

# Elizabeth A. Erickson

*Ph.D. Candidate*

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## EDUCATION

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- 2015-present **Ph.D., Geology, University of California, Santa Barbara (UCSB)**  
Department of Earth Science  
*Advisor:* Dr. John M. Cottle  
*Thesis title:* “Magmatic history of the Ross Orogen along the Gondwanan paleo-Pacific margin”  
*Certificates:* Certificate in College and University Teaching (CCUT) (*Pending*)
- 2007-2011 **B.A., Geology/Environmental Studies Magna Cum Laude, Cornell College, Mount Vernon, IA**  
Department of Geology  
*Advisor:* Dr. Benjamin J. Greenstein  
*Honors thesis title:* “Using epibiont successional patterns to determine the mode of accumulation of Late Pleistocene fossil reefs”  
Phi Beta Kappa

## PUBLICATIONS

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### ABSTRACTS/PRESENTATIONS

- Erickson, E.A.** and Cottle, J.M., 2019, Petrochronologic insight into episodic crustal recycling along the paleo-Pacific margin of Gondwana: Goldschmidt Abstracts 2019
- Erickson, E.A.** and Cottle, J.M., 2017, Ross Orogeny magmatism in Northern Victoria Land, Antarctica: insight into along-strike arc variation and comparison to the detrital zircon record: Geological Society of America Abstracts with Programs, v. 49, no. 6, doi:10.1130/abs/2017AM-299690.
- Erickson, E.A.** and Greenstein, B.J., 2011, Using epibiont successional patterns to determine the mode of accumulation of Late Pleistocene fossil reefs: Geological Society of America Abstracts with Programs, v. 43, no. 1, p. 68.
- Erickson, E.A.**, 2011, Using epibiont successional patterns to determine the mode of accumulation of Late Pleistocene fossil reefs: Cornell College 15th Annual Student Symposium, 16 April 2011, Mount Vernon, Iowa.
- Erickson, E.A.** and Greenstein, B., 2011, Using epibiont successional patterns to determine the mode of accumulation of Late Pleistocene fossil reefs: Abstract Northeastern (46th Annual) and North-Central (45th Annual) Joint Meeting, 20–22 March 2011, Pittsburgh, Pennsylvania.
- Calcote, R., Lynch, E.A., Hotchkiss, S.C., Woods, P., Drake, C., **Erickson, E.**, 2010, A mid-Holocene prairie extension in northern Wisconsin: American Quaternary Association (AMQUA) biennial meeting, 12-15 August 2010, Laramie, Wyoming.
- Erickson, E.A.**, 2010, Fire history from Little Round Lake, northwestern Wisconsin, USA: Cornell College 14th Annual Student Symposium, 17 April 2010, Mount Vernon, Iowa.
- Erickson, E.A.**, 2009, Fire history from Little Round Lake, northwestern Wisconsin, USA: UMN Geology and Geophysics NSF-REU Summer Internship Program, 6 August 2009, Minneapolis, Minnesota.

### THESIS

- Erickson, E.A.**, 2011, Using calcareous encrusting epibiont successional patterns to determine the mode of accumulation of Late Pleistocene fossil reefs [B.A. Thesis]: Cornell College, 90 pp.

### TALKS/PANELS

- Erickson, E.A.**, *Natural Hazards and Plate Tectonics*, The Knox School of Santa Barbara, 15 October 2019
- Erickson, E.A.**, Moser, A., Johnson, T.A., *Geochronology Earth Science*, Laguna Blanca High School, 30 January 2019
- Erickson, E.A.**, *Along-strike variation of continental arc magmatism during the Ross orogeny, Antarctica*, UCSB Speakers Club, 6 December 2018.
- Erickson, E.A.**, Penserini, B., Moser, A., Zurbuchen, J., *You Want to Go to Grad School? Grad Student Panel*, UCSB, 1 November 2018
- Erickson, E.A.**, *Magmatic history of the paleo-Pacific margin of Gondwana*, Cornell College, 30 October 2018

# Elizabeth A. Erickson

## HONORS AND AWARDS

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2019	UCSB Royal Geological Society of Goleta Award for Most Helpful Graduate Student
2019	Recognition for Commitment and Constant Support in Promoting Science Education in K-12 Schools, ScienceLine, Materials Research Laboratory Education Program, UCSB
2018	UCSB Royal Geological Society of Goleta Award for Best Shirt Design
2018	Alumni Graduate Award for Research Excellence, Earth Science Department, UCSB
2018	Award in Earth Science for Outstanding Contribution to Promoting Science in K-12 Schools, ScienceLine, Materials Research Laboratory Education Program, UCSB
2017	Antarctica Service Medal of the United States of America, National Science Foundation
2017	First place for “PolarPeople at home” Photo Contest, Association of Polar Early Career Scientists (APECS) <ul style="list-style-type: none"><li>▪ Photo displayed in the UCSB Earth Science department</li></ul>
2016	UCSB Royal Geological Society of Goleta Award for Best FISH Czar
2011	Phi Beta Kappa, Cornell College
2011	<i>Magna Cum Laude</i> , Cornell College
2011	Herbert Hendricks Award to the Outstanding Senior Geology Major, Cornell College
2010	Barry M. Goldwater Scholarship Honorable Mention
2010	William H. Norton Geology Award for Outstanding Junior, Cornell College
2009	Research Experience for Undergraduates, National Science Foundation (NSF Award #0649044)
2009	Gene Hinman Geology Award for Excellence in Fieldwork, Cornell College

## GRANTS AWARDED AS GRADUATE STUDENT

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2019	2019-20 Doctoral Student Travel Grant, Graduate Division, UCSB, \$1,350
2019	Professional Development Award for Dissertation Write-in workshop, Graduate Division, UCSB, \$400
2019	Individualized Professional Skills (IPS) Grant, UCSB, \$1,000
2019	Graduate Travel Grant, Earth Research Institute (ERI), UCSB, \$400
2019	Grants-in-Aid Program - Arthur A. Meyerhoff Memorial Grant, AAPG Foundation, \$3,000
2018	Preston Cloud Award, Earth Science Department, UCSB \$300
2017	Atwater Global Field Travel Award, Earth Science Department, UCSB \$2,000
2017	Summer Research Fellowship, Earth Research Institute (ERI), UCSB, \$500
2016	Summer Research Fellowship, Earth Research Institute (ERI), UCSB, \$1,500
2016-2020	Graduate Research Fellowship Program, National Science Foundation (NSF Award #1650114), \$138,000
<b>Total: \$148,450</b>	

## GRANTS AWARDED AS UNDERGRADUATE STUDENT

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2011	North-Central Section Student Travel Grant, Geological Society of America (GSA), \$150
2010	Barry Center Wilderness Politics Course Award, Cornell College, \$450
2010	North-Central Section Undergrad Research Grant, Geological Society of America (GSA), \$200
2010	Student Research Grant, Paleontological Society, \$750
2010-2011	Student-Faculty Collaborative Research Grant, Cornell College, \$3,500
2009	Cat Levy Off-Campus Study Award, Cornell College, \$300
2007-2011	Academic Trustee Scholarship, Cornell College, \$60,000
2007	Pete Henry Scholarship, Cornell College, \$1,500
2007	Sunflower Bank Community Ambassador Program Scholarship, Colby, Kansas, \$1,500
<b>Total: \$68,350</b>	

## PROFESSIONAL EXPERIENCE *(references available upon request)*

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2018-2020	<b>Associate Instructor</b> at UCSB, Santa Barbara, CA
2015-2020	<b>Teaching Assistant</b> at UCSB, Santa Barbara, CA
2019	<b>Field Course Cook</b> (Earth 104B: Field Methods: Rainbow Basin) at UCSB, Santa Barbara, CA
2018-2019	<b>Graduate Student Researcher</b> at UCSB, Santa Barbara, CA
2018	<b>Field Course Cook</b> (Earth 104B: Field Methods: Rainbow Basin) at UCSB, Santa Barbara, CA
2017-2018	<b>Earth Science Speaker’s Club Student Host</b> at UCSB, Santa Barbara, CA
2017	<b>Field Course Cook</b> (Earth 6: Mountains, Boots, and Backpacks: Field Study of the High Sierra) at UCSB, Santa Barbara, CA
2014-2015	<b>Training and Health, Safety, and Environmental Manager</b> at COLUMBINE LOGGING, INC., Denver, CO

# Elizabeth A. Erickson

2012-2014 **Lead Well Site Geologist** at COLUMBINE LOGGING, INC., *Denver, CO*  
2012 **Agricultural Technician** at K-STATE NW RESEARCH-EXTENSION CENTER., *Colby, KS*  
2010 **Teaching Assistant** at CORNELL COLLEGE, *Mount Vernon, IA*  
2008 **Internship** at IOWA OFFICE OF THE STATE ARCHEOLOGIST, *Iowa City, IA*

## TEACHING AND MENTORING EXPERIENCE

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2020 **Associate Instructor** EARTH 10 “Antarctica: The Last Place on Earth” (SuB20)  
▪ *Duties:* Update and administer course material, lectures, lab demonstrations, quizzes, and exams into online format; maintain online course materials; calculate student course grades; oversee TA work.  
**Teaching Assistant** EARTH 7 “Dinosaurs” (Sp20)  
▪ *Course instructor:* *Dr. John Moore, UCSB*  
▪ *Duties:* Prepare & grade online course labs and weekly discussion forums, maintain digital office hours.

2019 **Associate Instructor** EARTH 10 “Antarctica: The Last Place on Earth” (SuB19)  
▪ *Duties:* Update and administer course material, lectures, quizzes, and exams; maintain online course materials; calculate and submit student course grades; oversee Teaching Assistant work duties.  
**Mentor for Undergraduate Senior Honors Project**  
▪ Nicole Aikin, 2018-19 academic year, “Reconnaissance geochronology of the Ohio Range, southern Horlick Mountains, Antarctica: Insights into crustal evolution of the Neoproterozoic to Paleozoic Ross Orogen magmatism from zircon U-Pb and Hf”  
▪ Train student in mineral separation techniques and laboratory processes, supervise sample processing, data acquisition, manuscript guidance.

2018 **Associate Instructor** EARTH 10 “Antarctica: The Last Place on Earth” (SuB18)  
▪ *Duties:* Design and administer course material, lectures, quizzes, and exams; maintain online course materials; calculate and submit student course grades; oversee Teaching Assistant work duties.  
**EUREKA! Mentor for the UCSB Center for Science and Engineering Partnerships (CSEP)**  
▪ Charu Garapaty, 2018 summer  
▪ Summer research program for UCSB undergraduates in STEM disciplines through the California Nanosystems Institute (CNSI) to address academic skills, social networking, and career exploration needed for success in the sciences.  
**Summer Teaching Institute for Associates (STIA)**  
▪ Pre-summer orientation program for planning, conducting, and assessing teaching of undergraduate courses sponsored by the Graduate Division and Instructional Development at UCSB.  
**Mentor for Undergraduate Senior Honors Project**  
▪ CJ Lemler, 2017-18 academic year, “U-Pb geochronology and whole-rock geochemistry of orthogneisses in the Miller Range, Antarctica”  
▪ Train student in mineral separation techniques and laboratory processes, supervise sample processing, data acquisition and synthesis, manuscript guidance.  
**Teaching Assistant** EARTH 177 “Ore Deposits and Mineral Resources” (Sp18)  
▪ *Course instructor:* *Dr. John Cottle and Dr. Phil Gans, UCSB*  
▪ *Duties:* Update, prepare, and lead course labs, maintain office hours, grade assignments.  
**Teaching Assistant** EARTH 10 “Antarctica: The Last Place on Earth” (W18)  
▪ *Course instructor:* *Dr. Allison Price, UCSB*  
▪ *Duties:* Prepare and lead course labs, maintain office hours, grade assignments, and guest lecturing.

2017 **Guest Lecturer** EARTH 10 “Antarctica: The Last Place on Earth” (F17)  
▪ *Course instructor:* *Dr. John Cottle, UCSB*  
**Teaching Assistant** EARTH 115 “Analytical Methods” (W17)  
▪ *Course instructor:* *Dr. Matt Rioux, UCSB*  
▪ *Duties:* Lead course labs, maintain office hours, grade assignments.

2016 **Teaching Assistant** EARTH 20 “Catastrophes” (Su16)  
▪ *Course instructor:* *Melissa Scruggs, M.S., UCSB*  
▪ *Duties:* Lead course labs, maintain office hours, grade assignments.  
**Teaching Assistant** EARTH 7 “Dinosaurs” (Sp16)  
▪ *Course instructor:* *Dr. Dan Luna, UCSB*  
▪ *Duties:* Lead course labs, maintain office hours, grade assignments.  
**Teaching Assistant** EARTH 2 “Physical Geology” (W16)  
▪ *Course instructor:* *Dr. Sabina Thomas, UCSB*

# Elizabeth A. Erickson

- 2015
  - *Duties:* Lead course labs, maintain office hours, grade assignments, lead day-long student field trips.
- Teaching Assistant** EARTH 7 “Dinosaurs” (F15)
  - *Course instructor:* Dr. Dan Luna, UCSB
- 2010
  - *Duties:* Lead course labs, maintain office hours, grade assignments.
- Teaching Assistant** GEO 111 “Physical Geology” (Block 8)
  - *Course instructor:* Dr. Emily Walsh, Cornell College
  - *Duties:* Prepare course lab materials, lead study sessions, assist course labs, assist student field trips.

## OUTREACH AND VOLUNTEER

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- 2017-present 500 Women Scientists, Santa Barbara Pod – Career Development Series Committee  
Monthly Discussion Night Coordinator  
Website Developer
- 2016-present UCSB Materials Research Laboratory (MRL) ScienceLine Scientist
- 2016-present UCSB Women in Science and Engineering (WiSE) Mentor
- 2015-present UCSB Earth Science Outreach
- 2018-2019 UCSB Earth Science Graduate-Faculty Liaison
- 2018 Science-A-Thon 2018, Earth Science Women’s Network, Inc. (ESWN)
- 2017-2018 UCSB Earth Science Graduate Student Association President
- 2017 Girls Inc. – Boost Program mentor
- 2016-2017 UCSB Earth Science Graduate-Faculty Liaison
- 2016-2017 UCSB Earth Science Alumni Panel Organizer
- 2015-2017 UCSB Sci-Trek Outreach Program
- 2015-2016 UCSB Earth Science Distinguished Alumni Committee
- 2015 California Diversity Forum – Earth Science recruiter

## TECHNICAL EXPERIENCE

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### ANALYTICAL AND LABORATORY

- Laser-Ablation-Split-Stream MC-ICP-MS for zircon U-Pb dating and Hf isotopes
- Quadrupole-MS for zircon trace elements and whole rock major and trace elements
- Scanning Electron Microscopy: EBSD and CL imaging
- Optical microscopy: transmitted and reflected
- Mineral separation, sample preparation, thin section preparation
- Tetracam Agricultural Digital Camera
- Bloodhound Gas Detection and Pason Gas Analyzer

### FIELD

- Lithologic mapping, configuring dataloggers and field instruments, archaeological excavation and cataloging

### SCIENTIFIC SOFTWARE

- MATLAB, Python, Iolite for IsoPlot and IgorPro, Iqpet for Mac, Adobe Illustrator and Photoshop, GIMP, FIJI, PixelWrench2, IR Flash, R-Program, Quantum GIS, Dreamweaver, Microsoft, MacOS, Excel, LPlot, MPlot, ZoneWise, SES 4, iBall

## MEMBERSHIP IN PROFESSIONAL SOCIETIES

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- 500 Women Scientists
  - <https://500wssantabarbara.wordpress.com/>
- 1 Million Women in STEM (1MWIS)
  - <https://www.1mwis.com/profiles/Elizabeth-Erickson>
- Women in Science and Engineering (WiSE)
- American Association of University Women (AAUW)
- American Geophysical Union (AGU)
- Association of Polar Early Career Scientists (APECS)
- Geochemical Society (GS)
- Geological Society of America (GSA)
- Mineralogical Society of America (MSA)
- Sigma Gamma Epsilon (SGE)
- Sigma Xi
- Phi Beta Kappa