

## KAREN GROVE Curriculum Vitae

Professor Emerita—Department of Earth & Climate Sciences  
San Francisco State University  
[kgrove@sfsu.edu](mailto:kgrove@sfsu.edu); 415-338-2061  
Currently residing in Ashland, OR

### EDUCATION

Ph.D in Geology, 1989                      Stanford University, Stanford, CA  
B.S. in Geology, 1983                      University of Maryland, College Park, MD

### PROFESSIONAL EXPERIENCE

Professor Emerita, San Francisco State University—Educational consulting and writing  
(6/15–present)  
Associate Chair, Department of Earth & Climate Sciences (8/14–6/15)  
Chair, Department of Earth & Climate Sciences (previously Geosciences), San Francisco  
State University (8/12–8/14)  
Fulbright Scholar, Universidad de Chile, Santiago (3/06–7/06)  
Professor, Department of Earth & Climate Sciences (previously Geosciences), San Francisco  
State University (8/00–6/15)  
Chair, Department of Geosciences, San Francisco State University (8/98–8/01)  
Visiting Scientist, University of California, Santa Barbara, CA (8/97–5/98)  
Associate Professor, San Francisco State University (8/95–8/00)  
Assistant Professor, San Francisco State University (8/92–8/95)  
Visiting Scientist, Moss Landing Marine Laboratories, CA (8/91–8/92)  
Lecturer, San Francisco State University (8/89–8/91)  
Geologist, Standard Production Co, Anchorage, AK (6/87–9/87)  
Graduate Intern, U.S. Geological Survey, Menlo Park, CA (5/85–9/88)  
Teaching Assistant, Stanford University (9/84–6/87; 9/88–12/88)  
Associate Instructor, Indiana University Geologic Field Station (5/84–8/84)

### AWARDS / HONORS

Elected Chair, SFSU Earth & Climate Science Department, 2012–2014; 1998–2001  
SFSU Sabbatical Leave Award, Spring 2012  
Elected Chair, Geological Society of America Cordilleran Section, 2009–2010 (Vice Chair in  
2008–2009; Past Chair in 2010–2011)  
Fulbright Scholar to Chile, March–July 2006  
SFSU Presidential Award for Fulbright Scholars, 2006  
SFSU Sabbatical Leave Award, Spring 2004  
SFSU nominee for Carnegie Foundation's U.S. Professors of the Year program, 2002  
Elected Fellow, California Academy of Sciences, 2001–present  
Promoted to Professor, SFSU, 2000  
SFSU Faculty Merit Increase for activities in 1999

Elected Councilor, Undergraduate Council for Undergraduate Research, 1998–2000 and 2001–2003  
SFSU Sabbatical Leave Award, 1997–98  
Elected President, Society for Sedimentary Geology, Pacific Section, 1997–98  
Elected Fellow, Geological Society of America, 1996–present  
Granted Tenure, SFSU, 1996  
SFSU Presidential Award for Probationary Faculty, 1995–96  
Promoted to Associate Professor, SFSU, 1995  
Visiting Scientist award, Moss Landing Marine Laboratories, 1991–92  
Elected Secretary of the Society for Sedimentary Geology, Pacific Section, 1991  
Fellow, 1987–88 U.S. Geological Survey/Stanford Fellowship (first recipient)

## **PROFESSIONAL MEMBERSHIPS**

Association for Women Geoscientists  
American Geophysical Union  
California Academy of Sciences  
Fulbright Association  
Geological Society of America  
National Association of Geoscience Teachers  
Society for Sedimentary Geology, Pacific Section

## **LANGUAGES**

English: native speaker  
Spanish: advanced level (reading, writing, speaking)

## **FUNDED RESEARCH AND TEACHING GRANTS**

National Science Foundation Course, Curriculum, and Laboratory Improvement Program, DUE 0942390, \$175,000, 2010–12, “Creating an academic community to foster curiosity and discovery in introductory geoscience classes” Project Director; co-P.I.s are Petra Dekens and Dave Dempsey.  
San Francisco Public Utilities Commission, \$24,948, 2006–07, “Hydrostratigraphic investigation of the North Westside Basin of San Francisco and northern San Mateo Counties”.  
U. S. Geological Survey National Earthquake Hazard Reduction Program, \$5,000, 2005–06, “Centennial Project for the 1906 San Francisco Earthquake: Relocating and Rephotographing Sites in the San Francisco Bay Area”.  
U.S. Geological Survey National Earthquake Hazard Reduction Program, \$153,057, 2005–07, “Theodolite and total station measurements of creep rates on San Francisco Bay Region faults”, co-P.I. with John Caskey.  
U.S. Geological Survey National Earthquake Hazard Reduction Program, \$34,385, 2004, “Constraints on late Pleistocene and active uplift rates along the Serra fault and the timing of late Pleistocene onset of transpressional deformation along the San Andreas fault, northern San Francisco Peninsula”, co-P.I. with John Caskey.

U.S. Geological Survey National Earthquake Hazard Reduction Program, \$138,250, 2003-05, "Theodolite and total station measurements of creep rates on San Francisco Bay Region faults", co-P.I. with John Caskey.

National Science Foundation, Opportunities for Enhancing Diversity in the Geosciences program, \$1,250,169, 2001-06, "Reaching out to communities and kids with science in San Francisco, California (SF-ROCKS)", proposal writer and co-P.I.

National Science Foundation Course, Curriculum, and Laboratory Improvement Program, \$98,121, 2001-03, "An Inquiry and Standards Based Earth System Science Course for Pre-service K-8 Teachers and Others", co-P.I. with David Dempsey and Isabel Quito.

SFSU Center for the Enhancement of Teaching grant, \$4000, Fall 2001: "Applying the Virtual Voyage Concept to a new Earth Systems Science Course for Liberal Studies Majors".

U.S. Geological Survey National Earthquake Hazard Reduction Program, \$140,000, 2001-03, "Theodolite and total station measurements of creep rates on San Francisco Bay Region faults", co-P.I. with John Caskey.

Petroleum Research Fund of the American Chemical Society, \$30,000, 2000-03: "The role of contractional deformation in a transform setting: Point Reyes segment of the San Andreas fault, California".

NOVA (NASA Opportunities for Visionary Academics) Program, \$24,752, 2000-01: "Planetary Climate Change, a new Geosciences course for pre-service secondary science teachers (and everyone else too)". co-PI with Dave Dempsey and Kathleen O'Sullivan.

SFSU Center for the Enhancement of Teaching grant, \$4025, Fall 1999: "Simulating scientific discovery with internet-delivered, inquiry-based exercises using real-world data".

Council on Undergraduate Research Summer Fellowship Program, \$4500, Summer 1999: "Late Quaternary slip rate for the San Andreas fault north of San Francisco, California". Funding for student research project.

CSU Mini-grant, \$4500, 1998-1999: "Long-term slip rate along the San Andreas fault north of San Francisco, California".

SFSU Center for the Enhancement of Teaching grant, \$2760 plus 0.5 summer stipend, 1997-98: "On-line innovations to improve an introductory-level science course".

National Science Foundation via MASTEP, \$25,884 (with D. Reed of SJSU), 1997-98: "Ocean Network of Science Education Using Technology (ONSET)".

SFSU Center for the Enhancement of Teaching, \$3000 (with 2 other faculty), 1996-97: to review software and present workshops to support instructional delivery.

CSU Mini-grant, \$4400, 1995-96: "Investigating the evidence from past earthquakes in the Point Reyes region, California".

National Science Foundation Instrumentation for Laboratory Improvement, \$37,127 (matched by SFSU), 1995-1997: "The Earth Systems Laboratory: an interactive tool for improving introductory Geoscience courses". Principal investigator.

NASA 1995 Sharp Plus Research Apprenticeship Program, Summer 1995, \$56,700 from the Quality Education for Minorities (QEM) Network. Faculty Coordinator.

CSU Faculty Affirmative Action Award for 3 WTUs, 1995 Spring Semester.

CSU Faculty Affirmative Action Award for 3 WTUs, 1994 Spring Semester.

National Science Foundation Curriculum Development grant, \$7500.00, 1992-1993: "Laboratory exercises comparing carbonate and clastic coastlines".

Petroleum Research Fund of the American Chemical Society, \$18,000, 1992-1994:  
"Quaternary sedimentation along the San Andreas fault north of San Francisco".  
Principal investigator.  
CSU Mini-grant, \$2800, 1992-1993: "Terrain modeling and visualization of a region adjacent to the San Andreas fault zone near Point Reyes, California".  
SFSU Presidio Planning grant, Spring 1991, \$1500 to prepare an Action Plan for Coastal Studies Center (with 3 other geoscience faculty).  
CSU Mini-grant, \$2960, 1990-1991: Estuarine circulation in Tomales Bay, California.  
CSU mini-grant, \$5764, 1989-1990: Current flow patterns in San Pablo Bay, California.

**PUBLICATIONS** (\*=student co-author)

- GROVE, K., Sklar, L., Scherer, A.M., Lee, G., Davis, J., 2010, Accelerating and spatially-variable rock uplift and its geomorphic expression, San Andreas fault zone north of San Francisco, California: *Tectonophysics*, v. 495, p. 256–268, doi:10.1015/j.tecto.2010.09.034.
- GROVE, K. and Niemi, T., 2005, Late Quaternary deformation and slip rates in the northern San Andreas fault zone at Olema Valley, Marin County, California: *Tectonophysics*, v. 401, p. 231–250.
- GROVE, K., 2002, Using online homework assignments to implement the learning cycle in large courses for general education: *Journal of Geoscience Education*, v. 50, n. 5, p. 566-574.
- GROVE, K., and Niemi, T., 1999, The San Andreas fault zone near Point Reyes: late Quaternary deposition, deformation, and paleoseismology: California Division of Mines and Geology Special Publication 118, p. 100–110.
- Lipps, J., D'Antonio, C., GROVE, K., Hickman, C., Mishler, B., and Zhigan, W., 1999, Geology and natural history of the central Coast Ranges: Berkeley to Bodega Head, California: California Division of Mines and Geology, Special Report 118, p. 1-14.
- Sojourner\*, A., and GROVE, K., 1997, Analysis of fault and fracture data from the San Andreas fault, Toms Point, Point Reyes, California, *in* Girty, G., Hanson, and Cooper, J.D., eds., *Geology of the western Cordillera: perspectives from undergraduate research*: Society for Sedimentary Geology (SEPM) Pacific Section Book 82, p. 57-64.
- GROVE, K., Colson\*, K., Binkin\*, M., Dull\*, R., and Garrison\*, C., 1995, Stratigraphy and structure of the Late Pleistocene Olema Creek Formation, San Andreas fault zone north of San Francisco, California, *in* Sangines, E., Andersen, D., Busing, A., eds., *Recent Geologic Studies in the San Francisco Bay Area*: Society for Sedimentary Geology (SEPM) Pacific Section Book 76, p. 55-77.
- GROVE, K., 1993, Latest Cretaceous basin formation within the Salinian terrane of west-central California: *Geological Society of America Bulletin*, v. 105, p. 447-463.
- Sullivan, R., Galehouse, J.S., Clarke, R.T., Hager, R.C., GROVE, K., Morgan, S.R., Pestrong, R., White, L.D., 1990, Geological setting of the San Francisco Bay Area, field trip

guidebook for American Association of Petroleum Geologists student chapter field trip, 2 June 1990.

GROVE, K., 1989, Late Cretaceous sedimentation and tectonics of the Salinian terrane, west-central California: Stanford University, Ph.D. dissertation, 230 pp.

GROVE, K., 1989, Upper Cretaceous conglomerates from the Salinian terrane, west-central California, in Colburn, I.P., Abbott, P.L., and Minch, J., eds., Conglomerates in basin analysis: SEPM Pacific Section, Book 62, p. 143-160.

Larue, D.K., and GROVE, K., 1988, Vacillatory turbidites, Barbados: *Sedimentary Geology*, v. 57, p. 211-219.

GROVE, K., 1986, Depositional environments of Upper Cretaceous and lower Tertiary strata near Lake Nacimiento, central California Coast Ranges, in GROVE, K., and Graham, S., eds., *Geology of Upper Cretaceous and lower Tertiary rocks near Lake Nacimiento, California*: SEPM Pacific Section, Book 49, p. 1-16. (Also in this volume: field trip boatlog and roadlog, p.43-63.)

EDITED VOLUME: GROVE, K., Graham, S., eds, 1986, *Geology of Upper Cretaceous and Lower Tertiary Rocks near Lake Nacimiento, California*: Society for Sedimentary Geology (SEPM) Pacific Section, Book 49, 63 pp.

#### **PUBLISHED ABSTRACTS** (\*=student co-author)

Rosa\*, C., Catchings, R., Rymer, M.J., Goldman, M., GROVE, K., Prentice, C.S., 2013, Near-Surface Structure of the Peninsula Segment of the San Andreas Fault, San Francisco Bay Area, California: EOS Trans AGU, Fall Meet. Suppl., Abstract NS33A-1693.

GROVE, K., Stozak\*, B., 2013, Geophysical and sedimentologic evidence for Plio-Pleistocene deformation in the offshore San Andreas fault zone between Gualala and San Francisco, northern California: Geological Society of America meeting, May 2013.

GROVE, K., and McGuire\*, T., 2013, Three-dimensional geometry of coastal deposits in the Pleistocene Merced Formation, northern San Francisco Peninsula, California: American Association of Petroleum Geologists/Sedimentary Geologists meeting, April 2013.

GROVE, K., Dempsey, D., and Dekens, P., 2012, Sustaining professional development gains after the NSF-CCLI grant ends: EOS Trans. AGU, Fall Meet. Suppl., Abstract ED21C-0728.

GROVE, K., Dempsey, D., and Dekens, P., 2011, Deliberating creating a teaching and learning community to advance graduate student and faculty innovation in introductory Geoscience classes: *GSA Abstracts with Programs*, v. 43, n. 5.

Stozek\*, B., and GROVE, K., 2010, Geophysical evidence for Quaternary deformation within the offshore San Andreas fault system, Point Reyes Peninsula, California: American

Geophysical Union, Fall 2010 meeting, abstract #T33B-2226.

McGuire\*, T., and GROVE, K., 2010, The Plio-Pleistocene Merced Formation in northern California: a world-class example of integrated sea level and tectonic controls: GSA Abstracts with Programs, v. 42, n. 4, p. 74.

Woodley\*, S., and GROVE, K., 2010, Interpreting Pleistocene marine terrace deposits overlying the 82 ka wave-cut platform, Point Reyes Peninsula, Marin County, California: GSA Abstracts with Programs, v. 42, n. 4, p. 64.

Feigelson\*, L., Prentice, C., GROVE, K., and Caskey, J., 2010, Slip rate on the San Andreas fault, San Francisco Peninsula, California: GSA Abstracts with Programs, v. 42, n. 4, p. 80.

GROVE, K., and McGuire\*, T., 2009, Coastal sedimentary response to sea-level changes: Pleistocene Merced and Colma Formations, San Francisco, California: GSA Abstracts with Programs, v. 41, n. 5, p. 36.

GROVE, K., and Ryan, H., 2007, Marine terrace and offshore seismic evidence for spatially and temporally varying uplift rates adjacent to the San Andreas fault north of San Francisco, California: GSA Abstracts with Programs, v. 39, n. 6, p. 239.

GROVE, K., Prentice, C., Polly\*, J., Yuen\*, C., Wu\*, K., Zhong\*, S., Lopez\*, J., 2005: Discovery Along the San Andreas Fault: Relocating Photographs From the 1906 Earthquake in San Francisco and San Mateo Counties: EOS Trans. AGU, 86 (52), Fall Meet. Suppl., Abstract ED43A-38.

GROVE, K., Scherer\*, A.M., and Caskey, J., 2005, Geomorphological evidence for spatially and temporally varying uplift rates adjacent to the San Andreas fault on the Point Reyes Peninsula: GSA Abstracts with Programs, v. 37, n. 4, p. 106.

Yi\*, C., GROVE, K., Caskey, J., Kennedy\*, D., and Berger, G., 2005, Depositional and deformational history of the Colma and uppermost Merced Formations, southwest San Francisco: GSA Abstracts with Programs, v. 37, n. 4, p. 43.

Davis\*, J., White, L., GROVE, K., Snow\*, M.K., and Freiberg\*, E., 2005, Reaching Out to Communities and Kids with Science in San Francisco (SF-ROCKS): using research experiences to increase high school student interest in geosciences: GSA Abstracts with Programs, v. 37, n. 4, p. 82.

GROVE, K., Labit\*, R., Lui\*, S., Rodriguez\*, I., Yi\*, C., Yu\*, M., 2004, The Different Faces of San Francisco's Ocean Beach: Analyzing Sand Size and Beach Shape: EOS Trans. AGU, 85, Fall Meet. Suppl., Abstract ED42A.

GROVE, K., 2004, Geologic Techniques and Problem Solving: A Course for New Majors, GSA Abstracts with Programs, v. 36, n. 5, p. 158.

White, L.D., GROVE, K., Garcia, O., Pestrone, R., Dempsey, D., La Force, M., Snow, M., Davis, J., and Freiberg, E., 2004, Efforts to increase diversity in the geosciences at the high

school level: the SF-ROCKS program at San Francisco State University: GSA Abstracts with Programs, v. 36, n. 5, p. 279.

GROVE, K., and White, L., 2003, Faculty activity to reach consensus and develop the SF-ROCKS outreach program: EOS Trans. AGU, 84 (46), Fall Meet. Suppl., Abstract ED11C-06.

GROVE, K., Bailey\*, C., Sotto\*, M., Yu\*, Manning, and Cohen, M., 2003, Does geothermal energy production cause earthquakes in the Geysers region of northern California?: EOS Trans. AGU, 84 (46), Fall Meet. Suppl., Abstract ED42A-1202.

GROVE, K., 2003, Scientific problem solving and teamwork: acquiring career skills in a sedimentology course: Geological Society of America Abstracts with Programs, v. 35, n. 6, p. 363.

Scherer\*, A.M., and GROVE, K., 2003, GIS analysis of Quaternary marine terraces, Point Reyes Peninsula, California: Geological Society of America Abstracts with Programs, v. 35, n. 6, p. 332.

GROVE, K., 2003, Coastal uplift of the Point Reyes Peninsula north of San Francisco, California: Geological Society of America Abstracts with Programs, v. 35, n. 4, p. 20.

White, L.D., GROVE, K., LaForce, M.J., Pestrong, R., Dempsey, D.P., Garcia, O., and Garfield, N., 2002, SF-ROCKS: Reaching out to communities and kids with Science in San Francisco: EOS Trans. AGU, v. 83, no. 47, p. F339.

GROVE, K., 2002, Point Reyes National Seashore: a creation of the San Andreas fault and coastal uplift: Geological Society of America Abstracts with Programs, v. 34, n. 5, p. A-21.

Bidgoli\*, T., and GROVE, K., 2002, Determining uplift rates and patterns from Quaternary marine terraces of the Point Reyes Peninsula, California: Geological Society of America Abstracts with Programs, v. 34, n. 5, p. A-27.

Davis\*, J., and GROVE, K., 2001, Marine terraces near Bolinas, California, and implications for uplift of the Point Reyes Peninsula, EOS Trans. AGU, v. 82, n. 47.

GROVE, K., 2001, Multiple topics, single theme: field studies along the San Andreas fault: Geological Society of America Abstracts with Programs, v. 33, n. 3, p. A-180.

GROVE, K., 2001, "Virtual Voyages": introducing science with real-world data in a large classroom: Geological Society of America Abstracts with Programs, v. 33, n. 6, p. A-350.

GROVE, K., Johnson, R., Geisler, J., 2001, AGU Activities to Promote Undergraduate Research: EOS Trans. AGU, v. 82, no. 20.

Davis\*, J., and GROVE, K., 2001, Marine terraces near Bolinas, California, and implications for uplift of the Point Reyes Peninsula: Geological Society of America Abstracts with Programs, v. 33, n. 3, p. A48.

Dempsey, D., O'Sullivan, K., GROVE, K., White, L., Schultz, G., Dutton, D., 2000, Planetary Climate Change, a geosciences course for pre-service secondary science teachers (and others): EOS Trans. AGU, v. 81, n. 48, p. F814.

Domrose\*, C., GROVE, K., and Neiss\*, J., 2000, Stratigraphy of late Quaternary alluvial deposits and implications for the evolution of San Andreas fault strands in the Olema Valley north of San Francisco: Geological Society of America Abstracts with Programs, v. 32, n. 6, p. A-11.

GROVE, K., 1999, Local, field-based projects excite undergraduates about research: Geological Society of America Abstracts with Programs, v. 31, n. 7, p. A-319.

GROVE, K., 1998, On-line materials to foster active learning in a large-sized ocean science course: EOS Trans. AGU, v. 79, n. 45, p. F514.

GROVE, K., 1998, Sedimentary response to tectonic and climatic controls: Quaternary coastal deposits north of San Francisco, California: American Association of Petroleum Geologists Bulletin (abstract), v. 82, n. 5A, p. 848.

GROVE, K., 1996, Enriching Geoscience courses for non-science majors with laboratory exercises based on internet-derived imagery: Geological Society of American Abstracts with Programs, v. 28, n. 7, p. 152.

GROVE K., 1996, Coastal sediments deposited around Tomales Bay, California during the last interglacial: a record of deformation in the San Andreas fault zone: Geological Society of American Abstracts with Programs, v. 28, n. 5, p. 71. *Plus five abstracts co-authored with SFSU undergraduate students\*\*\*\*\*.*

GROVE, K., 1995, Pleistocene sedimentation in the San Andreas fault zone north of San Francisco: evidence for tectonic deformation and sea-level changes: American Association of Petroleum Geologists Bulletin (abstract), v. 79, n. 4, p. 586. *Plus one abstract co-authored with an SFSU undergraduate student and Lisa White\*.*

Quinn, B.B, and GROVE, K., 1994, High-resolution gravity survey of subsurface morphology along the San Andreas fault north of San Francisco, California: EOS Trans. AGU, v. 75, n. 44, p. 684.

Colson\*, K.B., and GROVE, K., 1994, Stratigraphy and structure of the Pleistocene Olema Creek Formation, San Andreas fault zone in Marin County, California: Geological Society of America Abstracts with Programs, v. 26, n. 2, p. 45.

GROVE, K., 1993, Let's go to the beach: implementing a field-based coastal processes course: Geological Society of America Abstracts with Programs, v. 25, n. 6, p. A-45.

GROVE, K., and Niemi, T. L., 1992, Quaternary terraces near Point Reyes: strain gauges along the San Andreas fault zone north of San Francisco, California: American Geophysical Union Chapman Conference on Tectonics and Topography, 31 Aug-4 Sep 1992, p. 27.



GROVE, K., 1991, Tectonic control of basin subsidence within the Salinian terrane of western California during the Late Cretaceous Epoch, Geological Society of America Abstracts with Programs, v. 23, n. 2, p. 31.

GROVE, K., 1990, Transtensional model for Late Cretaceous basin formation in the Salinian terrane, California: Geological Society of America Abstracts with Programs, v. 22, n. 3, p. 26.

GROVE, K., 1989, Upper Cretaceous conglomerates of the Salinian terrane, central California: American Association of Petroleum Geologists Bulletin (abstract), v. 73, n. 4, p. 539.

GROVE, K., 1987, Paleomagnetic analysis of Upper Cretaceous rocks from the Salinian terrane, central California: EOS Trans. AGU, v. 68, p. 1253.

GROVE, K., 1986, Depositional environments of Cretaceous strata on the Salinian terrane, central California: American Association of Petroleum Geologists Bulletin (abstract), v. 70, n. 4, p. 476.

GROVE, K., 1984, Syntectonic crystal growth in veins of the Hamburg Klippe, southeast Pennsylvania: Geological Society of America Abstracts with Programs, v. 16, n. 1, p. 56.

## **STUDENT RESEARCH ADVISING**

### ***MS thesis advisor:***

Carla Rosa—Near-surface structure of the San Andreas fault, San Francisco Peninsula segment, 2013.

Brian Stozek—Mapping the offshore geology west of the Point Reyes Peninsula north of San Francisco, California, 2012.

Leah Feigelson—Using LiDAR to study active faults on the San Francisco Peninsula, California, 2010.

Terry McGuire—Correlating subsurface Merced Formation sequences to aid groundwater resource management, San Francisco, California, 2009.

Kristen Wood—A hydrogeologic assessment of the northern Westside Groundwater Basin in San Francisco and San Mateo Counties, California, 2008.

Andrew Matthew—Distribution of serpentine soils within the Presidio, California, 2007.

Chimi Yi—Depositional and deformational history of the Colma and uppermost Merced Formations along the coast of San Francisco, 2005.

Anne Marie Scherer—Geographic information system analyses of Quaternary marine terraces, Point Reyes Peninsula, California, 2004.

### ***Senior thesis advisor (undergraduate):***

Steve Woodley—Temporal and spatial variations of coastal marine terrace deposits along the coast of the Point Reyes Peninsula, 2009.

Andrea Ozzuna—Hydrostratigraphic study of Late Pleistocene units in northern San Mateo County, California, 2008.

- Lisa Garman—Tomales Point terraces of Marin County, California, and implication for rate of uplift of northern Point Reyes Peninsula, 2006.
- Terry McGuire—A small, unmapped surficial deposit and its paleogeographical implications, Point Reyes, California, 2004.
- Aaron Laughban—Evaluation of tectonic uplift and paleo-depositional environments using subsurface sediment logs and coastal exposures on the Bolinas terrace, Point Reyes Peninsula, California, 2003.
- Simon Barber—Laboratory procedures and grain size analysis of terrigenous and carbonaceous sediment on the fringing reef of Molokai, Hawaii, 2002.
- Tandis Bidgoli—Determining the style and rate of uplift from quaternary marine terraces of the Point Reyes Peninsula, California (awards: COSE undergraduate student research; best student paper at GSA Cordilleran section meeting), 2002.
- Jennifer Davis—Marine terrace near Bolinas, California, and implications for uplift of the Point Reyes Peninsula (awards: best student paper at GSA Cordilleran section meeting), 2002.
- Rianda Levin—High-resolution gravity models of subsurface geometry of the San Andreas fault zone near Point Reyes, California, 2001.
- Rachael Bailey—Subsurface geometry of Quaternary sediments in the San Andreas fault valley inferred from water well data, Point Reyes, California, 1997.
- Nicole Peirce—Compressional tectonics in the San Francisco Bay Area: an analysis of vertical deformation of marine terraces in the Point Reyes region, 1997.
- Joy DiFranzia—Geomorphological Response of Streams to Tectonism in the Southern San Francisco Bay Region and Santa Clara Valley, 1997.
- Orion Holcomb—Differentiating Quaternary sedimentary units near Bolinas, Marin County, California, 1996.
- Anna Sojourner—Analysis of fracture and fault data from the San Andreas fault zone at Point Reyes, California, 1996.
- Kevin Colson—Stratigraphy and structure of the Pleistocene Olema Creek Formation, Marin County, California, 1994.
- Carolyn Garrison—Origin of fluvial terraces near Olema, Marin County, California, 1994.
- David Rutledge—Detailed structural analysis of the San Andreas fault zone at Toms Point, Tomales Bay, California, 1994.
- Edgardo Jimenez-Bago—Seismic studies in northern Monterey Bay, 1992.
- Elizabeth Rosenberg—Stratigraphic analysis of the Pleistocene Millerton Formation, Tomales Bay, California, 1992.

***Other student advising:***

- Michelle Newcomer: science advisor for her NASA project—South San Francisco Bay Water Resources, 2010.
- Carmen Yuen, Keno Wu, Simon Zhong, Joel Lopez—Discovery Along the San Andreas Fault: Relocating Photographs From the 1906 Earthquake in San Francisco and San Mateo Counties (SF-ROCKS high school outreach program), 2005.
- Ryan Labit, Sarah Lui, Isreal Rodriguez, and Manning Yu—The Different Faces of San Francisco's Ocean Beach: Analyzing Sand Size and Beach Shape (SF-ROCKS high school outreach program), 2004.
- Claire Bailey, Melanie Sotto, Manning Yu—Does Geothermal Energy Production cause Earthquakes in the Geysers Region of Northern California? (SF-ROCKS high school outreach program), 2003.

- Rick Ford—Analysis of uplift along marine terraces at Point Reyes (undergraduate student project), 2001.
- Jeff Ham—Correlating onshore and offshore geology of Bodega Basin, California (undergraduate student project), 2000.
- Carolyn Domrose—Late Quaternary slip rate for the San Andreas fault north of San Francisco, California (CUR-funded undergraduate summer research fellowship), 1999.
- Jim Neiss—Grain size analysis of a relict and buried soil (undergraduate student project), 1999.
- Logan Hansen—Longitudinal profiles of Bear Valley Creek and other drainages of Inverness Ridge, Point Reyes Peninsula, California (undergraduate student project), 1997.
- Jeannine Kessell—Geophysical investigation of the San Andreas fault zone south of Tomales Bay, California, with vertical electric sounding, seismic refraction, and 100-meter sampled isostatic gravity (undergraduate student project), 1997.
- Marianne Binkin—Pleistocene diatom assemblages from around Tomales Bay and comparison to Holocene diatoms from San Francisco Bay (Women and Minority Program in Graduate Education), 1995.
- Maria Picardal—Microfossil assemblages from sediments found in the San Andreas fault zone north of San Francisco (high school student project; NASA Sharp Plus / Quality Education for Minorities program), 1995.

## **UNIVERSITY COMMITTEES AND SERVICE**

- Co-chair, Dean's Search Committee, College of Science & Engineering, 2014–2015.
- Committee member, Clicker standardization investigation, Academic Technology, 2010–2011.
- Invited presentation about “Just-in-time teaching” technique for “Read More Without Doing More” conference at SFSU, 30 April 2010.
- Administrative Review Committee for Ann Hallum, Dean, Graduate Studies, Spring 2009.
- Workshop leader about “Just-in-time teaching” technique for SFSU's Center for Teaching and Faculty Development (CRFD), 9 October 2008.
- Chair, Review Committee for Carlos Davidson, director of the Environmental Studies program, Fall 2008.
- Case Study for CSU Merlot/ELIXR web site, Just-in-time teaching technique in an introductory geology course, classroom and personal interview video made by CTFD staff and posted on CSU ELIXR web site, Spring 2008.
- Committee member to plan activities for Focus the Nation on Climate Change teach-in at SFSU, 2007–2008; organized student committee to do outreach to local high school teachers and students; served as MC during the event on 30–31 Jan 2008.
- Chair, University Leave with Pay committee, 2008–2010 (committee member 2006–2010).
- Faculty Panel Participant (presentation on Hurricanes, Wetlands, and Levees), SFSU Teach-in on Katrina: Rebuilding on a New Foundation of Justice, 15 Nov 2005.
- Judge for COSE Student Research Project Showcase, 6 May 2005.
- Search committee for Environmental Studies program director, 2004–2005.
- Steering committee for Environmental Studies program, 2004–2005.
- Featured in SFSU COSE Intersci magazine, 2003.
- Featured in SFSU ad in the San Francisco Business Times, 2003.

Co-leader of session at SFSU Asilomar faculty retreat: “Dreaming a new University Club”, Jan 2003.  
Featured in SFSU publication: Teaching; the art of taking risks, 2002.  
Presentation for Orientation to College Teaching Workshop Series for Postdoctoral Teaching Fellows from UC Davis and UC San Francisco (program funded through CET) and creation of online module.  
Information Technology Committee member, 2001–2003.  
Online teaching evaluation task force, 2001–2003.  
Search committee for Dean of the College of Science and Engineering, 1999–2001.  
Wrote an article for the SFSU College of Science and Engineering Spring 2000 newsletter: “Virtual voyages to explore the earth”.  
University Advisory Board for the Romberg Tiburon Center, 1999–2002.  
Invited presentations for SFSU-CET faculty workshops (5) and new faculty orientations (2), 1999–01.  
University Graduate Council, 1998–2002 (chair: Financial Aid subcommittee).  
Faculty advisor for the Earth Systems Science concentration of the new interdisciplinary Environmental Studies undergraduate majors program, (1998–present).  
University Club Board of Directors, 1996–2003.  
College of Science and Engineering Performance Salary Step Increase Committee, 1996–97.  
New Faculty Partnership Program (sponsored by the CET), 1995–96.  
Faculty mentor for the 1995 NASA SHARP PLUS (Quality Education for Minorities) program, Summer 1995.  
Faculty Coordinator for the 1995 NASA SHARP PLUS (Quality Education for Minorities) program, Summer 1995.  
Planning Committee member to develop the interdisciplinary Environmental Studies Program, 1995–97.  
CUSP participant: member of the Committee for Academic Excellence, 1995.  
Mentor for the Women and Minority Program in Graduate Education, Summer 1994.  
Program Committee for the 1995 SFSU Faculty Retreat, 1994–1995.  
Segment II LLD Committee (Lifelong Development), 1993–97.  
Segment III Committee (relationships of knowledge), 1993–97.  
Governing Board member for Moss Landing Marine Laboratories, 1992–2004.

## **DEPARTMENT COMMITTEES AND SERVICE**

Chair, Hiring Committee for faculty position in Sedimentary Geology, 2014–2015.  
Associate Chair, Department of Earth & Climate Sciences, 2014–2015.  
Graduate Coordinator, Department of Earth & Climate Sciences, 2013–2015.  
Chair, Alumni Relations and Outreach Committee, Earth & Climate Sciences, 2012–2015.  
Department Chair, Department of Geosciences/starting 1 July 2013 (renamed Department of Earth & Climate Sciences), 2012–2014.  
Academic advisor for graduate students and most undergraduate BS/BA geology majors, until August 2012.  
Chair, Geosciences Retention, Promotion, and Tenure Committee (2006–2009).  
Chair, Geosciences Curriculum Task Force that led to revision of Departmental undergraduate degree programs, 2004–2005.

SF-ROCKS outreach program, 2001–present: proposal writer, teacher workshop instructor, Summer Institute leader and advisor for Fall Research Experience groups in 2003, 2004, 2005; recruitment day leader in 2004, 2005, 2007.  
Geosciences Department Chair, 1998–2001; 2012–2015.  
Obtained funding through SFSU Instructionally Related Activities Fund for Geoscience Student Projects, 1999–00, 2000–01, 2001–02, 2002–03.  
Department representative for the California Faculty Association, 1998–2005.  
Geosciences coordinator for departmental self-study document, 1996–97.  
Geosciences Hiring, Retention, Tenure and Promotion Committee, 1996–97; 2001–present.  
Geosciences Graduate Coordinator for Geology, 1996–97 (prior to program initiation); 2001–2011.  
Geosciences Curriculum Committee, 1995–97; 2004–present.  
Director, Earth Systems (Computer) Laboratory, 1995–2005.  
Campus Representative for the Geological Society of America, 1995–present.  
Chair, Geosciences Outreach Committee, 1993–97.  
Geosciences Computer and Resources Committee, 1993–97; 2001–2005.  
Geosciences Master's Degree Committee (primary author of MS proposal), 1990–1994.

#### **OTHER PROFESSIONAL / COMMUNITY SERVICE**

Professional reviews of textbooks, manuscripts, proposals, and tenure / promotion packages, including international (Fondecyt—Chilean science funding agency).  
External evaluator for funded NSF-REU project, Field-Based Research on the Gulf of California Rift Margin Basins, Baja California Sur, 2014–17.  
Volunteer faculty for Juneau Ice Field Research Project (JIRP), 27 June–15 July 2014.  
Reviewer for American Geophysical Union Fall 2013 Meeting, Undergraduate Virtual Poster competition, December 2013.  
Invited field trip leader for METALS NSF-funded summer outreach project at Point Reyes, CA, 12 June 2013.  
External academic program reviewer, Department of Geology, San Jose State University, 14–15 November 2012.  
Science advisor for California Academy of Science planetarium production about earthquakes and seismology, 2011–2012.  
Invited participant, National Science Foundation's 2011 CCLI/TUES Principal Investigators Conference, Washington, D.C., 26–28 January 2011.  
Invited talk for 25<sup>th</sup> Anniversary Celebration of the Stanford-USGS Fellowship, Stanford University, “Geology, human needs, and the challenge of science outreach”, 13 May 2010.  
Invited National Science Foundation Proposal Review Panel, Wash. D.C.: Course, Curriculum, and Laboratory Improvement program, 18–19 March 2010.  
Invited talk, Earth Science Department, City College of San Francisco, “Chile's magnitude 8.8 Earthquake current and historical perspectives”, 12 Mar 2010.  
Chair, Cordilleran Section, Geological Society of America, 2009–2010 (Vice Chair in 2008–2009; Past Chair in 2010–2011).  
Invited talk, Department of Geology, San José State University, “Geology of the Andes in Chile and Argentina”, 3 March 2008.  
Invited talk, Department of Geology, Sonoma State University, “The Geology of Chile; Perspectives of a 2006 Fulbright Scholar”, 17 April 2007..

Invited talk, Department of Geology, Sacramento State University, “The Geology of Chile; Perspectives of a 2006 Fulbright Scholar”, 20 Mar 2007.

Invited speaker, BRIGHT STARS program for high-school students at American Geophysical Union meeting in San Francisco, 14 Dec 2006.

Invited speaker for Expanding Your Horizons in Science and Engineering career conference for middle-school girls, SFSU, 4 Nov. 2006.

Specialist reviewer, applications for international Fulbright Scholar positions (all geologist applications), 2006, 2007, 2008, 2014, 2015.

Invited talks, Geology Departments at the Universidad de Concepción (19 May 2006), Universidad Católica del Norte (30 June 2006), and Universidad de Chile (5 July 2006): “Terrazas marinas al norte de San Francisco, California: Archivos de la deformación a lo largo de la falla San Andreas”.

Invited talk, Geology Department, Universidad de Chile: “La falla San Andreas y el gran terremoto de 18 Abril 1906: una perspectiva cien años después”, 19 April 2006.

Instructor for Sedimentology course (part of Fulbright Scholar activities), Departamento de Geología, Universidad de Chile, March–July 2006.

Thesis committee member for 4 geology graduate student projects, Universidad de Chile (part of Fulbright Scholar activities), March–July 2006.

CSU community college articulation committee, 3 Dec. 2005.

Contributor to book—Living with the Changing California Coast, published by the University of California Press, 2005.

Union of Concerned Scientists event to inform California legislators about global climate change, Sacramento, 26–27 April 2005.

External academic program reviewer, Department of Geological Sciences, CSU Long Beach, 13–15 April 2005.

External academic program reviewer, Department of Geological Sciences, CSU Los Angeles, 3-5 Nov. 2004.

Co-convener of technical session at the American Geophysical Union annual fall meeting: “The next generation: research projects of high school-aged geoscientists”, Dec. 2003; Dec. 2004; Dec. 2005.

Co-convener of technical session at the Geological Society of America annual meeting: “Innovative approaches to teaching sedimentary geology course”, Nov. 2003.

Invited participant, Developing the Earth Science Teacher Workforce, NAGT workshop co-sponsored by the American Geophysical Union, Washington, D.C., May 2003.

Invited talk, San Jose State University Geology Club, “Using marine terraces to decipher uplift history of the Point Reyes Peninsula, north of San Francisco”, 10 Feb 2003.

Invited member of the National Visiting Committee, Marine Advanced Technology and Education Center (MATE), Monterey, 2003-2005.

Co-convener of technical session at the American Geophysical Union annual fall meeting, “Improving Diversity in the Earth and Space Sciences: Programs that work”, Fall 2002.

Invited participant, DLESE (Digital Library for Earth Science Education) annual conference, Cornell University, NY, 29 June–2 July 2002.

Invited National Science Foundation Proposal Review Panel, Wash. D.C., Geosciences Education, 26–28 June 2002.

Convener and organizer of technical sessions showcasing undergraduate research (sponsored by the Council on Undergraduate Research), Geological Society of America annual spring meetings in 2001, 2002, 2003, and 2005.

Co-convenor and organizer of technical sessions to showcase undergraduate research at American Geophysical Union meetings in June 2001 and December 2001.

Co-convenor and presenter for workshops: “How to get a research program started at a primarily undergraduate institution (PUT)”, Dec 2000, 2001, 2002, 2003, and 2004 for American Geophysical Union annual meeting in San Francisco.

Invited member of the American Geophysical Union Committee on Education and Human Resources (twice yearly meetings in D.C.), 2000-02.

Instructor for Project INQUIRES, two-week summer workshop for San Francisco Unified School District middle school teachers, 17-28 July 2000.

Invited presentation for Project Kaleidoscope (PKAL) 2000 Summer Institute in Keystone Colorado, “Using technology and real-world data to foster active learning in large classes: virtual voyages in ocean sciences”, 16-19 Jul 2000.

Invited participant to NSF-sponsored workshop to explore the feasibility of establishing a national Center for Ocean20 Science Education Excellence (COSEE), Gulf Coast, Mississippi, 23-26 May, 2000.

Invited presentation for NSF Collaboratives for Excellence in Teacher Preparation (CETP) conference in Washington, D.C., 23-25 Mar 2000, “Using technology to enhance classroom interactivity”.

Invited talk, Oregon State University Geosciences Department, “Surface and subsurface expressions of the San Andreas fault north of San Francisco”, 6 Jan 2000.

Invited presentation, MASTEP conference on Promoting Excellence in Teaching Science and Mathematics: Issues and Practices “Using Technology to Enhance Classroom Interactivity”, 12-13 Nov 1999.

Invited field trip leader, Geological Society of America Cordilleran meeting, “The San Andreas fault zone near Point Reyes: late Quaternary deposition, deformation, and paleoseismology”, June 1999.

Invited talk, Bay Area Geophysical Society, “The San Andreas fault zone at Point Reyes: geometry and late Quaternary evolution”, 15 March 1999.

Invited talk, University of California, Santa Cruz, Whole Earth Seminar series, “Climatic and tectonic controls on late Quaternary coastal deposits in the San Andreas fault zone near Point Reyes, California”, 17 November 1998.

Invited field trip leader, Northern California Geological Society, “Late Quaternary climate and tectonics in the San Andreas fault valley near Point Reyes”, 17 October 1998.

General councilor for Geoscience Division (twice yearly business meetings), Council for Undergraduate Education: elected two terms: 1998–2000 and 2000–2003.

Organized workshop for educators, “U.S. Geological Survey Water quality data set for San Francisco Bay”, 14 March 1998.

Invited talk, UC Santa Barbara Speaker Series, “Late Quaternary deposition and deformation in the San Andreas fault north of San Francisco”, 20 February 1998.

Invited talk, Stanford Journal Club, “Surface and subsurface expressions of the San Andreas fault north of San Francisco, California”, 2 June 1997.

President of the Society for Sedimentary Geology, Pacific Section, 1997-98.

President-elect of the Society for Sedimentary Geology, Pacific Section, 1996-97.

Invited field trip leader, Association for Women Geoscientists’ annual board meeting, “The Geology of Point Reyes”, March 1996.

Tour guide in San Francisco for the Ocean Drilling Project's *R/V Joides Resolution*, June 1996.

Co-convener and presenter of workshop: “Macintosh Computer Applications for Geoscience Education”, Dec. 1995 and 1996 for American Geophysical Union annual meeting.

Invited talk, Northern California Geological Society monthly meeting: “Investigating the Quaternary geologic history of the Point Reyes region”, 16 Nov. 1995.

Invited talk, San Jose State University Geology Club: “The sedimentary record of Quaternary deformation along the San Andreas fault zone north of San Francisco”, 3 Apr. 1995.

Invited field trip leader, Association for Women Geoscientists: “An up-close view of the San Andreas fault, Tomales Bay in Marin County, California”, 30 Apr. 1994.

Invited talk, Sonoma State University Geology Lecture Series: “Whole lotta shakin' goin' on: investigating the evidence for Quaternary events along the San Andreas fault near Point Reyes”, 20 Apr. 1994.

Invited talk, Association for Women Geoscientists, “Investigations of the San Andreas fault zone near Point Reyes”, 1 Jan. 1993.

Executive Committee, 1992-95: Convention Site Chair for the 1995 Spring Meeting of the Society for Sedimentary Geology in San Francisco.

Invited talk for State of Tomales Bay Conference in Inverness, California, “Geology of the Tomales Bay region”, 24 Oct. 1992.

Invited talk for San Jose State University Geology Club, “Tomales Bay estuary: Holocene characteristics and Pleistocene precursors”, 7 May 1992.

Invited talk for Gamma Chapter of 60 Plus Club, SFSU, “Loma Prieta earthquake”, 27 Oct. 1990.

Field trip Co-leader for American Association of Petroleum Geologists Annual Meeting Student Chapter Field Trip, surveyed the geologic setting of the San Francisco Bay Area, 2 June 1990.

Invited talk for Peninsula Geological Society at Stanford, “Sedimentary tectonics of the Salinian terrane, central California”, 5 Oct., 1989.