

S. Christopher Whisner

Associate Professor

EDUCATION

- 2005 Ph.D., Geology (Structural Geology and Tectonics), University of Tennessee
Dissertation: The Middle Ordovician Tellico-Sevier Syncline: A Stratigraphic, Structural,
and Paleoseismic Investigation. Advisor: Dr. Robert D. Hatcher, Jr.
- 1998 M. S., Geology (Structural Geology), Western Michigan University
Thesis: Application of the Paleomagnetic Fold Test to Determine the Relative Timing of
Sill Intrusion and Deformation in the Southwest Helena Salient, Montana. Advisor: Dr.
Christopher J. Schmidt.
- 1994 B. S., Geology, Western Michigan University.

ACADEMIC POSITIONS

- 2014-Present Associate Professor of Geology, Bloomsburg University of Pennsylvania
- 2008-2014 Assistant Professor of Geology, Bloomsburg University of Pennsylvania
- 2008 University of Tennessee-Knoxville, Instructor for Planetary Surface
Processes (EPS 685).
- 2005-2008 Post-Doctoral Researcher, University of Tennessee-Knoxville.
- 2005-2008 Guest Lecturer, University of Tennessee-Knoxville for Physical Geology
(EPS 101).
- 2002-2004 University of Tennessee-Knoxville, Graduate Research Assistant.
- 1997-2003 Graduate Teaching Assistant, University of Tennessee-Knoxville.
- 1995-1997 Graduate Teaching Assistant Western Michigan University.
- 1995-1997 Physical Geology Lab Coordinator Western Michigan University.
- 1995 Graduate Research Assistant. Western Michigan University

CURRENT PROFESSIONAL MEMBERSHIPS:

- Geological Society Of America (GSA) Member Since 1997

RESEARCH INTERESTS

Structural Geology/Tectonics
Planetary Surface Processes
Paleoseismology

TEACHING INTERESTS/COURSES:

EGGS 120 Physical Geology,
EGGS 261 Mineralogy
EGGS 262 Petrology
EGSS 265 Geomorphology
EGGS 330 Field Experience in Geosciences
EGGS 369 Structural Geology
South Dakota School of Mines Summer Geologic Field Camp (Spanish Pyranees)

GRANTS APPLIED FOR

2012- Granting Agency: Bloomsburg University Teaching and Learning Enhancement (TALE) center

Title: Broader Horizons Make Better Geologists

Amount - \$3000

Status: Funded

2010 -Granting agency: NASA Mars Fundamental Research Program

Title: Investigation of Terrestrial Alluvial Fan Surface Compositions: Application To Remote Measurements Of Mars

Amount - \$9200

Status: Rejected

AWARDS

2005 - University of Tennessee C.H. Gordon Award for Exceptional Professional Promise

1997 - Western Michigan University Graduate Research and Creative Scholar Award

1993 – Elected to Sigma Gamma Epsilon, Earth Science Honor Society

REFEREED PUBLICATIONS

Whisner, S.C., Schmidt, C. J., and, Whisner, J. B., 2014, Deformation In The Interior Of The Lombard Thrust Sheet Between The Devils Fence Anticline And The Jefferson Canyon Fault, Journal of Structural Geology.

Schmidt, C. J., and **Whisner, S.C.** 2014, Faulting And Folding Along A Lateral Ramp At The Southern Boundary Of The Helena Structural Salient, Southwestern Montana, Journal of Structural Geology.

Waltemeyer, K, Venn, C., Hallen, C, and **Whisner, S.C.** 2014, The Inorganic Water Chemistry of Alexander Cavern (Mifflin County, PA), Journal of Cave and Karst Studies.

Lang, N.P., Fedo, C. M., and **Whisner, S.C.**, 2011, Terrestrial analogs in the Mojave Desert of the southwestern United States for volcanic, sedimentary, and tectonic processes on other planets. Geological Society of America Special paper 483.

Hardgrove, C., Moersch, J.E., and **Whisner, S.C.**, 2010, Thermal imaging of sedimentary features on alluvial fans: Planetary and Space Science, vol. 58, p. 482-508.

Hardgrove, C., Moersch, J.E., and **Whisner, S.C.**, 2009, Thermal imaging of alluvial fans; a new technique for remote classification of sedimentary features: Earth and Planetary Science Letters, v. 285, p. 124-130.

Harlan, S.S., Geissman, J.W., **Whisner, S.C.**, and Schmidt, C.J., 2008, Paleomagnetism and geochronology of sills of the Doherty Mountain area, southwestern Montana: Implications for the timing of fold and thrust belt deformation and vertical-axis rotations along the southern margin of the Helena salient: Geological Society of America Bulletin v. 120, p. 1091-1104.

Whisner, S. C., Hatcher, R. D. Jr., and Munsey, J. W., 2003, Disturbed sediments in the east Tennessee seismic zone: Evidence of large prehistoric earthquakes in east Tennessee?: Southeastern Geology. v. 42, p. 67-82.

PAPERS/POSTERS PRESENTED

- Adams, James M., McLaurin, Brett T., and **Whisner, S. Christopher**, 2017, Variability in deformational style of Appalachian Plateau folds, Sullivan County, Pennsylvania Geological Society of America Abstracts with Programs, v. 49
- Whisner, S.C.**, 2015, Stop #5: Alleghanian Deformation at the Bear Valley Strip Mine, Shamokin PA., In: Anthony, R. (Ed.), 80th Annual Field Conference of Pennsylvania Geologist Guidebook, p. 35-41
- Whisner, S.C.**, Venn, C. and Hallen, C.P. , 2013, A multidisciplinary approach to teaching through residential water well sampling: combining structural geology, aqueous geochemistry and hydrogeology into a cohesive exercise in northeastern Pa. , Geological Society of America Abstracts with Programs, v. 45, p. 69
- Waltmeyer, K, Venn, C., Hallen, C, and **Whisner, S.C.**, 2013, A study of Alexander Caverns (Mifflin County, Pa): water chemistry and structural geology. Geological Society of America Abstracts with Programs, v. 45, p. 69
- Weicht, D. C., McLaurin, B.T., Shepard, M.K., **Whisner, S.C.**, 2013, Geophysical characterization of the Lightstreet fault, Columbia and Montour counties, Pa., Geological Society of America Abstracts with Programs, v. 45, p. 69
- Hatcher, R.D. Jr., Obermeier, S.F., Vaughn, J.D., Mills, H.H., **Whisner, S.C.**, and Howard, C.W., 2010, Evidence for a lengthy late-Quaternary earthquake history in the east Tennessee seismic zone, Tennessee, Georgia, Alabama, Geological Society of America Abstracts with Programs, v. 42, p. 218.
- Vaughn, J. D., Obermeier, S.F., Hatcher, R.D., Howard, C.W., Mills, H.H., and **Whisner, S.C.**, 2010, Evidence for one or more major late-quaternary earthquakes and surface faulting in the East Tennessee seismic zone: Seismological Research Letters, v.81 no. 2, p. 323.
- Snyder, C.D. and **Whisner, S.C.**, 2010, The effects of jointing in the nose of an anticline near Mountain Top, Luzerne County, Pennsylvania: Geological Society of America Abstracts with Programs, v. 34, p. 42.
- Hardgrove, C., **Whisner, S.C.**, Williams, R.M.E., Moersch, J. E., Chojnacki, M., and Rogers, D., 2010, Remote thermophysical observations of terrestrial inverted relief features, Lunar and Planetary Sciences Conference XLI, Houston, TX.
- Hardgrove, C., Moersch, J.E., **Whisner, S.C.**, 2009, Identification of sedimentary processes on alluvial fans using aerial thermal images and ground truth, Lunar and Planetary Sciences Conference XL, Houston, TX.
- Moersch J. E., Hardgrove C. J., and **Whisner S. C.**, 2008, [Thermophysical Signatures of Sedimentary Processes on Alluvial Fans](#), GSA Joint Annual Meeting, Abstract 268-4.
- Lang, N.P., Fedo, C.M., and **Whisner, S.C.**, 2008, A geologic processes course for planetary scientists, Geological Society of America Abstracts with Programs, v. 33, p. 59.
- Moersch, J.E., **Whisner, S.C.**, Hardgrove, C., 2008. Thermal imaging of alluvial fans: a new technique for remote classification of sedimentary processes, Eos Transactions AGU.
- Lineberger, H., Fuerst, S., **Whisner, S.C.**, and Moersch, J.E., 2008, The Mars Outreach for North Carolina Students (MONS); High School Students with "Hands On" Mars Research. Lunar and Planetary Sciences Conference XXXIX, Houston, TX.
- C. J. Hardgrove, J. E. Moersch, and **S.C. Whisner**, (2008) [Detection and Mapping of Sedimentary Features on Alluvial Fans Using High-Resolution Overhead Thermal Imaging](#), Eos Trans. AGU, 89(53), Fall Meet. Suppl., Abstract H33A-0985
- Moersch, J.E., **Whisner, S.C.**, and Hardgrove, C., 2007, Thermophysical characterization of terrestrial analogs for Martian sedimentary features: Seventh International Conference on Mars.
- Whisner, S.C.** and Moersch, J.E., 2007, Field observations of thermoclinometric effects in Dumont Dunes, California: Lunar and Planetary Sciences Conference XXXVIII, Houston, TX.
- Evenick, J.C., Hatcher, R.D. Jr., and **Whisner, S.C.**, 2007, What is the origin of the Middle-Ordovician Sevier Basin, Southern Appalachians?: Geological Society of America Abstracts with Programs, v. 39, p. 78.

- Moersch, J.E., **Whisner, S.C.**, Hardgrove, C., 2005, Thermophysical characterization of terrestrial alluvial fans, with applications to Mars: *Eos Transactions AGU*, v. 86, p. 52.
- Whisner, S.C.** and Moersch, J.E., 2005, The use of ASTER TIR data to distinguish between different lithologic units in the southern Appalachians and the relationship to problems of distinguishing among lithologies on Mars: *Lunar and Planetary Sciences Conference XXXVI*, Houston, TX.
- Harlan, S.S., Geissman, J.W., **Whisner, S.C.**, and Schmidt, C.J., 2005, Paleomagnetism and $^{40}\text{Ar}/^{39}\text{Ar}$ dating of folded sills in the Lombard thrust sheet, south central Montana: Implications for the timing and fold and thrust belt deformation and vertical axis rotations along the southern margin of the Helena Salient: *EarthScope in the Rocky Mountains Meeting*.
- Hatcher, R.D. Jr., **Whisner, S.C.**, Bream, B.R., and Miller, C.F., 2004, Sediments derived from mountain chains do not always land in foredeeps: *Southern Appalachian Sevier-Blountian basin dynamics: Geological Society of America Abstracts with Programs*, v. 33, p. 59.
- Whitmer, N.E., Hatcher, R.D. Jr., **Whisner, S.C.**, Whisner, J.B., Thigpen, J.R., and Bultman, J.G., 2003, Middle Ordovician Clastic Wedges in East Tennessee: A New Look at an Old Basin: *American Association of Petroleum Geologists (Eastern Section) Pittsburgh, PA*.
- Chapman, M.C., Munsey, J.W., **Whisner, S.C.**, and Whisner, J.B., 2002, The eastern Tennessee seismic zone; small earthquakes illuminating major basement faults?: *Geological Society of America Abstracts with Programs*, v. 34, p. 31.
- Chapman, M.C., Munsey, J.W., Powell, C.A. **Whisner, S.C.**, and Whisner, J. B., 2002, The eastern Tennessee seismic zone; summary after 20 years of network monitoring: *Seismological Research Letters*, v. 73, p. 245.
- Whisner, S.C.**, Hatcher, R.D. Jr., and Munsey, J.W., 2001, The possible link between east-west trending faults in the valley and ridge province of eastern Tennessee and the Gray fossil site: *Geological Society of America Abstracts with Programs*, v. 33, p. 59.
- Mills, H.H., and **Whisner, S.C.**, 2000, Old fan deposits on the northwestern flanks of Chilhowee Mountain, southeastern Tennessee; indicators of an inactive landscape?: *American Quaternary Association Programs and Abstracts*, v. 16, p. 84.
- Schmidt, C.J., **Whisner, S.C.**, Harlan, S.S., Geissman, J.W., 2000, Paleomagnetic and geochronologic results bearing on the timing of fold and thrust belt deformation in the Lombard thrust sheet along the southern margin of the Helena Salient, south central Montana: *Geological Society of America Abstracts with Programs*, v. 32, p. 82.
- Hatcher, R.D. Jr., **Whisner, S.C.**, Munsey, J.W., and Moore, H., 2000, Fractures, dewatering, and carbonate blocks in a lake deposit at Gray, northeastern Tennessee; a window into Southeastern U.S. Pleistocene (?) tectonics and possible seismicity: *Geological Society of America Abstracts with Programs* v. 32, p. 82.
- Whisner, S.C.**, Hatcher, R.D. Jr., Munsey, J.W., and Mills, H.H., 2000, Disturbed Quaternary terrace deposits in eastern Tennessee; smoking gun for old earthquakes, hillslope creep, or evidence for *Megatherium* trip and fall?: *Geological Society of America Abstracts with Programs*, v. 32, p. 28.
- Bergin, J.K. and **Whisner, S.C.**, 1995, Imbricate thrusting and internal strain near the southwest margin of the Helena salient, Montana. *Geological Society of America Abstracts with Programs*, v. 27, p. 2-3.

DEPARTMENT SERVICE:

2015-2016 Chairperson of Search committee for EGGS Tenure track Econ
Geol/Mineralogist position (Successful)
2013-2014 EGGS Chairperson of Search committee for Tenure track Soils position
(Successful)
2012-2013 EGGS Search Committee for Sabbatical Replacement of Dr. Cynthia
Venn
EGGS tenure track Cartography position search committee
Geography and Geosciences Tenure track position search committee
2011-present Geography and Geosciences Sabbatical Committee
2009-present Geosciences Curriculum Committee
2009-present Geography and Geosciences Budget Committee
2009-present Geography and Geosciences Outcomes Assessment Committee

UNIVERSITY SERVICE:

2014-2017 COST Curriculum Committee,
2011-Present COST Science Iditarod Committee

COMMUNITY SERVICE

2015-2017 Teaching Volunteer for Columbia County Water Education Day
2015 Helped Boy Scout Troop 25 earn their geology badges
2013 BUGS Geology Bootcamp organizer and participant
2012 BUGS Geology Bootcamp organizer and participant
2012 Helped Boy Scout Troop 25 earn their geology badges
2011 Invited speaker at Greenwood Friends School, Millville, PA, Origin of the Planets
2011 BUGS Geology Bootcamp organizer and participant
2010 Helped Boy Scout Troop 17 earn their geology badges
2010 BUGS Geology Bootcamp organizer and participant
2009 BUGS Geology Bootcamp organizer and participant
2009 Rock and Mineral Identification and Organization Greenwood Friends School
2008 Invited speaker at Greenwood Friends School, Millville, PA, Fossil Preservation.
2007-2013 Part of the MONS (Mars Outreach for North Carolina Students) with Durham
Academy, Durham, North Carolina
2008 Invited Speaker – Bearden Middle School, Knoxville, TN, Remote Sensing and Mars.
2007-2008 Co-Chair Knoxville Montessori Rockin' Fall Festival 2007, Earth science themed fair
for pre-school through elementary
2006-2007 Invited speaker, Knoxville Montessori Geology and Culture of Egypt for pre-school
through elementary children
1999, 2000 Oak Ridge Institute for Continued Learning (ORICL) field trip assistant