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APPOINTMENTS

2007-present	Associate Professor, Dept. Geosciences, Penn. State University
2005-2007	Assistant Professor, Dept. Geosciences, Penn. State University
2001-2004	Assistant Professor, Geology & Geophysics, University of Wyoming
1999-2001	NRC Research Associate, U.S.G.S., Menlo Park, California
1999-2001	Research Fellow, IGPP, University of California Santa Cruz

EDUCATION

1999	Ph. D., Earth Sciences	University of California, Santa Cruz
1995	B. A., Geology, <i>summa cum laude</i>	Williams College

HONORS AND AWARDS

2011	The Island Arc Award (best paper award, Wiley Blackwell)
2010	Consortium for Ocean Leadership Distinguished Lecturer (2010-2011)
2010-2011	Science plan writing committee , Integrated Ocean Drilling Program renewal (<i>invited</i>)
2009	Friedrich Wilhelm Bessel Research Award , Alexander von Humboldt Foundation
2009	Co-chief scientist , IODP expedition #319 (<i>first riser drilling in IODP</i>)
2006	Kavli Fellow ; invited participant in 12 th annual National Academy of Sciences – Alexander von Humboldt Foundation “Frontiers of Science” symposium.
2006	Fellow , Geological Society of America
2005	Donath Medalist (Geological Society of America’s young scientist award)
2004	Invited, Joint DFG-NSF Conference for outstanding young researchers, Wash., DC
1999-2001	National Research Council Post-doctoral Associateship
1998-1999	Teaching Assistant of the Year, Campus-wide award, U.C. Santa Cruz
1998-1999	Teaching Assistant of the Year, Earth Sciences Board, U.C. Santa Cruz
1995	National Science Foundation Graduate Fellowship
1995	David N. Major Prize in Geology, Williams College
1995	Geological Society of America, Outstanding Student Presentation

RESEARCH INTERESTS

Subseafloor instrumentation	Coupled deformation and fluid flow
Role of fluids in fault and earthquake mechanics	Regional scale fluid, solute, and heat transport

COURSES TAUGHT

The Pennsylvania State University:

GEOSC 440:	Marine Geology (upper level Undergraduate course)
GEOSC 452:	Hydrogeology (upper level Undergraduate course)
GEOSC 542:	Groundwater Modeling (Graduate lecture course)
GEOSC 598:	Geofluids / Subduction Zones Seminar (Graduate seminar)
EARTH 111 / 111-U:	Water: Science and Society (General education: GN and US Cultures)

University of Wyoming:

GEOL 5200:	Crustal Geomechanics: Faults, Fracture, and Fluids (Graduate course)
GEOL 4200:	Fluids in Geologic Processes (Graduate course)
GEOL 4444/5444:	Geohydrology (Undergraduate course)
GEOL 1070:	The Earth: Its Physical Environment (Non-majors course for education students)

PUBLICATIONS AND PAPERS IN PRESS
(Total Citations = 962, h = 17; as of Oct., 2011)

¹ denotes that Saffer acted as primary advisor for student or post-doctoral first author

² denotes that Saffer acted as co-advisor for student or post-doctoral first author's work

- 63) Ikari, M.J., Strasser, M., **Saffer, D.M.**, and Kopf, A.J. (2011), Submarine Landslide Potential Near the Megasplay Fault Tip at the Nankai Subduction Zone, accepted pending revision, *Earth Planet. Sci. Lett.*
- 62) ¹Ikari, M.J., and **Saffer, D.M.** (2011), Permeability Contrasts Between Sheared and Normally Consolidated Sediments in the Nankai Accretionary Prism, accepted pending revision, *Marine Geology*.
- 61) ²Song, I., **Saffer, D.M.**, and Flemings, P.B. (2011), Mechanical characterization of slope sediments: Constraints on in situ stress and pore pressure near the tip of the megasplay fault in the Nankai accretionary complex, *Geochem., Geophys., Geosystems*, Q0AD17, doi:10.1029/2011GC003556.
- 60) **Saffer, D.M.** and Tobin, H. (2011), Hydrogeology and Mechanics of Subduction Zone Forearcs: Fluid Flow and Pore Pressure, *Annu. Rev. Earth Planet. Sci.*, 39, doi:10.1146/annurev-earth-040610-133408.
- 59) ²Carpenter, B.M., Marone, C., and **Saffer, D.M.** (2011), Weakness of the San Andreas Fault revealed by samples from the active fault zone, *Nature Geoscience*, 4, doi:10.1038/NGEO1089
- 58) ¹Popek, M.A., and **Saffer, D.M.** (2011), Heat advection by groundwater flow through a heterogeneous permeability crust: A potential cause of scatter in surface heat flow near Parkfield, California, *J. Geophys. Res.*, doi:10.1029/2010JB008081.
- 57) ²Ikari, M., and **Saffer, D.M.** (2011), Comparison of frictional strength and velocity dependence between fault zones in the Nankai accretionary complex, *Geochem., Geophys., Geosystems*, doi:10.1029/2010GC003442.
- 56) Moore, G.F., **D. Saffer**, M. Studer, and P. C. Pisani (2011), Structural restoration of thrusts at the toe of the Nankai Trough accretionary prism off Shikoku Island, Japan: Implications for dewatering processes, *Geochem. Geophys. Geosyst.*, doi:10.1029/2010GC003453
- 55) **Saffer, D.M.**, Guo, J., Underwood, M.B., Likos, W., Skarbak, R.M., Song, I., and Gildow, M. (2011), Data Report: Consolidation and Permeability of sediments from the Nankai continental slope, IODP Sites C0001, C0008, and C0004, NanTroSEIZE Stage 1, *Proc. IODP*, 314/315/316: doi:10.2204/iodp.proc.314315316.218.2011.
- 54) Guo, J., Likos, W.J., Underwood, M.B., Skarbak, R.M., Adamson, N., **Saffer, D.M.** (2011), Data Report: Consolidation Characteristics of Sediments from Sites C0002, C0006, and C0007, IODP Expeditions 315 and 316, NanTroSEIZE Stage 1, in press, *Proc. IODP*, 314/315/316.
- 53) Doan, M.-L., M. Conin, P. Henry, T. Wiersberg, D. Boutt, D. Buchs, **D. Saffer**, L. C. McNeill, D. Cukur, and W. Lin (2011), Quantification of free gas in the Kumano fore-arc basin detected from borehole physical properties: IODP NanTroSEIZE drilling Site C0009, *Geochemistry, Geophysics, Geosystems*, 12, Q0AD06, doi:10.1029/2010GC003284
- 52) ²Ikari, M.J., Marone, C., **Saffer, D.M.** (2011), On the relation between fault strength and frictional stability, *Geology*, 39, p. 83–86; doi: 10.1130/G31416.1.
- 51) Long, H., Flemings, P.B., Germaine, J.T., and **Saffer, D.M.** (2011), Consolidation and Pore Fluid Pressure of Ursa Sediments, Deepwater Gulf of Mexico, *Earth Planet. Sci. Lett.*, doi:10.1016/j.epsl.2011.02.007.
- 50) McNeill, L., **Saffer, D.M.**, Byrne, T.B., Araki, E., et al. (2010), IODP Expedition 319, NanTroSEIZE Stage 2: First IODP Riser Drilling Operations and Observatory Installation Towards Understanding Subduction Zone Seismogenesis, *Scientific Drilling*, doi: 10.2204/iodp.sd.10.01.2010

- 49) ¹Fulton, P.M., Harris, R.N., **Saffer, D.M.**, and Brodsky, E.E. (2010), Does Hydrologic Circulation Mask Frictional Heat on Faults after Large Earthquakes?, *J. Geophys. Res.*, 115, B09402, doi:10.1029/2009JB007103.
- 48) Lin, W-L., Doan, M-L., Moore, J.C., McNeill, L., Byrne, T.B., Ito, T., **Saffer, D.M.**, et al. (2010), Present-day principal horizontal stress orientations in the Kumano forearc basin of the southwest Japan subduction zone determined from IODP NanTroSEIZE drilling Site C0009, *Geophys. Res. Lett.*, 37, L13303, doi:10.1029/2010GL043158.
- 47) **Saffer, D.M.** (2010), Hydrostratigraphy as a control on subduction zone mechanics through its effects on drainage: An example from the Nankai margin, SW Japan (*invited*), *Geofluids* (10th anniversary special issue “*Frontiers in Geofluids*”), doi:10.1111/j.1468-8123.2009.00276.x
- 46) ²Ikari, M.J., **Saffer, D.M.**, and Marone, C. (2009) Frictional and hydrologic properties of a major splay fault system, Nankai subduction zone, *Geophys. Res. Lett.*, 36, L20313, doi:10.1029/2009GL040009
- 45) ¹Skarbek, R.M., and **Saffer, D.M.** (2009), Pore pressure development beneath the décollement at the Nankai subduction zone: Implications for plate boundary fault strength and sediment dewatering, *J. Geophys. Res.*, 114, B07401, doi:10.1029/2008JB006205.
- 44) Tobin, H.J., and **Saffer, D.M.** (2009), Elevated Fluid Pressure and Extreme Mechanical Weakness of a Plate Boundary Megathrust, Nankai Trough Subduction Zone, *Geology*, 37, 679-682, doi: 10.1130/G25752A.1.
- 43) ¹Fulton, P.M., **Saffer, D.M.**, and Bekins, B.A. (2009), A critical evaluation of crustal dehydration as the cause of a weak and overpressured San Andreas Fault, *Earth Planet. Sci. Lett.*, 284, 447-454, doi:10.1016/j.epsl.2009.05.009.
- 42) ¹Fulton, P.M., and **Saffer, D.M.** (2009), The Effect of Thermal Refraction on Heat Flow near the San Andreas Fault, Parkfield, CA., *J. Geophys. Res.*, 114, B06408, doi:10.1029/2008JB005796.
- 41) ¹Fulton, P.M., and **Saffer, D.M.** (2009), Potential role of mantle-derived fluids in weakening the San Andreas Fault, *J. Geophys. Res.*, 114, B07408, doi:10.1029/2008JB006087.
- 40) ²Ikari, M.J., **Saffer, D.M.**, and Marone, C. (2009), Frictional and Hydrologic Properties of Clay Rich Fault Gouge, *J. Geophys. Res.*, 114, B05409, doi:10.1029/2008JB006089.
- 39) ²Carpenter, B.M., Marone, C., and **Saffer, D.M.** (2009), Frictional Behavior of Materials in the 3D SAFOD Volume, *Geophys. Res. Lett.*, 36, L05302, doi:10.1029/2008GL036660.
- 38) **Saffer, D.M.**, and McKiernan, A.W. (2009), Evaluation of in situ smectite dehydration as a pore-water freshening mechanism in the Nankai Trough, offshore southwest Japan, *Geochemistry, Geophysics, Geosystems*, 10, Q02010, doi:10.1029/2008GC002226.
- 37) Haines, S.H., van der Pluijm, B.A., Ikari, M., **Saffer, D.M.**, and Marone, C. (2009), Clay fabrics in natural and artificial fault gouge, *J. Geophys. Res.*, 114, B05406, doi:10.1029/2008JB005866.
- 36) ²Hornbach, M.J., **Saffer, D.M.**, Holbrook, W.S., Van Avendonk, H., and Gorman, A.R. (2008), 3D seismic imaging of the Blake Ridge methane hydrate province: evidence for large concentrated zones of gas hydrate and morphologically-driven advection, *J. Geophys. Res.* 113, B07101.
- 35) **Saffer, D.M.**, Underwood, M.B., and McKiernan, A.W. (2008), Evaluation of factors controlling smectite transformation and fluid production in subduction zones: Application to the Nankai Trough, *The Island Arc*, doi:10.1111/j.1440-1738.2008.00614.
- 34) Long, H., Flemings, P.B., Germaine, J.T., and **Saffer, D.M.** (2008), Consolidation characteristics of sediments from IODP Expedition 308, Ursa Basin, Gulf of Mexico, *In* Flemings, P.B., Behrmann, J.H., John, C.M., and the Expedition 308 Scientists, *Proc. IODP*, 308: College Station, TX, doi:10.2204/iodp.proc.308.204.2008.
- 33) **Saffer, D.M.** (2007), Pore pressure at plate boundaries: Insights from geohydrologic modeling, edited by Ito, H. *et al.*, *Scientific Drilling, Special Issue #1*, doi: 10.2204/iodp.sd.s01.32.2007, 20-23.

- 32) **Saffer, D.M.** (2007), Pore pressure within underthrust sediments in subduction zones, *in Dixon, T. et al. (Eds.), The Seismogenic Zone of Subduction Thrust Faults, Columbia University Press*, p. 171-209.
- 31) Marone, C., and **Saffer, D.M.** (2007), Fault friction and the upper transition from seismic to aseismic faulting, *in Dixon, T. et al. (Eds.), The Seismogenic Zone of Subduction Thrust Faults, Columbia University Press*, p. 346-369.
- 30) ²Ikari, M.J., **Saffer, D.M.**, and Marone, C. (2007), Effect of hydration state on the frictional properties of montmorillonite-based fault gouge, *J. Geophys. Res.*, 112, B06423, doi:10.1029/2006JB004748.
- 29) ²Spinelli, G.A., and **Saffer, D.M.** (2007), Trench-parallel fluid flow in subduction zones resulting from temperature differences, *Geochem. Geophys. Geosyst.*, 8, doi:10.1029/2007GC001673.
- 28) **Saffer, D.M.**, and Bekins, B.A. (2006), An evaluation of factors influencing pore pressure in accretionary complexes: Implications for taper angle and wedge mechanics, *J. Geophys. Res.*, doi:10.1029/2005JB003990.
- 27) ²Spinelli, G., **Saffer, D.M.**, and Underwood, M.B. (2006), Effects of along-strike variability in temperature on the hydrogeology of the Nicoya margin subduction zone, Costa Rica, *J. Geophys. Res.*, doi:10.1029/2004JB003436.
- 26) ¹Payne A., and **Saffer, D.M.** (2005), Surface water hydrology and shallow groundwater effects of coalbed methane development, upper Beaver drainage, Powder River Basin, WY, *in Zoback, M.D. (Ed.), Wyoming State Geological Survey, Report of Investigations, v. 55*.
- 25) ²Hornbach, M.J., Ruppel, C.D., **Saffer, D.M.**, Van Dover, C.L., and Holbrook, W.S. (2005), Coupled geophysical constraints on heat flow and fluid flux at a salt diapir, *Geophys. Res. Lett.*, 32, L24617, doi:10.1029/2005GL024862.
- 24) ¹McKiernan, A.W., and **Saffer, D.M.** (2005), Data Report: Permeability and consolidation characteristics of sediments collected during ODP Leg 205, Costa Rica, *In Morris, J.D., Villinger, H.W., and Klaus, A. (Eds.), Proc. ODP, Sci. Results, 205*.
- 23) Screaton, E.J., and **Saffer, D.M.** (2005), Fluid Expulsion and overpressure development during initial subduction at the Costa Rica convergent margin, *Earth Planet. Sci. Lett.*, 233, 361-374.
- 22) **Saffer, D.M.**, and McKiernan, A.W. (2005), Permeability of underthrust sediments at the Costa Rican margin: Scale dependence and implications for dewatering, *Geophys. Res. Lett.*, 32, L02302, doi:10.1029/2004GL021388.
- 21) ¹Fulton, P., **Saffer, D.M.**, Harris, R.N., and Bekins, B.A. (2004), Re-evaluation of heat flow data near Parkfield, CA: Evidence for a weak San Andreas Fault, *Geophys. Res. Lett.*, 31, L15S15, doi: 10.1029/2003GL019378.
- 20) ¹Spinelli, G., and **D. M. Saffer** (2004), Along-strike variations in underthrust sediment dewatering on the Nicoya margin, Costa Rica, related to the updip limit of seismicity, *Geophys. Res. Lett.*, 31, L04613, doi: 10.1029/2003GL018863.
- 19) ¹Hornbach, M.J., **Saffer, D.M.**, and Holbrook, W.S. (2004), Critically pressured gas reservoirs below hydrate provinces, *Nature*, 427, 142–144, doi: 10.1038/nature02172.
- 18) **Saffer, D.M.**, and Marone, C.J. (2003), Comparison of smectite- and illite-rich gouge frictional properties: Implications for the updip limit of the seismogenic zone along subduction megathrusts, *Earth Planet. Sci. Lett.*, v. 215, p. 219-235.
- 17) **Saffer, D.M.**, Bekins, B.A., and Hickman, S.H. (2003), Topographically driven groundwater flow and the San Andreas heat flow paradox revisited, *J. Geophys. Res.*, 108 (B5), doi:10.1029/2002JB001849.
- 16) **Saffer, D.M.** (2003), Pore pressure development and progressive dewatering in underthrust sediments at the Costa Rican subduction margin: Comparison with Northern Barbados and Nankai, *J. Geophys. Res.*, 108 (B5), 2261, doi: 10.1029/2002JB001787.
- 15) **Saffer, D.M.**, and Sreaton, E.J. (2003), Fluid flow pathways at the toe of convergent margins: Interpretation of sharp geochemical gradients, *Earth Planet. Sci. Lett.*, 213, 261-270.

- 14) Orange, D., **Saffer, D.M.**, Jeanjean, P., Khafaji, Z., Riley, G., and Humphrey, G. (2003), Measurements and modeling of the pore pressure regime at the Sigsbee escarpment: Successful prediction of overpressure and ground-truthing with borehole measurements, *The Leading Edge*, 9, 906-913.
- 13) Henry, P., L. Jouriaux, E. Screaton, S. Hunze, and **D.M. Saffer** (2003), Anisotropy of electrical conductivity records initial strain at the toe of the Nankai accretionary wedge, *J. Geophys. Res.*, 108, 2407, doi:10.1029/2002JB002287.
- 12) Holbrook, W.S., D. Lizarralde, I.A. Pecher, A.R. Gorman, K.L. Hackwith, M. Hornbach, and **D. Saffer** (2002), Expulsion of methane gas through sediment waves in a large methane hydrate province, *Geology*, 30, 467-470.
- 11) **Saffer, D.M.**, and Bekins, Barbara A. (2002), Hydrologic controls on the mechanics and morphology of accretionary wedges and thrust belts, *Geology*, 30, 271-274.
- 10) Screaton, E.J., **Saffer, D.M.**, Henry, Pierre, Hunze, Sabine, and Leg 190 Shipboard Scientific Party (2002), Porosity loss within underthrust sediments of the Nankai accretionary complex: Implications for overpressures, *Geology*, 30, 19-22.
- 9) Brown, K., **Saffer, D.M.**, and Bekins, B.A. (2001), Implications of smectite diagenesis and pore water freshening for fluid flow at the toe of the Nankai Wedge, *Earth Planet. Sci. Lett.*, 194, 97-109.
- 8) **Saffer, D.M.**, Frye, K., Marone, C., and Mair, K. (2001), Laboratory results indicating weak and potentially unstable frictional behavior of smectite clay, *Geophys. Res. Lett.*, 28, 2297-2300.
- 7) Moore, G.F., Taira, A., Klaus, A., Becker, L., Boeckel, B., Cragg, B.A., Dean, Al., Fergusson, C.L., Henry, P., Hirano, S., Hisamitsu, T., Hunze, S., Kastner, M., Maltman, A.J., Morgan, J.K., Murakami, Y., **Saffer, D.M.**, Sánchez-Gómez, M., Screaton, E.J., Smith, D.C., Spivack, A.J., Stuerer, J., Tobin, H.J., Ujiie, K., Underwood, M.B., and Wilson, M. (2001), New insights into deformation and fluid flow processes in the Nankai Trough accretionary prism: Results of Ocean Drilling Program Leg 190, *Geochemistry, Geophysics, Geosystems*, 2, 1058, doi:10.1029/2001GC000166.
- 6) Moore, J.C., and **Saffer, D.M.** (2001), Updip limit of the seismogenic zone beneath the accretionary prism of southwest Japan: An effect of diagenetic to low-grade metamorphic processes and increasing effective stress, *Geology*, 29, 183–186.
- 5) **Saffer, D.M.**, et al. (2000), Inferred pore pressures at the Costa Rica subduction zone: Implications for dewatering processes, *Earth Planet. Sci. Lett.*, 177, 193-207.
- 4) Silver, E.A., M. Kastner, A. T. Fisher, J. D. Morris, K. D. McIntosh, and **D.M. Saffer** (2000), Fluid Flow Paths in the Crust of the Middle America Trench, Costa Rica Margin, *Geology*, 28, p. 679-682.
- 3) **Saffer, D.M.**, and Bekins, B. A. (1999), Fluid budgets at convergent plate margins: Implications for the extent and duration of fault zone dilation, *Geology*, 27, 1095-1098.
- 2) **Saffer, D.M.**, and Bekins, Barbara A. (1998), Episodic fluid flow in the Nankai accretionary complex: Timescale, geochemistry, flow rates, and fluid budget, *J. Geophys. Res.*, 103, B12, 30,351.
- 1) **Saffer, D.M.** and Dethier, David P. (1996), Mechanics and stress analysis of the Pine Cobble landslide, Williamstown, Massachusetts, *Northeastern Geology and Environmental Sciences*, 18, 237-242.

OTHER PUBLICATIONS AND REPORTS

- 14) **Saffer, D.**, McNeill, L., Byrne, T., Araki, E., Toczko, S., Eguchi, N., Takahashi, K., and the Expedition 319 Scientists (2010), *Proc. IODP, 319*: Tokyo (Integrated Ocean Drilling Program Management International, Inc.). doi:10.2204/iodp.proc.319.2010, 388 pp.
- 13) **Saffer, D.M.**, McNeill, L., Araki, E., Byrne, T., Eguchi, N., Toczko, S., Takahashi, K., and the Expedition 319 Scientists (2009), NanTroSEIZE Stage 2: NanTroSEIZE riser/riserless observatory. *IODP Prel. Rept.*, 319, doi:10.2204/iodp.pr.319.2009, 82 pp.
- 12) E.E. Brodsky, Kuo-Fong Ma, Jim Mori, **D.M. Saffer**, and the participants of the ICDP/SCEC International Workshop (2009), Rapid Response Drilling: Past, Present, and Future, *Scientific Drilling*, doi:10.2204/iodp.sd.8.11.2009
- 11) ²Carpenter, B.M., Marone, C., and **Saffer, D.M.** (2009), *Featured Science*: Insights into frictional behavior of materials in and near SAFOD, *Earthscope OnSite Newsletter*.
- 10) Brodsky, E.E., Ma, K-F., Mori, J., and **Saffer, D.M.** (2009), Rapid Response Fault Drilling: Past, Present, and Future, *ICDP workshop report*, 30 pp.
- 9) Araki, E., Byrne, T., McNeill, L., **Saffer, D.**, Eguchi, N., Takahashi, K., and Toczko, S. (2009), NanTroSEIZE Stage 2: NanTroSEIZE riser/riserless observatory, *IODP Sci. Prosp.*, 319. doi:10.2204/iodp.sp.319.2009.
- 8) Bangs, N., Reed, D., **Saffer, D.M.**, and Schwartz, S.Y. (2009), Report of 2008 MARGINS-SEIZE Workshop: The Next Decade of The Seismogenic Zone Experiment, *MARGINS Newsletter #22*.
- 7) Morgan, J., Screaton, E.J., with advice from N. Bangs, **D. Saffer**, and S. Bilek (2008), The SEIZE Initiative: Status and Future Directions, *MARGINS Newsletter #20*.
- 6) Tobin, H., Kinoshita, M., Underwood, M., Kimura, G., **Saffer, D.**, Screaton, E., and Moore, G. (2006), NanTroSEIZE: IODP's First Complex Drilling Project, *JOI Newsletter*.
- 5) **Saffer, D.M.** (2004), Surface water hydrology and shallow groundwater effects of coalbed methane development, upper Beaver drainage, Powder River Basin, WY, report to Western Resources Project Foundation, 40 pp.
- 4) Harris, R.N., D.S. Chapman, K.P. Furlong, **D.M. Saffer** (2004), Thermal processes in the context of EarthScope, *EOS*, 85, 292.
- 3) Harris, R.N., D.S. Chapman, K.P. Furlong, **D.M. Saffer** (2004), Thermal processes in the context of EarthScope, *report to NSF-EAR (Earthscope)*, 39 pp.
- 2) Orange, D., **Saffer, D.M.**, Jeanjean, P., Khafaji, Z., Riley, G., and Humphrey, G. (2003), Measurements and modeling of the pore pressure regime at the Sigsbee escarpment: Successful prediction of overpressure and ground-truthing with borehole measurements, *Proceedings of the Offshore Technology Conference, paper #15201*.
- 1) **Saffer, D.**, et al. (1997), Vent survey by TV-Sled Explos, in Suess, Erwin, and Bohrmann, Gerhard (eds.), RV Sonne Cruise Report SO110, GEOMAR, Kiel, Germany.

ABSTRACTS AND PRESENTATIONS (>150 in total; selected abstracts listed below)

¹ denotes that Saffer was the primary advisor for the work

² denotes that Saffer was a co-advisor for the work

Boldface type denotes that Saffer was the presenting author

2011

- 107) **Saffer, D.M.**, 2011, Quantification of pore fluid pressure in active subduction zones: implications for fault strength and slip behavior (*invited*), Geological Society of America Fall Meeting.
- 106) ¹Kitajima, H., and Saffer, D.M., 2011, Effects of stress paths on physical properties of sediments at the Nankai Trough subduction zone, AGU Fall Meeting.
- 105) ¹Lipik, D., Kitajima, H., and Saffer, D.M., 2011, Geotechnical Testing of Slope Sediments on the Nankai accretionary prism: Implications for Erosion and Unroofing, AGU Fall Meeting.
- 104) ¹Olcott, K.A.H., Kitajima, H., and Saffer, D.M., 2011, Constraints on in situ stresses in the Nankai Trough, offshore SW Japan from borehole breakouts and laboratory measurements of rock strength, AGU Fall Meeting.
- 103) ¹Song, I., Rathbun, A.R., and Saffer, D.M., 2011, Uncertainty of permeability and specific storage due to experimental error during data acquisition for pulse-transient technique, AGU Fall Meeting.
- 102) **Saffer, D.M.**, 2011, Heat flow and Fluids on the San Andreas Fault (*invited*), Workshop on Scientific Research at the San Andreas Fault Observatory at Depth (SAFOD), Earthscope National Meeting.
- 101) ²Carpenter, B.M., Marone, C., and Saffer, D.M., 2011, Mechanical Behavior of the Active San Andreas Fault: Insights from laboratory experiments on intact core, Earthscope National Meeting.
- 100) Araki, E, Kopf, A.J., Saffer, D.M., Kitada, K., Kimura, T., Kinoshita, M., Kawaguchi, Y., Kaneda, U., and IODP Exp 332 Science party, 2011, Seafloor borehole observatories for monitoring slip events in the Nankai subducting plate boundary, Japan Geoscience Union Annual Meeting.

2010

- 99) **D.M. Saffer**, P.B. Flemings, 2010, Quantification of subsurface pore pressure through IODP drilling, AGU Fall meeting.
- 98) ¹Sacks, A., Saffer, D.M., Fisher, D.M., 2010, Extension axes in the Kumano forearc basin from inversion of fault populations mapped in a 3D seismic volume, Nankai Trough, SE Japan, AGU Fall meeting.
- 97) ¹A. Rathbun, I. Song, and D.M. Saffer, 2010, Permeability of the San Andreas Fault zone at depth, AGU Fall meeting.
- 96) ² Carpenter, B.M., Marone, C., and Saffer, D.M., 2010, Frictional and hydrologic behavior of the San Andreas Fault: Insights from laboratory experiments on SAFOD cuttings and core, AGU Fall meeting.
- 95) ²Haines, S., Marone, C., and Saffer, D.M., 2010, Frictional properties of low-angle normal fault gouges, AGU Fall meeting.
- 94) ²Ikari, M.J., Saffer, D.M., and Marone, C., 2010, Comparing slip behavior and hydromechanical properties of fault systems in the Nankai Subduction Zone, AGU Fall meeting.
- 93) A. Kopf, D.M. Saffer, E. Araki, E. Davis, et al., 2010, NanTroSEIZE observatories: Installation of a long-term borehole monitoring systems offshore the Kii Peninsula, Japan, AGU Fall meeting.
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Pre-2004

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FUNDING HISTORY

2011-2012: National Science Foundation, MARGINS: MARGINS Post-Doctoral Fellowship Research: Evolution of Sediment Physical Properties in the Nankai Subduction Zone and Implications for the Updip Limit of Seismogenesis, PSU budget \$165,864, *Lead PI (proposal written by H. Kitajima, advised by Saffer & Marone)*.

2011-2014: Consortium for Ocean Leadership, Pore pressure analysis to estimate hydraulic parameters and evaluate the role of aseismic pressure transients in the seismic cycle: IODP Expedition 332, \$14,650, *Sole PI*

2011-2014: Consortium for Ocean Leadership, Analysis of Observatory Data from IODP Sites C0010 and C0002: IODP Expedition 332, \$15,000, *Sole PI*.

2011: National Science Foundation, Integrated Ocean Drilling Program: Collaborative Research: Development of a long-term hydrologic observatory above the seismogenic zone offshore the Kii peninsula, \$47,322 (supplement to existing award), *Lead PI*.

2011: ExxonMobil Upstream Research Company: Controls on Shale Ductility: Application to Tight Gas Shale Development, \$54,000 (supplement to existing award), *Lead PI*.

2010-2011: Consortium for Ocean Leadership, Expedition 332 support for Rachel Lauer, \$6,834, *Sole PI*.

2010-2011: Consortium for Ocean Leadership, Expedition 332 salary support, \$17,994, *Sole PI*.

2010-2012: National Science Foundation, EarthScope: Laboratory Study Of Phase III SAFOD Core: Physical Properties And Mechanical Behavior Of The Active San Andreas Fault Zone, \$275,535, *Co-PI with C. Marone*.

2010: ExxonMobil Upstream Research Company: Controls on Shale Ductility: Application to Tight Gas Shale Development, \$106,795, *Lead PI*.

2010-2011: Woods Hole Oceanographic Institution (subcontract): Ocean Drilling Renewal Leadership Team, \$84,858, *Sole PI*.

2010-2012: GDL Foundation, Effects of Stress States and Cementation on physical properties of mudstones in the Nankai subduction zone: Fellowship support for Hiroko Kitajima, \$9000, *Sole PI*.

2009-2012: Consortium for Ocean Leadership, Frictional and permeability measurements on core samples of subduction input material: IODP Expedition 322, \$15,000, *Sole PI*.

2009-2012: Consortium for Ocean Leadership, Experimental measurements of permeability and Vp & Vs in Core Samples: IODP Expedition 319, \$15,000, *Sole PI*.

2009-2012: Consortium for Ocean Leadership, Expedition 319 Chief Scientist Support, \$88,134, *Sole PI*.

2009-2010: Consortium for Ocean Leadership, Expedition 322 support for Matt Ikari, \$5,608, *Sole PI*.

2009-2010: National Science Foundation, EAR-IF: Acquisition of a High-Pressure High-Temperature Load and Flow-Through System for Research and Teaching, \$207,226, *Co-PI with D. Elsworth (EME Department)*.

2009-2010: National Science Foundation, Tectonics: Mechanics and Seismogenic Potential of Low Angle Normal Faults: A Field and Laboratory Investigation, \$186,048, *Lead PI*.

2008-2009: National Science Foundation, EarthScope: Collaborative Research: Laboratory Study of the Mechanics and Physical Properties of the active San Andreas Fault zone from Phase III SAFOD cores, \$29,087 (supplement to existing award), *Lead PI*.

2008-2009: National Science Foundation, Integrated Ocean Drilling Program (IODP): Collaborative Research: Laboratory Investigations of Fault-Zone Mechanical Behavior and Fluid Overpressure (EOR for IODP NanTroSEIZE Expeditions 314, 315, and 316), \$99,080 Penn State Budget, *Lead PI*.

2008-2009: Integrated Ocean Drilling Program, Management International (IODP-MI): Specialty Coordinator for IODP NanTroSEIZE Complex Drilling Project, \$47,605, *Sole PI*.

2008-2010: National Science Foundation, EarthScope: Collaborative Research: Laboratory Study of the Mechanics and Physical Properties of the active San Andreas Fault zone from Phase III SAFOD cores, \$255,183 Penn State Budget, *Lead PI*.

2007-2008: Integrated Ocean Drilling Program, Management International (IODP-MI): Specialty Coordinator for IODP NanTroSEIZE Complex Drilling Project, \$35,995, *Sole PI*.

2007-2010: National Science Foundation, Marine Geology & Geophysics (MGG): The Upper Transition From Seismic to Aseismic Faulting on Subduction Megathrusts, \$390,000, *Co-PI with C. Marone*.

2007-2009: American Chemical Society (Petroleum Research Fund): Fault zones in mudstone as petroleum seals and fluid conduits: A laboratory study, \$90,000, *Lead PI*.

2006-2009: National Science Foundation, Integrated Ocean Drilling Program (IODP): Collaborative Research: Development of a long-term hydrologic observatory above the seismogenic zone offshore the Kii peninsula, \$465,136 Penn State Budget, *Lead PI*.

2006-2008: Shell International Exploration and Production Inc.: Prediction of Pressure and Stress in Thrust Belts, \$170,000 (\$85,000 in year one with \$85,000 year two renewal option), *Co-lead PI with Flemings*.

2006: JOI/USSAC: Salary support for participation in Chikyu Shakedown Cruise, \$11,895, *Sole PI*.

2006-2007: National Science Foundation, EarthScope: Collaborative Research: Laboratory Study of the Mechanics and Physical Properties of the San Andreas Fault and 3D SAFOD Volume, \$219,327, *Co-PI with C. Marone*.

2005-2010: National Science Foundation, IODP: Collaborative Research: A 3-D seismic investigation of the Nankai Trough Plate Boundary System in the Kumano Basin, PSU budget \$156,572, *Co-PI; Sole PI at Penn State*.

2005-2007: U.S. Department of Energy: 2004, Produced water and beneficial use in the Powder River Basin, WY, \$120,974, *subcontract through Colorado School of Mines, Sole PI*.

2003-2006: National Science Foundation, MARGINS: Collaborative Research: Seismic Velocity, Compaction, and Pore Pressure in Underthrust Sediments, Nankai Subduction Zone, \$391,060 (\$124,833 to PSU), *Lead PI*.

2003-2004: JOI/USSAC Post Cruise Research Grant: Saffer, D.M., Fluid production from underthrust sediments, Costa Rica, ODP Leg 205: \$22,475, *Sole PI*.

2002-2006: National Science Foundation, Tectonics Division: A critical evaluation of hypotheses for fluid overpressure along the San Andreas Fault, California: Implications for the “Stress-heat flow paradox, \$109,846, *Lead PI*.

2002-2005: National Science Foundation, Geophysics Division: Frictional constitutive behavior of natural fault gouge materials: Effects of composition, \$83,435, *Lead PI*.

2002-2003: USSSP Ocean Drilling Program: Leg 205 Shipboard Scientist Support, \$26,563, *Sole PI*.

2002-2004: Western Resources Project: Hydrologic effects of coal-bed methane development on shallow and deep aquifer systems in the Powder River Basin, \$68,906, *Sole PI*.

2001-2003: Petroleum Research Fund, Type G grant: In situ pore pressure and consolidation: A critical evaluation of field and laboratory approaches, \$25,000, *Sole PI*.

2000-2002: JOI/USSAC Post Cruise Research Grant: Hydrologic and mechanical laboratory tests of samples from the Nankai Trough, ODP Leg 190, \$20,998, *Sole PI*.

STUDENTS AND POST-DOCTORAL SCHOLARS SUPERVISED

Current students, post-doctoral scholars, and research associates:

Hiroko Kitajima	Post-doctoral scholar, 2010-present
Rachel Lauer	PhD candidate, anticipated 2011
Katelyn Olcott	PhD student, anticipated 2014
Brett Carpenter	PhD candidate (co-advised with C. Marone), anticipated 2011
Matthew Fry	PhD student (co-advised with C. Marone), anticipated 2014
Alison Sacks	MS candidate (co-advised with D. Fisher), anticipated 2011
Dustin Lipik	BS Senior Thesis student, 2011
John Coleman	Undergraduate independent study (co-advised with M. Arthur), 2011

Previous students and post-doctoral scholars (reverse chronological order by end date):

Sam Haines	Post-doctoral scholar, 2008-2010 (co-advised with C. Marone)
Insun Song	Research Associate / Postdoctoral Scholar, 2006-2010
Matthew Ikari	PhD conferred, 2010 (co-advised with C. Marone)
Andrew Rathbun	PhD conferred, 2010 (co-advised with C. Marone)
Enrique Perez	MS conferred, 2010
Teo Korkmaz	Undergraduate research, 2009-2010
Marie Gildow	BS Honors Thesis student, 2009-2010
Margaret Popek	MS conferred, 2009
Nick Adamson	BS Thesis student, 2008-2009
Patrick Fulton	PhD conferred, 2008
Robert Skarbek	MS conferred, 2008
Alexander McKiernan	MS conferred, 2005
Shaun Sagan	BA Independent Study, 2005
Aaron Payne	MS conferred, 2004
Glenn Spinelli	Post-doctoral scholar, 2003-2004 (co-advised with M. Underwood)
Melanie Williams	BS Independent Study, Univ. of Wyoming, 2003
Joyce Harris	BS Independent Study, Univ. of Wyoming, 2003
Brenda Rencher-Casey	MS candidate at Univ. of Wyoming
Karl G. Taboga	PhD candidate at Univ. of Wyoming

Graduate Thesis committees (not as primary or co-advisor; at Penn State unless otherwise noted):

Christopher Landry, PhD in progress (EME); Ryan Swanson, PhD in progress; Jennifer Nemitz, PhD in progress; Thomas Battenhouse, PhD in progress; Bryan Kaproth, PhD in progress; Marco Scuderi, PhD in progress.

Marianne Conin (CNRS, France), PhD conferred, 2011, Brian LeVay, PhD conferred, 2010; Jon Samuelson, PhD conferred, 2009; Igor Faoro (EME Dept.), PhD conferred, 2009; Joshua Taron (EME Dept.), PhD conferred, 2009; Sultan Al Enezi (EME Dept.), PhD conferred, 2009; Denis Pone (EME Dept.), PhD conferred, 2009; Daniel Wheaton, MS conferred, 2009; Basar Busbug (EME Dept.), PhD conferred, 2008; Matthew Reilly, MS conferred, 2008; Tapan Kumar Biswas (EME Dept.), MS conferred, 2008; Geoffrey Moret, PhD conferred, 2007; Hui Long, PhD conferred, 2007; Sean Culkin, MS conferred, 2007; Audrey Hucks, MS conferred, 2007; Julia Schneider, MS conferred, 2007; Garth Llewelyn, MS conferred, 2005; Jon Samuelson, MS conferred, 2005; Jeremy Shaha (Univ. WY), MS conferred, 2004; Matthew Hornbach (Univ. WY), PhD conferred 2004; Paula Cutillo (UC Boulder), PhD conferred, 2003; Brian Zurek (Univ. WY), MS conferred, 2003; Benjamin Pearson (Univ. WY), MS conferred, 2002; Michael Marshall (Univ. WY), MS conferred, 2002.

SIGNIFICANT RECENT RESEARCH ACTIVITIES (SELECTED)

- 2011 Lead/contact Proponent: IODP proposal, Riserless Drilling to unlock the secrets of slow slip by drilling at the N. Hikurangi subduction margin.
- 2011 Member, Project Management Team (PMT), Japan Trench Fast Earthquake Drilling Project (J-FAST): IODP proposal for rapid response drilling of March 2011 Tohoku Mw 9 Earthquake.
- 2011 Proponent, lead writing team: Japan Trench Fast Earthquake Drilling Project (J-FAST): IODP proposal for rapid response drilling of March 2011 Tohoku Mw 9 Earthquake.
- 2011 Member, detailed planning group (DPG), rapid response drilling for Tohoku Japan Earthquake
- 2010-2012 U.S. IODP renewal leadership team (*invited*; one of 4 team members)
- 2010-2011 Science plan writing committee, Integrated Ocean Drilling Program renewal (*invited*)
- 2010 Writing committee, MARGINS Successor Program Science Plan
- 2010 Proponent, IODP CDP proposal: Drilling at the northern Hikurangi subduction margin, New Zealand: The key to unlock the secrets of slow slip events
- 2009-present Guest editor, Theme issue of *Geochemistry, Geophysics, Geosystems*: “Mechanics, Deformation, and Hydrologic Processes at Subduction Complexes, With Emphasis on the Nankai Trough Seismogenic Zone Experiment (NanTroSEIZE) Drilling Transect”
- 2008-present Co-coordinator, inter-lab calibration of rock mechanics and friction studies for the SAFOD project (with C. Marone and D. Lockner).
- 2006-present Specialty Coordinator, Rock Physical Properties, NanTroSEIZE drilling project.
- 2006-present Member, Project Management Team, NanTroSEIZE complex drilling project.
- 2006-present Lead observatory scientist, IODP “Kumano Basin Observatory”.
- 2006 12th German-American Frontiers of Science Symposium (*invited*), Potsdam, Germany.
- 2003 Lead U.S. proponent, IODP proposal 603-B (NanTroSEIZE Phase 2 Drilling: Mega-Splay Faults).
- 2003 Proponent, IODP NanTroSEIZE proposals 603-CDP (NanTroSEIZE umbrella proposal), 603-A (subduction inputs), 603-C (riser drilling), and 603-D (reference sites monitoring).

MAJOR WORKSHOPS, MEETINGS, AND SESSIONS CONVENED

- 2011 Co-convener, NSF-GeoPRISMS Subduction Cycles and Dynamics implementation workshop, Austin TX, ~140 attendees.
- 2011 Co-convener, Consortium for Ocean Leadership workshop "Engaging Early Career Scientists in Future Scientific Ocean Drilling", College Station TX, ~35 attendees.
- 2010 Co-convener, NSF MARGINS Successor Program planning workshop, San Antonio TX, >200 attendees.
- 2010 Convener, “New frontiers and discoveries from scientific ocean drilling”, Union Session, AGU Fall meeting.
- 2008 Co-convener, “Fluids at Convergent Margins: Synthesis of Observations, Experiments and Models”, Union Session, AGU Fall meeting.
- 2008 Co-convener, MARGINS Seismogenic Zone Workshop, Portland OR, Sept. 22-26, ~100 participants.
- 2008 Co-convener (with E. Brodsky, J. Mori, and K-F. Ma), Rapid Response Drilling: Past, Present and Future, Intercontinental Drilling Program/SCEC workshop, Tokyo, Japan, ~75 participants.
- 2004 Co-Convener (with 4 others), Earthscope workshop on thermal processes.

ADDITIONAL RESEARCH ACTIVITIES & FIELD WORK

Field Work, Research Cruises, and Work Experience (Selected):

- 2010 Shipboard Scientist (Observatory specialist), IODP Expedition 332: NanTroSEIZE Stage 2 Riserless Observatory, Oct-Dec, 2010.
- 2009 Co-chief scientist, IODP Expedition 319: NanTroSEIZE Stage 2: Riser/Riserless Observatory
- 2007 Participant, IODP Expeditions #314-315 (in capacity as Specialty Coordinator), Oct-Nov, 2007

2006 Participant, Chikyu Shimokita Shakedown Drilling Expedition, Oct, 2006
 2003 CORK data acquisition and servicing cruise, ODP Sites 1253 and 1255, offshore Costa Rica
 2002 Shipboard Scientist, ODP Leg 205
 2000-2001 Independent Contractor, AOA Geophysics, Inc., Marine Division
 2000 Shipboard Scientist, ODP Leg 190
 1999-2000 Staff Geologist, Rogers Johnson & Associates
 1997 Heat flow survey and ROV seafloor mapping, Mariana Forearc
 1996 ODP Leg 170, Shore-based Scientist.
 1996 Bathymetry and ROV seafloor mapping, Aleutian Trench
 1998 Summer Intern, EXXON Exploration Company

Meeting Sessions Convened & Workshop Participation (Selected):

2011 Invited Speaker, Workshop on slow slip, Hikurangi subduction zone, August, 2011, Gisborne NZ
 2010 Co-convenor, "From subduction inputs to seismogenesis", Special Session, AGU Fall Meeting.
 2009 INVEST IODP Planning Workshop & Meeting, Bremen Germany.
 2007 Shell Bellaire Technology Center Workshop on Soil Mechanics, Houston, TX.
 2006 Convenor, "Fluids at plate boundaries: Agents of mechanical and chemical processes", Topical Session, Geological Society of America fall meeting.
 2005 Chapman conference: Radiated Energy and the Physics of Earthquake Faulting.
 2005 Convenor, "Hubbert and Rubey in the 21st Century", Special Session, AGU Fall meeting.
 2004 Nankai IODP cork workshop, JAMSTEC, Yukuska, Japan.
 2003 Co-convenor, "At the Seismogenic Front: Dynamic Processes at Convergent Margins", Special Session, AGU Fall meeting.
 2003 Earthscope Complimentary Geophysics Workshop, Denver, CO.
 2003 Workshop on linkages between the Ocean Observatory Initiative and the IODP.
 2002 NanTroSEIZE proposal planning workshop, Boulder, Colorado.
 2001 MARGINS workshop on Central Am. subduction processes, San Jose, Costa Rica.
 2000 Convenor, "*Basin-Scale Hydrodynamic Systems: Stress State, Pore Pressure, Fluid Flow, and Deformation*", Special Session, AGU Fall meeting.

INVITED PRESENTATIONS (SELECTED)

July 31, 2011 Public Lecture on Subduction Earthquakes, Gisborne, NZ.
 June 4, 2011 Southwest Oregon Community College, Geology Lecture Series
 May 16, 2011 SAFOD Workshop, Earthscope National Meeting, Austin TX
 May 2, 2011 University of Marseille, Marseille France
 April 28, 2011 New Mexico Inst. of Mining & Technology, Dept. Earth & Environmental Sciences
 April 27, 2011 Univ. of Colorado, Boulder, Dept. of Geological Sciences
 April 20, 2011 University of Minnesota, Dept. of Geology & Geophysics
 Feb 3, 2011 Iowa State University, Dept. of Geological Sciences
 Nov 4, 2010 German Research Center SFB574 on Subduction processes, Pucon Chile (*Keynote*)
 Oct 14, 2010 European Science Foundation Workshop on Borehole Monitoring
 Mar 24, 2009 DrillNZ, ICDP Alpine Fault Drilling Workshop, Franz Josef Glacier, NZ
 Sept 23, 2008 NSF-MARGINS Seismogenic Zone Initiative workshop
 Apr, 2008 European Geophysical Union 2008 Meeting, Vienna, Austria
 Apr 8, 2008 Williams College, Geology Dept. Colloquium Series
 Feb 8, 2008 University of Michigan, Smith Lecture Series
 Jul 18, 2007 Shell Bellaire Technology Center, Houston, TX
 Jun 18, 2007 Workshop to Integrate Subduction Factory and Seismogenic Zone Studies in Central America, Heredia, Costa Rica (*Keynote*)
 Mar 30, 2007 University of Rochester, Dept. Earth & Environmental Sciences
 May, 2006 ICDP/IODP Fault Zone Drilling Workshop, Miyazaki, Japan
 Sept, 2005 Rice University, Dept. of Earth Science
 Mar, 2005 EarthScope National Meeting, Albuquerque, NM

May, 2004	Workshop on Downhole Tools in the IODP, Washington, DC
Apr, 2004	Joint DFG-NSF Conference for outstanding young researchers, Washington, DC
Mar, 2004	The Pennsylvania State University, Dept. of Geosciences
Oct, 2003	University of Missouri, Columbia, Dept. of Geological Sciences
Apr, 2003	The Pennsylvania State University, Dept. of Geosciences
Mar, 2003	NSF-MARGINS Theoretical - Experimental Institute, Snowbird, UT
Mar, 2003	University of Minnesota, Dept. of Geology & Geophysics
Apr, 2002:	Woods Hole Oceanographic Institution, Geophysics Seminar Series
Oct, 2001	University of Colorado, Boulder, Dept. of Geological Sciences
Apr, 2001	University of Utah, Dept. Geology & Geophysics
Mar, 2001	New Mexico Inst. of Mining & Technology, Dept. Earth & Environmental Sciences
Dec, 2001	Hubbert Quorum, U.S. Geological Survey, Menlo Park, CA
Nov, 2000	Earthquake Megaproject Group, USGS, Menlo Park, CA
Mar, 2000	Joint ODP-Industry Workshop on overpressure in the Gulf of Mexico, Houston, TX
Nov, 1999	The Pennsylvania State University, Dept. of Geosciences
Dec, 1998	Cascades Volcano Observatory Vancouver, WA

SERVICE

University Committees (at Penn. State unless otherwise noted)

2011-present	Graduate program committee, Dept. of Geosciences
2010-present	Steering committee, Marcellus Shale Center
2009-2010	Rover, Candidacy Exams, Dept. of Geosciences
2009-2010	Member, <i>ad hoc</i> committee to assess research infrastructure, College of EMS
2009	Member, <i>ad-hoc</i> planning committee for Tribio building, College of EMS
2008-2009	Chair, Graduate Admissions Committee
2008-2009	Executive Committee, Dept. of Geosciences
2008-2009	Member, Faculty Search Committee (CO ₂ sequestration and Sedimentary Geology positions)
2007-present	Faculty co-advisor, Geosciences Departmental Colloquium Series
2007-2008	Dept. of Geosciences Tenure and Promotion Committee
2007-2008	Graduate Admissions committee
2007-2008	Faculty Search Committee, EME Dept.
2007-2008	Faculty Search Committee, Dept. of Geosciences
2005-2009	Graduate program committee, Dept. of Geosciences
2002-2003	Graduate admissions committee (Geology & Geophysics, Univ. of Wyoming)
2002	Earth systems science center committee (Univ. of Wyoming)
2001-2003	Chair, web-site committee (Geology & Geophysics, Univ. of Wyoming)
2001-2002	Computer committee (Geology & Geophysics, Univ. of Wyoming)
2002	Coordinator for student volunteers: AAPG Rocky Mountain Section Meeting
2001-2002	Faculty Advisor, Geology Club (Geology & Geophysics, Univ. of Wyoming)

Professional Service And Outreach

2011-present	San Andreas Fault Observatory at Depth (SAFOD) Core and Sample Committee (CoSWoG)
2011	Participated in NSF public relations/news article and video for “ <i>Science Nation</i> ”: http://www.nsf.gov/news/special_reports/science_nation/earthquakes.jsp
2010-2011	Integrated Ocean Drilling Program Renewal Leadership Team
2010-2011	Writing committee, Integrated Ocean Drilling Program Science Plan for new program
2010-2011	Consortium for Ocean Leadership, Distinguished Lecture Program
2010-2011	NSF-MARGINS successor program (GeoPRISMS) Steering Committee
2010	NSF-MARGINS successor science plan writing (MSPW) Committee
2010	Co-convener, NSF MARGINS Successor program planning workshop, San Antonio TX
2009-present	Guest editor, Theme issue of <i>Geochemistry, Geophysics, Geosystems</i> : Mechanics, Deformation, and Hydrologic Processes at Subduction Complexes
2009	Interview for Integrated Ocean Drilling Program (IODP) “INVEST” outreach video: http://www.youtube.com/watch?v=P8tH0-q-MT0
2009	Speaker, Press conference on IODP Expedition 319, Tokyo, Japan, Sept. 3
2009	Interviewed for Australian Broadcasting Company production of science program “ <i>Catalyst</i> ”.
2009	NSF Panel Member, OCE-MGG
2008-2009	Steering Committee, Charting the Future Course of Scientific Ocean Drilling Workshop
2008-2009	Selection Panel: Marine Geosciences Leadership Symposium, Consortium for Ocean Leadership
2008-2009	Co-coordinator of inter-lab calibration of rock mechanics and friction studies for the SAFOD project (with C. Marone and D. Lockner).
2008	U.S. Geological Survey External Grants Program, NEHRP Panel member
2008	Co-convener, MARGINS Seismogenic Zone workshop, Portland OR, Sept, 22-26.
2008	Co-convener, Rapid Response Drilling: Past, Present and Future, Intercontinental Drilling Program (ICDP)/SEEC workshop, Tokyo, Japan, Nov. 17-19.
2007-2010	NSF-MARGINS Steering Committee
2007-2008	Geological Society of America, ad-hoc committee on Innovative Science
2007-2008	Interviewed for article on seafloor observatories for <i>Civil Engineering</i> magazine.
2007	Panel member, AGU Press conference on NanTroSEIZE drilling program, Dec. 12.
2006	Interviewed for <i>Discovery Science News</i> article (by L. O’Hanlon).

2006 U.S. Geological Survey External Grants Program, NEHRP Panel member
2003-2006 IODP Science Steering and Evaluation Panel (SSEPs) member
2003-2004 Major contributor, NSF MARGINS SEIZE science plan
2003 Physical properties editor, Post-Cruise Editorial Meeting, ODP Leg 205 Initial Reports.
2000 Physical properties editor, Post-Cruise Editorial Meeting, ODP Leg 190 Initial Reports.

PROFESSIONAL AND INDUSTRIAL ASSOCIATIONS

American Geophysical Union (AGU), Geological Society of America (GSA), American Academy for the Advancement of Science (AAAS), Japan Geoscience Union (JGU)