

CURRICULUM VITAE
PAMELA A. SPECIALE
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PRIMARY RESEARCH INTERESTS

Rheology of the upper mantle, mechanisms of strain localization, experimental rock mechanics

ACADEMIC APPOINTMENTS

Graduate Research Assistant June 2014–present
Department of Geological Sciences, Jackson School of Geosciences
University of Texas at Austin

EDUCATIONAL BACKGROUND

B.S. Geological Sciences, University of Texas at Austin May 2013

RESEARCH EXPERIENCE

Longevity of strain localization associated with dynamic recrystallization of olivine 2014–present

Dr. Whitney Behr, Advisor

- Examine the conditions under which dynamic recrystallization leads to permanent, as opposed to transient, strain localization in experimentally deformed olivine aggregates.

A naturally-constrained orthopyroxene piezometer 2013–present

Dr. Whitney Behr, Advisor

- Established a relationship between flow stress and dynamically recrystallized orthopyroxene grain sizes in naturally-deformed peridotites, and calibrated them to stress magnitudes based on the well constrained, empirically-derived olivine piezometer.

Zircon ages from the Beypazari granitoid pluton: tectonic implications 2011–2013

Dr. Elizabeth Catlos, Advisor

- Explored the magmatic origin and tectonic history of the Beypazari granitoid, a Late Cretaceous granitic intrusion in north central Turkey.
- Analyzed zircon age data obtained with an ion microprobe.
- Developed a tectonic model to illustrate the interpreted geodynamic evolution of the pluton.

FIELD EXPERIENCE

Whipple Mountain Metamorphic Core Complex. Dr. Whitney Behr, Supervisor 2014

- Learned to identify shear sense indicators along an exhumed detachment fault.

Field Camp. Drs. Mark Helper and Randy Marrett, Supervisors 2013

- Studied the stratigraphy and structure of exposures in TX, NM, CO, WY, MT, ID and UT.

Philippines. Drs. Mark Cloos and Beyani Cardenas, Supervisors 2013

- Learned about volcanic eruption styles and hazards in the archipelago.
- Visited outcrops of ophiolitic assemblages on Palawan.

Mason Mountain Wildlife Management Area. Dr. Mark Helper, Supervisor 2012

- Developed an ArcGIS map for use in determining available grazing land.

Arbuckle/Ouachita Mountains. Dr. Mark Cloos, Supervisor 2011

- Studied the large-scale structure of the Ouachita Mountains in Oklahoma.

PEER-REVIEWED GEOSCIENCE PUBLICATION

P.A. Speciale, E.J. Catlos, G.O. Yildiz, T.A. Shin, and K.N. Black (2014). Zircon ages from the Beypazari granitoid pluton (north central Turkey): tectonic implications. *Geodinamica Acta*, DOI:10.1080/09853111.2013.858955

PEER REVIEW

Invited reviewer for *International Geology Review*.

2013

POSTERS AND ABSTRACTS

P. Speciale, W.M. Behr (2014). A naturally-constrained orthopyroxene piezometer. Abstract, American Geophysical Union.

P. Speciale, W.M. Behr (2014). A naturally-constrained orthopyroxene piezometer. Third Annual Jackson School of Geosciences Symposium.

P. Speciale, E.J. Catlos, G.O. Yildiz, and K. Black (2013). Geochronology and geochemistry of the Beypazari granitoid, north central Turkey: tectonic implications. Geological Society of America, South Central Section meeting.

P. Speciale, E.J. Catlos, G.O. Yildiz, and K. Black (2013). Geochronology and geochemistry of the Beypazari granitoid, north central Turkey: tectonic implications. Second Annual Jackson School of Geosciences Symposium.

P. Speciale, E.J. Catlos, G.O. Yildiz, and K. Black (2012). Investigating the geochronology and geochemistry of Beypazari granites, central Turkey. First Annual Jackson School of Geosciences Symposium.

E.J. Catlos, T.A. Shin, **P. Speciale**, G.O. Yildiz, and K. Black (2012). Linked magmatic events in central Turkey: geochemistry and geochronology of the Beypazari and Sivrihisar granitoids. Geophysical Research Abstract, European Geosciences Union, General Assembly.

SCHOLARSHIPS, HONORS AND AWARDS

660A/B Field Camp Scholarships	2013
College Scholar, University of Texas at Austin Honors Day	2013
SIPES Foundation Earth Science Scholarship, McCullough Fund Award	2012
Jackson Undergraduate Support Fund	2013
Distinguished College Scholar, University of Texas at Austin Honors Day	2012
Undergraduate Research Fellowship, University of Texas at Austin	2012
Undergraduate Scholarship to Support Geosciences Students	2012
Jackson Undergraduate Support Fund	2012
Ann and Henry Hamman Scholarship in Geosciences	2012
Houston Geological Society Foundation Undergraduate Scholarship	2012
Bill D. Holland Endowed Presidential Scholarship	2011

SKILLS AND INSTRUMENTS

Griggs rig

Philips FEI/XL30 scanning electron microprobe

Technosyn Cold Cathode Luminoscope Model 8300 Mk11

FEI Nova NanoSEM 420 field emission SEM with Gatan Chroma CL

JEOL JXA-8200 electron microprobe

PROFESSIONAL AFFILIATIONS

American Geophysical Union (AGU)

Austin Geological Society (AGS)

Geological Society of America (GSA)

National Association of Geoscience Teachers (NAGT)