

Lucy M. Flesch

**Lucy M. Flesch** (lmflesch@purdue.edu)

### **Education**

Beloit College, Physics, B.S., 1995  
Stony Brook University, Mineral Physics, M.A., 1997  
Stony Brook University, Geophysics, Ph.D., 2002

### **Present Position**

2024-present      Frederick L. Hovde Dean, College of Science, Purdue University  
  
2016-present      Professor, EAPS, Purdue University

### **Previous Positions**

2021-2024      Senior Associate Dean of Faculty Affairs, College of Science, Purdue University  
2018-2021      Associate Dean of Academic Affairs, College of Science, Purdue University  
2017-2018      Associate Head, EAPS, Purdue University  
2011-2016      Associate Professor, EAPS, Purdue University  
2005-2011      Assistant Professor, EAPS, Purdue University  
2003-2005      Postdoctoral Fellow, DTM, Carnegie Institution for Science  
2002-2003      Postdoctoral Associate, Geosciences, Stony Brook University

### **Awards and Honors**

2022                      Paul G. Silver Award, American Geophysical Union  
2017                      ELATE Fellow  
2016                      College of Science Leadership Award  
2011-2012              EarthScope Science Speaker

### **Professional Summary**

Dr. Flesch's research focuses on understanding how relative plate motions are accommodated throughout diffusely deforming continental regions and quantifying the forces involved in driving this deformation. The ability of plate tectonics theory to explain the movement of rigid tectonic plates sliding past each other delineated by narrow zones of earthquakes was a revolution in geology and geophysics. What has become apparent is that this theory tends to break down along continental plate boundaries where earthquakes and faults often extend 1000's of km away from plate boundaries. Understanding the behavior of these actively deforming regions has been a primary goal of Dr. Flesch's research. Her work is novel, and stands out, in its ability to incorporate a vast array of geophysical observations into her calculations and directly invert for both the kinematics and dynamics of these region and has been supported by the National Science Foundation and the American Chemical Society.

### **Professional and Scholarly Associations**

American Geophysical Union

Lucy M. Flesch

Geological Society of America  
SACNAS  
ELATE/ELUM

**Professional Activities**

Editor Geophysical Research Letters, 2018-2024

Board of Directors, UNAVCO, elected 2016.

Chair - 2019-2021

Vice Chair – 2018

Board Secretary –2017

IRIS/UNAVCO Negotiations Committee for a combined single Geophysical Facility 2018-2020.

Member National Academy of Science Solid Earth Panel for the 2017-2027 Decadal Survey for Earth Science and Applications from Space (ESAS 2017)

Co-Chair of the organizing committee for the “Future for Seismic and Geodetic Facility Needs in Geosciences” meeting sponsored by NSF May 2015, Landover VA.

Geodetic Data Services Advisory Committee (GDS-AC) of UNAVCO, 2013-2014.

EarthScope Cyberinfrastructure Committee, 2011- 2015.

IRIS DMS Data Products Working Group, 2012-2014.

Co-Organizer of the EarthCube end-user domain workshop for EarthScope, Tempe, AZ Oct, 2012.

Geodynamics Grand Challenges White Paper writing team, 2010.

Editorial Board of the Journal *Geology* from 2008-2010.

EarthScope Plate Boundary Observatory (PBO) – Advisory Committee, 2008-2013.

Dr. Flesch is an active peer reviewer for NSF proposals averaging ~8-10 per year. Additionally, she performs peer reviews for numerous journals (*Nature, Geology, Geophysical Research Letters, Journal of Geophysical Research, Geophysical Journal International, Earth and Planetary Science Letters, Physics of the Earth and Planetary Interiors, Journal of Geodesy, Geological Society of London, Bulletin of the Seismological Society of America, Tectonophysics*) averaging ~10 reviews per year.

### **External Funding**

- NSF-EAR0538119, Co-PI: Kinematic constraints on mantle-lithosphere interactions in Eastern Africa, 03/2006, \$423,250.
- Purdue Research Foundation XR Grant, PI, 06/2007, \$15,586.
- NSF-EAR0609337, PI: Collaborative Research: Quantifying the dynamics of Asia using GPS, geologic and shear-wave splitting data, and large-scale flow models, 06/2006, \$255,944.
- NSF-EAR0738920, Co-PI: Extensional Deformation in convergent systems, 01/2008, \$211,874.
- ACS Petroleum Research Fund, Co-PI: Geodynamics of Flat-Slab Subduction, Sedimentary Basin Development, and Hydrocarbon Systems Along the Southern Alaska, 01/2009, \$100,000.
- NSF-EAR0934806, PI: CMG RESEARCH: The application of polar field theories to largescale continental deformation, 09/2009, \$510,996.
- NSF-EAR1118931, PI: Collaborative Research: Exploring extensional tectonics beyond the Ethiopian rift, 08/2011, \$275,910.
- NSF-EAR1148027, PI: Collaborative Research: Geophysical investigation of the MidContinent rift system, 09/12, \$115,000.
- Purdue Research Foundation XR Grant, PI, 05/2014, \$28,281.
- NSF-EAR1447100, PI Investigating the partitioning of vertical strength with the IndiaEurasia lithosphere using surface observations: A numerical modeling approach, 01/2015, \$190,000.
- NSF-EAR1736153, PI: Quantifying the relationship between the Earth's convection interior, plate motions and earthquakes in Alaska using three-dimensional numerical simulations, 07/2017, \$294,288.
- NSF-EAR1813844, PI: Collaborative Research: Integrating tectonics, climate and mammal diversity, 09/2018, \$235,349.
- NSF-EAR, PI: Collaborative Research: Understanding lithospheric structure and deformation in Alaska via integration of seismic imaging and geodynamic modeling, 08/2018, \$16,352.
- NSF-EAR2348119, PI: Collaborative Research: Driving Forces at the top of the world: Characterizing the kinematics and dynamics of the eastern Eurasian and western North American Arctic, 07/2024-06/2027, \$302,361.00

### **M.S. and Ph.D. students graduated**

- Emily Finzel – PhD August 2010 Asst.  
*Prof. University of Iowa*
- Sarah Stamps –PhD May 2013 Asst.  
*Prof. Virginia Tech*
- Kelvin Koster – MS February 2013

Lucy M. Flesch

Sarah Bischoff – PhD May 2017

*Post-Doc Los Alamos National Lab*

Cassidy Jay – PhD May 2018

*Asst. Visiting Prof., Washington and Lee University*

Hannah Weaver – MS May 2021

Geophysicist, Bureau of Safety and Environmental Enforcement

Chris Calvelage – MS June 2021

EarthScope, consortium

Joe McConeghy – PhD May 2023

National Geodetic Survey

Elliot Klein – Post-Doctoral *Air*

*Worldwide*

Lijun Chang – Visiting Scholar China (2013-2014) *Faculty,*

*China Earthquake Administration*

Zhengyang Qiang – Visiting Scholar China (2015-2016)

*Faculty, China Earthquake Administration*

### **Current graduate and postdoctoral student**

Ilana Bromberg – PhD student started Fall 2021

### **Purdue University Service Department**

Associate Head, 2017-2018

Chair, Graduate Committee, Purdue University 2013-2017

Graduate Committee, Purdue University, 2005-present

Alumni & Corporate Relations, Purdue University, 2016-2018

Honors Committee, Purdue University, 2016-2018

Energy Chair Search Committee, Purdue University, 2016

Chair, Geohydrology Search Committee, Purdue University, 2014

Geodesy and Active Tectonics Search Committee, Purdue University, 2013

Executive Committee, Purdue University, 2007-2009, 2011-2013, 2014-present

Diversity Committee, Purdue University, 2012

Graduate Student Recruiting Committee, Purdue University, 2005-2007

GAT Search Committee, Purdue University, 2007

EAPS-Woman in Science at Purdue

### **College**

GCAP Member, 2013-2017

Grievance Hearing Committee, 2010-2012

College of Science Elections Committee, 2010-2012

Grade Appeals Alternative, 2006-2007

Speaker, Woman in Science at Purdue, 2007, 2011, 2017, 2018

### University

Graduate Council, 2014-2018

Chair, Area Committee C, Graduate Council 2016-2018

Judge, Undergraduate Research Symposium, 2006

Research Integrity Standing Committee, 2016-present

Judge, Sigma Chi, graduate poster competition, 2014

Provost's "Promotion and Tenure Task Force" charged for making recommendations for the rewriting of the current guidelines for Promotion and Tenure at Purdue University, 2011-2012

### Public Outreach

Participant in Congressional Visits Day sponsored by AAAS and AGI spring 2009, meeting with staffers from Senator Luger's office and Representative Buyer's office. Source for various local news outlets following the 2015 Nepali earthquake.

### Referred Publications

42. McConeghy, J<sup>G</sup>, **L.M. Flesch**, J. Elloitt, Investigating the influence of mantle tractions and flat slab subduction of the Yakutat microplate on the Denali Fault Using 3-D geodynamic models from 50Ma to the present, GRL, revised and resubmit, 2025.
41. McConeghy, J<sup>G</sup>, **L.M. Flesch**, J. Elloitt, Investigating the Effect of Mantle Flow and Viscosity Structure on Surface Velocities in Alaska Using 3-D Geodynamic Models, *J. Geophys. Res.*, 127 (10), 2022.
40. A. Bahadori, W. E. Holt, J. Austerman, L. Campbell, E.T Rasbury, D.M. Davis, C.M. Calvelage, **L.M. Flesch**, The role of gravitational body forces in development of metamorphic core complexes, *Nature Communications*, 13 (1) 1-19, 2022.
39. A. Bahadori, W.E. Holt, R. Feng, J. Austermann, K.M. Loughney, T. Salles, L. Moresi, R. Beucher, N. Lu, **L.M. Flesch**, C. Calvelage, E.T. Rasbury, D.M. Davis, A.R. Potochnik, W.K. Hatton, S.S.B. Haq, T.M. Smiley, C. Badgley, K.M. Wooton, C. Badgley, Coupled influence of tectonics, climate, and surface processes on landscape evolution in southwestern North America, *Nature Geosciences*, 13 (1), 1-18, 2022.
38. Gama, I.S., K.M. Fischer, Z. Eilon, H.E. Krueger, C.A. Dalton. **L.M. Flesch**, Alaska from a Bayesian joint inversion of Sp receiver functions and Rayleigh wave phase velocities, *E.P.S.L.*, <https://doi.org/10.1016/j.epsl.2021.116785>, 2021.
37. Bischoff, S.H.<sup>G</sup>, and **L.M. Flesch**, , *J. Geophys. Res.* Impacts of lithospheric strength distribution on the Indian-Eurasian deformation from 3-D geodynamic models, doi:10.1029/2018/JB015704, 2019.

36. Bischoff, S.H.<sup>G</sup>, and **L.M. Flesch**, Normal Faulting and Viscous Buckling in the Tibetan Plateau Induced by a Weak Lower Crust, *Nature Communications*, 9, 4952, DOI: 10.1038/s41467-018-07312-9, 2018.
35. Jay, C.N.<sup>G</sup>, **L.M. Flesch**, and R. Bendick, Kinematics and dynamics of the Pamir, Central Asia: Quantifying the roles of continental subduction in force balance, *J. Geophys. Res*, 9, 8161-8179, 2018.
34. Bomberger, C.<sup>G</sup>, R.O. Bendick, **L.M. Flesch**, and T. Ehlers, Spatial Scales of Active Deformation and Topography in the Western USA, *J. Geophys. Res.*, 123, DOI:10.1029/2018JB016135, 2018.
33. **Flesch, L.M.**, R.O. Bendick, and S. Bischoff<sup>G</sup>, Pamir-Tibet Continuity and Limitations on Inferring Dynamics from Surface Velocities in the India-Eurasia Collision Zone, *G.R.L.*, DOI:10.1002/2017GL076503, 2018.
32. Jay, C.N.<sup>G</sup>, **L.M. Flesch**, R.O. Bendick, Kinematics and dynamics of the Pamir, Central Asia: Quantifying surface deformation and force balance in an intracontinental subduction zone, *Journal of Geophysical Research*, DOI: 10.1002/2017JB014177, 2017.
31. Chang, L<sup>P</sup>, **L.M. Flesch**, C.Y. Wang, Z. Ding, Vertical Coherence of Deformation in the Lithosphere in the NE Margin of the Tibetan Plateau using GPS and Shear-Wave Splitting Data, *Tectonophysics*, 699, 93-101 2017.
30. Qiang, Z.<sup>P</sup>, Q. Wu, Y. Li, M. Gao, S. Demberel, M. Ulzibat, U. Sukhbaatar, **L.M. Flesch**, Complicated Seismic Anisotropy Beneath Sough-Central Mongolia and its Geodynamic Implications, *Earth and Planetary Sciences Letters*, 465, 126-133, 2017.
29. Chang, L<sup>P</sup>, **L.M. Flesch**, C.Y. Wang, Z. Ding, Constraining the vertical coherence of deformation in the lithosphere in eastern Himalayan syntaxis and surrounding regions using GPS, Quaternary fault slip rates and shear wave splitting data, *G.R.L.*, 42, 58135819, doi:10.1002/2015GL064568, 2015.
28. Finzel, E.M.<sup>G</sup>, **L.M. Flesch**, K.D. Ridgway, and W.E. Holt, Evidence of active mantle flow driving surface motions in Alaska, *G.R.L.*, 42(11), 4350-4358, doi:10.1002/2015GL063987, 2015
27. Finzel, E.S.<sup>G</sup>, **L.M. Flesch**, and K.D. Ridgway, Present-day geodynamics of the northern north American Cordillera, *E.P.S.L*, 404, 111-123, 2014.
26. Stamps, D.S.<sup>G</sup>, **L.M. Flesch**, E. Calais, Current kinematics and dynamics of the East African Rift, *J. Geophys. Res* 119(6), 5161-5186, 2014.
25. Stein, C.A., S. Stein, M. Merino, G.R. Keller, **L.M. Flesch** and D. Jurdy, Was the Mid-Continent Rift part of a successful seafloor-spreading episode?, *G.R.L.*, 41, 1465-1470, 2014.
24. Wang, C.Y., L.J. Chang, Z.F. Ding, Q.L. Liu, W.L. Liao, **L.M. Flesch**, Upper mantle anisotropy and crust-mantle deformation pattern beneath the Chinese mainland, *Science China – Earth Sciences*, 55, DOI: 10.1007/s11430-013-4675-5, 132-143, 2014.
23. Wang, C.Y., **L.M. Flesch**, L.J. Chang, and T.Y. Zhang, Evidence of active mantle flow beneath South China. *G.R.L.*, 40, DOI:10.1002/grl.50987, 5137-5141, 2013.
22. Bendick, R. and **L.M. Flesch**, A review of heterogeneous materials and their implications for relationships between kinematics and dynamics in continents, *Tectonics*, 32, DOI: 10.1002/tect.20058, 980-992, 2013.

21. O'Malley, D.<sup>P.</sup>, J.H. Cushman, and **L.M. Flesch**, Global Sensitivity Analysis for Micropolar Stokes Flow Problem, *INTERNATIONAL JOURNAL FOR MULTISCALE COMPUTATIONAL ENGINEERING*, 11 (4), 359-368, 2013.
20. **Flesch, L.M.** and R. Bendick\*, Relationship between surface kinematics and deformation of the whole lithosphere, *Geology*, 40, 711–714, doi:10.1130/G33269.1, 2012.
19. Leon Soto, G., E. Sandvol, J. Ni, **L.M. Flesch**, T. Hearn, F. Tillmann, Y. Chen, L. Brown, Significant and Vertically Coherent Seismic Anisotropy Beneath Eastern Tibet, *Journal of Geophysical Research*, 117, B05308, doi:10.1029/2011JB008919, 2012.
18. Finzel, E.S.<sup>G.</sup>, **L.M. Flesch**, and K.D. Ridgway, Identifying the diffuse North America-Pacific/Bering plate boundary in Alaska and western Canada, *Geology*, 39; 835–838; doi:10.1130/G32271.1, 2011.
17. Stamps, D.S.<sup>G.</sup>, **L.M. Flesch**, and E.C. Calais, Lithospheric Buoyancy Stresses in Africa from a Thin-Sheet Approach, *International Journal of Earth Sciences*, 99, 1525, 2010.
16. **Flesch, L.M.**, and C. Kremer, Gravitational potential energy and regional stress and strain rate fields for continental plateaus: Examples from the central Andes and Colorado Plateau, *Tectonophysics*, 482, 182-192, 2010.
15. Ghosh, A., W.E. Holt, and **L.M. Flesch**, Contribution of Gravitational Potential Energy Differences to the Global Stress Field, *G.J.I.*, 179, 787-812, doi: 10.1111/j.1365246X.2009.04326.x, 2009.
14. Klein, E.C.<sup>P.</sup>, **L.M. Flesch**, W.E. Holt, and A.J. Haines, Evidence of Long-term Weakness on Seismogenic Faults in Western North America from Dynamic Modeling, *J.G.R.*, 114, B03402, doi:10.1029/2007JB005201., 2009.
13. Bendick, R. and **L.M. Flesch**, Reconciling Lithospheric Deformation and Lower Crustal Flow Beneath Central Tibet: Reply, *Geology*, doi: 10.1130/G25391Y.1, 2008.
12. Ghosh, A., W.E. Holt, L. Wen, A.J. Haines, and **L.M. Flesch**, Joint modeling of lithosphere and mantle dynamics elucidating lithosphere-mantle coupling, *Geophys. Res. Lett.*, 35(16), L16309, 2008.
11. Wang, C., **L.M. Flesch**, P.G. Silver, L. Chang, and W.W. Chan, Evidence for Mechanically Coupled Lithosphere and Resulting Implications, *Geology*, 36(5), 363-366, doi:10.1130/G24450A, 2008.
10. **Flesch, L.M.** and R. Bendick, A comment on "Present-day kinematics at the India-Asia collision zone," *Geology*, doi: 10.1130/G24443C.1, 2008.
9. **Flesch, L.M.**, W.E. Holt, A.J. Haines, L. Wen, B. Shen-Tu, The dynamics of western North America: Stress magnitudes and the relative role of gravitational potential energy, plate interaction at the boundary, and basal tractions, *G.J.I.*, 169, 866-896, 2007.
8. Bendick, R., and **L.M. Flesch**, Reconciling Lithospheric Coupling and Crustal Flow Beneath Tibet, *Geology*, 35, 895-898, 2007.
7. Wang, C.Y., L.J. Chang, Z.Y. Lu, J.Z. Qin, W. Su, P.G. Silver, and **L.M. Flesch**, Seismic Anisotropy of Upper Mantle in Eastern Tibet Plateau and Related Crust-Mantle Coupling Pattern, *Science in China Series D*, 50, 1150-1160, 2007.

6. Ghosh, A., W.E. Holt, **L.M. Flesch**, A.J. Haines, The Gravitational Potential Energy of the Tibetan Plateau and the Forces Driving the Indian Plate, *Geology*, 34, 321-324, 2006.
5. **Flesch, L.M.**, W.E. Holt, P.G. Silver, M. Stephenson, C.-Y. Wang, and W.W. Chan, Constraining the Extent of Crust-Mantle Coupling in Central Asia Using GPS, Geologic, and Shear-Wave Splitting Data, *E.P.S.L*, 238, 248-268, 2005.
4. **Flesch, L.M.**, A.J. Haines, and W.E. Holt, Dynamics of the India-Eurasia collision zone, *J. Geophys. Res.*, 106, 16,435-16,460, 2001.
3. **Flesch, L.M.**, W.E. Holt, A.J. Haines, and B. Shen-Tu, Dynamics of the Pacific-North American plate boundary zone in the western United States, *Science*, 287, 834-836, 2000.
2. **Flesch, L.M.**, B. Li, and R.C. Liebermann, Sound velocities of MgSiO<sub>3</sub> – orthopyroxene to 10 GPa at room temperature, *Am. Min.*, 83, 444-450, 1998.
1. Liu, J., J. Zhang, **L. Flesch**, B. Li, D.J. Weidner, and R.C. Liebermann, Thermal equation of state of stishovite, *Phys. Earth and Planet. Int.*, 112, 257-266, 1999.

### Invited Lectures

61. EarthScope Alaska Synthesis series, February 2021.
59. L.M. Flesch and S. Bischoff, Impact of large-scale faulting on the surface deformation of India-Eurasia collision inverted from 3-D viscous modeling, Royal Society of London, Feb 2020.
58. L.M. Flesch and S. Bischoff, Impact of large-scale faulting on the surface deformation of India-Eurasia collision inverted from 3-D viscous modeling, GSA Meeting, 2019.
57. SCEC Community Stress Model Workshop, Pomona, CA, January 2019.
56. Keynote, Grand Challenges in Geodesy, Michigan State University, November 2018.
55. Department of Earth and Environmental Sciences, Tulane University, New Orleans, LA, March 2018.
54. UNAVCO Board of Directors Science talk to Agency Sponsors, Washington, D.C., January 2018.
53. Keynote, EarthScope National Meeting, Anchorage, AK, May 2017.
52. Keynote, UNAVCO Annual Meeting, Boulder, CO, March, 2016.
51. **L.M. Flesch**, L. Chang, C-Y Wang, and Z. Ding, Identification of Mantle Upwelling in North China Through the Joint Analysis of SKS and Surface Deformation Data, *Eos Trans., AGU*, Fall Meeting 2016.
50. Department of Geology and Environmental Earth Sciences, Oxford Ohio, November 2015.
49. Gansu Earthquake Administration, Lanzhou China, September 2015.
48. Chinese Earthquake Administration, Beijing China, September 2015.
47. Briefing for Rodger Wakimoto, Assistant Director (GEO) NSF and GEO program officers on the “Futures of SAGE/GAGE Facilities Workshop” and workshop report, Washington, D.C., September 2015.
46. Computational Infrastructure for Geodynamics Webinar, April 2015.
45. APS Conference for Undergraduate Woman in Physics, West Lafayette, IN, January 2015.
44. Keynote, CIG Mantle and Lithospheric Dynamics Workshop, Banff, Canada, May 2014.



43. **L.M. Flesch**, C.Y. Wang, L.J. Chang, and T.Y. Zhang, Evidence of active mantle flow beneath South China., *Eos Trans. AGU*, Fall Meet. Suppl., Abstract S31A-2342, 2013.
42. SACNAS, National Meeting, San Antonio, TX, October, 2013.
41. Department of Geosciences, University of Mass-Amherst, March 29<sup>th</sup>, 2012.
40. Department of Geology and Environmental Science, University of Akron, March, 2012.
39. Department of Geosciences, University of Arizona, February, 2012.
38. Department of Geological Sciences, Central Washington University, November, 2011.
37. Institute of Geophysics, China Earthquake Administration, Beijing, China – September, 2011.
36. Department of Earthquake Monitoring and Forecast, Earthquake Administration of Sichuan Province, Chengdu, China, September, 2011.
35. Department of Earth and Environmental Sciences, University of Kentucky, September, 2011.
34. Plenary Talk, *EarthScope National Meeting*, Austin, TX, May 2011.
33. Department of Earth and Space Sciences, UCLA, May, 2011.
32. **L.M. Flesch**, and P.G. Silver, Joint analysis of GPS and shear-wave splitting data to understand large-scale continental deformation in the India-Eurasia Collision zone, *Eos Trans. AGU*, 90(52), Fall Meet. Suppl., Abstract S13C-04, 2009.
31. EarthScope Symposium, Capital Hill, Washington D.C., April 29<sup>th</sup>, 2009.
30. NSF - Briefed Tim Kileen, Assistant Director for Geosciences, and Cora B. Marrett, Deputy Director, on EarthScope – Plate Boundary Observatory Science, January 28<sup>th</sup>, 2009.
29. Department of Earth Sciences, University of Southern California, November, 2008.
28. Department of Geosciences, Virginia Tech, September, 2008.
27. Keynote Talk - *CIG-Mantle/Lithosphere Meeting*, July 9<sup>th</sup>-11<sup>th</sup> Davis, CA, 2008.
26. Plenary Talk - *EarthScope National Meeting*, March 24<sup>th</sup>, 2007.
25. Department of Earth Sciences, Indiana University Purdue University Indianapolis, October 2007.
24. Earth and Atmospheric Sciences 40<sup>th</sup> Anniversary, Purdue University, April 2007.
23. Keynote Talk - Continent Scale Dynamics, MYRES-II, Verbania, Italy, July, 2006.
22. Department of Geological Sciences, Indiana University, April 2006.
21. Department of Geology, University of Illinois-Urbain-Champaign, March 2006.
20. Department of Earth and Environmental Sciences, University of Illinois-Chicago, March 2006.
19. Department of Geosciences, Princeton University, April 2005.
18. Department of Geosciences, Penn State University, March 2004.
17. Department of Earth and Atmospheric Sciences, Purdue University, March 2004.
16. Department of Geology, University of Oregon, March 2004.
15. Department of Geosciences, University of Arizona, March 2004.
14. Department of Geology, Miami University, February 2004.
13. Department of Geological Sciences, University of California-Santa Barbara, February 2004.
12. Department of Geological Sciences, University of Southern California, February 2004.

11. **Flesch, L.M.**, P.G. Silver, C. Wang, L. Chang, W.W. Chan, Evidence for Mechanically-Coupled Asian Lithosphere from the Joint Analysis of Surface Deformation and Seismic Anisotropy Data, *Eos Trans. AGU*, 87(52), Fall meet. Suppl., Abstract T32B-05, 2003.
10. Dept. of Terrestrial Magnetism, Carnegie Institution of Washington, March 2003.
9. **Flesch, L.M.**, W.E. Holt, A.J. Haines, and B. Shen-Tu, Dynamics of the Western North American Plate Boundary Zone, AGU Western Pacific Meeting, Wellington, New Zealand, July, 2002.
8. Dept. of Terrestrial Magnetism, Carnegie Institution of Washington, March 2002.
7. Department of Earth Sciences, University of Cambridge, February 2002.
6. Department of Geophysical Sciences, University of Chicago, February 2002.
5. Department of Geophysics, Stanford University, January 2002.
4. Department of Geology and Geophysics, Yale University, January 2001.
3. **Flesch, L.M.**, W.E. Holt, A.J. Haines, B. Shen-Tu, and M.W. Hamburger, Kinematic and Dynamic Models of western North America, *EOS Transactions, AGU*, 81(48), Fall Meeting Supplement, 2000.
2. **Flesch, L.M.**, W.E. Holt, A.J. Haines, and B. Shen-Tu, Understanding the dynamics of the western United States using seismic, geologic, topographic, and geodetic data, Geological Society of America, A-243, 2000.
1. **Flesch, L.M.**, W.E. Holt, and A.J. Haines, The dynamics of the India-Eurasia collision zone, *Eos Transactions, AGU*, 79 (45), Fall Meeting Supplement, 204, 1998.