

*VITA****Kevin P. Furlong***

413 Deike Building
 Department of Geosciences
 Pennsylvania State University
 University Park, PA 16802

(814) 863-0567
 (814) 863-7823 (FAX)
 email: kevin@geodyn.psu.ed

Education:

B.A. Mathematics	1975	Middlebury College, Middlebury, VT
B.A. Geology	1975	Middlebury College, Middlebury, VT
Ph.D Geophysics	1981	University of Utah, Salt Lake City, UT
Ph.D. Dissertation:		Time Dependent Thermal Modeling of Plate Tectonic Processes

Professional Positions:

1976-1981	Research Assistant, Department of Geology and Geophysics, University of Utah, Salt Lake City, UT
1981-1984	Assistant Professor of Geophysics, Department of Geology and Geophysics, University of Wyoming, Laramie, WY
1984-1987	Adjunct Assistant Professor of Geophysics, University of Wyoming, Laramie WY
1984-1986	Assistant Professor of Geosciences, Department of Geosciences, The Pennsylvania State University, University Park, PA
1986-1991	Associate Professor of Geosciences, Department of Geosciences, The Pennsylvania State University [Tenure Granted 1988]
1986-Present	Faculty Affiliate, Earth System Science Center, The Pennsylvania State University
1989	Gastdocent (Visiting Associate Professor), Institute for Earth Sciences Department of Theoretical Geophysics, University of Utrecht, The Netherlands
1991-Present	Professor of Geosciences, Department of Geosciences, The Pennsylvania State University
1994	Visiting Professor of Geology, Middlebury College, Middlebury, VT
1998-2009	Director of EMS Environment Institute <i>Natural Hazards Center</i>
2000-2001	Associate Head (Graduate Education and Research), Department of Geosciences
2002-2003	Fulbright Senior Scholar – New Zealand (Based at Victoria University of Wellington) Visiting Professor of Geophysics, Institute of Geophysics, Victoria University of Wellington
2010	Visiting Erskine Fellow, University of Canterbury, Christchurch, NZ
2011	Visiting Professorial Fellow, Earth and Ocean Sciences, University of Waikato

Awards:

1988	Pennsylvania State University, College of Earth and Mineral Sciences Wilson Outstanding Teaching Award
1993	Pennsylvania State University, College of Earth and Mineral Sciences Wilson Outstanding Research Award
2000	Pennsylvania State University, College of Earth and Mineral Sciences Mitchell Award for Innovative Teaching
2002	Pennsylvania State University, Eisenhower Award for Excellence in Teaching
2002	Fulbright Senior Scholar (Research/Lecture Award for New Zealand)
2008	Elected Fellow of Geological Society of America
2010	Erskine Fellow, University of Canterbury, New Zealand
2013	Elected Fellow of the American Association for the Advancement of Science (AAAS)

Editorships:

1984-1987 Associate Editor, *Geophysical Research Letters*
 1989-1994 Associate Editor, *GSA Bulletin*
 1992-1994 Associate Editor, *Tectonophysics*
 1993-1997 Editor, *Reviews of Geophysics*
 1994 -2007 Editor, *Tectonophysics*
 2004 - 2007 Associate Editor, *Geology*
 2007- 2014 Associate Editor *Tectonophysics*

Service to Professional Societies:

1986-1987, Program Chairman - Tectonophysics Section, Fall Meeting of the American Geophysical Union
 1990-1991
 1987-2003 IASPEI (International Association of Seismology and Physics of the Earth's Interior) Commission on Geodynamics and Tectonophysics - Secretary
 Chair - Lithospheric Dynamics Working Group
 1989-1996 IAG (International Association of Geodesy) Working Group in Kinematic and Dynamic Modeling in Geophysics and Geodesy
 1988-1990, American Geophysical Union, Meetings Committee
 1992-1994 American Geophysical Union, Meetings Committee
 1990-1992 Secretary, Tectonophysics Section, American Geophysical Union
 1992-1995 National Meetings Chairman, American Geophysical Union
 1996-2003 Member US National Committee IUGG (NAS/NRC Committee; IASPEI Representative)
 Vice-Chair, 1999- 2003
 2003-2015 IASPEI Commission on Tectonophysics and Crustal Structure (Chair)

Member of: American Geophysical Union Geological Society of America
 American Association for the Advancement of Science European Geosciences Union
 Seismological Society of America

Other Professional Service:

Proposal Review Panel Member for NASA DOSE Program, NASA Solid Earth and Natural Hazards Program, NSF NEHRP Program, USGS NEHRP Program
 Convenor of *International Workshop on Numerical Modeling of Lithospheric and Mantle Dynamics* (1997)
 Convenor of Symposia at IASPEI, AGU, GSA, and EGS/EGU meetings
 Chair - External Evaluation Committee, Department of Geology, University of North Carolina - Chapel Hill (1998)
 External Review Committee, Department of Geological Sciences, University of South Carolina (2000)
 Chair - External Review Committee, Department of Earth and Atmospheric Sciences, City College of New York (2001)
 Vice-Chair, U.S. National Committee to the International Union of Geodesy and Geophysics (Nat. Acad. Sci., Comm.)
 Chair, IASPEI Committee on Tectonophysics and Crustal Structure
 IRIS Education and Outreach Committee (2006-2008)
 NSF EarthScope Review Committee (2005, 2006)
 NSF GeoEarthscope LiDAR Working Group, Chair (2006 - 2007)
 External Assessment Panel, Foundation for Research, Science, and Technology, New Zealand (NZ NSF equivalent), for Tectonics programs at GNS Science and NIWA (two government owned research institute) (March 2007)
 External Review Panel, Geophysics Program, Research School of Earth Science, ANU, Canberra, Australia (March 2007)
 Chair, Topo-Europe Review Panel (European Science Foundation) 2007-2008, 2009
 NSF IRIS Management Review Panel, 2009

NSF Ridge2K Review Panel, 2009

AuScope Review Panel, (Australia), 2009

Chair, Topo-Europe Review Panel, November 2010, October 2011, April 2012

NSF UNAVCO Management Review Panel, 2011

University Service:

University of Wyoming, Graduate School Committee

Pennsylvania State University, Department of Geosciences, and College of EMS

- Tenure and Promotion Committee (1987-1993; 1997-1999), Chair 1997-98
- Department Head Search Committee (1991, 1997)
- Graduate Program Committee (1986-1991)
- Undergraduate Curriculum Development
- Executive Committee (2007-2008)
- Undergraduate Computation Facility Development
- Leeds Undergraduate Exchange Initiative
- Undergraduate Research Initiative
- International Programs Coordinator

Pennsylvania State University

- PSU Graduate Council (1997-2001, 2003-2005), Chair Graduate Research Committee (1998-2001)
- PSU Faculty Senate Committee on Research
- PSU International Education Programs and Studies Advisory Committee (1998-2002, 2003-2008)
- PSU Promotion and Tenure Committee (2006-2008)
- Steering Committee for Masters of Homeland Security (in Health Preparedness) professional masters and certificate program. Administered by PSU Hershey College of Medicine
- PSU Promotion and Tenure Committee (Committee for Out of Sequence Cases) 2008-2010 (Chair 2009-2010), 2011-2014
- PSU Graduate Exhibition Committee (2006-2010) Co-Chair 2009-2010, 2011-2014
- Global Engagement Network (GEN) Initiative – Co-Chair of Northern Europe Initiative
Co-Chair Caribbean Initiative

PUBLICATIONS – Books and Papers

1. **Furlong, K.P.** and D.S. Chapman, 1978, Roll cell mantle convection under the Pacific plate, *Nature*, 274, 145-147.
2. **Furlong, K.P.**, 1979, An analytic stress model applied to the Snake River Plain, USA, *Tectonophysics*, 58, T11-T15.
3. **Furlong, K.P.**, D.S. Chapman, and P.W. Alfeld, 1982, Thermal modeling of the geometry of subduction with implications for the tectonics of the overriding plate, *Jour. Geophys. Res.*, 87, 1786-1802.
4. Zandt, G. and **K.P. Furlong**, 1982, Evolution and thickness of the lithosphere beneath coastal California, *Geology*, 10, 376-381.
5. **Furlong, K.P.** and P.N. Shive, 1983, Determination of timing of volcanic events by secular variation and thermal modeling, *Geophys. Res. Lett.*, 10, 701-704.
6. **Furlong, K.P.** and J. Edman, 1984, Graphical approach to the determination of hydrocarbon maturation in overthrust terrains, *AAPG Bull.*, 68, 1818-1824.
7. **Furlong, K.P.**, 1984, Lithospheric behavior with triple junction migration: An example based on the Mendocino Triple Junction, *Phys. Earth Planet. Int.*, 36, 213-223.
8. **Furlong, K.P.**, and J.D. Myers, 1985, Thermal-mechanical modeling of the role of thermal stresses and stoping in magma contamination, *Jour. Volc. Geotherm. Res.*, 24, 179-191.
9. Hagen, E.S., M.S. Shuster, and **K.P. Furlong**, 1985, Tectonic loading and subsidence of Intermontane Basins: Wyoming Foreland Province, *Geology*, 13, 585-588.
10. **Furlong, K.P.** and M.D. Londe, 1986, Thermal-mechanical consequences of Basin and Range Extension, *GSA Special Paper 208 - Extensional Tectonics of the Basin and Range Province: A Perspective*, edited by Larry Mayer, 23-30.
11. **Furlong, K.P.** and D.M. Fountain, 1986, Continental crustal underplating: Thermal considerations and seismic-petrologic consequences, *J. Geophys. Res.*, 91, 8285-8294.
12. **Furlong, K.P.**, 1986, Thermal fingerprints of tectonic cycles, *Earth and Mineral Sciences (Penn State University)*, 55, 45-49.
13. **Furlong, K.P.**, 1986, Subduction of the Cocos Plate: Implications for lithospheric structure in Middle America, in *A Collection of Papers Honoring Brewster Baldwin (Middlebury College Press)*, ed. L.E. Harding and P.J. Coney, 149-156.
14. **Furlong, K.P.** and D.S. Chapman, 1987, Crustal heterogeneities and the thermal structure of the continental crust, *Geophys. Res. Lett.*, 14, 314-317.
15. Fountain, D.M., **K.P. Furlong**, and M.H. Salisbury, 1987, A heat production model of a shield area and its implications for the heat flow - heat production relationship, *Geophys. Res. Lett.*, 14, 283-286.
16. Morgan, P., W.N. Sawka, and **K.P. Furlong**, 1987, Introduction: Background and implications of the linear heat flow - heat production relationship, *Geophys. Res. Lett.*, 14, 248-251.
17. Nyblade, A.A., P.N. Shive, and **K.P. Furlong**, 1987, Rapid secular variation recorded in thick Eocene flows from the Absaroka Mountains of northwest Wyoming, *Earth Planet. Sci. Lett.*, 81, 419-424.
18. **Furlong, K.P.**, and D.S. Chapman, 1987, Thermal state of the lithosphere, *Rev. Geophys.*, 25, 1255-1264.
19. Edman, J.D., and **K.P. Furlong**, 1987, Thrust faulting and hydrocarbon generation: A reply, *Bull. Amer. Assoc. Petrol. Geol.*, 71, 890-896.
20. Fountain, D.M., M.H. Salisbury, and **K.P. Furlong**, 1987, Heat production and thermal conductivity of rocks from the Pikwitonei - Sachigo continental cross section, Central Manitoba: Implications for the thermal structure of Archean crust, *Can. J. Earth Sci.*, 24, 1583-1594.
21. Huntoon, J.E., and **K.P. Furlong**, 1987, Thermal-mechanical evolution of extensional basins: Problems of non-unique interpretation, *Can. Soc. Petrol. Geol. Memoir 12 - Sedimentary Basins and Basin-forming Processes*, 205-212.
22. Weir, L.A., and **K.P. Furlong**, 1987, Thermal evolution of sedimentary basins: Effects of intrabasinal conductive and advective heat transport, *Can. Soc. Petrol. Geol. Memoir 12 - Sedimentary Basins and Basin-forming Processes*, 351-362.
23. Miller, C.K., and **K.P. Furlong**, 1988, Thermal-mechanical controls on seismicity depth distributions in the San Andreas fault zone, *Geophys. Res. Lett.*, 15, 1429-1432.
24. **Furlong, K.P.**, W.D. Hugo, and G. Zandt, 1989, Geometry and evolution of the San Andreas Fault Zone in northern California, *J. Geophys. Res.*, 94, 3100-3110.

25. **Furlong, K.P.**, and J.D. Edman, 1989, Hydrocarbon maturation in thrust belts: Thermal considerations, *AGU Geophys. Mon.* 48, *Origin and Evolution of Sedimentary Basins and Their Energy and Mineral Resources*, 137-144.
26. Yan, B., E.K. Graham, and **K.P. Furlong**, 1989, Lateral variations in upper mantle thermal structure inferred from three-dimensional seismic inversion models, *Geophys. Res. Lett.*, 16, 449-452.
27. Eggler, D.H., J.K. Meen, F. Welt, F.O. Dudas, **K.P. Furlong**, M.E. McCallum, and R.W. Carlson, 1988, Tectonomagmatism of the Wyoming Province, Colorado Volcanism, *Colorado School of Mines Quarterly*, 83, 25-40.
28. Slingerland, R.L., **K.P. Furlong**, C. Beaumont, J.E. Huntoon, W. Manspeizer, and J. Diemer, 1989, *Sedimentology and Thermal-mechanical History of Basins in the Central Appalachian Orogen, IGC Field Trip Guidebook T152*, American Geophysical Union, 86 pp.
29. Slingerland, R.L., and **K.P. Furlong**, 1989, Geodynamic and geomorphic evolution of the Permo-Triassic Appalachian Mountains, *Geomorphology*, 2, 23-37.
30. **Furlong, K.P.**, and C.A. Langston, 1990, Geodynamic aspects of the Loma Prieta earthquake, *Geophys. Res. Lett.*, 17, 1457-1460.
31. Langston, C.A., **K.P. Furlong**, K.S. Vogfjord, R.H. Clouser, and C.J. Ammon, 1990, Analysis of teleseismic body waves radiated from the Loma Prieta Earthquake, *Geophys. Res. Lett.*, 17, 1405-1408.
32. Bowers, J.R., D.M. Kerrick, and **K.P. Furlong**, 1990, Conduction model for the thermal evolution of the Cupsuptic Aureole, Maine, *Amer. J. Sci.*, 290, 644-665.
33. **Furlong, K.P.**, 1990, Mapping the three-dimensional geometry of a strike slip plate boundary: Constraints from thermal-mechanical modeling and geodetic observations, *Proceedings of Fourth International Conference on the WEGENER/MEDLAS Project*, Scheveningen, The Netherlands, 43-44.
34. **Furlong, K.P.**, R.B. Hanson, and J.R. Bowers, 1991, Modeling Thermal Regimes, (Chapter), *Contact Metamorphism, Reviews of Mineralogy*, vol. 26, Mineral. Soc. Amer., 437-506.
35. Gardner, T.W., D. Verdonck, N.M. Pinter, R. Slingerland, **K.P. Furlong**, T.F. Bullard, and S.G. Wells, 1992, Quaternary uplift astride the aseismic Cocos Ridge, Pacific coast, Costa Rica, *Geol. Soc. Amer. Bull.*, 104, 219-232.
36. **Furlong, K.P.** 1992, Heat Flow Through the Earth, (Chapter), *Encyclopedia of Earth System Science*, Academic Press, p. 491-505.
37. Liu, M. and **K.P. Furlong**, 1992, Cenozoic volcanism in California Coast Ranges: Numerical Solutions, *J. Geophys. Res.*, 97, 4941-4951.
38. Verdonck, D., and **K.P. Furlong**, 1992, Stress buildup and release along the San Andreas during the earthquake cycle, *Geophys. Res. Lett.*, 19, 1967-1970.
39. **K.P. Furlong**, 1992, Geometry and kinematics of the Pacific-North American plate boundary in the San Francisco Bay area, in *Late Cenozoic Geology in the North Bay Region*, (Field Trip Guide), ed. T.L. Wright, 13-32.
40. Huntoon, J.E. and **K.P. Furlong**, 1992, Thermal evolution of the Newark Basin, *J. Geology*, 100, 579-591.
41. Chapman, D.S., and **K.P. Furlong**, 1992 Thermal State of the Lower Continental Crust, (Chapter), *Continental Lower Crust* (ed. Fountain, Arculus, Kay), Elsevier 179-199.
42. **Furlong, K.P.**, and S.M. Atkinson, 1993, Seismicity and thermal structure along the northern San Andreas fault system, California, U.S.A., *Tectonophysics*, 217, 23-30.
43. Liu, M. and **Furlong, K.P.**, 1993, Crustal shortening and Eocene extension in the southeastern Canadian cordillera: Some thermal and rheological considerations, *Tectonics*, 12, 776-786.
44. **Furlong, K.P.**, 1993, Thermal-rheological evolution of the upper mantle and the development of the San Andreas Fault system, *Tectonophysics*, 223, 149-164
45. Slingerland, R., J. Harbaugh, and **K.P. Furlong**, 1994, *Simulating Clastic Sedimentary Basins*, , Prentice Hall.
46. **Furlong, K.P.**, and D. Verdonck, 1994, Three-dimensional lithospheric kinematics in the Loma Prieta region: Implications for the earthquake cycle , in *The Loma Prieta, California, Earthquake of October 17, 1989- Tectonic Processes and Models*, U.S.G.S. Professional Paper 1550-F, 103-131.
47. Brocher, T.M., J. McCarthy, P.E. Hart, W.S. Holbrook, **K.P. Furlong**, T.V. McEvilly, J.H. Hole, and S.L. Klemperer, 1994, Seismic evidence for a lower-crustal detachment beneath San Francisco Bay, California, *Science*, 265, 1436-1439.
48. Liu, M., and **K.P. Furlong**, 1994, Intrusion and underplating of mafic magmas: thermal-rheological effects and implications for Tertiary tectonomagmatism in the North American Cordillera, *Tectonophysics*, 237, 175-187.

49. **Furlong, K.P.**, W. Spakman, and R. Wortel, 1995, Thermal structure of the continental lithosphere: constraints from seismic tomography, *Tectonophysics*, 244, 107-117.
50. Prims, J., and **K.P. Furlong**, 1995, Subsidence of San Francisco Bay: Blame it on Salinia, *Geology*, 23, 559-562.
51. Rohr, K.M.M., and **K.P. Furlong**, 1995, Ephemeral plate tectonics at the Queen Charlotte triple junction, *Geology* 23, 1035-1038.
52. Bahlburg, H., and **K.P. Furlong**, 1996, Lithospheric modeling of the Ordovician foreland basin in the Puna of NW Argentina: On the influence of arc loading on foreland basin formation, *Tectonophysics* ,259, 245-258.
53. Prims, J., **K.P. Furlong**, K.M.M. Rohr, and R. Govers, 1996, Lithospheric structure along the Queen Charlotte margin in western Canada: constraints from flexural modeling, *Geo-Marine Letters* , 17, 94-99.
54. Goes, S., R. Govers, S. Schwartz, and **K.P. Furlong**, 1997, Three-dimensional thermal modeling for the Mendocino Triple Junction area, *Earth Planet. Sci. Lett.*, 148, 45-57.
55. Kreemer, C., R. Govers, **K.P. Furlong**, and W.E. Holt, 1998, Plate boundary deformation between the Pacific and North America in the Explorer Region, *Tectonophysics*, 293, 225-238.
56. **Furlong, K.P.**, and R. Govers, 1999, Ephemeral Crustal Thickening at a Triple Junction: The Mendocino crustal conveyor, *Geology* v.27, 127-130.
57. Hole, J.A., T.M. Brocher, S.L. Klemperer, T.E. Parsons, H.M. Benz, **K.P. Furlong**, 2000, Three-dimensional seismic velocity structure of the San Francisco Bay Area, *J. Geophys. Res.*, 105, 13,859-13,874.
58. Gize, Andrew P; Kuehn, C A; **Furlong, K P**; Gaunt, J M, 2000, Organic maturation modeling applied to ore genesis and exploration, *Reviews in Economic Geology*, vol.9, pp.87-104
59. Malservisi R., **K. P. Furlong**, T. H. Dixon, 2001, Influence of the earthquake cycle and lithospheric rheology on the dynamics of the Eastern California shear zone, *Geophys. Res. Lett.*, 28, 2731-2734.
60. **Furlong, K.P.**, and C. Guzofski, 2000, Thermal Rheological Evolution of the Franciscan Crust: Implications for Earthquake Processes, *Proceedings of the 3rd Conference on Tectonic Problems of the San Andreas Fault System*, eds. G. Bokelmann and R.L. Kovach, Stanford Univ. Press 112-127.
61. **Furlong, K.P.**, S.D. Sheaffer, and R. Malservisi, 2001, Thermal-Rheological Controls on Deformation within Oceanic Transforms, *The Nature and Tectonic Significance of Fault-Zone Weakening*, Geol. Soc. London, Spec. Pub. 186, eds. R.E. Holdsworth, R.A. Strachan, J.F. Maglaughlin, and R.J. Knipe, 65-83.
62. van Wijk, J.W., R. Govers, and **K.P. Furlong**, 2001, Three-dimensional thermal modeling of the California upper mantle; a slab window vs. stalled slab, *Earth and Planetary Science Letters*, 186, 175-186.
63. Guzofski, Chris A.; **Furlong, Kevin P.**, 2002, Migration of the Mendocino triple junction and ephemeral crustal deformation: Implications for California Coast range heat flow, *Geophys. Res. Lett.* v. 29-1, pp. 12-1 to 12-4
64. Dixon, Timothy; Decaix, Julien; Farina, Fred; **Furlong, Kevin**; Malservisi, Rocco; Bennett, Richard; Suarez-Vidal, Francisco; Fletcher, John; Lee, Jeff, 2002, Seismic cycle and rheological effects on estimation of present-day slip rates for the Agua Blanca and San Miguel-Vallecitos faults, northern Baja California, Mexico, *J. Geophys. Res.*, v. 107- B10, pp. ETG 5-1 to ETG 5-23
65. Malservisi, R; Gans, C; **Furlong, K P**, 2003, Numerical modeling of strike-slip creeping faults and implications for the Hayward Fault, California, *Tectonophysics*, vol.361, no.1-2, pp.121-137
66. White T. ; **Furlong K.** ; Arthur M., 2002, Forebulge migration in the Cretaceous Western interior basin of the Central United States, *Basin Research* 14, no.1 (2002) p. 43-54
67. Malservisi, Rocco; **Furlong, Kevin P**; Anderson, Helen, 2003, Dynamic uplift in a transpressional regime; numerical model of the subduction area of Fiordland, New Zealand, *Earth and Planetary Science Letters*, vol.206, no.3-4, pp.349-364,
68. Gans, Christine, R., **Furlong, Kevin, P.**, and Malservisi, Rocco, 2003, Fault creep and microseismicity on the Hayward fault, California: Implications for asperity size, *Geophys. Res. Lett.*, 30, doi:10.1029/2003GL017904
69. **Furlong, Kevin P**, Jane Lock, Chris Guzofski, Jaime Whitlock, and Harley Benz, 2003, The Mendocino Crustal Conveyor: Making and breaking the California Crust, *Int. Geol. Rev*, 45, p. 767-779.

70. **Furlong, Kevin P.**, Jane Lock, Chris Guzowski, Jaime Whitlock, and Harley Benz, 2003, The Mendocino Crustal Conveyor: Making and breaking the California Crust, in *The Lithosphere of Western North America and Its Geophysical Characterization* (S.L. Klemperer and W.G. Ernst, Eds.), Geol. Soc. Amer. Int. Book Ser. V. 7, p. 92-104.
71. Malservisi, Rocco; Dixon, Timothy H.; La Femina, Peter C.; **Furlong, Kevin P.** 2003, Holocene slip rate of the Wasatch fault zone, Utah, from geodetic data: Earthquake cycle effects, *Geophys. Res Lett.*, 30, No. 13, 1673
10.1029/2003GL017408
72. **Furlong, Kevin P.**, and Susan Y. Schwartz, 2004, Influence of the Mendocino Triple junction on the tectonics of Coastal California, *Ann Rev. Earth Planet. Sci.*, 32, pp. 403 – 433, doi: 10.1146/annurev.earth.32.101802.120252
73. Bennett, R.A., A.M. Friedrich, **K.P. Furlong**, 2004, Co-dependent histories of the San Andreas and San Jacinto fault zones from inversion of fault displacement rates *Geology*, 32, 961-964, doi:10.1130/G20806.1 [Featured as an 'Editors Choice' paper in SCIENCE, 11/26/04]
74. Harris, R. N., D. S. Chapman, K. P. Furlong, and D. M. Saffer, 2004, Thermal processes in the context of EarthScope, EOS, 85, 292.
75. Malservisi, R., **K.P. Furlong**, C.R. Gans, 2005, Using Microseismicity to Map Creep on a Fault Plane: Hints from Modeling the Hayward Fault, California (USA) *Earth Planet Sci Lett* doi: 10.1016/j.epsl.2005.02.039
76. Kamp, P.J.J., and **K.P. Furlong**, 2006, Neogene Plate Tectonic Reconstructions and Geodynamics of North Island Sedimentary Basins: Implications for the Petroleum Systems, Proc. 2006 New Zealand Petroleum Conf., 16 pp.
77. Lock, J., H. Kelsey, **K.P. Furlong**, A Woolace, 2006, Late Neogene and Quaternary Landscape evolution of the northern California Coast Ranges: Evidence for Mendocino triple junction tectonics, *Geol. Soc. Amer. Bull.* V. 118, pp 1232-1246 doi: 10.1130/B25885.1
78. Hayes, G.P., C.B. Johnson, and **K.P. Furlong**, 2006, Evidence for melt injection in the crust of northern California?, *Earth Planet Sci Lett* doi: 10.1016/j.epsl.2006.05.008.
79. Kirby, Eric, Courtney Johnson, **Kevin Furlong**, and Arjun Heimsath, 2007, Transient channel incision along Bolinas Ridge, California: Evidence for differential rock uplift adjacent to the San Andreas fault, *J.Geophys. Res.*, 112, F03S07, doi:10.1029/2006JF000559, 2007
80. **Furlong, Kevin P.**, 2007, Locating the Deeper Extent of the Plate Boundary Along the Alpine Fault Zone, New Zealand: Implications for Patterns of Exhumation in the Southern Alps, in Till, A.B., Roeske, S.M., Sample J.C., and Foster D.A. eds. *Exhumation Associated with Continental Strike-Slip Systems, GSA Special Paper 434, 1-14*, doi: 10.1130/2007.2343(01).
81. **Furlong, Kevin**, G.C. Beroza, J-P Brun, P.A. Cowie, M.R. Handy, W.D. Mooney, T. Taymaz, C. Teyssier, A. Vouchez, and B. Wernicke, 2007, Nucleation and Growth of Fault Systems, in *Tectonic Faults: Agents of Change on a Dynamic Earth*, ed.. M.R. Handy, G. Hirth, and N. Hovius, MIT Press –Dahlem Workshop Reports, 79-98.
82. Hayes, G.P., and **Furlong, K.P.**, 2007. Abrupt Changes in Crustal Structure Beneath the Coast Ranges of Northern California - Developing New Techniques in Receiver Function Analysis, *Geophys. J. Int.*, 170, 313-336.
83. Hayes, G.P., **K.P. Furlong**, C.J. Ammon, 2009, Intraplate Deformation Adjacent to the Macquarie Ridge South of New Zealand - The Tectonic Evolution of a Complex Plate Boundary, *Tectonophysics* 463, 1-14, doi:10.1016/j.tecto.2008.09.024.
84. Prentice, C.S., C. J. Crosby, C. S. Whitehill, J. R. Arrowsmith, **K. P. Furlong**, D.A. Phillips, 2009, Illuminating Northern California's Active Faults, *EOS Trans. AGU*, 90, 55-56.
85. **Furlong, K.P.**, T. Lay, and C.J. Ammon, 2009, A Great earthquake rupture across a rapidly evolving three-plate boundary, *Science*, 324, 226-229 DOI: 10.1126/science.1167476
86. Johnson, C., **K.P. Furlong**, and E. Kirby, 2009, Integrated geomorphic and geodynamic modeling of a potential blind thrust in the San Francisco Bay area, California, *Tectonophysics*, 471, 319-328, doi:10.1016/j.tecto.2009.03.002

87. **Furlong, K.P.**, and P.J.J. Kamp, 2009, The Lithospheric geodynamics of plate boundary transpression in New Zealand: Initiating and emplacing Subduction along the Hikurangi margin of New Zealand, and the Tectonic evolution of the Alpine Fault system. *Tectonophysics*, doi:10.1016/j.tecto.2009.04.023
88. Lay, T, H. Kanamori, C. J. Ammon, A. R. Hutko, **K. P. Furlong**, and L. Rivera, 2009, The 2006-2007 Kuril Islands Great Earthquake Sequence, *J. Geophys. Res.* 114, B11308, doi:10.1029/2008JB006280
89. Plattner, C., R. Malservisi, **K.P. Furlong**, and R. Govers 2009, Development of the Eastern California Shear Zone – Walker Lane belt: The effects of microplate motion and pre-existing weakness in the Basin and Range *Tectonophysics*, doi:10.1016/j.tecto.2009.11.021
90. Hayes, G.P., and **K.P. Furlong**, 2010, Quantifying Potential Tsunami Hazard in the Puysegur Subduction Zone, South of New Zealand, *Geophys. J. Int.* doi: 10.1111/j.1365-246X.2010.04808.x
91. Quigley, M., P. Villamor, **K. Furlong**, J. Beavan, R. Van Dissen, N. Litchfield, T. Stahl, B. Duffy, E. Bilderback, D. Noble, D. Barrell, R. Jongens, A. Klahn, A. Smith, T. Wilson, S. Cox, J. Ristau, 2010, Mw 7.1 Earthquake on Unknown Strike-slip Fault Rattles New Zealand's South Island, *EOS Trans. AGU* v. 91, 469-470.
92. Quigley, M., Van Dissen, R., Villamor, P., Litchfield, N., Barrell, D., **Furlong, K.**, Stahl, T., Duffy, B., Bilderback, E., Noble, D., Townsend, D., Begg, J., Jongens, R., Ries, W., Claridge, J., Klahn, A., Mackenzie, H., Smith, A., Hornblow, S., Nicol, R., Cox, S., Langridge, R., Pedley, K., 2010, Surface rupture of the Greendale Fault during the M_w 7.1 Darfield (Canterbury) Earthquake, New Zealand: initial findings. *Bulletin of the New Zealand Society for Earthquake Engineering* 43(4): 236-242.
93. Van Dissen, R., D. Barrell, N. Litchfield, P. Villamor, M. Quigley, A. King, **K. Furlong**, J. Begg, D. Townsend, H. Mackenzie, T. Stahl, D. Noble, B. Duffy, E. Bilderback, J. Claridge, A. Klahn, R. Jongens, S. Cox, R. Langridge, W. Ries, R. Dhakal, A. Smith, S. Hornblow, R. Nicol, K. Pedley, H. Henham, R. Hunter, A. Zajac, T. Mote, 2011, Surface rupture displacement on the Greendale Fault during the Mw 7.1 Darfield (Canterbury) earthquake, New Zealand, and its impact on man-made structures, *Proceedings of the Ninth Pacific Conference on Earthquake Engineering Building an Earthquake-Resilient Society* 14-16 April, 2011, Auckland, New Zealand
94. Su, Z., E. Wang, **K.P. Furlong**, X. Shi, G. Wang, and C. Fan, 2012, Young, active conjugate strike-slip deformation in West Sichuan: evidence for the stress-strain pattern of the southeastern Tibetan, Plateau, *Int. Geology. Rev.*, 54, 991-1012, DOI:10.1080/00206814.2011.583491
95. **Furlong, K.P.**, 2011, Context of the Hayward Fault in the Formation and Evolution of the San Andreas Plate Boundary, *Proceedings of the 3rd East Bay Earthquake Hazards Conference*, CGS Special Publication 219
96. Barrell, D.J.A. , N.J. Litchfield, D.B. Townsend, M. Quigley, R.J. Van Dissen, R. Cosgrove, S.C. Cox, **K. Furlong**, P. Villamor, J.G. Begg, S. Hemmings-Sykes, R. Jongens, H. Mackenzie, D. Noble, T. Stahl, E. Bilderback, B. Duffy, H. Henham, A. Klahn, E.M.W. Lang, L. Moody, R. Nicol, K. Pedley and A. Smith, 2011, Strike-slip ground-surface rupture (Greendale Fault) associated with the 4 September 2010 Darfield earthquake, Canterbury, New Zealand, *Quarterly Journal of Engineering Geology and Hydrogeology*, 44, 283–291 1470-9236/11, Geological Society of London, DOI 10.1144/1470-9236/11-034
97. Quigley, M., R. Van Dissen, N. Litchfield, P. Villamor, B. Duffy, D. Barrell, **K. Furlong**, T. Stahl, E. Bilderback, and D. Noble., 2012, Surface rupture during the 2010 M_w 7.1 Darfield (Canterbury) earthquake: Implications for fault rupture dynamics and seismic-hazard analysis, *Geology*, v. 40; no. 1; p. 55–58; doi:10.1130/G32528.1
98. Wang E., E. Kirby, **K.P. Furlong**, M. van Soest, G. Xu, X. Shi, P.J.J. Kamp, K.V. Hodges, 2012. Two-phase growth of high topography in eastern Tibet during the Cenozoic. *Nature Geosc.* (in press) DOI: 10.1038/NCEO1538
99. Villamor, P., N Litchfield, D Barrell, R Van Dissen, S Hornblow, M Quigley, S Levick, W Ries, B Duffy, J Begg, D Townsend, T Stahl, E Bilderback, D Noble, **K Furlong** and H Grant, 2012, Map of the 2010 Greendale Fault surface rupture, Canterbury, New Zealand: application to land use planning, *New Zealand Journal of Geology and Geophysics*, DOI:10.1080/00288306.2012.680473

100. **Furlong, K.P.**, and P.J.J. Kamp, 2013, Changes in Plate Boundary Kinematics: Punctuated or Smoothly Varying - Evidence from the Mid-Cenozoic Transition from Lithospheric Extension to Shortening in New Zealand. *Tectonophysics*, 608, 1328-1342, doi 10.1016/j.tecto.2013.06.008
101. Kim, K. P. Sharma, S.M. Land, and **K.P. Furlong**, 2013, Effects of Active Learning on Enhancing Student Critical Thinking in an Undergraduate Science Course, *Innovative Higher Education*, v38, 223-235, doi 10.1007/s10755-012-9236-x
102. **Furlong, K.P.** and D.S. Chapman, 2013, Heat Flow, Heat Generation, and the Thermal State of the Lithosphere, *Ann Rev. Earth Planet. Sci.*, 41, 16.1-16.26, 10.1146/annurev.earth.031208.100051
103. Regalla, C., D.M. Fisher, E. Kirby, and **K.P. Furlong**, 2013, Relationship between outer fore arc subsidence and plate boundary kinematics along the Northeast Japan convergent margin, *Geochem. Geophys. Geosys.* doi: 10.1002/2013GC005008
104. Hayes, G.P., **K.P. Furlong**, H.M. Benz, and M. Herman, 2014, Triggered Aseismic Slip Adjacent to the 6 February 2013 Mw 8.0 Santa Cruz Islands Megathrust Earthquake, *EPSL*, 388, p. 265-272 doi10.1016/j.epsl.2013.11.010
105. Herman, M.W., R.B. Herrmann, H.M. Benz, **K.P. Furlong**, 2014, Using regional moment tensors to constrain the kinematics and stress evolution of the 2010–2013 Canterbury earthquake sequence, South Island, New Zealand, *Tectonophysics*, <http://dx.doi.org/10.1016/j.tecto.2014.06.019>
106. Hayes, G.P., M.W. Herman, W.D. Barnhart, K.P. Furlong, S. Riquelme, H.M. Benz, E. Bergman, S. Barrientos, P.S. Earle, S. Samsonov, 2014, Continuing Megathrust Potential in Northern Chile after the 2014 Iquique Earthquake Sequence, *Nature*, v.512, 295-298, doi:10.1038/nature13677
- 107.** Shi, X., E. Kirby, H. Lu, R. Robinson, **K. Furlong**, E. Wang, 2014, Holocene Slip Rate Along the Gyaring Co Fault, Central Tibet, *Geophys. Res. Lett.* Doi: 10.1002/2014GL060782

PUBLICATIONS – Maps

108. Tarr, A.C., Villaseñor, Antonio, **Furlong, K.P.**, Rhea, Susan, and Benz, H.M., 2010, Seismicity of the Earth 1900–2007: U.S. Geological Survey Scientific Investigations Map 3064, 1 sheet, scale 1:25,000,000.
109. Tarr, A.C., Rhea, S., Hayes, G., Villaseñor, A., **Furlong, K.P.**, and Benz, H., 2010, Seismicity of the earth 1900—2007, Caribbean plate and vicinity: U.S. Geological Survey Open-File Report 2010–1083-A, scale: 1:8,000,000.
110. Rhea, S., Tarr, A.C., Hayes, G., Villaseñor, A., **Furlong, K.P.**, and Benz, H., 2010, Seismicity of the Earth 1900–2007, Aleutian arc and vicinity: U.S. Geological Survey Open-File Report 2010–1083-B, 1 map sheet, scale 1:5,000,000.
111. Rhea, S., Tarr, A.C., Hayes, G., Villaseñor, A., **Furlong, K.P.**, and Benz, H.M., 2010, Seismicity of the Earth 1900–2007, Kuril-Kamchatka arc and vicinity: U.S. Geological Survey Open-File Report 2010-1083-C, 1 map sheet, scale 1:5,000,000.
112. Rhea, S., Tarr, A.C., Hayes, G., Villaseñor, A., **Furlong, K.P.**, and Benz, H.M., 2010, Seismicity of the Earth 1900–2007, Nazca plate and South America: U.S. Geological Survey Open-File Report 2010-1083-E, 1 map sheet, scale 1:12,000,000.
113. Rhea, Susan, Dart, R.L., Villaseñor, Antonio, Hayes, G.P., Tarr, A.C., **Furlong, K.P.**, and Benz, H.M., 2011, Seismicity of the Earth 1900–2007, Mexico and vicinity: U.S. Geological Survey Open-File Report 2011–1083-F, 1 sheet, scale 1:8,000,000.
114. Rhea, Susan, Herman, Matthew, Tarr, A.C., Hayes, G.P., **Furlong, K.P.**, Villaseñor, Antonio, Dart, R.L. and Benz, H.M., 2011, Seismicity of the Earth 1900–2010, Australia Plate and Vicinity: U.S. Geological Survey Open-File Report 2011–1083-G, 1 sheet, scale 1:15,000,000.
115. Rhea, Susan, Herman, Matthew, Tarr, A.C., Hayes, G.P., **Furlong, K.P.**, Villaseñor, Antonio, Dart, R.L. and Benz, H.M., 2011, Seismicity of the Earth 1900–2010, Sunda Arc and Vicinity: U.S. Geological Survey Open-File Report 2011–1083-H, 1 sheet, scale 1:8,000,000.
116. Rhea, Susan, Herman, Matthew, Tarr, A.C., Hayes, G.P., **Furlong, K.P.**, Villaseñor, Antonio, Dart, R.L. and Benz, H.M., 2011, Seismicity of the Earth 1900–2010, Eastern Margin of the Australia Plate Australia: U.S. Geological Survey Open-File Report 2011–1083-I, 1 sheet, scale 1:8,000,000.

117. Turner, Bethan, Jenkins, Jennifer, Turner, Rebecca, Parker, A.L., Sinclair, Alison, Davies, Sian, Hayes, G.P., Villaseñor, Antonio, Dart, R.L., Tarr, A.C., **Furlong, K.P.**, and Benz, H.M., 2013, Seismicity of the Earth 1900–2010 Himalaya and vicinity (ver.1.1, Jan. 28, 2014): U.S. Geological Survey Open-File Report 2010–1083-J, scale 1:9,000,000, <http://pubs.usgs.gov/of/2010/1083/j/>.
118. Hayes, G.P., Bernardino, Melissa, Dannemann, Fransiska, Smoczyk, Gregory, Briggs, Richard, Benz, H.M., **Furlong, K.P.**, and Villaseñor, Antonio, 2013, Seismicity of the Earth 1900–2012 Sumatra and vicinity: U.S. Geological Survey Open-File Report 2010–1083-L, scale 1:6,000,000, <http://pubs.usgs.gov/of/2010/1083/l/>.
119. Smoczyk, G.M., Hayes, G.P., Hamburger, M.W., Benz, H.M., Villaseñor, Antonio, and **Furlong, K.P.**, 2013, Seismicity of the Earth 1900–2012 Philippine Sea Plate and vicinity: U.S. Geological Survey Open-File Report 2010–1083-M, scale 1:10,000,000, <http://dx.doi.org/10.3133/ofr20101083m>. ISSN 2331-1258 (online)

EXTERNAL RESEARCH SUPPORT:

Completed Projects

1. Petroleum Research Fund (ACS) (7/1/82 - 9/1/84) \$10,000
"Time dependent modeling of forearc basins during evolution of subduction zones"
2. National Science Foundation (5/1/83 - 4/31/85) \$11,326
"Thermal aspects of the Basin and Range - Colorado Plateau Transition"
3. National Science Foundation (6/1/84 - 5/30/85) \$39,739
"Timing of volcanic events by secular variation and thermal modeling"
4. Texaco, USA (1/1/84 - 6/1/85) \$20,000
"Thermal effects of lava flow emplacement on hydrocarbon maturation"
5. National Science Foundation (5/15/85 - 10/31/86) \$30,000
"Evolution of continental lithosphere - Constraints from seismic and thermal-mechanical modeling of triple junction migration in western North America"
5. Petroleum Research Fund (ACS) (6/1/85 - 8/31/88) \$52,500
"Three-dimensional thermal-mechanical evolution of small sedimentary basins: implications for hydrocarbon maturation"
6. Texaco, USA (1/1/86 - 6/30/87) \$20,000
"Thermal evolution of overthrust terrains"
7. National Science Foundation (4/15/86 - 9/30/88) \$75,000
"Subduction zone structure of Oregon and Northern California"
8. National Science Foundation (1/1/87 - 6/30/89) \$121,000
"Collaborative Research on Aseismic Ridge Subduction in Costa Rica: Mechanisms and Geomorphic Evidence for Crustal Uplift"
9. Petroleum Research Fund (ACS) (9/1/88 - 8/31/89) \$20,000
"Evolution of Sedimentary Basins: Thermal, Mechanical, and Maturation Processes in Extensional Basins"
10. National Science Foundation (1/1/89 - 6/30/91) \$97,500
"Thermal-mechanical evolution of the northern San Andreas Fault System"
11. National Science Foundation (1/1/89 - 6/30/91) \$92,050
"Thermal modeling applied to the evolution of contact metamorphic aureoles"
12. National Science Foundation (6/1/91 - 12/31/91) \$13,000
"International Workshop on Numerical Modeling of Lithospheric and Mantle Dynamics" (Travel support U.S. Participants)
13. NASA (6/1/91 - 12/31/91) \$10,000
"International Workshop on Numerical Modeling of Lithospheric and Mantle Dynamics" (Travel support U.S. Participants)
14. Petroleum Research Fund (ACS) (9/1/90 - 8/31/92) \$40,000
"Geodynamic Modeling of Continental Extension"
15. National Science Foundation (7/1/91 - 6/30/93) \$103,692
"Rheology of Transform Plate Boundaries"
16. USGS (NEHRP) (2/15/92 - 2/14/94) \$109,437
"3-D Plate Boundary Structure in the San Francisco Bay Region: Implications for the Earthquake Cycle"

17. IBM Corp. (Equipment Grant) \$235,000
 "Geodynamics Computational Facility"
18. National Science Foundation (7/1/93 - 6/30/95) \$145,230
 "Thermal and Mechanical Modelling of Himalayan Geology"
19. National Science Foundation (7/1/94 - 6/31/95) \$26,058
 "Implications of grain growth observations for the evolution of the western Mediterranean upper mantle"
20. NASA DOSE (3/1/92 - 8/30/97) \$268,000
 "Three-dimensional Structure and Deformation of Transform Plate Boundaries: Geodetic and Modeling Constraints"
21. National Science Foundation (7/1/96 - 6/30/99) \$202,500
 "Active Plate Boundary Tectonics along the San Andreas"
22. National Science Foundation (1/1/98-6/30/02) \$212,760
 "Lithospheric tectonics of a transpressional plate boundary, Fiordland, New Zealand"
23. National Science Foundation (7/1/99-6/30/02) \$126,226
 "Tectonically Driven Landform Response to the Mendocino Crustal Conveyor, Northern Coast Ranges, California"
24. National Science Foundation (7/1/2000 - 6/30/2003) \$158,000
 "Upgrading the Penn State University Geosciences Computational Facility"
25. National Science Foundation (07/01/01 - 6/30/02) \$15,000
 "Geodynamics and Active Tectonics of Fiordland, New Zealand: Workshop"
26. National Science Foundation (07/01/02 - 6/30/03) \$19,000
 "SGER: Testing the viability of (U-Th)/He Geochronology in active tectonic regions"
27. National Science Foundation (3/15/2001 - 2/29/2004) \$147,119
 "Collaborative Research: Geodynamics of the Eastern California Shear Zone"
28. IRIS Education and Outreach Program Grant (NSF) (7/2002 - 8/2003) \$24,000
 "Earthquake Alert System"
29. National Science Foundation (06/01/02 - 5/31/05) \$76,180
 "Collaborative Research: Co-evolution and Dynamic Interplay of the San Jacinto and Southernmost San Andreas Fault Zones"
30. USGS NEHRP (1/1/2004 - 12/31/2005) \$45,000
 "Imaging Creep on the Hayward Fault System: Implications of Patterns of Transient Response for Earthquake Properties"
31. NSF (Continental Dynamics) \$21,260 05/01/05 - 04/30/06
 "Plate Boundary Geodynamics - The New Zealand Observatory: A workshop proposal"
32. NSF - Earthscope \$28,400 09/01/05 - 08/31/06
 "Northern California Plate Boundary Evolution: Workshop Focused on Defining LIDAR (ALSM) Targets and Priorities"
33. NEHRP \$50,000 1/1/2007 - 12/31/2008
 "3-D Fault Geometry Along the Hayward-Rodgers Creek-Ma'acama Fault Corridor"
34. NSF - GEO_Education: \$150,000 (2006-2010)
 "Active Learning in large enrollment classes: Learning Modules that work"
35. NSF - EAR \$355,033 (2008-2013)
 "Inner Forearc Deformation along an Erosive Convergent Margin, Northeastern Japan"
38. USGS-NEHRP \$48,605 (1/1/2012 - 12/31/2012)
 "The Intraplate Earthquake Cycle: Strain and Displacement Behavior during the Canterbury, NZ Earthquake Sequence"
36. NSF - EAR \$459,877 (2010-2013)
 "Probing the Rheology of Tibetan Lithosphere: Surface Deformation in Response to Climatically-Induced Changes in Lake Loads,"

Current Funding

37. NSF - EAR \$102,167 (10/01/2011 - 09/30/2014)
 "EAGER: Upper-Plate Response to a Great Earthquake: Integrating Deformation from Seismic to Geologic Timescales"

University Funded Research

Completed Projects

1. University of Wyoming, College of Arts and Sciences Basic Research Grant (1981-1982)
 "Thermal structure of subducting lithosphere"

2. University of Wyoming, Faculty Research Grant-in-Aid (3/1/83 - 12/31/83)
"Thermal diffusivity measurements using the divided bar"
3. Penn State University Research Initiation Grant (7/1/84 - 6/30/85)
"The Behavior of continental lithosphere during orogenic events"
4. Earth and Mineral Sciences Faculty Research Fund (10/1/84 - 6/30/85)
"Three-dimensional thermal-mechanical modeling of lithospheric evolution"
5. MRI Research Initiation Grant (9/1/86 - 8/30/87)
"Thermal Evolution of Overthrust Belts: Implications for Hydrocarbon Maturation"
6. IDP Fund for Excellence in Learning and Teaching (FELT) (6/1/97 - 5/31/98)
"Bringing Diversity to Disasters"
7. Wilson Education Grant (College of EMS) (1997-98)
"Development of a Natural Hazards Curriculum and Minor"
8. George H. Deike, Jr. Research Grant (College of EMS) (7/1/97 - 6/30/2000)
"Mapping Mantle Deformation"
9. Wilson Education Grant (College of EMS) (2000-2001)
"Real-time earthquakes: A project to integrate real-time global seismicity in to the curriculum"
10. Gladys Snyder Education Grant (College of EMS) (2004-2005)
"Active Learning in Large Enrollment Classes: Learning Modules that Work"
11. Gladys Snyder Education Grant (College of EMS) (2012-2013)
"Exploiting earthQUakes As Learning Events (EQUALE)"

EDUCATIONAL ACTIVITIES

Courses Taught (Y indicates taught yearly or every 2nd year, L indicates includes laboratory exercises)
(* indicates course initiated/developed by K.P. Furlong)

University of Wyoming (9/81 - 6/84)

Geol 664 *Plate Tectonics (Y, L)
Geol 681 *Thermal Processes (Y)
Geol 683 Geomathematics (Y, L)
Geol 880 *Tectonophysics
Geol 881 *Numerical Methods (L)

University of Utrecht, The Netherlands (1989)

Geophysics Tectonophysics

Middlebury College (1994)

Geol 128 *Natural Disasters (L)

Victoria University of Wellington (2003 – 2003)

Esci 111 Earth Systems and Global Change
(covered Natural Hazards component,
2003)
Geol 223 Earthquakes and Earth Structure
(co-taught, 2002)

University of Canterbury (2010)

Geol 113 Environmental Geohazards
(taught earthquakes and related topics)

Penn State University

Earth 497 *CAUSE - The Natural Hazards of NZ
Earth 297 *Natural Hazards - Facts and Fictions
Earth 101 *Natural Hazards - Hollywood vs.
Reality (general education) (Y, L)
Geosc 009 Introduction to Geophysics
Geosc 112 Introductory Geosciences II (L)
Geosc 310 *History of the Earth (Y, L)
Geosc 402W *Natural Disasters (Y, L)
Geosc 489 *Dynamics of the Earth (Y, L)
Geosc 497 *Extension in the Western Cordillera
Geosc 497H *Living with Risk, Natural Hazards of
NZ
Gphys 508 *Tectonics - Strike Slip Fault Zones
Geosc 508 *Tectonics - P-T-t in Orogenic Belts
Gphys 521 *Thermal State of the Earth (Y)
Gphys 597 *Numerical Modeling of Diffusion (L)
Geosc 597 *Evolution of Sedimentary Basins
Gphys 597 *Lithospheric Evolution
Geosc 597 *Finite Elements in Geodynamics
Geosc 597 * Transpressional Tectonics
Geosc 597 *Issues in Geosciences (Graduate Core
Course
Geosc 598 *Orogenic Systems
Geosc 598 *Tectono-Sedimentary Framework of
New Zealand (Field course)

On-Line (PSU)

Geosc 402 WC *Natural Disasters

(core-course in Professional
Masters Program, MHS for Health

Professionals)

Supervision of Graduate Students

University of Wyoming

M.Sc. Degree

- 1983 W. Eric Medlin "Numerical modeling of thermal conductivity contrasts"
1985 Andrew Nyblade "Timing volcanic events by secular variation and thermal modeling"

Ph.D Degree

- 1986 Michael D. Londe "The Colorado Plateau - Basin and Range Transition Zone in Central Utah: Thermomechanical Modeling and Spectral Analysis of Topographic and Gravity Data"

Pennsylvania State University

M.Sc. Degrees

- 1986 L. Alison Weir "Thermal Regimes of Small Basins: An Investigation of the Effects of Intra-basinal Conductive and Advective Heat Transport"
1986 William D. Hugo "Thermal Controls on Lithospheric Strength and the Evolution of the Northern San Andreas Fault System"
1986 Mary Beth Kovarik "Calculating Constrained Crustal Geotherms"
1987 Steven Crum "Plate Tectonic Controls on Topography in the Pacific Northwest"
1988 Cynthia K. Miller "Thermal-Mechanical Controls on Seismicity in the San Andreas Fault Zone of Northern and Central California"
1989 David Verdonck "Geodynamic Aspects of Aseismic Ridge Subduction"
1993 Jordi Prims "Flexural Development of San Francisco Bay Basin"
1995 Steven Sheaffer "Thermal-mechanical modeling of large offset oceanic transforms"
1997 Nikos Tzetos "Crustal Structure of the northern Aegean region"
1997 Corne Kreemer "Plate Boundary Deformation between the Pacific and North America in the Explorer Region" (M.S. candidate at Utrecht University; Research Advisor)
1999 Ankie Meuwissen "Seismological and Gravitational Constraints on the Lithospheric Geometry beneath Fiordland, New Zealand" (M.S. Candidate, Utrecht University; Research Advisor)
2000 Chris Guzofski "Thermal-petrologic response of the Northern California Crust to Triple Junction Migration"
2002 Jaime Whitlock "Geochemistry of Triple Junction Related Volcanics, California Coast Ranges"
2002 Chris Schneider "Geodynamics of the Explorer Plate Region"
2004 Christine Gans "Investigations of strike-slip plate boundaries: Numerical modeling of creeping faults in Central California, and Spatial and Temporal slip distributions in Southern California"
2006 Courtney B. Johnson "Coupled Geomorphic and Geodynamic Modeling of a Potential Blind Thrust in Marin County, California"
2008 Gwendolyn Erickson "Evolution of an Intermontane Basin Along the Maacama Fault, Little Lake Valley, Northern California" (Humboldt State University, Arcata, CA)
2010 Matthew J. Legg "The Tectonic and Thermal Evolution of Hawke's Bay Basin, New Zealand"
2011 Xuhua Shi "Transient Channel Incision in Response to the Mendocino Triple Junction Migration, Northern California"
2011 Rachel Piotraschke "Thermal and Geologic Constraints on the Cretaceous-to-Neogene tectonic development of the Klamath Mountains, Northern California"
2012 Matthew W. Herman "Regional Moment Tensors from the 2010-2012 Canterbury Earthquake Sequence, South Island, New Zealand"
2014 Beth Meyers "Analyzing the State of Lithospheric Stress in Greater Thailand Through Finite Element Modeling"

Ph.D. Degrees

- 1990 Jacqueline Huntoon "An Integrated Model of Tectonics and Sedimentation for the Newark Basin"

1993	David Verdonck	"Structure and Dynamics of the San Andreas Fault System in Central and Northern California"
2002	Rocco Malservisi	"Geodynamic Modeling of Plate Boundary Deformation"
2007	Gavin P. Hayes	"Integrating Seismological and Tectonic Studies to Constrain Lithospheric Evolution at Complex Plate Boundaries"
2009	Emily Beal	"Geochemical requirements of the anaerobic oxidation of methane in the Eel River Basin"

Post-Doctoral Researchers Supervised

Dr. Mian Liu (1990 - 1992)

Dr. Andrew A. Nyblade (1992 - 1994) (NSF Post-doctoral Fellow)

Dr. Rob Govers (1993 - 1995)

Dr. Dewei Li (1997-1998) (Visiting Professor from Chinese University of Geosciences, Hubei)

Dr. Zhenheng Zhou (2000-2002) (Visiting Professor from Yunan Seismological Bureau)

INVITED LECTURES

- 1981 Department of Geophysics, Stanford University: "Thermal Modeling of the Geometry of Subduction"
- 1982 Department of Geology and Geophysics, Yale University: "Thermal Modeling of Plate Tectonic Processes"
- 1983 Department of Geosciences, University of Arizona: "Thermal-tectonic Aspects of Triple Junction Migration Along Western North America"
- 1984 Department of Geology and Geophysics, University of Utah: "Modeling Thermal Aspects of Geological Processes"
Department of Geology, University of North Carolina: "Thermal and tectonic Consequences of Triple Junction Migration" and "Thermal Consequences of Mode of Extension in Western North America"
Department of Geological Sciences, SUNY-Binghamton: "Thermal Modeling of Geologic Processes"
- 1985 Department of Geology, Lehigh University: "Thermal-physical Constraints on Crustal Growth with Underplating"
Institute of Geology, Academia Sinica, Beijing, China: "Thermal-tectonic Aspects of Plate Tectonic Processes"
Department of Geology, Middlebury College: "Thermal-tectonic Evolution of Coastal California with Triple Junction Migration"
Department of Geological Sciences, SUNY-Albany: "Thermal Considerations in the Evolution of the Continental Lithosphere"
- 1986 Department of Geological Sciences, University of Michigan: "Thermal Structure and Evolution of the Continental Crust"
Department of Geological Sciences, Cornell University: "Crustal Evolution with Underplating"
Institute of Geophysics and Planetary Physics, Lawrence Livermore Laboratory: "Lower Crustal Evolution with Underplating"
- 1987 Department of Geological Sciences, Yale University: "Thermal Structure and Evolution of the Continental Crust"
Department of Terrestrial Magnetism, Carnegie Institution of Washington: "Thermal Structure of the Lower Continental Crust"
Department of Geological and Geophysical Sciences, Princeton University: "Consequences of Aseismic Ridge Subduction - Costa Rica"
Department of Geology, Middlebury College: "Thermal-mechanical Evolution of Foreland Basins"
Department of Geology, University of Missouri - Columbia: "Thermal Structure and Evolution of the Continental Crust"
- 1988 Department of Geology, Middlebury College: "Evolution of the San Andreas Fault System"
U.S. Geological Survey, Menlo Park: "Thermal-mechanical Evolution of the San Andreas Fault System"

- 1989 Institute for Earth Sciences, University of Utrecht, The Netherlands: "Thermal-rheologic Evolution of the San Andreas Fault Zone"
Physics - Geology Symposium, University of Utrecht, The Netherlands: "Plate Tectonics and Earthquakes"
Geological Institute, Uppsala University, Sweden: "Thermal-rheologic Evolution of the San Andreas Fault System"
Geophysical Institute, Uppsala University, Sweden: "Thermal Evolution of the Lower Crust: Seismic and Petrologic Controls"
Department of Geology, Ecole Normal Superior, Paris, France: "The Three-dimensional Deep Structure of the San Andreas Fault Zone"
Department of Geophysics, University of Karlsruhe, West Germany: "State of Stress Along Continental Transform Faults"
- 1990 U.S. Geological Survey, Menlo Park, CA: "Thermal-Rheologic Controls on the San Andreas: Why is it a Weak Plate Boundary"
Institute of Tectonics, Earth Sciences Board, Univ. California Santa Cruz: "Thermal-tectonic Evolution of the San Andreas"
Department of Geology, Lehigh University: "Evolution of the San Andreas Fault System"
Department of Geology and Geophysics, University of Utah: "Rheology of a Plate Boundary"
- 1991 Department of Geological Engineering, Geology, and Geophysics, Michigan Tech Univ.: "Development and Evolution of the San Andreas"
Department of Geology, Middlebury College: "Plate Tectonics of the San Andreas Fault"
U.S. Geological Survey, Branch of Pacific Marine Geology, Menlo Park, CA: "Kinematics and dynamics of the San Andreas in the San Francisco Bay region"
- 1992 Department of Earth and Environmental Sciences, Rensselaer Polytechnic Institute: "Kinematics and Dynamics of the San Andreas Plate Boundary"
- 1993 Department of Geology and Geophysics, Boston College: "Kinematics and Dynamics of the San Andreas Plate Boundary" and "Rheological Evolution of Large Offset Oceanic Transforms"
Institute of Earth Sciences, Utrecht University: "Rheological Evolution of Oceanic Transform Systems"
- 1994 Department of Geology, Dalhousie University, Nova Scotia: "Tectonic Evolution of the San Andreas Plate Boundary"
Department of Oceanography, Dalhousie University, Nova Scotia: "Rheology of Oceanic Transform Faults"
Department of Geology, Indiana University: "Rheology of the San Andreas Plate Boundary: Implications for Earthquake Hazards"
Department of Geology, Middlebury College, Earthquakes and the San Andreas: Is Oakland the City the Waits to Die?
Department of Geophysics, Victoria University, Wellington, New Zealand: "Geodynamics of the San Andreas plate Boundary"
Department of Geology and Geophysics, Canterbury University, Christchurch, New Zealand: "Geodynamics of the San Andreas plate Boundary"
Department of Geology, Otago University, Dunedin, New Zealand: "Geodynamics of the San Andreas plate Boundary"
- 1995 Department of Geological Sciences, University of South Carolina: "Birth of a Triple Junction, Death of a Plate: Evolution of the Explorer Plate"
Woods Hole Oceanographic Institution, "Geodynamic Evolution of the San Andreas Plate Boundary"
Department of Geophysical Sciences, University of Chicago: "Rheology of the Lithosphere: Why are the edges softer than the middle"
Department of Geological and Geophysical Sciences, Princeton University: "Rheology of the Lithosphere: Why are the edges softer than the middle"

- 1996 Department of Geological Sciences, University of California, Santa Barbara: “Pseudo-plates and Micro-plates - The Evolution of the Explorer Region”
 Departments of Geology and Geophysics (joint seminar), University of Washington: “Rheology of the Lithosphere: Why are the edges softer than the middle”
 Department of Geological Sciences, SUNY-Stony Brook: “One of Our plates is missing - The life and times of the Explorer”
 Department of Geology and Geophysics, University of Utah: “One of Our Plates is Missing - The life and times of the Explorer plate”
 Geodynamics Institute, Utrecht University, The Netherlands: “Rheology of Plate Boundaries”
 Invited Speaker in Geodynamics Institute Symposium on Plate Dynamics
- 1997 Department of Earth, Atmospheric and Space Science, M.I.T.: “Exposing the Mantle Fabric Beneath Tibet”
 Geodynamics Research School and Inst. Earth Sciences, Univ. of Utrecht, The Netherlands:
 “Unraveling the Mantle Fabric Beneath Tibet”
 Earth and Ocean Sciences Research Inst. and Dept. Geology, Univ. Otago, New Zealand:
 “Exposing the Mantle Fabric Beneath Tibet” and
 “Pseudo-plates and Micro-plates: The Evolution of the Explorer region”
 Department of Geosciences, University of Arizona: “The Birth and Death of a Plate: Evolution of the Explorer Pseudo-plate” and “Exposing the Mantle Fabric Beneath Tibet”
- 1998 Department of Geological Sciences, Indiana University
 “Geodynamics of the San Andreas: Why Mendocino Matters” and
 “Complex Patterns of Seismic Anisotropy in Regions of Active Tectonics”
 Department of Geology, University of Vermont: “Geodynamics of the San Andreas: Why Mendocino Matters”
 Department of Geology, Middlebury College, Middlebury, VT:
 “Ephemeral Crustal Thickening at the Mendocino Triple Junction: Implications for the San Andreas Fault System”
- 1999 China University of Geosciences (Wuhan) and Chengdu Institute of Technology:
 “Thermal and Deformational Behavior of Plate Boundaries: Lessons from the San Andreas and Tibet”
 Department of Physics, Penn State University: “The Physics of Natural Hazards”
 Department of Geology and Geophysics, University of Utah: “ “Tectonics of Fiordland, N.Z. and the Explorer plate of N.E. Pacific: Why do small plate behave the way they do?”
- 2000 Department of Geology and Geophysics, Yale University:
 “The Mendocino Crustal Conveyor: Toward a new Paradigm of Triple Junction Tectonics”
 “Lithospheric Geodynamics of Fiordland, N.Z.: Why ‘Subduction’ happens?”
- 2001 Department of Earth Sciences, Boston University
 “The Mendocino Crustal Conveyor: Making and Breaking the California Crust” and
 “Lithospheric Geodynamics of Fiordland, N.Z.: Why Subduction Happens”
 Department of Geology, Sonoma State University
 “The Mendocino Crustal Conveyor: A New Look at the Evolution of the Northern California Coast Ranges”
 Department of Geology, Dickinson College
 “The Mendocino Crustal Conveyor: A New Look at the Evolution of the Northern California Coast Ranges”
 Department of Geosciences, Princeton University
 “The Mendocino Crustal Conveyor: Making and Breaking the California Crust”
 School of Earth Sciences, Victoria University of Wellington, NZ
 “Where is the San Andreas Plate Boundary in California?”
- 2002 Lectures at Institute of Geologic and Nuclear Sciences - IGNS (Wellington, N.Z.), School of Earth Sciences, Victoria University of Wellington, Ministry of Research Science and Technology – MoRST (Wellington, N.Z.)
- 2003 “Who’s Afraid of the Big Bad Fault?”

- Fulbright – New Zealand Public Lecture (Wellington N.Z.) April 1, 2003)
- “Natural Disasters in the Curriculum: Making Science Relevant”
Plimmerton (N.Z.) Rotary
- “Science as Part of General Education”
School of Earth Sciences, Victoria University of Wellington, New Zealand
- “Localized Subduction in Fiordland, New Zealand: Is it the *Real Thing?*”
Department of Geology, University of Otago, New Zealand
- “A Different Sort Of Mountain: the Evolution of the California Coast Ranges”
Department of Earth Sciences, Waikato University, New Zealand
- “Landscape Development, Crustal Evolution and Upper Mantle Dynamics: The Geodynamics of the Mendocino Triple Junction in Northern California”
Department of Geology, University of Auckland, New Zealand
- “Localized Subduction in Fiordland, New Zealand: Who/What is Ripping Australia?”
Department of Geology and Geophysics, University of Utah
- “Can Scientists make their Research Understandable? And Should They?”
PSU Research Unplugged
- 2004
- “Making a Plate Boundary: Lithospheric Geodynamics in the Wake of the Mendocino Triple Junction”
Department of Earth Sciences, Syracuse University
- “20/20 Vision: Focusing on the Roles of Geophysics in the Next Decades,”
Department of Geophysics, Colorado School of Mines
- “Complex Tectonics along the New Zealand Plate Boundary: Lessons from Integrative Lithospheric Geodynamics”
Department of Geophysics, Colorado School of Mines
- “Making a Plate Boundary: Lithospheric Geodynamics in the Wake of the Mendocino Triple Junction”
Department of Geology, Humboldt State University, California
- “It Isn’t So Simple: The Evolving Plate Boundary through New Zealand”
Department of Earth Sciences, Univ. California, Santa Cruz.
- “Caught in the Crunch : Making the New Zealand Plate Boundary”
Geodaze Distinguished Lecturer, Department of Geosciences, University of Arizona
- “Evolution of the Plate Boundary through New Zealand: An Alternative Perspective?”
School of Earth Sciences, Victoria University of Wellington, New Zealand
- “Seismotectonics of the Fiordland Subduction Zone, New Zealand: Implications for the Evolution of the Alpine Fault”
National Earthquake Information Center, USGS, Golden CO.
- 2005
- “The Why, What and Why of the Sumatra Earthquake and Tsunami”
Office of International Programs, Penn State University
- “Making the Plate Boundary in Northern California”,
National Earthquake Information Center, USGS, Golden CO
- “The Why, What and Why of the Sumatra Earthquake and Tsunami”
Vail Symposium, Vail Colorado
- “Making the Plate Boundary through California: Lithospheric Geodynamics in the Wake of the Mendocino Triple Junction”
Royal Society of New Zealand – Geophysics Division
- “*Making a Plate Boundary: An Interdisciplinary Perspective on the Evolution and Behavior of the San Andreas System*”
Dept. Earth Sciences, New Mexico Tech
- “Lithospheric Geodynamics of Plate Boundary Tectonics: Lessons from New Zealand”
ExxonMobil Upstream Research Corporation
- “Making the Plate Boundary through California: Lithospheric Geodynamics in the Wake of the Mendocino Triple Junction”
Department of Earth and Planetary Sciences, University of Pittsburgh
- 2006
- “Terminating Subduction: How the New Zealand Plate Boundary Changes from Subduction to Translation”
School of Earth Sciences, Utrecht University
- “Terminating Subduction: How the New Zealand Plate Boundary Changes from Subduction to Translation”

- CSIC Jaume Almera, Barcelona, Spain
 "Making the New Zealand Plate Boundary: Signature of Transient Tectonics"
 Department of Geology, Canterbury University, New Zealand
 "Integrative Studies of Plate Boundary Development: Lithospheric Geodynamics of the San Andreas – Mendocino Triple Junction System"
 School of Cosmic Physics, Dublin Institute of Advanced Studies
 "Implications of New Developments in Plate Tectonics for Exploration Strategies",
 Permian Basin Geophysical Society, Midland, TX.
 "Making a Plate Boundary: Lithospheric Geodynamics of the San Andreas – Mendocino Triple Junction System"
 Department of Geology, University of Leicester, U.K.
- 2007 "Making a Plate Boundary: Lithospheric Geodynamics of the San Andreas - Mendocino Triple Junction System
 Geological Sciences, Ludwig Maximilian Univ. Munich, Germany.
 "Why is the San Andreas Fault System so Creepy?"
 Geological Society of Washington, D.C.
 "Making a Plate Boundary: The Formation and Evolution of the San Andreas"
 Department of Geology, University of Copenhagen, Denmark.
 "The Flip Side of Science Communication – Developing a 'Science Ready' Society"
 University of Otago, New Zealand.
- 2008 "Rethinking the Making of Plate Boundaries: Lessons from the San Andreas and New Zealand"
 Geosciences, Monash University, Melbourne Australia
 "Bringing Plate Tectonics Into the 21st Century: Lessons from New Zealand"
 Department of Earth and Environmental Sciences, RPI.
 "The Challenge (and promise) of Integrative Earth Sciences Research "
 National Science Foundation, Washington, D.C.
- 2009 "How to Make a plate Boundary in New Zealand (with some help from California)"
 Department of Geosciences, University of Texas at Dallas
 "Great Subduction Earthquakes, What do They Tell Us?"
 Department of Geosciences, University of Texas at Dallas
 "Rethinking Subduction: Learning from the Kurile and Solomon Earthquakes"
 Department of Geosciences, University of Melbourne, Australia
 "North versus South: Contrasts in the Evolution of the San Andreas Plate Boundary in Alta and Baja California"
 Department of Earth Sciences, Utrecht University, The Netherlands
 "Rethinking Subduction: Learning from the Kurile, Solomon and Other Recent Great Earthquakes",
 Monash University, Melbourne, Australia
- 2010 "How the New Zealand Plate Boundary was Made: or How we get to where we are today?",
 Geoscience Society of New Zealand, Canterbury Branch, Christchurch NZ
 "Putting the 2010 Canterbury Earthquake into Context: The Why and How",
 Department of Mathematics and Statistics, Univ. Canterbury, Christchurch, NZ
 "Putting the 2010 Canterbury Earthquake into Context: The Why and How", [Public Lecture]
 University of Waikato, Hamilton, NZ
 "The Why and How of the 2010 Canterbury Earthquake: Putting It into Context" [Public Lecture]
 Christchurch Tramping Club (and other regional Tramping (Hiking) Clubs)
 "Putting the 2010 Canterbury Earthquake into Context: The Perspective from One Month Out",
 Department of Geography, Univ. Canterbury, Christchurch, NZ
 "Is the Fault The Fault? Linking surface faulting to crustal faulting and deformation"
 Natural Hazards Research Center Symposium on Darfield (Canterbury) Earthquake
 University of Canterbury, Christchurch, NZ
 "It is dangerous Out there: Improving our knowledge base and mitigation response capabilities for GeoHazards"
 LESC (Life, Earth, Env. Sci. Commission), European Science Foundation, Strasbourg, France
- 2011 "Tectono-Seismology of the 2010 Darfield (Canterbury) NZ Earthquake"

- National Earthquake Information Center, USGS, Golden CO.
- “The September 2010 Darfield (Canterbury) NZ Earthquake and the February 2011 Christchurch ‘Aftershock’”
[Public Lecture], University of Utrecht, The Netherlands
- “What is Going On with These Earthquakes”
Waikato 60+ Club [Public Lecture]
- “The Canterbury Earthquake Sequence: What does it mean for New Zealand?”
Earth Science Club, University of Waikato
- “The Canterbury Earthquake Sequence: What does it mean for New Zealand?”
Maori Staff Organization, University of Waikato
- “The Canterbury Earthquake Sequence: What does it mean for New Zealand?”
IPENZ (Inst. Prof. Engineers, New Zealand), Hamilton, NZ and Rotorua, NZ
- “Earthquake Hazards in the Waikato: Could this be in our future?” [Public Lecture]
Natural Hazards Forum, Environment Waikato, Hamilton, NZ
- “The Magnitude 9.0 Sendai Earthquake and Tsunami: the Double Whammy” [Public Lecture]
University of Waikato, Hamilton, NZ
- “What’s With All These Earthquakes?” [Public Lecture]
The University of Melbourne, Australia
- “The Canterbury New Zealand Earthquake Sequence: Tectonic Context and Seismological Consequences”
Department of Geosciences, University of Melbourne, Australia
- “What Should We Make of the Canterbury Earthquakes”
Papamoa Beach (Tauranga) Probus (Rotary) Club, New Zealand
- “What Should We Make of All of These Earthquakes”
Morrinsville NZ Lyceum Club (Women’s Service Organization)
- “What’s The Deal With All These Earthquakes: Lessons from and for New Zealand”
University of Waikato, Faculty of Science Open Day
- “What’s The Deal With All These Earthquakes: Lessons from and for New Zealand”
University of Waikato, Tauranga Campus
- “Natural Disasters in the Asia-Pacific Region”
Melbourne Conversations, Melbourne Town Hall (Australia)
- “Finding Fault: Earthquakes Around the World (Including where they Shouldn’t Be!)”
Research Unplugged, Penn State University (Town/Gown Event)
- “A Year of Earthquakes: Lessons from the Canterbury NZ Earthquake Sequence”
Department of Geology, Humboldt State University
- 2012 “20/20 Vision for the Geosciences: Our Role in Addressing Key Societal Issues of Hazards and Resources”
Keynote Lecture at 50-Year Celebration of Geology Department at University of West Indies, Jamaica
- “When Should We head For the Hills?: New Thinking on Subduction Zones, Megathrusts, and Tsunami”
USGS – Geological Hazards Team, Seminar Series; Golden CO.
- 2013 "Should We Run For the Hills?: New Thinking About Subduction Earthquakes"
Department of Geological Sciences, University of Canterbury, Christchurch, New Zealand
- "Should We Run For the Hills: Rethinking Subduction Zone Earthquakes"
Department of Geology, University of South Florida, Tampa, FL
- “Teaching Science: 'Natural Disasters: Hollywood vs Reality'”
Tucson Chapter, Penn State Alumni Society
- “Teaching Science: 'Natural Disasters: Hollywood vs Reality'”
Northwest Ohio Chapter, Penn State Alumni Society, Toledo, OH
- “Cracks in the Earth – Idaho to New Zealand”
Department of Geology and Geophysics, University of Utah, Salt Lake City, UT
- “When Should We Run for the Hills? – Lessons from Tohoku and Other Megathrust Earthquakes”
Department of Earth Sciences, Kasetsart Univeristy, Bangkok, Thailand
- “Two Years of Earthquakes: The Christchurch (Canterbury) New Zealand Earthquake Sequence – Will it ever end?”
Department of Earth Sciences, Kasetsart Univeristy, Bangkok, Thailand
- “Helping the Public (and Government) Understand Earthquakes: Communication Lessons From the Christchurch Earthquakes”
Department of Earth Sciences, Kasetsart Univeristy, Bangkok, Thailand

“Teaching Disasters: Active Learning Approaches to Help Students Understand Earthquakes and Other Natural Hazards”
Department of Earth Sciences, Kasetsart Univeristy, Bangkok, Thailand

2014 “Really Big Earthquakes - What They Tell Us About Subduction Zones”
Department of Geological Sciences, Cal State - Fullerton

SHORT COURSE ORGANIZATION/LECTURES

1989 IGC Short Course Sedimentology and Thermal Mechanical History of Basins in the Central Appalachian Orogen
1991 MSA Short Course Contact Metamorphism
2005 International Conference on Disaster Mental Health Natural Hazards in the Classroom (Keynote Lecturer)
2006 MARGINS Source to Sink TEI Northern California Coast Ranges Field Trip
2013 Series of Lectures and Short Course on Plate Boundary Processes and Hazards at Kasetsart University (Bangkok, Thailand)

WORKSHOPS ORGANIZED (SINCE 2002)

2002 Tectonics of Fiordland, New Zealand, [NSF EAR-Tectonics Funded Workshop held in Dunedin and Te Anau, New Zealand,]
2004 Workshop on Thermal Processes in the Context of Earthscope, [NSF Earthscope funded Workshop held in Salt Lake City, UT]
2005 The New Zealand Geodynamic Observatory [NSF EAR-CD funded Workshop, held in Wellington, New Zealand]
2006 Northern California Earthscope LiDAR Workshop [NSF Earthscope funded Workshop held in Marshall CA]

PAPERS PRESENTED AT PROFESSIONAL MEETINGS:

[* Indicates Presented by K.P. Furlong]

1977

*Furlong, K.P., and D.S. Chapman, 1977, Roll cell mantle convection?: Evidence from heat flow and topography, EOS Trans. AGU, 58, 1235.

Chapman, D.S., and K.P. Furlong, 1977, Continental heat flow age relationship, EOS Trans. AGU, 58, 1240.

1978

Chapman, D.S., K.P. Furlong, R.B. Smith, and D.J. Wechsler, 1978, Geophysical characteristics of the Colorado Plateau and its transition to the Basin and Range province in Utah, in Abstracts of papers presented at Conference on Plateau Uplift: Mode and Mechanism, Lunar Planetary Institute Contrib., p. 329.

*Furlong, K.P., 1978, An analytic stress model applied to the Snake River Plain, EOS Trans. AGU, 59, 189.

1979

*Furlong, K.P., D.S. Chapman, and K.F. Priestley, 1979, Thermoelastic constraints on thermal models applied to the Basin and Range Province, EOS Trans. AGU, 60, 946.

Chapman, D.S., H.N. Pollack, I. Vittorello, and K.P. Furlong, 1979, On the variation of continental heat flow with age relationships; Observations and models (invited paper), Abstracts of papers presented at International Heat Flow Committee Workshop, 17th General Assembly of the IUGG, Canberra, Australia.

1980

*Furlong, K.P., D.S. Chapman, and P.W. Alfeld, 1980, Geometry of subduction - A thermal model, EOS Trans. AGU, 61, 1107.

Zandt, G., and K.P. Furlong, 1980, High heat flow in the California Coast Ranges - Result of a leaky transform, EOS Trans. AGU, 61 1130.

1981

*Furlong, K.P., 1981, A thermal model of Cenozoic subduction beneath the Southern Cordillera, Abstracts with programs, 1981 GSA Cordilleran Section Meeting, Hermosillo, Mexico.

*Furlong, K.P. and D.S. Chapman, 1981, Thermal consequences of Triple Junction migration applied to Western North America, Abstracts of Papers presented at 21st General Assembly of IASPEI, London, Ontario.

*Furlong, K.P., 1981, Rivera Triple Junction evolution - Implications for the future of the Juan de Fuca Plate, EOS Trans. AGU, 62, 1034-1035.

1982

*Furlong, K.P., and J.D. Myers, 1982, Magma Contamination: Role of thermal stresses, EOS Trans. AGU, 63, 458.

*Furlong, K.P., 1982, Thermal mechanical aspects of lithospheric behavior with triple junction evolution, Abstracts of papers presented at International Conference on Mathematical Geophysics, Bonas, France, Terra Cognita, 2, 159.

*Furlong, K.P., 1982, Constraints from paleomagnetic data on rates of lava flow emplacement: Modeling results, EOS Trans. AGU, 63, 920.

1983

*Furlong, K.P., and H.P. Heasler, 1983, Thermal consequences of emplacement of volcanics - Implications for hydrocarbon maturation, in Papers presented at AAPG Research Conference on Basin Analysis, Tucson, AZ.

*Furlong, K.P. and J.D. Edman, 1983, Graphical approach to determination of hydrocarbon maturation in overthrust terrains, Abstracts of Papers presented at AAPG Annual Meeting, p. 77.

*Furlong, K.P., and J.D. Myers, 1983, The role of thermal stresses in magma contamination: Theoretical Aspects, Abstracts of Papers presented at IAVCEI Symposia, 18th General Assembly of IUGG, Hamburg, Germany, p. 6.

*Myers, J.D., and K.P. Furlong, 1983, The role of thermal stresses in magma contamination: Petrologic consequences, Abstracts of Papers presented at IAVCEI Symposia, 18th General Assembly of IUGG, Hamburg, Germany, p. 7.

*Furlong, K.P., 1983, Application of the Method of Lines to transient thermal problems associated with plate interactions, Abstracts of Papers presented at IASPEI Symposia, 18th General Assembly of IUGG, Hamburg, Germany, p. 215.

*Furlong, K.P., 1983, Flexural evolution of the California Coast Ranges with Triple Junction migration, EOS Trans. AGU, 64, 865.

1984

Hagen, E.S., K.P. Furlong, and R.C. Surdam, 1984, Hydrocarbon maturation in Laramide Basins: Constraints from the evolution of the northern Bighorn Basin, Wyoming - Montana, in Abstracts of Papers presented at 1984 AAPG Annual Meeting (Best Paper Award).

*Furlong, K.P. and M.D. Londe, 1984, Thermal-mechanical consequences of Basin and Range Extension, EOS Trans. AGU, 65, 281.

*Furlong, K.P. and M.D. Londe, 1984, Thermal-mechanical consequences of mode of extension in continental lithosphere, Abstracts of Papers presented at International Conference on Mathematical Geophysics, Loen, Norway, Terra Cognita, 4, 253.

Chapman, D.S. and K.P. Furlong, 1984, A Plate Tectonics Laboratory Course, Abstracts of Papers presented at 27th Internat. Geol. Cong., Moscow, v. 8, p. 484-485.

*Furlong, K.P. and D. M. Fountain, 1984, Lithospheric evolution with underplating: Thermal-physical considerations, EOS Trans. AGU, 65, 986.

Londe, M.D. and K.P. Furlong, 1984, Thermal-mechanical modeling of the Colorado Plateau - Basin and Range transition, EOS Trans. AGU, 65, 1095.

1985

*Furlong, K.P., and D.S. Chapman, 1985, Crustal heterogeneities: Implications for the thermal state of the continental crust, EOS Trans. AGU, 66, 365.

Nyblade, A.A, P.N. Shive and K.P. Furlong, 1985, Rapid secular variation recorded by Eocene flows, EOS Trans. AGU, 66, 259.

- *Furlong, K.P., 1985, Thermal consequences of the evolution of the Pacific - North American plate boundary (invited paper), Abstracts of papers presented at the 23rd General Assembly of IASPEI, Tokyo, Japan, v. 1, p. 317.
- *Furlong, K.P., 1985, Crustal underplating: Thermal constraints and consequences, Abstracts of papers presented at the 23rd General Assembly of IASPEI, Tokyo, Japan, v. 2, p. 551.
- *Furlong, K.P., 1985, Continental extension zones: Thermal-mechanical signature of low-angle simple shear extension, Abstracts of papers presented at the International Symposium on Deep Internal Processes and Continental Rifting, Chengdu, China, p. 43.
- *Furlong, K.P., 1985, Thermal response to simple shear extension, Abstracts of papers presented at the Conference on Heat and Detachment in Crustal Extension on Continents and Planets, Sedona, AZ, Lunar Planetary Institute Contrib., p. 42.
- Hugo, W.D., and K.P. Furlong, 1985, Lithospheric strength and the evolution of the San Andreas Fault system, EOS Trans. AGU, 66, 1099.

1986

- *Furlong, K.P., 1986, Can heat flow data constrain crustal heat production? - A modeling perspective, (Invited Paper), EOS Trans. AGU, 67, 386.
- *Furlong, K.P., and W.D. Hugo, 1986, Lithospheric strength along the San Andreas Fault system: Implications for the development of the Pacific - North American plate boundary, Abstracts of papers presented at Conference on Mathematical Geophysics, Oosterbeek, Netherlands, Terra Cognita, 6, 317.
- Huntoon, J.E., and K.P. Furlong, 1986, Thermal-mechanical evolution of extensional basins: Toward a constrained forward model, Abstracts of papers presented at Conference on Basins of Eastern Canada and Worldwide Analogues, Halifax, Nova Scotia.
- Weir, L.A., and K.P. Furlong, 1986, Thermal evolution of sedimentary basins: Intrabasinal effects, Abstracts of papers presented at Conference on Basins of eastern Canada and Worldwide Analogues, Halifax, Nova Scotia.
- *Furlong, K.P., and G. Zandt, 1986, Lithospheric structure and evolution of the Northern San Andreas Fault, EOS Trans. AGU, 67, 1214.
- Hsui, A.T., G. Zandt, and K.P. Furlong, 1986, Thermal Mechanical Structure of the Upper Mantle Immediately beneath Coastal California -- A preliminary model, EOS Trans. AGU, 67, 1215.

1987

- *Furlong, K.P., and D.M. Fountain, 1987, Crustal underplating and the continental Moho: Thermal considerations in interpretations, EOS Trans. AGU, 68, 350.
- Yan, B., E.K. Graham, and K.P. Furlong, 1987, An application of seismic tomography to constrain global temperature or compositional variations in the upper mantle, EOS Trans. AGU, 68, 421.
- *Furlong, K.P., and D.S. Chapman, 1987, Crustal heterogeneities and the thermal structure of the continental crust, in Abstracts of Papers presented at Int. Meeting on Terrestrial Heat Flow and The Structure of the Lithosphere, Bechyně, Czechoslovakia. p. 31.
- *Furlong, K.P., and D.M. Fountain, 1987, Crustal Underplating and the continental Moho: Thermal Considerations in Interpretations, Abstracts of Papers presented at XIX General Assembly of IUGG, Vancouver, v. 1, p. 66.
- *Furlong, K.P., and J.D. Edman, 1987, Thermal evolution of thrust belts: Implications for the maturation of hydrocarbons in regions of multiple or complex thrusting, Abstracts of Papers presented at XIX General assembly of IUGG, Vancouver, v.1, p. 184.
- *Furlong, K.P., and G. Zandt, 1987, Three-dimensional lithospheric structure and evolution of the Pacific - North American plate boundary: Constraints from thermal-mechanical and seismic modeling, Abstracts of Papers presented at XIX General Assembly of IUGG, Vancouver, v.1, p. 297.
- *Furlong, K.P., 1987, Thermal-mechanical controls on the 3-D structure and evolution of the San Andreas fault zone: Implications for geodetic, geologic and geophysical observations, EOS Trans. AGU, 68, 1507.

1988

- Miller, C.K., and K.P. Furlong, 1988, The brittle-ductile transition in the San Andreas fault zone of northern California, EOS Trans. AGU, 69, 487.
- *Furlong, K.P., J.D. Edman, and J.E. Huntoon, 1988, Pre-Sevier thermal regime in the Hinterland: Evidence from the Idaho-Wyoming thrust belt, GSA 1988 Abstracts with Program, A19.

- *Furlong, K.P., 1988, Mapping the 3-D structure of a plate boundary with thermal-rheologic modeling: Application to the San Andreas fault system, *EOS Trans. AGU*, 69, 1461-1462.
- Verdonck, D., and K.P. Furlong, 1988, Application of Coulomb Wedge Theory to the Pacific coast of Costa Rica, *EOS Trans. AGU*, 69, 1406.
- *Furlong, K.P., 1988, Underplating, Metamorphism, and the Moho, Papers presented at NATO Advanced Study Institute, Exposed Cross Sections of the Continental Crust, Killarney Ont.

1989

- *Furlong, K.P., 1989, Reduction in lithospheric strength along the San Andreas Fault Zone, Abstracts of papers presented at XIV European Geophysical Society Annual Meeting, *Annales Geophysicae*, 9.
- *Furlong, K.P., 1989, Mapping Three-dimensional structure of San Andreas plate boundary: Implications for regional patterns of stress, Abstracts of papers presented at 28th IGC, Washington, D.C., 1, 519.
- Huntoon, J.E., K.P. Furlong, J.D. Edman, 1989, Tectonic evolution and hydrocarbon maturation in thrust belts as constrained by thermal modeling, Abstracts of papers presented at 28th IGC, Washington, D.C., 2, 84.
- Eggler, D.H., and K.P. Furlong, 1989, Destruction of Wyoming Province lithosphere: thermal modeling with Kimberlite xenoliths, *EOS trans. AGU*, 70, 511.
- *Furlong, K.P., 1989, Localization of deformation in the lithospheric mantle: The paradox of continental transform plate boundaries, Abstracts of papers presented at 25th General Assembly of IASPEI, Istanbul, Turkey, 122.
- *Furlong, K.P., and C.K. Miller, 1989, Thermal-mechanical controls on seismicity depth distributions along the San Andreas fault zone, California, Abstracts of papers presented at 25th General Assembly of IASPEI, Istanbul, Turkey, 570.
- *Furlong, K.P., W. Spakman, and R. Snieder, 1989, Mapping the thermal and compositional structure of the European lithosphere: Constraints from seismic tomography and heat flow, Abstracts of papers presented at Int. Symp. on Thermal Evolution of Lithosphere and Processes in the Earth's Interior, Moscow, U.S.S.R., 39.
- *Furlong, K.P., 1989, The role of thermal history in the localization of deformation in the lithospheric mantle of the San Andreas transform plate boundary, Abstracts of papers presented at Int. Symp. on Thermal Evolution of Lithosphere and Processes in the Earth's Interior, Moscow, U.S.S.R., 40.
- *Furlong, K.P., 1989, Mapping the thermal and compositional structure of the lower crust and uppermost mantle of continental lithosphere: Constraints from seismic tomography and heat flow, Abstracts of papers presented at 1989 GSA Annual Meeting, A82.
- Bowers, J.R., D.M. Kerrick, and K.P. Furlong, 1989, Conduction thermal modeling of contact aureoles of the Cupsuptic and Onawa plutons, Maine, Abstracts of papers presented at 1989 GSA Annual Meeting, A327.
- *Furlong, K.P., 1989, Terrane capture by the Pacific plate along the San Andreas plate boundary, *EOS trans. AGU*, 70, 1312.
- *Furlong, K.P., C.A. Langston, C.J. Ammon, R.H. Clouser, K.S. Vogfjord, G.S. Wagner, 1989, Seismic rupturing in the lower crust along the San Andreas?: lessons from Loma Prieta, *EOS trans. AGU*.
- Langston, C.A., K.P. Furlong, C.J. Ammon, R.H. Clouser, K.S. Vogfjord, and G.S. Wagner, 1989, Analysis of teleseismic body waves radiated from Loma Prieta, *EOS trans. AGU*.
- Huntoon, J.E., and K.P. Furlong, 1989, Thermal evolution of the Mesozoic Newark Basin and Implications for tectonic processes, *EOS trans. AGU*, 70, 1344.

1990

- *Furlong, K.P., and C.A. Langston, 1990, Geodynamic aspects of the Loma Prieta Earthquake: Constraints from rheological and source modeling, *Seism. Res. Lett.*, 61, 23.
- *Furlong, K.P., 1990, Localization of lithospheric deformation along transform plate boundaries: Modeling the San Andreas, *EOS trans. AGU*, 71, 643. (Invited)
- *Furlong, K.P., 1990, T-X Mantle Tomography, *Annales Geophysicae*, (abstracts of papers at XV General Assembly of the European Geophysical Society, Copenhagen, Denmark) (Invited).
- *Furlong, K.P., 1990, Kinematics of crustal blocks within the San Andreas system: A three-dimensional perspective, *EOS trans. AGU*, 71, 1223 (Invited).
- Verdonck, D. and K.P. Furlong, 1990, Stress buildup and release during the earthquake cycle: A numerical investigation of the dynamic evolution of the San Andreas fault system, *EOS trans. AGU*, 71, 1652.

1991

- *K.P. Furlong, and M. Liu, 1991, Lithospheric evolution along the San Andreas fault, California: Implications for strain localization and crustal magmatism, *Annales Geophysicae*, (abstracts of papers at XVI General Assembly of the European Geophysical Society, Wiesbaden, Germany), C78-79.
- *K.P. Furlong, and D. Verdonck, 1991, Fault interaction in the San Francisco Bay region: Stress communication between faults and the earthquake cycle, *Annales Geophysicae*, (abstracts of papers at XVI General Assembly of the European Geophysical Society, Wiesbaden, Germany), C35.
- Liu, M., and K.P. Furlong, 1991, Evolution of Cenozoic volcanism in California Coast Ranges: Numerical Solutions, *EOS trans. AGU*, (Abstract volume, Spring Meeting), 263.
- Verdonck, D., and K.P. Furlong, 1991, Numerical modeling of crustal deformation at complex transform plate boundaries, *EOS trans. AGU*, (Abstract volume, Spring Meeting), 263.
- *Furlong, K.P., and S.M. Atkinson, 1991, Seismicity and thermal structure in the San Francisco Bay area, Abstracts of papers presented at XX General Assembly of IASPEI (Vienna, Austria), 136.
- *Furlong, K.P., and D. Verdonck, 1991, Plate boundary rheology and deformation along transform faults, Abstracts of papers presented at XX General Assembly of IASPEI (Vienna, Austria), 152.
- Tzetos, N., and K.P. Furlong, 1991, Thermal modeling of the North Aegean Trough, North Aegean Sea, *EOS trans. AGU*, (Abstract volume, Fall Meeting), 428.
- *K.P. Furlong, J. McCarthy, and T. McEvelly, 1991, Geometry and kinematics of the Pacific-North American plate boundary in the San Francisco Bay area: A testable model for BASIX, *EOS trans. AGU*, (Abstract volume, Fall Meeting), 445.
- Liu, M., and K.P. Furlong, 1991, Thermal and deformational history in extensional core complexes, Southeastern Canadian cordillera, *EOS trans. AGU*, (Abstract volume, Fall Meeting), 461.
- *K.P. Furlong, and B. Conway, 1991, Rheologic properties of oceanic transform faults: The link to plate velocities, *EOS trans. AGU*, (Abstract volume, Fall Meeting), 472.
- G.E. Tucker, R.L. Slingerland, and K.P. Furlong, 1991, The influence of climate and surface processes in the cross-sectional topography of mountain ranges, *EOS trans. AGU*, (Abstract volume, Fall Meeting), 497.
- *Furlong, K.P., and R.B. Hanson, 1991, Modelling thermal regimes, (Short Course lecture at MSA Short Course - Contact Metamorphism, GSA National Meeting) [Invited]
- J.R. Bowers, D.M. Kerrick, and K.P. Furlong, 1991, Conduction modeling of the thermal evolution of metapelites in contact aureoles: Comparative analysis and systematics, (GSA National Meeting, Abstract volume), A49.
- *K.P. Furlong, D. Verdonck, and M. Liu, 1991, Crustal faulting and mantle shear: Where and what is the San Andreas plate boundary, (GSA National Meeting, Abstract volume), A91.
- 1992
- *Furlong, K.P., and D. Verdonck, 1992, Modeling crust-mantle coupling along the San Andreas fault system, NASA DOSE Workshop, Pasadena, CA.
- *Furlong, K.P., T. McEvelly, S. Klemperer, and J. McCarthy, 1992, BASIX: Imaging faults in the San Francisco Bay region, IRIS Workshop, Santa Fe, NM.
- Verdonck, D. and K.P. Furlong, 1992, Modeling of the dynamics of distributed shear along continental transform boundaries, *EOS trans. AGU*, (Abstract volume, Spring Meeting), 291.
- Verdonck, D., and K.P. Furlong, 1992, Coseismic and postseismic stress regime along the San Andreas fault system in central California, *Seism. Soc. Amer.*, 63, 28.
- J. Prims, and K.P. Furlong, 1992, Flexural modeling along a transform plate boundary: San Francisco Bay as a result of emplacement terranes?, *EOS trans. AGU*, (Abstract volume, Spring Meeting), 291.
- Mian Liu, and K.P. Furlong, 1992, Cenozoic extension and magmatism in the North American Cordillera: Insights from thermal modeling, *EOS trans. AGU*, (Abstract volume, Spring Meeting), 339.
- *K.P. Furlong, and D. Verdonck, 1992, Modeling lithospheric deformation at transform plate boundaries, 19th International Conf. Mathematical Geophysics, Abstract vol., 31.
- *K.P. Furlong, 1992, The 3-D structure of the San Andreas plate boundary and its role in crustal deformation and basin development, 29th Int. Geological Congress., Abstract vol.1, 233.
- *K.P. Furlong, N. Tzetos, and S. Atkinson, 1992, Constraints on crustal structure and dynamics from thermal observations and modeling, 29th Int. Geological Congress., Abstract vol.3, 837.
- Mussuridis, A., R. Slingerland, and K.P. Furlong, 1992, The role of transverse drainage in the development of foreland folds, (GSA National Meeting, Abstract volume), A152.

- Nyblade, A.A., K.P. Furlong, and C.A. Langston, 1992, Deep crustal earthquakes in Africa, *EOS trans. AGU*, (Abstract supplement), 73, 345.
- *Furlong, K.P., and D. Verdonck, 1992, 3-D lithospheric kinematics and dynamics in the San Francisco Bay region: Implications for BASIX, *EOS trans. AGU*, (Abstract supplement), 73, 401.
- *Furlong, K.P., and D. Verdonck, 1992, 3-D lithospheric kinematics and dynamics in the San Francisco Bay region: Implications for BASIX, *EOS trans. AGU*, (Abstract supplement), 73, 401.
- Verdonck, D., K.P. Furlong, and D. Pope, 1992, Three-dimensional structure of the crust in the San Francisco Bay region of central California, *EOS trans. AGU*, (Abstract supplement), 73, 401.
- Prims, J., and K.P. Furlong, 1992, Flexural modeling along a continental transform plate boundary: A possible explanation for the formation of San Francisco Bay, *EOS trans. AGU*, (Abstract supplement), 73, 404.
- *Furlong, K.P., and D. Verdonck, 1992, Geodynamics of the Mendocino triple junction: The past is the key to the present, *EOS trans. AGU*, (Abstract supplement), 73, 496.
- Verdonck, D., G. Zandt, and K.P. Furlong, 1992, Three-dimensional seismic velocity structure of the Mendocino triple junction, *EOS trans. AGU*, (Abstract supplement), 73, 496.
- Zandt, G., W.R. Walter, H.M. Benz, D.H. Oppenheimer, D. Verdonck, and K.P. Furlong, 1992, Tectonics of the Mendocino triple junction region from seismic tomography and earthquake source mechanisms, *EOS trans. AGU*, (Abstract supplement), 73, 496.
- *Furlong, K.P., 1992, Rheologic complications along large offset transform faults, *EOS trans. AGU*, (Abstract supplement), 73, 550.

1993

- *Furlong, K.P., 1993, Thermal-rheologic evolution of the upper mantle and the development of the San Andreas Fault system, *Terra nova* (abstracts of EUG VII), 5, 5.
- Bahlburg, H., and K.P. Furlong, 1993, Evolution of arc loads and active margin basins after the initiation of subduction, *Terra nova* (abstracts of EUG VII), 5, 157.
- Trehu, A., B. Beaudoin, S. Klemperer, A. Levander, A. Meltzer, G. Carver, K. Furlong, M. Talwani, S. Clarke, W. Mooney, R. Wells, and G. Zandt, 1993, Lithospheric evolution in response to triple junction migration: A program to obtain seismic images of the MTJ region, *GSA Cordilleran/Rocky Mountain Abstracts with Program*.
- *Furlong, K.P., and D. Verdonck, 1993, Stress history of faults in the San Francisco Bay region during simulated Earthquake cycles, *EOS trans. AGU* (Abstract supplement)
- *Furlong, K.P., 1993, Active tectonics along transform boundaries: Role of Geometry and Rheology, *EOS trans. AGU*, 74, 64 (abst. supp.) (*Invited*)
- Prims, J., and K.P. Furlong, 1993, Seismicity, tectonics, and lithospheric structure in the San Francisco Bay Area (California), *EOS trans. AGU*, 74, 445 (abst. supp.)
- *Furlong, K.P., K.M.M. Rohr, C.P. Lowe, and R.W. Embley, 1993, Tectonic Setting of the Queen Charlotte triple junction, *EOS trans. AGU*, 74, 593 (abst. supp.)
- Rohr, K.M.M., R.W. Embley, K.P. Furlong, and C.P. Lowe, 1993, Sea beam Survey of the Queen Charlotte triple junction, *EOS trans. AGU*, 74, 593 (abst. supp.)

1994

- *Furlong, K.P. and J. Prims, 1994, Formation of the San Francisco Bay Basin: The role of flexure and plate boundary processes, *27th IASPEI*, Wellington, N.Z., (abst. S3.11)
- Rohr, K.M.M., R.W. Embley, K.P. Furlong, and C.P. Lowe, 1994, Tectonic setting of the Queen Charlotte triple junction: Diffuse deformation at a diffuse triple junction, *27th IASPEI*, Wellington, N.Z., (abst. S3.24)
- *Furlong, K.P., 1994, Lithospheric rheology and the evolution of transform plate boundaries, *27th IASPEI*, Wellington, and N.Z., (abst S9.1) (*Invited*)
- *Furlong, K.P., 1994, Deformational consequences of the rheology of plate boundary regions: A modeling perspective, *EOS trans AGU*, 75, 329, (abst. supp) (*Invited*)
- Prims, J., and K.P. Furlong, 1994, Flexural deformation associated with continental accretion along the San Andreas and the Queen Charlotte fault systems, *EOS trans AGU*, 75, 332, (abst. supp. Spring Meeting)
- *Furlong, K.P., 1994, Tectonic Evolution of the Mendocino Triple Junction, *Invited lecture at the GSA Penrose Conference on Geologic Record of Triple Junctions*
- Rohr, K.M.M., and K.P. Furlong, 1994, Birth of a triple junction, death of a plate: Tectonics of the Queen Charlotte triple junction, *Abstracts with Program, GSA Annual Meeting*, A-188.

- *Furlong, K.P., K.M.M. Rohr, and C. Lowe, 1994, Evolution of the Pacific-Juan de Fuca-North America Triple Junction, *EOS trans AGU*, 75, 620, (abst. supp. Fall Meeting).
- Prims, J., K.P. Furlong, and K.M.M. Rohr, 1994, Lithospheric underthrusting in a transpressional regime: Evolution of the Queen Charlotte fault, *EOS trans AGU*, 75, 621, (abst. supp. Fall Meeting).
- Benz, H.M., J.A. Hole and K.P. Furlong, 1994, Three-dimensional crustal structure of the San Andreas fault system of Northern California, *EOS trans AGU*, 75, 642, (abst. supp. Fall Meeting).
- Pope, D.C., K.P. Furlong, T.M. Brocher, and H.M. Benz, 1994, Upper crust of the San Francisco Bay area: A tomographic study, *EOS trans AGU*, 75, 643-644, (abst. supp. Fall Meeting).

1995

- *Furlong, K.P., and J. Prims, 1995, San Francisco Bay Basin Subsidence: Driven by Offshore emplacement of Salinia?, AAPG/SEPM Pacific Section Convention, San Francisco.
- Govers, R., K.P. Furlong, and K.M.M. Rohr, 1995, Dynamics Evolution of the Explorer Plate, *Annales Geophysicae*, (abst. European Geophysical Society), C17.
- Prims, J., K.P. Furlong, and K.M.M. Rohr, 1995, Lithospheric Structure along the Queen Charlotte Transform Fault from Thermal Mechanical Modeling and Seismicity, *Annales Geophysicae*, (abst. European Geophysical Society), C18.
- *Furlong, K.P., 1995, Plate Boundary Rheology: Implications for Observations of Crustal strain, *Annales Geophysicae*, (abst. European Geophysical Society), C169.
- *Furlong, K.P., and K.M.M. Rohr, 1995, What has happened to the Explorer plate?: Plate tectonics of a rapidly evolving triple junction. (Abstracts of papers presented at GAC/MAC Annual Meeting, Victoria, B.C., Canada)
- Rohr, K.M.M., and Furlong, K.P., 1995, Uplift and Subsidence as the response to a change to transpression on the Queen Charlotte Fault. (Abstracts of papers presented at GAC/MAC Annual Meeting, Victoria, B.C., Canada)
- Govers, R., and K.P. Furlong, 1995, Dynamics of Subduction-Spreading-Transform triple junction: The Evolution of the Explorer plate. (Abstracts of papers presented at GAC/MAC Annual Meeting, Victoria, B.C., Canada)
- *Furlong, K.P., and K.M.M. Rohr, 1995, Pseudo-plates and the Evolution of the western North American Margin, (Abstracts for IUGG XXI General Assembly, Boulder) A398.
- Govers, R., K.P. Furlong, and K.M.M. Rohr, 1995, The Explorer Plate as a Consequence of the evolution of a subduction-spreading-transform triple junction (Abstracts for IUGG XXI General Assembly, Boulder) B334.
- Goes, S., S. Schwartz, R. Govers. K.P. Furlong, 1995, Thermal Modeling of the Mendocino Triple Junction (Abstracts for IUGG XXI General Assembly, Boulder) B336.
- *Furlong, K.P., 1995, Heat Budget of the Lithosphere-Asthenosphere system, papers presented at Workshop on Numerical Modeling of Mantle Convection and Lithospheric Dynamics, Vlieland, the Netherlands (Sept. 16-19, 1995).
- Sheaffer, S.D., and K.P. Furlong, 1995, Oceanic Transforms: Rheology and the Age-Offset Limit, *EOS trans. AGU*, v. 76, F580.
- Goes, S., S. Schwartz, R. Govers. K.P. Furlong, 1995, Thermal Modeling of the Mendocino Triple Junction, *EOS trans. AGU*, v. 76, F626.

1996

- *Furlong, K.P., H.M. Benz, and D.C. Pope, 1996, Imaging Active Tectonics along the San Andreas boundary, (abstracts, European Geophysical Society Annual Meeting).
- Goes, S., R. Govers, S. Schwartz, and K.P. Furlong, 1996, Thermal Modelling and Seismicity of the Mendocino triple junction, (abstracts, European Geophysical Society Annual Meeting).
- *Sheaffer, S.D., and K.P. Furlong, 1996, Rheology and dynamics of Ocean Transforms, (abstracts, European Geophysical Society Annual Meeting).
- Govers, R, K.P. Furlong, and K.M.M. Rohr, 1996, Oceanic Plate Fragmentation resulting from Subduction of Ridges: The Explorer Plate, (abstracts, European Geophysical Society Annual Meeting).
- *Furlong, K.P., 1996, Tomographic images of deep basins astride the San Andreas fault system in the San Francisco Bay region, (Invited) SCEC Workshop on Strong Ground Motion, San Diego.
- *Furlong, K.P., and T.J. Owens, 1996, Unraveling the mantle fabric beneath Tibet, *EOS trans. AGU*, 77, F688.

- Kreemer, C., K.P. Furlong, W. Holt, 1996, Plate boundary deformation between the Pacific and North America in the Explorer Region, *EOS trans. AGU*, 77, F654.
- Rohr, K.M.M., and K.P. Furlong, 1996, Images of the initiation of a transform plate boundary, the Explorer transform zone, *EOS trans. AGU*, 77, F655.
- 1997
- *Furlong, K.P., 1997, Geodynamics of the Mendocino Triple Junction (Invited), NSF Workshop on the Tectonics of the Mendocino Triple Junction, Menlo Park, CA.
 - *Furlong, K.P., and T.J. Owens, 1997, Exposing the mantle fabric beneath Tibet, European Geophysical Society Ann. Meeting, Vienna, Austria.
 - *Rohr, K.M.M., and K.P. Furlong, 1997, Images of the initiation of a transform plate boundary, European Geophysical Society Ann. Meeting, Vienna, Austria.
 - *Furlong, K.P., and T.J. Owens, 1997, Lithospheric Mantle Rollback beneath Northern Tibet: Evidence from Mantle Anisotropy, (abstracts of GSA National Meeting).
 - *Furlong, K.P., and T.J. Owens, 1997, Tibetan Mantle Fabric and Crust-Mantle Kinematics, *EOS trans. AGU*, 78, F173.
- 1998
- *Furlong, K.P., 1998, Complex Patterns of Seismic Anisotropy in Regions of Active Tectonics (Invited), European Geophysical Society Ann. Meeting, Nice, France
 - *Furlong, K.P., 1998, Mantle Driven Active Tectonics at the Mendocino Triple Junction, European Geophysical Society Ann. Meeting, Nice, France
 - *Furlong, K.P. and H. Anderson, 1998, Lithospheric Tectonics of a transpressional plate Boundary, Fiordland, New Zealand, European Geophysical Society Ann. Meeting, Nice, France
 - Malservisi, R., and K.P. Furlong, 1998, Lithospheric response to transpressional plate boundary kinematics, European Geophysical Society Ann. Meeting, Nice, France
 - *Furlong, K.P., 1998, Complex Patterns of Seismic Anisotropy in Regions of Active Tectonics (Invited), American Geophysical Union Spring Meeting, Boston, MA
 - *Furlong, K.P., 1998, Strain Localization and Plate Boundary Evolution (Invited), IRIS Annual Meeting, July 8-12, Santa Cruz CA
 - *Furlong, K.P., and R. Govers, 1998, Geodynamics of the Mendocino Triple Junction: Implications for Crustal Structure and Mantle Fabric, IRIS Annual Meeting, July 8-12, Santa Cruz CA
 - Li Dewei, Wang, Jiaying, and K.P. Furlong, 1998, Crustal Structure of Qiangtang Terrane in the Northern Tibetan Plateau, *EOS trans. AGU*, 79, F795.
 - *Furlong, K.P., and R. Govers, 1998, Geodynamics of the Mendocino Triple Junction: Implications for Crustal Structure and Mantle Fabric, *EOS trans. AGU*, 79, F859.
 - *Furlong, K.P., and H. Anderson, 1998, Lithospheric tectonics of the Fiordland, NZ plate boundary region, *EOS trans. AGU*, 79, F903.
 - Malservisi, R., K.P. Furlong, and A. Meuwissen, 1998, Lithospheric accommodation in the transpressional regime of Fiordland, New Zealand, *EOS trans. AGU*, 79, F904.
- 1999
- *Furlong, Kevin, and Helen Anderson, 1999, Evolution of the Fiordland, new Zealand Transpressional Plate Boundary: Constraints from Geodynamic Modelling, (Invited), GSA Penrose Conference "Mid-Cretaceous to recent Plate Boundary Processes in the Southwest Pacific.
 - *Furlong, K.P., and R. Govers, 1999, Geodynamics of the Mendocino Triple Junction, European Geophysical Society Annual Meeting, The Hague, the Netherlands.
 - Malservisi, R., and K.P. Furlong, 1999, The role of Australian plate flexure on Fiordland (new Zealand) Topography, *EOS trans. AGU*, 80, F969
 - *Furlong, K.P., S. Schwartz, and R. Govers, 1999, Crustal structure and mantle dynamics in the wake of the Mendocino triple junction, *EOS trans. AGU*, 80, F1005.
 - Guzofski, C., and K.P. Furlong, 1999, Heat flow, crustal structure, and the Mendocino triple junction: A new look, *EOS trans. AGU*, 80, F1005.

2000

- *Furlong, K.P., and S.D. Sheaffer, 2000, Thermal-rheologic controls on deformation within oceanic transforms, (invited), papers presented at Joint Int. Res. Mtg. On The Nature and Tectonic Significance of Fault Zone Weakening, London, England, March 7-9,2000.
- *Furlong, K.P., and R. Govers, 2000, The Mendocino Crustal Conveyor: toward a new paradigm of triple junction tectonics. (Paper in Society Symposium) European Geophysical Society Meeting, Nice France.
- Malservisi, R., K.P. Furlong, R. Govers, and H. Anderson, 2000, Australian plate flexure in the Fiordland (New Zealand) subduction, European Geophysical Society Meeting, Nice France.
- Guzofski, C., and K.P. Furlong, 2000, Thermal and crustal response to the Mendocino triple junction migration, European Geophysical Society Meeting, Nice France.
- *Furlong, K.P., C. Guzofski, and R. Govers, 2000, The Mendocino Crustal Conveyor: Toward a new paradigm of triple junction tectonics, GSA Annual Meeting, Reno, NV. (Invited)
- *Furlong, K.P., T. Dixon, and R. Malservisi, 2000, Geodynamics of the Eastern California Shear Zone, GSA Annual Meeting, Reno, NV.
- *Furlong, K.P., T. Dixon, R. Malservisi, and J. Decaix, 2000, A diffuse plate boundary in northern Baja: implications of geodynamic modeling with crustal deformation observations, GSA Annual Meeting, Reno, NV. (Invited)
- Benz, H., K.P. Furlong, and A. Villasenor, 2000, Lithospheric velocity structure of northern California: Constraints on the development of the Mendocino triple junction and San Andreas fault system. GSA Annual Meeting, Reno, NV. (Invited)
- Lock, J., K.P. Furlong, and R. Slingerland, 2000, Neogene landscape evolution of the northern California Coast Ranges: Evidence for MTJ tectonics, GSA Annual Meeting, Reno, NV.
- Whitlock, J., K.P. Furlong, and T. Furman, 2000, Geochemical signatures of the Mendocino Triple Junction migration: Implications for magma petrogenesis, GSA Annual Meeting, Reno, NV.
- Guzofski, C A, Furlong, K P, 2000, Thermal-Petrologic Consequences of Northern California Crustal Deformation due to Mendocino Triple Junction Migration, *Eos Trans. AGU*, 81 (48), Fall Meet. Suppl.
- Lock, J., Furlong, K, Slingerland, R, Kelsey, H., 2000, Landscape Response to the Mendocino Crustal Conveyor, Northern California Coast Ranges, *Eos Trans. AGU*, 81 (48), Fall Meet. Suppl.,
- *Furlong, K P, 2000, Crustal Kinematics and Plate Boundary Deformation: Insights from the northern San Andreas System (Invited), *Eos Trans. AGU*, 81 (48), Fall Meet. Suppl.,
- Malservisi, R, Furlong, K P, Dixon, T H., 2000, Dynamics of the Eastern California Shear Zone, *Eos Trans. AGU*, 81 (48), Fall Meet. Suppl.
- *Furlong, Kevin P., Guzofski, Chris, Govers, Rob, 2000, THE MENDOCINO CRUSTAL CONVEYOR: TOWARD A NEW PARADIGM OF TRIPLE JUNCTION TECTONICS, *GSA National Meeting, Program with Abstracts*
- Whitlock, Jaime S., Furlong, Kevin P., Furman, Tanya, 2000, GEOCHEMICAL SIGNATURES OF THE MENDOCINO TRIPLE JUNCTION MIGRATION: IMPLICATIONS FOR MAGMA PETROGENESIS, *GSA National Meeting, Program with Abstracts*
- *Furlong, Kevin P., Dixon, Tim, Malservisi, Rocco, Decaix, Julien, 2000, A DIFFUSE PLATE BOUNDARY IN NORTHERN BAJA: IMPLICATIONS OF GEODYNAMIC MODELING WITH CRUSTAL DEFORMATION OBSERVATIONS, *GSA National Meeting, Program with Abstracts*
- Benz, Harley, Furlong, Kevin, Villasenor, Antonio, 2000, LITHOSPHERIC VELOCITY STRUCTURE OF NORTHERN CALIFORNIA: CONSTRAINTS ON THE DEVELOPMENT OF THE MENDOCINO TRIPLE JUNCTION AND SAN ANDREAS FAULT SYSTEM, *GSA National Meeting, Program with Abstracts*
- Lock, Jane, Furlong, Kevin, Slingerland, Rudy, Kelsey, Harvey, 2000, NEOGENE LANDSCAPE EVOLUTION OF THE NORTHERN CALIFORNIA COAST RANGES: EVIDENCE FOR MTJ TECTONICS. *GSA National Meeting, Program with Abstracts*
- *Furlong, Kevin P., Dixon, Tim, Malservisi, Rocco, 2000, GEODYNAMICS OF THE EASTERN CALIFORNIA SHEAR ZONE, *GSA National Meeting, Program with Abstracts*
- Dixon, T. H., Decaix, J., Furlong, K., Malservisi, R., Bennett, R., Suarez Vidal, F., Fletcher, J, 2000, PRESENT-DAY SLIP RATES FOR THE AQUA BLANCA AND SAN MIGUEL-VALLECITOS FAULTS IN NORTHERN BAJA CALIFORNIA, MEXICO, *GSA National Meeting, Program with Abstracts*

2001

- *Furlong, K.P.; Dixon, T.; Malservisi, R.; Decaix, J., 2001, A diffuse plate boundary in northern Baja: implications of geodynamic modeling and crustal deformation observations, *Geophysical Research Abstracts*, European Geophysical Society, Vol. 3

- Malservisi, R.; Furlong, K.P.; Dixon, T., 2001, Dynamics of the Eastern California Shear Zone: influence of the earthquake cycle and lithospheric rheology on the surface velocity field, *Geophysical Research Abstracts*, European Geophysical Society, Vol. 3
- Lock, J.; Furlong, K.P.; Slingerland, R.; Kelsey, H., 2001, Landscape Response to the Mendocino Crustal Conveyor, Northern California Coast Ranges, *Geophysical Research Abstracts*, European Geophysical Society, 3
- *Furlong, K.P.; Malservisi, R.; Sheaffer, S., 2001, Thermal-Rheologic Controls on Deformation within Oceanic Transforms, *Geophysical Research Abstracts*, European Geophysical Society, Vol. 3
- Malservisi, R.; Furlong, K.P.; Govers, R.; Anderson, H., 2001, Australian Plate Flexure in the Fiordland (New Zealand) Subduction, *Geophysical Research Abstracts*, European Geophysical Society, Vol. 3
- Whitlock, J.S., and K.P. Furlong, 2001, Earth 101 Natural Disasters: Hollywood vs. Reality, *GSA National Meeting, Program with Abstracts A-64*
- *Furlong, K.P., 2001, A New View of Slab Window Tectonics: Implications for Crustal Evolution and Volcanism in the California Coast Ranges, *GSA National Meeting, Program with Abstracts A-210*
- Lock, J., K.P. Furlong, R. Slingerland, H. Kelsey, 2001, Complex Drainage Response to Migrating Tectonic Uplift: Example from the Northern California Coast Ranges, *Eos. Trans. AGU 82, (47) Fall Meet. Suppl.* Abstract T51C-0895.
- *Furlong, K.P., H.M. Benz, J.S. Whitlock, A.N. Bittenbinder, B.B. Bogaert, 2001, Integrating Real-time Earthquakes into Natural Hazards Courses, *Eos. Trans. AGU 82, (47) Fall Meet. Suppl.* Abstract ED51B-0228.
- Malservisi, R., K.P. Furlong, C. Gans, 2001, Fault Creep on the Hayward Fault, CA: Implications for Fault Properties and Patterns of Moment Release, *Eos. Trans. AGU 82, (47) Fall Meet. Suppl.* Abstract S41A-0593.
- Hall, C., S.Y. Schwartz, D.E. Sampson, K.P. Furlong, Crustal Structure Near the Mendocino Triple Junction, California from Broadband Receiver Functions, *Eos. Trans. AGU 82, (47) Fall Meet. Suppl.* Abstract T12A-0900.
- Whitlock, J. S., K.P. Furlong, C.E. Leshner, T. Furman, 2001, The Juan de Fuca Slab-window and Coast Range Volcanics, California: Correlation between Subducted Slab Age and Mantle Wedge Geochemistry, *Eos. Trans. AGU 82, (47) Fall Meet. Suppl.* Abstract T32D-03
- *Furlong, K.P., R. Malservisi, H. Anderson, 2001, Initiation of Subduction in a Complex Transpressional Regime, Fiordland, New Zealand, *Eos. Trans. AGU 82, (47) Fall Meet. Suppl.* Abstract T41F-03.
- *Furlong, K P, Whitlock, J S, Benz, H M, 2002, Near-real-time Earthquake Notification and Response in the Classroom: Exploiting the Teachable Moment, *Eos. Trans. AGU 83, Fall Meet. Suppl.*
- 2002
- Lock, J. and K.P. Furlong, 2002, COMPLEX DRAINAGE RESPONSE TO MIGRATING TECTONIC UPLIFT: EXAMPLE FROM THE NORTHERN CALIFORNIA COAST RANGES, EGS Meeting, Nice
- *Furlong, K.P., J. Lock, H.M. Benz, and C. Guzofski, 2002, MAKING CONTINENTAL CRUST IN THE WAKE OF A TRIPLE JUNCTION: THE MENDOCINO CRUSTAL CONVEYOR, EGS Meeting, Nice
- *Furlong, K.P., R. Malservisi, and H. Anderson, 2002, INITIATION(?) OF SUBDUCTION IN A COMPLEX TRANSPRESSIONAL REGIME, FIORDLAND, NEW ZEALAND, EGS Meeting, Nice
- *Whitlock, J., K. Furlong and C. Leshner, 2002, EVIDENCE OF A MANTLE WEDGE SOURCE FOR SLAB WINDOW VOLCANISM IN THE NORTHERN CALIFORNIA COAST RANGES, EGS Meeting, Nice
- Malservisi, R., K.P. Furlong and C. Gan, 2002, CREEPING FAULTS AND SEISMICITY: LESSONS FROM THE HAYWARD FAULT, CALIFORNIA, EGS Meeting, Nice
- Malservisi, R, Furlong, K P, Anderson, H, 2002, ELEVATING FIORDLAND: PLATE GEOMETRIES AND DYNAMIC SUPPORT, West. Pac. Geophys. Mtg, Wellington, N.Z.
- Malservisi, R, Furlong, K P, Gans, C R 2002 Creeping Faults and Seismicity: insight from numerical simulations of the Hayward fault, West. Pac. Geophys. Mtg, Wellington, N.Z.
- *Furlong, K P, Anderson, H, Malservisi, R 2002, Localized subduction in response to transpression: A sliver 'neath Fiordland, West. Pac. Geophys. Mtg, Wellington, N.Z.
- Lock, J, Furlong, K, 2002, Complex Drainage Response to Migrating Tectonic Uplift: Example from the Northern California Coast Ranges, West. Pac. Geophys. Mtg, Wellington, N.Z.
- Gans, C R, Furlong, K P, Malservisi, R, 2002, Implications of Patterns of Micro-Seismicity on Creeping Faults: Evidence From the Hayward Fault, Papers presented at Fall AGU Meeting
- *Furlong, K P, Lock, J M, Whitlock, J S, Benz, H M, 2002, Tectonism in the Wake of the Mendocino Triple Junction (Revisited): The Link Between Crustal Deformation and Mantle Flow in the Northern California Coast Ranges, Papers presented at Fall AGU Meeting
- Lock, J, Furlong, K, 2002, Geomorphic Insights into the Links Between Mantle Flow and Crustal Deformation in the Northern California Coast Ranges, Papers presented at Fall AGU Meeting

- Bennett, R A, Friedrich, A, Furlong, K P, 2002, Rapid shut-down and slow recovery of the San Andreas fault associated with San Jacinto fault inception, Papers presented at Fall AGU Meeting
- Malservisi, R, Furlong, K P, Gans, C, 2002, Implications of Earthquake-Induced Transient Creep Rates on Creeping Faults, Papers presented at Fall AGU Meeting
- *Furlong, Kevin P., LOCK, Jane, and Whitlock, Jaime, 2002, EARTHSCOPE AS MOTIVATION FOR INTEGRATIVE TECTONIC STUDIES: AN EXAMPLE FROM THE EVOLUTION OF THE NORTHERN CALIFORNIA PLATE BOUNDARY REGION, Papers presented at GSA Meeting

2003

- *Furlong, K.P. 2003, Evolution of the San Andreas Fault System in California: Lithospheric Processes and Crustal Consequences, Papers Presented at 2003 EGS Meeting TS24-1MO3O-007
- Lock, J.; Furlong, K. 2003, Geomorphic and Thermal Steady State Regimes: Reality or Wishful Thinking? Papers Presented at 2003 EGS Meeting, TS8-1TU3O-002
- Hayes, G.P.; Furlong, K.P.; Ammon, C; Hall, C, 2003, Crustal structure evolution in response to the passage of the Mendocino triple junction – A receiver function analysis Papers Presented at 2003 EGS Meeting SM3-1WE2P-0052;
- Bennett, R.A.; Friedrich, A.M.; Furlong, K.P. 2003, Inverse models for fault displacement history with application to the San Jacinto and San Andreas fault zones, southern California, USA Papers Presented at 2003 EGS Meeting TS21-1FR1P-0389
- Malservisi, R; La Femina, P.C.; Dixon, T.H.; Furlong, K.P., 2003, The role of rheology in strain partitioning between the Agua Blanca and San Miguel Faults in northern Baja California, Mexico. Papers Presented at 2003 EGS Meeting TS21-1FR1P-0390
- Furlong, K.P., 2003, Implications of the deeper extent of the plate boundary for exhumation along the Alpine Fault, New Zealand, abstracts of papers presented at 2003 GSA National meeting, Seattle, p. 303.
- Furlong, K.P., and J.S. Whitlock, 2003, Making your class a disaster...on purpose! Authentic science in a large enrollment GenEd class. Abstracts of papers presented at 2003 GSA National meeting, Seattle, p. 441.
- Whitlock, J.S., and K.P. Furlong, 2003, Is your class a Natural Disaster? It can be... The Real Time Earthquake Education (RTTE) system, Eos. Trans. AGU, 84(46) Fall Meet. Suppl. Abstract ED32C-1223.
- Gans, C., K.P. Furlong, and R. Malservisi, 2003, Implications of microseismicity and earthquake induced transient fault creep for the earthquake potential on the Hayward fault, eastern San Francisco bay area, Eos. Trans. AGU, 84(46) Fall Meet. Suppl. Abstract T11D-0427.
- *Furlong, K.P., and R. Malservisi, 2003, Implications of the 8/21/2003 Mw 7.2 Fiordland New Zealand earthquake for the development of the Alpine fault plate boundary, Eos. Trans. AGU, 84(46) Fall Meet. Suppl. Abstract T51C-03.
- Hayes, G.P., K.P. Furlong, S.Y. Schwartz, C.J. Ammon, C. Hall, 2003, Integrating seismological studies of crustal structure in the northern California Coast Ranges to construct a regional 3D strain model, Eos. Trans. AGU, 84(46) Fall Meet. Suppl. Abstract T51C-04.
- *Kamp, P.J.J. and K.P. Furlong, 2003, Making room for the Pacific: Southward migration of Pacific subduction beneath New Zealand and tectonic consequences of delaminating the Australian lithosphere, Eos. Trans. AGU, 84(46) Fall Meet. Suppl. Abstract T52F-05.

2004

- *Furlong, Kevin, and Peter Kamp, 2004, Pushing Australia out of the way? Southward migration of Pacific Subduction beneath New Zealand and tectonic consequences of delaminating the Australian lithosphere. Abs. of papers presented at the 17th Australian Geologic Convention, Hobart, Tasmania, Australia.
- *Furlong, Kevin, and Rocco Malservisi, 2004, Implications of the formation and location of the deeper extent of the plate boundary for exhumation along the Alpine Fault, New Zealand, Abs. of papers presented at the 17th Australian Geologic Convention, Hobart, Tasmania, Australia.
- *Furlong, K.; Kamp, P., Lithospheric Delamination Driven by Slab Migration: Tectonic Consequences for the New Zealand Plate Boundary, Abs. papers presented at the 1st EGU Congress, Nice, France (EGU04-A-04294)
- *Furlong, K. Landscape Response to Switching Tectonic Drivers: Lessons from California and New Zealand, Abs. papers presented at the 1st EGU Congress, Nice, France (EGU04-A-05974)
- *Furlong, K. Implications of the Formation and Location of the Deeper Extent of the Plate Boundary for Patterns of Lithospheric Seismic Anisotropy Along the New Zealand Southern Alps, Abs. papers presented at the 1st EGU Congress, (EGU04-A-04305)
- Gans, C.R.; Furlong, K.P.; Friedrich, A., Slip distribution and temporal slip rate variability on the San Andreas and San Jacinto Fault Zones, Southern California, Abs. papers presented at the 1st EGU Congress, (EGU04-A-05097)

- Malservisi, R.; Gans, C.R.; Furlong, K.P., Using microseismicity to help to map creep on a fault plane: hints from modeling the Hayward fault, Abs. papers presented at the 1st EGU Congress (EGU04-A-03931)
- Hayes, G.P.; Furlong, K.P.; Schwartz, S.; Ammon, C.; Hall, C. The development of shear zones in the crust of the Northern California Coast Ranges as determined by regional strain models (solicited), Abs. papers presented at the 1st EGU Congress, (EGU04-A-03893)
- * Furlong, K P, P J Kamp, Making Room for the Pacific: Southward Migration of Subduction Beneath New Zealand and Tectonic Consequences of Delaminating the Australian Lithosphere, *Eos Trans. AGU*, 85(28), West. Pac. Geophys. Meet. Suppl., Abstract T34A-03)
- *Furlong, K P, The Transition from Australian Subduction to Alpine Fault Tectonics: Evolution of the Plate Boundary through the South Island of New Zealand, *Eos Trans. AGU*, 85(28), West. Pac. Geophys. Meet. Suppl., Abstract T34A-05)
- *Furlong, K P, Making Mountains along the New Zealand plate boundary: Importance of Transitions and Transients, Abst. of Papers at 2004 GSA Annual Mtg. Paper 207 – 10.
- Johnson, C B, K.P. Furlong, E. Kirby, Possible Geometry and Implications for Potential Blind thrusts Beneath the Marin County – Mt Tamalpais Region, *Eos Trans. AGU*, 85(47), Fall Meet. Suppl., Abstract T41F-1283.
- Malservisi, R, P C LaFemina, T H Dixon, J Fletcher, F. Suarez-Vidal, K P Furlong, Present day Fault Kinematics of Northern Baja California, Mexico, *Eos Trans. AGU*, 85(47), Fall Meet. Suppl., Abstract G11A-0768.
- Hayes, G P, K P Furlong, S Y Schwartz, Using Receiver Functions to analyze rapid transitions in crustal structure and deformation in Northern California, *Eos Trans. AGU*, 85(47), Fall Meet. Suppl., Abstract 33C-1396.
- *Furlong, K.P., E Kirby, Potential for Blind Thrust(s) Beneath the Marin County – Mt Tamalpais region, *Eos Trans. AGU*, 85(47), Fall Meet. Suppl., Abstract T42B-04.
- *Furlong, K P, Spatial and Temporal variations along the New Zealand plate Boundary: Decoupling, Delamination and Localization, *Eos Trans. AGU*, 85(47), Fall Meet. Suppl., Abstract T41C-1215 (Invited).
- Gans, C R, K P Furlong, A Friedrich, Slip Distribution and Temporal slip rate variability on the San Andreas and San Jacinto fault zones, Southern California, *Eos Trans. AGU*, 85(47), Fall Meet. Suppl., Abstract G14A-07.

2005

- *Furlong, K.P. Lithospheric Geodynamics of the Eastern California Shear Zone, papers presented at GSA Penrose Conference on the development of the Walker Lane – eastern California Shear Zone, Mammoth, CA (INVITED)
- *Furlong, K.P. R. Harris, Thermal processes and Earthscope Science, Earthscope National Meeting, Tamaya, NM
- *Furlong, K.P., and P.J.J. Kamp, MAKING MOUNTAINS AND BASINS ALONG THE NEW ZEALAND PLATE BOUNDARY: IMPORTANCE OF TRANSITIONS AND TRANSIENTS: Papers presented at the GSA ESP II Conference, Calgary, Canada
- *Furlong, K.P., E. Kirby, and C. Johnson, COUPLING GEOPHYSICAL AND GEOMORPHIC ANALYSES TO IDENTIFY BLIND THRUST STRUCTURES IN THE SAN FRANCISCO BAY REGION FURLONG, Papers presented at the GSA ESP II Conference, Calgary, Canada
- *Furlong, K.P., and H. Kelsey, MAKING THE PLATE BOUNDARY: LITHOSPHERIC EVOLUTION IN THE WAKE OF THE MENDOCINO TRIPLE JUNCTION, Papers presented at the GSA Cordilleran Section Meeting, San Jose, CA
- Hayes, G.P., K.P. Furlong, and S. Schwartz, THE CRUSTAL STRUCTURE OF THE NORTHERN CALIFORNIA COAST RANGES FROM RECEIVER FUNCTIONS, Papers presented at the GSA Cordilleran Section Meeting, San Jose, CA
- Johnson, C.B., K.P. Furlong, and E. Kirby, POTENTIAL EARTHQUAKE HAZARDS BENEATH MT. TAMALPAIS: MODELING FAULT INTERACTIONS, Papers presented at the GSA Cordilleran Section Meeting, San Jose, CA
- Hayes G.P, K.P. Furlong, and S.Y Schwartz, Analyzing Rapid Changes in Crustal Structure in Complex Tectonic Environments with Sparse Data Sets: A Case Study from Northern California, USA; papers presented at 2005 IASPEI General Assembly, Santiago, Chile
- Johnson, C.B., K.P. Furlong, and E. Kirby, An Integrative approach to modeling potential blind thrusts: Marin County – Mt Tamalpais region, California.; papers presented at 2005 IASPEI General Assembly, Santiago, Chile
- *Furlong, K.P., Thermal-tectonic response to triple junction migrations: Lessons from the Mendocino triple junction, papers presented at 2005 IASPEI General Assembly, Santiago, Chile
- *Furlong, K.P., Locating the lithospheric plate boundary structure along the Alpine fault zone, New Zealand: Implications for patterns of crustal coupling, deformation and exhumation in the Southern Alps; papers presented at 2005 IASPEI General Assembly, Santiago, Chile

- Malservisi, R, Furlong, K P Govers, R, Lithospheric-scale plate boundary response to changes in plate motion, EOS Trans. AGU, Papers at Fall AGU Meeting, San Francisco, CA
- *Furlong, K P, Dixon, T H, Deformation and Fault Slip Along Plate Boundaries - Exploiting the Variations Between Geodetic and Geologic Observations, EOS Trans. AGU, Papers at Fall AGU Meeting, San Francisco, CA
- Hayes, G P, Johnson, C B, Furlong, K P, Evidence for Melt Injection in the Crust of Northern California, EOS Trans. AGU, Papers at Fall AGU Meeting, San Francisco, CA
- Johnson, C B, Furlong, K P, Kirby, E, From Topography to Tectonics: Coupling geomorphic and geodynamic analyses to assess potential blind thrusts in the Marin County region, EOS Trans. AGU, Papers at Fall AGU Meeting, San Francisco, CA

2006

- Johnson, C., K. Furlong, E. Kirby, Potential earthquake hazards associated with previously unrecognized blind thrust fault: Analysis of the Marin County- Mt Tamalpais region; Seismo. Soc. America Annual Meeting.
- Hayes, G., K.P Furlong, The evolution of a plate boundary system: crustal structure, seismicity, and volcanism in northern California; Seismo. Soc. America Annual Meeting.
- *Furlong, K., Making the San Andreas plate boundary in the wake of the Mendocino triple junction. Seismo. Soc. America Annual Meeting.
- *Furlong, K., R Malservisi, C. Gans, Mapping the deformational behavior and mechanical properties of the Hayward fault. Seismo. Soc. America Annual Meeting. .
- Malservisi, R.; Furlong, K.P.; Dixon, T.H, Effect of lithospheric model assumptions on the interpretation of geodetic data (solicited), Papers presented at European Geosciences Union Meeting, Vienna.
- *Furlong, KP; Govers, R, Topo-Mendocino – The link between topography and lithospheric processes in the wake of the Mendocino triple junction in northern California, USA (solicited), Papers presented at European Geosciences Union Meeting, Vienna.
- *Furlong, K.P., Making the New Zealand Plate Boundary: Signatures of Transient Tectonics (solicited), Papers presented at European Geosciences Union Meeting, Vienna.
- Friedrich, A. M.; Gans, C.; Furlong, K.; Bennett, R. A.; Flerit, F., Significance of temporal and spatial variations of geological fault slip rates for models of lithospheric deformation, Papers presented at European Geosciences Union Meeting, Vienna.
- *Furlong, K.P., Making the Ever-Changing Plate Boundary Through New Zealand, Abstracts of papers presented at 2006 AGU Joint Assembly, Baltimore.
- *Furlong, K.P, Lithospheric mantle rollback beneath northern Tibet? Evidence from mantle anisotropy. Papers presented at Int. Conference on Tibet Tectonics and Climate Change, Xining, China.
- *Furlong, K.P., The Flip side of communicating science – preparing all students to participate in scientific discussions, Geological Society of America *Abstracts with Programs*, Vol. 38, No. 7, p. 257.
- * Furlong, K.P., and Cherry, R.A., Training of health care professionals for disaster and terrorism response, Geological Society of America *Abstracts with Programs*, Vol. 38, No. 7, p. 22
- *Furlong, K P, From Slab Window to Plate Boundary: Making the San Andreas Fault System, *Eos Trans. AGU*, 87(52), Fall Meet. Suppl., Abstract T53E-06 INVITED
- Villasenor, A , Benz, H EM, Furlong, K, Tarr, A Century of Earthquakes: A New Global Seismicity Map, *Eos Trans. AGU*, 87 (52), Fall Meet. Suppl., S31B-0196
- Malservisi, R, Govers, R, Furlong, K, How does a lithospheric plate boundary adapt to changes in plate motion? An example from South Island of New Zealand *Eos Trans. AGU*, 87(52), Fall Meet. Suppl., Abstract T41G-04
- *Furlong, K, Kamp, P J Evolution of the Plate Boundary Through New Zealand since 25 Ma – Implications for the Development of the Alpine Fault, *Eos Trans. AGU*, 87(52), Fall Meet. Suppl., Abstract T41G-05
- Hayes, G, Furlong, K, Ammon, C, Zeng, Y, Relocations and Rupture Processes of Large Plate Boundary Earthquakes in Fiordland, South Island, New Zealand, *Eos Trans. AGU*, 87(52), Fall Meet. Suppl., Abstract T43D-1684

2007

- *Furlong, K.P.; Williams, T., Linking Geodetics and Geodynamics along the northern San Andreas system (solicited), GD08-1MO3O-001, abst. of papers presented at 2007 *European Geosciences Union General Assembly*
- *Furlong, K.P.; Malservisi, R., Lithospheric controls on fault creep: Insights from the San Andreas fault system, G7/GD15-1TU4O-002, abst. of papers presented at 2007 *European Geosciences Union General Assembly*
- Malservisi, R.; Furlong, K.P.; Govers, R., How does a lithospheric plate boundary adapt to changes in plate motion? - An example from South Island of New Zealand, G12-1TU5P-0346, *abst. of papers presented at 2007 European Geosciences Union General Assembly*

- *Furlong, K.P., P.J.J. Kamp, and G.P. Hayes, Evolution of the plate boundary through New Zealand since 25 Ma – Spatial-temporal patterns of orogenesis, *abst. of papers presented at XXIV General Assembly of the IUGG, Perugia, Italy.*
- Hayes, G.P., and K.P. Furlong, Local velocity ratio calculation for California: A simple approach for estimating regional Vp/Vs, *abst. of papers presented at XXIV General Assembly of the IUGG, Perugia, Italy.*
- Hayes, G.P., and K.P. Furlong, Quantifying Regional Velocity Ratio in California: Using Seismic Data to Map Shallow Structure, *abst. of Papers for 2007 Earthscope Meeting, Monterey, CA.*
- *Furlong, K P, Kamp, P J, Hayes, G P, 2007, From Convergence to Subduction – Plate Boundary Formation through New Zealand, *Eos Trans. AGU*, 88(52), Fall Meet. Suppl. T41D-04 INVITED
- Hayes, G P, Furlong, K P, 2007, Intraplate Deformation Adjacent to the Macquarie Ridge South of New Zealand - The Tectonic Evolution of a Complex Plate Boundary, *Eos Trans. AGU*, 88(52), Fall Meet. Suppl., T23B-1422
- Erickson, G.Kelsey, H, Langenheim, V, Furlong, K, 2007, Evolution of an Intermontane Basin Along the Northern San Andreas System: Evidence from Basin Structure of Little Lake Valley (Willits), Northern California Inferred from Gravity and Geologic Data, *Eos Trans. AGU*, 88(52), Fall Meet. Suppl., T43A-1098
- *Furlong, K P, Williams, T Hayes, G P. 2007, The Development of the San Andreas Plate Boundary through Northern California: Insights from GPS, Crustal Structure, and Lithospheric Modeling, *Eos Trans. AGU*, 88(52), Fall Meet. Suppl. G14A-05
- Shi, X Kirby, E., Furlong, K., Wang, E., Asmerom, Y Polyak, V., 2007, Does Tibetan lower crust flow? Preliminary constraints from a reconnaissance investigation of lacustrine shorelines around Siling Co, Tibet, *Eos Trans. AGU*, 88(52), Fall Meet. Suppl., T31D-0674
- Prentice, C S., Phillips, D A , Furlong, K P, Brown, A, Crosby, C J, Bevis, M., Shrestha, R., Sartori, M., Brocher, T., Brown, J., , 2007, High-Resolution LiDAR Topography of the Plate-Boundary Faults in Northern California *Eos Trans. AGU*, 88(52), Fall Meet. Suppl., G43D-06
- *Phillips, D A., Furlong, K., Bruhn, R., Dolan, J., Oldow, J., Prentice, C., Rubin, C., Burbank, D., Wernicke, B., Wesnowsky, S., 2007, LiDAR Acquisition for the GeoEarthScope Community, *Eos Trans. AGU*, 88(52), Fall Meet. Suppl., G51B-0438

2008

- *Furlong, K.P., and G.P. Hayes, 2008, Seismicity Studies along the Ma'acama Fault and Northern San Andreas Fault System, papers presented at Northern Calif. NEHRP Conf., USGS, Menlo Park, CA
- *Furlong, K.P.; Hayes, G.P.; Kamp, P.J.J, 2008, Deconstructing the New Zealand plate boundary: Implications for plate boundary formation, extent, and deformation, EGU2008-A-05528; GD8-1WE50-004
- * Furlong, K.P., 2008, Natural Hazards Across the Curriculum: From General Education to Professional Training, EGU2008-A-04761; IS36 - NH9.1/ES4-1TH3P-0407
- *Furlong, K.P., 2008, Seismo-tectonics of the northern Maacama fault system. Papers presented at the Rodgers Creek Maacama Fault Workshop, Menlo Park, CA.
- *Furlong, K.P., 2008, Thermal considerations in lithospheric evolution along transpressional plate boundaries: Lessons from the Neogene evolution of New Zealand, abstracts of papers presented at 33rd Int. Geol. Cong., Oslo, Norway.
- *Furlong, K.P., 2008, Making Continental Transforms – Lessons from New Zealand and California (Paper 288-3), Geological Society of America *Abstract*
- *Furlong, K.P., P.Sharma, and KN Kim, 2008, Assessment of Learning Strategies in a Large-Enrollment, Active-Learning, General Education Geoscience Course (Paper 244-8), Geological Society of America *Abstract*
- *Furlong, K.P., 2008, Context of the Hayward Fault in the Formation and Evolution of the San Andreas Plate Boundary. Papers presented at the 3rd Conf. on Earthquake Hazards in the eastern San Francisco Bay Area
- Shi, X., K.P: Furlong, E. Kirby, 2008, The Development of the Hayward-Rodgers Creek-Maacama Plate Boundary Fault System, *Eos Trans. AGU*, 89(53), Fall Meet. Suppl., Abstract T41A-1954
- O'Hara, C A LaFemina, P C, Furlong, K P, 2008, Evolution of a Ridge-Transform Intersection, Northern Iceland, *Eos Trans. AGU*, 89(53), Fall Meet. Suppl., Abstract T43C-2050
- Ammon, C R. Woodward, K.P. Furlong, T Lay, 2008, Visualizing the Seismic Wavefield With EarthScope's Transportable Array, *Eos Trans. AGU*, 89(53), Fall Meet. Suppl., Abstract ED21C-02
- *Furlong, K.P., C.J. Ammon.; T. Lay, 2008, Lithospheric Scale Deformation in Mega-thrust Subduction Zones, *Eos Trans. AGU*, 89(53), Fall Meet. Suppl., Abstract: T11D-08
- *Furlong, K.P., P. Sharma, K.Kim, 2008, What Are Students Learning in a Popular Large Enrollment General Education Geoscience Course: Assessment of Learning Strategies, *Eos Trans. AGU*, 89(53), Fall Meet. Suppl., Abstract ED41B-02

2009

- *Furlong, K.P., P.J.J Kamp 2009, The Genesis of the New Zealand Plate Boundary Extension-Transpression-Subduction, Papers at IASPEI general Assembly, Cape Town, South Africa.
- *Furlong, K.P., T. Lay, C.J. Ammon, 2009, Styles of Lithospheric Scale Deformation in Mega-thrust Subduction Zones, Papers at IASPEI general Assembly, Cape Town, South Africa.
- M. Hackl, R. Malservisi, K. Furlong, and E. Kirby, 2009, Crustal strain rate patterns of the western North America Plate boundary, Abst. papers presented at 2009 General Assembly, European Geosciences Union, EGU2009-8495
- *G.P. Hayes and K.P. Furlong, 2009, Potential Significant Tsunami Hazard in the Puysegur Subduction Zone, South of New Zealand, Abst. papers presented at 2009 General Assembly, European Geosciences Union, EGU2009-3550
- *P. LaFemina, K.P. Furlong, and C. O'Hara, 2009, Variation in Extension Style with Change in Extensional Velocity: Tectonics of the Northern Volcanic Zone, Iceland, Abst. papers presented at 2009 General Assembly, European Geosciences Union, EGU2009-1701
- *K.P. Furlong, T. Lay, and C. J. Ammon, 2009, Variations Lithospheric Scale Strain Accumulation in Mega-thrust Subduction Zones: Implications for Earthquake rupture, Abst. papers presented at 2009 General Assembly, European Geosciences Union, EGU2009-1690
- *Furlong, K.P., 2009, Variability in Lithospheric Scale Deformation Along Mega-thrust Subduction Zones, Abst. papers presented at 6th Annual General meeting Asia Oceania Geosciences Society (AOGS), Singapore, SE55-D4-AM2-302-039
- *Furlong, K. P., 2009, Development of the New Zealand and San Andreas Continental Transforms: From Plate Kinematics to Lithospheric Geodynamics (Invited). *Eos Trans. AGU, 90(52)*, Fall Meet. Suppl., Abstract T11F-01.
- *Furlong, K. P., 2009, Oblique Convergence, Slab Trajectories, and the Thermal-deformational Path of Subducting Lithosphere: Implications for Rupture Segmentation (Invited). *Eos Trans. AGU, 90(52)*, Fall Meet. Suppl., Abstract 14A-08.
- *Furlong, K. P., G. P. Hayes, R. M. Govers, R. Malservisi, 2009, The 29 September Mw8+ Samoa Earthquake: Tectonic drivers and reactivated detachment faults?. , *Eos Trans. AGU, 90(52)*, Fall Meet. Suppl., Abstract U21D-04.
- Shi, X., E. Kirby; K. P. Furlong, 2009, Geomorphic Response to Crustal Evolution of the Plate Boundary, northern California. *Eos Trans. AGU, 90(52)*, Fall Meet. Suppl., Abstract EP41B-0604.
- O'Hara, C. A., P. C. LaFemina, K. P. Furlong, 2009, Temporal and Spatial Variations in Plate Motion Across a Ridge-Transform Intersection, Northern Iceland. *Eos Trans. AGU, 90(52)*, Fall Meet. Suppl., Abstract G51B-0663.
- Legg, M. J., K. P. Furlong, P. J. Kamp, 2009, Thermo-chronologic constraints on the development of The East Coast Basin along New Zealand's Hikurangi Margin. *Eos Trans. AGU, 90(52)*, Fall Meet. Suppl., Abstract T43D-2137.
- Piotraschke, R. E., 2009, Constraints on the Exhumation History of the Klamath Mountains Block from Preliminary Thermal Modeling. ; K. P. Furlong; S. M. Cashman; E. Kirby, *Eos Trans. AGU, 90(52)*, Fall Meet. Suppl., Abstract T43D-2140.
- 2010
- *Furlong, K.P., 2010, Strain Partitioning Between the Slab and the Upper Plate: Implications for the Deformational Efficiency of Subduction, Abst. papers presented at 2010 General Assembly, European Geosciences Union, EGU2010-2471
- Furlong, K.P., M.J. Legg, and P.J.J. Kamp, 2010, Thermo-chronologic constraints on East Coast Basin Evolution in the Hawke's Bay Region, Papers presented at the 2010 NZ Petroleum Conf., Ministry Econ Dev., Auckland, NZ
- Van Dissen, R, N. Litchfield, M. Quigley, P. Villamor, D. Barrell, K. Furlong, T. Stahl, B. Duffy, E. Bilderback, D. Noble, D. Townsend, J. Begg, R. Jongens, W. Ries, A. Klahn, H. Mackenzie, A. Smith, R. Nicol, S. Cox, K. Pedley, and R. Langridge¹ 2010, Surface Rupture displacement on the Greendale Fault during the M_w 7.1 Darfield (Canterbury, New Zealand) Earthquake, Abst of Papers for GeoNZ Annual Meeting, Auckland, NZ
- *Furlong, K P, 2010, Strain Partitioning Between the Slab and the Upper Plate: Implications for the Deformational Efficiency of Subduction, T44B-08, presented at 2010 Fall Meeting, AGU, San Francisco, Calif., 13-17 Dec
- Herman, M W, Furlong, KP, Benz, H, 2010, A comparison of transpressional boundaries: what New Zealand can tell us about tectonics in New Guinea, T13B-2195, presented at 2010 Fall Meeting, AGU, San Francisco, Calif., 13-17 Dec.
- *Furlong, K P, Benz, H, Hayes, G P, Villasenor, 2010, Incorporating Real-time Earthquake Information into Large Enrollment Natural Disaster Course Learning, ED21C-0682, presented at 2010 Fall Meeting, AGU, San Francisco, Calif., 13-17 Dec.
- *Piotraschke, R E, Furlong, K P, Cashman, S M, Kamp, P J, Danišik, M Kirby, E, 2010, Insights into the Tectonic Development of the Klamath Mountains Province from Thermal Data and Modeling, T13C-2211 AU: presented at 2010 Fall Meeting, AGU, San Francisco, Calif., 13-17 Dec.

2011

- Barrell, D., R. Van Dissen, M. Quigley, N. Litchfield, P. Villamor, K. T. Stahl, B. Duffy, E. Bilderback, D. Noble, D. Townsend, J. Begg, R. Jongens, W. Ries, J. Claridge, A. Klahn, H. Mackenzie, A. Smith, S. Hornblow, R. Nicol, S. Cox, K. Pedley, R. Langridg, 2011, It's a ripper! Geomorphology of the Greendale Fault surface trace formed during the 04 Sept 2010 (NZST) Darfield (Canterbury) earthquake, New Zealand, Abst. papers presented at ANZ Geomorphology Conf. Oamaru, NZ
- R. Van Dissen, D. Barrell, N. Litchfield, A. King, M. Quigley, P. Villamor, K. Furlong, H. Mackenzie, A. Klahn, J. Begg, D. Townsend, T. Stahl, D. Noble, B. Duffy, E. Bilderback, R. Jongens, S. Cox, R. Langridge, W. Ries, R. Dhakal, A. Smith, R. Nicol, K. Pedley, H. Henham, R. Hunter, 2011, Surface rupture displacement on the Greendale Fault during the M_w 7.1 Darfield (Canterbury) Earthquake, New Zealand, and its impact on man-made structures, Abst Pacific Conference on Earthquake Engineering, Auckland, New Zealand, 14-16 April, 2011.
- *Furlong, KP, GP Hayes, M. Quigley, and H. Benz, 2011, The Canterbury, New Zealand Earthquake Sequence: Tectonic Context and Seismological Consequences, Abst. papers presented at 2011 General Assembly, European Geosciences Union EGU2011-14232
- *Furlong, KP, GP Hayes, M. Quigley, and H. Benz, 2011, Tectonic-seismology of the M_w 7.1 2010 Darfield (Canterbury NZ) Earthquake, Abst. papers presented at 2011 General Assembly, European Geosciences Union EGU2011-4298
- *Furlong, K.P., and P.J.J. Kamp, 2011, How the New Zealand Plate Boundary was Made, Papers at The XXV IUGG General Assembly, Melbourne, Australia, 28 June - 7 July 2011
- Quigley, M., R. Van Dissen, N. Litchfield, P. Villamor, K. P. Furlong, et al., 2011, Surface rupture during the 2010 M_w 7.1 Darfield (Canterbury) earthquake: Implications for fault development, orogenesis, and palaeoseismology (Invited), Papers at The XXV IUGG General Assembly, Melbourne, Australia, 28 June - 7 July 2011
- *Furlong, K.P., G.P. Hayes, M. Quigley, H. Benz, 2011, Tectonic Context and Implications of the Canterbury, New Zealand Earthquake Sequence (Invited), Papers at The XXV IUGG General Assembly, Melbourne, Australia, 28 June - 7 July 2011
- *Furlong, K.P., M. Herman, G. Hayes and H. Benz, 2011, Seismicity of the Earth 1900-2010: The Australia Plate and Vicinity, Papers at The XXV IUGG General Assembly, Melbourne, Australia, 28 June - 7 July 2011
- *Furlong, K.P., 2011, The Canterbury, New Zealand Earthquake Sequence: Lessons from a Year of Earthquakes, Abst of papers presented at GSA International Conference Fragile Earth, Munich Germany, 4-7 Sept. 2011
- Kirby, Eric, Wang, Erqi, Van Soest, Matthijs, Xu, G., Furlong, Kevin P., Kamp, Peter, Hodges, K.V., and Shi, X, 2011, When Did the Eastern Tibetan Plateau Become Elevated?, Abstr. Papers at 2011 GSA Annual Meeting in Minneapolis (9-12 October 2011)
- S. Lee, P.J.J. Kamp, K.G. Jager, and K.P. Furlong, 2011, Constraints on Late Miocene Heat Flow in Southern Taranaki Basin, Papers presented at 2011 Conference Geoscience Society of New Zealand, Nelson, NZ.
- Rosenberg, Russell H., Eric Kirby, Andres Aslan, Karl E. Karlstrom, Matthew T. Heizler, Shari A. Kelley, Rachel E. Piotraschke, Kevin P. Furlong, 2011, Does Late Miocene Exhumation Along the Western Slope of the Colorado Rockies Reflect Differential Rock Uplift? Abstracts of papers at 2011 AGU Fall Meeting T13B-2378.
- Herman, Matthew W., Kevin P. Furlong, Robert B. Herrmann, Harley Benz, 2011, Using Regional Moment Tensors to Constrain Earthquake Processes following the 2010 Darfield and 2011 Canterbury New Zealand Earthquake Sequences, Abstracts of papers at 2011 AGU Fall Meeting S21C-07
- Piotraschke, Rachel E., Kevin P. Furlong, Susan M. Cashman, Martin Danišík, Peter J. Kamp, 2011, Insights into the Tectonic Development of the Klamath Mountains Province from (U-Th)/He Data and Other Constraints, Abstracts of papers at 2011 AGU Fall Meeting V23A-2554
- *Kirby, Eric, Kevin P. Furlong, Erchie Wang, Ganqing Xu, Peter J. Kamp, Matthijs C. Van Soest, Kip Hodges, Xuhua Shi, 2011, How did the Tibetan Plateau grow? A view from Eastern Tibet, Abstracts of papers at 2011 AGU Fall Meeting T24C-02
- Regalla, Christine, Donald M. Fisher, Kevin P. Furlong, Eric Kirby, 2011, An alternative explanation for forearc subsidence along the Northeast Japan "erosive" margin? Abstracts of papers at 2011 AGU Fall Meeting DI43B-06
- *Furlong, Kevin P., Rob M. Govers, 2011, Partitioning deformation in subduction regimes throughout the earthquake cycle, Abstracts of papers at 2011 AGU Fall Meeting G51A-0869

2012

- Kirby, E., K. Furlong, E. Wang, X. Shi, M. van Soest, G. Xu, P. Kamp, and K. Hodges, 2012, Episodic growth of topography in eastern Tibet, Abst. papers presented at 2012 General Assembly, European Geosciences Union, EGU2012-3447

- Shi, X., E. Kirby, K. P. Furlong, E. Wang, K. Meng, F. M. Phillips, R. Robinson, and S. Marrero, 2012, Preliminary constraints on rheology of the deep crust beneath central Tibet from Late Pleistocene - Early Holocene shorelines, Abst. papers presented at 2012 General Assembly, European Geosciences Union, EGU2012-10796
- *Furlong K. P. and R. Govers, 2012, Partitioning subduction deformation throughout the earthquake cycle: Why Pre-earthquake and co-earthquake deformation patterns don't agree., Abst. papers presented at 2012 General Assembly, European Geosciences Union, EGU2012-11690
- *Furlong, K.P., and E. Kirby, 2012, Building the Eastern Margin of Tibet, Abst. papers presented at 2012 Joint Assembly, AOGS-AGU(WPGM), SE58-A015
- *Furlong, K.P., and R. Govers, 2012, Can We Better Anticipate the Tsunamigenic Character of Subduction Earthquakes? Abst. papers presented at 2012 Joint Assembly, AOGS-AGU(WPGM), OS07-A005
- *Furlong, K.P. and R. Govers, 2012 Controls on upper plate deformation through the earthquake cycle in subduction zones Abstracts of papers at 2012 AGU Fall Meeting T12C-02. (available in video on demand)
- Herman, Matthew W.; Kevin P. Furlong; Robert B. Herrmann; Harley Benz, 2012 Using Regional Moment Tensors to Constrain the Kinematics and Stress Evolution During the 2010-2012 Canterbury, New Zealand, Earthquake Sequence Abstracts of papers at 2012 AGU Fall Meeting T33A-2644.
- Meyers, Beth; Kevin P. Furlong; Gavin P. Hayes; Matthew W. Herman; Mark Quigley, 2012, Surface and Subsurface Fault Displacements from the September 2010 Darfield (Canterbury) Earthquake Abstracts of papers at 2012 AGU Fall Meeting T33A-2645.
- Regalla, Christine; Donald M. Fisher; Kevin P. Furlong; Eric Kirby, 2012, Kinematic evolution of the Northeast Japan convergent margin and implications for plate boundary dynamics Abstracts of papers at 2012 AGU Fall Meeting T43A-2643.
- Cleveland, Michael; Charles J. Ammon; Kevin P. Furlong, 2012, Oceanic Plate Boundary Seismicity Offshore of the U.S. Pacific Northwest and Southwestern Canada Abstracts of papers at 2012 AGU Fall Meeting T43A-2650.
- *Piotraschke, Rachel E.; Kevin P. Furlong; Susan M. Cashman; Martin Danisik; Peter J. Kamp, 2012, Subduction-driven, long-duration, margin-parallel extension in the Klamath Province, California and Oregon, in mid-Tertiary time Abstracts of papers at 2012 AGU Fall Meeting T43E-2724
- Shi, Xuhua; Eric Kirby; Kevin P. Furlong; Erchie Wang; Kai Meng; Shasta Marrero; Ruth A. Robinson; Fred M. Phillips, 2012, Weak middle crust beneath central Tibet: constraints from shoreline deformation around Siling Co Abstracts of papers at 2012 AGU Fall Meeting T51F-2668.

2013

- *Furlong, Kevin P., and Eric Kirby, 2103, Reconstructing the growth of high topography across eastern Tibet in space and time, Abst. papers presented at 2013 General Assembly, European Geosciences Union EGU2013-11938 .
- *Furlong, Kevin , Eric Kirby, Wang Erchie, Matthijs Van Soest, Xu Ganqing, Shi Xuhua, Peter Kamp, Martin Danisik, and Kip Hodges. 2013, Reconstructing the Growth of High Topography Across Eastern Tibet in Space and Time, Acta Geologica Sinica, 87(z1):37, Abs. of papers at GSC/GSA Joint Meeting "Roof of the World"; Chengdu China, June 17-19, 2014
- Shi Xuhua, Eric Kirby, Kevin P. Furlong, Meng Kai, Erchie Wang, Ruth Robinson, and Lu Haijian, 2013, Determining Crustal Strength from Shoreline Deformation, Central Tibet, Acta Geologica Sinica, 87(z1):151-152, Abs. of papers at GSC/GSA Joint Meeting "Roof of the World"; Chengdu China, June 17-19, 2014
- *Furlong, K.P., Govers, R., Herman, M., 2013, Controls on upper plate deformation through the earthquake cycle in subduction zones, Papers at IASPEI General Assembly, Gothenberg, Sweden. S401S2.04
- *Furlong, K.P., Kirby, E., 2013, Reconstructing the growth of high topography across eastern Tibet in space and time, Papers at IASPEI General Assembly, Gothenberg, Sweden. S402S1.02
- Kirby, Eric, Aslan, Andres, Rosenberg, Russell, Kelley, Shari, Karlstrom, Karl E., and Furlong, Kevin P., 2013, New Constraints on the timing and rates of incision along the Colorado River near Rifle, CO: Implications for drivers of Late Cenozoic landscape evolution, Abstr. Papers at 2013 GSA Annual Meeting in Denver, CO (27-30 October 2013)
- Hayes, GP, Furlong, K.P, and Benz, H., 2013, Triggered Aseismic Slip Adjacent to the 6 February 2013 Mw 8.0 Santa Cruz Islands Megathrust Earthquake, Abstract G23B-0792 presented at 2013 Fall Meeting, AGU, San Francisco, Calif., 9-13 Dec.
- Shi, X, Kirby, E, Furlong, K P, Meng, K, Marrero, S, Wang, E, Asmerom, Y, Robinson, R A, Polyak, V J, Phillips, F M, 2013, High lake levels at Siling Co, central Tibet, during MIS 5e - 6, Abstract PP53A-1984 presented at 2013 Fall Meeting, AGU, San Francisco, Calif., 9-13 Dec.

- Herman, M W, Furlong, K P, Hayes, G P, 2103, Constraining the Static Deformation Process of the Great 2011 Tohoku Earthquake Using High Rate GPS, Abstract S43A-2496 presented at 2013 Fall Meeting, AGU, San Francisco, Calif., 9-13 Dec.
- Meyers, B, Furlong, K P, Pananont, P, Pornsopin, P, 2103, The State of Lithospheric Stress in Greater Thailand, Abstract T13D-2563 presented at 2013 Fall Meeting, AGU, San Francisco, Calif., 9-13 Dec.
- Kirby, E, Furlong, K P, Cook, K L, Ouimet, W B, Shi, X, Wang, E, Kamp, P J, Hodges, K V, 2103, On the extent and significance of Oligocene mountain building in eastern Tibet, Abstract T22E-01 presented at 2013 Fall Meeting, AGU, San Francisco, Calif., 9-13 Dec.
- *Furlong, K P, Govers, R M, Geosciences, 2013, Reconciling Pre- and Co-Seismic Deformation at Megathrusts: Tohoku Informing Cascadia, Abstract T51I-07 presented at 2013 Fall Meeting, AGU, San Francisco, Calif., 9-13 Dec.

2104

- *Furlong, Kevin P., 2014, Anomalous Accretionary Margin Topography formed by repeated earthquakes, Abst. papers presented at 2014 General Assembly, European Geosciences Union, EGU2014-2494

[* Indicates Presented by K.P. Furlong]