

VITA

Diane Irene Doser

Department of Geological Sciences, University of Texas at El Paso
El Paso, Texas 79968-0555
(915) 747-5851(office), (915)-747-5073(FAX), email: doser@ utep.edu

Education

- 1978 BS with high honors in Applied Geophysics, Michigan Technological University
- 1980 MS Geophysics, University of Utah
- 1984 Ph.D. Geophysics, University of Utah

Professional Experience

- 1996-present Professor, Director Kidd Memorial Seismic Observatory, Department of Geological Sciences, University of Texas at El Paso
- 2004-2008 Chair, Department of Geological Sciences
- 2000-2003 Director, BS in Environmental Science Program, MS in Interdisciplinary Science Program
- 1991-1996 Associate Professor, Director Kidd Memorial Seismic Observatory, Department of Geological Sciences, University of Texas at El Paso
- 1986-1991 Assistant Professor, Department of Geological Sciences, University of Texas at El Paso
- 1984-1985 Bantrell Postdoctoral Fellow in Geophysics, Seismological Laboratory, California Institute of Technology

Professional and Honor Societies

Registered Professional Geoscientist (in geophysics), State of Texas, license no. 4787
American Geophysical Union, Seismological Society of America, Environmental and Engineering Geophysical Society, Geological Society of America, National Association of Geoscience Teachers, Tau Beta Pi, Sigma Pi Sigma, Phi Kappa Phi, Sigma Xi

Awards

- 2016 Seismological Society of America Distinguished Service Award
- 2015 UTEP Dept. Geol. Sciences, Undergraduate Student Choice Award for Outstanding Teaching
- 2010 Univ. of Texas System Regents' Outstanding Teaching Award
- 1999 Distinguished Achievement Award in Research, University of Texas at El Paso
- 1997 Academy of Geological Engineering and Sciences, Michigan Technological University

Other Professional Activities

- 2016 member, Fulbright U.S. student grant program panel
- 2011-present member, American Chemical Society Petroleum Research Fund Advisory Board
- 2010-2016 editor in chief, Bulletin of the Seismological Society of America
- 1996-2010 associate editor, Bulletin of the Seismological Society of America
- 2009-2012 faculty fellow, Center for Excellence in Teaching and Learning (CETaL)
- 2009-present member, Building Strong Geoscience Depts. visiting workshop program
- 2008-2009 faculty fellow, Kauffman Campus Initiative
- 2004-2007 member, executive committee, American Geophysical Union board of heads and chairs of academic geoscience departments/programs
- 1997-present member, geophysical advisory board, Michigan Technological University
- 1997-present member, Presidential Council of Alumnae, Michigan Technological University

Publications, Refereed Journals (2013-2016)

*=student author

Abercrombie, R. E., S. Bannister, J. Ristau, and D. Doser, Variability of earthquake stress drop in a subduction setting, the Hikurangi Margin, New Zealand, in press, *Geophys. J. Internat.*, Nov. 2016.

Doser, D.I., and J. I. Villalobos, Mentoring instructors to teach about Earth for a sustainable future, Proceedings 9th Annual Mentoring Conference, University of New Mexico, October 24-28, 2016.

Avila, V.M.*, D. Doser, O.S. Dena-Ornelas, M.M. Moncada*, and S. S. Marrufo-Cannon*, Using geophysical techniques to trace active faults in the urbanized northern Hueco Bolson, west Texas, USA, and northern Chihuahua, Mexico, *Geosphere*, 12, 264-280, 2016.

Dena, O.S., D. Doser, G.J. Obeso*, and V.M. Avila*, Integrated geophysical and hydrological studies to partially recharge the Bolson del Hueco aquifer, in revision for *Geofisica Internacional*, November, 2016.

Doser, D.I., and P. Galvan*, Determining location and magnitude of historic (pre-1963) events in the Rio Grande rift region using intensity information, *Bull. Seismol. Soc. Amer.*, 105 (3), 1562-1575, doi:10.1786/0120140264, 2015.

Chapman, J.B.*, J. Elliot, D.I. Doser, and T.L. Pavlis, Slip on the Suckling Hills splay fault during the 1964 Alaska earthquake, *Tectonophysics* 637, 191-197, 2014.

Doser, D.I., C. Manduca, and D. Rhodes, Recruiting and supporting diverse geoscience and environmental science students, *Eos Trans. Amer. Geophys. Union*. 95, No. 32, 289, 2014.

Doser, D. I., Seismicity of Southwestern Yukon, Canada, and its Relation to Slip Transfer Between the Fairweather and Denali Fault Systems, *Tectonophysics*, 611, 121-129, 2014.

Escudero, C. R. *, and Doser, D. I., Relative Source Time Function Studies of Earthquakes along the Denali –Totschunda Fault System. *Bulletin Seismological Society of America*, 103, 3094-3103, 2013.

Doser, D.I., and J.I. Villalobos, Mentoring to strengthen the 2-Yr to4-Yr Pipeline of Geology Students, Proceedings 6th Annual Mentoring Conference, University of New Mexico, October 29-Nov. 1, 2013.

Mankhemthong*, N., D.I. Doser, and T. L. Pavlis, Interpretation of gravity and magnetic data and development of 2D cross-sectional models for the Border Ranges fault system, south-central Alaska, *Geosphere* 9, 2, 242-259, 2013.

Wamalwa*, A.M., K. L. Mickus, L.F. Serpa and D.I. Doser, A joint geophysical analysis of the Coso geothermal field, south-eastern California, *Phys. Earth Planet. Int.*, v. 214, no. 1, 25-34, 2013.

Abstracts (2014-2016)

*=student author

Doser, D.I., and M.J. Hussein, Use of InTeGrate materials to teach about sustainability in an upper division geology course for civil engineering students, paper 322-4, *Geol. Soc. Amer. Annual Meeting*, 2016.

Manduca, C.A., T.J. Bralower, D.I. Doser, A.E. Egger, D. McConnell, InTeGrate: Interdisciplinary teaching about the earth for a sustainable future, paper 214-7, *Geol. Soc. Amer. Annual Meeting*, 2016.

Doser, D.I., The rewards and challenges of encouraging instructors to adopt InTeGrate materials, *Earth Educator's Rendezvous*, Madison, WI, http://serc.carleton.edu/earth_rendezvous/2016/program/posters/tuesday/136344.html, July 2016

Doser, D.I., V.M. Avila*, O.S. Dena-Ornelas, M. Hiebing*, and L. Ma, Using geophysics and geochemistry to trace Quaternary faults in the El Paso, Texas – Ciudad Juarez, Chihuahua region, abstract 15-475, Seismol. Soc. Amer. Meeting, Reno, NV, 2016.

Hiebing*, M., L. Ma and D. Doser, Combining geochemistry and geophysics to pinpoint sources of salinity in the Rio Rande and the relationship to faults, National Groundwater Assoc. Summit, April 24-27, Denver, CO, 2016.

Ziwu*, F., L. Serpa and D. Doser, Geophysical investigations of hot springs in the vicinity of Shoshone, California, abstract 4-2, Geol. Soc. Amer. Cordilleran section meeting, Abstracts with Programs, v. 48, no. 4, 2016.

Doser, D.I., J. I. Villalobos, A.E. Perez and L. Ma, Collaborative teaching about Earth using InTeGrate materials, Sun Conference on Teaching and Learning, Univ. Texas at El Paso, March 16-17, 2016.

Villalobos, J., A. Perez, and D.I. Doser, A trans-disciplinary approach in teaching earth science: integrating environmental justice into earth science curriculum utilizing an InTeGrate teaching module, abstract 273-6, GSA Annual Meeting, 2015.

Doser, D. I., V.M. Avila*, O. Dena, P. Budhathoki*, A. Thapalia*, M. Moncada*, C. Montana, and G. Kaip, Determining basin structure of the Hueco and southern Mesilla Bolsons, west Texas, southern New Mexico and northern Chihuahua: Geophysical challenges in an urban setting, abstract 181-4, GSA Annual Meeting, 2015.

Doser, D. I., E. J. Walsh, L. Jin, V.L. Lougheed, and L.K. Hamdan, Lessons learned from years 1 and 2 of the TIERA (Training in Environmental Research and Academic success) program, abstract 11-13, GSA Annual Meeting, 2015.

Egger, A. E., C. Baldassari, D.I. Doser, K. Herbstrith, E. Iverson, S. Lee, C.A. Manduca, D.A. McConnell, M.A. Pelch, and D.N. Steer, Taking a systems approach to supporting faculty in transforming teaching and learning, abstract 89-2, GSA Annual Meeting, 2015.

Doser, D., J. Villalobos, and A. Perez, Implementation of InTeGrate modules in the El Paso higher education community, presented at Earth Educator's Rendezvous, Boulder, CO, http://serc.carleton.edu/earth_rendezvous/2015/program_table/abstracts/100639.html, July 2015

Glover*, C.O., D.I. Doser and S.M. Schinagel*, Continuing geophysical analysis of seismically active structures in the Matanuska-Susitna valley region near Anchorage, Alaska, Seism. Res. Lett. 86, 2B, 686, 2015.

Doser, D.I., J.I. Villalobos, and A. E. Perez, Implementation of InTeGrate modules into introductory courses in the El Paso higher education community, abstract ED43B-3466, presented American Geophysical Union Fall Meeting, December 2014.

Abercrombie, R., B. Fry and D. Doser, Scaling and stress release in the Darfield-Christchurch, New Zealand earthquake sequence, abstract S53B-4498, presented at American Geophysical Union Fall Meeting, December 2014.

Ziwu, F.*, L. Serpa, D. Doser and E. Hagedorn, Geophysical investigation of hot springs within the vicinity of Shoshone, California, abstract NS33A-3962, presented at American Geophysical Union Fall Meeting, December 2014.

Chapman*, J.B., J. Elliott, D.I. Doser and T.L. Pavlis, Slip on the Suckling Hills splay fault during the 1964 Alaska earthquake, vol. 46.6, pp. 234, Geol. Soc. Amer. Abstracts with Programs 2014.

Barnes*, K.E., D.I. Doser, and R.E. Abercrombie, Stress drop studies of earthquakes in the southern North Island and Cook Strait region of New Zealand, Seismol. Res. Lett., v.85, no. 2, 528, 2014.

Doser, D.I., Waveform modeling of large earthquakes of the southern Fairbanks seismic zone, Alaska (1929-1947), Seismol. Res. Lett., v.85, no. 2, 501, 2014.

Chapman*, J.B., J. Elliott, D.I. Doser, and T.L. Pavlis, Slip on the Suckling Hills splay fault during the 1964 Alaska earthquake, Seismol. Res. Lett., v.85, no. 2, 483, 2014.

Abercrombie, R.E., Fry, B., Doser, D.I., and Gerstenberger, M., Improving stress drop measurements from EGF- scaling and stress release in the Darfield-Christchurch, New Zealand earthquake sequence, Seismol. Res. Lett., v.85, no. 2, 533, 2014.

Webinars (2014-2016)

http://serc.carleton.edu/integrate/workshops/webinars/2015_2016/envirojustice/index.html

(Doser presentation on “*Connecting Science to Issues of Justice in Your Course*”) (February 25, 2016)

http://serc.carleton.edu/integrate/workshops/webinars/2015_2016/diverse_students/index.html

(Doser presentation on “*Working with Diverse Students on Societally Relevant Issues*”) (May 11, 2016)

http://serc.carleton.edu/integrate/workshops/webinars/2016_2017/diversity_equity/index.html

(Doser presentation on “*The Importance of Diversity and Equity in Supporting the Whole Student*”) (September 22, 2016)

Other Presentations/Workshops (2014-2016)

Doser, D.I., and J. Villalobos, Preparing two-year college students for success at four-year colleges, invited, Annual Meeting of Texas Community College Teachers Association, Houston, Texas, February 25-27, 2016.

Doser, D., and G. Weissman, National Assoc. Geoscience Teachers, Traveling Workshop, Program, workshop at Univ. Idaho, Moscow, ID, April 9-10, 2016.

Doser, D., and D. Gosselin, National Assoc. Geoscience Teachers, Traveling Workshop, Program, workshop at Univ. of Washington-Bothell, Bothell, WA, Sept. 17-18, 2015.

Doser, D.I., and J. Villalobos, Building Bridges from 2YC to 4YC, invited presentation, Summit on the Future of Undergraduate Education, Austin, Texas, January 8-10, 2016. (see http://www.jsg.utexas.edu/events/files/Doser-Diane_Villalobos-Joshua.pdf)

Doser, D. and W. Robinson, National Assoc. Geoscience Teachers, Traveling Workshop, Program, workshop at Lincolnland Community College for geoscience instructors at Illinois community colleges, Springfield, IL, March 20, 2015.

Ebert, J., and D. Doser, National Assoc. Geoscience Teachers, Traveling Workshop, Program, workshop at West Chester University of Pennsylvania, West Chester, PA, February 20-21, 2015.

Doser, D.I., G. Weissman, D. Rhodes, J. Villalobos and J. McDaris, workshop conveners, Broadening Access to the Earth and Environmental Sciences, American Geophysical Union Meeting, December 2014. (see <http://fallmeeting.agu.org/2014/events/broadening-access-to-the-earth-and-environmental-sciences/> and <http://nagt.org/dev/nagt/profdev/AGU/diversityAGU14.html>)

Doser, D.I., Supporting the 2YC transfer student at UT El Paso, webinar sponsored by National Assoc. Geoscience Teachers/SAGE 2YC (Supporting and Advancing Geoscience Education in Two-year Colleges), November 21, 2014. (see <http://serc.carleton.edu/sage2yc/webinars/2yc4yctransfer.html>)

Doser, D.I., and Villalobos, J.I., Strengthening the 2 YC to 4 YC pipeline of geology students, workshop on “Broadening Access to Earth and Environmental Science” held at Arizona State Univ., Feb. 23-25, 2014 (see http://serc.carleton.edu/integrate/workshops/broaden_access/program.html for power point slides)

Research grants (2014-2016)

funded:

National Science Foundation:

9/1/16-8/31/19, REU Site: UTEP-ROCCS (University of Texas at El Paso – Research Experience for Community College Students), (D. Doser, PI, and J. Villalobos, El Paso Commun. College, co-PI), \$330,532.

8/16-9/18, Improved STEM education for 21st century environmental scientists through stratified mentoring and professional networking, (L. Jin PI, D. Doser, V. Loughheed, E. Walsh, co-PIs), \$298,431.

9/1/11-8/31/15 Collaborative research: New Zealand as a natural laboratory to investigate earthquake stress variations (with R. Abercrombie, Boston University), \$216,400 (UTEP portion) (D. Doser-PI)

1/1/12-12/31/17 InTeGRATE: Interdisciplinary Teaching of Geoscience for a Sustainable Future (part of a DUE-GEO STEP Center proposal) (K. Manduca-PI, Carleton College, D. Doser co-PI), \$201,467 (UTEP portion)

Department of Education:

10/1/13-9/30/16 TIERA: Training in Environmental Research and Academic Success (E. Walsh, PI, D. Doser, E. Hagedorn, L. Jin and V. Lougheed co-PIs) \$604,868.

Howard Hughes Medical Institute

9/14-8/19 UTEP Program to Educate and Retain Students in STEM Tracks (PERSIST) (S. Aley, PI, D. Doser senior personnel) \$2,400,000

pending:

National Science Foundation:

9/17-8/20 GP-Impact: Service learning activities targeting the earth sciences (SLATES) (D. Doser, PI; R. Langford, J. Villalobos (El Paso Commun. College), R. Rohrbaugh (El Paso Commun. College) co-PIs, \$174,701

not funded:

Department of Education:

6/16-5/19, SUCCESS: Supporting Undergrad College Completion for Environmental Science Students, (L. Jin PI, D. Doser, V. Lougheed, E. Walsh, co-PIs), \$3,247,571

National Science Foundation:

6/15-5/19 Hazard SEES: Transnational Infrastructure and Natural Disaster Thresholds (A. Velasco PI, D. Doser senior researcher) \$2,999,674

4/1/15-3/31/18, REU Site: UTEP-ROCCS (University of Texas at El Paso – Research Experience for Community College Students), (D. Doser, PI, and J. Villalobos, co-PI), \$325,700.

5/1/15-4/30/17, Improved STEM education for 21st century environmental scientists through stratified mentoring and professional networking, (L. Jin, PI, D. Doser, V. Lougheed, E. Walsh, co-PIs), \$247,471

National Earthquake Hazard Reduction Program (U.S. Geol. Survey):

6/1/16-5/31/17 Seismological studies of the central and northern Queen Charlotte fault system, (Doser, PI) \$42,837

6/1/14-5/31/15 Seismological studies of the Queen Charlotte fault system (1927-2013), (Doser, PI) \$54,308

Department of Defense (ARO):

6/14/14-6/13/15, Enhancing and Upgrading the Laboratory for Engineering and Environmental Geophysics (LEEG) at the University of Texas at El Paso, (D. Doser, PI, and S. Nazarian, co-PI), \$360,488

U.S. Department of Agriculture:

9/15-8/19 Innovations in Experiential Learning for 21st Century Agricultural and Natural Resources Scientists, (L. Jin-PI, D. Doser, W. Hargrove, S. Mubako, V. Lougheed, and E. Walsh co-PIs), \$274,955

9/1/14-8/31/18 Innovations in experiential learning for 21st century environmental scientists, (L. Jin-PI, D. Doser, W. Hargrove, S. Mubako, V. Lougheed, and E. Walsh co-PIs), \$299,955