## **CURRICULUM VITAE**

#### LYDIA K. FOX

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## PRESENT POSITIONS:

Associate Professor and Chair, Department of Geological and Environmental Sciences, University of the Pacific, Stockton, CA 95211

Director of Environmental Studies Program, University of the Pacific, Stockton, CA 95211

## **EDUCATION:**

Ph.D., Geological Sciences, University of California, Santa Barbara, 1989

Dissertation: Albitization of Jurassic plutons in the southern Bristol Mountains, east-central Mojave Desert, southeastern California.

B.S.E., Geological Engineering, Princeton University, 1981

Senior Thesis: Compositional variations and implications of petrogenesis of the Kernville pluton, southern Sierra Nevada, California.

## PROFESSIONAL EXPERIENCE:

#### **Administrative:**

Chair, Department of Geological & Environmental Sciences, University of the Pacific (1998-2014, 2021-present)

Director, Environmental Studies Program, University of the Pacific (2004-present)

Director of Undergraduate Research, University of the Pacific (2010-2022)

### **Academic:**

Associate Professor, Department of Geosciences (now Geological & Environmental Sciences), University of the Pacific (1995-present)

Assistant Professor, Department of Geology & Geography, Univ. of the Pacific (1990-1995)

Visiting Assistant Professor, Dept. of Geological Sciences, Calif. State Univ., Northridge, (1988-1990)

Teaching Associate, Department of Geological Sciences, UC Santa Barbara (Fall 1987)

Teaching Assistant, Department of Geological Sciences, UC Santa Barbara (1984-1988)

## **Non-Academic:**

Geologist, U. S. Geological Survey, Menlo Park, CA 92540 (1985-1989)

Physical Science Technician, U. S. Geological Survey, Menlo Park, CA (1983-85)

Geological Field Assistant, U. S. Geological Survey, Menlo Park, CA (1982-83)

Field Engineer, Schlumberger Well Services, Opelousas, LA (1981-82)

## PROFESSIONAL AFFILIATIONS:

American Association of Colleges & Universities

American Association for the Advancement of Science

American Geophysical Union

Association of Women Geoscientists

Council on Undergraduate Research

Geological Society of America

National Association of Geoscience Teachers

Phi Kappa Phi

Project Kaleidoscope, Faculty for the 21st Century

Sigma Xi

#### **HONORS/AWARDS:**

University of the Pacific Distinguished Faculty Award (2018)
Fellow of the Geological Society of America (elected 2016)
Faye & Alex Spanos Distinguished Teaching Award, College of the Pacfic (2009)
Thomas J. Long Foundation Core Fellowship, University of the Pacific (2007-2008)

## **PUBLICATIONS/ABSTRACTS:**

- Fox, L. K. and Wurtz, M, J. 2020, Helping Students Develop a Sense of Place Enhances Scaffolded Learning by Incorporating John Muir's Journals and Drawings into a Multi-Day Field Experience in Yosemite and the Eastern Sierra, Fall meeting of the American Geophysical Union
- Fox, L. K. and Winter, L., 2019, Evaluation: Best Practices for Broader Impacts, Tutorial Talk presented at the Fall Meeting of the American Geophysical Union
- Fox, L. K, 2019, Incorporating GeoHealth into the Curriculum When There is not Room for a New Course, Geological Society of America Abstracts with Programs, v. 51, no. 5, doi: 10.1130/abs/2019AM-335329
- Fox, L. K., Fortner, S. K., Kraal, E., and Wilson, C., 2018, Designing Course-based Undergraduate Research Experiences (CURES) to address science literacy. Geological Society of America *Abstracts with Programs*, vol. 50, No. 6, doi: 10.1130/abs/2018AM-322439.
- Fox, L. K., 2017, Less is More: The transformative impact of the 2003 "Teaching Petrology in the 21st Century" "On the Cutting Edge" Workshop, Geological Society of America *Abstracts with Programs*, vol. 49, No. 6, doi: 10.1130/abs/2017AM-304103
- Barth, A.P, Wooden, J.L., Miller, D.M, Howard, Fox, L.K., Schermer, E.R., and K. A., Jacobsen, C. E., Regional and temporal variability of melts during a Cordilleran magma pulse: Age and chemical evolution of the Jurassic arc, eastern Mojave Desert, California. Geological Society of America Bulletin, March 2017, v. 129, no. 3-4, p. 429-448, doi:10.1130/B31550.1)
- Fox, L. K., 2016, Writing to Learn: Use of informal writing assignments to deepen comprehension in geology and environmental science courses, Geological Society of America Abstracts with Programs, vol. 48, No. 7, doi: 10.1130/abs/2016AM-279750
- Fox, L. K., 2015, Putting research in context: an environmental policy project in a writing-intensive capstone course, Geological Society of America Abstracts with Programs, vol. 47, No. 7.
- Fox, L.K., and Guertin, L. A., 2013, Faculty development workshops to support establishing and sustaining undergraduate research programs in the earth sciences, presented (invited) at the 2013 Fall meeting of the American Geophysical Union, San Francisco, 10 December (ED23E-05)
- Fox, L.K., Guertin, L.A., Manley, P.L., and Pollock, Meagen., (2013) Undergraduate research as effective pedagogy supported by the Geosciences Division of the Council on Undergraduate Research, Geological Society of America *Abstracts with Programs*, vol 45, no 7, p. 733
- Manley, P. L., Guertin, L. A., Fox, L. K., and Ambos, E., 2013, Undergraduate research as teaching practice: Geosciences Division of the Council on Undergraduate Research. Geological Society of America *Abstracts with Programs*, vol 45, no 7, p. 205.
- Fox, L. K., Guertin, L. A., Manley, P. L., and Fortner, S. K., 2012, The Geosciences Division of the Council on Undergraduate Research (GeoCUR): Supporting Faculty that Mentor Undergraduate Researchers, presented at 2012 Fall Meeting, AGU, San Francisco, 3-7 December (ED51C-0902).
- Fox, Lydia K. (2012) "Water is for Fighting Over": Water and the California Delta as a Theme for a Capstone Seminar. Geological Society of America *Abstracts with Programs*, Vol. 44, No. 7, p. 46
- Fox, Lydia K. and Asher, Pranoti (2012) 2011 AGU Workshop for Heads & Chairs, EOS, Transactions of the American Geophysical Union, v. 93, no. 9, p. 97
- Fox, Lydia K. (2011) Preparing future elementary school teachers by helping them overcome their fear of science Geological Society of America *Abstracts with Programs*, Vol. 43, No. 5, p. 404.
- Fox, Lydia K., 2010, Making Learning Fun: use of clickers to facilitate review and scaffold learning. Geological Society of America *Abstracts with Programs*, Vol. 42, No. 5, p. 555
- Fox, Lydia K., 2008, Learning the Tools of the Trade in Petrology: Developing a Research Proposal as a Semester-Long Project, Geological Society of America, *Abstracts with Programs*, v. 40, p.

- Fox, Lydia K. and Ronco, Silvia, 2007, CUR 2008: The Biennial CUR Conference "Frontiers and Challenges in Undergraduate Research, CUR Quarterly, Fall 2007, p. 36-37.
- Albala, Ken, Camfield, Gregg, Fox, Lydia, Goff, Chris, Matz, Lou, Ostberg, Cindy, Randels, George, Raterman, Ty, eds., 2007, What is Good Society, Pacific Seminar I, Houghton Mifflin Co., 810 p.
- Fox, Lydia.K., 2006, Encouraging reflection as a means to increase learning in an Earth System Science course for pre-service K-8 teachers, Geological Society of America *Abstracts with Programs*, Vol. 38, No. 7, p. 365.
- Albala, Ken, Camfield, Gregg, Fox, Lydia, Goff, Chris, Matz, Lou, Ostberg, Cindy, Randels, George, eds., 2006, What is Good Society, Pacific Seminar I, Houghton Mifflin Co., 1012 p.
- Singer, Jill, and Fox, Lydia K., 2006, BIO2010: What's missing, CUR Quarterly, June 2006, p. 151-152.
- Fox, L.K., Singer, J., Woodrow, D., and Ryan, J. G., 2005, Summer Undergraduate Research Experiences Fellowships in Geosciences: Outcomes from NSF-REU Support to the Council on Undergraduate Research, Eos, Transactions of the American Geophysical Union, 86 (52), Fall Meeting Supplement, Abstract ED31A-1198
- Fox, L.K., 2004, Preparing students for petrography and beyond: a practical approach to optical mineralogy, Eos Transaction of the American Geophysical Union, 85 (47), Fall Meeting Suppl., Abstract ED13B-0725,
- Honesto, Jenise Maire, and Fox, L.K., 2004, Compositional variations of the orbs in Morgan Hill poppy jasper, southern Santa Clarita Valley, CA. Geological Society of America, Abstracts with Programs, v. 36, no. 4, p. 9
- Singer, J. and Fox, L. K., 2004, Council on Undergraduate Research (CUR): Faculty Development and Models of Successful Undergraduate Research Programs, Eos Transactions of the American Geophysical Union, 85 (47), Fall Meeting Suppl., Abstract ED51D-0038
- Fox, Lydia K., 2003, Geology in context: an introductory geology course with a multi-disciplinary focus on a field trip to Yosemite and Owen's Valley. Geological Society of America Abstracts with Programs, v. 34, no. 7, p. 277.
- Fox, Lydia K., 2001, Getting past "I don't do science": Earth System Science for pre-service teachers. Geological Society of America Abstracts with Programs, v. 33, no 7, p. A177.
- Fox, Lydia K. and Pearson, Eugene F., 2000, Multiple avenues to building research skills: investigative experiences in the petrology curriculum at the University of the Pacific: Geological Society of America Abstracts with Programs, v. 32, no. 7, p. A-205.
- Fox, Lydia K., 1999, Making an introductory geology course accessible to students with limited mobility: Geological Society of America Abstracts with Programs, v. 31, no. 7, p. A-274.
- Fox, Lydia K. and Kane, William F., 1997, Creating links across disciplines: Engineering Geology at University of the Pacific: Geological Society of America Abstracts with Programs, v. 28, no.7, p. A-413.
- Fox, Lydia K., and Kane, William F., 1995, Engineering geology of the San Joaquin Delta and San Francisco Bay Area, *in* Pearson, Eugene, F, ed., Environmental and engineering geology of central California: Salinian Block to Sierra Foothills and Workshops for Geoscience Educators, NAGT Far West Section Fall Conference, Univ. of the Pacific, p. 45 66.
- Kane, William F., Perez, Hernan, Anderson, Neil O., and Fox, Lydia K., 1995, Slope monitoring using electronic instrumentation, *in* Proceedings of the 1995 Annual Meeting of the Association of Engineering Geologists, Sacramento, CA, p. 61.
- Fox, Lydia K., 1991, Rare earth element geochemistry of Jurassic plutonic rocks of the southern Bristol Mountains, Mojave Desert, California: genetic implications: Geological Society of America, Abstracts with Programs, v. 23, no. 5, p. A307.
- Fox, Lydia K., and Miller, D. M., 1990, Jurassic granitoids and related rocks in the southern Bristol Mountains, southern Providence Mountains, and Colton Hills, Mojave Desert, California: *in* Anderson, J. L., ed., The Nature and Origin of Cordilleran Magmatism: Geological Society of America Memoir 174, p. 111-132.
- Fox, Lydia. K., 1987, Sodium metasomatism of Jurassic plutons, east-central Mojave Desert, California. Geological Society of America Abstracts with Programs, vol.19, no.6, pp.379.

Fox, Lydia K., 1987, Mineralogical and chemical effects of late-magmatic albitization of Jurassic plutons, Bristol Mtns, CA; implications for fluid composition: Geological Society of America, Abstracts with Programs, vol.19, no.7, pp.667.

Fox, Lydia K., 1986, Sodium metasomatism of a Jurassic quartz syenite, Bristol Mountains, California: Eos, Transactions, American Geophysical Union, vol.67, no.44, pp.1269.

Frizzell, Virgil A, Jr., Fox, Lydia K., Moser, Fredrika C., Ort, Kathleen M., 1984, Late Cretaceous granitoids, Cabo San Lucas Block, Baja California Sur, Mexico: Eos, Transactions, American Geophysical Union, vol.65, no.45, pp.1151.

#### **REVEIWS:**

#### **Books:**

Principles of Igneous & Metamorphic Petrology, 3<sup>rd</sup> ed., Cambridge University Press, 2019 Manual of Mineral Science, Wiley, 2005

Modern Earth Science: Holt, Rinehart and Winston, 1996

Foundation Upgrading and Repair for Infrastructure Improvement, American Society of Civil Engineers Geotechnical Publication No. 50, William F. Kane and John Tehaney, eds.

#### **Journals:**

Scholarship and Practice of Undergraduate Research (SPUR) Council on Undergraduate Research (CUR) Quarterly Journal of Geoscience Education

## **PROGRAM REVEIWS:**

Science Division – St. Norbert College

Department of Earth & Environmental Sciences, Furman University

Undergraduate Research Program – California Lutheran University

Department of Marine Science and Environmental Studies, University of San Diego

Department of Geological & Environmental Sciences, Hope College

Department of Environmental & Ocean Sciences, University of San Diego

## UNDERGRADUATE RESEARDCH SUPERVSION:

Matthew Gallagher., Distribution and petrography of plutons in the Hunter Mountain Batholith, 1992 Wendy Naugler., The origin of the Franciscan Complex, 1997

Shayne Zurilgen, Petrology and petrogenesis of the Hunter Mountain Batholith, 1997

Jennifer O'Neal, Petrologic comparision of the Logtown Ridge and Gopher Ridge Formations, 1998 Jenise Honesto, Origin of poppy jasper from Morgan Hill, CA, 2003-2004

Rebecca Haskett, XRD of feldspars to determine the control of ordering in original K-feldspar on the development of chess board albite in altered rocks, 2003-2004

Sheena Styger, Origin of silicic volcanic rocks in northwestern Iceland, 2004-2005

Kimi Matsushima, Investigation of the Gopher Ridge and Copper Hill Formations of the central Sierra Nevada foothills, California, 2009-2010.

Kaitlyn Rawhouser, Study of Jurassic volcanic rocks of the Foothills Terrance of the western Sierra Nevada metamorphic belt, 2012-2013.

Paula Phelps, Study of volcanic landforms on Mars using remote imagery, 2016-2017.

Katie Ortega, Crystallography of albitized feldspars, 2018-2019

Natali Hoeg, Mineral collection curation research, 2021-present

## **GRADUATE RESEARDCH SUPERVSION:**

Kathlyn Ortega, PhD candidate, University of Illinois at Urbana-Champaign

Claudia Brackett: NMR Characterization of a Diiron Macrocycle and Structural Characterization of a Diketo Derivative, MS chemistry, May 2002

#### **WORKSHOPS:**

- Leader/Facilitator/Presenter "Establishing and Sustaining an Undergraduate Research Program", workshop held at the Fall Meeting of the American Geophysical Union in New Orleans, LA, hybrid workshop, December 2021.
- Leader/Facilitator/Presenter "Establishing and Sustaining an Undergraduate Research Program", workshop held at the Fall Meeting of the American Geophysical Union, virtual workshop, December 2020.
- Leader/Facilitator/Presenter "Establishing and Sustaining an Undergraduate Research Program", workshop held at the Fall Meeting of the American Geophysical Union in San Francisco, December 2019.
- Leader/Facilitator/Presenter "Establishing and Sustaining an Undergraduate Research Program", workshop held at the Fall Meeting of the American Geophysical Union in Washington, DC, December 2018.
- Organizer "Establishing and Sustaining an Undergraduate Research Program", workshop held at the Fall Meeting of the American Geophysical Union in New Orleans, December 2017.
- Leader/Facilitator/Presenter "Establishing and Sustaining an Undergraduate Research Program", workshop held at the Fall Meeting of the American Geophysical Union in San Francisco, December 2016.
- Leader/Facilitator/Presenter "Making Undergraduate Research a Key Part of Your Class or Curriculum" Workshop held at Earth Educator's Rendezvous Madison, WI, July 22, 2016
- Leader/Facilitator/Presenter "Getting Started in Undergraduate Research", workshop held at the Fall Meeting of the American Geophysical Union in San Francisco, December 2015.
- Moderator/Panelist "Undergraduate Research Administrative Nuts and Bolts, held at the CUR Undergraduate Research Program Directors Conference Undergraduate Research Programs: Building, Enhancing, and Sustaining, held at University of Oklahoma, June 23-25, 2015
- Facilitator "Institutionalizing Undergraduate Research" a Council on Undergraduate Research institute held at University of San Diego, April 2015.
- Leader/Facilitator/Presenter "Getting Started in Undergraduate Research", workshop held at the Fall Meeting of the American Geophysical Union in San Francisco, December 2014.
- Facilitator "Connecting Undergraduate Research to other High Impact Practices" a Council on Undergraduate Research workshop for State University Systems and Consortia, held at University of San Diego, November 2014.
- Leader/Facilitator/Presenter "Getting Started in Undergraduate Research for New, Future, and Current faculty", workshop held at the Annual Meeting of the Geological Society of America in Vancouver, BC, October 2014.
- Leader/Facilitator/Presenter "Getting Started in Undergraduate Research", workshop held at the Fall Meeting of the American Geophysical Union in San Francisco, December 2013.
- Leader/Facilitator/Presenter "Getting Started in Undergraduate Research", workshop held at the Annual Meeting of the Geological Society of America in Denver, CO, October 2013.
- Leader/Facilitator/Presenter "How to Establish and Sustain an Undergraduate Research Program", workshop held at the Annual Meeting of the Association of American Geographers in Los Angeles, April 2013.
- Leader/Facilitator/Presenter "Getting Started in Undergraduate Research", workshop held at the Fall Meeting of the American Geophysical Union in San Francisco, December 2012.
- Session leader/presenter/organizing committee member 2012 AGU Workshop for Heads & Chairs of Earth and Space Science Departments, December 2, 2012, San Francisco
- Leader/Facilitator/Presenter "Getting Started in Undergraduate Research", workshop held at the Annual Meeting of the Geological Society of America in Charlotte, NC, November 2012.
- Leader/Facilitator/Presenter "Starting an Undergraduate Research Program", workshop held at the Annual Meeting of the Association of American Geographers in New York, February 2012.
- Leader/Facilitator/Presenter "How to Get a Research Program Started", workshop held at the Fall Meeting of the American Geophysical Union in San Francisco, December 2011.
- Facilitator Institutionalizing Undergraduate Research a workshop for the CSU system, CSU- Los Angeles, October, 2011.

- Leader/Facilitator/Presenter Establishing and Sustaining an Undergraduate Research Program: A Professional Development Workshop for New and Future Faculty, workshop at annual meeting of the Geological Society of America meeting in Minneapolis, October, 2011.
- Leader/Facilitator/Presenter "How to Get a Research Program Started at PUI (Primarily Undergraduate Institution)", workshop held at the Fall Meeting of the American Geophysical Union in San Francisco, December 2010.
- Leader/Facilitator/Presenter Establishing and Sustaining an Undergraduate Research Program: A Professional Development Workshop for New and Future Faculty, workshop at annual meeting of the Geological Society of America meeting in Denver, October, 2010.
- Leader/Facilitator/Presenter How to get a Research Program Started at a Primarily Undergraduate Institution, workshop at Fall meeting of the American Geophysical Union, December 2009, San Francisco.
- Leader/Facilitator/Presenter: Establishing and Sustaining an Undergraduate Research Program Workshop held at annual meeting of the Geological Society of America, October 2009, Portland, OR.
- Leader/Facilitator/Presenter: How to Get a Research Program Started at a Primarily Undergraduate Institution (PUI) Sponsored by CUR, held at the AGU Fall meeting, December 2008, San Francisco.
- Facilitator Institutionalizing Undergraduate Research –sponsored by CUR workshop at CSU Sacramento, November 2008.
- Facilitator How to Establish and Sustain an Undergraduate Research Program Sponsored by CUR, held at the GSA annual meeting in Houston, October 2008.
- Facilitator Institutionalizing Undergraduate Research workshop at CSU Northridge, February 2008. "How to get a job at a PUI" presentation in Geo-CUR workshop on "How to Get a Research Program Started at a Primarily Undergraduate Institution (PUI)" at American Geophysical Union Fall 2006 Meeting, December, 2006, San Francisco, CA.
- Leader/Facilitator/Presenter "How to Get a Research Program Started at a Primarily Undergraduate Institution (PUI)" at American Geophysical Union Fall Meeting, December, 2005, San Francisco, CA
- Facilitator How to Establish and Sustain and Undergraduate Research Program Sponsored by CUR, held at the GSA annual meeting in Salt Lake City, October 2005.
- "How to get a job at a PUI" presentation in Geo-CUR workshop on "How to Get a Research Program Started at a Primarily Undergraduate Institution (PUI)" at American Geophysical Union Fall 2004 Meeting, December 14, 2004, San Francisco, CA. (facilitated the workshop as well)
- Facilitator How to Establish and Sustain and Undergraduate Research Program Sponsored by CUR, held at the GSA annual meeting in Denver, November 6, 2004.
- "How to get a job at a PUI" presentation in Geo-CUR workshop on "How to Get a Research Program Started at a Primarily Undergraduate Institution (PUI)" at American Geophysical Union Fall 2003 Meeting, December 2003, San Francisco, CA.
- "Seeking funds from foundations" presentation in Geo-CUR workshop on "Proposal Writing Tips in the Geosciences" at the 2003 Geological Society of America Meeting November 1, 2003, Seattle, WA
- "How to get a job at a PUI" presentation in Geo-CUR workshop on "How to Get a Research Program Started at a Primarily Undergraduate Institution (PUI)" at American Geophysical Union Fall 2002 Meeting, December 2002, San Francisco, CA.
- "Seeking funds from foundations" presentation in Geo-CUR workshop on "Proposal Writing Tips in the Geosciences" at the 2002 Geological Society of America Meeting, October 27, 2002, Denver, CO
- "How to get a job at a PUI" presentation in Geo-CUR workshop on "How to Get a Research Program Started at a Primarily Undergraduate Institution (PUI)" at American Geophysical Union Fall 2000 Meeting, December 9, 2001, San Francisco, CA.
- "How to Get a Research Program Started at a Primarily Undergraduate Institution (PUI)" moderator of CUR sponsored workshop at the Geological Society of America Meeting, Boston, November 4, 2001
- "The Interview: where it all starts" presentation in Geo-CUR workshop on "How to Get a Research Program Started at a Primarily Undergraduate Institution (PUI)" at American Geophysical Union Fall 2000 Meeting, December 14, 2000, San Francisco, CA
- "Use of writing assignments as a learning tool in geology courses" in workshop on Enhancing Learning Through Writing", University of the Pacific, February 10, 1994

## **PRESENTATIONS:**

- "Helping Students Develop a Sense of Place Enhances Scaffolded Learning by Incorporating John Muir's Journals and Drawings into a Multi-Day Field Experience in Yosemite and the Eastern Sierra" presented online for the 2020 Fall Meeting of the American Geophysical Union, December 15,
- "Evaluation: Best Practices for Broader Impacts", Tutorial Talk presented at the 2019 Fall Meeting of the American Geophysical Union in San Francisco, December 10.
- "Incorporating GeoHealth into the Curriculum When There is not Room for a New Course" poster presented at the 2019 Annual meeting of the Geological Society of America, Phoenix, September 22.
- "Undergraduate Research at University of the Pacific: Building an Undergraduate Research Program at a Small, Private, Comprehensive University "presented at the 2019 Council on Undergraduate Research Programs Division Conference at The Ohio State University, Columbus, OH, June 27.
- "Designing Course-based Undergraduate Research Experiences (CURES) to address science literacy" presented at the 2018 annual meeting of the Geological Society of America in Indianapolis, IN, November 6.
- "Less is More: The transformative impact of the 2003 "Teaching Petrology in the 21st Century" "On the Cutting Edge" Workshop" poster presented at the 2017 annual meeting of the Geological Society of America, Seattle, WA, October 23.
- "Writing to Learn: Use of informal writing assignments to deepen comprehension in geology and environmental science courses." poster presented at the 2016 annual meeting of the Geological Society of America, Denver, CO, September 25.
- "Geology of the California Delta" presentation given at Sacramento State for Delta Narratives course in Renaissance program, Sacramento State University, September 30, 2016
- "Putting research in context: Research projects related to environmental policy in a writing-intensive capstone course." Presented at the 2015 annual meeting of the Geological Society of America, Baltimore, MD, November 3.
- "Preparing the Mentors "How to Get Started" Workshops at Professional Society meetings" presentation the 2014 CUR Conference "Creating the Citizens of Tomorrow: Undergraduate Research for All" June 30.
- "The Earth Shakes Under your Feet" presentation for the Pacific Osher Life Long Learning Institute, March 17, 18, 19, 2014
- "Faculty development workshops to support establishing and sustaining undergraduate research programs in the earth sciences" Invited presentation at the 2013 Fall meeting of the American Geophysical Union, San Francisco, 10 December
- "Undergraduate research as effective pedagogy supported by the Geosciences Division of the Council on Undergraduate Research" presented at the 2013 Fall meeting of the Geological Society of America meeting, Denver, CO, 30 October
- "Evolution of a Woman Scientist" presentation for National Women's History Month at Department of Justice Bureau of Prisons Western Regional office, Stockton., CA. March 13, 2103
- "The Geosciences Division of the Council on Undergraduate Research (GeoCUR): Supporting Faculty that Mentor Undergraduate Researchers", poster presented at 2012 Fall Meeting, AGU, San Francisco, 7 December
- "Evaluating Your Faculty", presentation at the 2012 AGU Heads & Chairs Workshop, December 3, 2012, San Francisco (and webinar)
- "Water is for Fighting Over": Water and the California Delta as a Theme for a Capstone Seminar". oral presentation given at the annual meeting of the Geological Society of America in Charlotte, NC, November 2012.
- "Wear Two Hats: Dual roles of many Undergraduate Research Program Directors", presentation at 2012 CUR National Conference at The College of New Jersey.
- "Preparing future elementary school teachers by helping them overcome their fear of science" oral presentation given at the Annual Meeting of the Geological Society of America Meeting in Minneapolis, October 2011.

- "Making Learning Fun: use of clickers to facilitate review and scaffold learning" oral presentation given at the annual meeting of the Geological Society of America meeting in Denver, November 2010.
- "Learning the Tools of the Trade in Petrology: Developing a Research Proposal as a Semester-Long Project", oral presentation given at the Annual meeting of the Geological Society of America, Houston, Texas, October 2008
- "How to get a Tenure-track Position at a Predominantly Undergraduate Institution (PUI)" workshop presentation at the National Post-Doctoral Association Annual Meeting, Berkeley, CA, 31 March 2007
- "Global Warming" presentation to the University of the Pacific Osher Lifelong Learning Institute, December 3 &5, 2007, Stockton, CA.
- "Dimensions of Leadership: Tracking What Works in Transforming the Undergraduate STEM Learning Environment" panel presentation at the AAC&U meeting in San Francisco, January 28, 2005
- "Council on Undergraduate Research (CUR): Faculty Development and Models of Successful Undergraduate Research Programs" poster presented at Fall meeting of the American Geophysical Union in San Francisco, December, 2004.
- "Research at Comprehensive Universities: A Faculty Perspective" presented at the CUR 10<sup>th</sup> National Conference at University of Wisconsin, LaCrosse, June 25, 2004
- "Geology and Natural History of the Jaimison Creek Trail" field trip led for 2001 California History Institute, May 5, 2001.
- "Multiple avenues to building research skills: investigative experiences in the petrology curriculum at the University of the Pacific" poster presented at the annual meeting of the Geological Society of America in Reno, October, 2000.
- "So you have tenure, now what" presentation at 8<sup>th</sup> CUR National Conference, College of Wooster, Ohio, June 23, 2000.
- "Making an introductory geology course accessible to students with limited mobility" poster presentation given at the annual meeting of the Geological Society of America, October 1999.
- "Research Opportunities in Environmental Studies", presented at the CUR 7<sup>th</sup> National Conference, Occidental College, June 26, 1998.
- "Creating links across disciplines: Engineering Geology at University of the Pacific" oral presentation given at the annual meeting of the Geological Society of America meeting, October 1997.
- "Enriching the geoscience curriculum through collaborative teaching: Engineering Geology at the University of the Pacific," presented at the AGU Chapman Conference on Scrutiny of Undergraduate Geoscience Education, Washington, DC, September 10, 1994
- "Magmatism and related albitization in the southern Bristol Mountains, "presented a the GSA Penrose Conference on Continental Tectonics and Magmatism of the Jurassic North American Cordillera, Lake Havasu City, AZ, February 28, 1993.
- "Rare earth element geochemistry of Jurassic plutonic rocks of the southern Bristol Mountains, Mojave Desert, California: genetic implications" oral presentation given at the annual meeting of the Geological Society of America meeting in San Diego, October 1991.
- "Albitization of Jurassic plutons, Bristol Mountains, east-central Mojave Desert, California," presented at The Origin of Granites Symposium (Royal Society of Edinburgh/Royal Society of London), Edinburgh, Scotland, September 15, 1987.
- "Mineralogical and chemical effects of late-magmatic albitization of Jurassic plutons, Bristol Mtns, CA; implications for fluid composition, oral presentation given at the Cordilleran Section meeting of the Geological Society of America, in Hilo, HI, April 1987.
- "Sodium metasomatism of a Jurassic quartz syenite, Bristol Mountains, California" oral presentation given at the Fall meeting of the American Geophysical Union in San Francisco, Dec. 1986.

## **GRANTS:**

# **External funding:**

2019, National Science Foundation (Noyce Program), "Building a Culture of Achievement: Pacific Noyce STEM Scholars Program (\$1,447,587)

- 2008, National Science Foundation (CCLI program), "Faculty development workshops to support engagement in undergraduate research" (\$49,000)
- 2002, Hewlett Packard Laboratories, Integrating GIS-based Mapping and Data Analysis into the Curriculum (equipment: approximate value \$10,000)
- 2000, Ralph M. Parsons Enhancing Undergraduate Research and Supporting Curricular Reform in Geosciences (\$150,000)
- 2000, W. M. Keck Foundation Enhancing Undergraduate Research and Supporting Curricular Reform in Geosciences (\$500,000)
- 1999, UOP Committee on Academic Planning and Development (CAPD) Long Technology grant (\$22,330) for Geographic Information Systems (GIS) computer lab.
- Summer, 1998&1999 TORCH Institute: GIS & Environmental Studies. A grant funded by the Woodrow Wilson National Leadership Program for Teachers (NSF funding).

## **Internal funding**

- 2018, Academic Facilities Improvement Committee (\$1,760 for min/pet laboratory)
- 2017, Technology in Education Committee (\$20,970 for petrographic microscopes)
- 2016, EED Grant for ENST/GESC
- 2003, Committee on Academic Planning and Development (CAPD) travel grant
- 1997, CAPD travel grant.
- 1996, Faculty Research Committee research grant
- 1993, CAPD travel grant
- 1991, Faculty Research Committee research grant

## **PROFESSIONAL SERVICE:**

American Geophysical Union (AGU)

Executive Committee, AGU Education section (2018-2021)

Executive Board, Committee on Department Heads & Chairs (2007-2014, Chair, 2011)

AGU representative on AGI ad-hoc committee on department accreditation/classification (2012-14) Council on Undergraduate Research (CUR):

CUR Goldwater Scholars Faculty Mentor Award Review Committee (Chair 2019-present, member 2013-present)

Student Programs Task Force (2018-2020)

Councilor in Geosciences Division (1996-present)

Nominations Vetting Committee (2010-2013, 2019-present)

CUR 2008 National Conference Planning Committee co-chair (2006-2008)

Meetings Committee Chair (2006-2008)

Chair of Geosciences Division (2004-2006),

Publications Committee (Co-Chair 2001-2005 member 1998 - 2006)

Geology Division Editor, CUR Quarterly (1998-2002),

Geological Society of America Foundation (GSAF)

Member, Board of Trustees (2020-present)

Vice-Chair, GSAF BOT (2022-present)

Member, Executive Board of GSAF BOT (2021-present)

National Association of Geoscience Teachers (NAGT)

Field Camp Scholarship Committee (Chair, 2017-present, member 2015-present)

Project Kaleidoscope Faculty for the 21<sup>st</sup> Century (PKAL F21)

Scientist-in-Residence 1997

Leadership Institute, 1997

Steering Committee member (1997, 1998, 1999, 2003)

Academic Administrator Task Force

PKAL F21/Keck Consultant

## Phi Kappa Phi

Pacific Chapter President (2014-present), president-elect (2012-2014), Executive Board member (2009-present)

## **UNIVERSITY SERVICE:**

### **Search Committees:**

Provost/Executive Vice-President Search (2022-present)

Chief People Officer Search Committee (2021-2022)

President Search Committee (2008-2009)

College of the Pacific Dean Search Committees (2006-2007)

College of the Pacific Dean Search Committees (2001-2002)

Provost Search Committee (1996-1997)

## **University Committees:**

Academic Affairs Committee (2012-2015, Fall 2022))

Academic Council (1996-2000, 2004-2009, 2016-present)

Chair (2007-2008), Past-chair (2008-2009), Chair-elect (2006-2007)

Executive Board member (1997-1999, 2004-2009, 2017-2022)

Commencement Speakers Committee (2015-present, Chair 2016/17)

Committee on Academic Planning & Development (1992-1995)

Faculty Compensation Committee (2014-present)

Faculty Grievance Committee (2014-2018)

Faculty Research Committee (1990-1991)

Information Strategy & Policy Committee (ISPC) (2007-2009)

Institutional Priorities Committee (1998-2001, 2013-2016, 2018-2021, Chair 2015-2016)

Pacific McGeorge School of Law - Employment, Promotions, Tenure Committee (2005, 2006)

Professional Relations Committee (2002-2007), Chair, 2003-2004

Strategic Planning Committee (2016-2018)

University Awards Committee (2022-present)

University Compensation Committee (2018-2022)

University Library Committee (1996-1999)

University Promotions & Tenure Committee (1997-2000)

## **College of the Pacific Committees:**

COP Council (1992-1996)

Chair, 1995-1996

Charter Revision Committee, 1994-1996

Courses & Standards Committee (1992-1995, 2002-2005)

Curriculum Committee (2003-2006)

Gender Studies Executive Committee (1992-1996)

Strategic Planning Committee (1995-1996)

## **Ad hoc Committees**

ANAC/Hewlett Project (1999-2001)

Emotional Intelligence (EI) Task Force (2006-2007)

Faculty Salary Task Force (1996-1997)

Fleet Management Task Force (Spring 2006, appointed by Risk Management?)

Pacific Seminar I Planning/Reader committee (2006-2007)

Pacific Seminar I Faculty Convener (Fall 2006)

Program Review panels

Religious Studies (2002-2003)

Chair, Chaplaincy Services (2006-2007)

Sexual Harassment Compliance Counseling Panel (1992-1995, 1997-2003)

Undergraduate Research Task Force, Chair (2006-2010)

WASC Review Subcommittee Chair (2008-2011)

Writing in the Disciplines Networked Interest Community (NIC) (2014-2018)

### **Administrator Review Committees:**

Review of Dean Benedetti, College of the Pacific (Chair 1998-1999) Review of Dean Caplan, McGeorge School of Law (1997-1998)

## Other:

Coordinator, Pacific Undergraduate Research & Creativity Conference PURCC (2001-2022)

University Marshall (2003-2005)

College of the Pacific Marshall (2001-2007)

College of the Pacific Association (COPA) Faculty Advisor (1992-1995)

COP Graduation Marshall (1992-2000)

## **TEACHING:**

# **University of the Pacific**

Capstone in Environmental Sciences

Capstone in Geological & Environmental Sciences

Dynamic Planet (was Physical Geology)

**Environmental Geology** 

Earth Materials & the Environment

Earth System Science

Engineering Geology

Environmental Issues & Solutions

Geochemistry

Geology for Engineers

Igneous & Metamorphic Petrology

Introduction to Environmental Studies

Mineralogy

**Optical Mineralogy** 

Petrography

Petrology

Professional Development Seminar for Environmental Studies

Professional Development Seminar for Geological & Environmental Sciences

Mentor Seminar I

Mentor Seminar II

Pacific Seminar I – What is a Good Society

Pacific Seminar II – Global Warming

# California State University, Northridge

Mineralogy

**Environmental Geology** 

Introductory Geology

Oceanography Lab

## University of California, Santa Barbara

Minerals (as instructor of record)