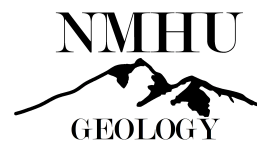


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### **Professional Preparation**

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United States Marine Corps - Active Duty 1987 - 1991  
Kent State University - Geology - Bachelor of Science December 1995  
University of New Mexico - Geology - Master of Science December 1998  
University of New Mexico - Geology - Doctor of Philosophy December 2005

### **Appointments**

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#### **2011-present:**

Associate Professor of Geology, New Mexico Highlands University  
Consulting Geologist, Monte Vista Petroleum Exploration Company

#### **2006-2011:**

Assistant Professor of Geology, New Mexico Highlands University

#### **2005 - 2006:**

Visiting Assistant Professor, The Colorado College, Department of Geology

#### **2001- 2005:**

Ph.D. candidate, research assistant, assistant Paleomagnetism lab manager E&PS  
President E&PS Graduate Student Association 2001-2003

#### **1998-2001:**

Exploration/Production Geoscientist ExxonMobil Corporation, Houston, TX

#### **1996-1998:**

Research and Teaching Assistant E&PS; Contract Geologist, NM Bureau of Geology

### **Grants, Honors and Awards**

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- National Science Foundation (NSF) Catalyzing New International Collaboration: *Pending* \$68,556
- United States Department of Agriculture (USDA): *Pending* \$299,789
- NSF Epscore Seed Grant: **Awarded \$50,000**
- NSF Sedimentary Geology and Paleobiology: **Awarded: \$333,461**
- NSF Major Research Instrumentation Program x 2: **Awarded \$159,000; Awarded \$ 42,489**
- National Geographic Society Grants-in-aid-of Research x 2: **Awarded \$19,890; \$20,500**
- Seismic Micro-Technology Software Grant: **Awarded \$477,158**
- NMHU Office of Research and Sponsored Projects: **Awarded \$31,000**
- NMHU Faculty Research Committee grants in Aid of Research: **Awarded \$16,600**
- University College Dublin International Collaborative Research Project: **Awarded \$21,200**
- NSF Fellowship Institute of Rock Magnetism Visiting Researcher Program: **Awarded \$750**
- NSF Western Alliance to Expand Student Opportunities: **Awarded \$25, 666**
- NSF International Research & Education: Planning Visit: **Awarded \$20,000**
- NMHU 2010 **Professor of the Year**
- UNM Graduate School Research and Travel Grant, 1997, 2002, 2003, 2004, 2005
- Sigma Xi Research Grant, 1996, 2001, 2003
- Geological Society of America Student Research Grant, 1998, 2002, 2003, 2004
- Society of Independent Professional Earth Sciences (SIPES) Scholarship, 2002
- SW New Mexico section of Society for Mining & Exploration Scholarship, 2002
- GSA (Geophysics Division) Allen Cox Student Research Award 1998

### **Teaching Experience (seven years at the graduate and undergraduate level)**

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- NMHU, Environmental Geophysics, Geographic Information System and Surveying, Depositional Environments, Hydrogeology, Ore Deposits, Structural Geology, Volcanology
- Colorado College, Tectonics, Intro Geology, Geophysics, Field Methods/Instrumentation
- UNM EPS319L Geology Field Camp (1997, 1998, 2000, 2001, 2002, 2003, 2004,2005)
- UNM EPS551L Volcanology Summer Field Camp 2004

- LSU (6 week) Geology Field Camp 2002
- UNM EPS307L Structural Geology 1998
- UNM EPS255/310 New Mexico Field Geology 1996, 1997, 2001, 2002
- UNM EPS105L Introductory Geology Lab 1996,2005
- UNM Athletic Department Geology Tutor 2001 - 2005

### **Mapping Experience**

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*10 years mapping experience, including*

- Norway: Svalbard glacial deposits/ Leka ophiolite
- Chaîne des Puys, France
- Isle Rhum and Ross of Mull - Scotland UK
- West-central Nevada, regional ignimbrites and metamorphic rocks
- EDMAP 1:24000 South Garcia SE Quadrangle (in progress), central New Mexico
- Southern Colorado and northern New Mexico
- Southwest Utah, transition zone between BRP and Colorado Plateau
- Bohemian Massif (Poland and Czech Republic)
- Masters Thesis Research: 1:6000 scale mapping: Silver Peak Range, Nevada

### **Synergistic Activities**

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#### **Service to the University**

- Web Page Committee chair (2009 – present)
- Faculty Research Committee Chair (2006-2010).
- Organized 7th Annual New Mexico Highlands University Faculty and Student Research Day (2009).

#### **Service to the Environmental Geology Program**

- Environmental Geology Program Advisor (2006-present).
- Forestry Assistant Professorship Search & Screen Committee Chair (2008/2011).
- Vice President Academic Affairs Search and Screen Committee (2011)

#### **Service to the Student Body**

- Faculty Representative Highlands University Geological Society (HUGS).
- Participate in NMHU Sigma Xi Chapter Activities.
- Participate in NMHU Society of American Foresters Student Chapter Activities.
- Provide graduate students with letters of recommendation for graduate school admission, scholarships, financial aid awards, internships, and employment opportunities.

#### **Service to the Community**

- Guest speaker at Santa Rosa Middle School, Geology of the Santa Rosa area and the origin of Blue Holes" (March 2008).
- Guest speaker at Juan Elliot Elementary School, "The Rock Cycle" (December 2008).
- Collaboration with Rio Rancho High School teachers and students: fundamental concepts of Earth System, Environmental Issues, Magnetism (field, lab, & classroom experiments)

#### **Service to the Profession**

- New Mexico Geological Society Member (1996 - current).
- American Geophysical Union (1996 – current)
- Geological Society of America (1994 – current)
- Society of Independent Professional Earth Sciences (SIPES) (2000 – current)
- American Association of Petroleum Geologists Associate Member (2006 – current)
- Sigma XI (2004 – current)
- Reviewer, National Science Foundation Grants (ongoing)
- Reviewer, numerous peer-reviewed journals (ongoing)
- Reviewed 50 + WAESO proposals and awarded more than \$500,000 in funds

### **Analytical Experience**

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- Paleomagnetism, rock magnetism, anisotropy magnetic susceptibility
- Exploration Geophysics – Gravity and Magnetics
- ArcGIS 10.xx; Remote Sensing (ERDAS)
- Laser probe and conventional high-precision, low blank  $^{40}\text{Ar}/^{39}\text{Ar}$  geochronology

- XRF whole-rock and trace element geochemistry
- High-precision, low blank U-Pb geochronology
- Petrographic and microstructural analysis
- Extensive field geology mapping and techniques

#### **Peer-Reviewed Publications (\* student authors)**

1. **Petronis, M.S.**, A. Delcamp\*, B. van Wyk de Vries, 2012, Structures, Anisotropy of Magnetic Susceptibility and Paleomagnetic Data bearing on Magma Emplacement at Lemptegy Volcano, Chaîne Des Puys, France *in review* Bulletin of Volcanology and Geothermal Research
2. C. Magee\*, B. O'Driscoll, **M.S. Petronis**, C.T.E. Stevenson, P.L. Clay & R. Gertisser, 2012, Melting and Disaggregation of Gabbroic Cumulate Inclusions in Minor Sheet Intrusions of the Ardnamurchan Igneous Centre (Scotland) *in review* Journal of Petrology
3. **Petronis, M.S.**, B. O'Driscoll, C.T.E. Stevenson, R.J. Reavy, 2012, Regional structural controls on the emplacement of the Ross of Mull Granite, NW Scotland, *in press*, Geological Society of American Bulletin.
4. Martinez, E., J. Lindline, **M.S. Petronis**, M. Pilotti, 2011, Effectiveness of a Science Agricultural Summer Experience (SASE) in Recruiting Students to Natural Resources Management, Journal of Science Education and Technology (25 December 2011), pp. 1-9. doi:10.1007/s10956-011-9359-3
5. Lindline, J., **M.S. Petronis**, R. Pitrucha\*, and S. Sena\*, 2011, La Cieneguilla Basanites, Santa Fe County: Monitors Of Early Rio Grande Rift Magmatism, *in* D.J. Koning, K.E. Karlstrom, S.A. Kelley, V.W. Lueth, S.B. Aby, [editors], Geology of the Tusas Mountains and Ojo Caliente, 418 pages.
6. Garcia\*, L., **M.S. Petronis**, D. Koning, M. Zimmerer\*, and N. Dunbar, 2011, Structural, anisotropy of magnetic susceptibility, Geochemistry, and paleomagnetic investigations of a steeply Dipping, welded tuff (amalia tuff) south of Petaca, New Mexico, *in* D.J. Koning, K.E. Karlstrom, S.A. Kelley, V.W. Lueth, S.B. Aby, [editors], Geology of the Tusas Mountains and Ojo Caliente, 418 pages.
7. **Petronis, M.S.**, B. O'Driscoll, and J. Lindline, 2011, Late stage oxide growth associated with hydrothermal alteration of the Western Granite, Isle of Rum, NW Scotland, *Geochem. Geophys. Geosyst.*, 12, Q01001, doi:10.1029/2010GC003246..
8. **Petronis, M.S.** and Lindline, J., 2011, Paleomagnetic and geochemical data from the late Miocene Lobato Formation adjacent to the Santa Clara fault system, Chili quadrangle, Rio Arriba County, New Mexico, *New Mexico Geology*, v. 33, no. 2, pp. 27-39.
9. Delcamp, A\*., **M.S. Petronis**, J.C. Carracedo, V.R. Troll, B. van Wyk de Vries, 2010a, Vertical axis rotation of the upper portions of the north-east rift of Tenerife Island inferred from paleomagnetic data, *Tectonophysics*, ISSN 0040-1951, DOI: 10.1016 /j.tecto.2010.04.020
10. **Petronis, M.S.**, O'Driscoll, B., and Lindline, J., 2010b, Rock Magnetic and Petrologic Data from the Western Granite, Isle of Rum NW Scotland: Implications for Post-Emplacement Alteration of a Shallow Igneous Intrusion, *G-Cubed*, 12(1), doi: 10. 1029/2010GC003246.
11. O'Driscoll, B. and **Petronis, M.S.**, 2009, Oxide mineral formation during the serpentinization of a Cr spinel seam: Insights from rock magnetic experiments, *Geochemistry, Geophysics, Geosystems*, 30 January 2009, v.10, n.1 doi:10.1029/2008GC002274.
12. **Petronis, M.S.**, Geissman, J.W., Oldow, J.S., and McIntosh, W.C., 2009, Late Miocene to Pliocene vertical-axis rotation attending development of the Silver Peak–Lone Mountain displacement transfer zone, west-central Nevada, *in* Oldow, J.S., and Cashman, P.H., eds., *Late Cenozoic Structure and Evolution of the Great Basin–Sierra Nevada Transition: Geological Society of America Special Paper 447*, p. 215–253, doi: 10.1130/2009.2447(12)..

13. **Petronis, M.S.**, B. O'Driscoll, V.R. Troll, C.H., Emeleus, and J.W. Geissman, 2008, Palaeomagnetic and Anisotropy of Magnetic Susceptibility data bearing on the emplacement of the Western Granite, Isle of Rum, NW Scotland, *Geological Magazine*, p.1-18, doi:10.1017/SOD16756808005827.
14. \*Looock S. S., Diotb, H., Van Wyk de Vriese, B., Launeauc, P., Merlea, O., Vadeboind, F. and **Petronis, M.S.**, 2008, Lava flow internal structure found from AMS and textural data: An example in methodology from the Chaîne des Puys, France, *Journal of Volcanology and Geothermal Research*, V. 177, issue 1, p.445-472.
15. **Petronis, M.S.**, and Geissman, J.W., 2008, Anisotropy of Magnetic Susceptibility Data Bearing on the Transport Direction of the Candelaria Hills Regional Tuffs, central Walker Lane, Nevada, *Bulletin of Volcanology*, v. 69, n. 8. p. 930-951. DOI: 10.1007/s00445-008-0212-3.
16. **Petronis, M.S.**, Geissman, J.W., Oldow, J.S., and McIntosh, W.C., 2007, Tectonism of the southern Silver Peak Range: Paleomagnetic and geochronologic data bearing on the Neogene development of a regional extensional complex, Central Walker Lane, Nevada, *in* Till, A.B., Roeske, S.M., Sample, J.C., and Foster, D.A., eds., *Exhumation Associated with Continental Strike-Slip Systems: Geological Society of America Special Paper 434*, p. 81–106, DOI: 10.1130/2007.2343(05).
17. Hacker, D.B., **Petronis, M.S.**, Holm, D.K., and Geissman, J.W., 2007, Shallow level emplacement mechanisms of the Miocene Iron Axis Laccolith Group, Southwest Utah, *Geological Society of America Rocky Mountain Section Annual Meeting*, Utah Geological Association Publication 35, 49 pp.
18. \*R.E. Pressler, D.A. Schneider, **M.S. Petronis**, D.K. Holm, J.W. Geissman, 2007, Pervasive horizontal fabric and rapid vertical extrusion: lateral overturning and margin subparallel flow of deep crustal migmatites, northeastern Bohemian Massif, *Tectonophysics*, v. 443, p. 19–36
19. **Petronis, M.S.**, Hacker, D.B., Holm, D.K., Geissman, J.W., Harlen, S.S., 2004, Magnetic Flow Paths and Paleomagnetism of the Miocene Stoddard Mountain Laccolith, Iron Axis region, southwest Utah, USA, *Magnetic Fabric: Methods and Applications*, GSL Special Publications 238, p. 251-283
20. **Petronis, M.S.**, Geissman, J.W., and McIntosh, W.C, 2003, Transitional Field Clusters from Uppermost Oligocene Volcanic Rocks in the Central Walker Lane, Western Nevada, *Physics of the Earth and Planetary Interior*, v. 141, n.3,p. 207 - 238.
21. **Petronis, M.S.**, Geissman, J.W., Holm, D.K., Wernicke, B. and Schauble, E., 2002, Assessing vertical- axis rotation in large-magnitude extensional regimes: A transect across the Death Valley extended terrane, California, *Journal of Geophysical Research*, v. 107, B1, no. 1, 21 pp.
22. **Petronis, M.S.**, 1998, A reconnaissance paleomagnetic investigation bearing on vertical-axis rotation associated with a simple-shear transfer system in the Silver Peak Range, west-central Nevada: University of New Mexico, [M.S. thesis], p. 273.

### **Select Conference Proceedings**

(\*undergraduate student author; \*\*graduate student author)

**Petronis, M.S.**, \*\*M. Foucher, J. Lineline, B. Van Wyk de Vries, 2011, The anatomy of a cinder cone: preliminary paleomagnetic, rock magnetic, structural, and petrologic data from the La Cienega volcano, Cerros del Rio volcanic field, northern New Mexico, GP23A-1036, presented at 2011 Fall Meeting, AGU, San Francisco, Calif., 5-9 Dec.

Stevenson, C., \*\*E. Fleming, I. Fairchild, **M.S. Petronis**, M. Hambrey; D. Benn, 2011, Magnetic Fabrics and Paleomagnetic Data of Neoproterozoic Diamictites from Svalbard, GP23A-1037, presented at 2011 Fall Meeting, AGU, San Francisco, Calif., 5-9 Dec.

\*\*Trujillo, R.V., **M.S. Petronis**, J. Lineline, 2011, Preliminary Anisotropy of Magnetic Susceptibility and Paleomagnetic Data from Mafic Dikes in the Chili Quadrangle, Rio Arriba County, New Mexico, GP23A-1038, presented at 2011 Fall Meeting, AGU, San Francisco, Calif., 5-9 Dec.

\*Cedillo, D.N., \*A.R. Brister, \*C.A. LoPresti, \*M. Maldonado, \*R.M. Pitrucha, \*C. West, E. Martinez, J. Lindline, **M.S. Petronis**, 2011, Preliminary Results from a Late Pleistocene to Holocene Paleoclimate Study of the Lake Sediment Cores, Northern New Mexico, GP51B-1170, presented at 2011 Fall Meeting, AGU, San Francisco, Calif., 5-9 Dec.

Smith, J.J., Ludvigson, G.A., Doveton, J.H., and **Petronis, M.S.**, 2010, Inauguration of a Scientific Drilling Program Investigating the Lithology and Stratigraphy of Neogene Strata of the Central High Plains Aquifer in Western Kansas, October 2010 Denver GSA Annual Meeting.

\*\*Ashu, R.A. and **Petronis, M.S.**, 2010, Geophysical Data Bearing on Hydrocarbon Traps and Resource Potential of the Galisteo Basin, NM, New Mexico Geological Society April 2010 meeting, Socorro NM.

**Petronis, M.S.**, and Lindline, J., 2010, Paleomagnetic and Geochemical Data From Late Miocene Lobato Basalt Flows Adjacent to the Santa Clara Fault System, Chili Quadrangle, Rio Arriba County, New Mexico, New Mexico Geological Society April 2010 meeting, Socorro NM.

Brister, A.\*, Cedillo, D.N.\*, Garcia, L.A.\*, Lara, H.J.\*, Parson, C.B.\*, Pitrucha, R.M.\*, Aragon, A.\*, Cattarello, R.J.\*, and **Petronis, M.S.**, 2009, Quaternary Mapping Of Fluvial Terrace Deposits Using High Resolution Magnetic And Surveying Techniques, Huerfano County, Colorado, 2009 Portland GSA Annual Meeting.

**Petronis, M.S.**, and Lindline, J., 2009, Paleomagnetic Data Bearing On Drag Folding Along The Santa Clara Fault System, 2009 Portland GSA Annual Meeting.

**Petronis, M.S.**, Hacker, D.B., and Brister, A.\*, 2009, Emplacement Of The Iron Mountain Laccolith, Sw Utah, Revealed By Anisotropy Of Magnetic Susceptibility And Field Mapping Studies, 2009 Portland GSA Annual Meeting.

Lindline, J., Martinez, E., Meyer, M., and **Petronis, M.S.**, 2009, Effectiveness Of A Science Agricultural Summer Experience In Attracting Rural New Mexican Students To The Geosciences, 2009 Portland GSA Annual Meeting.

Delcamp, A\*\* , V.R. Troll, J.C. Carracedo, **M. Petronis**, B. van Wyk de Vries, R. Trevizo\*\*, S. Wiesmaier\*\*, 2008, New Paleomagnetic Constraints on the Evolution of the NE Rift-zone and Associated Landslides, Tenerife, Spain, Eos Trans. AGU, 89(53), Fall Meet. Suppl., Abstract GP13-03.

**Petronis, M.S.**, B. O'Driscoll, C.T.E Stevenson, J.W. Lowry\*, R.J. Reavy, J. W., Geissman, 2008, Anisotropy of Magnetic Susceptibility and Petrography of the Ross of Mull Granite, NW Scotland: Implications for Ascent and Emplacement of a Reversely-Zoned Intrusion, 89(53), Fall Meet. Suppl., Abstract GP21D-0794.

Hacker, D.B., **Petronis, M.S.**, and O'Driscoll, B., 2008, Emplacement of the early Miocene Pinto Peak intrusion, Southwest SW Utah, USA, based on Anisotropy of Magnetic Susceptibility Data, LASI III Conference Elba Island, Tuscany Italy.

\*Garcia, L., **Petronis, M.S.**, Lindline, J., and Geissman, J.W., 2008, AMS Data bearing on the Deformational History of the Proterozoic Basement in the Las Vegas Area, Southern Sangre de Cristo Mountains, New Mexico, Poster presentation at the New Mexico Geological Society Spring meeting, Socorro, NM.

**Petronis, M.S.**, B. O'Driscoll, C.T.E Stevenson, J.W. Lowry\*, R.J. Reavy, J. W., Geissman, 2008, Anisotropy of magnetic susceptibility, petrography, and paleomagnetic data of the Ross of Mull Granite, NW Scotland: implications for the ascent and emplacement of a reversely-zoned intrusion, Poster presentation at the Annual Volcanic-Magmatic Studies Group conference, Dublin, Ireland.

Delcamp, A\*\* , V.R. Troll, J.C. Carracedo, **M. Petronis**, B. van Wyk de Vries, R. Trevizo\*\*, S. Wiesmaier\*\*, and F.M. Deegan\*\*, 2008, Dyke emplacement into the backbone of Tenerife: the Cumbre Dorsal Rift zone, Abstract presented at Volcanic and Magmatic Studies Spring 2008 Meeting.

Lowry, J.W.\*, **M.S. Petronis**, B. O'Driscoll, J. W. Geissman, 2008, A Palaeomagnetic baked contact test of a Permo-Carboniferous dyke in the Ross of Mull Granite, Isle of Mull, NW Scotland, Poster presentation at the Annual Volcanic-Magmatic Studies Group conference, Dublin, Ireland.

**Petronis, M.S.**, Peacock, G.W.\*, Geissman, J.W., O'Driscoll, B., 2007, Magnetic Mineralogy, AMS, and Paleomagnetism of the mid-Tertiary Three Peaks Laccolith, Iron Axis Province, Southwest Utah, Eos Trans. AGU, 88(52), Fall Meet. Suppl., Abstract GP21-0115

Lowry, J.W.\*, **M.S. Petronis**, B. O'Driscoll, J. W. Geissman, 2007, A Palaeomagnetic baked contact test of a Permo-Carboniferous dyke in the Ross of Mull Granite, Isle of Mull, NW Scotland, Eos Trans. AGU, 88(52), Fall Meet. Suppl., Abstract GP21-0118.

**Petronis, M.S.**, Hacker, D.B., Holm, D.K., Geissman, W.C., 2007, Emplacement of the Miocene Iron Axis Laccoliths, SW Utah: Results from Magnetic Fabric, Paleomagnetic, and Field Mapping Studies, Rocky Mountain Geological Society of America Meeting 59th Annual Meeting Abstracts with Programs, Paper No. 2-3.

Peacock, G.W.\*, Arnold, B.J.\*\*\*, **Petronis, M.S.**, Holm, D.K., Geissman, J.W., 2007, Anisotropy of Magnetic Susceptibility and Paleomagnetism of the mid-Tertiary Granite Mountain and Three Peaks Laccolith, Iron Axis Province, SW Utah, Rocky Mountain Geological Society of America Meeting 59th Annual Meeting Abstracts with Programs, Paper No. 2-5.

Trevizo, R.\*\*\*, Marisa Bowen\*, Joey Gallegos\*, Louis Garcia\*, Roger Griego\*, Bela Harrington\*, Justin Kaysing\*, Joel Lowry\*, Jason Martinez\*, Celina McFadden\*, Shannon Rupert\*\*, Rhonda Trujillo\*, and **Petronis, M.S.**, 2007, High Resolution Magnetic Survey of a Fluvial Terrace Deposit and Regional Gravity -Magnetic Survey Along Hwy 69, Huerfano County, Colorado, Rocky Mountain Geological Society of America Meeting 59th Annual Meeting Abstracts with Programs, Paper No. 20-14. (Note: publication based on data collected by students during a four day field trip as part of GEOL 425 and FOR 421).

Hacker, D.B., Holm, D.K., Rowley, P.D., and **Petronis, M.S.**, 2007, Rapid Emplacements Of Miocene Iron Axis Laccoliths, SW Utah, Rocky Mountain Geological Society of America Meeting 59th Annual Meeting Abstracts with Programs, Paper No. 2-1.

**Petronis, M.S.**, B. O'Driscoll, V.R. Troll, J.W. Geissman, and C.H., Emeleus, 2006, The Structure and Emplacement of the Western Granite, Isle of Rum, NW Scotland, Eos Trans. AGU, v. 87(52).

**Peacock, G W\***, Petronis, M S, Geissman, J W, 2006, Anisotropy of Magnetic Susceptibility and Paleomagnetism of the mid-Tertiary Three Peaks Laccolith, Iron Axis Province, Southwest Utah, Eos Trans. AGU, v. 87(52).

**Petronis, M.S.**, B. O'Driscoll, V.R. Troll, and J.W. Geissman, 2006, Anisotropy of Magnetic Susceptibility and Paleomagnetic Data Bearing on Magma Ascent and Emplacement of the Western Granite, Isle Of Rum, NW Scotland, EGU Geophysical Research Abstracts, V. 8.

**Petronis, M.S.**, Geissman, J.W., and Oldow, J.S., 2005, Heterogeneous Block Rotations In Mina Deflection Of The Central Walker Lane, West Central Nevada, GSA Abstracts with Programs, No., 28-18.

Pressler, R.E., **Petronis, M.S.**, Schneider, D.A., Holm, D.K., 2005, An Integrated Petrofabric Study Of The High-Pressure Orlica-Snieznik Complex, Czech Republic And Poland, GSA Abstracts with Programs, No. 89-13

Hacker, D.B., Holm, D.K., **Petronis, M.S.**, Rowley, P.D. and Arnold, B.J., 2005, Relation Between Miocene Volcanism And Iron-Axis Laccolith Emplacement, Southwest Utah, GSA Abstracts with Programs, No. 28-29

**Petronis, M.S.**, Geissman, J.W., and Oldow, J.S., 2004, Paleomagnetic Evaluation of Crustal-Scale Block Rotations in the Mina Deflection of the Central Walker Lane, EOS, v.85, no. 47

Pressler, R.E., **Petronis, M.S.**, Schneider, D.A., Holm, D.K., Manecki, M., 2005, An exhumed mid-crustal attachment zone: Results of AMS fabric analysis of the Orlica-Snieznik massif, Poland & Czech Republic, EGU Geophysical Research Abstracts, V. 7, 05536

**Petronis, M.S.**, Wawrzyniec, T.F., and Geissman, J.W., 2004, Paleomagnetism and Fault Kinematic Analysis of the Eastern Lucero Uplift, New Mexico, GSA Abstracts with Programs, v. 36, no. 5, p. 435.

Arnold, B.J., **Petronis, M.S.**, Holm, D.K., Hacker, D.S., And Geissman, J.W., 2004, Paleomagnetic Results From the Eastern Caliente-Enterprise Zone, Southwest Utah: Implications for Initiation of a Major Miocene Transfer Zone, GSA Abstracts with Programs, v. 36, no. 5, p. 501.

**Petronis, M.S.** and Geissman, J.W., 2004, Anisotropy of Magnetic Susceptibility Data Bearing on the Volcanic Source of the Candelaria Hills Regional Tuffs, central Walker Lane, west-central Nevada, Joint Rocky Mountain (v. 56) - Cordilleran (v. 100) Section GSA Abstracts with Programs, n. 9-4.

**Petronis, M.S.**, Hacker, D.B., Holm, D.K., Geissman, J.W., Harlen, S.S., 2003, Magnetic Flow Paths and Paleomagnetism of the Miocene Stoddard Mountain Laccolith, Iron Axis region, southwest Utah, USA, GSA Abstracts with Programs, v. 35, n. 6, p. 47.

**Petronis, M.S.**, and Geissman, J.W., 2002, Paleomagnetism of Lower Permian Abo and Yeso Formation, Carizzo Arroyo, Lucero Uplift, New Mexico, EOS, v. 83, no. 47

**Petronis, M.S.**, Geissman, J.W., Oldow, J.S., and McIntosh, 2002, Paleomagnetic and  $^{40}\text{Ar}/^{39}\text{Ar}$  Data from Remagnetized Mafic Dikes and Host Granite Rocks in the Southwest Silver Peak Range, Nevada, Tertiary Structural Evolution of the Central Walker lane, GSA Abstracts with Programs, v. 34, n. 6, p. 45.

Libed, S.A, **Petronis, M.S.**, Lucas, S.G., and Crossey, L.J., 2001, The stratigraphy, sedimentology, and paleontology of the Nacimiento Formation in the lower Animas Valley of the San Juan Basin of New Mexico and Colorado, New Mexico Geological Society spring meeting, New Mexico Geology, vol.23, no.2, pp.57.

**Petronis, M.S.**, Geissman, J.W., and Oldow, J.S., 2001, Paleomagnetic Data from Upper Tertiary Volcanic Rocks in the Central Walker Lane: Crustal-Scale Block Rotation and Transitional Field Directions, EOS, v. 82, no. 47, F313.

**Petronis, M.S.**, Geissman, J.W., Oldow, J.S., and McIntosh, 1999,  $^{40}\text{Ar}/^{39}\text{Ar}$  age determinations on mafic dikes and sills in the Silver Peak Range, west-central Nevada and their bearing on paleomagnetic data, EOS, v. 80, no. 46, p. F280.

**Petronis, M.S.**, Geissman, J.W., and Oldow, J.S. 1998, Paleomagnetic Data Bearing on Vertical Axis-Rotation Associated with a Simple-Shear Transfer System in the Silver Peak Range, West-Central Nevada, EOS, v. 79, GP72A-19.

**Petronis, M.S.**, Geissman, J.W., and Oldow, J.S., 1997, Paleomagnetism and structural history of the Silver Peak Range, west-central Nevada, Geological Society of America abstracts with programs, v. 29, n. 6, p. 380.

**Petronis, M.S.**, Holm, D.K., Geissman, J.W., Schauble, E., Wernicke, B.P., 1997, Paleomagnetic Data Bearing on Vertical-Axis Rotation within the Central Death Valley Extended Terrane, EOS, v. 78, GP42A-09.

## **Collaborators and Other Affiliations**

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### *Collaborators*

Anderson, E. Kernville, Ca; Emeleus, C.H., University of Durham, UK; Hacker, D.B., Kent State; Harlan, S.S., George Mason; Holm, D.K., Kent State; Hudson, M., USGS Denver; Manecki, M., Akademia Gornicza Hutnicza, Poland; McIntosh, W.C., New Mexico Tech; O'Driscoll, B., Keel University, UK; Oldow, J.S., University of Idaho; Reavy, J., University of Cork, Ireland; Rowley, P.D., New Harmony, Utah; Schneider, D.S., Canada; Siddoway, C., Colorado College; Stevenson, C., University of Birmingham, UK; Troll, V.R., Uppsala University, Sweden; van wyke de vries, B., BP-Clermont, France; Wawrzyniec, T.F., University of New Mexico; Wernicke, B., Cal Tech

### *Graduate Advisors*

John Geissman, University of New Mexico, M.S., Ph.D.  
Jane Selverstone, University of New Mexico, M.S., Ph.D.  
William C McIntosh, New Mexico Tech, Ph.D.  
Tobias Fischer, University of New Mexico, Ph.D.  
John S. Oldow, University of Idaho, PhD  
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