

Joseph Christopher Hill

Sam Houston State University

EDUCATION

University of Missouri-Columbia

Ph.D. Geological Sciences

2006

Dissertation: *Structural Geology and Tectonics of the Paleoproterozoic Rocks of the Mount Rushmore Quadrangle, Black Hills, South Dakota*

University of Tennessee-Knoxville

M.S. Geological Sciences

1999

Thesis: *Stratigraphy, Structure, and Tectonics of the Southern Appalachian Piedmont near Marion, North Carolina*

University of Tennessee-Knoxville

B.S. Geological Sciences

1996

TEACHING EXPERIENCE

Associate Professor (*tenured; graduate faculty*)

2013 – present

*Department of Geography and Geology, Sam Houston State University
Huntsville, TX*

Director, BHNSF Spain Field Course, Spanish Pyrenees

2015 - present

*Black Hills Natural Sciences Field School,
South Dakota School of Mines and Technology, Rapid City, SD*

Assistant Professor (*tenure-track; graduate faculty*) –

2008 - 2013

*Department of Geography and Geology, Sam Houston State University
Huntsville, TX*

Assistant Professor (*tenure-track*) –

2005 - 2008

*Department of Geosciences, Bloomsburg University of Pennsylvania
Bloomsburg, PA*

Visiting Instructor –

2004 - 2005

*Department of Geosciences, Bloomsburg University of Pennsylvania
Bloomsburg, PA*

Instructor –

2003 - 2004

*Department of Geological Sciences, University of Missouri-Columbia
Columbia, MO*

Adjunct Assistant Professor –

2002 – 2004

Department of Science, Columbia College, Columbia, MO

Graduate Teaching Assistant – 1999 - 2004
Department of Geological Sciences, University of Missouri-Columbia
Columbia, MO

Graduate Teaching Assistant – 1996-1999
Department of Earth and Planetary Sciences, University of Tennessee- Knoxville

RESEARCH EXPERIENCE

Cooperating Geologist, Pennsylvania Geologic Survey 2005 - present
Field mapping, stratigraphic and structural interpretation

Research Assistant, U.S.G.S. National Cooperative Mapping Program 1999-2003
Supervised by Drs. Robert L. Bauer and Peter I. Nabelek (University of Missouri-Columbia), the South Dakota Geologic Survey, and the U.S.G.S. National Cooperative Mapping Program

Research Assistant, U.S.G.S. National Cooperative Mapping Program 1999-2003
Supervised by Dr. Robert D. Hatcher, Jr. (University of Tennessee-Knoxville), the North Carolina Geologic Survey, and the U.S.G.S. National Cooperative Mapping Program

GRANTS/AWARDS

External Grants and Awards

Geoscience Exposure and Training in Texas (GET Texas): High School Through Undergrad. Senior Personnel. PIs David Moss and Ross Guida (SHSU). NSF award IUSE GEOPaths (\$345,773) 2020

NSF Fieldwork Inspiring Expanded Leadership and Diversity (Workshop and Travel Grant) 2019

Southern Atlantic Petroleum Corporation (SAPETRO) – Research grant (\$10,000) 2015

Geologic Society of America Penrose Conference - Linkages and Feedbacks in Orogenic Processes (Travel Grant) 2014

National Science Foundation “On the Cutting Edge” Workshop – Teaching Geoscience in the Field; Professional Development for Geoscience Faculty 2010

National Cooperative Mapping Program USGS/PA Geologic Survey STATEMAP grant (\$34,966*) 2009

National Cooperative Mapping Program USGS/PA Geologic Survey STATEMAP grant (\$31,622) 2008

National Cooperative Mapping Program USGS/PA Geologic Survey STATEMAP grant (\$31,647) 2007

National Science Foundation “On the Cutting Edge” Workshop – Teaching Structural Geology in the 21 st Century; Professional Development for Geoscience Faculty	2007
National Cooperative Mapping Program USGS/PA Geologic Survey STATEMAP grant (\$29,247)	2006
National Cooperative Mapping Program USGS/PA Geologic Survey STATEMAP grant (\$28,422)	2005
National Cooperative Mapping Program EDMAP Grant (\$13,680) <i>*Proposal ranked #4 out of ~250 applicants</i>	2001
Geologic Society of America Research Grant (\$2,200)	2000
National Cooperative Mapping Program EDMAP Grant (\$31,000) <i>*Proposal ranked #1 out of ~230 applicants</i>	1997
National Cooperative Mapping Program EDMAP Grant (\$15,000) <i>*Proposal ranked #1 out of ~170 applicants</i>	1996
<u><i>Internal Grants – Sam Houston State University (2008-present)</i></u>	
SHSU PACE Grant: Using a Stream Geomodel to Enhance Stem Courses and An Active Learning Space (\$8700)	2023
SHSU STEM Center Mini-Grant: Using a Stream Geomodel to Enhance Stem Courses and An Active Learning Space (\$4500)	2022
SHSU STEM Center Mini-Grant: Increasing Student Engagement in Introductory Labs Through Active Learning (\$2,000)	2022
SHSU STEM Center Mini- Grant: Building and Augmented Reality Sandbox (\$2,000)	2020
SHSU Engaging Spaces Grant: A Geoscience Garden (\$136,390; not funded)	2019
University Professional Academic Center for Excellence: Co-PIs with Fraass and Guida Teaching Innovation Grant (\$7,758; not funded)	2017
College of Sciences Career Advancement Award (\$20,000) Sam Houston State University	2014- 2015
Enhancement Research Grant – Sam Houston State University (\$15,000)	2011 - 2012

Internal Grants – Bloomsburg University of Pennsylvania (2004-2008)

Bloomsburg University, College of Science and Technology Research and Scholarship Award (\$1500)	2007
Bloomsburg University, College of Science and Technology Travel and Professional Development Award (\$1267.68)	2007
Bloomsburg University, College of Science and Technology Travel and Professional Development Award (\$1584.50)	2006

Internal Grants – University of Missouri-Columbia

University of Missouri System Research Board Grant (\$16,600)	2000
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Honors and Awards

Fred Strothmann Scholar, University of Missouri, College of Arts and Sciences, Department of Geological Sciences (\$3,500 award)	2004
Fred Strothmann Scholar, University of Missouri, College of Arts and Sciences, Department of Geological Sciences (\$3,000 award)	2000
University of Tennessee Chancellor's Graduate Teaching Honors Award <i>*Award was 1 of 6 given University wide (\$1000 award)</i>	1999
University of Tennessee Department of Earth and Planetary Sciences Swingle Award for Excellence and Professional Promise (\$800)	1998

DIRECTED STUDENT RESEARCH & THESES

Khisty, Anjali: Petrology of the Norris Lake Kimberlite, Tennessee	2022
Bickham, David: An Investigation of Martian Geology <i>*Led to a NASA Summer Internship 2022</i>	2021
Arceneaux, Teri: Structure Controls on Hydrogeology <i>(outcome: MS Missouri State University, 2021)</i>	2017
Morris, Rene: Characterization of the 'Norris Lake' kimberlite, East Tennessee <i>(outcome: MS Edinburgh, 2021; Geologist with Shell, London, England)</i>	2017-2018
Jordan, Nicolas: A petrographic investigation of basaltic rocks from the upper Carrizozo lava flow, Valley of Fires, New Mexico <i>(outcome: MS Student Missouri State University)</i>	2017

Mckeown, Allison: XRD Analysis of Precambrian Metamorphic Rocks from the Black Hills, S.D. (<i>outcome: MS student Western Kentucky University</i>)	2015
Nash, Kyle: Detrital Zircon Dating of Precambrian Metasedimentary Rocks of the Central and Eastern Black Hills, South Dakota	2014
Bricarell, Alex: Seismicity and Associated Hazards of the New Madrid Seismic Zone, SW Missouri	2013
Hale, Joshua: Provenance determination of detrital zircons from the Central Appalachian Piedmont (<i>outcome: M.S. at Northern Arizona University</i>)	2012
Russell, Robert James: Detrital zircon geochronology of the Peters Creek sandstone unit, York and Lancaster counties, PA (<i>outcome: M.S. University of Missouri</i>)	2011
Echols, Shelia E.: 3D Correlation and Cross-section construction of Gulf Coast Strata using Petra and 3D Analyst (<i>currently works as a geotechnical manager for Houston Energy, Inc.</i>)	2011
Jimenez, Ariana: Shock-metamorphic features in the Haystack sandstone	2010
O'Keefe, Kevin: Fracture analysis of the Catahoula sandstone, Blue Lagoon quarry Walker County, TX (<i>outcome: M.S. the University of Houston</i>)	2009
Mathes, Claude: Brittle deformation in the Precambrian Valley Spring gneiss and Town Mountain granite, Inks Lake State Park, TX	2009
Palkendo, Michael: Characterization and Investigation of the Haystacks Sandstone, Sullivan County, PA	2008
Huebner, Matthew: Detailed Mapping and Structural Geology of the Southern Portions of the Barbours and Hills Grove 7.5-minute Quadrangles, Sullivan and Lycoming Counties, Pennsylvania. (<i>Outcome: Ph.D. University of Tennessee-Knoxville</i>)	2007
Hertzog, Justin: Determination of the Geologic Structural Configuration in the Eagles Mere Quadrangle, Sullivan County, PA (<i>M.S. Boston College; Currently a Geophysicist at Bracken Engineering, Tampa, FL</i>)	2006
McKinney, Megan: Petrologic Study of the "Haystacks" Sandstone Formation, Sullivan County, PA (<i>Currently a Geologist at Earth Engineering, Emmaus, PA</i>)	2005

UNIVERSITY/DEPARTMENTAL SERVICE

Sam Houston State University

Department Level

Department DPTAC Committee	2022- present
<i>Department By-Laws Committee</i>	2022-present
Chair, Tenure Committee: Dr. Renjie Zhou	2019 - present
Environmental Sciences Steering	2019 - present
Chair, Tenure Committee: Dr. David Moss	2017 - present
Chair, Tenure Committee: Dr. Gary Acton	2013 -2017
Chair, Tenure Committee: Dr. Jonathan Sumrall	2013 -2016
Chair, Tenure Committee: Dr. Pat Harris	2013 - 2018
Search Committee Chair, Hydrogeologist	2018-2019
Search Committee Chair, Geophysics	2012 & 2017
Search Committee Member, Sedimentology	2012 & 2017
Undergraduate Academic Advisor	2012 – present
Search Committee Member, Geochemistry	2010 - 2011
Geology Curriculum Committee Member	2008 - present
Departmental Webmaster	2008 - 2013
<i>College Level</i>	
College of Sciences – Curriculum Committee	2012 – 2015
College of Sciences – Mission and Vision Committee Member	2012
College of Sciences – Curriculum Committee	2014- present
<i>University Level</i>	
University - Presidential Scholarship Committee Member	2009 – 2011
University - Quality Enhancement Program Committee (FOS)	2008 – 2010
<i>*Committee responsible for QEP Science SACS Accreditation</i>	
University Curriculum Committee	2016 - 2019
Writing Across the Disciplines Committee	2022 - present
<u>Bloomsburg University</u>	
<i>Department Level</i>	
Technology Committee Chair	2006-2008
Search Committee Chair, Stratigraphy and Sedimentation	2007
Geology Curriculum Committee Member	2005-2008
<i>College Level</i>	
College of Science and Technology, COST Technology Committee Member	2006-2008
Departmental Teaching and Learning Enhancement (TALE) Representative	2005-2006
COST Science Iditarod	2005-2008
<i>University Level</i>	
Provost's Committee on BU Laptop and Technology Initiative	2006-2008

PROFESSIONAL SERVICE

Reviewer – Texas Interactive Science Program: Texas Middle School Grades (Pearson Education)	2012-present
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Reviewer – Journal of Geoscience Education	2011-present
K-4 Outreach at area Elementary Schools	2008-present
Northeast Geological Society of America Annual Meeting – Session Chair	2008
Northeast Geological Society of America Annual Meeting – Local Committee	2006
71 st Annual Field Conference of Pennsylvania Geologists – Field Trip Leader	2005
Carolina Geologic Society Annual Field Trip – Contributor and Field Leader	2002

PUBLICATIONS/PRESENTATIONS

Peer Reviewed

Papers, Guidebooks, & Reports –

Hill, Joseph C., 2009, Geology of the Southern Portions of the Holtwood and Wakefield 7.5-minute Quadrangles, York and Lancaster Counties, PA: PA-DCNR Open File Report OFBM-09-01*

Hill, Joseph C., 2008, Geology of the Airville and Pennsylvanian Portions of the Fawn Grove 7.5-minute quadrangles, Southeast Pennsylvania: PA-DCNR Open File Report OFBM-08-04

Hill, Joseph C., 2007, Geology of the Northern Portions of the Holtwood and Wakefield 7.5- minute quadrangles, Southeast Pennsylvania: PA-DCNR Open File Report OFBM-07-04

Gillmesiter, N. and Hill, J. C., 2006, Petrology of the Haystacks Sandstone *in* The Haystacks, “Ricketts Folly,” and the End of the World: Geology of the Glaciated Allegheny High Plateau, Sullivan, Luzerne, and Columbia Counties, Pennsylvania: Inners, J.D. and Fleeger, G.M., *eds.* 71st Annual Field Conference of Pennsylvanian Geologists.

Hill, Joseph C., 2006, Geology of the Oxford and Bay View 7.5-minute quadrangles, Southeast Pennsylvania: PA-DCNR Open File Report OFBM-06-01.0.

Hill, Joseph C., 2006, Structural Geology and Tectonics Of The Paleoproterozoic Rocks Of The Mount Rushmore Quadrangle, Black Hills, South Dakota: University of Missouri, Doctoral Dissertation, 177 p.

Contributor and Field Trip Leader – Carolina Geologic Society 2002 Annual Field Trip Guidebook, Inner Piedmont Geology in the South Mountains-Blue Ridge Foothills and the southwestern Brushy Mountains, central-western North Carolina, University of Tennessee, p. 145.

Hill, Joseph C., 1999, Stratigraphy, Structure, and Tectonics of the Southern Appalachian Inner Piedmont, Near Marion, North Carolina: University of Tennessee Masters Thesis, 188 p.

Published Geologic Maps –

Hill, Joseph C., Blackmer, G., and Shank, S., 2009, Bedrock Map of the Southern Portions of the Holtwood and Wakefield 7.5-minute Quadrangles, York and Lancaster Counties, PA: PA-DCNR Open File Report OFBM-09-01

Hill, Joseph C. 2008, Bedrock Map of the Airville and Pennsylvanian Portions of the Fawn Grove 7.5-minute quadrangles, Southeast Pennsylvania: PA-DCNR Open File Report OFBM-08-04

Hill, Joseph C., 2007, Bedrock Geologic Map of the Northern Portions of the Holtwood and Wakefield 7.5-minute quadrangles, Southeast Pennsylvania: PA-DCNR Open File Report OFBM-07-04

Hill, Joseph C., 2006, Bedrock Geologic Map of the Oxford and Bay View 7.5-minute quadrangles, Southeast Pennsylvania: PA-DCNR Open File Report OFBM-06-01.0.

Hill, Joseph C., 1999, Geologic Map of the Marion East 7 1/2-minute Quadrangle, North Carolina: North Carolina Geological Survey open file.

Non-peer Reviewed

Books, Book Chapters, and Field Trip Guides –

Hill, Joseph C., 2019, Spanish Pyrenees Field Camp Guide Book, 51 p.

Hill, Joseph C., 2016, Field Guide to the Spanish Pyrenees: 2016 Geology Spring Break Trip. 92 p.

Hill, Joseph C. and Harris, John P., 2015, Southwestern Geology Field Guide: 2015 Geology Spring Break Trip. 84 p.

Gillespie, M., Hill, Joseph C., Rose, L., and Rowe, M., 2010, Foundations of Science Laboratory Manual: Hayden-McNeil, Plymouth, MI, 108 p.

Cooper, B., Netoff, D. and Hill, Joseph C., 2010, Physical Geology Laboratory Manual, 5th edition: Start Group, Huntsville, TX 191 p.

Abstracts and Conference Proceedings – (denotes student author)*

Guida, R., Nelson, V., Moss, D., Strait, J., Fujimoto-Strait, A., Hill, J. and Cooper, B., 2022, Working with Southeast Texas Teachers to Improve Geography Education and Intergrate Geoscience Concepts, Southwest Division of the American Association of Geographers, Conference Proceedings, Fayetteville, AR.

Moss, D., Guida, R., Benford, B., Spears, C., Zhou, R., Cooper, B., Harris, J. and Hill, J., 2022, Lessons learned from two years of a summer program for high school and community college students in southeast Texas, Geological Society of America Annual Meeting, Abstracts with Programs, vol 54

Guida, R., Moss, D., Benford, B., Spears, C., Hill, J. Cooper, B., and Harris, J. 2022, SHSU's NSF GEOPaths: Where we've been, where we are, where we're going, SHSU STEM Center Symposium, Huntsville, TX

Moss, D., Guida, R., Benford, B., Spears, C. Zhou, R., Hill, J., Cooper, B., and Harris, J, 2021, Preliminary data on the perceptions of the geosciences of high school and community college students in southeast Texas, Geological Society of America Annual Meeting, Abstracts with Programs, v 53, No. 6.

Hill, Joseph C., 2018, A Case For A Paleoproterozoic Transpressional Boundary, Black Hills, South Dakota, Invited Talk, Geological Society of America Abstracts with Programs. Vol. 50, No. 3, ISSN 0016-7592 doi: 10.1130/abs/2018SE-313177

Jordan, Nicolas*, Jordan, Miranda M.*, and Hill, Joseph C., 2017, A Petrographic Investigation of Basaltic Rocks from the Upper Carrizozo Lava Flow, Valley of Fires, New Mexico, Geological Society of America South-Central Section, Abstracts with Programs, Vol. 49, Issue 1

Hill, Joseph C. and Nash, Kyle*, 2016, Detrital Zircon Dating of Precambrian metasedimentary rocks from the central and eastern Black Hills, South Dakota; Geological Society of America, Abstracts with Programs, Vol. 48, Issue 7

Hill, Joseph C. and Cooper, Brian J., 2014, Undergraduate Field Experience in L'Ansia, Huesca, Spain: Piggy-back basins, Paralic, and the Pyrenean Orogeny; Geological Society of America, Abstracts with Programs

Hill, Joseph C., Russell*, Robert James, Hale*, Joshua, Spezia*, Kyle, and Ivy*, Robert, 2012, Detrital Zircon Ages from Part of the Central Appalachian Piedmont, Pennsylvania, Geological Society of America, Abstracts with Programs

Hill, Joseph C. and Jimenez*, Arianna, 2010, The Haystacks Sandstone: A Proposed Devonian-Mississippian Impact Ejecta: Geological Society of America Abstracts with Programs, v. 42, Issue 5, pp. 306

Hill, Joseph C., 2008, Soft-sediment Deformation Features in the Devonian-Mississippian Transition 'Haystacks' Sandstone, Northeastern Pennsylvania: A Paleoseismicity?: NEGSA Abstracts with Programs, v. 40, Issue 2, pp. 2.

Hill, Joseph C., 2007, Petrology of the "Haystacks" Sandstone, Northeastern Pennsylvania: A Unique Depositional Sequence in the Devonian-Mississippian Transition: NEGSA Abstracts with Programs, v. 39, Issue 1, pp. 60.

Huebner*, M. and Hill, Joseph, C., 2007, Detailed Mapping and Structural Geology of the Southern Portions of the Barbour and Hills Grove 7.5-minute Quadrangles, Sullivan and Lycoming Counties, Pennsylvania: NEGSA Abstracts with Programs, v. 39

Hertzog*, J. T., and Hill, Joseph C., 2006, Determination of the geologic structural configuration of the Eagles Mere Quadrangle: NEGSA Abstracts with Programs, v. 38

Hill, Joseph C., 2006, Geology of the Mount Rushmore 7.5-minute quadrangle, Black Hills, South Dakota, 1:24000-scale

Beyer, P. J., J. C. Hill, and J. Hintz, 2006, Environmental History of Lower Fishing Creek. Association of American Geographers, 102nd Annual Meeting, Chicago, Illinois

Hill, Joseph C., Nabelek, Peter I., and Bauer, Robert L., 2004, Differential Deformational History of Fault-Bounded Blocks: "Southern Trans-Hudson" Orogeny, Black Hills, South Dakota, Geological Society of America Abstracts with Programs, v.36.

Hill, Joseph C., Nabelek, Peter I., and Bauer, Robert L., 2004, Differential Deformational History of Fault-Bounded Blocks, "Southern Trans-Hudson" Orogeny, Black Hills, South Dakota, Proceedings of the Seventeenth International Basement Tectonics Association Conference.

Nabelek, Peter I., Hill, Joseph C., Bauer, Robert L., and Dewitt, Edward F., 2004, Granite magma emplacement in the upper crust during continental collision – An example from the Black Hills, United States, General Meeting of the International Association of Volcanology and Chemistry of the Earth's Interior 2004, Santiago, Chile, Abstracts with Programs

Hill, J.C., Bream, B.R., Giorgis, S.D., Williams, S.T., and Hatcher, R.D., Jr., 1999, New digital geologic 7.5' quadrangle maps from part of the western Inner Piedmont of North Carolina (Abstract SE GSA Annual Meeting).

Hatcher, R.D., Jr., Bream, B.R., Hill, J.C., Giorgis, S.D., and Williams, S.T., 1999, Transect through the Acadian Orogen in the Carolinas and NE Georgia (Abstract SE GSA Annual Meeting).

Hill, J.C., Bream, B.R., Giorgis, S.D., and Williams, S. T., 1998, EDMAP Site Visit and Field Review: Field Trip Guidebook: Department of Geological Sciences-Structure and Tectonics Group, University of Tennessee-Knoxville.

Bream, B. R., Hatcher, R. D., Jr., and Hill, J. C., 1998, The Henderson Augen gneiss of the western Inner Piedmont, N.C. and S.C. : Geological Society of America Abstracts with Programs, v. 30, p. 125.

Hill, J. C., Bream, B. R., and Hatcher, R. D., Jr., 1998, Structure and stratigraphy of part of the Inner Piedmont near Marion, North Carolina: Geological Society of America Abstracts with Programs, v. 30, p. 17.

Hill, J. C., Bream, B. R., and Hatcher, R. D., Jr., 1998, Use of detailed digital geological and derivative maps to resolve the structure and stratigraphy in part of the western Inner Piedmont, North Carolina: Geological Society of America Southeastern section Abstracts with Programs, v.30, p. 5.

Hill, J. C., Bream, B. R., and Hatcher, R. D., Jr., 1997, Value of traditional detailed geologic mapping, augmented by technology, to resolve the structure in part of the western Inner Piedmont, North Carolina: Geological Society of America Abstracts with Programs, v. 29, p. 306.

Invited Talks

Hill, Joseph C., 2018, A Case For A Paleoproterozoic Transpressional Boundary, Black Hills, South Dakota: A Hatchling's View, Southeastern Geological Society of America Symposium Honoring the Work of Dr. Robert D. Hatcher, Jr.

Hill, Joseph C. 2014, Undergraduate Field Experience in L'Ansia, Huesca, Spain: Piggy-back basins, Paralics, and the Pyrenean Orogeny; Geologic Society Annual Meeting

Hill, Joseph C., 2014, Geologic Society of America Penrose Conference

Hill, Joseph C., 2013, The Haystacks Sandstone: A preserved ejecta blanket; Invited Colloquium speaker, Department of Geology, Geography, and Planning, Missouri State University, Springfield, MO

Hill, Joseph C., 2010, The Haystacks Sandstone: A proposed meteorite impact; Sam Houston Association of Geology Students, Colloquium, Sam Houston State University

Hill, Joseph C., 2009, Structural Geology and Tectonics of the Black Hills, SD; Invited Colloquium speaker, Department of Geology and Geography, Missouri State University, Springfield, MO

Hill, Joseph C. 2008, Structural Geology and Tectonics of the Black Hills, SD and the Assembly of Laurentia, Department of Geography and Geology Sam Houston State University, Huntsville, TX

Hill, Joseph C., 2005, An overview of the Black Hills Orogeny: Implications for Laurentian Assembly, Department of Geological Sciences, Texas Christian University, Fort Worth, TX

Hill, Joseph C., 2005, Structural Geology of the Black Hills, South Dakota, Department of Geosciences, Bloomsburg University, Bloomsburg, PA

Hill, Joseph C., 2004, The Black Hills, South Dakota: A view into the Assembly of Laurentia, Youngstown State University, Youngstown, OH

Hill, Joseph C., 2003, Plate Tectonics: How the World Works, Mineral Area College, Park Hills, MO