Curriculum Vitae – Peter Aaron Selkin

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# Education

*PhD, Earth Sciences (Paleomagnetism)*

Scripps Institution of Oceanography, University of California, San Diego (2003)

Dissertation title: *Archean Paleointensity from Layered Intrusions*

Co-Advisors: Jeffrey S. Gee and Lisa Tauxe

## BA Magna cum Laude, Geology

Amherst College, Massachusetts (1997)

# Current Research

* Geophysics and rock magnetism applied to environmental problems
* Mineralogy and magnetic properties of iron oxides in rocks, soils, and anthropogenic debris
* Reliability of records of Earth’s magnetic field, particularly from the Archean
* Tracing magma movement in large igneous bodies using fabric and magnetic anisotropy
* Use of virtual globes in geoscience education

# Teaching and Research Experience

## January 2015-March 2015

*Paleomagnetist*, International Ocean Discovery Program Expedition 354, Bengal Fan (Singapore-Columbo, Sri Lanka)

## Fall 2008 - Present

## Assistant Professor, IAS/Environmental Science, University of Washington, Tacoma

## Fall 2006 - Spring 2008

## Lecturer, IAS/Environmental Science, University of Washington, Tacoma, WA

## Fall 2004 - Spring 2006

## Assistant Professor, Geography / Geology, San Diego City College, San Diego, CA

## Fall 2004

## Adjunct Professor, Oceanography, Palomar College (Mt. Carmel Education Center), San Diego, CA

## Fall 2003 - Spring 2004

## Lecturer (Part-Time), Earth Sciences

## and Postdoctoral Researcher and Visiting Scholar (Part-Time)

## Scripps Institution of Oceanography, UC San Diego, La Jolla, CA

## 1997 - 2003

*Graduate Student Researcher,* Scripps Institution of Oceanography, UC San Diego, La Jolla, CA

## Fall 1998 - Fall 2002

## Teaching Assistant, Earth Sciences, UC San Diego, La Jolla, CA

1996-1997

*Undergraduate Researcher*, Keck Geology Consortium, Amherst College, MA / University of Massachusetts, Amherst / College of Wooster, OH

Summer 1996

*Undergraduate Researcher, Experimental Petrology Laboratory*, California Institute of Technology, Pasadena, CA

1995-1996

*Teaching Assistant, Geology,* Amherst College, Amherst, MA

# Publications

## Peer-Reviewed

\*: Undergraduate Student

Selkin, P.A., C.A.E. Strömberg, M.J. Kohn, A. A. Carlini, K.S. Davies-Vollum, R. Dunn, and R.H. Madden, 2015. Climate, dust, and fire across the Eocene-Oligocene transition, Patagonia, *Geology*. In Press.

Selkin, P.A., J.S. Gee, and W.P. Meurer. 2014. Magnetic Anisotropy as a Tracer of Crystal Accumulation and Transport, Middle Banded Series, Stillwater Complex, Montana, *Tectonophysics*, 629: 123-127.

Becker, B.J., and P.A. Selkin, 2009, Marine reserve design: Simulating stakeholder options, *Teaching Issues in Ecology and the Environment*, *6* (Experiment 3), http://tiee.esa.org/vol/v6/experiment/marine\_reserve/abstract.html [Developed maps for simulation using GIS tools. Participated in original classroom tests.]

Selkin, P.A., J.S. Gee, W.P. Meurer, and S.R. Hemming, 2008, Paleointensity Record from the 2.7 Ga Stillwater Complex, Montana, *Geochemistry, Geophysics, Geosystems, 9* (Q12023), doi:10.1029/2008GC001950

Selkin, P.A., J.S. Gee, and L. Tauxe, 2007, Nonlinear thermoremanence acquisition and implications for paleointensity data, *Earth and Planetary Science Letters*, *256*, 81-89.

Gee, J.S., W.P. Meurer, P.A. Selkin and M.J. Cheadle, 2004, Quantifying three-dimensional silicate fabrics in cumulates using cumulative distribution functions, *Journal of Petrology*, *45*, 1983-2009. [With Jeff Gee, developed data processing technique and wrote computer code to estimate three-dimensional fabric parameters from two-dimensional thin section grain tracing.]

Tauxe, L., C. Luskin\*, P. Selkin, P. Gans and A. Calvert. 2004. Paleomagnetic results from the Snake River Plain: Contribution to the time-averaged field global database. *Geochemistry, Geophysics, Geosystems,* *5* (Q08H13)*,* doi:10.1029/2003GC000661. [Led paleomagnetic field sampling team (myself, postdoc, and undergraduate) in Idaho: identified suitable sites, worked with geochronologists to determine stratigraphy, obtained permission to drill, collected oriented drill core and metadata.]

Cronin, M.\*, L. Tauxe, C. Constable, P. Selkin, and T. Pick, 2001, Noise in the Quiet Zone, *Earth and Planetary Science Letters*, *190*, 13-30. [Participated in field sampling, helped advise first author (undergraduate) on statistics.]

Selkin, P.A., Gee, J.S., Tauxe, L., Meurer, W.P. and A.J. Newell, 2000, The effect of remanence anisotropy on paleointensity estimates: a case study from the Archean Stillwater Complex, *Earth and Planetary Science Letters*, *183*, 403-416.

Selkin, P.A. and L. Tauxe, 2000, Long-term trends in palaeointensity, *Proceedings of the Royal Society of London A.*, *358*, 1065-1088.

## Field-Tested Educational Materials

Goodell, L., P.A. Selkin, and R. Teasdale, 2015. Living on the Edge: Building Resilient Societies on Active Plate Margins, *InTeGrate: Interdisciplinary Teaching about Earth for a Sustainable Future*, to be accessible at:

http://serc.carleton.edu/dev/integrate/teaching\_materials/living\_edge/index.html

[Module has undergone copy-editing and will be published before the end of this quarter. I proposed the module, wrote the original outline, wrote the summative assessment, wrote a unit (material for one class day) on risk at transform plate boundaries and seismic safety, and co-wrote the culminating activity – a two-day Mount Rainier eruption simulation.]

## Non-Peer-Reviewed

Selkin, P.A., 2003, *Archean Paleointensity from Layered Intrusions*, Ph.D. dissertation, University of California, San Diego, 323 pp.

Selkin, P.A., 2006, Google Earth and Geoscience Education, *On the Cutting Edge: Professional Development for Geoscience Faculty*, accessible at:

http://serc.carleton.edu/NAGTWorkshops/visualize04/tool\_examples/google\_earth.html

## In Progress

Selkin, P.A. and D. Heslop, In Preparation, 2014, Magnetic Characterization of Dust from a Copper Smelter, Tacoma, WA. *To be submitted to Science of the Total Environment*, Summer 2015.

[As a member of the Expedition 354 Science Party] Spiess, V., France-Lanord, C., Klaus, A., and the Expedition 354 Science Party, 2015. International Ocean Discovery Program Expedition 354 Preliminary Report. College Station, TX: International Ocean Discovery Program. *In prep; to be submitted March 30, 2015*.

# Presentations

\*: Undergraduate Student

*Italics*: Presenting author (if not first)

## Invited Research Presentations

Selkin, P.A. [with D. Hanano and L. Strong, facilitators] Science on the JOIDES *Resolution*, March 2, 2015 [video broadcast]. Environmental Seminar Series, UW Tacoma, Tacoma, WA.

 “Paleoenvironments and paleoclimate from land to sea across the Eocene-Oligocene transition, Patagonia”, June 2, 2014, Marine Geology and Geophysics Seminar Series, School of Oceanography, UW Seattle.

“Investigating Ancient Climate Change in Patagonia,” April 30, 2014, Interdisciplinary Arts and Sciences Brown Bag Seminar, UW Tacoma.

 “A magnetic perspective on magmatic processes in the Stillwater Complex, Montana,” February 27, 2014, Thompson Hall Seminar Series, University of Puget Sound, Tacoma, WA.

“From footprint to fingerprint: using soil magnetism and mineralogy to trace smelter contamination in Tacoma,” February 6, 2012, Environmental Science Seminar Series, UW Tacoma, Tacoma, WA.

 “From footprint to fingerprint: using soil magnetism and mineralogy to trace smelter contamination in Tacoma,” December 13, 2011, Northwest Geological Society, Seattle, WA.

“The Early Earth and its Magnetic Field,” November 17, 2008, Environmental Science Seminar Series, UW Tacoma, Tacoma, WA.

 “Paleointensity Distributions and the Early Geodynamo.” (Co-Authors: J.S. Gee, W.P. Meurer, L. Tauxe and C.G. Constable) Fall 2003 American Geophysical Union Meeting, San Francisco.

“Magnetic Anisotropies and Magmatic Fabrics in the Middle Banded Series, Stillwater Complex, MT.” (Co-Authors: J.S. Gee, W.P. Meurer and B.D. Grosser\*) Fall 2000 American Geophysical Union Meeting, San Francisco.

“Late Archean Paleointensity from the Stillwater Complex, MT.” (Co-Authors: J.S. Gee and W.P. Meurer) Fall 2000 American Geophysical Union Meeting, San Francisco.

“Absolute Paleointensity variations: How Restless is the Geodynamo?” (Co-Author: L. Tauxe) Fall 1999 American Geophysical Union Meeting, San Francisco.

## Other Research Presentations

Teasdale, R., P.A. Selkin, and L.P. Goodell, 2015, Living on the Edge: an IntTeGrate curriculum about building resilient communities on active plate boundaries. Earth Educators Rendezvous

Selkin, P.A., *C.A.E Strömberg* (presenting author), J. Boyle, A. A. Carlini, K.S. Davies-Vollum, R.E. Dunn, M.J. Kohn, and R.H. Madden, 2014, The role of fire during the Eocene-Oligocene transition in southern South America [Poster], San Francisco, CA: 2014 Fall Meeting, American Geophysical Union.

Teasdale, R., P.A. Selkin, and L.P. Goodell, 2014, Living on the Edge: an IntTeGrate curriculum about building resilient communities on active plate boundaries [Poster]. Geol. Soc. Am. Abstracts with Programs, 46 (6): 737.

Selkin, P.A., K.S. Davies-Vollum, C.A.E. Strömberg, R.E. Dunn, R. Madden, and G.H. Re, 2012, Sedimentology and Magnetic Properties of the Late Eocene - Early Oligocene Vera Member, Sarmiento Formation at Gran Barranca, Argentina [Poster], San Francisco, CA: 2012 Fall Meeting, American Geophysical Union, Abstract GP41A-1111.

Selkin, P.A. 2012. Google Earth Tutorials for Introductory Geoscience Courses [Poster], Seattle, WA: 2012 UW Teaching and Learning Symposium. [Abstract available at http://depts.washington.edu/sotl/symposium/2012/]

Selkin, P.A., J.D. Story\*, and M.P. Cole\*. 2011. Magnetic properties as a proxy for airborne smelter dust contamination, Tacoma, WA [Poster]. Geol. Soc. Am. Abstracts with Programs, 43 (5): 284.

Selkin, P.A., D.G. De Paor, J. Gobert, K.B. Kirk, S. Kluge, G.A. Richard, S.J. Whitmeyer, 2009, Emerging Digital Technologies for Geoscience Education and Outreach, *Geological Society of America Abstracts with Programs*, 41(7): 165.

Selkin, P.A. L. Wetzstein, and J.E. Masura, 2009, Thinking Globally, Teaching Locally: Resources for Looking at Local Landscape Change and Human Population in Google Earth [Poster], *Geological Society of America Abstracts with Programs*, 41(7): 501.

Selkin, P.A., E.T. Cline, and A. Beaufort, 2008, Integrating Writing into an Introductory Environmental Science Curriculum: Perspectives from Biology and Physics [Poster], *Eos Trans. AGU, 89, Fall Meeting Suppl.*, Abstract ED31A-0587.

Tauxe, L., J.A. Bowles, J.S. Gee, A. Genevey, P.A. Selkin, and Y. Yu. 2006. Absolute paleointensity: theory, experimental design and the current database, *Eos Trans. AGU, 87, Fall Meeting Suppl.*, Abstract GP13A-03.

Selkin, P.A., J.S. Gee, and W.P. Meurer. 2003. How Variable Was the Late Archaean Field?: Paleointensity and Paleomagnetism of the Stillwater Complex, MT, *AGU Chapman Conference on Timescales of the Geomagnetic Field*, *University of Florida*.

Gee, J.S., W.P. Meurer, P.A. Selkin, and M. Cheadle. 2003. Quantifying Three-Dimensional Silicate Fabrics in Cumulates Using Cumulative Distribution Functions, *Eos Trans. AGU, 84, Fall Meeting Suppl.*, Abstract V12A-0567.

Meurer, W.P., J.S. Gee, P.A. Selkin, and M. Cheadle. 2003. Contrasting fabrics produced during magmatic slumping and compaction of gabbroic cumulates from the Stillwater Complex [Poster], Montana, *Eos Trans. AGU, 84, Fall Meeting Suppl.*, Abstract V12A-0568.

Selkin, P.A., J.S. Gee, W.P. Meurer, and L. Tauxe. 2002. Magnetic anisotropies at the mineral scale: Building magnetic fabrics from the ground up, *Quaderni di Geofisica*, *26*, 157-158. [Extended abstract for the International Symposium on Fundamental Rock Magnetism and Environmental Applications, Erice, Italy, June 2002.]

Selkin, P.A., J.S. Gee, and W.P. Meurer. 2001. Contributions of Igneous Rock-Forming Minerals to Magnetic Fabrics [Poster], *Eos Trans. AGU, 82, Fall Meeting Suppl.*, Abstract GP41A-0251.

Meurer, W.P., J.S. Gee, and P.A. Selkin. 2001. A Quantitative Evaluation of the Relationship Between Magnetic and Silicate Fabrics in Cumulates with no Discrete Magnetite [Poster], *Eos Trans. AGU, 82, Fall Meeting Suppl.*, Abstract V51B-1003.

Cronin\*, M. L. Tauxe, C. Constable, and P.A. Selkin. 2000. Noise in the Quiet Zone, *Eos Trans. AGU, 81, Fall Meeting Suppl.*, Abstract GP12B-06.

Luskin\*, C.R., L. Tauxe, P.A. Selkin, P. Gans, A. Newell, and M. Cronin\*. 2000. Paleomagnetic Results from the Snake River Plain: Contribution to the Time Averaged Field Initiative, *Eos Trans. AGU, 81, Fall Meeting Suppl.*, Abstract GP71A-16.

Selkin, P.A., R.J. Varga, and P.D. Crowley. 1997. Petrologic and structural constraints on the origin of foliated gabbro near Khandria, Troodos Ophiolite, Cyprus [Poster], *Abstracts with Programs, Geological Society of America, 29*, 78, 1997. [Undergraduate research presented at Northeast Section GSA Meeting.]

## Undergraduate Research Presentations

Moore, J.\* M. Friedman\*, P.A. Selkin, R.E. Dunn, and C.A.E. Strömberg. 2014. Clay minerals and weathering of the Vera Member, Sarmiento Formation, Patagonia, Argentina. Geological Society of America *Abstracts with Programs.* *46* (5), 12. [Poster at the 2014 Rocky Mountain / Cordilleran Geological Society of America Joint Meeting; Moore cancelled due to emergency, but poster was displayed.]

Brown, C.\*, R. Holtz\*, and P.A. Selkin. 2014. Reconstructing Streamflow in the Olympia Nonglacial Deposits, Puget Sound Region, Washington: A Study using Mineralogy and Magnetic Susceptibility. *University of Washington Undergraduate Research Symposium,* Seattle, WA*.*

Degenstein, T.\*, P. Davis, and P.A. Selkin. 2013. Strain Analysis of the Indian Creek Shear Zone, Rimrock Lake, WA. *Second Annual Undergraduate Geosciences Research Conference,* University of Puget Sound, Tacoma, WA.

Moore, J.\*, and P.A. Selkin. 2013. Determination of Clay Fraction Minerals from the Vera Member (Sarmiento Formation) in Patagonia Argentina. *University of Washngton Undergraduate Research Symposium,* Seattle, WA.

Schwartz, R.\*, C. Sharp\*, B. Brand, and P.A. Selkin. 2013. Effects of Topography on Erosional Capacity of Pyroclastic Density Currents: A Case Study from Mt. St. Helens. *University of Washington Undergraduate Research Symposium,* Seattle, WA.

Wells, R.\*, and P.A. Selkin. 2012. Tracking Heavy Metal Contamination using Magnetism and Mineralogy in Tacoma. *University of Washington Undergraduate Research Symposium,* Seattle, WA.

Friedman, M.\*, P.A. Selkin and K.S. Davies-Vollum. 2012. Sedimentary Analysis of Gran Barranca, Argentina. *University of Washington Undergraduate Research Symposium,* Seattle, WA.

Mousseau, M.\*, P.A. Selkin and J.M. Feinberg. 2010. Crystallographic Constraints on Magnetite Formation in Plagioclase. *University of Washington Undergraduate Research Symposium,* Seattle, WA.

## Invited Public Presentations and Workshops

Art+Science Salon presentation on physics, 2013, Hosted by the University of Puget Sound at the Tacoma Art Museum.

“Earth’s Magnetic Field,” April 9, 2013, Science Café presentation, KCTS-9 and Pacific Science Center, Swiss Pub, Tacoma, WA, available at http://kcts9.org/education/science-cafe/earths-magnetic-field.

“Google Earth and Maps,” workshop at 2012 Curriculum for the Bioregion Geoscience Faculty Learning Community Meeting, Skagit Valley College.

 “Teaching with Google Earth,” workshop at 2011 Geological Society of America Meeting (with Declan De Paor, Old Dominion University).

“Google Earth and Maps,” workshop at 2011 Curriculum for the Bioregion Geoscience Faculty Learning Community Meeting, Bothell, WA.

“Landscape Change and Human Population Growth,” activity presented at 2010 Bay Watershed Education and Training workshop, Foss Waterway Seaport, Tacoma, WA

 “Designing Educational Material for Use in Google Earth,” workshop at 2010 Cyberinfrastructure Summer Institute for Geoscientists, San Diego Supercomputer Center, CA

“Exploring Google Earth and Virtual Globes.” November 30, 2006, Quantitative Reasoning University workshop, Carleton College, MN

“Faults, Earthquakes, the Bay and the Point.” October 15, 2005 Tidepool Volunteer Training Conference, Cabrillo National Monument

Tidepool Geology. Fall, 2004 Tidepool Volunteer Training Conference, Cabrillo National Monument

American Geophysical Union Press Conference on Paleointensity of Earth’s Magnetic Field. December 2000. With Jeremy Bloxham (Harvard) and John Tarduno (U. Rochester).

# Fellowships and Awards

# 2013 *Quantitative Fellowship,* University of Washington, Tacoma

# 2012 *Online Teaching Fellowship,* University of Washington, Tacoma

# 2010 *Visiting Fellow,* Institute for Rock Magnetism, Minneapolis, MN

# 2007 *Writing Fellowship*, University of Washington, Tacoma

# 2004 *Undergraduate Teaching Award*, Scripps Institution of Oceanography

# 2003 *Outstanding Student Paper, Geomagnetism and Paleomagnetism*, American Geophysical Union Fall Meeting

1999 *JOI/USSAC Fellowship*, Joint Oceanographic Institutions

1997 *Regents Fellowship,* University of California, San Diego

1997 *Walter F. Pond Prize* for distinguished geology honors thesis, Amherst College

1997 *Amherst College Fellowship* in geology*,* Amherst College

# Grants Funded

2013 *Principal Investigator*, Field and Laboratory Research in Environmental Magnetism. UW Tacoma IAS Research and Teaching Improvement Fund. $4000.

2012 *Principal Investigator*, Funds for Startup of an Environmental Earth Materials Course. UW Tacoma IAS Research and Teaching Improvement Fund. $5000.

2010 *Principal Investigator,* Magnetic and Mineralogical Characterization of Tacoma Smelter Emissions. UW Royalty Research Fund. $33000.

2009 *Principal Investigator*, Testing the Fidelity of Geological Magnetic Records: Origin of Magnetic Iron Oxides in Plagioclase. UW Tacoma Chancellor’s Fund for Research and Scholarship. $2000.

2009 *Co-PI* with Lee West, Curriculum Enhancement Grant for developing computer labs (including Google Earth-based) to engage students in sustainability analysis, UW Tacoma Center for Leadership and Social Responsibility. $1000.

2006 *Associate Co-Principal Investigator*, Collaborative Research: An Integrated Geomagnetic and Petrologic Study of the Dufek Complex (Antarctica). Funded by NSF, 2006-2009. Principal Investigator: Jeffrey S. Gee, Scripps Institution of Oceanography. [Co-authored successful grant proposal as a postdoctoral researcher, but removed self from project upon moving to Washington.]

2005 *Collaborator* (with Teresa Bolaños) on Hewlett-Packard grant proposal for classroom computing resources at San Diego City College.

# Courses Taught

## (\* with lab, † TA led labs, developed or substantially redeveloped course at institution)

### University of Washington Tacoma

TESC 419\* – Environmental Field Geophysics (Upcoming: Fall 2015)

TESC 347\* – Environmental Earth Materials (2013)

TESC 417 – Field Geology (2011, 2012, 2014)

TESC 117\* – Physical Geology (2010, 2011, 2012, 2013)

TESC 227 – Earth History (2010, 2013)

TESC 200 – Environmental Seminar (2010, 2012)

TESC 123\* – Physics 3: Waves, Optics, and Thermodynamics (2008, 2009, 2010, 2011)

TESC 122\* – Physics 2: Electromagnetism and Oscillatory Motion (2008, 2010, 2011, 2012, 2013, 2014)

TESC 121\* – Physics 1: Mechanics (2007, 2008, 2010)

TCORE 121/122 – Introduction to Science (121: 2007, 122: 2008)

TESC 243 – Geography of the Physical Environment (2007, 2012, 2015)

TESC 107 – Geohazards and Natural Disasters (2007)

TESC 239 – Energy and the Environment (2007)

TESC 241 – Oceanography (2006)

TESC 100 ­– Introduction to Environmental Science (2006, 2007, 2008)

### San Diego City College

GEOG 101 – Physical Geography (2004, 2005, 2006)

GEOG 101L – Physical Geography Laboratory (2004, 2005, 2006)

GEOL 100 – General Geology (2004, 2005, 2006)

GEOL 100L – General Geology Laboratory (2004, 2005, 2006)

### Palomar College (San Marcos, CA)

OCN 100 – Introduction to Oceanography (2004)

### University of California, San Diego

ERTH 110\* – Introduction to GIS for Earth and Environmental Scientists (2004)

SIO 250\* – Earth History (2004, Co-Taught with Richard Norris)

ERTH 120† – Mineralogy (2003)

## As Teaching Assistant or Guest Lecturer

TESC 120 – Biology 1: Guest Lecturer, UW Tacoma (2009)

TESC 227 – Earth History: Guest Lecturer, UW Tacoma (2006)

SIO 229 – Marine Geophysics: Guest Lecturer, UC San Diego (2003)

ERTH 160 – Field and Structural Geology: Teaching Assistant and Guest Lecturer, UC San Diego (1999)

SIO Graduate Student Seminar Series: Developed as a graduate student (with Kim Cobb and others) and led, UC San Diego (2000)

ERTH 101 – Introductory Geology: Teaching Assistant, UC San Diego (1998, 1999)

Geology 11 – Introductory Geology, Amherst College (1995, 1996 as lead TA)

# Undergraduate Research Students Advised

## (by graduation date)

Current: Aaron Burr, Davenick Harris, Tia Harris-Dalton

2014 Michael Birge, Christopher Brown, Tiffany Degenstein (with Peter Davis, Pacific Lutheran University), Ryan Holtz, James Moore, Norm Peterson (with Tanyalee Erwin, WA Stormwater Center, Puyallup)

2013 Mark Friedman (with Sian Davies-Vollum, UWT), Richard Schwartz (with Sian Davies-Vollum, UWT and Brittany Brand, UW Seattle), Chad Sharp (with Sian Davies-Vollum, UWT and Brittany Brand, UW Seattle), Jill Wetzel (with Sian Davies-Vollum, UWT)

2012 Aaron Beckner (with Sian Davies-Vollum, UWT), Scott Hopson (with Sian Davies-Vollum, UWT)

2011 Michael Cole, Daniel Marlowe (Global Honors), Jason Story, Rodgerick Wells, Kelsey Fahey (St. Olaf)

2009 Max Mousseau

2007 James Foreman (with Rich Sheibley, USGS)

# Service

## Institutional

2015 Search committee, geoscience lecturer. University of Washington Tacoma.

2014-2015 Scholarship Committee, University of Washington School of Interdisciplinary Arts and Sciences.

2012-2014 (ongoing) Mary Cline Research Award Committee, University of Washington, Tacoma. (Also advised on Dolph Kleiner Award).

2013 Search committee, geology. University of Washington, Tacoma.

2012 Interview committee, freshwater sciences cluster. University of Washington Tacoma and Seattle.

2012 Search committee, international studies. University of Washington, Tacoma.

2010 Search committee, applied mathematics. University of Washington, Tacoma.

2009-2012 IAS Representative, Executive Council of the Faculty Assembly. University of Washington, Tacoma.

2009 Interview committee, applied mathematics. University of Washington, Tacoma.

2007 Organizer, introductory science instructors’ meetings. University of Washington, Tacoma.

2007 Search committee, laboratory coordinator. University of Washington, Tacoma.

2007 Interview committee, Port of Tacoma Chair. University of Washington, Tacoma.

2006 Search committee, environmental organic chemistry. University of Washington, Tacoma.

2005-2006 Faculty Senator. San Diego City College.

2005 Search committee, laboratory technician. Physical Sciences Department, San Diego City College.

2005 Proposition S – physical science building redesign committee. San Diego City College.

## Professional

2013 (ongoing) Review Editor*, Frontiers in Geomagnetism and Paleomagnetism*.

2010 Resource Faculty, Curriculum for the Bioregion Geoscience Faculty Learning Community

2009Co-Chair, technical session on technology in geoscience education and Pardee Keynote Symposium, Geological Society of America conference.

Ongoing: Reviewer, National Science Foundation, American Geophysical Union (Geophysical Monograph 145: *Timescales of the Geomagnetic Field*), *Environmental Science and Technology*, Geological Society of America (Special Paper 492: *Google Earth & Virtual Visualizations in Geoscience*), *Geochemistry, Geophysics, Geosystems*, *Earth Planets Space*, *Earth and Planetary Science Letters*, *Geophysical Journal International*, and *On the Cutting Edge: Professional Development for Geoscience Faculty*

## Community

2013-2014 Facilitator*,* Engineering Club, Bryant Montessori School, Tacoma, WA (with Brian Brandt, WSU, and David Muller, PLU)