

VITA

KATE C. MILLER

EDUCATION:

Ph.D., Geophysics, Stanford University (1991).

Dissertation Title: *Structure and Tectonics of Central California from Seismic Reflection Data*, Advisor: George A. Thompson.

M.S., Geophysics, Stanford University (1988).

A.B., magna cum laude, Geological and Geophysical Sciences, Princeton University (1982).

Senior Thesis: *The Paleomagnetism of Precambrian Kimberlites from India*,
Advisor: Robert B. Hargraves.

ADMINISTRATIVE EXPERIENCE:

Dean Emeritus, College of Geosciences, Texas A&M University, 2017-present

Provost and Vice President for Academic Affairs, University of Wyoming, July 2016-June 2020.

Responsibilities: Oversight and leadership for all academic personnel and programs, students' education, enrollment functions, and internationalization at a land-grant flagship institution with an operating budget of \$438 M, an endowment of \$535 M, 12,250 students, and 1,100 full-time faculty. Oversight and leadership of a central office comprised of a vice provost, four associate vice provosts (AVP), director of business operations, and associated staff. Reporting units include a branch campus, 8 colleges, 2 schools, 6 academic centers, the libraries, the offices of the registrar, scholarships and financial aid, admissions, graduate education, and global engagement as well as ROTC programs.

Accomplishments:

Research: Partnered with Vice President for Research on a variety of projects including revision of faculty startup funding process, university support of NSF EPSCoR and major NIH awards, support for School of Energy Resources and Center of Innovation for Flow Through Porous Media, renewal of NSF-funded Research Aircraft Facility, and oversight of NCAR Wyoming Supercomputer Center, also NSF-funded. Initiated partnership with Vice President for Research to launch University Grand Challenge effort. Initiated faculty hiring program in support of interdisciplinary research.

Budget and Finance: Participated in executing \$42 M biennial cut to University budget. Managed voluntary separation incentive program for faculty in support of cuts. Partnered with the Office of Budget and Finance to stand up all-funds budget model and transition to new cloud-based financial and human capital management systems. Partnered with Division of Finance and Administration to add budget incentives for colleges to grow distance education.

Strategic Planning: Led comprehensive and inclusive university-wide strategic planning process that resulted in "Breaking Through", adopted by the Board of Trustees in July, 2017. Mentored Deans and Directors in producing unit-level plans that align with *Breaking Through*. Led development of the strategic plan for the Division of Academic Affairs.

Governance:

- Proposed and completed a major reorganization of the Division of Academic Affairs, including elimination of and redistribution of the functions of an Outreach School, establishment of an Office of Global Engagement, expansion of an Office of Graduate Education, and transitioning all enrollment management functions to the division.
- Partnered with General Counsel in trustees-mandated initiative to carry out comprehensive overall of the governing regulations of the University. Effort included leading substantive changes to regulations related to faculty and students, as well as those related to review, consolidation, and elimination of

academic degree programs. Worked closely with the Faculty Senate to gather input and buy-in for changes.

- Partnered with President and Executive team members to introduce stronger mechanisms for shared governance, including establishment of a Naming Committee, and a Facilities Council.

Team Building: Managed significant change over in the academic leadership team. Worked with four deans and two center directors to stepdown or retire. Hired four college deans, two associate vice provosts and two directors through external searches. Brought on an Honors College dean, a center director, and an AVP for graduate education through internal searches. Put interim leadership in place as necessary.

Enrollment Management: Supported a series of consultant studies around improving recruitment and retention of undergraduate students, distance education, and academic capacity, all with the goals of growing enrollment and creating efficiencies. Overseeing implementation of numerous recommendations of these studies, including hiring of inaugural Associate Vice Provost for Enrollment Management, establishment of transfer success center, optimizing course scheduling and availability, partnering with Wyoming Community College Commission on a variety of educational attainment issues, including common course numbering, common electronic transcripts, and a nascent state-wide longitudinal educational data system. Joined *WICHE Passport* for ease of transfer of general education coursework across the country.

Student Success: Oversight of a variety of programs designed to promote academic success and student engagement, including tutoring and supplemental instruction, and a Student Success Services program group that serves a variety of special student populations through state and federal grants. Instituted professional advising centers in every college. Developed Exploratory Studies tracks for incoming students to replace “undeclared” status. Instituted a Bachelor’s of General Studies with tracks associated with every college to promote degree completion. Developed or enhanced a variety of first year transition programs. Deployed co-curricular program (SOAR) designed to help students garner and recognize competencies needed for the workforce and beyond.

Development: Worked with academic leadership team and the UW Foundation, to establish fundraising priorities, expectations for fundraising, and conduct training. Partnered with President and Foundation to establish processes for more efficient and effective use of endowment income, especially in the area of scholarships. Led a taskforce to steward a major planned gift that will result in establishment of an artist residency and teaching center in north central Wyoming.

Dean, College of Geosciences, Texas A&M University, 2009-July 2016.

Responsibilities: Leadership of college with 107 faculty members, 26 research scientists, 201 research and administrative staff members, 1500 students, an operation budget of \$16 million, a federal research budget of \$105 million, and endowment of \$33 million. Includes oversight of 4 academic departments, two interdisciplinary programs, and three research units: the International Ocean Discovery Program (IODP), the Texas Sea Grant, and the Geochemical and Environmental Research Group (GERG).

Accomplishments:

Research: Focused on fostering major interdisciplinary research collaborations across College and University. Oversaw internal process for award of a cooperative agreement with the NSF to manage science services for the International Ocean Discovery program (\$60 M annually), revitalization of Ocean Sciences research capacity, major improvement in high-performance computing capacity, research and education collaborations with Universities in Brazil, China, Israel, and creation of a GIS Center. Led university Grand Challenge related to “ensuring a sustainable society”, one of six areas of interdisciplinary excellence targeted for growth.

Strategic Planning: Led two inclusive college strategic planning processes, the first of which resulted in the first strategic planning document for the college in ten years. Oversaw alignment of College and University plans. Re-defined mission and vision of the College.

Management and Finance: Rebuilt and restructured college executive team. Managed process for two mandatory budget reductions totaling 7.5%/year, including reduction-in-force for staff and voluntary separation program for faculty. Created annual budgeting process with high level of transparency. Oversaw reorganization of college business functions. Oversaw administrative reorganization of a high-growth academic department.

Faculty: Appointed 20 faculty members to endowed chairs and professorships. Instituted new annual performance evaluation and post-tenure review policies. Oversaw tenure and/or promotion of 40 faculty members and hiring of 15 more. Made substantial investments in equity adjustments to faculty salaries. Established college workplace climate and inclusion taskforce.

Development: Focused on strengthening traditional relationships with former students, oil and gas industry, and exploring new opportunities related to the environmental/sustainability sector. Oversaw receipt and stewardship of ca. \$1.4 million annually in contributions, including major role in raising over \$2.5 million for new center for petroleum and sedimentary systems. Rejuvenated College Advisory Council by appointing new members with expertise across all sectors of the geosciences. Oversaw transition to new Director of Development. Prepared strategic plan and case statements for University-wide capital campaign.

Communications: Reorganized functions to form an advancement team that more closely integrate communications with development, public outreach, and student recruitment efforts. Major website rebuild underway. Recognized with University newsmaker of the year award two-years running for College efforts to translate research on BP oil spill and drought for public understanding. In the midst of a 50th anniversary celebration. Participant in University-wide branding exercise.

Academic Programs: Enhanced student recruitment processes, including pipeline program for URM students. Implemented freshmen and transfer student retention programs. Grew number and quality of high-impact learning experiences for students. Streamlined and improved assessment of student learning outcomes. Initiated Quality Enhancement Plan – Commit to Communicate. Oversaw 51% enrollment growth and 49% increase in degrees awarded since 2009.

Associate Dean, College of Science, University of Texas at El Paso, 2004 – 2008.

Responsibilities: Oversight, leadership, and grant writing for interdisciplinary and inter-college research and education initiatives. Included management and budgetary responsibilities for college portion of four major institutional grants related to Math and Science education from the National Science Foundation, Carnegie Foundation, Department of Education, and the State of Texas. Supervision of four program coordinators to implement grant activities. Other duties as directed by the dean.

Accomplishments:

Federal Grantsmanship: Led multi-PI efforts to obtain National Science Foundation awards from the Opportunities for Enhancing Diversity in the Geosciences (OEDG) and the Graduate Teaching Fellows in K-12 Education (GK-12) programs. The OEDG grant involved a \$1.1 million 5-year effort to develop a Geoscience network for training and recruitment of future earth scientists in El Paso, through a summer program, work with high schools, a research experience for undergraduates, and stipends for graduate students. The GK-12 grant was a \$1.8 million 3-year effort to build a partnership for exploring the environment on the U.S.-Mexico border, by placing 10 science and engineering graduate students with teachers in middle school classrooms in El Paso Independent School District.

Corporate Development: Initiated a scholarship and professional development program for math and science majors who planned careers as high school teachers. Teamed with development office and university president to obtain funding for the program, called MaST (Math and Science Teacher) Academy, from Automatic Data Processing Inc. (\$600,000 over 3 years) and Boeing (\$20,000). Teamed with development office to obtain support from Shell Oil Co. for geoscience summer program for high school students (\$15,000 annually).

Education Reform:

- Provided support for development and implementation of cohort-based Masters of Arts of Teaching Math

and Science programs underwritten by a NSF Math Science Partnership grant. Led revision of initial program curriculum in collaboration with faculty from Colleges of Science and Education to include preparation for Master Science teacher certification and credentialing for dual-credit high school courses.

- Initiated successful reforms to increase the number of College of Science graduates who prepare to be high school teachers through a minor in secondary education. Collaborated with College of Education to provide more flexible course sequencing in education classes. Initiated college-wide changes to policies for advising secondary education minors.
- Supported K-16 curriculum alignment initiatives, a component of the NSF Math Science Partnership, in collaboration with the College of Education, El Paso Community College, and regional school districts.

Faculty Development: Mentored new faculty members, appointed in the College of Science, with research interests in math and science education. Consulted with disciplinary faculty seeking advice on appropriate activities to satisfy “broader impacts” criteria of federal grants.

Chair, Department of Geological Sciences, University of Texas at El Paso, 1999-2004
(*Interim Chair*, Fall 1998)

Responsibilities: recommendations for and management of department’s budget including endowed funds, strategic planning, curriculum, building safety and maintenance, space allocation, assignment of duties to faculty, staff, and teaching assistants, hiring and supervision of staff, recruitment, mentoring, evaluation and promotion of faculty, other duties as directed by the dean.

Accomplishments:

Led department, comprised of 13 faculty, 10 staff, 50 graduate students, 40 undergraduates for six years. Facilitated growth of department grant portfolio to \$9.4 million including \$2 million in grant expenditures in 2004.

Faculty Recruitment and Development: Initiated proactive faculty recruitment strategies that resulted in hiring of four new faculty members, all from groups underrepresented in science. Facilitated formal mentoring and third-year review of pre-tenure faculty members. Supported doubling of number of faculty members serving as lead PI on grants and contracts.

Degree Plan Development: Initiated and led multi-disciplinary, multi-college committee that established a B. S. in Environmental Science degree program (2000).

Student Recruitment and Training: Initiated first phase of program to recruit minority students into the geosciences funded through the NSF program for Enhancing Diversity in the Geosciences. Established graduate teaching assistant training program that provided professional training in teaching strategies to department graduate students. Obtained 75% increase in department teaching assistant funding and support for a half-time staff graduate advisor.

ACADEMIC APPOINTMENTS:

Professor of Geology and Geophysics, University of Wyoming, Laramie, WY, 2016-March 2021.

Professor of Geology and Geophysics, Texas A&M University, College Station, Texas, 2009-2016.

Responsibilities and Accomplishments: Continued teaching, research and publication in active source seismology. Mentored a postdoctoral fellow, 2 summer interns. Co-led graduate seminar on geophysical imaging of the lithosphere.

Professor of Geological Sciences, University of Texas at El Paso, El Paso, Texas, 2002-2009.

Responsibilities and Accomplishments: Continued teaching, research and publication in active source seismology. Fund raising for hardware, software, and personnel to support infrastructure for geophysical research. Taught undergraduate Seismic Methods, Mentored 2 undergraduates in summer research, Chaired thesis committees for 3 M.S., and 2 Ph.D. students.

Associate Professor of Geological Sciences, University of Texas at El Paso, El Paso, Texas, 1998-2002.

Responsibilities and Accomplishments: Continued teaching, research and publication in active source seismology. Developed graduate courses in Modeling and Inversion of Wide-Angle Seismic Data,

Geophysical Framework of North America, Taught Geology for Engineers, Introductory Earth Science I and II. Mentored 1 undergraduate in research, Chaired thesis committees for 4 M.S., and 3 Ph.D. students.

Assistant Professor of Geological Sciences, University of Texas at El Paso, El Paso, Texas, 1993-1998.
(*Visiting Assistant Professor*, 1992-1993).

Accomplishments: Established funded research program in active source seismology with applications to tectonics and the shallow subsurface. Developed graduate courses in Digital Signal Processing, Plate Tectonics, Seismic Reflection Data Processing, and Seismic Reflection Data Interpretation, Taught Introductory Historical Geology. Mentored 3 undergraduates in research, Chaired thesis committees for 4 M.S. and 2 Ph.D. students.

Research Specialist, University of Texas at El Paso, El Paso, Texas, Fall, 1991.

Accomplishments: Acquisition and analysis of refraction seismic data from surveys in western Washington and Oregon funded through the U.S. Geological Survey.

OTHER PROFESSIONAL EMPLOYMENT:

Research and Teaching Assistant, Stanford University, Stanford, California, 1987-1991.

Summer Geophysicist, Amoco Production Co. (now BP plc), New Orleans, Louisiana, 1987 and 1988.

Accomplishments: Modeled steep dip resolution of vertical seismic profiles. Modeled amplitude versus offset effects by creating synthetic CMP gathers from well log data.

Exploration Geophysicist, Amoco Production Co. (now BP plc), New Orleans, Louisiana, 1984-1986.

Accomplishments: Acted as regional VSP (Vertical Seismic Profiling) consultant. Processed seismic reflection data from South Louisiana and the offshore Gulf of Mexico. Acted as regional potential fields consultant. Interpreted, processed and modeled gravity and magnetic data.

Development Geologist, Amoco Production Co. (now BP plc), New Orleans, Louisiana, 1982-1984.

Accomplishments: Mapped oil and gas fields in the offshore Gulf of Mexico using well log data. Recommended drilling of exploration and development wells.

GRANTS AND CONTRACTS

Summary: Total of \$16.8 M, including \$8.9 M for research infrastructure, \$3.6 M for research and \$4.4 M for training.

<u>Role</u>	<u>Granting Agency</u>	<u>Project Title</u>	<u>Award Amount*</u>	<u>Duration</u>
PI	NSF (Geoscience Education)	Planning Grant: DIG Texas - A Workshop on Diversity and Innovation in Geosciences in Texas	\$39,997	5/10-7/12
PI	DOE/NNSA	Assessment of Regional Explosion Discriminants Using Data Sets of Unparalleled Spatial Sampling	\$260,845	3/10-9/12
PI (w/ Erslev et al.)	NSF (Earthscope)	Collaborative Research: Formation of basement-involved foreland arches: An integrated EarthScope experiment	\$580,879*	5/09-4/13
PI (w/ Hagedorn, Johnson)	NSF (EHR)	Track 1, GK-12 Partnership for Exploring the Environment on the U.S.-Mexico Border	\$ 1,780,908	01/06-12/08
Prin. Invest. (w/ Hagedorn, Langford, Velasco)	NSF (GEO)	Track 2: Pathways - A Geoscience Network for Training and Recruitment of Future Earth Scientists in El Paso	\$1,149,733	6/05-5/10
PI	ADP Inc.	MaST (Math and Science Teachers)	\$600,000	11/06-10/09

<u>Role</u>	<u>Granting Agency</u>	<u>Project Title</u>	<u>Award Amount*</u>	<u>Duration</u>
		Academy		
Co-PI (w/ Andronicos et al.)	NSF (Continental Dynamics)	BATHOLITHS: Generation and Evolution of Crust in Continental Magmatic Arcs	\$407,547*	9/03-8/09
PI	Shell Oil	Support for Pathways Summer Program	\$75,000	2/05-2/10
PI (w/ Harder)	IRIS (NSF)	PASSCAL Seismic Instrument Facility	\$84,500 - \$199,000 annually	12/98-6/09
Co-PI w/ Keller, Harder	NSF	Upgrade of a Pool of Highly Portable Seismic Recorders for Use by the Seismological Community	\$430,000	6/05-5/08
Co-PI (w/ Starks)	NASA	Supporting Science Outreach in a Digital Media Environment	\$75,000	3/04-11/06
PI (w/ Doser, Keller)	THECB	STAR Award For Seismic Instrumentation	\$200,000	6/05-2/06
Prin. Invest.	Landmark Graphics Corporation	Landmark University Grant (in-kind grant for hydrocarbon exploration solutions software)	\$5,517,050	6/01-6/10
Co-PI (w/ Velasco, Keller, Doser)	DoD (ARO)	Seismic Instrumentation for Solidifying Research Capabilities in Defenses and Earthquake Science & Education	\$200,000	11/04-10/05
Prin. Invest. (w/ Velasco)	NSF (INT)	US-Bhutan Workshop: Seismotectonics and its Relationship to Natural Hazards in the Bhutanese Himalaya	\$6,900	6/03-5/04
Prin. Invest. (w/ Andronicos, Langford)	NSF (GEO)	Building Pathways into the Geosciences for an Hispanic Community of Learners in El Paso	\$380,200	1/02-12/05
Co-PI (w/ Karlstrom et al.)	NSF (Continental Dynamics)	Collaborative Research: Lithospheric Structure and Evolution of the Rocky Mountains: Phase 2	\$62,996*	9/02-8/04
Prin. Invest. (w/ Barnes)	THECB-ARP	Geophysical and Petrological View of Magmatic Contribution to Intracontinental Growth: Rio Grande Rift	\$112,350*	1/02-8/04
Prin. Invest. (w/ Velasco)	DOE (LANL)	Deployment of a Temporary Seismic Array in Bhutan	\$146,101	11/01-10/04
Prin. Invest. (w/ Keller, Doser, Harder)	NSF (IF)	Upgrade to Geophysical Computing at the University of Texas at El Paso	\$99,580	9/01-8/04
Co-PI (w/ Keller)	NSF (INT)	CELEBRATION 2000: A Seismic Investigation of Lithospheric Structure in the TESZ/Carpathian Mountains Region	\$64,440	5/00-5/04
Co-PI (w/ Karlstrom,	NSF (Continental Dynamics)	Collaborative Research: Lithospheric Structure and Evolution of the Rocky	\$79,929	5/01-9/03

<u>Role</u>	<u>Granting Agency</u>	<u>Project Title</u>	<u>Award Amount*</u>	<u>Duration</u>
Keller, et al.)		Mountains - beginning Phase 2 Geodynamic Processes		
Prin. Invest. (w/ Keller, Doser, Harder)	NSF (IF)	Upgrade to Geophysical Computing at the University of Texas at El Paso	\$99,580	9/01-8/04
Prin. Invest. (w/ Velasco	NSF (INT)	US-Bhutan Workshop: Seismotectonics and its Relationship to Natural Hazards in the Bhutanese Himalaya	\$6,900	6/03-5/04
Prin. Invest.	IRIS (NSF)	Undergraduate Summer Internship in Seismology at UTEP	\$11,300	5/02-12/02
Prin. Invest. (w/ C. Barnes)	THECB-ARP	Formation and Evolution of Proterozoic Crust in West Texas and Eastern New Mexico	\$39,488*	1/00-1/02
Prin. Invest.	HiCREST (DOE)	Scholarship for Jackie Arellano	\$5,000	9/99-8/00
Prin. Invest.	NSF (INT)	Seismotectonics and Structure of the Bhutanese Himalaya	\$5,500	6/01-5/02
Prin. Invest.	USGS	Controlled-Source Study of the Structure of the Seattle and Tacoma Basins - SHIPS (Seismic Hazards Investigations of Puget Sound) 99: Collaborative Research (USGS, OSU, UTEP)	\$150,000*	2/99-2/01
Co-PI. (w/ Keller, Harder)	TLLRWA	Seismic and Gravity Surveys for Fault Delineation, Sierra Blanca, Texas	\$60,000	9/98-8/99
Co-PI (w/ Harder)	Allied Signal Technical Services	Seismic Survey of the NASA White Sands Test Facility	\$75,000	7/98-12/98
Co-PI. (w/ Keller)	NSF (MRI)	Acquisition of a Pool of Highly Portable Seismic Recorders for Use by the Seismological Community	\$583,600	7/98-7/00
Prin. Invest.	USGS	COLLABORATIVE RESEARCH: (UTEP/OSU/USGS/UBC/UW/ U. Victoria/PGC): Seismic Hazards Investigations of Puget Sound (SHIPS)	\$39,693*	2/98-2/99
Co-PI (w/ Karlstrom et al.)	NSF (Continental Dynamics)	Collaborative Research: Lithosphere Structure and Evolution of the Rocky Mountain Transect of the Western U.S.: An Integrated Geological and Geophysical Investigation	\$538,790	10/97-9/01
Prin. Invest. (w/ Keller)	USGS	COLLABORATIVE RESEARCH: A High Resolution Seismic Refraction and Reflection Survey of the Washington Study Corridor	\$138,303*	4/95-9/97
Co-PI (w/ Harder)	Tierra Engr.	Gravity and Seismic Surveys of the Holloman AFB, New Mexico	\$21,077	10/97-9/01

<u>Role</u>	<u>Granting Agency</u>	<u>Project Title</u>	<u>Award Amount*</u>	<u>Duration</u>
Co-PI (w/ Harder)	U. S. Army	Shallow Geophysical Surveys for Geothermal Resources, MacGregor Range, Fort Bliss, New Mexico	\$70,000	9/94-9/96
Co-PI. (w/ Doser, Keller, Harder)	U.S. Air Force Res.	Development of a Lithospheric Model and Geophysical Data Base for North Africa	\$152,433	10/95-9/97
Co-PI (w/ Keller)	THECB (ATP)	Development and Testing of a New 3-D Seismic Recorder: A University-Industry Collaboration	\$334,305	1/96-12/97
Co-PI (w/ Keller & Doser)	U.S. Air Force Res.	Lithospheric Profiles in the Southwestern U.S. using Nevada Test Site Sources	\$544,891	8/92-7/95
Co-PI (w/ Keller & Doser)	U.S. Air Force Res. AASERT Program	Lithospheric Profiles in the Southwestern U.S. using Nevada Test Site Sources	\$113,065	9/93-9/96
Prin. Invest.	EPA (CERM)	Potential Role of Controlled-Source Fluid Flow and Contaminant Migration in Arid Regions	\$19,700	5/95-8/95
Prin. Invest.	NASA	Evaluation of Seismic Data for NASA Johnson Space Center, White Sands Test Facility	\$16,379	6/95-9/95
Prin. Invest.	URI (UTEP)	Seismic Reflection Data Processing in West Texas and Eastern New Mexico	\$1,500	11/94-8/95
Prin. Invest.	URI	Seismic Reflection Investigation of the Continental Crust in West Texas and Eastern New Mexico	\$3,000	2/94-8/94
Co-Invest (w/ Keller & Doser)	U.S. Air Force Res.	Instrumentation for Seismic Data Acquisition and Analysis	\$174,801	9/93-9/94
Prin. Invest.	Am. Chem. Soc.	Deep Penetration Seismic Reflection Studies of the California Borderland	\$21,000	9/92-12/94
Prin. Invest. (w/ Moss & Whitelaw)	Tx. Bur. Econ. Geol.	Geophysical and Geohydrologic Studies of the Eagle Flat Region	\$33,833	5/92-8/92
Co-PI (w/ Keller)	USGS	Collaboration with the USGS Deep Continental Studies Group on The North Deployment of the Pacific Northwest Refraction Experiment	\$102,201*	9/91-8/93

*Dollar amount denotes home institution portion of multi-institutional grant.

PUBLICATIONS

Summary: 68 refereed publications and technical reports, 147 conference presentations.

(Italics indicate student authors)

- Erslev, E. A., L. L. Worthington, M. Anderson, and K. C. Miller, in review, *Laramide Crustal Detachment in the Rockies: Cordilleran Shortening of Fluid-Weakened Crust*, Rocky Mountain Geology.
- Mosher, S., and C. Keane, Eds., 2021, *Vision and Change in the Geosciences: The Future of Undergraduate Geoscience Education*, Authoring Committee: Mosher, S, W. Harrison, J. Huntoon, C. Keane, D. McConnell, K. Miller, J. Ryan, L. Summa, and J. Villalobos, American Geosciences Institute, Downloadable from: <https://www.americangeosciences.org/change/pdfs/Vision-Change-Geosciences.pdf>.
- Houser, C., J. Nunez, and K. C. Miller, 2018, *Pathways to the Geosciences through 2YR community colleges: A strategic recruitment approach being used at Texas A&M University*, Journal of Geoscience Education, v. 66, 4-11, doi: 10.1080/10899995.2018.1412189.
- Worthington, L. L., K. C. Miller, E. A. Erslev, M. L. Anderson, K. R. Chamberlain, A. F. Sheehan, W. L. Yeck, Steven H. Harder and Christine S. Siddoway, 2015, *Crustal structure of the Bighorn Mountains region: Precambrian influence on Laramide shortening and uplift in north-central Wyoming*, doi: 10.1002/2015TC003840.
- Carrick, T. L., K. C. Miller, E. A. Hagedorn, B. R. Smith-Konter, and A. A. Velasco, 2016, Pathways to the Geosciences Summer High School Program: A Ten-Year Evaluation, Journal of Geoscience Education, v. 64, 87–97, doi: 10.5408/15-088.1.
- Yeck, W. L., A. F. Sheehan, M. L. Anderson, E. A. Erslev, K. C. Miller and C. S. Siddoway, 2014, *Structure of the Bighorn Mountain region, Wyoming, from teleseismic receiver function analysis: Implications for the kinematics of Laramide shortening*, Journal of Geophysical Research, v. 119, pp. 7028–7042, doi: 10.1002/2013JB010769.
- O'Rourke, C.T., A.F. Sheehan, E.A. Erslev, K.C. Miller, 2014, *Estimating basin thickness using a high-density passive-source geophone array*, Earth and Planetary Science Letters, v. 402, pp. 120–126, doi:10.1016/j.epsl.2013.10.035.
- Averill, M. G., and K. C. Miller, 2013, *Upper crustal structure of the southern Rio Grande rift: A composite record of rift and pre-rift tectonics*, in Hudson, M.R., and Grauch, V.J.S., eds., *New Perspectives on Rio Grande Rift Basins: From Tectonics to Groundwater*: Geological Society of America Special Paper 494, p. 463–474, doi:10.1130/2013.2494(17).
- Yang, Z., A. F. Sheehan, W. L. Yeck, K. C. Miller, E. A. Erslev, L. L. Worthington and S. H. Harder, 2012, *Imaging basin structure with teleseismic virtual source reflection profiles*, Geophysical Research Letters, v. 39, doi: 10.1029/2011GL050035.
- Stephenson A. L., G. D. Spence, K. Wang, J. A. Hole, K. C. Miller, R. M. Clowes, S. H. Harder, and G. M. Kaip, 2011, *Crustal velocity structure of the southern Nechako Basin, British Columbia, from wide-angle seismic travel-time inversion*, Canadian Journal of Earth Science, v. 48, pp. 1050-1063.
- Kreinovich, V., J. Nava, R. Romero, J. Olaya, A. Velasco and K. C. Miller, 2010, *Spatial Resolution for Processing Seismic Data: Type-2 Methods for Finding the Relevant Granular Structure*, 2010 IEEE International Conference on Granular Computing (Silicon Valley, CA, USA, August 14-16).
- Miller, K. C., T. Carrick, C. Martínez-Sussmann, R. Levine, C. L. Andronicos, R. P. Langford, 2007, *Effectiveness of a Summer Experience for Inspiring Interest in Geoscience Among Hispanic-American High School Students*, Journal of Geoscience Education, v. 55, pp. 596-603.
- Averill, M.G., K. C. Miller, G. R. Keller, V. Kreinovich, R. Araiza, S. A. Starks, 2007, *Using expert knowledge in solving the seismic inverse problem*, International Journal of Approximate Reasoning, v. 45, pp. 564-587.
- Velasco, A. A., V. L. Gee, C. A. Rowe, D. Grujic, L. S. Hollister, D. Hernandez, K. C. Miller, T. Tobgay, M. Fort, and S. Harder, 2007, *Using Small, Temporary Seismic Networks for Investigating Tectonic Deformation: Brittle Deformation and Evidence for Strike-Slip Faulting in Bhutan*, *Seism. Res. Lett.*, v. 78, p. 446-453, DOI: 10.1785/gssrl.78.4.446.

-
- J. M. Hamblock, C. L. Andronicos, K. C. Miller, C. G. Barnes, M-H. Ren, M. G. Averill, and E. Y. Anthony, 2007, *A Composite Geologic and Seismic Profile Beneath The Southern Rio Grande Rift, New Mexico, Based on Xenolith Mineralogy, Temperature, and Pressure*, Tectonophysics, v. 442, pp. 14–48, doi:10.1016/j.tecto.2007.04.006.
- Snelson, C. M., T. M. Brocher, K. C. Miller, T. L. Pratt, and A. M. Tréhu, 2007, *Seismic Amplification Within the Seattle Basin, Washington State: Insights from SHIPS Seismic Tomography Experiments*, Bull. Seism. Soc. Am., v. 97, pp. 1432–1448, doi: 10.1785/0120050204.
- Averill, M.G., G. R. Keller, K.C. Miller, P Sroda, T. Bond, and A. Velasco, 2006, Data fusion in geophysics: Seismic tomography and crustal structure in Poland as an example, in Sinha, A.K., ed., *Geoinformatics: Geological Society of America Special Paper 397*, doi: 10.1130/2005.2397(11).
- Snelson, C. M., G. R. Keller, K. C. Miller, H.-M. Rumpel, and C. Prodehl, 2005, *Regional crustal structure derived from the CD-ROM 99 seismic refraction/wide-angle reflection profile: The lower crust and upper mantle*, in Lithospheric Structure and Evolution of the Rocky Mountain Region, K. E. Karlstrom, and G. R. Keller, eds., Am. Geop. Un. Monograph 154, pp. 271-292.
- Magnani, M. B., A. Levander, K. C. Miller, T. Eshete, and K. E. Karlstrom, 2005, *Seismic investigation of the Yavapai-Mazatzal transition zone and the Jemez Lineament, northeastern New Mexico*, in Lithospheric Structure and Evolution of the Rocky Mountain Region, K. E. Karlstrom, and G. R. Keller, eds., Am. Geop. Un. Monograph 154, pp. 227-238.
- Amarante, J. F. A., S. A. Kelley, M. T. Heizler, M. Barnes, K. C. Miller, and E. Y. Anthony, 2005, *Characterization and age of the Mesoproterozoic Debaca sequence in the Tucumcari basin, New Mexico*, in Lithospheric Structure and Evolution of the Rocky Mountain Region, K. E. Karlstrom, and G. R. Keller, eds., Am. Geop. Un. Monograph 154, pp. 185-200.
- Keller, G. R., K. E. Karlstrom, M. L. Williams, K. C. Miller, C. L. Andronicos, A. Levander, C. M. Snelson, and C. Prodehl, 2005, *The dynamic nature of the continental crust-mantle boundary: Crustal evolution in the Southern Rocky Mountain region as an example*, in Lithospheric Structure and Evolution of the Rocky Mountain Region, K. E. Karlstrom, and G. R. Keller, eds., Am. Geop. Un. Monograph 154 pp. 403-420.
- Magnani, M. B., K. C. Miller, A. Levander, and K. E. Karlstrom, 2004, *The Yavapai-Mazatzal boundary: a long-lived assembly structure in the lithosphere of southwestern North America*, Geol. Soc. Am. Bull., v. 116, pp. 1137-1142.
- Grad, M., S. L. Jensen, G. R. Keller, A. Guterch, H. Thybo, T. Janik, T. Tiira, J. Yliniemi, U. Luosto, G. Motuza and V. Nasedkin, W. Czuba, E. Gaczynski, P. Sroda, K. C. Miller, M. Wilde-Piörko, K. Komminaho, J. Jacyna, and L. Korablova, 2003, *Crustal structure of the Trans-European suture zone region along POLONAISE'97 seismic profile P4*, Journal of Geophysical Research, v. 108, doi:10.1029/2003JB002426.
- Pratt, T. L., T. M. Brocher, C. S. Weaver, K. C. Miller, A. M. Trehu, K. C. Creager, R. S. Crosson, and C. M. Snelson, 2003, *Amplification of seismic waves by the Seattle basin, northwestern U. S.*, Bulletin of the Seismological Society of America, v. 93, pp. 533-545.
- Miller, K. C., 2002, *Geophysical Evidence for Miocene Extension and Mafic Magmatic Addition in the California Continental Borderland*, Geological Society of America Bulletin, v. 114, pp. 497-512.
- Grad, M., G. R. Keller, H. Thybo, A. Guterch, W. Czuba, T. Janik, P. Sroda, K. C. Miller, S. Jensen, U. Luosto, T. Tiira, J. Yliniemi, and C. E. Lund, *Lower lithospheric structure beneath the Trans-European suture zone from POLONAISE'97 seismic profiles*, 2002, Tectonophysics, v. 360, pp.153-168.
- Belzer, W. L., K. C. Miller, and S. Harder, 2002, *Shallow Geophysical Study of the Grapevine Canyon Area, Eastern Tularosa Basin: Implications For Groundwater Resources*, New Mexico Geological Society Guidebook 52, pp. 79-84.
- Gorman, A.R., R.M. Clowes, R.M. Ellis, T.J. Henstock, G.D. Spence, G.R. Keller, A.R. Levander, C.M. Snelson, M.J.A. Burianyk, E.R. Kanasewich, I. Asudeh, Z. Hajnal and K.C. Miller, 2002, *Deep Probe - Imaging the roots of western North America*, Canadian Journal of Earth Sciences, v. 39, pp. 375-398.
- O'Donnell, T. M. Jr., K. C. Miller, and J. C. Witcher, 2001, *A Seismic and Gravity Study of the McGregor Geothermal System, Southern New Mexico*, Geophysics, v. 66, pp.1002-1014.
- Brocher, T. M., T. E. Parsons, R. J. Blakely, N. I. Christensen, M. A. R. E. Fisher, Wells, U. S. ten Brink, T. L.
-

-
- Pratt, R. S. Crosson, K. C. Creager, N. P. Symons, L. A. Preston, Van T. Wagoner, K. C. Miller, C. M. Snelson, A. M. Trehu, V. E. Langenheim, G. D. Spence, K. Ramachandran, R. D. Hyndman, D. C. Mosher, B. C. Zelt, C. S. Weaver, 2001, *Upper crustal structure in Puget Lowland, Washington; results from the 1998 seismic hazards investigation in Puget Sound*, Journal of Geophysical Research, v. 106, pp. 13,541-13,564.
- Shearer, D. L., and K. C. Miller, 2000, *Implications of Recent Geophysical Studies of The Big Hatchet Mountains Area, Southwestern New Mexico*, New Mexico Geological Society Guidebook 51, pp. 71-74.
- Brocher, T. M., T. L. Pratt, K. C. Creager, R. S. Crosson, W. P. Steele, C. S. Weaver, A. D. Frankel, A. M. Trehu, C. M. Snelson, K. C. Miller, and S. H. Harder, 2000, *Urban Seismic Experiments Investigate Seattle Fault and Basin*, EOS Trans. Am. Geophys. Un., v. 81, no. 46, pp. 545-551.
- Sroda, P., W. Czuba, A. Guterch, M. Grad, H. Thybo, G. R. Keller, K. C. Miller, T. Tiira, U. Luosto, J. Yliniemi, G. Motuza, V. Nasedkin, 1999, *P- and S- velocity model of the southwestern margin of the Precambrian East European Craton; Polonaise '97, profile P3*, Tectonophysics, v. 314, pp. 193-217.
- Jensen, S. L., T. Janik, H. Thybo, M. Grad, E. Gacynski, A. Guterch, G. R. Keller, and K. C. Miller, 1999, *Seismic structure of the Palaeozoic Platform along POLONAISE'97 profile P1 in northwestern Poland*, Tectonophysics, v. 314, pp. 123-143.
- Guterch, A., M. Grad, H. Thybo, G. R. Keller, W. Czuba, E. Gacynski, T. Janik, R. Materzok, P. Sroda, M. Wilde-Pioorko, S. L. Jensen, S. Harder, K. C. Miller, A. Schulze, K. Schuster, K. Komminaho, U. Luosto, T. Tiira, J. Yliniemi, G. Motuza, V. Nasedkin, and C. E. Lund, 1999, *POLONAISE '97; an international seismic experiment between Precambrian and Variscan Europe in Poland*, Tectonophysics, v. 314, pp. 101-121.
- Fisher, M. A., T. M. Brocher, R. D. Hyndman, A. M. Trehu, C. S. Weaver, K. C. Creager, R. S. Crosson, T. Parsons, A. K. Cooper, D. Mosher, G. Spence, B. C. Zelt, P. T. Hammer, U. tenBrink, T. L. Pratt, K. C. Miller, J. R. Childs, G. R. Cochrane, S. Chopra, and R. Walia, 1999, *Seismic survey probes urban earthquake hazards in Pacific Northwest*, EOS, v. 80, pp. 13-17.
- Miller, K. C., and Meltzer, A. S., 1999, *Structure and tectonic of the offshore central Santa Maria and Santa Lucia Basins, California: Results from the PG&E/EDGE seismic reflection survey*, U. S. Geological Survey Bulletin 1995, Evolution of Sedimentary Basins - Onshore Oil and Gas Investigations - Santa Maria Province.
- Chang, J.-Y., K. C. Miller, and G. R. Keller, 1999, *Seismic expression of late Cretaceous to Recent structure in southwestern New Mexico*, Rocky Mountain Geology, v. 34, pp. 131-148.
- Maciejewski, T. J. and K. C. Miller, 1998, *Geophysical interpretation of subsurface geology, pediment of the San Andres Mountains to the Jornada del Muerto basin*, New Mexico Geological Society Guidebook 49, pp. 101-106.
- C. M. Snelson, T. J. Henstock, G. R. Keller, K. C. Miller, and A. Levander, 1998, *Crust and uppermost mantle structure along the Deep Probe profile*, Rocky Mountain Geology, v. 2, pp. 181-198.
- Guterch, A., M. Grad, H. Thybo, G. R. Keller, and K. C. Miller, 1998, *Seismic Experiment Spreads across Poland*, EOS, v. 79, pp. 302-305.
- Henstock, T. J., A. Levander, G. R. Keller, C. M. Snelson, K. C. Miller, S. H. Harder, A. R. Gorman, R. M. Clowes, M. J. A. Burianyk, E. D. Humphreys, 1998, *Probing the Archean and Proterozoic lithosphere of western North America*, GSA Today, v. 8, no. 7, pp. 1-5.
- Miller, K. C., S. Harder, D. C. Adams, and T. O'Donnell, 1998, *Integrating high resolution refraction data into near-surface seismic reflection data processing and interpretation*, Geophysics, v. 63, pp. 1339-1347.
- Parsons, T., A. M. Trehu, J. H. Luetgert, K. Miller, F. Kilbride, R. E. Wells, M. A. Fisher, E. Flueh, U. S. ten Brink, and N. I. Christensen, 1998, *A new view into the Cascadia subduction zone and volcanic arc in southwest Washington*, Geology, v. 26, pp. 199-202.
- Miller, K. C., G. R. Keller, J. M. Gridley, J. Luetgert, W. Mooney, and H. Thybo, 1997, *Crustal Structure Along the West Flank of the Cascades*, Western Washington, J. Geophys. Res., v. 102, pp. 17,857-17,873.
- Miller, K. C., and Meltzer, A. S., 1999, *Structure and tectonic of the offshore central Santa Maria and Santa Lucia Basins, California: Results from the PG&E/EDGE seismic reflection survey*, U. S. Geological Survey Bulletin 1995, Evolution of Sedimentary Basins - Onshore Oil and Gas Investigations - Santa Maria Province.
-

-
- Adams, D. C., K. C. Miller, and H. Kargi, 1997, *Reconciling physical properties with surface seismic data from a layered mafic intrusion*, Tectonophysics, v. 271, pp. 59-74.
- Flidner, M. M., S. D. Ruppert, P. E. Malin, S. K. Park, G. R. Jiracek, R. A. Phinney, J. B. Saleeby, B. P. Wernicke, R. W. Clayton, G. R. Keller, K. C. Miller, C. H. Jones, J. H. Luetgert, W. D. Mooney, H. L. Oliver, S. L. Klemperer, G. A. Thompson, 1996, *Three-dimensional crustal structure of the southern Sierra Nevada from seismic fan profiles and gravity modeling*, Geology, v. 24, pp. 367-370.
- Wernicke, B., R. Clayton, M. Ducea, C. H. Jones, S. Park, S. Ruppert, J. Saleeby, J. K. Snow, L. Squires, M. Flidner, G. Jiracek, R. Keller, S. Klemperer, J. Luetgert, P. Malin, K. Miller, W. Mooney, H. Oliver, and R. Phinney, 1996, *Origin of high mountains in the continents: The southern Sierra Nevada*, Science, v. 271, pp. 190-193.
- Pingitore, N. E., L. DuPlessis, *L. Lopez*, and K. C. Miller, and L. E. Murr, 1996, *Cracks and fractures in rocks: Geological Analysis with the Acoustic Microscope*, Acoustic Imaging, v. 22, pp. 719-724.
- Adams, D. C., and K. C. Miller, 1995, *Evidence for late Middle Proterozoic Extension in the Precambrian Basement Beneath the Permian Basin*, Tectonics, v. 14, pp. 1263-1272.
- Miller, K. C., and Mooney, W. D., 1995, *Reply to Comment: Crustal structure and composition of the southern Foothills Metamorphic Belt, Sierra Nevada, California, from Seismic data*. J. Geophys. Res., v. 100, p. 15,405.
- Miller, K. C., C. G. Barnes, D. C. Adams, H. Kargi, and G. R. Keller, 1995, *New Inferences on the Structure and Composition of Basement in the Permian Basin Region*, West Texas Geological Society Bulletin, v. 35, no. 2, p. 5-11.
- Malin, P. E., J. B. Saleeby, J. K. Snow, L. J. Squires, G. R. Jiracek, C. L. Kinn, R. A. Phinney, G. R. Keller, K. C. Miller, E. Shalev, M. Flidner, D. Jongmans, I. A. Pau, W. D. Mooney, J. Luetgert, H. W. Oliver, S. K. Park, R. W. Clayton, M. N. Ducea, B. Wernicke-B, C. H. Jones, S. D. Ruppert, 1995, *Project combines seismic and magnetotelluric surveying to address the Sierran root question*, Eos, Transactions, American Geophysical Union. v. 76; pp. 297-298.
- Pingitore, N. E., C. L. Gillespie, and K. C. Miller, 1995, *Imaging Geological Materials with the Acoustic Microscope*, v. 21, pp. 613-619.
- Miller, K. C., and Mooney, W. D., 1994, *Crustal structure and composition of the southern Foothills Metamorphic Belt, Sierra Nevada, California, from seismic data*. J. Geophys. Res., v. 99, pp. 6865-6880.
- Miller, K. C., and R. B. Hargraves, 1994, *Paleomagnetism of some Indian kimberlites and lamproites*, Precambrian Research, v. 69, pp. 259-267.
- Miller, K. C., 1993, *Crustal structure along the strike of the offshore Santa Maria Basin, California*, Tectonophysics, v. 219, pp. 57-69.
- Howie, J. M., Miller, K. C., and Savage, W. U., 1993, *Integrated crustal structure across the south-central California margin: Santa Lucia Escarpment to the San Andreas Fault*, J. Geophys. Res., v. 98, pp. 8173-8196.
- Miller, K. C., Howie, J. M. and Ruppert, S. D., 1992, *Shortening within underplated oceanic crust beneath the central California margin*, J. Geophys. Res., v. 97, pp. 19,961-19,980.

TECHNICAL REPORTS (REFEREED):

- Worthington, L., K. Miller, H. Hartse, W. Phillips, S. Harder, and A. Sheehan, 2012, *Crustal velocity heterogeneity and assessment of regional explosion discriminants in north-central Wyoming: Results from the Bighorns Arch seismic experiment (BASE)*, Proceedings of the 2012, Monitoring Research Review: Ground-Based Nuclear Explosion Monitoring Technologies, Albuquerque, 18-20 Sept., pp. 176-188.
- Worthington, L. L., K. C. Miller, S. H. Harder, and A. F. Sheehan, 2011, *Modeling crustal velocity heterogeneity in north central Wyoming: Results from the Bighorn arch seismic experiment (BASE) active source component*, Proceedings of the 2011, Monitoring Research Review: Ground-Based Nuclear Explosion Monitoring Technologies, Tucson, 13-15 Sept., pp. 206-213.
- Harder, S., K. Miller, and C. Snelson, 2011, *The relative effect of explosive charge configuration on seismic amplitudes*, Proceedings of the 2011, Monitoring Research Review: Ground-Based Nuclear Explosion

Monitoring Technologies, Tucson, 13-15 Sept., pp. 467-472.

- Miller, K. C., M. Arrowsmith, W. Phillips, S. Harder, *L. Worthington*, A. Sheehan, and M. Anderson, 2010, *Assessment of regional explosion discriminants using datasets of unparalleled spatial sampling: The Big Horns Array Seismic Experiment (BASE)*, Proceedings of the 2010 Monitoring Research Review: Ground-Based Nuclear Explosion Monitoring Technologies, pp. 146-149, <https://www.na22.doe.gov/review2010>.
- Brocher, T.M., T. L. Pratt, K.C. Miller, A.M. Trehu, *C.M. Snelson*, C.S. Weaver, K. C. Creager, R.S. Crosson, U.S. ten Brink, M.G. Alvarez, S.H. Harder, and I. Asudeh, 2000, *Report for explosion and earthquake data acquired in the 1999 Seismic Hazards Investigation in Puget Sound (SHIPS)*, Washington, U.S. Geological Survey Open-File Report 00-318, 85 p.
- Brocher, T. M., T. Parsons, K. C. Creager, R. S. Crosson, N. P. Symons, G. D. Spence, B. C. Zelt, P. T. C. Hammer, R. D. Hyndman, D. C. Mosher, A. M. Trehu, K. C. Miller, U. S. ten Brink, M. A. Fisher, T. L. Pratt, M. G. Alvarez, B. C. Beaudoin, K. E. Loudon, and C. S. Weaver, 1999, *Wide-angle seismic recordings from the 1998 Seismic Hazards Investigation of Puget Sounds (SHIPS), western Washington and British Columbia.*, U. S. Geol. Surv. Open-File Rep., 99-314.
- Luetgert, J. Mooney, W., Trehu, A., Nabelek, J., Keller, G. R., Miller, K., Asudeh, I., and B. Isbell, 1993, Data report for a seismic refraction/wide-angle reflection investigation of the Puget Basin and Willamette Valley in western Washington and Oregon, U. S. Geol. Surv. Open-File Rep., 93-347.
- Mooney, W. D., J. H. Luetgert, E. E. Criley, K. Miller, *J. M. Gridley*, G. R. Keller, A. M. Trehu, J. L. Nabelek, N. I. Christensen, 1992, *Probing the active subduction zone of the Pacific NW, USA.*, in, Proceedings of Conference LXII; eighth joint meeting of the U.S.-Japan conference on natural resources (UJNR), panel on earthquake prediction technology, November 16-21, 1992, U. S. Geol. Surv. Open File Rep., 93-0542, pp. 111-114.
- Paine, J. G., K. C. Miller, and *F. Hua*, *Seismic Reflection, Refraction and Surface Wave Studies at the Proposed Low Level Radioactive Waste Repository, Hudspeth County, Texas*, Texas Low-Level Radioactive Waste Disposal Authority, 1993.

PRESENTATIONS (LAST FIVE YEARS)

Miller, K. C., and R. Martinelli, 2018, *How Data, Collaboration & Partnership Drove Enrollment Gains at Wyoming*, Partner Session, Annual Meeting of the American Council of Education.

References to remaining presentations can be provided on request.

PROFESSIONAL DEVELOPMENT ACTIVITIES RELATED TO TEACHING

UTEP Institute for Educational Renewal, August 2001, November 2001, February 2002

CETaL Teaching Portfolio Workshop, September 1997.

Advanced Collaborative Learning Workshop, July 29 - August 1, 1997.

Collaborative Learning Workshop, August 12 - 16, 1996.

Macintosh and Internet Computer Applications for Geoscience Education, 1 day short course, December, 1995.

Society of Exploration Geophysicists Short Course: Near Surface Seismology, August, 1995.

AAPG short course on Seismic/Sequence Stratigraphy, November, 1992.

HONORS

Dean Emeritus, College of Geosciences, Texas A&M University, 2017

The Baldwin School Alumnae Award, 2013.

University of Texas System Chancellor's Council Award for Teaching Excellence, 2001.

Elected Fellow of the Geological Society of America, 1997.

Elected to Sigma Xi, 1982.

PROFESSIONAL AFFILIATIONS

American Geophysical Union, Geological Society of America, Society of Exploration Geophysicists.

PROFESSIONAL ACTIVITIES RELATED TO ADMINISTRATION

Member, Executive Committee, Western Academic Leadership Forum, WICHE, 2017-2020

Participant, American Council of Education New Provost Institute, 2016-2017

Presenter, NAGT/SERC Webinar: Early career negotiations: Negotiating for what you need to be successful, <http://serc.carleton.edu/NAGTWorkshops/careerdev/AcademicCareer2013/march.html>, March 2013.

40-hour Mediation Training, meets Texas Mediation Trainers Roundtable and Texas Mediator Credentialing Association training requirements, The Center for Change and Conflict Resolution, College Station, TX, May, 2012.

Protégé, Millenium Leadership Institute, American Association of Small Colleges and Universities, Washington, D.C., June 2011.

Panelist, session on, *The Dean's Role in Diversifying the Sciences: Best Practices for Recruiting, Retaining, & Ensuring the Success of Students*, 2010 Annual Meeting of the Council of Colleges of Arts and Sciences, New Orleans.

PROFESSIONAL ACTIVITIES RELATED TO GEOSCIENCE

External Reviewer, Department of Earth and Planetary Sciences, University of New Mexico, 2021.

Presenter, AGU/AGU Heads and Chairs Webinar on Vision and Change in the Geosciences: The Future of Undergraduate Geoscience Education, 2021.

Member, Geosciences Advisory Group to the Roundtable on Systemic Change in Undergraduate STEM Education. National Academies of Science, Engineering and Medicine, 2021.

Invited Participant, Scoping Meeting for the Development of a Quantitative Training Framework in Solid Earth Geophysics, National Academies of Science, Engineering and Medicine, 2021.

Panelist, NSF, Management Review of the Southern California Earthquake Center, 2019

Member, Board of Trustees, Consortium for Ocean Leadership, 2016

Panelist, Webinar on Teaching Introductory Geoscience Courses in the 21st Century, National Association of Geoscience Teachers, March, 2014.

Steering Committee Member, NSF Summit on the Future of Geoscience Education, January 2014, Austin, TX.

Member, Board of Trustees, Houston Advanced Research Center (HARC), 2014-2016

Co-organizer, Conference on Basement Cored-Uplifts, February, 2014, Tucson, Arizona

Executive Committee Member – At Large, Council of Environmental Deans and Directors, National Council for Science and the Environment (2013-2015)

Member, Board of Directors, Incorporated Research Institutions in Seismology, 2014.

Member, Board of Trustees, American Geosciences Institute Foundation (2013-present)

Member Institution Representative, Consortium for Ocean Leadership (2009-2016)

Member, Consortium for Ocean Leadership Sub-Committee on Scientific Ocean Drilling (2010-2016)

Member Institution Representative, University Consortium for Atmospheric Research (2009-2016)

Member Institution Representative, Incorporated Research Institutions in Seismology, (2009-2016)

External Consultant, Environmental Science and Engineering Ph.D. Program, University of Texas at Arlington, 2012.

External Reviewer, Conoco-Phillips School of Geology and Geophysics, University of Oklahoma, 2011.

Member, Program Review Team, Department of Geological Sciences and Engineering, University of Nevada, Reno, 2008.

Member, External Advisory Council, Southern California Earthquake Center, 2005-2010.

Member, Planning Committee, Incorporated Research Institutions in Seismology (IRIS) 2007-2009.

Member, Board of Directors, IRIS 2003-2005.

Panel Moderator, Ocean Leadership 2011 Public Policy Forum, Panel on Implications of the Deep Water Horizon Oil Spill for Offshore Oil and Gas Regulations and Production, March 9, 2011.

Panelist, NSF Earth Sciences Instrumentation and Facilities Program (2007), NSF GeoTeach Program (2006), NSF PIRE Program (2005), NSF Earthscope Program (2003-04); NSF Continental Dynamics Program (2008-

2010); UNAVCO NSF Management Review, 2011.
Member, IRIS - PASSCAL Standing Committee, 1998-2001.
Panelist, National Earthquake Hazards Reduction Program of the U. S. Geological Survey, 1996.
Technical Session Chair on a regular basis at professional meetings including, the fall meeting of the AGU, the annual GSA meeting, and sectional GSA and AAPG meetings.
Invited speaker for seminar series including presentations at University of Texas at Austin, New Mexico State University, New Mexico Tech, Texas Tech, University of Washington, UTEP Physics Department, UTEP Environmental Science and Engineering Program.
Reviewer of manuscripts submitted to a variety of journals including Tectonics, Journal of Geophysical Research, Geophysics, Geophysical Review Letters, Tectonophysics, GSA Today, Geological Society of America Bulletin, Canadian Journal of Earth Science, Geophysical Journal International.
Reviewer of grant proposals primarily for the National Science Foundation.

UNIVERSITY SERVICE

University of Wyoming

Member, AMK Ranch, Grand Tetons National Park, Visioning Task Force, 2019-2020
Member, University Innovation Task Force, 2019
Co-Chair, UW Facilities Council, 2018-2020
Member, Careers Everywhere Taskforce, 2018-2020
Chair, University Naming Committee, 2017-2020
Chair, Undergraduate Enrollment Governance Committee, 2017-2018
Chair, Strategic Planning Leadership Council, 2016-2017
Member, Financial Crisis Advisory Council, 2016

Texas A&M University

Convener of the Deans, 2015-2016
Member, Search Advisory Committee, Vice President for Information Technology and Chief Information Officer, 2015-present
Member, University Strategic Communication Executive Committee, 2015-present
Member, President's Executive Staff Council, 2015-present
Member, Council on Climate and Diversity, 2015-present
Chair, Search Advisory Committee, Dean of the College of Liberal Arts, 2014-2015
Steering Committee Chair, Grand Challenge to Ensure a Sustainable Society, 2012-present
Member, Steering Committee for Engineering 25x25, 2013-present
Member, University Council on Strategic Budgeting, Strategic Reallocation Sub-council, 2012-2014
Member, Vision 2020: Diversity and Globalization Study Team, 2011
Member, NSF ADVANCE Internal Advisory Board, 2010-present
Member, Council for the Built Environment, 2010-2012
Search Advisory Committee Member - Chief Executive Officer and Vice President, Texas A&M University at Galveston, 2010
Search Advisory Committee Member – Associate Vice-President for Graduate Studies, 2010
Member, Task Force on Faculty Evaluation, 2010

University of Texas at El Paso

Member, University Faculty Mentoring Program Task Force, 2008.
Member, NSF ADVANCE Institutional Advisory Board, 2004-2008.
Member, Provost's Ad Hoc Committee on Incorporating Education Activities into Promotion and Tenure Criteria, 2006-2007.
Member, Provost's Ad Hoc Committee on Graduate Stipends, 2006.
Member, Search Committee, College Administrative Officer, 2006.
Member, Centennial Research Task Force, 2004-2005.

Member, University Compliance Committee, 2001-2003.
Member, University Distinguished Achievement Awards Committee, 2001.
Member, Physics Chair Search Committee, 1999.
Member, Center for Environmental Resource Management Director Search Committee, 1999.
Faculty Senate Member, 1994-1996
Member, William L. Staley Student Research Grant Selection Committee, 1995-1998
Member, Faculty Senate Committee on Information Technology 1997-1999, served as Vice-Chair, 1998-1999
Member, Faculty Senate Committee on Admissions and Academic Standards 1994-1997; served as Committee Secretary, 1995-1996; Vice-Chair, 1996-1997
MIE B. S. Environmental Science Committee, Chair, 1999-2000
Member, MIE Curriculum Committee, 1997
NRTS Faculty Liaison and Web Page Manager, 1995 - 1998
Department Undergraduate Advisor, 1995 - 1998
Department Undergraduate Curriculum Committee, 1997-1998
Department Scholarship Committee, 1993 - 1998
Department Computer Committee, 1993 - 2008
Department Graduate Seminar Coordinator, 1993 – 1994; 2005-2006.