

MEGAN H. MCCUSKER

56 Beechwood Dr • New Britain, CT • 06040 • (860) 803-5053

email: mhmccusker@gmail.com

EDUCATION

- 2008 **M.S., Center for Integrative Geosciences.** University of Connecticut.
- 2005 **M.A., Geography Concentration: Fluvial Geomorphology.** University of Connecticut.
Thesis: The Geomorphic Downstream Effect of Low-Head Dams upon the Sediment Regime of Connecticut Fluvial Systems.
- 2005 **Certificate of GIS (Geographic Information Systems).** University of Connecticut.
- 2003 **B.A., Geography.** University of Connecticut.

CERTIFICATIONS

- 2005 **Certificate of GIS (Geographic Information Systems).** University of Connecticut.

TEACHING EXPERIENCE

- 2013 **Teaching Assistant, University of Connecticut –Center for Integrative Geosciences.** *Earth Surface Processes.* Intensive field and laboratory based course examining earth surface process. Was responsible for teaching 22 students for a 3 hour laboratory each week.
- 2013 **Adjunct Lecturer, University of Connecticut – Center for Integrative Geosciences.** *Earth and Life Through Time.* Intensive introductory lecture for geological sciences. January winter intersession. Spring semester.
- Adjunct Lecturer, University of Connecticut – Center for Integrative Geosciences.** *Age of the Dinosaurs.* A reconstruction of the Mesozoic world of the dinosaurs as interpreted from geological and paleontological evidence. Spring semester.
- Adjunct Lecturer, Southern Connecticut State University – Geography Department.** *Physical Geography.* Introductory course pertaining to spatial patterns in earth's physical environment and relationships between the atmosphere, biosphere, hydrosphere, and lithosphere. Spring semester.
- Adjunct Lecturer, Southern Connecticut State University – Geography Department.** *World Climates.* An introductory course to meteorology. Spring semester.
- 2012 **Adjunct Lecturer, Southern Connecticut State University – FYE Program and Geography Department.** *Introduction to Intellectual and Creative Inquiry.* A course to freshman, pertaining to intellectual and critical inquiry skills that are crucial to successful college study. *Introduction to Physical Geography. Critical Food Systems.* Fall semester.
- Adjunct Lecturer, University of Connecticut – Center for Integrative Geosciences.**

Earth and Life Through Time. Introductory lecture of geological sciences to over 160 students. Course accompanied by a lab section with hands on lab information. Fall semester.

Adjunct Lecturer, Manchester Community College. *Introduction to Natural Disasters:* Introduction to the causes, occurrence, and consequences of natural disasters. Course of physical causes as well as the distribution and frequency of disasters such as earthquakes, volcanic eruptions, hurricanes, floods, and extraterrestrial impacts. Spring semester.

2009- **Adjunct Lecturer, Manchester Community College and Tunxis Community College,**
2012 *Introduction to Earth Sciences:* Introductory course of earth sciences each semester at each college. Course provides an exploration of Earth's systems, time scales, and Earth's location in the solar system, through a selection of topics including Geology, Oceanography, Meteorology, and Astronomy.

2004- **Teaching Assistant, University of Connecticut.** *Environmental Impact Evaluation:*
2008 Planned and lead discussion sections for two classes of twenty-five students each. Graded and instructed students in a semester writing project that evaluated a specific environmental situation. Organized and administered labs, homework assignments, quizzes, and exams.

2005 **Teaching Assistant, University of Connecticut.** *Earth and Life Through Time:*
Responsible for teaching two lab sections of twenty-five students each. Organized and administered labs, homework assignments, quizzes, and exams.

2004 **Teaching Assistant, University of Connecticut.** *Introduction to Physical Geography.*
An introduction to geography as a discipline the scope and history of physical geography, as well as the geography of environmental science.

2004 **Teaching Assistant, University of Connecticut.** *Environmental Impact Evaluation.*
Responsible for planning, leading discussion, and evaluating students for writing sections of the main course. Responsible for grading and instruction of students through a semester in which students completed an extensive written evaluation of the environment.

PROFESSIONAL EXPERIENCE

2009- **Cardno TEC Inc. Environmental Scientist.** Preparation of environmental documentation
Pres. in accordance with the National Environmental Policy Act (NEPA). Document preparation of EA/EIS NEPA documents. Field methodology: wetland delineation, Facility Condition Assessment, shellfish sampling.

2007 **Research Assistant, Universidade de Fluminense, UFF, Rio de Janeiro, Brazil.**
Research conducted through University of Connecticut. Analyzed estuarine and lagoon core samples in order to enhance doctoral research on impacts of land-use on coastal system sediment dynamics.

2006 **Lab Coordinator, Geosciences Program, University of Connecticut.** Administrator for ten laboratory sections of twenty-five students each for the class entitled, *Earth and Life Through Time*. Prepared syllabus, labs, and teaching assistants for successful completion of the laboratory portion of the course and acted as liaison between lecture and lab.

- 2004 **Research Assistant, University of Connecticut.** Quantification of Channel Planform Change over Time using GIS: Pomperaug River, Connecticut (AAG, 2004). Work involved extensive use of ArcGIS and Arcview, conducting scanning, digitizing, buffering, and quantification of channel change through implementation of beachtools extension within ArcView.
- 2003 **Research Assistant, University of Connecticut.** Conducted research including comprehensive survey and data collection involving contacting various community and watershed group individuals. Work culminated in presentation at Undergraduate Honors Research Symposium.
- 2002 **Research Analyst Intern, Mackworth Environmental Consulting.** Higgins Beach, ME. Made contacts for the marine culture division for data and information gathering, in order to complete an assessment for a Maine Technology Institute grant entitled: "Program to enhance expertise through project team development and 'next-phase' research into candidate species. Work culminated with the submission of a competitive Maine Technology Institute round II proposal
- 2001 **Research Assistant, University of Connecticut.** Research conducted through University of Connecticut. Assessment of biodiversity within varied fragments of forested area in order to find correlation between fragment size and overall biodiversity in tropical cloud forest environment in Monteverde, Costa Rica.

PUBLICATIONS

- McCusker, M.H., and Daniels, M.D.** 2008. The Potential Influence of Small Dams on Basin Sediment Dynamics and Coastal Erosion in Connecticut. *Middle States Geographer* 41: 82-90.
- Daniels, M.D., and **McCusker, M.H.** 2010. Operator Bias Characterizing Stream Substrates Using Wolman Pebble Counts with a Standard Measurement Template. *Geomorphology*. 115: 194-198.
- Daniels, M.D. and **McCusker, M.H.** 2011. Reply to Bunte et al. (2011) "Discussion of Daniels and McCusker (2010): Operator bias characterizing stream substrates using Wolman pebble counts with a standard measurement template." *Geomorphology* 115, 194–198. *Geomorphology*, 134, 501-502.3

PRESENTATIONS

- NESTVAL Meeting of the Association of American Geographers, October 2003, East Hartford, CT. River Restoration in Connecticut: The Last Ten Years (Poster, Second author with Dr. Melinda Daniels).
- American Geophysical Union, December 2004, San Francisco, CA. Planform Dynamics on an Urbanizing New England River. (Poster)

Association of American Geographers (AAG), March 2004, Philadelphia, PA. Quantification of Channel Planform Change over Time Using GIS: Pomperaug River, Connecticut. (Poster)

Association of American Geographers (AAG), April 2005, Denver, CO. The Geomorphic Downstream Effect of Low-Head Dams upon the Sediment Regime of Connecticut Fluvial Systems. (Poster)

Southern Connecticut State University (SCSU). November, 2012. New Haven, CT. The Potential Influence of Small Dams on Fluvial Basin Sediment Dynamics and Coastal Systems in Connecticut. (Presentation)

WORKSHOPS

2012 The Center for Teaching INSTRUCTIONAL SKILLS WORKSHOP (ISW) August 15-17.