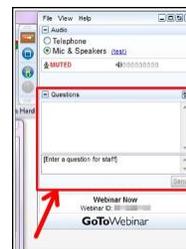
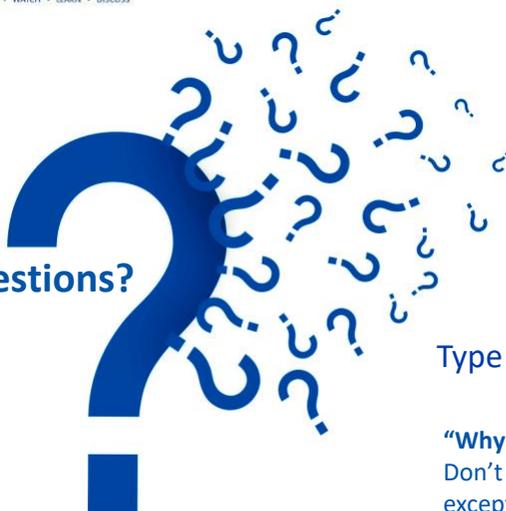




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“Why am I muted?”

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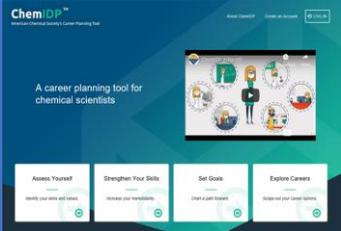
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Development System



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“Chemistry has been good to me...so I wanted to make a significant gift to provide that opportunity to others.”

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SOLVING the plastic waste PROBLEM
Novel Chemical Pathway Upcycling & Chemical Recycling

Date: Thursday, January 28, 2021 @ 2-3:30pm ET

Speakers: Katrina Knauer, BioCollection Inc. and Philippe Reutenauer, Léa Nature
Moderator: Peter Boul, Aramco Americas

Register for Free!

What You Will Learn:

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Co-produced with: ACS Division of Polymer Chemistry

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- What to expect in graduate school in chemistry

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Using the
**Science of
 Mentorship**
 for
Mentorship in Science

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Using the Science of Mentorship for Mentorship in Science



Renetta Garrison Tull
 Vice Chancellor of Diversity, Equity and
 Inclusion, University of California, Davis



Sonia Zárate
 Program Officer,
 Howard Hughes Medical Institute



Jodi Wesemann
 Assistant Director for Educational Research,
 American Chemical Society

Presentation slides are available now! The edited recording will be made available as soon as possible.

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Audience Survey Question

ANSWER THE QUESTION ON BLUE SCREEN IN ONE MOMENT



Which of the following elements are part of your mentorship experiences?
(select all that apply)

- Trust
- Self-reflection
- Explicit expectations
- Mentorship education



** If your answer differs greatly from the choices above tell us in the chat!*

13

Mentorship

is IMPORTANT,
MULITFACETED,
and PERSONAL

**Renetta
Garrison Tull**

*Vice Chancellor of Diversity, Equity and
Inclusion, University of California, Davis*



Sonia Zárate

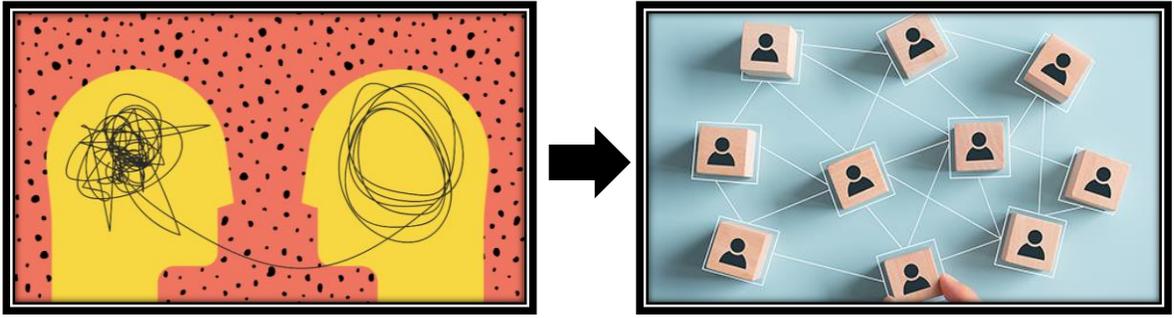
*Program Officer, Howard Hughes
Medical Institute*



Jodi Wesemann

*Assistant Director for Educational Research,
American Chemical Society*





- The impact of effective mentorship
- The attributes of effective mentorship
- How you can use evidence-based approaches

Renetta Garrison Tull

Vice Chancellor of Diversity, Equity and Inclusion, University of California, Davis



Sonia Zárate

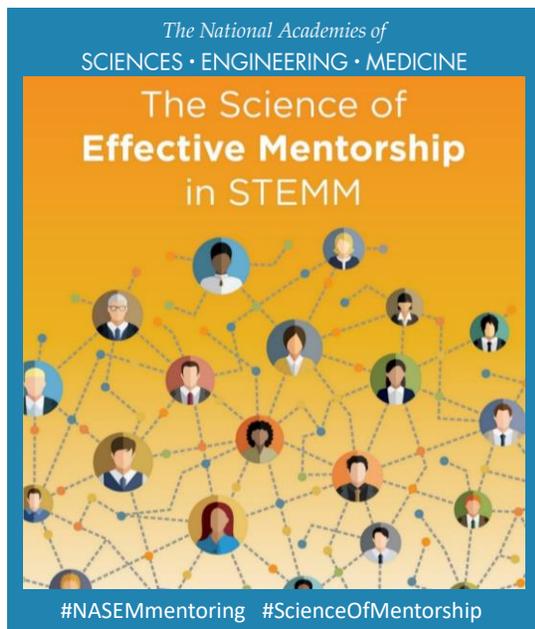
Program Officer, Howard Hughes Medical Institute



Jodi Wesemann

Assistant Director for Educational Research, American Chemical Society





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Read the Report

www.nap.edu/MentorshipInSTEMM

Use the Online Guide

www.nap.edu/resource/25568/interactive

Listen to the Podcast

thescienceofmentorship.transistor.fm

Learn about the Project

www.nas.edu/mentoring

Join the Conversation

#NASEMmentoring or #ScienceOfMentorship

Ask a Question or Make a Comment

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What is Mentorship?

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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.



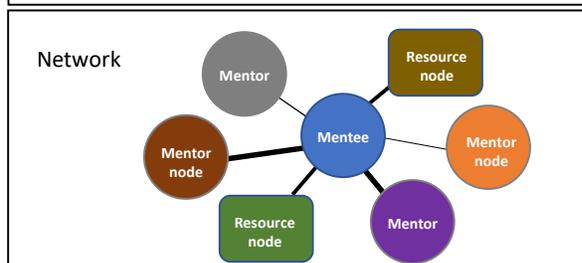
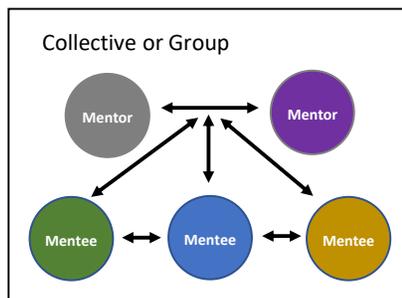
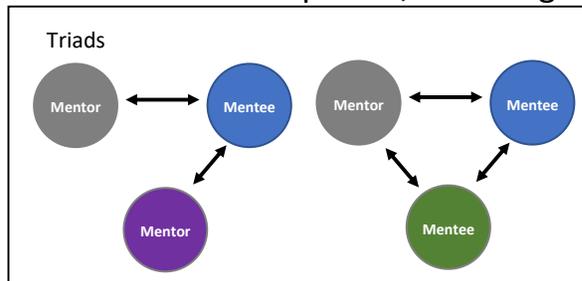
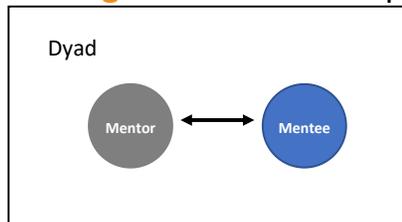
The Science of Effective Mentorship in STEMM Online Guide V1.0
(www.nationalacademies.org/MentorshipInSTEMM)

Mentorship Structures

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A **range of structures** support mentees' development, including:



Audience Survey Question

ANSWER THE QUESTION ON BLUE SCREEN IN ONE MOMENT



What best describes the status of your mentorship network?

- A few key individuals
- Several collectives
- A mix of individuals and collectives
- A rich constellation of individuals and collectives



** If your answer differs greatly from the choices above tell us in the chat!*

Mentorship Elements

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Trust develops when mentors and mentees work together to identify and respond to their mutual goals, needs, and priorities. These change over time and thus may require adjustment.

Self-reflection Critical and honest self-reflection occurs at multiple stages of effective mentorship processes.

Expectations Explicit declarations of the expectations of both mentors and mentees at the initiation of mentorship—revisited periodically and possibly recorded in writing—can help create an effective mentoring relationship.

Education Mentorship is a learned skill, and mentorship education influences mentor and mentee attitudes, self-efficacy, and behaviors.

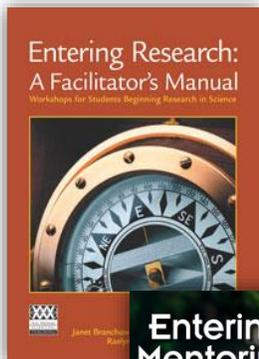


Attributes for Effective Mentorship Relationships

<p>RESEARCH SKILLS</p> <ul style="list-style-type: none"> • Developing disciplinary research skills • Teaching and Learning disciplinary knowledge • Developing technical skills • Accurately assessing mentees' understanding of disciplinary knowledge and skills • Valuing and practicing ethical behavior and responsible conduct of research 	<p>PSYCHOSOCIAL & CAREER SKILLS</p> <ul style="list-style-type: none"> • Providing motivation • Developing mentee career self-efficacy • Developing mentee research self-efficacy • Developing science identity • Developing a sense of belonging
<p>SPONSORSHIP SKILLS</p> <ul style="list-style-type: none"> • Fostering mentees' independence • Promoting professional development • Establishing and fostering mentee professional networks • Actively advocating on behalf of mentees 	<p>INTERPERSONAL SKILLS</p> <ul style="list-style-type: none"> • Listening actively • Aligning mentor and mentee expectations • Building trusting relationships/ honesty
<p>Pfund <i>et al.</i>, <i>AIDS Behav.</i> 2016, 20:238-248.</p>	<p>DIVERSITY/CULTURALLY-FOCUSED SKILLS</p> <ul style="list-style-type: none"> • Advancing equity and inclusion • Being culturally responsive • Reducing the impact of bias • Reducing the impact of stereotype threat

Putting Research into Practice

From *The Science of Effective Mentorship in STEMM, 2019* (www.nap.edu/MentorshipInSTEMM)



BOX 5-2

Effective Mentor Behaviors Adapted from *Entering Mentoring*

Entering Mentoring describes the following set of mentor competencies or behaviors:

- **Align expectations:** Mentors make expectations explicit and create a safe space for mentees to make their expectations explicit. Together they engage in negotiations to ensure that expectations of all parties can be met.
- **Assess understanding:** Mentors work with mentees to understand what the mentees know and are capable of and consider what the mentees can do to further develop and achieve success.
- **Communicate effectively:** Mentors engage in active listening with mentees, provide timely and constructive feedback, recognize that communication styles differ, and work with mentees to accommodate their personal communication styles.
- **Address equity and inclusion:** Mentors reflect on and account for the biases and assumptions they may bring to a mentoring relationship and acknowledge and account for how their background might differ from the background of their mentees.
- **Foster independence:** Mentors work to motivate mentees, build their confidence, stimulate their creativity, acknowledge their contributions, and navigate their path toward independence.
- **Promote professional development:** Mentors help mentees to set career goals, develop and refine plans related to career goals, develop a professional network, and access resources that will be helpful in their professional development. Mentors also recognize the influence they have as a professional role model.

- National Research Mentoring Network (<https://nrmnet.net/>)
- Center for the Improvement of Mentored Experiences in Research (<https://cimerproject.org/>)
- The Science of Effective Mentorship in STEMM Online Guide V1.0 (www.nationalacademies.org/MentorshipInSTEMM)



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their own cultural
identities



Understand the
critical role of
listening



Feel comfortable
engaging across
cultures

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Audience Survey Question

ANSWER THE QUESTION ON BLUE SCREEN IN ONE MOMENT



What type of mentorship skills are you MOST interested in developing?

- Research skills
- Sponsorship skills
- Psychosocial & career skills
- Interpersonal skills
- Diversity/culturally-focused skills



** If your answer differs greatly from the choices above tell us in the chat!*

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Discover more about Science Mentorship with this Resource!



<https://www.acs.org/content/dam/acsorg/events/professional-development/Slides/2021-01-27-mentorship-resources.pdf>

**These resources are provided for informational use only. Inclusion on this list does not constitute an endorsement by ACS*

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SOLVING the plastic waste PROBLEM

Novel Chemical Pathway Upcycling & Chemical Recycling



Date: Thursday, January 28, 2021 @ 2-3:30pm ET

Speakers: Katrina Knauer, BioCollection Inc. and Philippe Reutenauer, Léa Nature
Moderator: Peter Boul, Aramco Americas

Register for Free!

What You Will Learn:

- Challenges in recycling of plastics and scaling new depolymerization technologies
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- Synthesis of new polymers from chemically recycled monomers
- How food companies can modify their relationship towards plastics to face the public concerns linked to plastic packaging
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Co-produced with: ACS Division of Polymer Chemistry

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