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**EDUCATION**

**Doctor of** Geology (Conservation Paleobiology/Paleoecology), University of Cincinnati

**Philosophy** Thesis: *Variations in benthic community structure around St. Croix, USVI:*

2010-2015 *Delineating the unique signatures of different anthropogenic agents*

Supervisor: Dr. Arnold I. Miller

**Bachelor of Arts** Geology, *Summa* *Cum Laude*, Cornell College

2006-2010 Thesis: *Mitigating the effects of the shifting baseline syndrome by utilizing the benthic molluscan death assemblage*

Supervisor: Dr. Benjamin J. Greenstein

**TEACHING EXPERIENCE**

**Visiting Assistant Paleoecology**, 2016

**Professor** *Upper level, seminar-style course* focused on organism-organism and

Cornell College organism-environment interactions; involved independent field research component, paper discussions, and final research papers/presentations

**Invertebrate Paleontology**, 2015, 2016

*Mid-level, lecture + lab course* focused on phylogeny, taphonomy, and functional morphology; final project involved creating and 3D printing a hypothetical organism based on a random set of functional attributes

**Historical Geology**, 2015, 2016

*Introductory level, lecture + lab course* meant to highlight the interconnectedness between Earth’s physical and biologic systems, museum visit and/or field trip accompanied by final video presentations

**Physical Geology**, 2015, 2016

*Introductory level, lecture + lab course* providing an introduction to Earth systems, with a focus on surface processes; local field trips; final projects involved modeling natural hazards and describing their geologic cause(s)

**Marine Science**, 2016

*Introductory level, lecture course* examining physical, chemical, and biological oceanographic processes; course format emphasizes critical thinking, small- and large-group discussion, and applications to modern marine issues

**Co-Instructor Capstone Field Course: Modern and Ancient Carbonate Systems**

Univ. of Cincinnati **of the Bahamas**, 2013, 2015

*Mid/Upper-level, two week field course* aimed at elucidating the processes of carbonate sediment formation by comparing to modern analogues; involved snorkeling, SCUBA diving, paleontological and sedimentological field work and sample collection

**Instructor Historical Geology Lab**, 2013

Univ. of Cincinnati *Introductory geology series, lab course* highlighting local Ordovician geology; organized and led several local field trips

**Physical Geology Lab**, 2010 & 2011

*Introductory geology series, lab course* providing an introduction to fundamental geologic processes; organized and led local field trips

**Visiting Instructor Invertebrate Paleontology**, 2012

Cornell College *Mid-level, lecture + lab course* focused on phylogeny, taphonomy, and morphology of major fossil-forming groups; included a local field trip where students collected specimens and curated their own fossil collections

**Historical Geology**, 2012

*Introductory level, lecture + lab course* highlighting the interconnectedness among Earth’s physical and biological systems; included local field and museum trips

**Teaching Assistant Evolution of Life**, 2012

Univ. of Cincinnati *Introductory level, lecture course*; assisted with teaching related activities, held office hours/tutored students; graded assignments and exams and led review sessions

**Physical Geology**, 2011

*Introductory level, lecture course*; assisted with teaching related activities, held office hours/tutored students, graded assignments and exams, led review sessions, and delivered one lecture

**Coral Reef Ecology**, 2011

Assisted with teaching related activities, held office hours, tutored students, graded assignments and exams, and led review sessions.

**Tutor Physical Geology**, 2009

Cornell College *Introductory level, lecture + lab course*, tutored students twice a week for the duration of the course

**DIVERSITY AND INCLUSION TRAINING**

**Participant Diversity and Inclusion Workshop**, 2016

Aimed at developing a foundation for talking about diversity and inclusion in the classroom, identified critical classroom biases, and brainstormed steps to take toward creating an inclusive classroom where participants appreciate and communicate across differences (*8 hours*)

**Inclusive Teaching Practices,** 2014

Panel discussion on best practices for creating and maintaining a diverse, inclusive, and comfortable classroom environment for all students (*2 hours*)

**Applying What We Know About How People Learn**, 2014

Discovered the most effective methods of student retention based on scientists’ understanding of the brain; brainstormed strategies that appeal to various learning styles (*2 hours*)

**TEACHING ENHANCEMENT**

**Committee Chair/** **Assessing Student Learning in your Class**

**Presenter** Developed and co-presented this new workshop aimed at providing both theoretical and practical information on assessment for graduate student TAs and instructors (*2 hours*)

**Organizer/ Teach me to Teach Pedagogical Seminar**

**Presenter** Helped design this full-day workshop aimed at improving instructor effectiveness through discussions of evidence-based pedagogical methods and hands-on course planning activities (*2 sessions,* *7 hours each*)

**Professional ePortfolios**

Practical advice and practice in preparing a professional ePortfolio to showcase professional accomplishments (*2 hours*)

**Capturing Student Attention**

Organized and presented a portion of this two-hour workshop designed to provide practical techniques to help graduate student instructors maximize student learning (*2 hours*)

**Get up and Go!**

Helped to organize this half-day workshop aimed at preparing new graduate students for their first teaching assignment. Used active learning techniques to provide classroom and time management techniques to participants (*4.5 hours*)

**Participant Flipped and Blended Classrooms**

Discussed practical methods for integrating flipped/blended techniques into the classroom. Practiced using a few software programs allowing for video-making, screen-capture, and file-sharing (*1 hour*)

**Technology in the Classroom**

Tested several technologies that can be incorporated into courses, including: video recording/editing, screen capture, and file sharing(*2 hours*)

**Models of Teaching Excellence**

Brainstormed and evaluated effective teaching strategies and learned how to implement them by participating in one hour “courses” taught by some of UCs finest educators. (*2 hours*)

**Writing Across the Curriculum**

Designed writing prompts to more effectively elicit thoughtful student responses (*2 hours*)

**Developing Your Teaching Philosophy *and* Creating an ePortfolio**

Discussed the ways to clearly articulate the teaching philosophy statement, and identified the important components of a teaching philosophy statement (*2 hours*)

**Teaching Effectiveness Seminar**

This semester-long course provided an opportunity to redesign a course to emphasize active learning. Created an online professional ePortfolio and conducted several classroom observations of faculty on campus (*14 weeks*)

**3T: Teaching, Techniques, and Technology Seminar**

This full day course emphasized learning techniques for engaging students using technology. We discovered effective practices for conveying information to students through various online software programs and discussed how to incorporate active research in the classroom (*8 hours*)

**“Teach me to Teach” Pedagogical Seminar**

This full-day seminar focused on familiarizing us with student learning outcomes, and allowed us to begin developing a course that aligned outcomes with appropriate and meaningful activities and assessments (*7 hours*)

**STUDENT ADVISING**

**Research**  **Cornell Summer Research Institute**, John Lewis, Cornell College, 2016-17

**Advisor** Worked with student to develop a chronology of shells collected from seagrass beds around St. Croix using amino acid racemization. Included a significant literature review and laboratory work at Cornell University(*10 weeks*)

**Directed Research**, Nina Morris, Cornell College, 2016-17

Departmental capstone project whose goal was to examine underlying chemical, physical, and biological causes of spatial variation in molluscan composition at a variety of localities around St. Croix, USVI

**Directed Research**, Jeannie Kort, Cornell College, 2016-17

Departmental capstone project whose goal was to quantify variation in potential terrestrial anthropogenic drivers (including: lithology, land use/vegetative cover, and environmental variables) of offshore molluscan community compositional variation

**Directed Research**, Bryan Hernandez, Cornell College, 2016-17

Independent research project aimed at examining variation in metal concentrations in shells collected around St. Croix, USVI, with the goal of identifying potential terrestrial anthropogenic pollutants in offshore environments

**Directed Research**, Ryan Shanks, Cornell College, 2015-16

Student worked semi-independently developing a specimen-based project aimed at linking aspects of trilobite (genus: *Ceraurus*) body size to potential paleoecology; involved literature review and museum work at the Field Museum of Natural History in Chicago (*4 weeks*)

**Grad/Undergrad Summer Mentoring Program**, Spencer Fogelman, University of Cincinnati, 2013

Worked with student to analyze the variation in metal composition in marine sediments around St. Croix, USVI using XRF spectroscopy (*10 weeks*)

**Directed Research**, Doug Sberna, University of Cincinnati, 2013

Student worked semi-independently on a project aimed at quantifying body size variation within the bivalve taxon *Chione cancellata* from samples collected around St. Croix, USVI (*14 weeks*)

**High School Capstone Project,** Mariah Peters,University of Cincinnati/Walnut HS, 2014

Mentored a high school senior on a research project aimed at comparing modern coral reef decline to changes seen during the Paleocene-Eocene Thermal Maximum(*28 weeks*)

**Committee Departmental Thesis,** James Garrett, Cornell College, 2016-17

**Member** *Reconstruction of coastal Western Australia paleoclimate over the last five glacial cycles using stalagmites from Cape Range, Australia*

**Honors Thesis,** Thomas Weiss***,*** Cornell College, 2015-16

*Testing the state of ENSO at the Miocene/Pliocene boundary using a monthly resolved oxygen isotopic time series from a pristine fossil coral from the central Caribbean*

**Honors Thesis,** Christopher Felt, Cornell College, 2015-16

*A characterization of layer-bounding surfaces in a Great Basin stalagmite utilizing both petrographic and high resolution stable isotope analyses*

**RESEARCH EXPERIENCE**

**Field Research Multi-Year Crinoid Censuses in Jamaica and the Bahamas (2012-2014)**

**Assistant** Repeated sampling of crinoids on shallow reefs in Jamaica and the Bahamas with the intention of determining how populations changed through time. Used visual and video methods to perform censuses.

**Dissertation Department of Geology, University of Cincinnati (2010-present)**

**Research** Sampling molluscan communities and quantifying pollutants at several venues around St. Croix, USVI, in order to identify distinct taphonomic signatures of different types of anthropogenic modification.

\*see research statement for details on methods used

**Research** **Geology, University of Cincinnati (2010)**

**Assistant** Disaggregated and identified mollusks in Cretaceous sediments from California, collected as part of another student’s dissertation. Also located and obtained literature sources of data for an ongoing on the nature of epicontinental sea versus open ocean biotas throughout the Mesozoic era.

**Honors** **Department of Geology, Cornell College (2009-2010)**

**Research** Quantified the live-dead similarity of molluscan assemblages to determine whether the baseline community was still present following two decades of anthropogenic development.

**Paleontology** **Cornell College Fellow, Field Museum of Natural History (2009)**

**Internship** Updated century-old paleobotany catalog collections to electronic format to facilitate scientific access and promote collaboration.

**Directed**  **NSF Research Experience for Undergraduates, Univ. of Minnesota (2008)**

**Research** Determined whether authigenic chemical zonation was present in conodont fossil elements using electron microprobe trace element mapping.

**PEER-REVIEWED PUBLICATIONS**

**Feser, K.M.**, and Miller, A.I., (In Review) The diagnosis and significance of stratigraphy in subfossil mollusk assemblages preserved in seagrass beds: St Croix, US Virgin Islands: Paleobiology.

**Feser, K.M.**, and Miller, A.I., 2014, Temporal dynamics of shallow seagrass-associated molluscan assemblages in St. Croix, USVI: Towards the calibration of taphonomic inertia: Palaios, 29 (5), p. 218-230.

*\*Outstanding Paper Honorable Mention, 2014*

**Feser, K.M.**, and Miller, A.I., and Ferguson, C.A., 2012, Sieve-size overprint on experimental results: A correction to Ferguson and Miller (2007): Palaeogeography, Palaeoclimatology, Palaeoecology, 358-360, p. 109-111.

**Feser, K.M.**, and Miller, A.I., (In Prep.), Geographic variation in mollusk assemblages and its relationship to geochemistry: St. Croix, U.S. Virgin Islands.

**PUBLISHED ABSTRACTS AND ORAL PRESENTATIONS**

**Feser, K.M.,** Miller, A.I., Arkle, J.C., 2016, Identifying terrestrial controls on spatial variation in molluscan death assemblages, St.. Croix, USVI, Geological Society of America Abstracts with Programs: 138 (2).

**Feser, K.M.**, and Miller, A.I., 2015, The diagnosis and significance of stratigraphy in subfossil molluscan assemblages preserved in seagrass beds: St. Croix, US Virgin Islands, Geological Society of America Abstracts with Programs: 194(1).

**Feser, K.M.**, and Miller, A.I., 2014, Diagnosing environmental change in seagrass beds based on stratigraphic transitions in molluscan death assemblages, Geological Society of America Abstracts with Programs: 81(8).

**Feser, K.M.**, and Miller, A.I., 2014, Enhanced resolution in live/dead molluscan fidelity studies through comparisons among multiple stratigraphic intervals,*in*10th North American Paleontological Convention: Florida Museum of Natural History, Gainesville, FL, The Paleontological Society Special Publications, p. 80-81.

**Feser, K.M.,** and Miller, A.I., 2013, Geographic variation in mollusk assemblages and its relationship to geochemistry: St. Croix, U.S. Virgin Islands. Geological Society of America Abstracts with Programs: 45 (7), p. 684.

**Feser, K.M.,** and Miller, A.I., 2012, Quantifying decadal-scale compositional changes in seagrass-associated molluscan assemblages using multi-year census data from two sites around St. Croix, USVI. Geological Society of America Abstracts with Programs: 44 (7), p. 475.

**Feser, K.M,** and Miller, A.I., 2012, Quantifying decadal-scale variation in molluscan assemblages using multi-year census data: St. Croix, USVI. Abstracts of the 6th Annual College of the Bahamas Geology Symposium, San Salvador, Bahamas.

**Feser, K.M.,** and Miller, A.I., 2011, Variation in mollusk communities from seagrass beds around St. Croix, US Virgin Islands. Sigma Xi Award Dinner.

**Feser, K.M.,** and Miller, A.I., 2011, Temporal and geographic variation in molluscan assemblages from seagrass beds around St. Croix, US Virgin Islands: Towards the delineation of natural versus anthropogenic drivers. Geological Society of America Abstracts with Programs: 43 (5), p. 32.

**Feser, K.M.**, and Greenstein, B.J., 2010,Mitigating the effects of the shifting baseline by utilizing the benthic molluscan death assemblage, Geological Society of America Abstracts with Programs: 42 (2), p. 73.

**Feser, K.M.**, and Greenstein, B.J., 2010, Mitigating the Effects of the Shifting Baseline by Utilizing the Benthic Molluscan Death Assemblage, Abstracts of the 5th Annual College of the Bahamas Geology Symposium, San Salvador, Bahamas.

**POSTER PRESENTATIONS**

**Feser, K.M.,** and Webb, C., 2015, A Bomb or a Blessing: Hurricane Hugo and the Economy of St. Croix, Graduate Poster Forum, University of Cincinnati.

**Feser, K.M.,** and Miller, A.I., 2012, Quantifying variation in seagrass-associated mollusks around St. Croix, USVI, Graduate Poster Forum, University of Cincinnati.

**INVITED TALKS**

**From Information Loss to Information Gain: How taphonomy informs ancient and modern**

**ecological processes**. University of Wisconsin, Madison, 2016

**Time-Averaging and Taphonomic Inertia in Shallow Marine Sediments**. Centre College,

Danville, KY, 2014

**QUANTITATIVE WORKSHOPS**

**Workshop Using R for Quantitative Analyses** (*4 hours*)

**Leader** Organized and taught this workshop focusing on helping beginners use the programming language R by introducing them to basic concepts, breaking down help files, and identifying ways they could incorporate R in their own research.

**Instructional An Introduction to Programming and Data in R** (*2 days*)

**Support** Acted as a “teaching assistant” for this workshop aimed at beginners to R. Worked one-on-one with participants as they worked through problem sets using the program.

**GRANTS AND SCHOLARSHIPS**

$3500 Cornell Summer Research Institute (2016)

$600 Graduate Student Governance Association (2014)

$1,000 University of Cincinnati Caster Fund (2014)

$1,500 Lerner Gray Memorial Fund - American Museum of Natural History (2013)

$1,200 University of Cincinnati Sedimentology Fund (2013)

$3,000 University Research Council Graduate Student Research Fellowship (2012)

$800 Gerace Research Centre BEST Grant (2012)

$800 Paleontological Society – Richard Osgood Research Grant (2011)

$1,890 Geological Society of America Graduate Research Grant (2011)

$3,000 UC Sigma XI Chapter Grant-in-Aid of Research Award (2011)

$120 Geological Society of America Travel Grant (2010)

$300 Vokes Grant-in-aid for Invertebrate Paleontological Research (2009)

$300 Geological Society of America Grant for Undergraduate Research (2009)

$3,000 Cornell College Student-Faculty Research Grant (2009)

$17,500 annually Samuel S. Fellows Scholar (2006-2010)

$1,500 annually Robert C. Byrd Scholarship (2006-2010)

**HONORS & AWARDS**

2015 **Kenneth Caster Award**, University of Cincinnati Department of Geology

2014 **Outstanding Paper in PALAIOS**, Honorable Mention

2012 **Outstanding Poster Presentation**, UC Graduate School Poster Forum

2012 **Departmental** **Good Spirit Award**, University of Cincinnati

2011 **Nominee** for University Research Council summer funding, UC Geology

2010 **Honorable Mention**, NSF Graduate Research Fellowship Program

2010 **Nominee**, McElroy Graduate Scholarship, Cornell College

2010 **Best Undergraduate Oral Presentation**, North-Central Section GSA

2010 **Outstanding Senior Geologist**, Herb Hendriks Award, Cornell College

2009 **Phi Beta Kappa** National Honor Society

2009 **Outstanding Junior Geologist**, Wm. Harmon Norton Award, Cornell College

2008 **Academic Excellence**, C.O. Pauley Award,Cornell College

**SERVICE AND LEADERSHIP**

2016 **Ad Hoc Reviewer,** Biodiversity and Conservation

2015 **Ad Hoc Reviewer,** Turkish Journal of Fisheries and Aquatic Sciences

2014-present **Technical Program Chair**, Quaternary Geoscience Conference at UC

2014 **Ad Hoc Reviewer**, Palaios

2013-present **Member**, Graduate Association for Teaching Enhancement

2013 **Ad Hoc Reviewer**, National Science Foundation

2011-2012 **President,** University of Cincinnati Geology Club

2011-2014 **Judge**, Cincinnati Regional Science and Engineering Expo

2011-2012 **Exhibitor**, Cincinnati Gem and Mineral Show

2011 **Exhibitor**, Falls Fossil Festival

2011 **Event Supervisor**, Cincinnati Science Olympiad

2011 **Judge**, Horizon Academy Middle School/High School Science Fair

2010-2011 **Outreach Coordinator**, University of Cincinnati Geology Club

2009-2010 **Vice President**, Cornell College Mountaineering Club

2008-2010 **President,** Cornell College Geology Club

2008-2010 **Exhibitor**, Cedar Valley Rock and Mineral Show

**PROFESSIONAL AFFILIATIONS**

2016-present National Association of Geoscience Teachers

2013-present Association of Women Geologists

2012-present American Academy of Underwater Sciences

2010-present Sigma Xi

2009-present Geological Society of America

2009-present Paleontological Society

2009-present Sigma Gamma Epsilon, Beta Pi Chapter