PETER B. FLEMINGS

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EDUCATION

Ph.D.	1990	Geology, Cornell University: minors in structural mechanics and geodynamics

- M.S. 1987 Geology, Cornell University
- B.A. 1984 Geology, Dartmouth College

PROFESSIONAL EXPERIENCE

I KOI LODIOI		
2015-present	John A. and Katherine G. Jackson Chair in Energy and Mineral Resources, The University of Texas at Austin	
2013-2015	Visiting Research Scientist, Woods Hole Oceanographic Institute (June-August)	
2007-present	Professor, Department of Geological Sciences, The University of Texas at Austin	
2007-2015	Jackson Chair of GeoSystems, The University of Texas at Austin	
2007-2015	Research Professor, Texas Institute of Geophysics and Bureau of Economic Geology, The	
	University of Texas at Austin	
2009-2012	Graduate Adviser, Department of Geological Sciences, The University of Texas at Austin	
2003-2007	Professor of Geosciences, Pennsylvania State University	
2002-2003 Visiting Scientist, Massachusetts Institute of Technology, Department of Civil a		
	Environmental Engineering	
1998-2007	Co-Director of the Petroleum GeoSystems Initiative, Pennsylvania State University	
1997-2003	Associate Professor of Geosciences, Pennsylvania State University	
1993-1997	Assistant Professor of Geosciences, Pennsylvania State University	
1992-1993	Research Scientist and Crosby Lecturer, Massachusetts Institute of Technology	
1991-1992	Associate Research Scientist, Lamont-Doherty Geological Observatory	
1991	Visiting Scientist, Exxon Production Research Company	
1990-1991	Post-Doc. Associate, Lamont-Doherty Geological Observatory	
1983	Geologist, Comp. Minera Autlan, Otongo Hgo., México	
1982-1983	Geologist, Refinadora Costarricense De Petróleo, San Juan, Costa Rica	
HONORS		
2016	Jackson School of Geosciences Joseph C. Walter Jr. Excellence Award	
2015-2016	American Geophysical Union, Chair of the Asahiko Taira International Scientific Ocean Drilling Research Prize Committee	
2011 2015	6	
2011-2015 2015	UT Institute for Geophysics Director's Circle of Excellence Award Tinker Family BEG Publication Award	
2013	UT Institute for Geophysics Outstanding Researcher Award	
2014	Marine and Petroleum Geology Certificate for Reviewing Excellence	
2014	Bureau of Economic Geology Author Achievement Award	
2014-2015	Methane Hydrate Advisory Committee (An Advisory Committee to the Secretary of Energy),	
2014-2015	June (Chair)	
2013	Methane Hydrate Advisory Committee (An Advisory Committee to the Secretary of Energy),	
	June (Co-chair)	
2012	Chair: 2nd Gordon Research Conference on Hydrates, March 18-23, 2012, Ventura, CA	
2010	Adviser to Energy Secretary S. Chu's BP Macondo Well Integrity Team	
2010	Vice Chair: 1st Gordon Research Conference on Hydrates	
2008	Bureau of Economic Geology Author Achievement Award	
2007-2008	JOI-USSAC Distinguished Lecturer	
2006	National Academy of Sciences Kavli Frontiers of Science Fellow and Speaker	

2006	AAPG Distinguished Lecturer		
2005	Co-Chief Scientist, IODP Expedition 308 – Gulf of Mexico, Hydrogeology		
2003	Penn State EMS College Mitchell Award for Innovation in Teaching		
2001	Best Paper Award, Cookman and Flemings, STORMSED. Computers and Geosciences 27 (6):		
	647-674.		
1997-present	Geological Society of America Fellow		
1996	Penn State EMS College Wilson Teaching Award		
1995	Best Paper, J.C. Cam Sproule Memorial Award, Alexander and Flemings, 1995, Geologic		
	Evolution of a Plio-Pleistocene Salt Withdrawal Mini-basin: Block 330, Eugene Island, South		
	Addition, offshore Louisiana, AAPG Bulletin 79 (12): 1737-1756.		
1994-1997	Shell Faculty Fellow		
1992	Crosby Distinguished Lecturer at MIT		
1991	Best Paper Award, Mountain Geologist - Flemings, P. B., Nelson, S. N., 1991, Paleogeography		
	of the Paleocene Wind River Basin		
1986	John McMullen Graduate Fellowship for academic record		
1983-1984	Member Casque and Gauntlet Honor Society, Dartmouth College		

PUBLICATIONS

h-index: 31 (Google Scholar) i10-index: 83 (Google Scholar) h-index: 23 (Web of Science)

* indicates graduate student advisee

⁺ indicates post-doc advisee or supervised staff

° indicates undergrad advisee

³ indicated graduate student co-advisee

Papers in Refereed Journals

- 1. *Gao, B., **Flemings, P.B.**, 2017, Pore pressure within dipping reservoirs in overpressured basins, Marine and Petroleum Geology, 80, 94-111, doi:http://dx.doi.org/10.1016/j.marpetgeo.2016.11.014.
- 2. ⁺Nikolinakou, M.A., ⁺Heidari, M., Hudec, M.R., **Flemings, P.B.**, 2016, Initiation and growth of salt diapirs in tectonically stable settings: upbuilding and megaflaps, American Association of Petroleum Geologists Bulletin, doi:10.1306/09021615245.
- 3. Casey, B., Germaine, J.T., **Flemings, P.B.**, Fahy, B.P., 2016, In situ stress state and strength in mudrocks, Journal of Geophysical Research: Solid Earth, 121, doi:10.1002/2016JB012855.
- 4. ⁺Heidari, M., ⁺Nikolinakou, M. A., Hudec, M. R., **Flemings, P. B.**, 2016, Geomechanical analysis of a welding salt layer and its effects on adjacent sediments, Tectonophysics, v. 683, p. 172-181, doi:10.1016/j.tecto.2016.06.027.
- 5. Adams, A.L., Nordquist, T.J., Germaine, J.T., and **Flemings, P.B.**, 2016, Permeability Anisotropy and Resistivity Anisotropy of Mechanically Compressed Mudrocks, Canadian Geotechnical Journal, doi:10.1139/cgj-2015-0596.
- *Cronin, M., Flemings, P.B., ⁺Bhandari, A., 2016, Dual-permeability microstratigraphy in the Barnett Shale, Journal of Petroleum Science and Engineering, Vol. 142, pp. 119-128, doi:10.1016/j.petrol.2016.02.003.
- 7. ⁺You, K., DiCarlo, D., **Flemings, P.B.**, 2016, Impact of gravity on hydrate saturation in gas-rich environments, Water Resour. Res., Vol. 52, pp. 1265-1285, doi:10.1002/2015WR017975.
- 8. ⁺Heidari, M., ⁺Nikolinakou, M.A., **Flemings, P.B.**, Hudec, M.R., 2016, A simplified stress analysis of rising salt domes, Basin Research, doi:10.1111/bre.12181.
- 9. ⁺Nikolinakou, M.A., **Flemings, P.B.**, Hudec, M.R, 2016, Modeling of shales in salt-hydrocarbon systems, Rock Mechanics Rock Engineering, v. 49, p. 699–705, doi 10.1007/s00603-015-0863-2.

- *Darnell, K.N., Flemings, P.B., 2015, Transient seafloor venting on continental slopes from warminginduced methane hydrate dissociation, Geophysical Research Letters, Vol. 42, 10,765–10,772, doi:10.1002/2015GL067012.
- ⁺You, K., DiCarlo, D., Flemings, P.B., 2015, Quantifying hydrate solidification front advancing using method of characteristics, Journal of Geophysical Research: Solid Earth, 120, 6681-6697, doi: 10.1002/2015JB011985.
- 12. ⁺Bhandari, A., **Flemings, P.B.**, ⁺Polito, P.J., *Cronin, M.B., Bryant, S.L., 2015, Anisotropy and Stress Dependence of Permeability in the Barnett Shale, Transport in Porous Media, Vol. 108, Issue 2, pp 393-411, DOI 10.1007/s11242-015-0482-0.
- 13. Casey, B., Germaine, J.T., **Flemings, P.B.**, Fahy, B.P., 2015, Estimating Horizontal Stresses for Mudrocks under One-dimensional Compression, Marine and Petroleum Geology, 178-186, doi:10.1016/j.marpetgeo.2015.02.001.
- Flemings, P.B., Reece, J.S., Ditkof, J., Atkins, C.C., Sawyer, D., 2015, Data Report: Particle Size Analysis of Sediments in the Nankai Trough, IODP Expedition 319 Site C0009A. In Saffer, D., McNeill, L., Byrne, T., Araki, E., Toczko, S., Eguchi, N., Takahashi, K., and the Expedition 319 Scientists, Proc. IODP, 319: Tokyo (Integrated Ocean Drilling Program Management International, Inc.), doi:10.2204/iodp.proc.319.203.2015.
- 15. ⁺You, K., Kneafsey, T.J., **Flemings, P.B.**, ⁺Polito, P.J., Bryant, S.L., 2015, Salinity-Buffered Methane Hydrate Formation and Dissociation in Gas-Rich Systems, J. of Geophys. Res. Solid Earth, 120, 643-661, doi: 10.1002/2014JB011190.
- 16. Luo, G., **Flemings, P.B.**, Hudec, M.R., ⁺Nikolinakou, M.A., 2015, The role of pore fluid overpressure in the substrates of advancing salt sheets, ice glaciers and critical-state wedges, Journal of Geophysical Research, DOI: 10.1002/2014JB011326.
- 17. *Merrell, M.P., **Flemings, P.B.**, Bowers, G.L., 2014, Subsalt Pressure Prediction in the Miocene Mad Dog Field, Gulf of Mexico, AAPG Bulletin, v. 98, no. 2, p. 315-340, doi:10.1306/06251312156.
- ⁺Nikolinakou, M.A., Flemings, P.B., Hudec, M.R., 2014, Modeling stress evolution around a rising salt diapir, Marine and Petroleum Geology, v. 51, p. 230-238, doi: http://dx.doi.org/10.1016/j.marpetgeo.2013.11.021.
- ⁺Nikolinakou, M.A., Hudec, M.R., Flemings, P.B., 2014, Comparison of evolutionary and static modeling of stresses around a salt diapir, Marine and Petroleum Geology, v. 57, no. 0, p. 537-545., 10.1016/j.marpetgeo.2014.07.002.
- *Smith, A. J., Flemings, P. B., Fulton, P. M., 2014, Hydrocarbon flux from natural deepwater Gulf of Mexico vents: Earth and Planetary Science Letters, v. 395, no. 0, p. 241-253, doi:10.1016/j.epsl.2014.03.055.
- 21. Smith, A. J., **Flemings, P. B.**, Liu, X., and Darnell, K., 2014, The evolution of methane vents that pierce the hydrate stability zone in the world's oceans: Journal of Geophysical Research: Solid Earth, DOI: 10.1002/2013JB010686.
- 22. *You, Y., Flemings, P.B., and Mohrig, D., 2014, Mechanics of dual-mode dilative failure in subaqueous sediment deposits: Earth and Planetary Science Letters, v. 397, no. 0, p. 10-18, doi: 10.1016/j.epsl.2014.04.024.
- 23. *You, Y., **Flemings, P.B.**, Mohrig, D. and Germaine, J.T., 2014, How heterogeneity in the shear dilation of a deposit controls the mechanics of breaching slope failure, J. Geophys. Res. Earth Surf., 119, 2381–2395, doi:10.1002/2013JF002983.
- 24. Adams, A.L., Germaine, J.T., **Flemings, P.B.**, and Day-Stirrat, R.J., 2013, Stress induced permeability anisotropy of resedimented Boston Blue Clay, Water Resources Research, p. 11, doi: 10.1002/wrcr.20470.
- 25. Casey, B., Germaine, J.T., **Flemings, P.B.**, *+Reece, J.S., *Gao, B., *Betts, W., 2013, Liquid limit as a predictor of mudrock permeability, Marine and Petroleum Geology, v. 44, p. 256-263, doi: http://dx.doi.org/10.1016/j.marpetgeo.2013.04.008.
- 26. Day-Stirrat, R.J., **Flemings, P.B.**, *You, Y., and van der Pluijm, B.A., 2013, Modification of mudstone fabric and pore structure as a result of slope failure: Ursa Basin, Gulf of Mexico, Marine Geology, doi: http://dx.doi.org/10.1016/j.margeo.2013.05.003.

- 27. **Flemings, P.B.**, Polito, P.J., Pettigrew, T.L., Iturrino, G.J., Meissner, E., Aduddell, R., Brooks, D., Hetmaniak, C., Huey, D., Germaine, J.T., and IODP Expedition 342 Scientists, 2013, The Motion Decoupled Delivery System: A new deployment system for downhole tools is tested at Site U1402, New Jersey Margin, Scientific Drilling, v. 15, doi:10.2204/iodp.sd.15.07.2013.
- 28. Saffer, D.M., **Flemings, P.B.**, Boutt, D., Doan, M.L., Ito, T., McNeill, L., Byrne, T., Conin, M., Lin, W., Kano, Y., Araki, E., Eguchi, N., and Toczko, S., 2013, In Situ Stress and Pore Pressure in the Kumano Forearc Basin, offshore SW Honshu from Down-hole Measurements During Riser Drilling: Geochemistry, Geophysics, Geosystems, v. 14, p. 1454-1470, published May 2013.
- 29. *Sawyer, D.E, **Flemings, P.B.**, and ⁺Nikolinakou, M., 2013, Continuous deep-seated slope failure recycles sediments and limits levee height in submarine channels, Geology, doi: 10.1130/g34870.1.
- Boutt, D.F., Saffer, D., Doan, M., Lin, W., Ito, T., Kano, Y., Flemings, P.B., McNeill, L.C., Byrne, T., Hayman, N.W., Moe, K.T., 2012, Scale dependence of in-situ permeability measurements in the Nankai accretionary prism: The role of fractures, Geophysical Research Letters, v. 39, p. L07302, doi: 10.1029/2012gl051216.
- Day-Stirrat, R.J., Flemings, P.B., *You, Y., Aplin, A.C., and van der Pluijm, B.A., 2012, The fabric of cosolidation in Gulf of Mexico mudstones, Marine Geology, v. 295–298, p. 77-85, doi: 10.1016/j.margeo.2011.12.003.
- 32. Foroozan, R., Elsworth, D., **Flemings, P.B.**, Bilotti, F., and Muhuri, S., 2012, The role of permeability evolution in fault zones on the structural and hydro-mechanical characteristics of shortening basins, Marine and Petroleum Geology, v. 29, p. 143-151, doi: 10.1016/j.marpetgeo.2011.08.007.
- 33. Hickman, S.H., Hsieh, P.A., Mooney, W.D., Enomoto, C.B., Nelson, P.H., Mayer, L.A., Weber, T.C., Moran, K, **Flemings, P.B.**, McNutt, M.K., 2012, Scientific basis for safely shutting in the Macondo Well after the April 20, 2010 Deepwater Horizon blowout, Proceedings of the National Academy of Sciences of the United States of America, v. 3, p. 3.
- 34. ⁺Luo, G., ⁺Nikolinakou, M.A., **Flemings, P.B.**, and Hudec, M.R., 2012a, Geomechanical modeling of stresses adjacent to salt bodies: Part 1 Uncoupled models, American Association of Petroleum Geologists Bulletin, v. 96, p. 43-64.
- 35. ⁺Luo, G., ⁺Nikolinakou, M.A., **Flemings, P.B.**, and Hudec, M.R., 2012b, Near-salt stress and wellbore stability: A finite-element study and its application, American Rock Mechanics Association, v. 12-309, p. 9.
- 36. ⁺Nikolinakou, M.A., ⁺Luo, G., Hudec, M.R., and **Flemings, P.B.**, 2012, Geomechanical modeling of stresses adjacent to salt bodies: Part 2 Poroelastoplasticity and coupled overpressures, American Association of Petroleum Geologists Bulletin, v. 96, p. 65-85.
- 37. **Reece, J.S., **Flemings, P.B.**, *Dugan, B., *Long, H., and Germaine, J.T., 2012, Permeability-porosity relationships of shallow mudstones in the Ursa Basin, Northern Deepwater Gulf of Mexico, Journal of Geophysical Research, doi: 10.1029/2012JB009438, in press.
- 38. *Sawyer, D.E., **Flemings, P.B.**, Buttles, J., and Mohrig, D., 2012, Mudflow transport behavior and deposit morphology: Role of shear stress to yield strength ratio in subaqueous experiments, Marine Geology, v. 307–310, p. 28-39, doi: 10.1016/j.margeo.2012.01.009.
- Thu, M.K., Ito, T., Lin, W., Doan, M.L., Boutt, D., Kawamura, Y., Khong, C.K., McNeill, L., Byrne, T., Saffer, D., Araki, E., Eguchi, N., Sawada, I., Flemings, P. B., Kano, Y., Moore, C., Kinoshita, M., Tobin, H., 2012, Operational Review of the First Wireline In Situ Stress Test in Scientific Ocean Drilling, Scientific Drilling, v. 13, p. 35-39, doi: 10.2204/iodp.sd.13.06.2011.
- 40. *You, Y., **Flemings, P.B.**, and Mohrig, D., 2012, Dynamics of dilative slope failure, Geology, v. 40, p. 663-666, doi: 10.1130/g32855.1.
- 41. Day-Stirrat, R.J., Schleicher, A., *Schneider, J., **Flemings, P.B.**, Germaine, J.T., and van der Pluijm, B., 2011, Preferred orientation of phyllosilicates: Effects of composition and stress on resedimented mudstone microfabrics, Journal of Structural Geology, v. 33, p. 1347-1358, doi: doi: 10.1016/j.jsg.2011.06.007.
- 42. *Liu, X.L., and **Flemings, P.B.**, 2011, Capillary effects on hydrate stability in marine sediments, Journal of Geophysical Research-Solid Earth, v. 116, doi: 10.1029/2010jb008143.

- 43. *Long, H., **Flemings, P.B.**, Germaine, J., and Saffer, D., 2011, Consolidation and overpressure near the seafloor in the Ursa Basin, Deepwater Gulf of Mexico, Earth and Planetary Science Letters, v. 305, p. 11-20, doi: 10.1016/j.epsl.2011.02.007.
- 44. Moore, J., Urgeles, R., Conin, M., **Flemings, P.B.**, and Iturrino, G., 2011, Threshold of borehole failure: Breaking in before breaking out, Mississippi fan, Gulf of Mexico, Geosphere, v. 7, p. 684-693, doi: 10.1130/ges00613.1.
- 45. *Schneider, J., **Flemings, P.B.**, Day-Stirrat, R.J., and Germaine, J.T., 2011, Insights into pore-scale controls on mudstone permeability through resedimentation experiments, Geology, v. 39, p. 1011-1014, doi: 10.1130/G32475.1.
- 46. ⁺Song, 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, Geochemistry Geophysics Geosystems, v. 12, doi: 10.1029/2011gc003556.
- 47. Huuse, M., Jackson, C., Rensbergen, P., Davies, R.J., **Flemings, P.B.**, Dixon, R.J., 2010, Subsurface sediment remobilization and fluid flow in sedimentary basins: an overview, Basin Research, v. 22, p. 342-360, doi: 10.1111/j.1365-2117.2010.00488.x.
- 48. Huuse, M., Jackson, C., Rensbergen, P., Davies, R.J., **Flemings, P.B.**, Dixon, R.J., 2010, Subsurface sediment remobilization and fluid flow in sedimentary basins: preface, Basin Research, August 2010, V. 22, p. 341, doi:10.1111/j.1365-2117.2010.00487.x.
- 49. Lin, W., Doan, M., Moore, J.C., McNeill, L., Byrne, T.B., Ito, T., Saffer, D., Conin, M., Kinoshita, M., Sanada, Y., Moe, K.T., Araki, E., Tobin, H., Boutt, D., Kano, Y., Hayman, N.W., Flemings, P.B., Huftile, G.J., Cukur, D., Buret, C., Schleicher, A.M., Efimenko, N., Kawabata, K., Buchs, D.M., Jiang, S., Kameo, K., Horiguchi, K., Wiersberg, T., Kopf, A., Kitada, K. Eguchi, N., Toczko, S., Takahashi, K., Kido, Y., 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, Geophysical Research Letters, v. 37, p. L13303, doi: 10.1029/2010gl043158.
- 50. *Reilly, M.J., and **Flemings, P.B.**, 2010, Deep pore pressures and seafloor venting in the Auger Basin, Gulf of Mexico, Basin Research, v. 22, p. 380-397, doi: 10.1111/j.1365-2117.2010.00481.x.
- 51. *Liu, X., and **Flemings, P.B.**, 2009, Dynamic response of oceanic hydrates to sea level drop, Geophys. Res. Lett., v. 36, p. L17308, doi: 10.1029/2009gl039821.
- 52. *Sawyer, D.E., **Flemings, P.B.**, *Dugan, B., and Germaine, J.T., 2009 Retrogressive failures recorded in mass transport deposits in the Ursa Basin, Northern Gulf of Mexico, Journal of Geophysical Research, v. 114, doi: 10.1029/2008JB006159.
- 53. *Schneider, J., **Flemings, P.B.**, *Dugan, B., *Long, H., and Germaine, J.T., 2009, Overpressure and consolidation near the seafloor of Brazos-Trinity Basin IV, northwest deepwater Gulf of Mexico, Journal of Geophysical Research-Solid Earth, v. 114, doi: 10.1029/2008jb005922.
- 54. **Flemings, P.B.**, et al., 2008a, Erratum to "Pore pressure penetrometers document high overpressure near the seafloor where multiple submarine landslides have occurred on the continental slope, offshore Louisiana, Gulf of Mexico" (vol 269, pg 309, 2008), Earth and Planetary Science Letters, v. 274, p. 269-283, doi: 10.1016/j.epsl.2008.06.027.
- 55. Flemings, P.B., et al., 2008b, Pore pressure penetrometers document high overpressure near the seafloor where multiple submarine landslides have occurred on the continental slope, offshore Louisiana, Gulf of Mexico, Earth and Planetary Science Letters, v. 269, p. 309-325, doi: 10.1016/j.epsl.2007.12.005.
- 56. *Sawyer, A.H., **Flemings, P.B.**, Elsworth, D., and Kinoshita, M., 2008, Response of submarine hydrologic monitoring instruments to formation pressure changes: Theory and application to Nankai advanced CORKs, J. Geophys. Res., v. 113, p. B01102, doi: 10.1029/2007jb005132.
- 57. *Liu, X.L., and **Flemings, P.B.**, 2007, Dynamic multiphase flow model of hydrate formation in marine sediments, Journal of Geophysical Research-Solid Earth, v. 112, doi: 10.1029/2005jb004227.
- 58. *Long, H., **Flemings, P.B.**, and Germaine, J.T., 2007, Interpreting in situ pressure and hydraulic properties with borehole penetrometers in ocean drilling: DVTPP and Piezoprobe deployments at southern Hydrate Ridge, offshore Oregon, J. Geophys. Res., v. 112, p. B04101, doi: 10.1029/2005jb004165.

- 59. *Sawyer, D.E., **Flemings, P.B.**, Shipp, C., and Winker, C., 2007, Seismic Geomorphology, Lithology, and Evolution of the Late Pleistocene Mars-Ursa Turbidite Region, Mississippi Canyon Area, Northern Gulf of Mexico, American Association of Petroleum Geologists Bulletin, v. 91, p. 215-234.
- 60. Behrmann, J.H., **Flemings, P.B.**, John, C.M., and Scientists, E., 2006, Rapid Sedimentation, Overpressure and Focused Fluid Flow, Gulf of Mexico continental margin, Scientific Drilling, Scientific Drilling, v. 3, p. 12-17, doi: 10.2204/iodp.sd.3.03.2006.
- 61. *Liu, X., and **Flemings, P.B.**, 2006, Passing gas through the hydrate stability zone at southern Hydrate Ridge, offshore Oregon, Earth and Planetary Science Letters, v. 241, p. 211-226, doi: 10.1016/j.epsl.2005.10.026.
- 62. Prather, B.E., Pirmez, C., O'Byrne, C. J., Winker, C., Mallarino, G., Droxler, A.W., **Flemings, P.B.**, Behrmann, J., John, C., Shipboard Scientific Party, 2006, Stratigraphic Evolution of Linked Basins within the Brazos-Trinity Slope System: Western Gulf of Mexico, Gulf Coast Association of Geological Societies Transactions, v. 56, p. 699-699.
- 63. *Enunwa, C.I., Razzano, J.L., III, Ramgulam, A., **Flemings, P.B.**, Ertekin, T., Karpyn, Z.T., 2005, Tahoe Field Case Study—Understanding Reservoir Compartmentalization in a Channel-Levee System: Gulf Coast Association of Geological Societies Transactions, v. 55, p. 152-162
- 64. *Seldon, B., and **Flemings, P.B.**, 2005, Reservoir pressure and seafloor venting: Predicting trap integrity in a Gulf of Mexico deepwater turbidite minibasin, AAPG Bulletin, v. 89, p. 193-209, doi: 10.1306/09170403122.
- 65. **Flemings, P.B.**, and *Lupa, J., 2004, Pressure Prediction in the Bullwinkle Basin through Petrophysics and Flow Modeling (Green Canyon 65, Gulf of Mexico), Marine and Petroleum Geology, v. 21, p. 1311-1322.
- 66. Janik, A., Goldberg, D, Moos, D, Sheridan, J, **Flemings, P.B.**, Germaine, J, Tan, B, 2004, Constraints on the strength of the gas hydrate-rich sediments from borehole breakouts–implications for slope stability near Hydrate Ridge on the US continental margin offshore Oregon, AAPG Bulletin, v. 88.
- 67. Trehu, A.M., **Flemings, P.B.**, Bangs, N.L., Chevallier, J., Gràcia, E., Johnson, J.E., Liu, C.S., *Liu, X., Riedel, M., Torres, M.E., 2004, Feeding methane vents and gas hydrate deposits at south Hydrate Ridge, Geophysical Research Letters, v. 31, doi: 10.1029/2004gl021286.
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- 69. Flemings, P.B., *Liu, X.L., and Winters, W.J., 2003, Critical pressure and multiphase flow in Blake Ridge gas hydrates, Geology, v. 31, p. 1057-1060.
- 70. Mikada, H., et al., 2003, Hydrogeological and geothermal studies around Nankai trough (Nankai trough cruise report), JAMSTEC J. Deep Sea Res, v. 22, p. 125 171.
- 71. *Swanston, A.M., **Flemings, P.B.**, *°Comisky, J.T., and *Best, K.D., 2003, Time-lapse imaging at Bullwinkle Field, Green Canyon 65, offshore Gulf of Mexico, Geophysics, v. 68, p. 1470-1484, doi: 10.1190/1.1620620.
- *Yuvancic-Strickland, B., et al., 2003, Integration Of Geologic Model And Reservoir Simulation, Popeye Field, Green Canyon 116, Transactions of the Gulf Coast Association of Geological Societies (GCAGS), v. 53, p. 918-932.
- 73. *Dugan, B., and **Flemings, P.B.**, 2002, Fluid flow and stability of the US continental slope offshore New Jersey from the Pleistocene to the present, Geofluids, v. 2, p. 137-146.
- 74. **Flemings, P.B.**, *Stump, B.B., ³Finkbeiner, T., and Zoback, M., 2002a, Flow focusing in overpressured sandstones: Theory, observations, and applications, American Journal of Science, v. 302, p. 827-855, doi: 10.2475/ajs.302.10.827.
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- 240. Rowan, M.G., Weimer, P., Flemings, P.B., 1993, Eugene Island Block 330: Regional Stratigraphic and Structural Evolution, GBRN Technical Meeting.
- 241. **Flemings, P.B.**, ³Alexander, L., Spiegleman, M., Anderson, R.N., 1992, Fluid expulsion from abnormally pressured strata along growth faults in the Eugene Island Block 331 Area, Gulf of Mexico. AAPG Annual Meeting, Calgary, Canada.
- 242. **Flemings, P.B.**, Ando, C., Carter, J.B., Ferdinand, K.J., Masek, J., Rassman, B., Rudolph, K., Shaw, C., 1992, Three dimensional stratigraphic geometry and subsidence history of Cretaceous strata, Colville Trough, Alaska, AAPG Annual Meeting, Calgary, Canada.
- 243. 3Alexander, L.L., Flemings, P.B., 1991, Sequence Stratigraphy and Pressure Distribution Along A Syn-Depositional Listric Fault-Eugene Island, Gulf of Mexico, Geological Society of America, San Diego, CA.
- 244. **Flemings, P.B.**, Jordan, T.E., 1990, Modeling stratigraphic sequences in clastic sedimentary basins. AAPG Anual Meeting, San Francisco, CA.
- 245. Jordan, T.E., Flemings, P.B., 1990, Análisis Teórico de la Estratigrafía de Cuencas de Ante país Durante Deformaciones Episódicas, Terceira Reunion Argentina de Sedimentology, May 1990.
- 246. **Flemings, P. B.**, 1989, Downstream fining by selective sediment transport in fluvial systems, American Geophysical Union Meeting.
- 247. Flemings, P.B., Jordan, T.E., 1989, Reconstructing eustatic sea-level history from the age of stratigraphic sequence boundaries, Geological Society of America Meeting.
- 248. **Flemings, P.B.**, Jordan, T.E., 1989, Synthetic stratigraphy, implications for deformation and rheology, International Geological Congress Meeting, Washington, D.C.
- 249. **Flemings, P.B.**, Jordan, T.E., 1987, Synthetic stratigraphy of foreland basins, American Geophysical Union Annual Meeting, Baltimore, MD.
- 250. **Flemings, P.B.**, Jordan, T.E., Reynolds, S.A., 1986, Flexural analysis of two broken foreland basins: the Late Cenozoic Bermejo basin and the Early Cenozoic Green River Basin, AAPG Annual Meeting, Atlanta, GA.

Participation in Meetings, Seminars, and Workshops

- 1. UT GeoFluids Industrial Affiliates Meeting, Austin, TX, Mar 2016 (meeting organizer)
- 2. UT GeoFluids Industrial Affiliates Meeting, Austin, TX, Feb 2015 (meeting organizer)
- 3. American Geophysical Union meeting 2014, San Francisco, CA, December 2014 (invited speaker)
- 4. DOE Drilling Hybrid PCS Strategy Meeting, Salt Lake City, UT, November 2014 (meeting organizer)
- 5. DGS Faculty Retreat, Lost Pines, TX, September 2014 (meeting organizer)
- 6. Shell Grand Challenge Meeting, Austin, TX, September 2014

- 7. Fourth EAGE Shale Workshop, Porto, Portugal, April 2014 (invited speaker)
- 8. 2014 Gordon Research Conference on Natural Gas Hydrate Systems, March 2014
- 9. SPE/AAPG/SEG Pore Pressure Workshop, March 2014
- 10. UT GeoFluids Industrial Affiliates Meeting, Austin, TX, Feb 2014 (meeting organizer)
- 11. American Geophysical Union meeting 2013, San Francisco, CA, December 2013
- 12. 6th International Symposium on Submarine Mass Wasting and their Consequences (6thISSMMTC), Kiel Germany, September 23-25, 2013 (keynote speaker)
- 13. 47th U.S. Rock Mechanics/Geomechanics Symposium, June 2013 (invited speaker)
- 14. IODP Board of Govenors Meeting, Sendai Japan, June 2013
- 15. Methane Hydrate Advisory Committee, June 2013 (Co-chair)
- 16. Marine Gas Hydrate Community Workshop, June 2013
- 17. GSOC Meeting, March 2013
- 18. Jackson School of Geology, Prospective Student Weekend, Austin, TX, Feb. 2013
- 19. UT GeoFluids Industrial Affiliates Meeting, Austin, TX. Feb. 2013 (meeting organizer)
- 20. 2nd Annual Jackson School Student Research Symposium, Feb.2013 (organizer)
- 21. IODP Expedition 342 Editorial Meeting, January 2013
- 22. Convener of the session: Initiation and Evolution of Rift Systems II, 2012 Fall Meeting, AGU, San Francisco, Calif., 3-7 Dec.
- Convener of the session: Faults, Fractures, and Fluid Flow in Georesources: Physical, Chemical, and Transport Processes and Models IV Posters, 2012 Fall Meeting, AGU, San Francisco, Calif., 3-7 Dec.
- 24. Convener of the session: Faults, Fractures, and Fluid Flow in Georesources: Physical, Chemical, and Transport Processes and Models I, 2012 Fall Meeting, AGU, San Francisco, Calif., 3-7 Dec.
- 25. 2nd Gordon Research Conference on Hydrates, Ventura Beach, CA, March 2012 (Chair)
- 26. Jackson School of Geology, Prospective Student Weekend, Austin, TX, Feb. 2012 (meeting organizer)
- 27. UT GeoFluids Industrial Affiliates Meeting, Austin, TX. Feb. 2012 (meeting organizer)
- 28. 1st Annual Jackson School Student Research Symposium, Feb.2012 (organizer)
- 29. American Geophysical Union Fall meeting 2012, San Francisco, CA, December 2011 (invited speaker)
- 30. EarthScope-GeoPRISMS Science Workshop for Eastern North America, Bethlehem, PA, October 2011 (Convener)
- 31. GEOPRESSURE 2011, Galveston, TX, October 2011 (Co-chair)
- 32. IODP 319 Expedition Meeting, Barcelona, Spain, September 2011
- EarthScope-GeoPRISMS Opportunities in Eastern North America, Mini-Workshop, Austin, TX, May 2011 (Convener)
- 34. EarthScope National Meeting, Austin, TX, May 2011 (Convener)
- 35. USGS Hazard Workshop, Menlo Park, CA, March 2011
- 36. UT GeoFluids Industrial Affiliates Meeting, Austin, TX, Feb. 2011 (meeting organizer)
- 37. GeoPRISMS Implementation Workshop: Subduction Cycles and Deformation, Austin, TX, January 2011
- 38. RIE Workshop, Santa Fe, NM, October 2010
- 39. Gordon Research Conference on Methane Hydrates, June 2010
- 40. UT GeoFluids Industrial Affiliates Meeting, Austin, TX. Feb. 2010 (meeting organizer)
- 41. Margins Successor Planning Workshop, San Antonio, TX. Feb. 2010
- 42. IODP Invest, Bremen, Germany, Sept, 2009
- 43. UKIODP Scientific Ocean Drilling Symposium, London, May 2009 (invited speaker)

- 44. Workshop on Seabed Sediment Pore Pressure: Genesis, Measurement and Implications for Design/Analysis, March 2009, Oslo, Norway (invited speaker). SPE / AAPG / SEG Pore Pressure Prediction, Monitoring, and Wellbore Stability Workshop, San Antonio, 45. Texas, February 2009 (member organizing committee) 46. PSU GeoFluids Consortium Meeting, Austin, TX, November 2008 (meeting organizer) 47. IODP Collaborative Industry Drilling Workshop, Houston, TX, June 2008 48. IODP Engineering Development Panel Meeting, France, January 2008 (Panel Chair) 49. PSU GeoFluids Consortium Meeting, Austin, TX, October 2007 (meeting organizer) IODP Science Planning Committee Meeting, August 2007, Santa Cruz, CA, (Presenter) 50. 51. IODP GeoHazards Meeting, August, 2007, Portland, Or (Participant) 52. IODP Gas Hydrates Observatory Meeting, July 2007, Portland, Or. (Presenter) 53. IODP Engineering Development Panel Meeting, Japan, July 2007 (Panel Chair) 54. Chevron Hydrocarbon Charge Workshop, April 2007, Houston, Texas (Presenter) 55. IODP Science Planning Committee Meeting, March 2007, Osaka Japan, (Presenter) 56. IODP Gulf of Mexico Scoping Project Meeting, Feb. 2007, Houston, TX. (Presenter) 57. IODP Engineering Development Panel Meeting, New York, January 2007 (Panel Chair) 58. PSU GeoFluids Consortium Meeting, Santa Cruz, CA, October 2006 (meeting organizer) 59. IODP Expedition 308 Post Cruise Science Meeting, Granada, Spain (Presenter) 60. IODP Science Planning Committee Meeting, August 2006, Bergen, Norway (Presenter) 61. 12th German-American Frontiers of Science Symposium, Potsdam, Germany, June 2006 (speaker) 62. IODP Engineering Development Panel Meeting, Germany, June 2006 (Panel Chair) 63. IODP Engineering Development Panel Meeting, Japan, January 2006 (Panel Chair) 64. IODP EPSP Meeting, Honolulu, HI, December 2005 (presenter) 65. PSU GeoFluids Consortium Meeting, Galveston, TX, September 2005 (meeting organizer) 66. IODP EDP Panel Meeting, Boston, MA, September 2005 (Panel chair) 67. ODP Downhole Tools Workshop, Washington, D.C., May 2004 (workshop co-convener) 68. PSU GeoFluids Consortium Meeting, Santa Barbara, CA, April 2004 (meeting organizer) 69. JOIDES Pollution Prevention and Safety Panel Meeting, Barcelona, Spain, June 2002 (panel member) 70. ODP Leg 196 Post-Cruise Science Meeting, Kochi, Japan, May 2002 (invited participant) 71. PSU GeoFluids Consortium Meeting, Santa Cruz, CA, February 2003 (meeting organizer) 72. JOIDES Pollution Prevention and Safety Panel Meeting, Miami, FL, December 2001 (panel member) 73. Capital Hill Earth Science Week, Joint Oceanographic Institutions, House of Representatives, Washington, D.C., October 2001 (invited speaker) 74. Forum on Cooperation in Scientific Ocean Drilling: Forging Industry and Academic Partnerships, organized by the Industrial Liaison Working Group (an IODP planning group) and hosted by BP Exploration, Sunbury, UK, September. 6-7, 2001 (invited participant) 75. Deepwater Geohazard Workshop, Del Lago Conference Center in Montgomery, Texas, April 2001 (invited speaker) 76. PSU GeoFluids Consortium Meeting, Conoco offices, Houston, TX, March 2001 (meeting organizer) 77. GeoSystems Initiative Bullwinkle Research Seminar, Shell Exploration and Production Company offices, New Orleans, LA, March 2001 (meeting organizer) 78. Annual Penn State Time-Lapse Seismic Consortium Meeting, Texaco Offices, Briar Park, TX, March 2001 (meeting organizer)
 - 79. Chevron Pore Pressure Workshop, Chevron Offices, New Orleans, LA, January 2001 (invited speaker, and led a workshop session)

- 80. Hubbert Quorum, Palo-Alto, CA, December 2000 (invited speaker)
- 81. PSU GeoFluids Consortium Meeting, Bellaire, TX, March 2000 (meeting organizer)
- 82. Workshop in GeoFluids of Overpressured Strata in the Gulf of Mexico, Houston, TX, March 2000. Sponsors: JOI-ODP, Conoco. (co-organizer/leader of conference)
- 83. PSU GeoFluids Consortium Annual Meeting, Houston, TX, February 1999 (meeting organizer)
- 84. GRI Consortium Meeting and Workshop, Houston, TX, June 1998 (meeting organizer)
- 85. GRI Pressure Compartmentalization Workshop, Stillwater, OK, November 1996 (invited participant, gave two presentations)
- 86. Global Basins Research Network (GBRN) Corporate Affiliates Meeting, Houston, TX, August 1995 (invited participant, reported on progress in geopressure research)
- 87. Workshop on pressure/stress in the Gulf of Mexico, Penzoil Offices, Houston, TX, August 1994 (organized and led seminar)
- 88. International Continental Scientific Drilling (ISCD) Workshop, Potsdam University, Potsdam, Germany, August 1993 (invited participant, co-wrote final report)
- 89. Sequence Stratigraphy Workshop, Rutgers University, October 1991 (invited participant)

Invited Lectures

- 1. Woods Hole Oceanographic Institute, Exploring the Methane Hydrate GeoSystem from Pore to Basin, July 26, 2016
- 2. Sandia National Laboratories, Exploring the Methane Hydrate GeoSystem from Pore to Basin, June 15, 2016
- 3. Osher Lifelong Learning Institute at UT Austin, The Methane Hydrate GeoSystem: Geology, Climate, & Energy, April 19, 2016
- 4. Woods Hole Oceanographic Institute, The Methane Hydrate and Free Gas GeoSystem, June 29, 2015
- 5. Penn State University, The Methane Hydrate and Free Gas GeoSystem: Geology, Climate, & Energy, April 6, 2015
- 6. Jackson School of Geosciences Tech Session: The Methane Hydrate and Free Gas GeoSystem: Geology, Climate, & Energy, January 29, 2015
- 7. Keynote Speaker: Pore pressure response to unloading, progressive slope failure, and the stratigraphic record, 6th International Symposium on Submarine Mass Wasting and their Consequences (6thISSMMTC), Kiel Germany, September 23-25, 2013
- 8. Keynote Speaker: The Science of Pore Pressure Prediction in the Deepwater, 47th US Rock Mechanics/Geomechanics Symposium, San Francisco, California, USA on 23-26 June 2013
- 9. Talk: Gas Venting Through the Hydrate Stability Zone: observation and theory, MARUM Center for Marine Environmental Sciences, University of Bremen, June 2012, Bremen, Germany
- 10. Talk: Making Mudstones: insights into material behavior through resedimentation experiments, Invited Speaker, Abstract MR23D-04, presented at 2012 Fall Meeting, AGU, San Francisco, Calif., 3-7 Dec
- 11. Offshore Active Processes and Hazards, RIE Lehigh conference, October 2011, Bethlehem, PA
- 12. Talk: Geomechanical modeling of salt-sediment interaction in evolving sedimentary basins, Abstract T42A-04, presented at 2011 Fall Meeting, AGU, San Francisco, Calif., 5-9 Dec.
- 13. Society of Industrial and Applied Mathematics, 'Capillary behavior of methane hydrates', Long Beach, CA, March 2011.
- 14. Sub-seafloor Oil-plume Containment: How can we preserve and build the required expertise to respond to large oil vents in the US waters? Is there a role beyond spill response?, National USGS Marine Geohazards Workshop, Pore Pressure and the Macondo Well, March 2011, Menlo Park.
- 15. California Institute of Technology, 'Pore Pressure, shallow to deep,' November 2010.
- 16. Dept. of Geophysics, Stanford University, 'Pore pressure, shallow to deep'. November 2010
- 17. Bureau of Economic Geology, Jackson School of Geosciences, 'Pore pressure, trap integrity, and seafloor venting,' April 2010.
- 18. SPE 2008 Forum on Reservoir Geomechanics, Colorado Springs, Co, June 2008 (invited speaker)

- 19. Keynote Speaker/ Co-Convener, 'Subsurface sediment mobilization and fluid flow', Geological Society, London.
- 20. European Association of Geoscientists & Engineers Research Workshop, 'Compacting and Stressing Out Shales: from Geological to Production Timescales', Berlin, Germany (invited speaker)
- 21. Dept. of Earth and Planetary Sciences, University of California, Santa Cruz. April 2008 (JOI Distinguished Lecture)
- 22. Dept. of Geosciences, Indiana University of Pennsylvania, Indiana, PA. March 2008 (JOI Distinguished Lecture)
- 23. Geology Dept. University of California, Davis. January 2008 (JOI Distinguished Lecture)
- 24. Geology Dept. Edinboro University, Edinboro, PA. November 2007 (JOI Distinguished Lecture)
- 25. Dept. Petroleum Engineering and Dept. of Geosciences, Louisiana State University, November 2007 (JOI Distinguished Lecture)
- 26. Earth Sciences Dept., University of Maine, Orono, ME. October 2007 (JOI Distinguished Lecture)
- 27. Geology Dept., Middlebury College, Middlebury, Vt. October 2007 (JOI Distinguished Lecture)
- 28. Earth Sciences Dept., University of Maine, Orono, ME. October 2007 (JOI Distinguished Lecture)
- 29. Chevron 2007 Hydrocarbon Charge Evaluation Workshop, Houston, Texas, April 2007 (invited speaker)
- 30. University of Texas, February 2007 (invited speaker, 2 lectures)
- 31. Department of Geosciences, Penn State University, Spring 2007 (Geodynamics Seminar)
- 32. British Petroleum, October 2006, London, (Invited Speaker)
- 33. Invited Speaker, Kavli Frontiers of Science 12th German-American Symposium, Potsdam Germany (2006)
- 34. 12th German-American Frontiers of Science Symposium, Potsdam, Germany, June 2006 (invited speaker)
- 35. Dept. of Earth Sciences, Dartmouth College, Hanover, NH April 2006 (AAPG Distinguished Lecture)
- 36. Dept. of Geology, University of Toronto, Toronto, Canada, April 2006 (AAPG Distinguished Lecture)
- 37. College of Oceanic and Atmospheric Sciences, Marine Geology, and Geophysics Department, Oregon State University, Corvallis, OR April 2006 (AAPG Distinguished Lecture)
- 38. Dept. of Geological Sciences, University of Oregon, Eugene, OR, April 2006 (AAPG Distinguished Lecture)
- 39. Dept. of Geology and Geophysics, University of Calgary, Calgary, Canada, April 2006 (AAPG Distinguished Lecture)
- 40. Department of Geology and Geological Engineering, University of North Dakota, Grand Forks, ND, April 2006 (AAPG Distinguished Lecture)
- 41. North Dakota Geological Society, Bismarck, ND, March 2006 (AAPG Distinguished Lecture)
- 42. Montana Geological Society, Billings, MT, March 2006 (AAPG Distinguished Lecture)
- 43. Department of Geology and Geophysics, University of Wyoming, Laramie, WY, March 2006 (AAPG Distinguished Lecture)
- 44. Northern California Geological Society, San Ramon, CA, March 2006 (AAPG Distinguished Lecture)
- 45. Department of Geology and Environmental Sciences, Lafayette College, Feb. 2006 (AAPG Distinguished Lecture)
- 46. Department of Geosciences, University of South Carolina, Columbia, S.C., October 2004 (departmental seminar)
- 47. Department of Geosciences, Texas A&M, College Station, TX, October 2003 (departmental seminar)
- 48. Department of Earth Sciences, Rice University, Houston, TX, April 2003 (departmental seminar)
- 49. Department of Geosciences, Penn State University, April 2003 (Geosciences Colloquium speaker)
- 50. JOIDES Pollution Prevention and Safety Panel Meeting, Barcelona, Spain, June 2002 (invited seminar)
- 51. Department of Civil and Environmental Engineering, MIT, Cambridge, MA, April 2002 (departmental seminar)
- 52. University of Rhode Island Graduate School of Oceanography, Narragansett, RI, March 2002 (Marine Geology & Geophysics Seminar)
- 53. Woods Hole Oceanographic Institution, Woods Hole, MA, March 2002 (Geodynamics seminar)
- 54. University of Edinburgh, Edinburgh, United Kingdom, May 2001 (invited speaker)
- 55. Pittsburgh Geological Society, Pittsburgh, PA, November 2000 (invited speaker)
- 56. Cornell University, October 1998 (invited speaker)
- 57. New Orleans Geologic Society, New Orleans, LA, October 1998 (invited speaker)

- 58. Department of Geosciences, Penn State University, February 1997 (Geodynamics Seminar)
- 59. Department of Geosciences, Penn State University, September 1996 (Hydroscience Brown Bag Seminar)
- 60. Department of Geography and Environmental Engineering, Johns Hopkins University, November 15, 1995 (departmental seminar)
- 61. Petroleum & Natural Gas 590 Seminar, Penn State University, November 1995 (invited speaker)
- 62. Society of Petroleum Engineers, Penn State University, February 1995, (invited guest speaker)
- 63. Department of Geosciences, Penn State University, October 1994 (Hydroscience Brown Bag Seminar)
- 64. Department of Earth and Planetary Sciences, University of New Mexico, September 1994, (presented two department-wide seminars)
- 65. Crosby Distinguished Lecturer, M.I.T., January 1994 (presented departmental seminar on geopressure)66.

FIELD EXPEDITIONS

- 2014 Panoche Valley, May 2014 (1 week)
- 2012 IODP Expedition 342, Pore Pressure Pentrometer Deployment, June 2012 (1 month)
- 2012 Motion Decoupled Hydraulic Delivery System Test, Sugarland, TX, April 2012 (1 week)
- 2012 Motion Decoupled Hydraulic Delivery System Test, Sugarland, TX, January 2012 (1 week)
- 2011 Pore Pressure Penetrometer Test, Sugarland, TX, August 2011 (1 week)
- 2010 Pore Pressure Penetrometer Deployment, Boston, June 2010 (1 week.).
- 2009 IODP Expedition 319, Summer 2009 (Physical Properties Specialist)
- 2005 IODP Expedition 308---Gulf of Mexico Hydrogeology (co-Chief Scientist) (2 months)
- 2003 JAMSTEC KRO3 Cork Data Recovery Cruise (2 weeks)
- 2002 ODP Leg 204---Hydrate Ridge (shore-based scientist)
- 2002 JAMSTEC KRO2-10 Cork Data Recovery Cruise (2 weeks)
- 2001 ODP Leg 196---Nankai Accretionary Prism (8 weeks)
- 1997 ODP Leg 174A---New Jersey Margin (logging scientist) (4 weeks)

OTHER EVIDENCE OF RESEARCH ACCOMPLISHMENTS

Interviewed for The Energy Makers, Episode 159, November 2014

Interviewed and research features in article "UT will research new Gulf energy source" published in *Houston Chronicle*, Oct 22, 2014

Interviewed and research featured in article "UT-led team gets \$58M for fuel study" published in *Austin American Statesman*, Oct 22, 2014

Interviewed and research featured in article "Drilling Deep for Fire and Ice" published in *JSG Newsletter*, 2014 Interviewed and research featured in article "Unchartered Waters: A Behind the Scenes Look at the Struggle to Kill the Deepwater Horizon Oil Spill" published in *JSG Newsletter*, 2013.

Interviewed and featured in article "Students Organize First JSG Research Symposium" published in *JSG Newsletter*, 2012.

Interviewed and research featured in article "Hands-On Learning Monopoly: Oil Edition" published in *JSG Newsletter*, 2010.

Interviewed and featured in article "Bureau Organizes First Annual Industry Day" published in *JSG Newsletter*, 2009.

Interviewed and featured in article "Jackson School Hosts Fort Valley Students" published in *JSG Newsletter*, 2008.

Interviewed and research featured in article "Swept Away: Peter Flemings Works Best Under Pressure" published in *JSG Newsletter*, 2007.

Interviewed and research featured in article "Tidal Waves Called Threat to East Coast" published in *The New York Times*, July 2000.

Interviewed and research featured in article "If You See A Really Big Wave At Shore, There's An Explanation" published in *The Philadelphia Inquirer*, July 2000.

Interviewed and research featured in article "All coasts face tidal wave risk Slides could spark disaster" published in USA Today, July 2000.

Interviewed for Discovery Channel program Science News, October 2000.

Interviewed and research featured in article published in Penn State Intercom, November 2000.

RESEARCH PROJECTS, GRANTS AND CONTRACTS

In Progress: Duration	Title		Source	Amount
2016-2019	A multi-scale experimental investigation of flow in coarse- grained hydrate reservoirs during pro	DOE	\$1,499,991	
2016-2018	SUTUR: Multi-faceted study of water cut in the Wolfcamp in the Delaware Basin, West Texas	Shell	\$98,500	
2014-2018	Deepwater Methane Hydrate Characterization and Scientific Assessment		DOE	\$81,022,246
2014-2018	SUTUR Task 11: The Effective Stress Law for Permeability During Pore Pressure and Pressure Cycling of Shale		Shell	\$1,572,345
2013-2019	UT GeoFluids—Industrial Consortium		Industry	\$4,432,954
Pending:			~	
Submitted 2013	<u>Title</u> The impact of recent warming and pore pressure rebound on slope instability: Ocean Drilling Proposal		<u>Source</u> IODP	<u>Amount</u> NA
Completed:		_		
Duration	<u>Title</u>	<u>Source</u>		Amount
2012-2015	Controls on Methane Expulsion During Melting of Natural Gas Hydrate Systems: Topic Area 2	DOE		\$1,170,807
2012-2015	SUTUR Task 1: Mechanisms of Gas Flow in Shale	Shell		\$457,127
2012-2015	SUTUR Equipment Grant	BEG		\$180,000
2014	Jackson School of Geosciences Equipment Grant	JSG		\$100,000
2014-2015	Jackson School of Geosciences Seed Grant: Migration of gas in coarse-grained hydrate- bearing sediments	JSG		\$35,000
2013-2014	JSG Equipment Grant	Jackson School of Geosciences		\$124,000
2012-2014	Theory, experiment, and observation of the impact of warming on methane hydrate melting and gas venting in the Arctic.	NASA		\$30,000
2012	UT GeoFluids - Industrial Consortium	Industry		\$556,600
2011-2013	Observing the Transient Temperature and Pressures of the Tohoku Earthquake: Observatory Fabrication	Consortium	for Ocean Leadership	\$14,998
2011	UT GeoFluids - Industrial Consortium	Industry		\$535,700
2008-2012	A motion decoupled hydraulic delivery system for the IODP	÷	cean Drilling Program t International	\$534,000
2009-2012	Geotechnical Characterization of IODP Site C0009 and Petrophysical Analysis of the Megasplay gault at IODP Site C0010	Consortium	for Ocean Leadership	\$79,386
2010	UT GeoFluids - Industrial Consortium	Industry		\$561,600

2009-2010	IODP Expedition 319 - NANTROSEIZE Stage 2 Riser/Riserless Observatory aboard the D/V Chikyu	CORE	\$64,386
2009	UT GeoFluids - Industrial Consortium	Industry	\$495,000
2007	G3: GeoMechanics, GeoFluids, & GeoHazards Initiative Support (with Marone, and Elsworth)	Energy Institute, The Pennsylvania State University	\$55,000
2007	Overpressure and Slope Stability in the Deepwater Gulf of Mexico	American Chemical Society, Petroleum Research Fund Supplement for Underrepresented Minority Research	\$5,000
2006-2008	Overpressure and Slope Stability in the Deepwater Gulf of Mexico	American Chemical Society, Petroleum Research Fund	\$80,000
2005-2008	JOI Postcruise – Sawyer	Joint Oceanographic Institute	\$23,467
2005-2008	JOI Postcruise – Long	Joint Oceanographic Institute	\$21,353
2005-2008	JOI Postcruise – Flemings	Joint Oceanographic Institute	\$29,011
2005	JOI Cruise – Flemings	Joint Oceanographic Institute	\$65,762
2004-2009	GeoFluidsIII Consortium	Amerada Hess, Anadarko, BP, BHP Petroleum, Chevron, ConocoPhillips, Devon Energy, Encana (withdrew), ExxonMobil, Shell, Unocal (bought by Chevron)	\$1,081,000
2004-2007	Collaborative Research: Analysis and Development of a New Pressure Probe for the IODP	National Science Foundation	\$199,991
2004	Downhole Tools in the Integrated Ocean Drilling Program: Goals, Techniques, Needs, and Strategies for Development	JOI	\$39,988
2002-2005	Petroleum GeoSystems Initiative	Shell Offshore Inc., The Shell Foundation and ChevronTexaco	\$300,000
9/6/02- 7/11/05	ODP Leg 204 Post-Cruise Science: Constraining a soil model for Hydrate Ridge sediments through Triaxial Deformation Experiments, award no. F001698	Texas A&M Research Foundation, JOI/ODP	\$6,600
2001-2004	GeoFluidsII Consortium	Amerada Hess, Anadarko, BP, BHP Petroleum, Burlington Resources, Chevron, Conoco, Devon Energy, Pan Canadian, Phillips, Shell, Unocal	\$648,000
2001-2002	ODP Leg 196 Post-Cruise Science Funds	Texas A&M Research Foundation, JOI/ODP	\$25,594
2001	USSSP Participant, Leg 196	Texas A&M Research Foundation, JOI/ODP	\$19,186
2000-2002	Overpressure and Fluid Flow in New Jersey Continental Slope: Implications for Slope Stability and Cold Seeps	National Science Foundation	\$108,000

		Updat	ed 8-Dec-16
1998-2001	GeoFluidsI Consortium	Amerada Hess, Arco/Vaster, BHP Petroleum, Burlington Resources, Chevron, Conoco, Phillips, Shell, Unocal	\$405,000
1998-2001	Petroleum GeoSystems Initiative	Shell Offshore Inc. and The Shell Foundation	\$350,000
1998-2001	Time-Lapse Seismic Consortium	Chevron, Conoco, Statoil, Texaco	\$180,000
1998-2000	Three-Dimensional Characterization and Modeling of Mio-Pliocene Clinoforms, Offshore New Jersey: Depositional Processes, Stratigraphic Architecture, and Lithology Distribution	American Chemical Society, Petroleum Research Fund	\$60,000
1997-1999	Integrated Analysis of Miocene and Pleistocene Lowstand Wedges	Texas A&M Research Foundation, JOI/ODP	\$19,206
1997-1999	NSF Hydrodynamic	National Science Foundation	\$89,012
1997-1998	Post-Cruise Scientific Research Up-Front Funds	Texas A&M Research Foundation, JOI/ODP	\$3,000
1997	USSSP Participant, Leg 174A	Texas A&M Research Foundation, JOI/ODP	\$16,112
1996-1998	Demonstration of Stress Control on Entrapment of Gas in Geopressured Strata with Application to: Exploration (risking seal integrity) and Production (optimizing well bore stability and fracture completion approaches)	Gas Research Institute	\$757,171
1996	Simulation of Hydrocarbon Migration in Faulted Systems: Stage Two	Exxon Production Research Company	\$69,003
1995-1999	4D Seismic Interpretation of Three Fields in the Gulf of Mexico	Amoco, Chevron, Exxon, Pennzoil, Shell, Texaco, BP, Norsk Hydro, Unocal	\$450,000
1995-1996	Core Laboratories Fellowship	Core Laboratories	\$33,850
1995	Simulation of Hydrocarbon Migration in Faulted Systems: Stage One	Exxon Production Research Company	\$20,000
1994-1997	Shell Foundation Faculty Career Initiation Fund	Shell Oil Company Foundation	\$75,000
1994-1995	Flemings	Columbia University	\$1,000
1994	Global Basins Research Network	Industry Consortium	\$59,500
1993-1995	Dynamic Enhanced Recovery Technologies	Columbia Subcontract, Department of Energy	\$875,546
1993-1994	Sequence Stratigraphic Interpretation and Stratigraphic Modeling Study of Two Neogene Passive Margins	Columbia Subcontract, American Chemical Society	\$25,091
1992-1993	Upgrades to Lamont's Marine Geo and Geophysics Workstation Network for Analysis, Visualization and Numerical Modeling with Large Datasets	National Science Foundation	\$140,067
1991-1992	Stratigraphic Modeling Program	Chevron Petroleum Technology Company	\$25,000

\$113,313

1991-1992	Forward and Inverse Modeling of Two	National Science Foundation
	Cretaceous Foreland Basins: A Cooperative	
	Research Program	

Grants and Contracts for Facility Improvement

Duration	Title	Source	<u>Amount</u>
2005	Upgrading of Linux Computing Facility for Research in Climate-Change, Glacier Dynamics and Fluid Flow	National Science Foundation	\$44,087
2000-2001	Geoscience Instrumentation and Facilities	National Science Foundation	\$158,047
1999-present	Applied Geophysical Instructional Facility	Shell	\$40,000
1999-2002	Applied Geophysical Instructional Facility	Conoco	\$52,000
1997-present	Applied Geophysical Instructional Facility	Landmark Graphics Corporation	\$4,713,940
1997-1999	Applied Geophysical Instructional Facility	Chevron, Conoco, Dupont, Kerr McGee, Shell, Texaco	\$118,000
1997-1999	Applied Geophysical Instructional Facility	IBM	\$303,390

Student Funding Raised

Student I dhung I	Miscu		
Duration	Title	Source	<u>Amount</u>
2014-2015	Predicting Pressure and Stress State Near Salt in the Mad Dog Region	Statoil	\$58,076
2013-2014	Multi-scale Pore Structure at the Core Scale in Shales	Statoil	\$29,000
2013-2014	Reservoir Pore Pressure Prediction from Shale Pressure Estimation	Statoil	\$58,000
2013-2014	Theory, experiment, and observations of the impact of warming on methane hydrate melting and gas venting in the arctic	NASA	\$30,000
2011-2012	Residementation of Nankai	Consotrium of Ocean Leadership	\$20,000
2006-2007	Devon Energy Fort Valley State University Fellowship	Devon Energy	\$20,000/yr.
2006-2007	Marathon Oil Fort Valley State University Fellowship	Marathon Oil	\$30,000/yr.
2006-2007	ExxonMobil Fort Valley State University Fellowship	ExxonMobil	\$25,000/yr.
2006-2007	Shell Oil Fort Valley State University Fellowship	Shell Oil Company	\$30,000/yr.
2006-2007	Chevron GeoSystems Fellowship	Chevron	\$30,000/yr.
2006-2007	Shell GeoSystems Fellowship	Shell	\$60,000/yr.
2005-2007	Chevron Undergraduate Diversity Fellowship	Chevron	\$1,000/yr.
2005-2007	BP Fort Valley State University Fellowship	BP	\$15,000/yr.
2005-2007	Chevron Fort Valley State University Fellowship	Chevron	\$15,000/yr.
2005-2006	Newfield Undergraduate and Graduate Fellowships	Newfield	\$2,000
2005-2006	Chevron GeoSystems Fellowship	Chevron	\$15,000
2005-2006	Shell GeoSystems Fellowship	Shell	\$30,000
2004-2007	ConocoPhillips GeoPressure Fellowship	ConocoPhillips	\$20,000/yr.
2004-2007	ConocoPhillips Graduate Fieldwork Fellowship	ConocoPhillips	\$10,000/yr.
2003-2004	ConocoPhillips GeoPressure Fellowship	ConocoPhillips	\$29,000
2001-2005	ChevronTexaco GeoSystems Fellowship	ChevronTexaco	\$60,000/yr.

Updated 8-Dec-16

2001-2005	BP Graduate Fellowship	BP	\$15,000/yr.
2001-2004	Amerada Hess GeoSystems Graduate Scholarship	Amerada Hess	\$10,000/yr.
1998-2005	Shell GeoSystems Fellowship	Shell	\$60,000/yr.
1998-2001	Chevron GeoSystems Fellowship	Chevron	\$16,000/yr.
1998-2001	Texaco GeoSystems Fellowship	Texaco	\$55,000/yr.
1996-2007	ExxonMobil Fellowship in Quantitative Geosciences	ExxonMobil	\$20,000/yr.

Declined:

Submitted	<u>Title</u>	Source	<u>Amount</u>
2014	Observing the Transient Temperature and Pressures of the	IODP-MI	\$281,929
	Tohuku Earthquake: Observing Fabrication		
2014	Multi-Scale Mass Transport in Shales	American Chemical	\$100,000
		Scociety	
2014	Determining the Best Approach for Assessing the Impact of	IODP	\$39,340
	Recent Ocean Warming and Pore Pressure Rebound on		
	Slope Stability: an IODP Workshop for Proposal 811		
2013	Multi-Scale Mass Transport in Shales	American Chemical	\$100,000
		Scociety	
2012	Evaluation of Potential Hydrate Resources of Colombia	Agencia Nacional de	\$225,000
	Caribbean Coast	Hidrocarburos	

NEW PROGRAMS DEVELOPED

2006	Geohazards, Geomechanics, and GeoFluids Initiative (with Elsworth, Marone, Saffer)
Fall 1999	Petroleum GeoSystems Master's Degree Initiative

NEW FACILITIES DEVELOPED

- Fall 1998 Industry Projects Office
- Fall 1998Petroleum GeoSystems Initiative Office
- Fall 1998 Petroleum GeoSystems Research Laboratory
- Fall 1997 Applied Geophysical Instructional Facility (AGIF)

COMPUTER SOFTWARE DEVELOPED

- 2014-present UT Centroid
- 2001-present PSTAR
- 2001-present Overburden Evaluator
- 2001-present PSU-FRAC
- 1998-present STORMSED1.0 see - Cookman, J., **Flemings, P.B.**, 2001, STORMSED1.0: Hydrodynamics and Sediment Transport in a 2-D Steady-State, Wind- and Wave-Driven, Coastal Circulation Model, *Computers* and Geosciences 27 (6): 647-674.
- 1996-1997 Strata: Basin Modeling Tool *see* - **Flemings, P.B.**, and Grotzinger, J.P., 1996, STRATA: Freeware for Solving Classic Stratigraphic Problems. *GSA Today*, vol. 6, no. 12, p. 1-7.

EDUCATIONAL ACTIVITIES

SUPERVISION OF STUDENT RESEARCH

The University of Texas at Austin Graduate Thesis Research (As primary advisor)

M.S. Students

	Name	Degree Sought
1.	Hilary Strong	M.S.
2.	Andrew Smith	M.S.
3.	Michael Merrell	M.S.
4.	Baiyuan Gao	M.S.
5.	William Betts	M.S.
6.	Michael Cronin	M.S.
7.	Landon Lockhart	M.S.
8.	Will Pinkston	M.S.

PhD Students

	Name	Degree Sought
1.	Derek Sawyer	Ph.D.
2.	Julia Schneider	Ph.D.
3.	Yao You	Ph.D.
4.	Dylan Meyer	Ph.D.
5.	Baiyuan Gao	Ph.D.
6.	Kristopher Darnell	Ph.D.
7.	Kevin Meazell	Ph.D.
8.	Tiannong Dong	Ph.D.
9.	Sebastian Ramiro Ramirez	Ph.D.

Graduate Thesis Research (As co-advisor)

M.S. Students

	Name	Degree Sought	Status
1.	Lucas Fidler	M.S.	Completed 2011
2.	Michael Braunscheidel	M.S.	Incomplete

PhD Students

	Name	Degree Sought	Status
1.	Kylara Martin	Ph.D.	Completed 2011
2	Kyung Chang	Ph.D.	Completed 2013

Membership on Graduate Degree Candidates' Committee

	Name	Degree Sought
1.	Kylara Martin	Ph.D.
2.	Kyung Won Chang	Ph.D.
3.	Emily Graham	M.S.
4.	Alexander Urquhart	M.S.
5.	Yao Peng	Ph.D.
6.	Yang Xue	Ph.D.
7.	Brendan Anthony Casey	Ph.D. (MIT)
8.	Amy Adams	Ph.D. (MIT)
9.	John Nowinski	Ph.D.
10.	Amer Dierieh	Ph.D. (MIT)
11.	Brad Gooch	Ph.D.
12.	Gregory Hurd	Ph.D.
13.	Miguel Cisneros	M.S.

Status

Completed 2009 (ExxonMobil) Completed 2012 (ExxonMobil) Completed 2012 (ConocoPhilips) Completed 2013 (pursuing PhD) Completed 2014 (Halliburton) Completed 2015 (Anadarko) In Progress In Progress

Status

Completed 2010 (ExxonMobil) Completed 2011 (Texas A&M) Completed 2013 (Hess) In Progress In Progress In Progress In Progress In Progress In Progress

Status

Completed 2011 Completed 2013 Completed 2013 Completed 2013 Completed 2011 Completed 2014 Completed 2014 Completed 2014 Completed 2014 Completed 2016 In Progress In Progress (exp 2016) In Progress

Undergraduate Thesis Research (As primary advisor) Daguas Caught Mana

	Iname	Degree Sought
1.	Carmen Atkins	B.S. (Geosciences)

Penn State

Graduate Thesis Research (As primary advisor) MC Ctude

M.S. Students		
	Name	
1.	Tucker Burkhart	
2.	David Gordon	
2	A 1	

- Andrew Hoover 3.
- 4. Beth Stump
- 5. Janette Cookman
- 6. John Metzger
- 7. Nathan Kaleta
- 8. Jacek Lupa
- 9. Alastair Swanston
- 10. Kevin Best
- 11. Joseph Comisky
- 12. Eric Kuhl
- Tin Wai Lee 13.
- 14. Ben Seldon
- 15. Beth Strickland
- 16. Aaron Janssen
- 17. Chekwube Enunwa
- 18. Umut Gokcesu
- 19. Derek Sawyer
- 20. Joseph Razzano
- 21. Asha Ramgulam
- 22. Louanne Christopher
- 23. Audrey Hucks Sawyer
- 24. Doruk Seren
- 25. Matthew Reilly
- 26. Charles Bohn
- 27. Joseph Valenti

PhD Students

- Name
- 1. Anil Deshpande
- 2. Brandon Dugan
- 3. Xiaoli Liu
- 4. Hui Long

Graduate Thesis Research (As co-advisor)

M.S. Students

	Name	Degree Sought	Status
1.	Matt Bennett	M.S. (EGEE)	Comple
2.	Dae Sung Lee	M.S. (EGEE)	Comple
3.	Tiancong Hong	M.S. (Geosciences)	Comple

PhD Students

Status	
Completed 2012 (Berger	r
Geosciences)	

Degree Sought M.S. M.S. (Geosciences) M.S. (Geosciences)

M.S. (Geosciences) M.S. (Geosciences) M.S. (Geosciences) M.S. (Geosciences) M.S. (Geosciences) M.S. (Geosciences) M.S. (EGEE) M.S. (Geosciences) M.S. (EGEE) M.S. (Geosciences) M.S. (Geosciences) M.S. (Geosciences) M.S. (Geosciences) M.S. (Geosciences) M.S. (EGEE) M.S. (Geosciences) M.S. (Geosciences) M.S. (EGEE) M.S. (Geosciences) M.S. (Geosciences) M.S. (EGEE) M.S. (Geosciences) M.S. (Geosciences) M.S. (Geosciences)

Degree Sought

Ph.D. (Geosciences) Ph.D. (Geosciences) Ph.D. (Geosciences) Ph.D. (EGEE)

Status

Completed 1997 Completed 1997 Completed 1997 Completed 1998 Completed 1999 Completed 1999 Completed 2001 Completed 2001 Completed 2001 Completed 2002 Completed 2002 Completed 2003 Completed 2003 Completed 2003 Completed 2003 Completed 2004 Completed 2005 Completed 2005 Completed 2005 Completed 2006 Completed 2006 Completed 2006 Completed 2007 Completed 2008 Completed 2008 Completed 2008 Completed 2009

Status

Completed 1997 Completed 2003 Completed 2006 Completed 2007

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leted 1996 leted 2001 leted 2004

	Name	Degree Sought	Status
1.	Laurel Alexander	Ph.D. – at MIT	Completed 1995
2.	Jennifer Carlson	PhD. – at MIT	Completed 1996
3.	Thomas Finkbeiner	Ph.D. (Geosciences)	Completed 1998
4.	Victor Siahaan	Ph.D. (EGEE)	Completed 2002

Post-doctoral and Visiting Scholars Supervised

Matthew VanWie, 5/1999-8/1999 (supported by Flemings) Bruce Hart, Post-Doctoral Scientist, 6/1994-6/1996 (supported by Flemings) Insun Song, Research Associate, 10/2006-2010 (Penn State)

Membership on Graduate Degree Candidates' Committee

	Name	Degree Sought	Status
1.	Mohammed Al-Mugheiry	M.S. (Geosciences)	Completed 1995
2.	Wei He	Ph.D. (Geosciences)	Completed 1996
3.	David McConaughy	M.S. (Geosciences)	Completed 1997
4.	Ruth Robinson	Ph.D. (Geosciences)	Completed 1997
5.	Lee Colarusso	M.S. (Geosciences)	Completed 1998
6.	Tim White	Ph.D. (Geosciences)	Completed 1999
7.	Robert Dias	Ph.D. (Geosciences)	Completed 2000
8.	Dimitri Abbado	M.S. (Geosciences)	Completed 2001
9.	Ian Brewer	Ph.D. (Geosciences)	Completed 2001
10.	Laura Savalli	M.S. (Geosciences)	Completed 2003
11.	Nikolai Pedentchouk	M.S. (Geosciences)	Completed 2004
12.	Dae Sung Lee	Ph.D. (EGEE)	Completed 2006
13.	Douglas Edmunds	M.S. (Geosciences)	Completed 2006
14.	Alex McKiernan	Ph.D. (Geosciences)	Completed 2006
15.	Kritika Trakoolngam	M.S. (EGEE)	Completed 2006
16.	Michael Fitzgerald	M.S. (EGEE)	Completed 2007

Undergraduate Thesis Research (As primary advisor)

	Name	Degree Sought	Status
1.	Matt Bennett	B.S. (Geosciences)	Completed 1994
2.	Brent Criswell	B.S. (Geosciences)	Completed 1994
3.	Edward Carpanetti	B.S. (Geosciences)	Completed 1995
4.	Randy Geis	B.S. (Geosciences)	Completed 1997
5.	Ryan Shatt	B.S. (Geosciences)	Completed 1997
6.	Patrick Walsh	B.S. (Geosciences)	Completed 1998
7.	Joseph Comisky	B.S. (Geosciences)	Completed 1999
8.	Kyle Straub	B.S. (Geosciences)	Completed 2002
9.	Cody Jones	B.S. (Geosciences)	Completed 2006
10.	Josh Dixon	B.S. (Geosciences)	Completed 2007

Undergraduate Advising (As thesis committee member or co-advisor)

J. Aileo, J. Bona, R. Brennan, E. DeRoos, T. Heil, A. Kondas, T. Lippman, L. Mark, J. Mihalcik, M. Panettieri, D. Pinkus, G. Price, E. Scott, D. Whitmire

POST-DOCTORAL AND VISITING SCHOLARS SUPERVISED

Manasij Santra, 11/2016-present Steve Phillips, Post-Doctoral Scientist, 2015-present Stacey Worman, Post-Doctoral Scientist, 2015-2016 Kehua You, Post-Doctoral Scientist, 2013-2015 Christian Hermanrud, Visiting Scholar from Statoil, 2012-2013 Athma Bhandari, Post-Doctoral Scientist, 2012-2014 Julia Schneider Reece, Post-Doctoral Scientist, 2011-2013 Gang Luo, Post Doctoral Scientist, 2009-2011 Maria Nikolinakou, Post-Doctoral Scientist, 2009-2010 Insun Song, Post-Doctoral Associate, 2007-2010

TECHNICAL STAFF SUPERVISED

Penelope Parr, Research Engineering Associate, 2016-present Ethan Petrou, Research Engineering Associate, 2016-present Joshua O'Connell, Research Engineering Associate, 2016-present Colleen Morgan, Senior Program Coordinator, 2015-present Kehua You, Research Associate, 2015-present Athma Bhandari, Research Associate, 2014-present Peter Polito, Research Associate: Laboratory Director, 2011-present Tessa Green, Project Manager, 2010-present Maria Nikolinakou, Research Associate, 2010-present Heather Nelson, Project Assistant, 8/1998-present Donnie Brooks, Research Associate, 2011-2015 Gang Luo, Research Associate, 2011-2015 Kris Darnell, Research Associate, 2009-2010 Mark Andrews, Research Associate, 2008-2010 Andrew Peterson, Undergraduate Research Assistant, 2006-2007 LaMichelle Arnold, Undergraduate Research Assistant, 2006-2007 Ryan Jacoby, Research Assistant, 2006-2007 Christie Rosenhoover, Staff Assistant, 2006-2007 Judi Hite, Staff Assistant, 2005-2005 Damian Futrick, Systems Administrator, 2004-2007 Christina Conley, Systems Administrator, 2004-2004 Stefanie McCormick, Staff Assistant, 2003-2005 Frank Kachurak, Systems Administrator, 2001-2003 Tom Canich, Systems Administrator, 2001-2007 Rachel Alternus, Staff Assistant, 2000-2003 Michael Manes, Research Assistant, 1999-1999 Nancy Levitsky, Staff Assistant, 1998-2000 James Ashbaugh, Research Assistant, 1998-2000 John Miley, Systems Administrator, 1997-2001

AWARDS MY STUDENTS/STAFF HAVE WON

- 2016 Baiyuan Gao: NSF Travel Award, Fall 2016
- 2016 Kris Darnell: Ewing/Worzel Fellowship for Spring 2017
- 2016 Tessa Green: UT Institute for Geophysics Eleanor Picard Excellence Award
- 2016 Kris Darnell: Best Paper Published by a JSG Graduate Student Award
- 2015 Baiyuan Gao: AGU Travel Award, Fall 2015
- 2015 Kris Darnell: Whitney Endowed Presidential Scholarship for Fall 2015 Spring 2016
- 2015 Baiyuan Gao: Whitney Endowed Presidential Scholarship for Fall 2015 Spring 2016
- 2015 Dylan Meyer: GeoPRISMS Student Presentation Honorable Mention
- 2015 Dylan Meyer: Chevron Graduate Student Fellowship for Spring 2015
- 2014 Dylan Meyer: AGU 2014 Outstanding Student Presentation Award in Biogeosciences
- 2014 Dylan Meyer: Banks Fellowship for Spring and Summer 2014
- 2014 Dylan Meyer: JSG Energy Geosciences Seed Grant
- 2013 Kris Darnell: NASA Fellowship Fall 2013 thru Summer 2014
- 2013 Dylan Meyer: Gale White Fellowship Fall 2013
- 2013-2016 Baiyuan Gao: Statoil Fellowship Fall 2013 thru Summer 2016

2013	Michael Merrell: Statoil Fellowship
2012-2013	Andrew Smith: US Student Fulbright Award for 2012-2013 to Norway
2013	Maria Nikolinakou: member of the organizing committee for the 47th U.S. Rock
	Mechanics/Geomechanics Symposium, in San Francisco, June 2013
2012	Dylan Meyer: 2012, University of Texas Institute of Geophysics Fellowship
2012	Dylan Meyer: 2012, Best Student Poster Presentation Award, Eckerd College Science Symposium
2012	Maria Nikolinakou: Future Leaders of the American Rock Mechanics and Geomechanics
	Association
2012	Maria Nikolinakou: invited keynote speaker at the 3rd Geoqus Conference in Potsdam, Germany
2012	Yao You: Ewig Worzel Fellowship, UTIG
2012	Andrew Smith: Best M.S. Tech Session Speaker (Spring 2012), Department of Geological Sciences
2012	Andrew Smith: Outstanding Student Paper Award, AGU Ocean Sciences Section
2012	Andrew Smith: Best Student Presentation at the Gordon Research Conference on Gas Hydrates
2012	Michael Merrell: Statoil Fellowship for Predicting Pressure and Stress State near Salt in the Mad
	Dog Region
2012	Michael Cronin: Mruk Family Named Grant from AAPG Foundation
2012	Andrew Smith: ConocoPhillips SPIRIT Scholar
2012	Julia Schneider Reece: Best Paper Award, Department of Geological Sciences
2011-2012	Michael Cronin: Jackson School Endowed Graduate Fellowship (ConocoPhillips)
2011	Julia Schneider Reece: Outstanding Student Paper Award, AGU Fall Meeting, Mineral and Rock
	Physics Section
2011	Julia Schneider Reece: Best Student Speaker Award, Technical Sessions, UT JSG, Fall 2011
2011	Julia Schneider Reece: Ewing Worzel Fellowship, UTIG, Fall 2011
2011	Yao You: Best Presentation, AGU Fall Meeting
2011	Yao You: 'Best Poster' award for his presentation "Coupling of the evolution of pore pressure and
	the retrogressive slope failure during breaching " at the recent SIAM Conference on Mathematics
	& Computational Issues in the Geosciences held in Long Beach California.
2010	Julia Schneider: Outstanding Teaching Assistant, Jackson School of Geosciences
2010-2011	Julia Schneider Reece: 2010-2011 Schlanger Scientific Ocean Drilling Fellowship Program Winner
2010	Derek Sawyer: Tech Sessions Best Speaker, Jackson School of Geosciences
2010	Julia Schneider Reece: 'Outstanding Student Paper Award' from the Mineral and Rock Physics
	Section of AGU. Her poster was presented at the Fall 2010 AGU meeting in San Francisco and was
	entitled "Experimentally derived model to predict permeability behavior of mudstones."
2010	Yao You: 'Best Presentation' award for his presentation "Coupling of the evolution of pore
	pressure and the retrogressive slope failure during breaching " at Fall AGU, 2010
2009	Derek Sawyer: Outstanding Student Paper Award, American Geophysical Union Fall Meeting
2004-2005	JOI-USSAC Student Fellowship to Xiaoli Liu, Modeling of Hydrate Systems, \$25,000

TEACHING HONORS

2003 Received the Pennsylvania State University, College of Earth and Mineral Sciences G. Montgomery and Marion Mitchell Award for Innovative Teaching

1996 Received the Pennsylvania State University, College of Earth and Mineral Sciences Matthew J. and Anne C. Wilson Outstanding Teaching Award

COURSES TAUGHT

Course	CREDITS	Course Title	Approx. Enrollment
Geosc 497g	3	Field Stratigraphy (50%)	7
Geosc 454	3	The Geology of Oil and Gas	13
Geosc 497b	3	Advanced Stratigraphy	2
Geosc 454	3	The Geology of Oil and Gas	12
Geosc 497b	3	Advanced Stratigraphy	10
	Geosc 497g Geosc 454 Geosc 497b Geosc 454	Geosc 497g 3 Geosc 454 3 Geosc 497b 3 Geosc 454 3	Geosc 497g3Field Stratigraphy (50%)Geosc 4543The Geology of Oil and GasGeosc 497b3Advanced StratigraphyGeosc 4543The Geology of Oil and Gas

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Spring 1996	Geosc 596a	3	3-D Seismic Processing	3
	Geosc 454	3	The Geology of Oil and Gas	15
Fall 1996	Geosc 497b	3	Advanced Stratigraphy	8
Spring 1997	Geosc 454	3	The Geology of Oil and Gas	21
	Geosc 597d	3	Field Stratigraphy (50%)	10
Fall 1997	Geosc 497k	3	Multichannel Seismic Processing and	13
			Interpretation (50%)	
Spring 1998	Geosc 597d	3	Field Stratigraphy (50%)	4
	Geosc 454	3	The Geology of Oil and Gas	23
Fall 1998	Geosc 497k	3	Multichannel Seismic Processing and	5
			Interpretation (50%)	
	Geosc 497b	3	Advanced Stratigraphy	10
Spring 1999	Geosc 454	3	The Geology of Oil and Gas	17
Fall 1999	Geosc 558	3	Multichannel Seismic Processing and	9
			Interpretation (50%)	
~	Geosc 598a	1	Petroleum GeoSystems Seminar	4
Spring 2000	Geosc 454	3	The Geology of Oil and Gas	22
	Geosc 597d	3	Field Stratigraphy (50%)	13
	Geosc 598a	3	Petroleum Geosystems	5
Fall 2000	Geosc 479	3	Advanced Stratigraphy	7
	Geosc 597g	3	GeoFluids Mechanics (50%)	7
Spring 2001	Geosc 454	3	The Geology of Oil and Gas	15
Fall 2001	Geosc 598a	3	Petroleum Geosystems (50%)	11
	Geosc 598b	1	Petroleum GeoSystems Seminar	4
	Geosc 598c	3	Geofluids Seminar	8
Spring 2002	Geosc 454	3	The Geology of Oil and Gas (10%)	9
	Geosc 558	3	Multichannel Seismic Processing and	9
			Interpretation (10%)	
Spring 2003	Geosc 479	3	Advanced Stratigraphy	
Fall 2003	Geosc 558	3	Multichannel Seismic Processing and	14
			Interpretation (50%)	
	Geosc 598b	1	Petroleum GeoSystems Seminar	4
Spring 2004	Geosc 454	3	The Geology of Oil and Gas	14
	Geosc 572	3	Field Stratigraphy (50%)	13
	Geosc 597	1	Geofluids Seminar	5
	Geosc 598A	3	Petroleum GeoSystems (50%)	11
Fall 2004	Geosc 479	3	Advanced Stratigraphy (50%)	12
	Geosc 558	3	Multichannel Seismic Processing and	12
		_	Interpretation (50%)	
Spring 2005	Geosc 454	3	The Geology of Oil and Gas	18
Fall 2005	Geosc 597	1	Geofluids Seminar	7
Spring 2006	Geosc 454	3	The Geology of Oil and Gas	26
	Geosc 572	3	Field Stratigraphy (50%)	12
	Geosc 597I	1	Geofluids Seminar (20%)	8
Fall 2006	Geosc 497	3	Advanced Stratigraphy (50%)	8
	Geosc 558	3	Multichannel Seismic Processing and	8
	a f (a) i		Interpretation (50%)	_
	Geosc 598A	1	Petroleum GeoSystems Seminar	5
a	Geosc 597C	1	GeoFluids/Mudrock Seminar	5
Spring 2007	Geosc 454	3	The Geology of Oil & Gas	26
	Geosc 597K	1	Petroleum GeoSystems Seminar	4
	Geosc 598F	1	G3 Seminar (50%)	5
Fall 2007	Geosc 558	1	Petroleum GeoSystems Seminar	5

Spring 2008 Fall 2008 Spring 2009 Fall 2009	GEO 391 GEO 191 GEO 391 GEO 191	3 1 3 1	Guadalupe Mountain Stratigraphy Earth Surface and Hydro. Seminar Crustal GeoFluids Earth Surface and Hydro. Seminar	10 5 14 4
Spring 2010	GEO 330K	3	Energy Exploration	126
Spring 2011	GEO 391	3	Crustal Fluids	14
	GEO 330K	3	Energy Exploration	126
Spring 2012	GEO 330K	3	Energy Exploration	71
	GEO 391/371C	3	Field Stratigraphy: Guadalupe Mtns	18
Spring 2013	GEO 330K	3	Energy Exploration	54
	GEO 391	3	Crustal GeoFluids	16
Spring 2015	GEO 330K	3	Energy Exploration	27
Fall 2015	GEO 291	2	Fire/Ice: Methane Hydrates Geosystems	6
Spring 2016	GEO 330K	3	Energy Exploration	15
	GEO 382D	3	Crustal GeoFluids	15

NEW COURSES DEVELOPED

Geosc 572	Field Stratigraphy, Spring 1994, (with Patzkowsky)
Geosc 479	Advanced Stratigraphy, Fall 1994
Geosc 558	Multi-Channel Seismic Processing and Interpretation, Spring 1997
Geosc 598a	Reservoir GeoSystems, Fall 1999
Geosc Special Topics	Geofluids Seminar, Fall 2000
Geosc Special Topics	G3: GeoMechanics, GeoFluids, GeoHazards Seminar, Fall 2005
Geo391	Crustal GeoFluids

ESTABLISHED COURSES REVISED

Geosc 454	The Geology of Oil and Gas, Spring 1994
Eceem 490	Finance: Applications for Energy and Minerals, Spring 2001
Geo330K	Energy Exploration

FIELD TRIPS LED:

Spring 2013:	Crustal Fluids Field trip for graduate course to California
Spring 2012:	Graduate Student Field trip to Guadalupe Mountains
Spring 2011;	Crustal Fluids Field trip for graduate course to California
Spring 2010:	Crustal Fluids Field trip for graduate course to California
Spring 2009:	Crustal Fluids Field trip for graduate course to California
Spring 2008:	Graduate Student Field trip to Guadalupe Mountains

SERVICE TO THE UNIVERITY, PUBLIC AND PROFESSION

SERVICE TO THE UNIVERSITY OF TEXAS

Service to the Department & Jackson School of Geosciences

2015	Member, Consultative Committee for Evaluation of Dean of Jackson School of Geosciences
2013-present	Chair, Appointments Committee-Jackson School
2014	Chair, Strategic Planning Committee (Department of Geological Sciences)
2012-present	Member, Graduate Studies Committee (Department of Geological Sciences)
2013	Chair, Faculty Evaluation Committee (Department of Geological Sciences)
2010-2012	Chair, Appointments Committee-Jackson School
2010-August	Presented talk on research for Jackson School Reunion
2009-2011	Member, Endowment Committee (Jackson School)
2009-2010	Member, Appointments Committee (Jackson School)

2009-2012	Chair, Graduate Studies Committee (Department of Geological Sciences)
2009-2009	Member, IT Search Committee (Department of Geological Sciences)
2009-2009	Chair, Energy Theme Search Committee (Jackson School)
2009	Chair Sed Erg (Jackson School)
2008-2012	Graduate Adviser, Dept. of Geological Science (Jackson School)
2008-2009	Member, UTIG Director Search Committee (UTIG)
2008-2009	Chair, Schoch Building Move Committee (Department of Geological Sciences)
2008-2009	Chair, Ad Hoc Department Computing Committee (Department of Geological Sciences)
2007-2009	Member, Energy Theme Search Committee (Jackson School)
2007-2009	Member, Departmental Endowed Position Committee (Department of Geological Sciences)

SERVICE TO PENN STATE

Service to the Department

2003-2007	Chair, Department Computing Committee
2003-2004	Member, Executive Committee
2003-2004	Member, Promotion and Tenure Committee
2003-2004	Member, Broad Search Faculty Search Committee
2001	Member, Search Committee for Geophysics faculty position
2000-2001	Member, Search Committee for Seismology faculty position
1999	Member, Search Committee for Crustal Geophysics faculty position
1998-2001	Chair, Department Computing Committee
1998-2000	Member, Search Committee for Geodynamics faculty position
1997	Chair, Search Committee for Hydroscience faculty position
1994-1995	Rover, Graduate Student Candidacy Exams

Service to the College

2004-2005	Co-Chair, Deike Basement Renovation Committee
2003-2004	Member, AESEDA Leadership Committee
2003	Chair, Strategic Planning Committee for the Alliance for Earth Sciences, Engineering, and
	Development in Africa (AESEDA)
2000	Member, Computing Committee
1999-2007	Co-Director, Petroleum GeoSystems Initiative
1999-2007	Co-Chair, Petroleum GeoSystems Curriculum Committee

SERVICE TO BUSINESS AND INDUSTRY

SERVICE TO) BUSINESS AND INDUSTRY
2016	Leader, Advanced Pore Pressure Prediction Workshop: Concepts, Mechanisms, and Workflows,
	taught in Houston for Nautilus (June, 2016)
2015	Leader, Advanced Pore Pressure Prediction Workshop: Concepts, Mechanisms, and Workflows,
	taught in Houston for Nautilus (September, 2015)
2015	Leader, Advanced Pore Pressure Prediction Workshop: Concepts, Mechanisms, and Workflows,
	taught in Houston for Nautilus (June, 2015)
2015	Met with Franklin Orr, the Under Secretary for Science and Energy for the US Department of
	Energy (April, 2015)
2014	Leader, Advanced Pore Pressure Prediction Workshop: Concepts, Mechanisms and Workflows,
	taught in Houston for Nautilus (November, 2014)
2014	Lecturer, Gulf of Mexico Petroleum Systems, taught in Covington, LA for Nautilus (October,
	2014)
2014	Leader, Advanced Pore Pressure Prediction Workshop: Concepts, Mechanisms and Workflows,
	taught in Houston for Nautilus (September 2014)
2013	Leader, Advanced Pore Pressure Prediction Workshop: Concepts, Mechanisms and Workflows,
	taught in Houston for Nautilus (November 2013)

2013	Leader, Advanced Pore Pressure Prediction Workshop: Concepts, Mechanisms and Workflows,
2012	taught in Houston for Nautilus (September 2013)
2013	Consultant, Husky Energy
2012	Leader, Advanced Pore Pressure Prediction Workshop: Concepts, Mechanisms and Workflows, taught in Houston for Nautilus (September 2012)
2012	Expert Witness, Chevron Brazil
2009-present	Director UT GeoFluids Consortium (Run Annual Meeting hosting ~75 industry specialists)
2011	Leader, Advanced Pore Pressure Prediction Workshop: Concepts, Mechanisms and Workflows, taught in Houston for Nautilus (November 2011)
2011	Leader, Advanced Pore Pressure Prediction Workshop: Concepts, Mechanisms and Workflows,
-	taught in Norway for Statoil (October 2011)
2009	Co-hosted Fort Valley State University undergraduates for U.T. visit (January, 2009)
2008	Visited Fort Valley State University (HBCU) as part of Career Energy Day (March 2008)
2008	Hosted Fort Valley State University undergraduates for U.T. visit (April, 2008)
2004-2009	Director, GeoFluidsIII Consortium
2002-2004	Director, GeoFluidsII Consortium
1999-present	Manager, GeoFluids and GeoSystems Office
1999-2007	Liaison, Departmental Industry Recruiting Program
1999	Participant, Ocean Drilling Program (ODP)-Industry workshop. Mandate: find common scientific
	problems of interest to both industry and scientific community
1998-2001	Director, Penn State Time-Lapse Seismic Consortium
1998-2001	Director, Penn State GeoFluids Consortium
1998	Leader, Gas Research Industry Workshop, teaching methods to predict overpressure in sedimentary basins
1995-1998	Co-Director, Lamont-Penn State 4-D Seismic Consortium

SERVICE TO GOVERNMENT AGENCIES

- 2015-present Member, Methane Hydrate Advisory Committee (An Advisory Committee to the Secretary of Energy)
- 2014-2015 Chairperson, Methane Hydrate Advisory Committee (An Advisory Committee to the Secretary of Energy)
- 2010-2013 Co-Chairperson, Methane Hydrate Advisory Committee (An Advisory Committee to the Secretary of Energy)
- 2010 Informal Advisor to Energy Secretary Stephen Chu's Science team on the BP Macondo Well.
- 2001 Invited Speaker, House of Representatives, Washington, DC, presented poster on ocean drilling in passive margins to understand crustal fluid flow as part of "Earth Science Week"

PROFESSIONAL JOURNAL EDITORSHIPS

- 2003-2009 Associate Editor, *Geofluids*
- 1996-2012 Associate Editor, *Basin Research*
- 1993-1997 Associate Editor, Journal of Sedimentary Research

SERVICE TO PROFESSIONAL ORGANIZATIONS

- 2015-2016 American Geophysical Union, Chair of the Asahiko Taira International Scientific Ocean Drilling Research Prize Committee
- 2014 Visiting Research Scientist, Woods Hole Oceanographic Institution, July to August, 2014
- 2013 Visiting Research Scientist, Woods Hole Oceanographic Institution, July 1 to August 15, 2013
- 2012 Shipboard Scientist, Expedition 342 JOIDES Resolution cruise, June 2012
- 2012 Chair 2nd Gordon Research Conference in Gas Hydrates
- 2011 Co-Convener, GeoPressure 2011, Biennial conference on overpressure.
- 2010-2011 Member Organizing Committee for International Conference on Geopressure (Galveston, 10/4/2011)
- 2010-present Member Science Proposal Writing Committee—Margins

2010	Vice Chair 1 st Gordon Research Conference in Gas Hydrates
2010-present	Member GeoPrisms Steering Committee
2010	Co-Convener Rifting Margins Workshop, Nov. 2010.
2009-present	Member IODP Board of Governors
2008-present	Member Colorado School of Mines Department of Geological Engineering Review Committee
2005-2008	Chairperson, IODP Engineering Development Panel
2005	Co-Chief Scientist, IODP Expedition 308, Gulf of Mexico Hydrogeology
2004	Convener, Downhole Tools Workshop (JOI-USSAC supported workshop)
2003-2006	Served as member of the AAPG Research Committee
2003	Shipboard Scientist, JAMSTEC KR03-05 data recovery cruise, Yokohama, Japan, May 2003
2003	Served as Shorebased Scientists for ODP Leg 204
2002	ACORK specialist, Ocean Drilling Program data recovery cruise
2001-2002	Member, Interim Science Steering and Evaluation Panel for the Environment, guides the scientific
	groundwork for International Ocean Drilling Program
2001	Co-Chair American Geophysical Union Session in Dynamics of Gas Hydrate Reservoirs and
	Similar Shallow Marine Flow Systems
2001	Logging/CORK Specialist, Ocean Drilling Program Cruise, Leg 196
2000	Chair, American Association of Petroleum Geologists Session in Geopressure and Trap Integrity
1999-2002	Member, JOI Pollution Prevention and Safety Panel, evaluates safety of Ocean Drilling Program
	sites
1999	Participant, Ocean Drilling Program (ODP)-Industry workshop. Mandate: find common scientific
	problems of interest to both industry and scientific community
1999	Participant, National Science Foundation Special Sedimentary Geosciences Workshop
1997	Logging Scientist, Ocean Drilling Program Cruise, Leg 174A
1997-2000	Member, Scientific Measurements Panel of the Ocean Drilling Program, evaluates and strengthens
	ability of the JOIDES Resolution to make scientific measurements
1993	Chair, SEPM Finance, mid-year meeting

PROPOSALS REVIEWED FOR:

American Chemical Society, Department of Energy, Petroleum Research Fund, The National Science Foundation, NSERC