

Curriculum Vitae – Steven J. Whitmeyer

Assistant Professor
Department of Geology and Environmental Science
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EDUCATION

2004	Ph.D. Earth Sciences Thesis title: Paleozoic Deformation and Metamorphism of the Sierra de San Luis, Central Argentina: Evidence for the Tectonic Development of Western Gondwana Thesis Advisor: Prof. Carol Simpson	Boston University , Boston, MA
1999	B.Sc. Geology with Honors (magna cum laude)	University of New Hampshire , Durham, NH

RESEARCH INTERESTS

- Analysis of deformation and shear zone fabrics using macro- and microstructural evidence, metamorphic petrology, and geochronologic techniques.
- Global plate tectonic reconstructions; including the Archean-Proterozoic Nuna-Rodinia cycle and Paleozoic Laurentia-Gondwana interactions.
- Development of digital mapping techniques and 3D and 4D visualizations, and their incorporation into field geology curricula and research.
- Research techniques include traditional and digital field mapping, petrologic microstructural analysis, electron microprobe analysis, and laser $^{40}\text{Ar}/^{39}\text{Ar}$ thermochronology.

FIELD RESEARCH LOCATIONS

Appalachians of Northeastern and Southeastern North America; Caledonides of Western Ireland;
Proterozoic basement of Southwestern United States; Eastern Sierras Pampeanas of Argentina

GRANT HISTORY

2009-10	USGS - EDMAP, “Bedrock Mapping of the North Half of the Williamsville 7.5’ Quadrangle, VA, with a Stratigraphic and Structural Investigation of a Broken Zone in the Marcellus interval of the Millboro Shale”; \$14,893 , co-PI with Dr. John Haynes
2008-10	NSF – DUE/CCLI, “Collaborative Research: Enhancing the Geosciences Curriculum Using GeoBrowsers-based Learning Objects”, \$50,704
2008-09	Virginia Dept. of Mines, Minerals & Energy (STATEMAP), “Bedrock geologic mapping of the northeastern region of the 7.5” Stanley quadrangle in support of the VDGMR I-81 project”; \$9624
2008-09	USGS - EDMAP, “Bedrock Mapping and Stratigraphic Analyses of Western Regions of the Big Meadows 7.5’ Quadrangle, Virginia”; \$15,500
2008-09	NSF – EAR/IF, “Collaborative Research: Geological and Geophysical Data Analysis Using a Virtual Globe”, \$40,432
2007-08	Virginia Dept. of Mines, Minerals & Energy (STATEMAP), “Bedrock geologic mapping of the NW quarter of the 7.5” Stanley quadrangle in support of the VDMR I-81 project”; \$6305

2007-08	USGS - EDMAP, “Detailed Bedrock Mapping in the Stanley 7.5’ quadrangle, Valley and Ridge province, Virginia”; \$8676
2006-07	Virginia Dept. of Mines, Minerals & Energy (STATEMAP), “Bedrock and Surficial geologic mapping in conjunction with the VDMR Interstate 81 project”; \$3993
2006	JMU Faculty Teaching Grant “Summer Field Geology Course in Western Ireland”; \$4000

TEACHING AND RESEARCH EXPERIENCE

2006-present	Field Course Director	James Madison University (Field Course in Ireland)
2005-present	Assistant Professor	James Madison University <i>Undergraduate courses:</i> Environment Earth, Physical Geology (& Honors), Applied Physical Geology, History of Plate Tectonics, Structural Geology, Stratigraphy-Structure-Tectonics, Geological Evolution of N. America, Geology of JMU, History and Phil. of the Geosciences, Earth Laboratory <i>Graduate courses:</i> Geology of Virginia, Structural Geology
2005	Lecturer	Boston University (Field Camp in Ireland)
2004-2005	Visiting Scholar	University of Tennessee <i>Courses:</i> Structural Geology, Earth’s Environment, Field Geology of New Mexico
2004	Post Doctoral Fellow	University of New Mexico Supervisor: Dr. Karl Karlstrom
2000-2002	Teaching Fellow	Boston University (Field Camp in Ireland, Structural Analysis, Natural Disasters, Mineralogy, Core Curriculum Natural Science)
1999	Lab Technician	Geochemical Research Group (Univ. of NH) Supervisor: Dr. Henri Gaudette
1998-1999	Teaching Assistant	University of New Hampshire (Environmental Geology)
1997-1998	Lab Technician	Climate Change Research Center (Univ. of NH) Supervisor: Dr. Greg Zielinski

ACADEMIC AWARDS

2003	Sigma Xi Award	
	Graduate Student Science & Technology Day	Boston University
2001-2002	Department of Earth Sciences	
	Outstanding Teaching Fellow Award	Boston University
2000-2001	College of Arts and Sciences	
	Outstanding Teaching Fellow Award	Boston University
1999-2004	Presidential University Graduate Fellow	Boston University

ACADEMIC SOCIETY MEMBERSHIPS

- Phi Beta Kappa
- Sigma Xi

PROFESSIONAL SOCIETY MEMBERSHIPS

- American Geophysical Union
- American Association of Petroleum Geologists
- Geological Society of America
- National Association of Geoscience Teachers

UNDERGRADUATE RESEARCH PROJECTS ADVISED

2009-2010	Natalie Caro Seldon Walker	“Structural Controls on the Devonian Millboro Shale, Williamsville Quadrangle, Virginia”
	Nicholas Pence & Elizabeth Weisbrot	“Design and Evaluation of Google Earth-based Learning Objects in Geoscience Curricula”
	Elizabeth Garman	“Investigating Antietam Breccias near Luray, Virginia”
2008-2009	Mark Cox & Sara Rangel	“Bedrock Mapping of Western Regions of the Big Meadows Quadrangle, Virginia”
	Jeremy Nicoletti & Michael Rivera	“Interactive, Virtual Globe-based Geologic Maps of Field Areas in Western Ireland”
2007-2008	Jessica Errico	“Structural controls on the hydrogeology of the Valley and Ridge”
	Joshua Kirby	“Investigating the Stanley fault within the Valley and Ridge of Page Valley, Virginia”
2006-2007	David Arnette & Christopher Holland	“Detailed structure and mapping of the Massanutten Synclinorium, Tenth Legion quadrangle, VA”
	Natalia Denda	“The evolution and growth of continental crust”
	Owen Shufeldt & David Stiefel	“3-D interactive educational animations of an island arc system”
2005-2006	Daniel Dunlap	“Structural relationships in the Edinburg Limestone Fm. near Stanley, Virginia”

UNDERGRADUATE SENIOR THESES ADVISED / READER

2009	Nicholas Silvis	“Sourcing the Water Feeding Selected Thermal Springs of Bath and Alleghany Counties, Virginia”
2007	Owen Shufeldt	“Interactive Scientific Modeling of an Island Arc System: Expanding Geoscience Education”

INVITED LECTURES

2008	College of William & Mary, Vanderbilt University, JMU College of Science & Mathematics Research Symposium
2006	Virginia Dept. of Mines, Minerals & Energy (Division of Mineral Resources)
2005	Bloomsburg University, University of Louisiana, James Madison University, Appalachian State University
2004	University of Tennessee, University of New Mexico
2003	Indiana University of Pennsylvania

WORKSHOPS / SHORT COURSES

2009	Co-Leader	“Using Google Earth in Undergraduate Geoscience Education”; National GSA conference, Portland, OR
2009	Leader	“Using 3-D Models in Google Earth to Teach Plate Tectonics and Other Aspects of Geology”; Southeastern GSA, Tampa, FL
2009	Co-Leader	“Innovative Geoscience Education Using Tools and Models in Google Earth”; Northeastern GSA, Portland, ME
2007	Co-Leader	“Google Earth for Earth Science Teachers”; K-12 Teachers program; Northeastern GSA, Durham, NH

PROFESSIONAL SERVICE AND DEVELOPMENT

2009	Session chair	“Field Geology Education - Historical Perspectives and Modern Approaches” Geological Society of America conference, Portland, OR
2008	Session chair	“Structural Geology” Geological Society of America conference, Houston
2008	Participant	Slope Stabilization and Rockfall Mitigation workshop sponsored by Geobruigg & AEG
2007	Session chair	“The Future of Geoscience Field Courses” Geological Society of America conference, Denver
2007	Session chair	“Google Earth Science: Geological applications of interactive web-based maps” Northeast GSA conference, Durham, NH
2005	Participant	Project Kaleidoscope Leadership Seminar “Leadership in Building Interdisciplinary Programs”
2005	Coordinator and Field trip leader	Tennessee GeoConclave 2005
2004	Editorial Assistant	Geological Society of America Bulletin
2003	Session chair	“Structural Geology II: Deformation Processes” Geological Society of America conference, Seattle
2001	Session chair	“Structural Geology” Geological Society of America conference, Boston
1999	Participant	National Assoc. of Geoscience Teachers workshop “Preparing Graduate Students for Teaching”

PROPOSAL REVIEWER FOR

- NSF – EAR Tectonics, NSF – EAR Petrology & Geochemistry

JOURNAL EDITORSHIPS

2008-present	Associate Editor	Terra Nova
2008-2009	Co-Editor	GSA Special Paper “Field Geology Education: Historical Perspectives and Modern Approaches”
2007	Associate Editor	Geological Society of America Bulletin

MANUSCRIPT REVIEWER FOR

- Computers & Geosciences, Geology, Geological Society of America Bulletin, Geological Society of America Special Papers, Geological Society of London Special Volumes, Geosphere, Journal of Geoscience Education, Journal of South American Earth Sciences, Journal of Structural Geology, Journal of the Virtual Explorer, Precambrian Research, Southeastern Geology

UNIVERSITY AND DEPARTMENTAL SERVICE

2009-present	Member	College of Science & Mathematics College Council
2009-present	Alternate Rep.	Incorporated Research Institutions for Seismology
2009-present	Coordinator	Geology & Environmental Undergraduate Research Symposium
2008-present	Faculty Advisor	JMU Geological Association (Geology Club)
2007-present	Member	School of Engineering – Internal advisory committee
2009	Member	Search committee, Director of School of Engineering
2008	Member	Search committee, tenure-track Engineer
2007-2008	Member	Search committee, tenure-track Environmental Geologist
2007-2008	Member	College of Science & Mathematics College Council
2005-2008	Coordinator	Geology & Environmental Science Seminar Series
2007	Participant	Standard setting workshop, JMU Center for Assessment and Research Studies (CARS)
2006-2007	Dept. Representative	James Madison University faculty senate
2006-2007	Member	Search committee, Head of Department of Geology and Environmental Science

BOOKS

Whitmeyer, S.J., Mogk, D., and Pyle, E.J. (eds). 2009. Field Geology Education: Historical Perspectives and Modern Approaches, GSA Special Paper 461, *in press*.

PEER REVIEWED JOURNAL PUBLICATIONS (undergraduates in my research group in *italics*)

Whitmeyer, S.J., and Mogk, D.W. The Resurgence of Geoscience Field Education. EOS, *in review*.

Whitmeyer, S.J., Nicoletti, J., and De Paor, D.G. The Digital Revolution in Geologic Mapping. GSA Today, *in review*.

De Paor, D.G. and **Whitmeyer, S.J.** Geological and Geophysical Modeling Using Data Pyramids and Virtual Globes. Computers and Geosciences, *in review*.

Fichter, L.S., Pyle, E.J., and **Whitmeyer, S.J.** Expanding Evolutionary Theory Beyond Darwinism. Journal of Geoscience Education, *in review*.

De Paor, D.G. and **Whitmeyer, S.J.** 2009. Innovations and Redundancies in Geoscience Field Courses: Past Experiences and Proposals for the Future, in Whitmeyer, S.J., Mogk, D., and Pyle, E.J. (eds) Field Geology Education: Historical Perspectives and Modern Approaches, GSA Special Paper 461, *in press*.

May, C.L., Eaton, L.S., and **Whitmeyer, S.J.** 2009. Integrating student-led research in fluvial geomorphology into traditional field courses: A case study from James Madison University's field course in Ireland, in Whitmeyer, S.J., Mogk, D., and Pyle, E.J. (eds) Field Geology Education: Historical Perspectives and Modern Approaches, GSA Special Paper 461, *in press*.

CURRICULUM VITAE – STEVEN J. WHITMEYER

- Whitmeyer, S.J.**, Feely, M., De Paor, D.G., Hennessy, R., Whitmeyer, S., *Nicoletti, J.*, Santangelo, B., *Rivera, M.*, Daniels, J. 2009. Visualization Techniques in Field Geology Education: Modern Pedagogy and Original Research in Western Ireland, in Whitmeyer, S.J., Mogk, D., and Pyle, E.J. (eds) Field Geology Education: Historical Perspectives and Modern Approaches, GSA Special Paper 461, *in press*.
- Whitmeyer, S.J.**, Mogk, D.W., Pyle, E.J. 2009. An Introduction to Historical Perspectives and Modern Approaches to Field Geology Education, in Whitmeyer, S.J., Mogk, D., and Pyle, E.J. (eds) Field Geology Education: Historical Perspectives and Modern Approaches, GSA Special Paper 461, *in press*.
- Whitmeyer, S.J.** 2008. Dating fault fabrics using modern techniques of $^{40}\text{Ar}/^{39}\text{Ar}$ thermochronology: evidence for Paleozoic deformation in the Eastern Sierras Pampeanas, Argentina. In: (ed.) De Paor, D., Making Sense of Shear (In honour of Carol Simpson), *Journal of the Virtual Explorer*, Electronic Edition, ISSN 1441-8142, Volume 31, Paper 5.
- Karlstrom, K.E., **Whitmeyer, S.J.**, Williams, M.L., Bowring, S., and Jessup, M.J. 2007. Does the arc-accretion model adequately explain the Paleoproterozoic evolution of southern Laurentia? An expanded interpretation: Comment. *Geology*, p. e143, doi: 10.1130/G23971C.1.
- Whitmeyer, S.J.** and Karlstrom, K.E. 2007. Tectonic model for the Proterozoic growth of North America. *Geosphere*, 3, p.220–259, doi: 10.1130/GES00055.1.
- Whitmeyer, S.J.**, Fichter, L.S., and Pyle, E.J. 2007. New directions in Wilson Cycle concepts: Supercontinent and Tectonic Rock Cycles. *Geosphere*, 3, p. 511-526, doi: 10.1130/GES00091.1.
- Karlstrom, K.E., **Whitmeyer, S.J.**, Dueker, K., Williams, M.L., Levander, A., Humphreys, E.D., Keller G.R. and the CD-ROM Working Group. 2005. Synthesis of results from the CD-ROM experiment: 4-D image of the lithosphere beneath the Rocky Mountains and implications for understanding the evolution of continental lithosphere. In: Karlstrom, K.E. and Keller, G.R. (eds.) *The Rocky Mountain Region -- An Evolving Lithosphere: Tectonics, Geochemistry, and Geophysics*. AGU Monograph, 154, p. 421-442.
- Whitmeyer, S.J.** and Wintsch, R.J. 2005. Reaction localization and softening of texturally-hardened mylonites in a reactivated fault zone, central Argentina. *Journal of Metamorphic Geology*, 23, p. 411-424.
- Whitmeyer, S.J.** and Simpson, C. 2004. Regional deformation of the Sierra de San Luis, Argentina: Implications for the Paleozoic development of western Gondwana. *Tectonics*, 23, TC1005, doi: 10.1029/2003TC001542.
- Whitmeyer, S.J.** and Simpson, C. 2003. High strain-rate deformation fabrics characterize a kilometers-thick Paleozoic fault zone in the Eastern Sierras Pampeanas, central Argentina. *Journal of Structural Geology*, 25, p. 909-922.
- Simpson, C., **Whitmeyer, S.J.**, De Paor, D.G., Gromet, L.P., Miro, R., Krol, M.A. and Short, H. 2001. Sequential ductile through brittle reactivation of major fault zones along the accretionary margin of Gondwana in Central Argentina. In: Holdsworth, R.E., Strachan, R.A., Macloughlin, J.F. & Knipe, R.J. (eds.) *The Nature and Tectonic Significance of Fault Zone Weakening*. Geological Society, London, Special Publications, 186, p. 233-254.

GEOLOGIC MAPS (undergraduate students in my research group in *italics*)

-
- Heller, M. and **Whitmeyer, S.J.** 2009. Bedrock geologic map of the Tenth Legion quadrangle, Virginia. *Virginia Division of Geology and Mineral Resources*, 1:24,000-scale geologic map.
- Whitmeyer, S.J.**, and Kirby, J. 2009. Bedrock geologic map of the Stanley quadrangle, Virginia. *Virginia Division of Geology and Mineral Resources*, 1:24,000-scale geologic map.

Bogdanova, S.V., Li, Z.X., Pisarevsky, S.A., Collins, A.S., DeWaele, B., Kampuzu, A.B., Milesi, J.-P., Jacobs, J., Fitzsimmons, I.C.W., Myers, J.S., Hand, M., Pease, V., Ernst, R.E., Henriksen, N., Thrane, K., Pandit, M., Davidson, T., Karlstrom, K., **Whitmeyer, S.J.**, Lu, S., Hao, G., Natapov, L.M., Vernikovsky, V.A., Gladkochub, D.P., Fuck, R., Brito-Neves, B.B., Schobbenhaus, C., and Niu, G. 2008. The geodynamic map of Rodinia. In: Li, Z.X., et al. Assembly, configuration, and break-up history of Rodinia: a synthesis, *Precambrian Research*, doi: 10.1016/j.precamres.2007.04.021.

ABSTRACTS (undergraduate students in my research group in *italics*)

- De Paor, D.G., **Whitmeyer, S.J.**, Gobert, J., *Nicoletti, J.*, Dordevic, M.M., and Brooks, W. 2009. Development, Deployment, and Assessment of Dynamic Geological and Geophysical Models Using the Google Earth APP and API: Implications for Undergraduate Education in the Earth and Planetary Sciences. EOS Transactions AGU, v.90, Fall Meeting Supplement.
- Eaton, L.S., Baedke, S.J., Haynes, J.T., Johnson, E.A., Leslie, S.A., Pyle, E.J., **Whitmeyer, S.J.**, and Whitmeyer, S. 2009. Dueling Topics: Success Using a Two Track Option in the James Madison University Ireland Field Course. GSA Abstracts with Programs, v.41, no.6.
- Whitmeyer, S.J.**, De Paor, D.G., *Nicoletti, J.*, *Pence, N.*, and *Weisbrot, E.* 2009. Building Interactive Geologic Maps In Google Earth. GSA Abstracts with Programs, v.41, no.6.
- De Paor, D.G., Dordevic, M.M., and **Whitmeyer, S.J.** 2009. Modeling Volcanism on Terrestrial Planets and Moons using Virtual Globes and Collada Models. GSA Abstracts with Programs, v.41, no.6.
- De Paor, D.G., and **Whitmeyer, S.J.** 2009. One Map – Many Mappers: Implications of Innovative Mapping, Modeling, and Networking Technologies for Geoscience Education. GSA Abstracts with Programs, v.41, no.6.
- Selkin, P.A., De Paor, D.G., Gobert, J., Kirk, K.B., Kluge, S., Richard, G.A., and **Whitmeyer, S.J.** 2009. Emerging Digital Technologies for Geoscience Education and Research. GSA Abstracts with Programs, v.41, no.6.
- Haynes, J.T., *Walker, S.M.*, **Whitmeyer, S.J.**, and Goggin, K.E. 2009. What came first: Folding, faulting, and fracturing in the Devonian Needmore and Marcellus Shales of Highland County, Virginia. AAPG Eastern Section (Evansville, IN) Abstracts.
- De Paor, D.G., **Whitmeyer, S.**, Santangelo, B., Daniels, J., *Nicoletti, J.*, and *Rivera, M.* 2009. Migrating from ArcGIS to Google Earth: Challenges and Opportunities for makers of Geologic Maps. GSA Abstracts with Programs, v.41, no.3.
- Nicoletti, J.*, *Rivera, M.*, **Whitmeyer, S.**, and De Paor, D. 2009. Creating Visual Aids and Interactive Geologic Maps Using Virtual Globes. GSA Abstracts with Programs, v.41, no.1, p.32.
- Rangel, S.*, *Cox, M.*, and Whitmeyer, S. 2009. Rethinking the Blue Ridge – Valley and Ridge Interface: The Stanley Fault as a Late Alleghanian Thrust Array. GSA Abstracts with Programs, v.41, no.1, p.32.
- Whitmeyer, S.**, Heller, M., *Kirby, J.*, *Rangel, S.*, *Cox, M.*, and *Holland, C.* 2009. A New Appreciation of Out-of-Sequence Thrusts and Extensional Faulting In Page Valley, Virginia, Based on Recent 1:24,000-Scale Mapping. GSA Abstracts with Programs, v.41, no.1, p.32.
- De Paor, D.G., **Whitmeyer, S.J.**, and Gobert, J. 2008. Emergent Models for Teaching Geology and Geophysics Using Google Earth, EOS Transactions AGU, v.89(53), Fall Meeting Supplement, Abstract ED31A-0599.
- Whitmeyer, S.J.**, De Paor, D., Daniels, J., *Nicoletti, J.*, *Rivera, M.*, Santangelo, B. 2008. A Pyramid Scheme for Constructing Geologic Maps on Geobrowsers, EOS Transactions AGU, v.89(53), Fall Meeting Supplement, Abstract ED52A-04.

- Whitmeyer, S.J.**, De Paor, D., *Nicoletti, J., Rivera, M., Santangelo, B., Daniels, J.* 2008. Cross-disciplinary Undergraduate Research: A Case Study in Digital Mapping, western Ireland. EOS Transactions AGU, v.89(53), Abstract IN41B-1140.
- De Paor, D., and **Whitmeyer, S.J.** 2008. Geologic Models and Paleogeographic Restorations on Virtual Globes. Scientific Applications for Google Earth Conference, Ann Arbor, Michigan, Oct.22-23.
- De Paor, D., Simpson, C., and **Whitmeyer, S.J.** 2008. Deconstructing Classical Geologic Maps using Google Earth's Keyhole Markup Language. GSA Abstracts with Programs, v.40, no.6, p.348.
- Fichter, Lynn S., **Whitmeyer, S.J.**, Pyle, E.J. 2008. Earth Systems Do Not Evolve to Equilibrium. GSA Abstracts with Programs, v.40, no.6, p.213.
- Whitmeyer, S.J.** and De Paor, D.G., 2008. Large-scale Emergent Cross Sections of Crustal Structures in Google Earth. GSA Abstracts with Programs, v.40, no.6, p.189.
- De Paor, D., and **Whitmeyer, S.J.** 2008. Geological maps as relational databases. GSA Abstracts with Programs, v.40, no.2.
- Kirby, J.B., Shufeldt, O.P.*, and **Whitmeyer, S.J.** 2008. New Interpretation of the Late Alleghenian Stanley Fault System within the Valley and Ridge of Page County, Virginia. GSA Abstracts with Programs, v.40, no.4, p.12.
- Shufeldt, O.P., Kirby, J.B.*, and **Whitmeyer, S.J.** 2008. Structural Complexities and Deformational History of the Blue Ridge and Valley and Ridge Boundary Region, Page Valley, Virginia. GSA Abstracts with Programs, v.40, no.4, p.27.
- Whitmeyer, S.J.**, Heller, M.J., *Kirby, J., Rangel, S., Holland, C., and Shufeldt, O.* 2008. A New Appreciation of Out-of-Sequence Thrusts and Extensional Faulting in Page Valley, Based On Recent 1:24,000-Scale Mapping, Virginia Department of Mines, Minerals and Energy, Division of Geology and Mineral Resources Symposium.
- Denda, N.J.*, and **Whitmeyer, S.J.** 2007. The evolution and growth of continental crust. GSA Abstracts with Programs, v.39, no.6, p.245.
- De Paor, D., and **Whitmeyer, S.J.** 2007. Field course syllabus reform: What students really need to learn. GSA Abstracts with Programs, v.39, no.6, p.623.
- Eaton, L.S., May, C.L., Moore, K.R., Harris, M.J., and **Whitmeyer, S.J.** Integrating student-led research in environmental geology into traditional field courses: A case study from James Madison University's field course in Ireland. GSA Abstracts with Programs, v.39, no.6, p.622.
- Heller, M.J., **Whitmeyer, S.J.**, *Holland, C., Arnette, D., Carter, M.W., and Coiner, L.V.* 2007. Southeast-directed backthrusting and crustal thickening in the Massanutten synclinorium, Rockingham and Page counties, Virginia. GSA Abstracts with Programs, v.39., no.2, p.13.
- Hennessey, R., Feely, M., and **Whitmeyer, S.J.** 2007. Teaching geology field courses: A west of Ireland experience. GSA Abstracts with Programs, v.39, no.6, p.547.
- Karlstrom, K.E., **Whitmeyer, S.J.**, Williams, M.L., Bowering, S.A., and Jessup, M.J., 2007, Arc-accretion model for the Paleoproterozoic evolution of southern Laurentia: Ores and Orogenesis, a symposium honoring the career of William R. Dickinson, Tucson Arizona: Arizona Geological Society, p. 57-58.
- Shufeldt, O.P., Stiefel, D.S., Fichter, L.S., Pyle, E.J.*, and **Whitmeyer, S.J.** 2007. Interactive scientific modeling of an island arc system: Expanding geoscience education. GSA Abstracts with Programs, v.39, no.1, p.62.
- Whitmeyer, S.J.**, De Paor, D.G., and Sharma, A. 2007. Innovative Google Earth visualizations of the Appalachian – Caledonian orogeny in eastern North America and western Ireland. GSA Abstracts with Programs, v.39, no.1, p.42.

- Harris, M.J., Whitmeyer, S., Kelly, S., **Whitmeyer, S.J.**, Feely, M., and Eaton, L.S. 2006. Digital mapping and 3D visualization in a geology summer field course. *GSA Abstracts with Programs*, v.38, no.7, p.425.
- Whitmeyer, S.J.** 2006. The Iapetus cycle: Laurentia-Gondwana interactions from the breakup of Rodinia to the assembly of Pangaea. *GSA Abstracts with Programs*, v.38, no.3, p.21.
- Whitmeyer, S.J.**, Fichter, L.S., and Pyle, E.J. 2006. 3D and 4D animations in geoscience education: Moving towards an interactive environment. *GSA Abstracts with Programs*, v.38, no.7, p.325.
- Whitmeyer, S.J.**, Pyle, E.J., and Fichter, L. 2006. No rock is accidental: An interactive interface to enhance student understanding of tectonic systems and characteristic rock types. *GSA Penrose Conference "Unlocking Three-Dimensional Earth Systems – Harnessing New Digital Technologies to Revolutionize Multi-Scale Geologic Models"*, Durham, U.K.
- Johnston, S., **Whitmeyer, S.J.**, and De Paor, D. 2005. New developments in digital mapping and visualization as part of a capstone field geology course. *GSA Abstracts with Programs*, v.37, no.7, p.145.
- Karlstrom, K.E., and **Whitmeyer, S.J.** 2005. Progressive Proterozoic growth of southern Laurentia: long-lived (1.8 to 1.0 Ga) accretionary orogen resulting in a distinctive style of hydrated, thick, and weak continental lithosphere. *GSA Abstracts with Programs*, v.37, no.7, p.494.
- Karlstrom, K.E., and **Whitmeyer, S.J.** 2005. Progressive Proterozoic growth of southern Laurentia: new map and linked databases. IGCP 440 Rodinia conference, July 16-19, Perth, Australia.
- Whitmeyer, S.J.**, and Karlstrom, K.E. 2005. Proterozoic growth and evolution of southern Laurentia: visualization and interpretation by digital paleomaps. *GSA Abstracts with Programs*, v.37, no.7, p.417.
- Whitmeyer, S.J.**, and Karlstrom, K.E. 2005. Proterozoic growth and stabilization of continental lithosphere: southern Laurentia as a key type section. Earthscope National Meeting, March 28-31, Santa Anna Pueblo, New Mexico.
- Karlstrom, K.E., **Whitmeyer, S.J.**, and Jessup, M. 2005. Proterozoic rocks of the Southwest: episodic crustal growth, long-lived (1.8 to 1.0 Ga) plate margin along southern Laurentia, and preservation of Proterozoic subduction scars in the modern-day lithosphere. *GSA Abstracts with Programs*, v.37, p.41.
- Karlstrom, K.E., and **Whitmeyer, S.J.** 2004. 4-D images of the lithosphere beneath the Rocky Mountains and challenges for understanding the evolution of continental lithosphere. *GSA Abstracts with Programs*, v.36, no.5, p.116.
- Karlstrom, K.E., and **Whitmeyer, S.J.** 2004. Progressive Proterozoic growth of southern Laurentia by magmatic stabilization of lithosphere, and preservation of Proterozoic suture scars in the modern-day lithosphere. Lithoprobe Celebratory Conference, Oct. 15-17, Ontario, Canada.
- Whitmeyer, S.J.**, and Karlstrom, K.E. 2004. Progressive Proterozoic growth of southern Laurentia by magmatic stabilization of lithosphere. *GSA Abstracts with Programs*, v.36, no.5, p.404.
- Whitmeyer, S.J.**, and Karlstrom, K.E. 2004. Progressive Proterozoic growth of southern Laurentia by magmatic stabilization of lithosphere. Rocky Mountain Earthscope Workshop 1, Sept. 15-18, Albuquerque, New Mexico.
- Karlstrom, K.E., **Whitmeyer, S.J.**, Williams, M.L. and Davidson, A. 2004. Tectonic map of Laurentia within Rodinia. 32nd International Geologic Conference, Florence, Italy.
- Whitmeyer, S.J.** and Simpson, C. 2003. The Early Paleozoic orogenic sequence of western Gondwana: evidence from the Sierra de San Luis, central Argentina. Terrane Processes at the Pacific Margin of Gondwana (TAPMOG) Conference, Cambridge, U.K., p.39.

- Whitmeyer, S.J.** and Simpson, C. 2003. Early Paleozoic tectonism of the western margin of Gondwana and its relationship to the tectonics of Eastern Laurentia. *GSA Abstracts with Programs*, v.35, no.3, p.97.
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