

Communications Curriculum Vitae

Megan L. Anderson

CONTACT INFORMATION

Phone: (650) 218-3565

Email: megan_l_anderson@yahoo.com

Web site: <https://quantitativeinquiries.com>

EDUCATION

- 2005 Ph. D., Geosciences, concentration in Geophysics, Department of Geosciences, University of Arizona, Tucson, AZ
- 1998 B.A., Geology, Carleton College, Northfield, MN
Graduated **magna cum laude**

PROFESSIONAL EXPERIENCE

- 2018-present **Earthquake Geologist/Geophysicist**, Washington Geological Survey
- 2013-2017 **Associate Professor**, Colorado College
* Taught 6 Geology Department classes per year in applied geophysics, regional geology, tectonics, geologic hazards and introductory geology;
Co-taught cross disciplinary classes in mathematics and geology.
- 2007-2013 **Assistant Professor**, Colorado College
- 2005-2006 **Mendenhall Postdoctoral Fellow**, USGS, Menlo Park, CA.
- 2003-2004 **Teaching Assistant**, University of Arizona.
- 2003 **Summer Intern**, Lawrence Livermore Laboratory.
- 2001-2005 **NSF Graduate Research Fellow**, University of Arizona.
- 2000-2001 **Graduate Research Assistant**, University of Arizona.
- 1998-2000 **Geophysics Intern**, USGS, Menlo Park, CA.
- 1996-1998 **Geology Lab Assistant and Mathematics Tutor**, Carleton College.

COMMUNICATIONS EXPERIENCE

Oral Communications

Teaching

- All of my courses are original and, at their core, involve teaching students the fundamentals of how science works by requiring students to use the scientific method to solve real problems. As such, I have relied heavily on societally-relevant topics in my course development especially for the following courses:
GY101: **Catastrophic Geology**
The geology of natural hazards including flooding, earthquakes and volcanoes with a focus on the impact of these events on society and preparedness of communities to handle their effects.
GY140: **Physical Geology**

Introduction to geologic principles using field work in Colorado and other western states as a context.

NS160: Mathematics and Geology of the Great American Desert

Freshman-only course centered on solving geologic problems with mathematics. Emphasis on geology relevant to society, especially the western U.S. Central topics are volcanology and water resources (both surface and groundwater).

GY212: Investigating Earth as a Physical System

A sophomore-level course in geologic methods using field and map data bearing on Rocky Mountain history and evolution.

GY240: Tectonics

Fundamentals of tectonics and its origins as a scientific revolution in geology. Features local examples from the western U.S. and Colorado region.

GY445: Regional Geology

In-depth investigation of the geology of a region from a wide range of disciplinary perspectives.

*Geology of the Baja, California Region, Spring 2008

*Argentinean Andes and Sierras Pampeanas, Spring 2010

*The Cascadia Margin, Washington, Fall 2012

*California, From Subduction to Transform, Fall 2014

- **Field teaching.** I have in-depth knowledge of the geology of multiple western states and Argentina from leading field sessions in these places. States include Washington, California, Nevada, New Mexico, Colorado, Wyoming, Utah.

Public Lectures

- 2019 **Centralia College, Centralia, WA:** The Doty fault: Are local earthquakes possible near Centralia?
- 2018 **Jefferson Land Trust, Port Townsend, WA:** Revelations about active faulting in the Puget Sound region from geology and geophysics
- 2016 **Colorado College Film and New Media Panel:** Landscape, cultural and social history of Hollywood/Los Angeles
- 2015 **Pikes Peak Environmental Forum:** What do earthquakes have to do with Earth's climate? How technological advances are fostering scientific collaboration across disparate fields
- 2013 **Colorado College Voices from Japan Festival:** Behind the Scenes: Geology and Tectonics of the 2010 Tohoku Earthquake and Tsunami
- 2011 **Colorado College Geology Department Lunch Series:** Japan: What happened to the most earthquake-ready country in the world?
- 2008 **Sigma Xi Science Lecture:** Earthquakes and Tsunamis: Why Seattle is the New San Francisco

Scientific Community Talks

- **IRIS/PASSCAL Webinar:** "Your PASSCAL Instrument Center: How to get started planning your first (or next) experiment", April, 2015 (**view it online:**

https://www.iris.edu/hq/webinar/2015/04/your_passcal_instrument_center_how_to_get_started_planning_your_first_or_next_experiment)

- **Invited lectures:** USGS Denver, USGS Menlo Park, Colorado State University, St. Louis University, Brown University, Yale University, Washington & Lee University
- **Seventeen talks** at scientific meetings over 20 years

Media

2018 July 31, **King 5 News**, Seattle WA: Geologists tracking faults in western Washington

Field Communications

Working in the field involves regular interaction with community members who have a natural curiosity about my work. Therefore, I have extensive experience explaining my scientific work to residents, police and land managers for the following regions and topics:

- Washington State: Earthquake hazards and the usefulness of geophysics for creating images of the geology under urban areas.
- Wyoming: The scientific and societal utility of understanding how mountains are formed.
- South America: How tracking earthquake occurrence can help us understand if communities should be concerned about earthquake hazards.

Writing and Editing

Health and Economics of Eating Blog

For several years now, I often hear in conversation, or in the media that it is “too expensive to eat healthy”. As a scientist, I wanted to find support for this sentiment, so I started collecting data from my own life for how expensive it is for me to eat what I have learned is healthy. This blog is a companion to a book I'm writing about this data and the articles combine the topics of health and eating delicious food all on a budget.

<https://www.thethriftytable.com>

Facebook: @TheThriftyTable

Published Stories

Unwanted Guests, February 2019, *Readers Write: Guests*, The Sun Magazine
Dr. Mom, November 2018, *Readers Write: Men & Women*, The Sun Magazine

Other Web-Published Articles

What is Truth to This Scientist?

7/29/18 Medium

<https://medium.com/@meganlanderson/what-rocks-taught-me-about-truth-4694def6bbb7>

Why Oh Why Do People Keep Eating at McDonald's? 3/6/18 Medium
<https://medium.com/@meganlanderson/why-oh-why-do-people-keep-eating-at-mcdonalds-434e3effe8c4>

30 Seconds – A Life Changed 12/17/16 Quiet Revolution
<https://www.quietrev.com/portraits/megan-anderson/>

Science Technical Writing

- Authored or coauthored 32 journal articles and geologic maps.

Journal Reviewer 2005-2017

- Journal articles reviewed in: Geology, Geophysical Research Letters, Geophysical Journal International, Journal of Geophysical Research, Lithosphere, Geosphere, Nature

Reviewer Awards

2014 Geophysical Journal International **Outstanding Reviewer**
2011 Lithosphere Journal **Exceptional Reviewer**

USGS Ask A Geologist 1999-2000

- Answered two questions per week submitted by the public to the “Ask-A-Geologist” web site.
- Researched topics both inside and outside of my geologic sub-discipline and translated what I found for a layperson to understand.

High School Yearbook Co-Editor 1993-94

- Responsible for managing yearbook staff; theme, graphic design and layout decisions; copy editing and photo presentation.

PUBLICATIONS-RELATED TECHNICAL EXPERTISE

Photographic

- 20 years experience using **Photoshop and Illustrator** for photo/raster manipulation and vector figure creation.
- Three years experience taking, developing and manipulating photos for the high school yearbook.
- Two week high school summer workshop in basic photo composition, depth of field, exposure and lighting.

Analytical

- Adept in the use of **ArcMap** and other **GIS software** for data manipulation and map creation.
- Proficient use of **Excel** for data analysis, manipulation and visual aid creation.