co-Organizer, *Digital Tools and Strategies Webinar*, a NSF-sponsored webinar series in support of field camp instructors transitioning to online teaching formats, co-led with Drs Basil Tikoff and Chris Atchison (4/6 - 2020) [\[Link\]](#)
- Project Leader, Designing Remote Field Experiences, NSF and NAGT-sponsored effort in response to COVID-19 pandemic to help move 150+ North American Field Camps to online/alternative options for students in summer 2020, co-led with Drs Chris Atchison, Basil Tikoff, Kathrine Ryker, Anne Egger, and Laura Rademacher (2020) [\[Link\]](#)
- Organizing Committee, Using Virtual Landscapes for Remote Teaching, NAGT/GSA Digital Field Tools and Applications Webinar Series in Support of Geoscience Community Reaction to COVID-19 curriculum changes, co-led with Dr Basil Tikoff (2020) [\[Link\]](#)
- Organizing Committee, Using Gigapan for Remote Teaching, NAGT/GSA Digital Field Tools and Applications Webinar Series in Support of Geoscience Community Reaction to COVID-19 curriculum changes, co-led with Dr Basil Tikoff (2020) [\[Link\]](#)
- Organizing Committee, Using Google Earth for Remote Teaching, NAGT/GSA Digital Field Tools and Applications Webinar Series in Support of Geoscience Community Reaction to COVID-19 curriculum changes, co-led with Dr Basil Tikoff (2020) [\[Link\]](#)
- Workshop Co-Leader, *Developing a Framework for Effective Field & Virtual Capstone Programs Workshop*, NSF and NAGT-sponsored 1-day professional development workshop for faculty in response to COVID-19 pandemic to spearhead effort to distill the first set of program learning outcomes for the capstone experiences traditionally met with field camp courses, co-led with Dr Laura Rademacher (2020) [\[Link\]](#)
- Working Group Co-Leader, *Learning Objectives and Assessment for Field Experiences Working Group*, NSF and NAGT-sponsored 1-day professional development workshop for faculty in response to COVID-19 pandemic to spearhead effort to distill the first set of program learning outcomes for the capstone experiences traditionally met with field camp courses, co-led with Dr Chris Atchison (2020)

Field Camp Programs

- Founding Member, Board of Directors, Wasatch-Uinta Field Camp Foundation, (2022 - present)
- Executive Secretary, United States Geological Survey – National Association of Geoscience Teachers, Cooperative Field Training Program (2017 - present) [\[Link to Program\]](#)

Field Safety Leadership

- Wilderness and Remote First Aid for Field Trip Leaders and Research Scientists
 - Department of Geological & Environmental Sciences, California State University at Chico (2022)
- Breakout Workgroup Facilitator: *Exploring the quantification of risk and the need for data to support critical evaluation field safety practices*, University of California System Field Safety Leadership Retreat, Lake Arrowhead Lodge, California, February 25-27 (2022)
- Workshop Leader, *Field Safety Leadership: Planing, conducting, & evaluating safe, healthy & successful field activities* 1- or 2-day professional development workshops for faculty, staff, graduate students, and undergraduate students
 - Department of Geography, Geology, & Environment, Illinois State University (Fall 2022)
 - Geology and Geological Engineering Department, Colorado School of Mines (April 2022)
 - Department of Geological Sciences, Albion College, Michigan (2021)
 - Department of Earth Science, University of Minnesota - Twin Cities (2020)
 - Geology and Geological Engineering Department, Colorado School of Mines (2019)
 - Department of Earth Sciences, Dartmouth College (2018)
 - Department of Geology, State University New York at New Paltz (2018)
 - Department of Geological Sciences, State University New York at Geneseo (2018)
 - Department of Earth & Climate Sciences, San Francisco State University (2016)
 - Department of Geological & Environmental Sciences, California State University at Chico (2015)

- Workshop co-Leader, *Field Safety Leadership School*, 1-day and 2-day professional development short courses offered at professional society meetings
 - GSA Annual Meeting, Denver, CA (2022)
 - Society for Economic Geology, online (2022)
 - GSA Connects Online (2020) [[Link](#)]
 - GSA Annual Meeting, Phoenix, AZ (2019)
- Workshop co-Leader, *Focusing the Lens on Field Safety: A Workshop For Field Trip Leaders* 4-day professional development workshop, University of Iowa (2019)

Service to Professional & Academic Societies

Geological Society of America

- Technical Session Chair, *Community-based development of virtual alternative capstone experiences for field camps in response to COVID-19 pandemic (largest session at meeting with 47 presentations submitted)*, Annual meeting of the Geological Society of America, online (2020)
- Planning Committee, GSA/NAGT Digital Field Tools for Teaching Webinar Series (2020)
- Planning Committee, 2023 Cordilleran Section Meeting, Sacramento, CA (2019 - present)
- Mentor, On To the Future Meeting Program for undergraduate and graduate students that are underrepresented in the Geosciences, Geological Society of America (2016 - present)
- Geological Society of America, Campus Representative (2012 - 2020)

Geological Society of America, Structural Geology & Tectonics Division

- Webmaster, Member Communications Committee, Structural Geology & Tectonics Division, Geological Society of America (2018 - 2022) [[Link to website](#)]
- Short Course/Workshop Coordinator, 2016 Structural Geology & Tectonics Forum, Sonoma State Univ. (2015 - 2016)
- Social Media Coordinator, Member Communications Committee, Structural Geology & Tectonics Division, Geological Society of America (2011 - 2018)

Sigma Gamma Epsilon National Honor Society for the Earth & Environmental Sciences

- Sigma Gamma Epsilon National Honor Society for the Earth & Environmental Sciences, Eta Upsilon Chapter Faculty Advisor & Representative (nominated, 2008 - 2020)
- Ritual and Insignia Committee Chair, 42nd Biennial Convention, Charlotte, NC (2012)
- Judge, SGE Austin A. Sartin Best Poster Award Committee, Geological Society of America National Meeting (2012)

Peer-Review of Scholarly Publications & Grant Proposals

- GSAToday, solicited manuscript reviewer (2020 - present)
- Geological Society of London, solicited manuscript reviewer (2014 - present)
- Tectonophysics – International Journal of Integrated Solid Earth Science (Elsevier), solicited manuscript reviewer (2014 - present)
- Geological Society of America, solicited manuscript reviewer (2010 - present)
- Geological Society of Japan, solicited manuscript reviewer (2010 - present)
- Journal of Structural Geology (Springer), solicited manuscript reviewer (2008 - present)
- National Science Foundation, research proposal reviewer (2005 - present)

Service to Other Universities

- Academic Program Review, Department of Geological and Environmental Sciences, College of Natural Sciences, California State University, Chico (2021)
- Adjunct Associate Professor of Geology, Department of Geology, University of Illinois (2011 - present)

Curriculum Development

- *Bu(nk) - Ki(sk)... A hybrid Busk-Kink method for constructing admissible geologic cross sections*
- Invited guest lecture at the NSF/GSA Structural Geology & Tectonics Forum, Sonoma State University (2016)
- Invited guest lecture in Structural Geology course (GESC 403), Department of Geological & Environmental Sciences, California State University at Chico (2015)
- *Introduction to geologic mapping at Rainbow Basin*: in support of Dr. Paul Wetmore's Structural Geology & Tectonics course (GLY 3402), University of South Florida (guest instructor, 2016)
- *Overview of the structural geology of the northern Appalachian fold-thrust belt & the Rosendale natural cement region*: in support of Dr. Mark Anders' Advanced General Geology course (W4001x), Lamont-Doherty Earth Observatory, Columbia University (principal leader, 1-day field trip, 2011)
- *Structures of the Hudson Valley fold-thrust belt in the Appalachian foreland of eastern New York*: NYSGA, 81st Annual Meeting, New Paltz, NY (co-leader, 1-day field trip, 2009)
- *Along-strike changes in the architecture of a fold-thrust belt: An example from the Hudson Valley, New York*: Annual Meeting of the Geological Society of America, Philadelphia (co-leader, 2-day field trip, 2006)
- *Mines and geology of the Potomac River Valley*: American Natural Cement Conference, Rosendale, New York (co-leader, 1-day field trip, 2006)
- *Structure, stratigraphy, and economic geology of the Rosendale natural cement region, Ulster County, New York*: American Natural Cement Conference, Rosendale, New York (principal leader, 1-day field trip, 2005)
- *Examples of along-strike changes in fold-thrust belt architecture; structural geology of the Rosendale natural cement region, Ulster County, New York*: NYSGA, 75th Annual Meeting, Diamond Jubilee Field Conference, Oneonta, NY (principal leader, 1-day field trip, 2003)

Educational Outreach Activities

- *Sharing distance learning strategies & best practices, assisting in the recording and production of instructional videos for fourth, fifth, and sixth grade classes*: Jan Ken Po Gakko Japanese-American School, Sacramento, CA (2021) [\[Link\]](#)
- *The Amazing Story of Mary Anning - A presentation in support of the Because of Her Patch Program*: Girl Scouts of America, Troop 2124, Sacramento, CA (2017)
- *Creek Week - Delta Waterways Cleanup with Sacramento-San Joaquin Delta Conservancy*: Lower Morrison Creek Bufferlands (2017)
- *Science Blast Community Day with the José Hernández Reaching for the Stars Foundation*: DeRosa University Center, University of the Pacific (2016)
- *Earth Science Curriculum Development Program at Sly Park Environmental School*: with Matt Smith (Director), Sacramento Unified School District (2011 - 2014)
- *Geology of Grover Hot Springs State Park, Markleeville, CA*: with Linda Hines, California State Parks (2007)
- *Geologic history of the Chalk Creek*: educational materials for visitors to the Pine Cliff Camp & Retreat Center, Coalville, Utah (2007)
- *Geology of Williams Lake*: educational materials for visitors to public lands and the Walkill Valley Rail Trail adjacent to the Williams Lake Resort, Binnewater, NY (2006)
- *Learning to identify minerals and basic rock types*: hands-on learning experience for 5th and 6th grade students, St. Gertrude's School, Stockton (2006)
- *Science on the Antarctic Peninsula*: interactive photo-journal for USAP Online Library (2004)
- *Emails To Antarctica*: Geosciences curriculum development project with P. McIntosh, A.P. Giannini Middle School, San Francisco, CA (2003 - 2004)

- *Geology and Oceanography Merit Badge Counselor*: Boy Scouts of America (1998-2000)
- *ScienceLine*: online science tutor for K-12 students (1997-2000)

Public Lectures & Presentations

- *Growing educational outreach with digital tools honed during the COVID19 pandemic*: Invited lecture, Century House Historical Society Annual Meeting, in collaboration with P. McCarthy, R. Petterson, X. McCarthy, and J.M. Finley (2021)
- *Sorting facts from truths - science as a way of knowing*: Stockton Institute for Continued Learning, San Joaquin Delta College, Stockton, CA (2019)
- *Knowledge and the difference between beliefs, understandings, facts, & the truth*: Invited Keynote Speaker for Annual Research Symposia, Hinsdale Central High School, Hinsdale, IL (2018)
- *Life as a Pacific Geosciences student*: Hinsdale Central High School, Hinsdale, IL (2018)
- *Earth science degree programs and career options*: Invited lecture, University of the Pacific, Dean's Seminar for Exploratory Students (2017, 2018)
- *Life as a Pacific Geosciences student*: Hinsdale Central High School, Hinsdale, IL (2017)
- *Welcome to Jurassic arc reconstructing the ancient history of the Sierra*: Invited Lecture, Department of Physical Science, Diablo Valley Community College, CA (2017)
- *Sorting facts from truths - science as a way of knowing*: San Joaquin County Association of Atheists and Freethinkers, Manteca Library, Manteca, CA (2017)
- *Welcome to Jurassic Arc, reconstructing the ancient history of the Sierra Nevada & Life as a Geological & Environmental Sciences Student at Pacific*: Merced Junior College, Science, Math and Engineering Division (2016)
- *Welcome to Jurassic Arc, reconstructing the ancient history of the Sierra Nevada – a conversation with Pacific Geologist Kurt Burmeister*: Invited Lecture, Science Night Live at the World of Wonders Science Museum with the Capital Science Communicators, Lodi, CA (2015)
- *Exploring deformation in mountain belts when data are limited; insights from geologic mapping, fabric analysis & submarine work*: Invited lecture, University of the Pacific, Department of Earth & Environmental Science (2015)
- *Mapping geology on the seafloor: using submarines to study structures in the Nankai accretionary prism of SE Japan & Life as an Earth Sciences Student at Pacific*: Merced Junior College, Science, Math and Engineering Division (2015)
- *Earth science degree programs and career options*: Invited speaker & informal discussion leader, Alumni/Senior Career Day, Jesuit High School, Carmichael, CA (2013)
- *Earth science degree programs and career options*: Invited lecture, University of the Pacific, REELL Sustainability Outreach Day with Middle College High School (2011)
- *Earth science degree programs and career options*: Invited lecture, University of the Pacific, Dean's Seminar for Exploratory Students (2010)
- *Geology From A Submarine*: Lecture to Theta Chi - Iota Eta Chapter, University of the Pacific, Stockton, CA (2009)
- *Centennial of the Great San Francisco Earthquake, 1906-2006*: three-part poster campus exhibit on the 1906 earthquake and earthquake hazards. (2006)

Invited Topical Lectures, Panels & Discussions

- *GESC 43, Environmental Science – An overview of the geologic evolution of California and its physiographic provinces*: hosted by Dr. Karrigan Börk, Department of Geological & Environmental Sciences, Invited Lecture (2016)
- *PACS 2, BIG HISTORY – Extinction and the Anthropocene*: hosted by Dr. Arturo Giraldez, the Department of History & School of International Studies, University of the Pacific, Invited Lecture (2015)
- *PACS 2, BIG HISTORY – Origin of the Earth & Deep Time*: hosted by Dr. Arturo Giraldez, the Department of History & School of International Studies, University of the Pacific, Invited Lecture (2015)

- *ANTH 112, Physical Anthropology – How geologists think about deep time*: hosted by Dr. Analiese Richard, the School of International Studies, University of the Pacific, Two invited Lectures (2014)
- *HIST 93, BIG HISTORY – Deep Time*: hosted by Dr. Arturo Giraldez, the Department of History & School of International Studies, University of the Pacific, Invited Lecture (2013)
- *HIST 93, BIG HISTORY – Ancient Supercontinents, Nuclear Submarines, and the Secret Life of Ocean Floors; An Introduction to Tectonics*: hosted by Dr. Arturo Giraldez, the Department of History & School of International Studies, University of the Pacific, Invited Lecture (2013)
- *How the Geology of California Affects Our Mineral & Energy Resources, Agricultural Economy, & the Hazards That Surround Us*: hosted by the Residence for Earth & Environmental Living & Learning, University of the Pacific, Invited Lecture (2012)
- *The Truth About Global Warming - the science, economics, and culture of climate change*: hosted by the Delta Phi Epsilon Professional Foreign Service Fraternity, University of the Pacific, Invited Debater (2010)
- *Community Forum on Sustainability*: hosted by the University of the Pacific Jacoby Center for Public Service and Civic Leadership, Invited Panel Member (2010)
- *What Is Sustainability*: Hosted by the Pacific STARS Mentor Program, Invited Lecture in collaboration with Dr. L. Rademacher (2010)

TV, Magazine, & Web Interviews

- *Trove Of Fossils Discovered In Mokelumne River Watershed Near Valley Springs*: Interview regarding my involvement with recovery of Miocene vertebrate fossils in Calaveras County during spring and summer 2020, by Adrienne Moore, CBS Sacramento, Channel 13 (2021) [[Link to article](#)]
- *Changes to lab and field courses during the COVID-19 pandemic*: Interview regarding my NSF-supported effort to help field camps transition to online alternatives in summer 2020, by AAAS SCIENCE Magazine reporter, Elizabeth Pennisi (2020) [[Link to article](#)]
- *GIS Day - Celebrating spatial data, of all things*: Interview regarding history, tools, and applications of Geographic Information Systems by Stockton Record reporter, Michael Fitzgerald (2017) [[Link to article](#)]
- *Best Science Interviews of 2015 – Seismology Compilation*: Interview on Capital Public Radio program Insight with Beth Ruyak (2015) [[Link to article](#)]
- *Rock Formations In The Sierra*: Interview on Capital Public Radio program Insight with Beth Ruyak (2015): [[Link to article](#)]
- *Report – Groundwater Removal During Drought Could Cause Earthquakes*: Interview regarding connection between groundwater overuse during drought and potential for increases earthquake activity, Leigh Martinez, CBS News (2014) [[Link to article](#)]
- *The Skeletal Fabric of Chicago*: contributor to and editor of a blog article by Marynia Kolak for The Center For Humans & Nature (2013): [[Link to article](#)]
- *Pacific Attends GSA Conference*: Interview regarding our undergraduate research program by Jamil Burns for the Pacifican campus newspaper (2013)
- *Geology undergrads get graduate-level research experience*: Interview regarding the my undergraduate research program for the University of the Pacific by Marnie Santoyo, College of the Pacific Website (2012) [[Link to article](#)]
- *Where do the northern Shawangunk Mountains end?*: Interview regarding the geology and geomorphology of the northernmost Shawangunk Mountains for an article in the newsletter for the Shawangunk Conservancy by Dany Davis, v. 16, n. 1 (2012) [[Link to article](#)]
- *Six year anniversary of the hurricane Katrina disaster*: Interview regarding hazards Californian's should be aware of regarding the Sacramento-San Joaquin Bay-Delta's levee system, KFBK News Radio 1530 (2011)
- *Northern Japanese earthquake & tsunami*: Interview regarding causes and potential for similar hazards in California, KXTV Channel 10, (2011)
- *Earthquake Rattles Lathrop*: Interview regarding earthquake hazards in California's Central Valley, KXTL Channel 40, (2010)
- *San Joaquin scientists keeping watch on Copenhagen*: Interview regarding the Copenhagen Climate Summit by Alex Breitler, Staff Writer for the Stockton Record Newspaper, December 19 (2009) [[Link to article](#)]
- *Professor investigates Japanese tectonic activity*: Interview regarding my research in the Nankai Trough by Abby Liao for The Pacifican campus newspaper (2008)

- *The Return of American Natural Cement*: Interview regarding geology of Rosendale natural cement region by S. Brimo-Cox, *Traditional Masonry*, Traditional Masonry, v. 2, n. 2. (2007)
- *Rediscovered rock*: Interview regarding Rosendale natural cement industry: by J.D. King, *Chronogram*, Hudson Valley Arts, Culture, and Spirit, v. 6. (2005) [[Link to article](#)]
- *Parkfield Earthquake*: Interview regarding earthquake hazards in California's Central Valley, KBAK Channel 29, (2004)

Professional Affiliations

- **Research**: Geological Society of America (Structure & Tectonics and History of Geology Divisions), American Geophysical Union
- **Education**: Capitol Science Communicators (CapSciComm), Sigma Gamma Epsilon (SGE), National Association for Geoscience Teachers (NAGT), Northern California Geological Society, National Center for Science Education, Union of Concerned Scientists
- **Diversity, Equity, & Inclusion**: International Association for Geoscience Diversity (IAGD), National Association for the Advancement of Colored People (NAACP), Human Rights Campaign (HRC)

Woodworking

- Owner, *Strain Shadow Designs* - maker of wooden geological models for illustrating how planar geologic contacts (bedding, faults, intrusions, folds, etc.) interact with topography (e.g., the "rule of Vs"). [[Link to portfolio](#)]