Picture captured by students with their own old GoPro on a high altitude balloon that landed on a backyard barbeque. W.R.A.P. students, 2014

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My journey

- Wanted to work in space, but...
- Music major; then geology rocked my world
- Educator since 2004:
  - Outdoor ed, high school, college
- Students are my driver
- Teaching space globally
- Astronomy Ed Projects
- Space as a STEM gateway
Authentic opportunities to do science
Earth and Space = Fewest Women and POC

- \(~15\%\) of global astronomers (Cesarsky & Walker, 2010)
- <100 PhDs granted to African American Women (Women in Physics and Astronomy, 2019)
- Non-white PhD in astronomy 1%-5% (NRC, 2013; Women in Physics and Astronomy, 2019)
- IAU Membership is 21% women—but changing!

Science course offerings in schools where at least 80% of students are Black, Latino/a, or Indigenous.
NASEM Call to Action for Science Education

Substantial, disproportionate opportunity gaps to learn science:

Elementary school is CRITICAL!

- STEM Identification (Kim & Sinatra, 2016)
- Resources
- Qualified teachers
- Diverse educator work force

Hardwired to learn science but left out of the landscape: the role of expanding access to quality science education in America for elementary learners

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20 minutes per day to science

90 minutes per day to English/Language Arts

60 minutes per day to mathematics

Average time spent per day in elementary classrooms.
Academic Prioritization Problem

- No AP Course
- Lowest level science
- Not counted towards University requirements
- Lowest number of credentialed teachers
Want to collaborate?
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Space For All: A Multinational Study in Astronomy Education

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