

Graham Harper Edwards

Earth & Planetary Sciences
University of California Santa Cruz
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EDUCATION

University of California Santa Cruz 2016 – Present
Doctoral Studies, Earth & Planetary Sciences
Candidacy Fall 2018
Proposed Dissertation Title: Applications of the uranium decay chain to diverse problems in deep time and Quaternary studies: chronologic insights into processes of planetary interiors and the bases of glaciers.
Advisor: Prof. Terrence Blackburn
Committee: Profs. Slawek Tulaczyk (*Chair*, UCSC), Myriam Telus (UCSC), Kurt Cuffey (UC Berkeley)

Bowdoin College Brunswick, ME 2014
Bachelor of Arts: Earth and Oceanographic Science with Honors, Classics minor
Summa cum Laude, *ΦBK Society*

PUBLICATIONS

4. T. Blackburn, G.H. Edwards, S. Tulaczyk, M. Scudder, G. Piccione, B. Hallet, J.C. Zachos, B. Cheney, N. McLean, J.T. Babbe, *In review*, Subglacial precipitates record the East Antarctic response to 1-2 °C warming. *Nature*.
3. G.H. Edwards, T. Blackburn. 2020. Accretion of a large LL parent planetesimal from a recently formed chondrule population. *Science Advances*.
2. G.H. Edwards, T. Blackburn. 2018. Detecting the extent of ca. 1.1 Ga Midcontinent Rift plume heating using U-Pb thermochronology of the lower crust. *Geology* (46), 911–914. doi: 10.1130/G45150.1
1. G.H. Edwards. 2014. Geochemical and stratigraphic analysis of the Linnévatnet sediment record: a study of Late Holocene cirque glacier activity in Spitsbergen, Svalbard. [*Honor's Thesis*] Bowdoin College: Brunswick, ME, U.S.A. 73 p. [[Undergraduate Research Commons](#)]

TEACHING

University of California Santa Cruz
Graduate Teaching Assistant

Fall 2019	<i>Elements of Field Geology</i>
Spring 2018	<i>Geochemistry of the Solar System</i>
Winter 2018	<i>Geologic Principles</i>

Bozeman & Livingston Public Schools MT, U.S.A. 2015
Substitute Teacher

- Instructor and paraprofessional in K-12 classrooms.
- Taught students with various educational needs in diverse subjects.

Bowdoin College Brunswick, ME, U.S.A. 2012 – 2013
Laboratory Teaching Assistant

- Assisted coordination and instruction of field and laboratory activities for an introductory geoscience course.

OUTREACH & PUBLIC SERVICE

Geoscientists Encouraging Openness and Diversity in the Earth Sciences (GEODES) *Student Leader* 2019 – 2020

- Organize and implement outreach events centered on promoting awareness of issues facing underrepresented groups in the geosciences and cultivating a culture of inclusivity in the UCSC Earth & Planetary Sciences Dept.
- One of six graduate student leaders responsible for the operation and development of GEODES.

Skype a Scientist 2019
Volunteer Scientist

- Prepare educational content and host video calls with elementary classrooms.
- Teach geoscience concepts and share stories about experiences as a scientist.

Santa Cruz Museum of Natural History 2018 – Present
Volunteer Scientist

- Create educational content and host geoscience educational activities at monthly museum events.

Peary-MacMillan Arctic Museum Brunswick, ME 2015 – 2016
Curatorial Intern

- Developed outreach programming and exhibition content.
- Supplemented undergraduate courses with lectures drawing on museum collections.
- Mentored and trained undergraduate student interns and employees.

HONORS & AWARDS

Aaron and Elizabeth Waters Award 2019
Issued annually for the most outstanding proposal for PhD research in the UCSC Earth & Planetary Sciences Dept.

UC Santa Cruz Regent's Fellowship 2016

National Association of Geoscience Teachers Outstanding TA Award 2014

Sarah and James Bowdoin Scholar (Dean's List) 2011 – 2013

Grua/O'Connell Research Award 2013

Freedman Summer Research Fellowship in Coastal/Environmental Studies 2012

CONFERENCE ABSTRACTS (1ST AUTHOR)

5. G.H. Edwards, T. Blackburn, S. Tulaczyk, G.G. Piccione. 2019. [Poster]: U-series isotopics of silts from Taylor Valley, Antarctica: Applying comminution dating methods on polar desert tills and implications for the timeframe of valley incision. *American Geophysical Union Fall Meeting*, San Francisco, CA, U.S.A.
4. G.H. Edwards, T. Blackburn, S. Tulaczyk, G.G. Piccione. 2019. [Poster]: U-Series isotopics constrain timescale of bedrock comminution and glacial incision in Taylor Valley, Antarctica. *Goldschmidt Annual Meeting*, Barcelona, ES.
3. G.H. Edwards, T. Blackburn, C.M.O'M. Alexander. 2017. [Talk]: Accretion and disruption histories of the ordinary chondrite parent bodies. *Meteoritical Society Annual Meeting*, Santa Fe, NM, U.S.A.
2. G.H. Edwards, T. Blackburn, K.V. Smit. 2017. [Poster]: Timescales of crustal cooling of the Superior Craton near Attawapiskat, Ontario, Canada, and implications for extent of Keweenaw plume heating. *American Geophysical Union Fall Meeting*, New Orleans, LA, U.S.A.
1. G.H. Edwards. 2014. [Poster]: Geochemical and stratigraphic analysis of the Linnévatnet sediment record: a provenance study of Late Holocene cirque glacier activity in Linnédalen, Spitsbergen, Svalbard. *44th International Arctic Workshop*, Boulder, CO.

ADDITIONAL SERVICES, EXPERIENCES

Earth & Planetary Sciences Dept., UCSC

Spring 2019

Whole Earth Seminar Organizer

- One of two graduate student organizers that coordinated a departmental seminar series.
- Contacted and scheduled speakers from diverse disciplines with in Earth and planetary sciences.

U.S. Forest Service Winthrop, WA, U.S.A.

2015

Forestry Aid (*Wildland Firefighter Type 2*, GS-2)

Society Affiliations: Geochemical Society, Geological Society of America, Meteoritical Society, American Geophysical Union.

Analytical Experience: *Expert:* TIMS. *Proficient:* MC-ICP-MS, ICP-MS, SEM EDS. *Limited:* ICP-OES, XRF, XRD.

Non-academic Interests: Rock climbing, cross-country skiing, birdwatching.