# **EMILY E. RODRIGUEZ**

### Curriculum Vitae

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

University of Arizona Department of Geosciences 1040 E. 4th St. Tucson, AZ 85721 rodrigueze@email.arizona.edu https://emilyerodriguez.com/

### **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

## **PUBLICATIONS**

### PEER REVIEWED

- 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.
- **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", *in review, Geosphere*.

#### SELECTED CONFERENCE ABSTRACTS

- 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.
- 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

### **COMMUNITY INVOLVEMENT**

Association of Women Geoscientists (AWG) Southern Arizona Chapter -

Vice President, Webmaster	2018 - 2019	
Graduate Student GeoClub - Treasurer, Event Coordinator	2018 - present	
College of Science's Science Speakeasy – Scientist "on tap"	2019	
Associate Graduate Council for the College of Science – Student Representative	2018 - 2019	
Cooperative Institute for Dynamic Earth Research (CIDER) Summer Program – Participant 2018		
Tucson Festival of Books - ScienceCity Volunteer	2018	
GeoDaze Annual Geoscience Symposium – Fundraiser Chair	2017 - 2019	
Tucson Gem and Mineral Show Junior Education Booth - Volunteer	2018, 2019	
Can You Dig It? Community Outreach Program - Volunteer	2016, 2017	
GeoGators K-12 Education Outreach Program – Volunteer	2016, 2017	
Florida Museum of National History - Data Entry, Lepidoptera Lab Assistant	2014 - 2015	

### PROFESSIONAL SOCIETY MEMBERSHIPS

Association of Women Geoscientists (AWG)	2018 - present
Seismological Society of America (SSA)	2016 - present
American Geophysical Union (AGU)	2015 - present
Geological Society of America (GSA)	2014 - present