



Mentor Training Session Fall 2024

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These slides were adapted from a previous PROGRESS mentor training led by M. Burt (CSU) and L. Hartten (NOAA/CIRES), and additional contributions from GEO REU colleagues R. Batchelor (CIRES) and V. Sloan (NCAR).

Roadmap

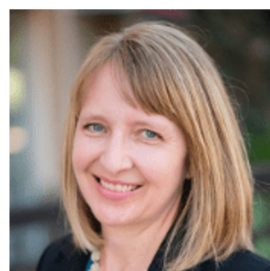
- Introduction to PROGRESS
- Expectations of mentors
- Best practices on effective mentoring



The PROGRESS Leadership Team



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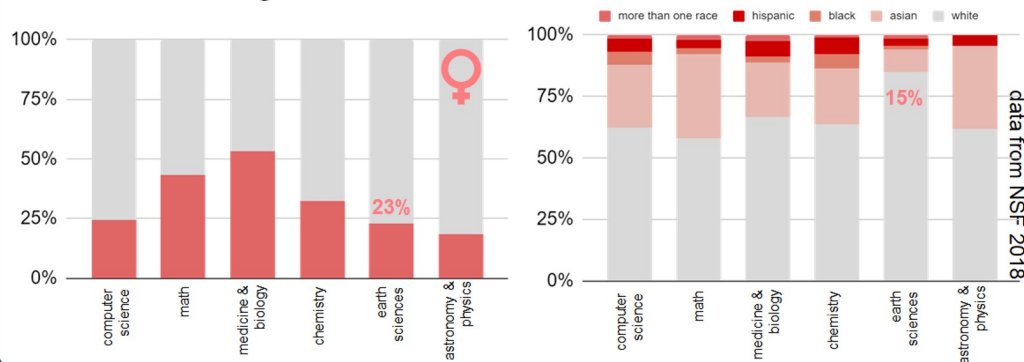
Mica Estrada



NSF Award #'s: 2013318, 2013333, 2013323, 2013312, 2013326

PROGRESS aims to increase the diversity of the geoscience workforce by supporting undergraduate women.

The geosciences represent the lowest diversity of all STEM fields at all levels of higher education.



Gender diverse teams produce better science.

(Bear & Woolley 2011; Campbell et al. 2013)



VectorStock



VectorStock

Lack of gender diversity, perpetuates feeling of not belonging (for all genders).
(Good et al 2012; Diekmann et al. 2010)

PROGRESS provides support via three components: workshops, mentoring relationships, and resources.

Workshops

Geosciences are at the heart of solving global challenges

Career Role Modeling

Professional Skills Development

Leadership Training

Networking Skills



Mentoring

Peer Mentoring via workshop, local events & Facebook group

Group Mentoring via local (campus) and regional networking events each semester

One-on-One mentoring students were matched with a local women geoscientist & encouraged to meet once a semester



Resources

Website

- Scholarship Opportunities
- REU Listings
- History of Gender & STEM
- Photos & Profiles of Scientists

Webinars

- REUs & Application Tips
- Graduate School

Group Me

- Research Opportunities
- Women in STEM News



<https://progress.colostate.edu/>

Eos

ABOUT SPECIAL REPORTS TOPICS PROJECTS NEWSLETTER SUBMIT TO EOS

Mentorship Builds Inclusivity and Belonging in the Geosciences

Four evidence-based approaches implemented through an innovative mentoring program have succeeded at improving retention rates of undergraduate women in the geosciences.

By Melissa A. Burt, Rebecca T. Barnes, Sarah Schatz, Sandra Clinton, and Emily V. Fischer 26 January 2023



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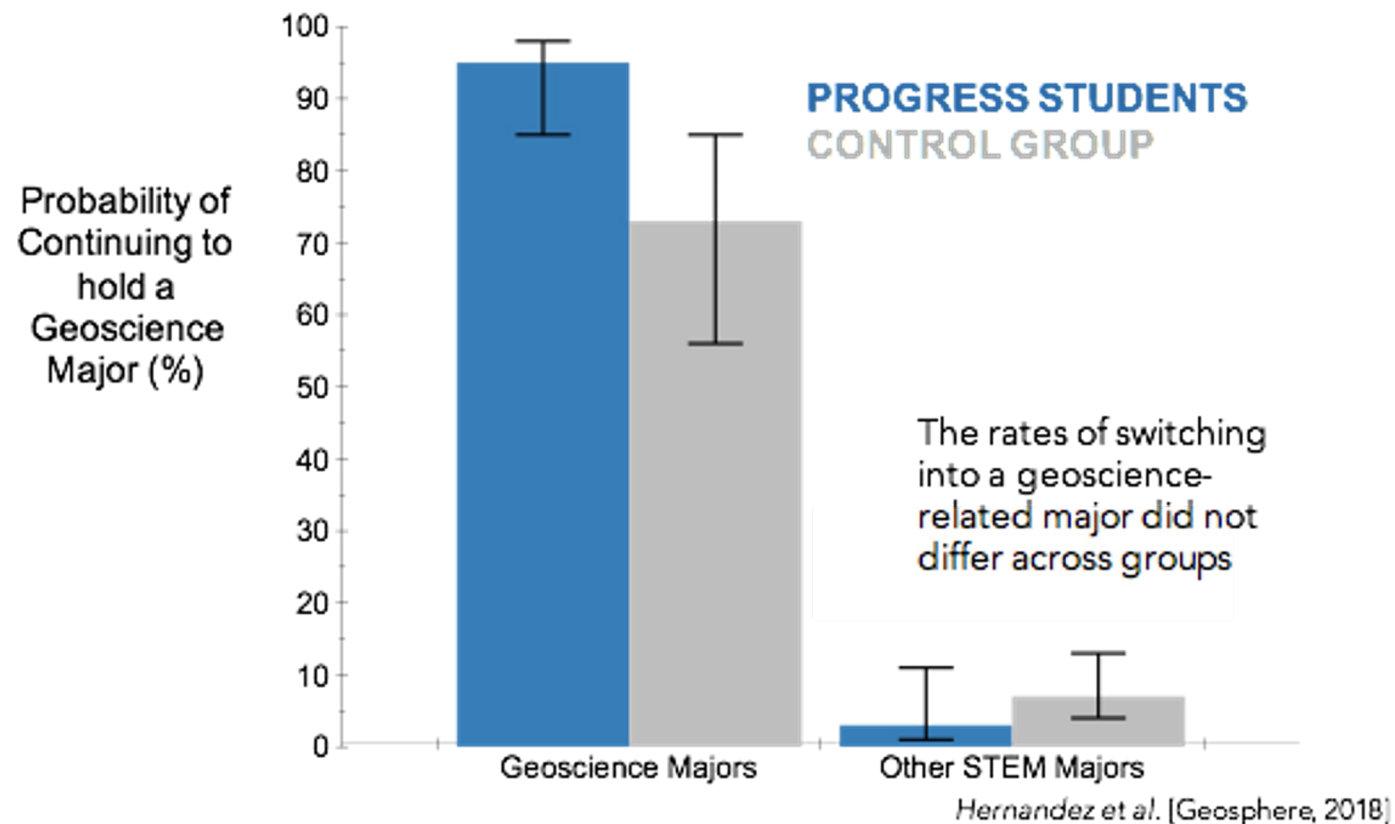
Welcoming Women into the Geosciences

Early results of a program to foster the careers of women entering the geosciences demonstrate the effectiveness of several specific factors.

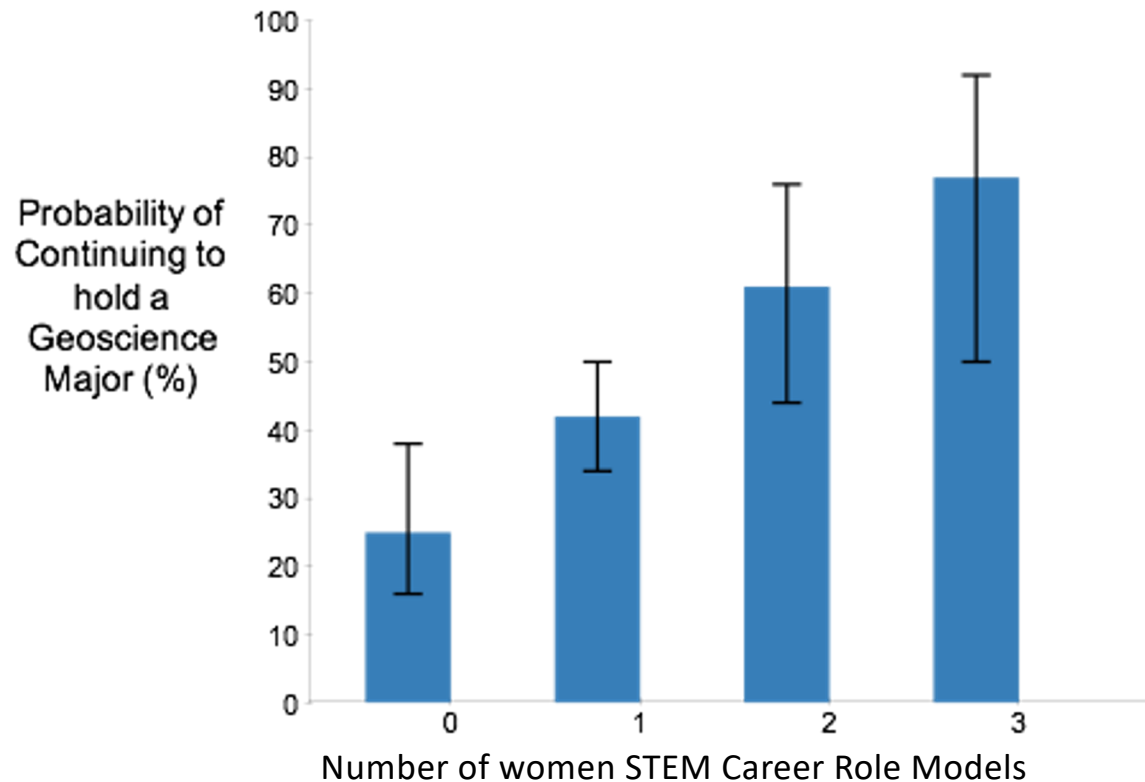
By Emily V. Fischer, A. Adams, R. Barnes, B. Blomquist, Melissa Burt, Sandra Clinton, E. Godfrey, I. Polack, and P. R. Hernandez 3 April 2018



Undergraduate women in PROGRESS have higher rates of persistence in geoscience-related majors (95% vs. 73%).



Persistence of undergraduate women in the geosciences is related to their number of women STEM role models.



Hernandez et al. [Geosphere, 2018]

PROGRESS Keys to success

Inspire

exposure to geoscience careers & role models

Inoculate

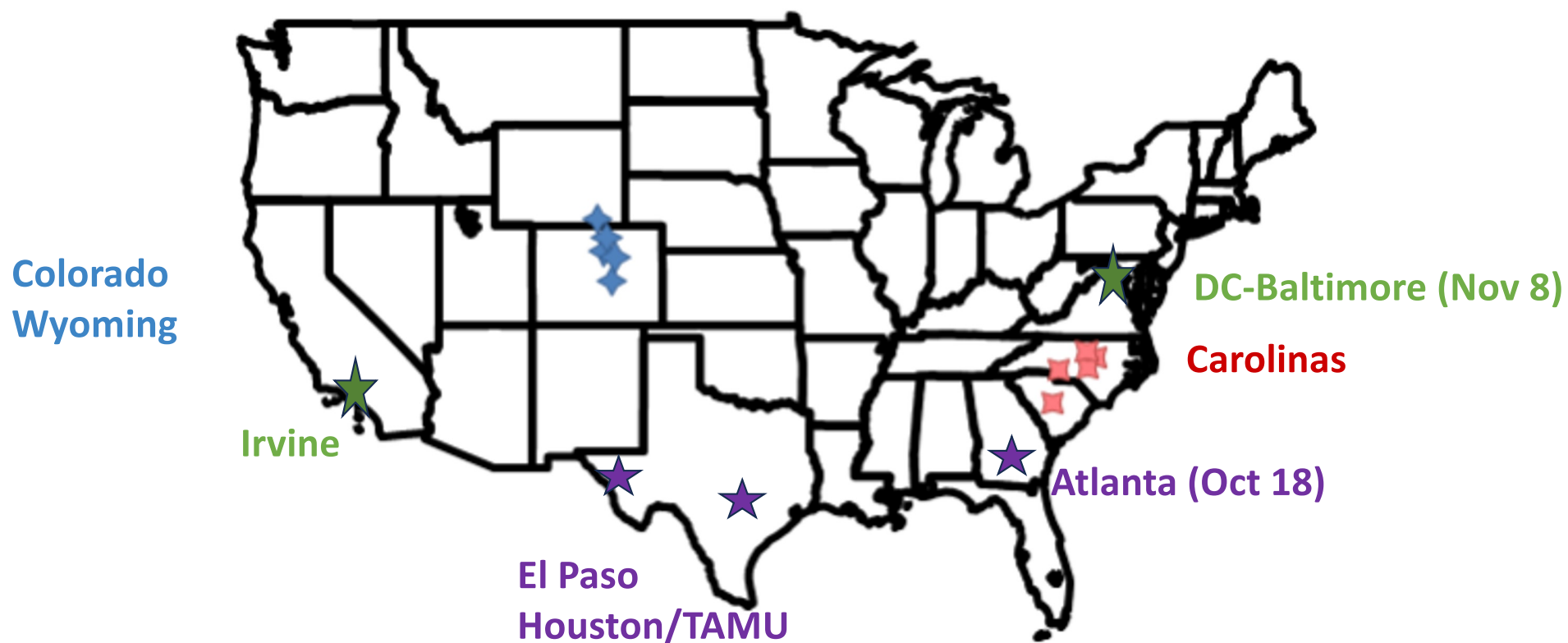
training on how to grow your mentor network, how to be more resilient & overcome obstacles

Introduce

post-workshop introduction to a local geoscientist mentor

Higher scientific identity, greater resilience skills, & increased intention to persist present **only for PROGRESS participants who were matched with a mentor** following the initial workshop

PROGRESS 2.0 is testing efficacy of strategies for program sustainability & scalability



A view into the PROGRESS workshop

Time	Workshop Activities
10:00	Welcome and Community Connections
10:30	Intro to the Earth and Environmental Sciences
10:40	Panel: Pathways to Earth and Environmental Sciences
11:45	Support Network Map
12:30	Lunch
1:15	Panel: What does Mentoring Mean to Me
2:15	Growing Equitable Inclusion
4:00	Communication and Connection Toolkit



Workshop in Maryland 11/8/24

Expectations and time commitment

1. When we notify you, please reach out to your student within 1 week.
Note: Not every prospective mentor will be paired.
2. Arrange for **at least 1 in-person** meeting with your student during the Fall 2024 semester. Your student will be located at your university or nearby.
3. Please offer to stay in touch with your student via email and social media.
Be available if your student reaches out to you.
4. Be mindful of helpful resources or events on your campus that you can share as needed with your student(s). We will provide a list of resources in your region in the follow-up materials.

FAQs

- What if I do not get paired?
 - We will let you know. And will keep you on our list as sometimes we need additional mentors after the first round of pairing.
- How long is the mentoring commitment?
 - We ask for at least 1 meeting – but you are welcome to continue to meet with your mentee. Mentoring is strengthened over time.



Why do you want to mentor?

MENTORING

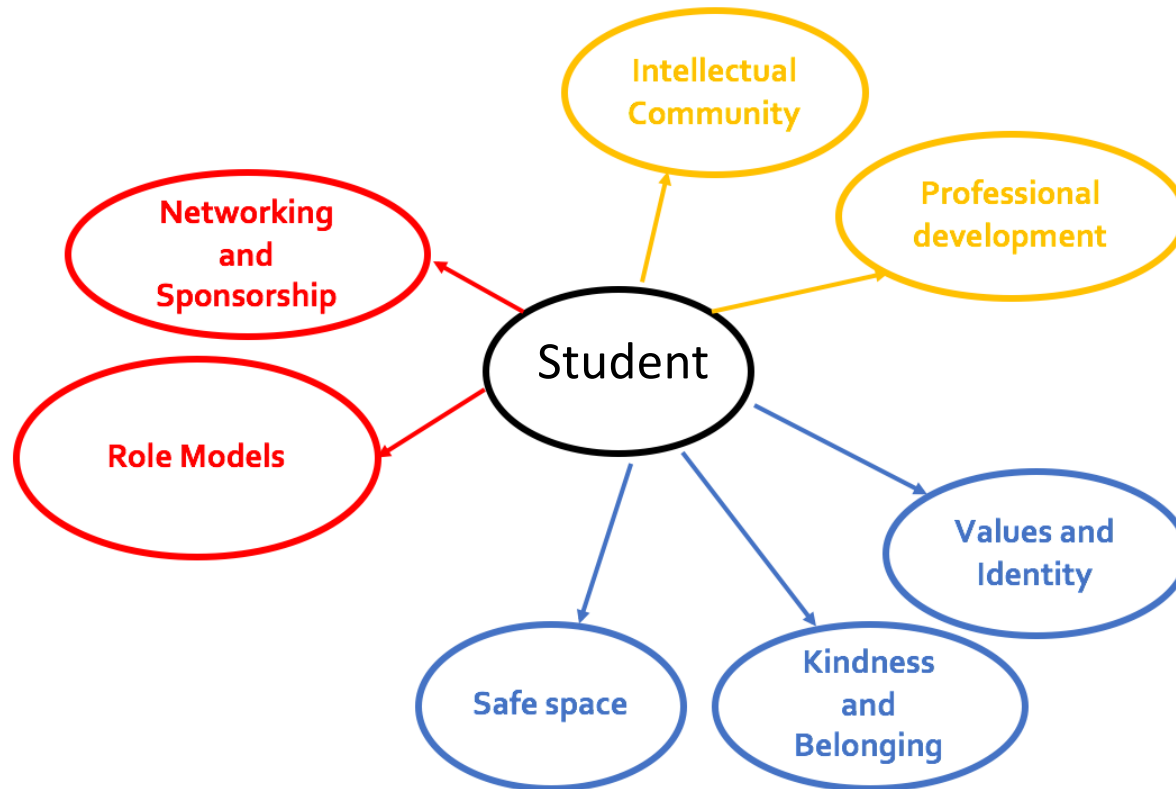
How do you define mentoring or mentorship?

- "Mentorship is a professional, working alliance in which individuals work together over time to support the personal and professional growth, development, and success of the relational partners through the provision of career and psychosocial support."



Source: National Academies of Sciences Engineering & Medicine. (2019). The Science of Effective Mentorship in STEMM. Washington, DC: The National Academies Press.

There are many avenues in which we can support our mentees.



1. We cannot provide support in all of these areas ALL of the time.
2. We can provide support AND open doors...

Join at menti.com | use code **8919 8681**



What benefits do you get from mentoring?

49 responses



Account



Content



Design




Settings



Help &
Feedback

Mentoring is a two-way relationship

influential New perspectives Skill development
relationship satisfaction
excitement knowledge
inspiration connections



We mentor like we were mentored
unless we are thoughtful, become
intentional, and remain open to
learning.

1. Be inclusive in your mentoring

- Is relationship centered
- Values new ideas and creativity
- Holds space for conversation and shared idea generation
- Empowers learning
- Supports bringing one's full self and experiences to their work
- Setting goals and expectations

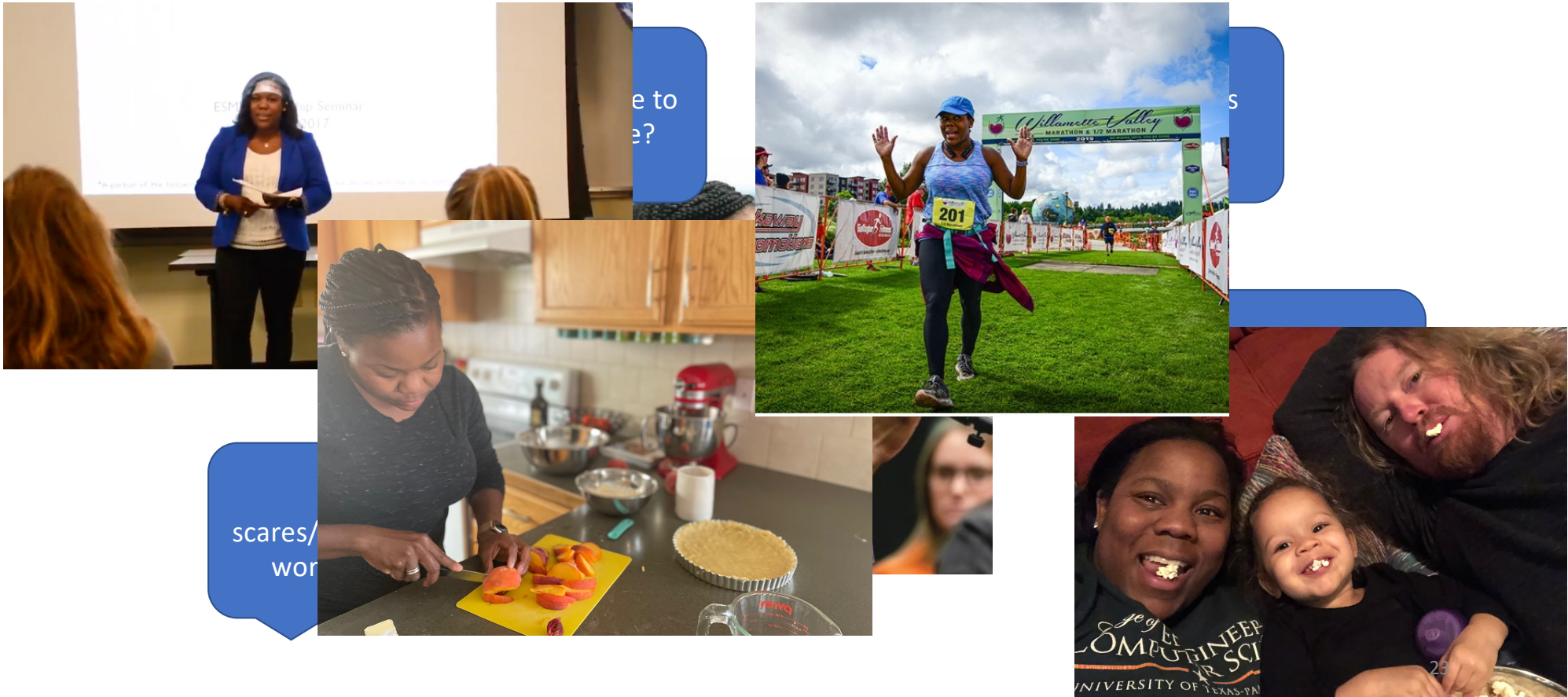


2. Get to know your mentee

- What got you interested in science?
- What matters to you?
- What motivates you?
- What skills are you trying to develop?
- What has it been like for you in [your city/town]?

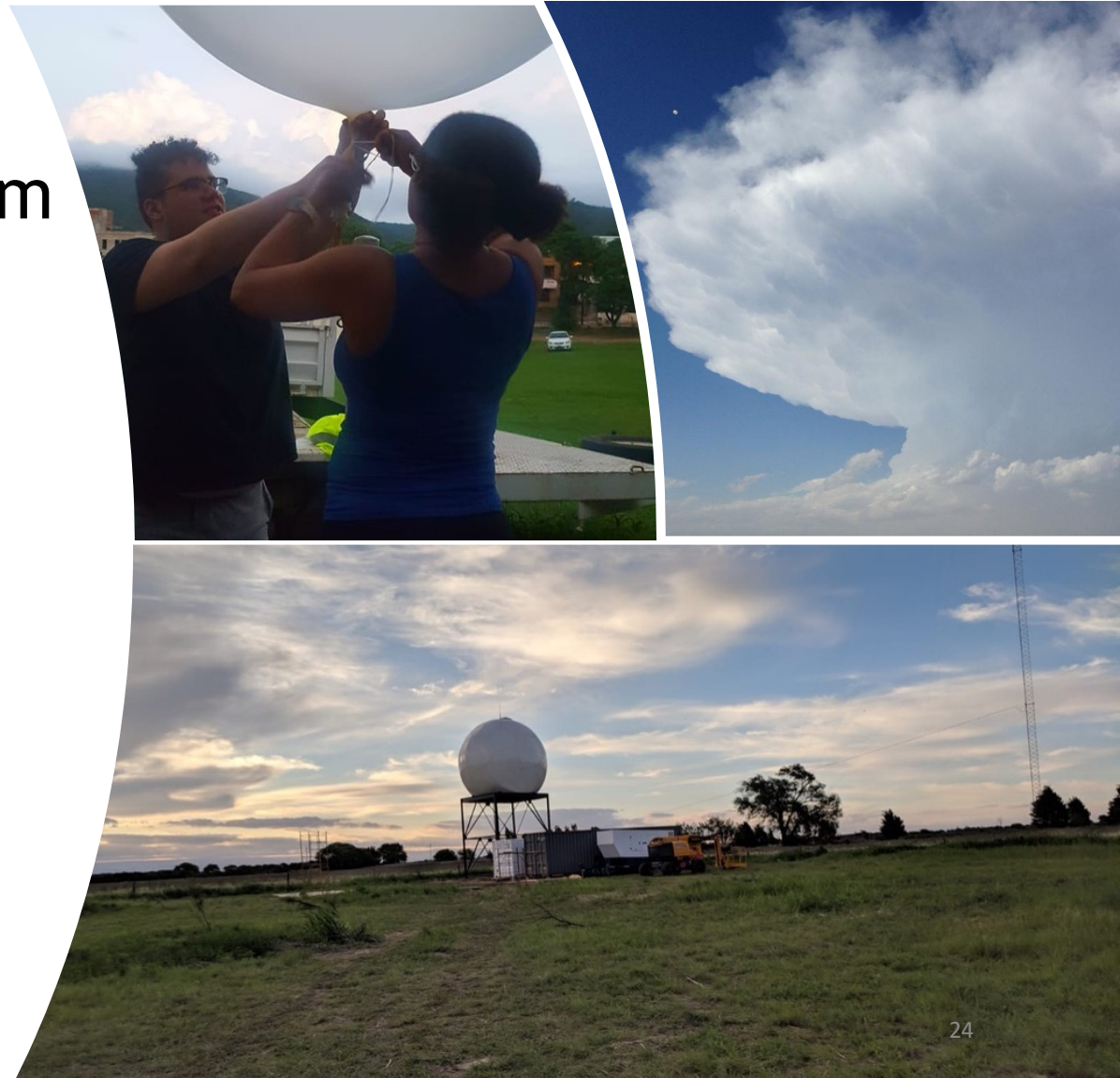


3. Be Curious. Ask questions! Share your own experiences.



4. Share your enthusiasm for your work!

- Share your excitement for the project with photos, videos, news, articles.
- Ground the work in the big picture - why is this important?
- Why do you do and love this work?
- What are some challenges?



5. Avoid absence

- The most common complaint about mentors by undergrads/grad students is that their mentors are MIA (missing in action).
- Maintain consistent communication, and be reliable.



6. Highlight your similarities.

- Studies show that mentees find their relationships with their mentors more valuable when they perceive similarities.



7. Normalize struggle (and coping strategies).

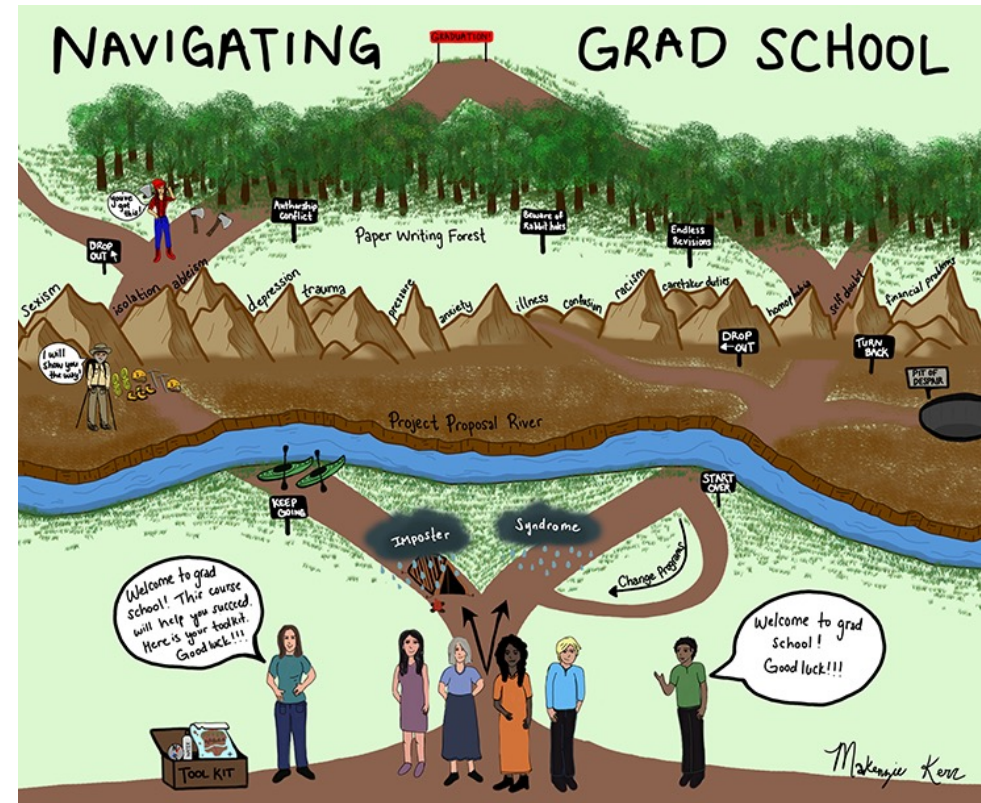
- It is helpful for mentees to perceive their struggles as normal. Mentees frequently misinterpret struggle as personal inadequacies that can't be changed. In reality, academic and personal struggles are common and changeable.
- Share examples and strategies that lead to success following perseverance.



Photo: <https://andriacorso.com/2018/11/14/who-are-you-without-your-struggle/>

8. Recognize challenges

- Racism, micro-aggressions, bias, harassment
- Imposter experience
- Family and health issues
- Uncertainty about the future



9. Show confidence in your mentee's ability to succeed.

- Communicate high expectations for your mentee.
- Communicate confidence in your mentee's ability to succeed.
- Support this with specific examples.



10. Be an active listener.



<https://www.ccl.org/articles/leading-effectively-articles/coaching-others-use-active-listening-skills/>

Getting to know each other

- Breakout rooms (of 2) -- You will have ~**8 minutes**
- Both people should have an active mic (not on mute)
- Nominate a speaker - that person should spend 1-2 minutes talking about themselves.
- The other should practice “Active Listening”; you may use body language but resist the urge to interrupt or respond.
- In the next 1-2 minutes the listener may ask curious questions e.g. “Tell me more about ...” “What ...” “How...” “When you said ...”
- Switch and have the other person talk



How was the 'active listening' experience?

Active Listening Skill – Where we go wrong?

- Have a hard time concentrating on what's being said?
- Think about what to say next, rather than about what the speaker is saying?
- Give advice too soon and suggest solutions to problems before the other person has fully explained their perspective?
- Tell people not to feel the way they do?
- Talk significantly more than the other person talks?

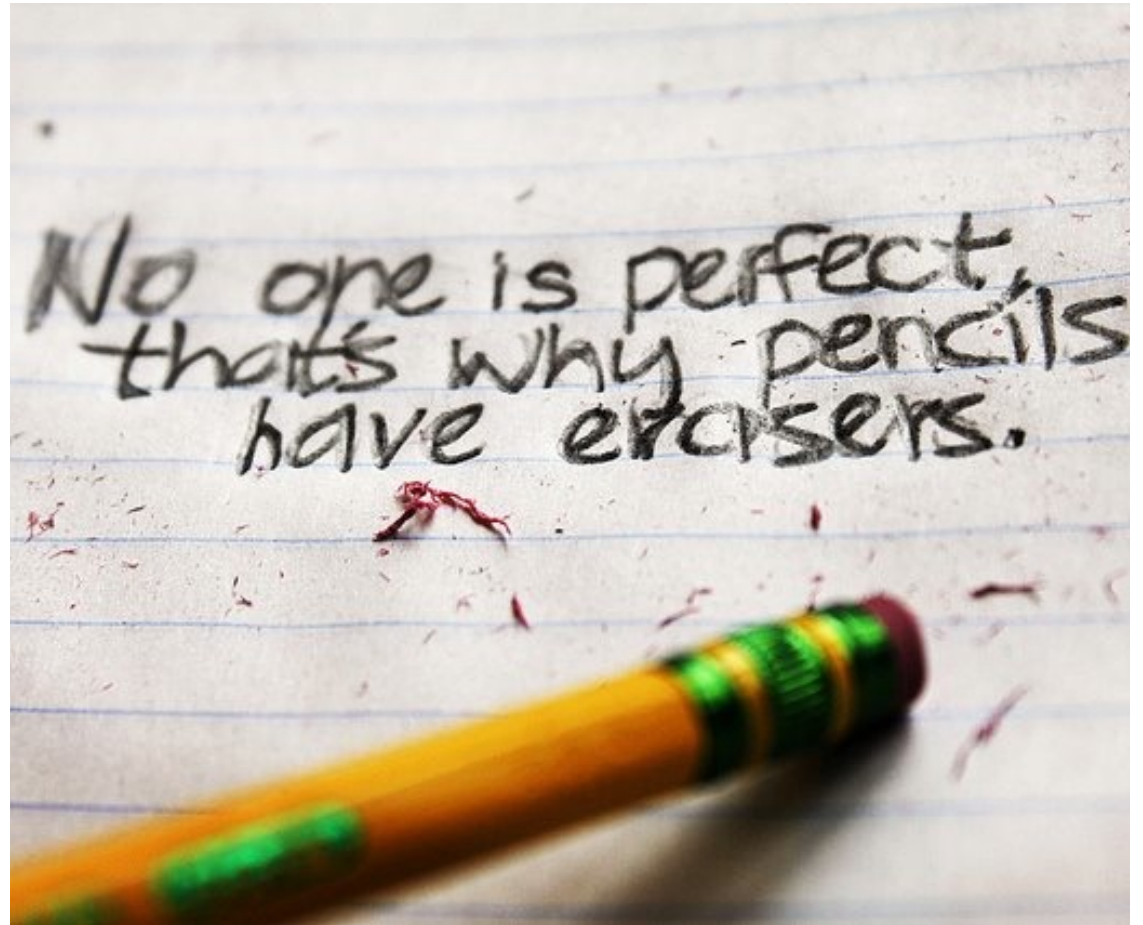
If you answered yes, you're not alone!

So how do you boost those **active** listening skills?

- Limit distractions.
- Pay attention to what's being said, not what you want to say.
- Be okay with silence.
- Encourage the other person to offer ideas and solutions before you give yours.
- Restate the key points you heard and ask whether they're accurate.

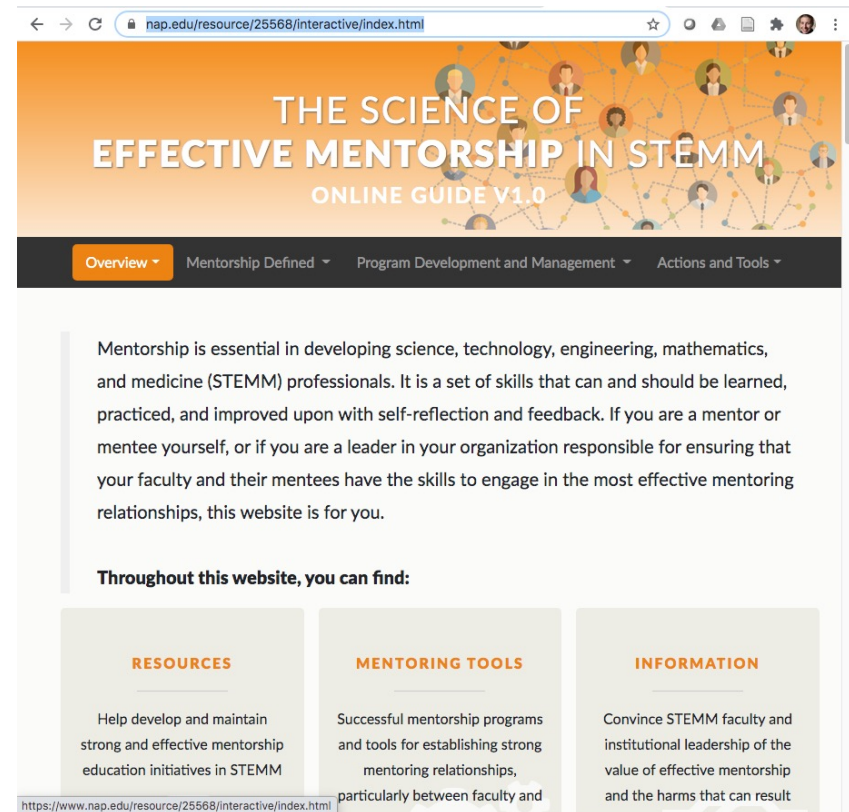
Provide feedback [Practice kindness]

- I noticed that {observe behavior}
- When you do this it {explain impact}
- I would like you to {set expectations}
- Try not to impose your own judgement or interpretation



Everyone can be a better mentor.

1. This is an awesome resource.
2. Online Guide and Podcast
3. Culturally Aware Mentoring

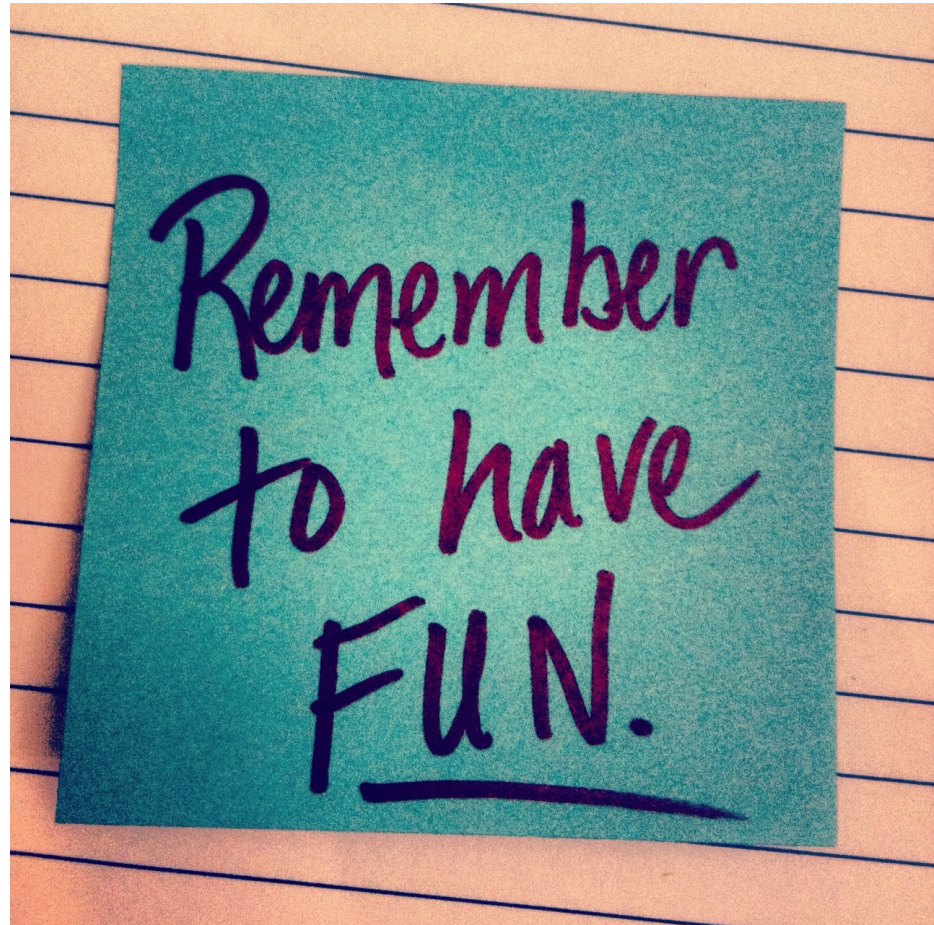


The key to being a great mentor is to help people become more of who they already are – not to make them more like you”
- Suze Orman

Thanks for
participating!

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Specific questions about
PROGRESS:
progressgeoscience@gmail.com



FAQs

- Do mentors need to attend the PROGRESS workshop?
 - No, the workshop is geared to students.
- When will we be notified of our mentee pairing?
 - Within a few days after the workshop in your region.
- What if I do not get paired?
 - We will let you know. And will keep you on our list as sometimes we need additional mentors after the first round of pairing.
- How long is the mentoring commitment?
 - We ask for at least 1 meeting – but you are welcome to continue to meet with your mentee. Mentoring is strengthened over time.