

## Grace Margaret Beaudoin

(she, her, hers)

Education Specialist

Lunar and Planetary Institute

Universities Space Research Association

Houston, Texas 77058, USA

Phone: 281-486-2164; Email: gbeaudoin@lpi.usra.edu

### ***Employment***

---

2021-present      Education Specialist, LPI, USRA  
Assists with public engagement efforts as a member of LPI's  
Education and Public Engagement Team

### ***Education***

---

2016-present    Ph.D.    Geological Sciences, University of Texas at Austin  
*(Dr. Jaime Barnes, advisor)*

2011-2015      B.A.      Geology, University of California at Berkeley  
*Honors thesis: Transition of Franciscan eclogite to blueschist in a  
metamorphic block from Jenner, CA (Dr. Sean Mulcahy, advisor)*

### ***Awards***

---

2020              University of Texas at Austin Graduate School Summer 2020 Fellowship

2020              Outstanding Teaching Assistant Award from the Jackson School of Geosciences  
for Spring 2020 semester

2019-2020      Endowed Presidential Scholarship (EPS) from the Jackson School of Geosciences

2019              Folk/McBride Petrography Contest, 2nd Place, Graduate division, Jackson  
School of Geosciences

2018              ExxonMobil special recognition Geological Society of America Graduate Student  
Research Grant

2018              Folk/McBride Petrography Contest, 2nd Place, Graduate division, Jackson  
School of Geosciences

2017              Geological Society of America Graduate Student Research Grant

2016              Jackson School of Geosciences Recruitment Fellowship

2015              Highest Honors in Geology, Department of Earth and Planetary Science, Univ. of  
California, Berkeley

2014-2015      Al Ragan Track & Field Scholarship for Academic and Athletic Excellence,  
Univ. of California, Berkeley

### ***Teaching Experience***

---

2020              Head Teaching Assistant, GEO 401 Physical Geology, Jackson School of  
Geosciences, Univ. of Texas, Austin, Spring semester 2020

*Helped transition the course from an in-person setting to a virtual setting midway through the semester. Prepared and delivered lab lectures, demonstrations, assignments, and assessments in an online format. Authored lab exams for the 180-person, introductory geology course.*

- 2018 Head teaching Assistant, GEO 416K Earth Materials, Jackson School of Geosciences, Univ. of Texas, Austin, Fall semester 2018  
*Responsible for lab lectures and demonstrations, preparing lab materials (instruments, samples, assignments), and writing three lab practical exams. Teaching topics included mineral hand specimen ID, crystallography, petrographic microscopy, and basic petrology.*
- 2017 Teaching Assistant, GEO416K Earth Materials, Jackson School of Geosciences, Univ. of Texas, Austin, Fall semester 2017  
*Teaching topics included mineral hand specimen ID, crystallography, petrographic microscopy, and basic petrology.*

### ***Outreach & Volunteering***

---

- 2020 GeoFORCE Educational Coach (Virtual)  
*- GeoFORCE is a K-12 outreach program designed to increase the number and diversity of students pursuing STEM degrees and careers. Each summer GeoFORCE takes > 300 high school students on geological field trips.*  
*- I participated in two of the 2020 summer academies: 10<sup>th</sup> Grade Academy: American Southwest and 11<sup>th</sup> Grade Academy: Pacific Northwest.*  
*- Due to COVID-19 precautions, academies were held virtually, demanding all new curriculum. I was responsible for sourcing and developing materials for online teaching activities to reinforce lessons presented in virtual lectures.*
- 2020 Organized and participated in introductory geology lessons with fellow graduate students at Bernice Kiker Elementary School, Austin, TX
- 2020 Organized and operated a Minerals & Fossils booth at Tom Ford Elementary School's Annual STEAM Fair, Georgetown, TX
- 2019 Organized and presented an introductory Earth science lesson to students (3-9 years old) at science-themed summer camp, Goddard School, Leander, TX
- 2019 Presented at "Hot Science, Cool Talks", a science education and public outreach program, Univ. of Texas, Austin. Hands-on demonstrations aimed at educating the public about planetary differentiation and comets.
- 2018 STEAM Fair volunteer at UT Austin Geosciences Minerals & Fossils booth, Tom Ford Elementary School, Georgetown, TX

### ***Presentations***

---

- 2020 The evolution of the halogen budget in ophiolites from the Western Alps, **Beaudoin, G.M.**, Barnes, J.D., John, T., Hoffmann, J.E.  
Virtual iPoster presentation at the 2020 AGU Fall Meeting.

- 2019 Global halogen flux of subducting oceanic crust, **Beaudoin, G.M.**, Barnes, J.D., John, T., Hoffmann, J.E.  
Oral presentation at the 2019 Goldschmidt Conference in Barcelona, Spain.
- 2018 From AOC to eclogite: halogen behavior during devolatilization in the forearc, **Beaudoin, G.M.**, Barnes, J.D., John, T.  
Poster presentation at the 2018 Goldschmidt Conference in Boston, MA.
- 2018 Halogen cycling during prograde subduction zone metamorphism and devolatilization, **Beaudoin, G.M.**, Barnes, J.D., John, T.  
Poster presentation at the Jackson School of Geosciences Research Symposium.

### ***Research Experience***

---

- 2016-present Graduate Research Assistant, Jackson School of Geosciences, Univ. of Texas, Austin
- 2014-2015 Undergraduate Research Assistant, Dept. of Earth and Planetary Science, Univ. of California, Berkeley
- 2013-2014 Undergraduate Research Apprentice, Museum of Paleontology, Univ. of California, Berkeley

### ***Publications***

---

- 2020 Urann, B.M., Le Roux, V., John, T., **Beaudoin, G.M.**, Barnes, J.D. The distribution and abundance of halogens in eclogites: an *in situ* SIMS perspective of the Raspas Complex (Ecuador). *American Mineralogist* 105, 307-318.  
<https://doi.org/10.2138/am-2020-6994>
- 2019 Barnes, J.D., Penniston-Dorland, S.C., Bebout, G.E., Hoover, W., **Beaudoin, G.M.**, Agard, P. Chlorine and Lithium Behavior in Metasedimentary Rocks during Prograde Metamorphism: A Comparative Study of Exhumed Subduction Complexes (Catalina Schist and Schistes Lustrés). *Lithos* 336-337, 40-53.  
<https://doi.org/10.1016/j.lithos.2019.03.028>
- 2015 **Beaudoin, G.M.** Undergraduate Honors Thesis: Transition of Franciscan eclogite to blueschist in a metamorphic block from Jenner, CA, Dept. of Earth and Planetary Science, Univ. of California, Berkeley, Adviser: Sean Mulcahy

### ***Work in progress***

- Pending re-submission* **Beaudoin, G.M.**, Barnes, J.D., John, T., Hoffmann, J.E. Global halogen flux of subducting oceanic crust. *Earth and Planetary Science Letters*.
- In prep. **Beaudoin, G.M.**, Barnes, J.D., John, T., Hoffmann, J.E. Utilizing exhumed metamorphic terranes in the Western Alps to investigate progressive halogen (F, Cl, Br, I) devolatilization from subducting ocean crust.
- In prep. **Beaudoin, G.M.**, Barnes, J.D., John, T., Chatterjee, R., Stockli, D. Halogen transport during HP vein formation: Vein transects from Raspas, Monviso, New Caledonia, and Tianshan eclogites provide insights into volatile fluxes during prograde subduction.

***Certification***

---

- 2019-2021    Advanced Teaching Preparation Certificate (on going)  
*Teaching preparation series conducted by the Faculty Innovation Center at the Univ. of Texas, Austin*
- 2019        Inclusive Classrooms Leadership Certificate  
*Seminar series conducted by the Division of Diversity and Community Engagement (DDCE) and the Graduate School at the Univ. of Texas, Austin*
- 2017        NOLS Wilderness First Aid Training

***Professional Societies***

---

- |                                  |                                      |
|----------------------------------|--------------------------------------|
| Geological Society of America    | European Association of Geochemistry |
| American Geophysical Union       | Cal Alumni Association               |
| Mineralogical Society of America |                                      |

***Relevant Coursework***

---

**Undergraduate studies**

- General Astronomy  
Intro to Astrophysics  
The Planets  
The Planet Earth  
Mineralogy & Petrology  
Geomorphology  
Biogeography  
Geochemistry  
Isotopic Geochemistry  
Case Studies of Earth Systems  
History and Evolution of Planet Earth

**Graduate studies**

- Continental Tectonics  
Isotope Geology  
Analytical Methods: Electron-Microbeam Tech.  
Advanced Metamorphic Petrology  
Earth in Deep Time  
Physics of the Earth  
Physical Chemistry  
Ins and Outs of Subduction Zones  
Structural Geology (GEO 380C)  
High Temperature Geochemistry  
Python for Geoscientists