

EMILY E. RODRIGUEZ

Curriculum Vitae

Ph.D. Candidate | University of Arizona | Department of Geosciences

University of Arizona
Department of Geosciences
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EDUCATION

UNIVERSITY OF ARIZONA | Tucson, AZ

Ph.D. in Geosciences

Anticipated: May 2021

Focus: Seismology, Seismic imaging, South America

UNIVERSITY OF FLORIDA | Gainesville, FL

M.S. in Geology

May 2017

Thesis: "Southern Chile crustal structure: Responses to ridge subduction and terrane assembly of the Patagonian microplate"

B.S. in Geology

August 2015

Minors: Physics, Anthropology

EXPERIENCE

POSITIONS HELD

Graduate Research and Teaching Assistant

University of Arizona

2017 – present

Graduate Research and Teaching Assistant

University of Florida

2015 – 2017

TEACHING

Dinosaurs – GEOS 216

Fall 2019

University of Arizona – Grader

Introduction to Geophysics – GEOS 322

Spring 2019

University of Arizona – Lab Instructor, Guest Lecturer

Introduction to Oceanography – GEOS 212

Fall 2017

University of Arizona – Grader

Introduction to Earth Sciences – ESC 1000

Spring 2017

University of Florida – Grader

Physical Geology – GLY 2010

Fall 2015, 2016

University of Florida – Lab Instructor, Guest Lecturer

Geology of American National Parks – GLY 3163

Spring 2016

University of Florida – Grader

FIELD WORK

SEISMOLOGY

Lassen Peak, CA Nodal Deployment – Deployment and demobilization

Jul., Aug. 2019

Teton Fault, WY Nodal Deployment – Deployment

June 2018

Joshua Tree, CA Nodal Deployment – Deployment and demobilization

Sept., Oct. 2017

CHILLAX (Chile-Illapel Aftershock Experiment) – Servicing and demobilization

May, Oct. 2016

OTHER

University of Florida Geologic Field Camp

Summer 2015

PUBLICATIONS

PEER REVIEWED

**submitted/under review*

- (3*) Agrawal, S., Eakin, C.M., Portner, D.E., **Rodríguez, E.E.**, and Beck, S.L. (2019), "The deformational journey of the Nazca Slab from seismic anisotropy" *in review*, Geophysical Research Letters.
- (2*) Portner, D.E., **Rodríguez, E.E.**, Beck, S., Zandt, G., Scire, A., Rocha, M.P., Bianchi, M.B., Ruiz, M., França, G.S., Condori, C., and Alvarado, P. (2019) "Detailed structure of the subducted Nazca slab into the lower mantle derived from continent-scale teleseismic P-wave tomography", *in review*, Journal of Geophysical Research.
- (1) **Rodríguez, E.E.** and Russo, R.M., (2019), "Southern Chile Crustal Structure from Teleseismic Receiver Functions: Responses to Ridge Subduction and Terrane Assembly of Patagonia", *Geosphere*, doi:10.1130/GES01692.1.

SELECTED CONFERENCE ABSTRACTS

- Beck, S., Wagner, L., Bishop, B., Porter, R., Linkimer, L., Portner, D., **Rodríguez, E.**, Alvarado, P., Ammirati, J.B., Scire, A., Long, M., Tavera, H., Condori, C., and Zandt, G., (2019), "A tale of two modern flat slabs along the South America Convergent Margin", *8th International Symposium on Andean Geodynamics*, Quito, Ecuador.
- Rodríguez, E.E.**, Portner, D.E., Beck, S.L., Rocha, M., Bianchi, M., Assumpção, M., Ruiz, M., Alvarado, P., and Condori, C., (2019), "Mantle Dynamics of the Andean Subduction Zone from Teleseismic S-Wave Tomography", *8th International Symposium on Andean Geodynamics*, Quito, Ecuador.
- Portner, D.E., **Rodríguez, E.E.**, Beck, S.L., Zandt, G., Scire, A., Rocha, M., Bianchi, M.B., Ruiz, M., Alvarado, P., França, G.S., Condori, C., and Lynner, C., (2019), "A new, comprehensive model for the geometry of the Nazca slab down to 1,200 km depth derived from teleseismic P-wave tomography and earthquake data", *8th International Symposium on Andean Geodynamics*, Quito, Ecuador.
- Agrawal, S., Eakin, C.M., Portner, D.E., and **Rodríguez, E.E.**, (2019), "Constraining the dynamics of the subducting Nazca slab from seismic anisotropy" *2019 EGU Meeting*, Vienna, Austria, Abstract X2.217.
- Rodríguez, E.E.**, Portner, D.E., Beck, S.L., Rocha, M., and Assumpção, M., (2018), "Mantle heterogeneity across the Andean subduction zone from finite-frequency teleseismic S-wave tomography" *2018 Fall AGU Meeting*, Washington, D.C., Abstract DI23B-0037.
- Portner, D.E., **Rodríguez, E.E.**, Beck, S.L., Zandt, G., Scire, A., Rocha, M., and Assumpção, M., (2018), "Inferred Variations in Thermal and Rheological State of the Nazca Slab from High-Resolution Tomographic Imaging" *2018 Fall AGU Meeting*, Washington, D.C., Abstract DI22A-03.
- Rodríguez, E.E.**, Portner, D.E., Beck, S.L., Rocha, M., and Bianchi, M., (2018), "Mantle heterogeneity across the Andean subduction zone from preliminary teleseismic S-wave tomography" *2018 IRIS Workshop*, Albuquerque, NM, Abstract A17.

- Portner, D., Beck, S., Zandt, G., **Rodríguez, E.E.**, Scire, A., Rocha, M., and; Assumpção, M (2018) "Variability in slab behavior within the South America subduction zone: New observations from continent-scale teleseismic P-wave tomography" *2018 IRIS Workshop*, Albuquerque, NM, Abstract A18.
- Beck, S.L., Portner, D.E., Bishop, B.T., Koch, C., **Rodríguez, E.E.**, Lynner, C., Ryan, J.C., Ward, K.M., Delph, J.R., Wagner, L.S., Alvarado, P.A., Porter, R.C., and Scire, A., (2018), "Contributions of Modern Seismic Imaging to Understanding the Andean Convergent Margin", *2018 Seismological Society of America Annual Meeting*.
- Rodríguez, E.E.** and Russo, R.M., (2016), "Crustal Thickness and Structure in Southern Chile: Patagonia plate assembly structures and continental arc modifications" *2016 Fall AGU Meeting*, San Francisco, CA, Abstract T11B-262.
- Roecker, S.W., Russo, R.M., Comte, D., Carrizo, D., Peyrat, S., Opazo, T., Peña, G., Farrell, M.E., Moor, J., Glick, R., and **Rodríguez, E.E.**, (2016), "Preliminary Results From the Chile-Illapel Aftershock Experiment (CHILLAX)" *2016 Fall AGU Meeting*, San Francisco, CA, Abstract S21B-2715.
- Rodríguez, E.E.**, Russo, R.M., Comte, D., Mocanu, V.I., Gallego, A., and Murdie, R.E., (2015), "Structural Responses to the Chile Ridge Subduction, Southern South America" *2015 AGU Fall Meeting*, San Francisco, CA, Abstract T31B-2865.

HONORS AND AWARDS

ChevronTexaco Geology Summer Fellowship, University of Arizona	2018, 2019
Peter J. Coney Scholarship, University of Arizona	2019
John & Nancy Sumner Scholarship, University of Arizona	2019
Sulzer Earth Sciences Scholarship, University of Arizona	2017, 2019
Best Geophysics Presentation, Geosciences Colloquium, University of Arizona	2018
Galileo Circle Scholar, University of Arizona	2018
Bert S. Butler Scholarship, University of Arizona	2017
Thompson Scholarship, University of Florida	2015 – 2017