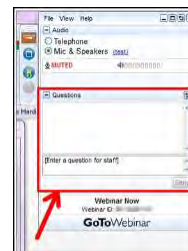




Have Questions?



Type them into questions box!

**“Why am I muted?”**

Don't worry. Everyone is muted except the presenter and host. Thank you and enjoy the show.

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1



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ACS Member-only weekly newsletter with exclusive interviews with industry leaders and insights to advance your career.

Preview & Subscribe: [acs.org/indnews](https://acs.org/indnews)



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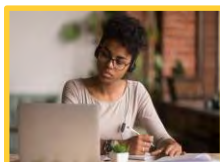
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## ACS Career Navigator: Your Home for Career Services



Whether you are just starting your journey, transitioning jobs, or looking to brush up or learn new skills, the **ACS Career Navigator** has the resources to point you in the right direction.

We have a collection of career resources to support you during this global pandemic:



Professional  
Education



Virtual Career  
Consultants



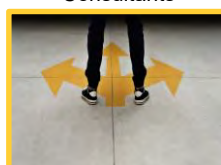
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*Advancing ACS's Core Value of Diversity, Inclusion & Respect*

We believe in the strength of diversity in all its forms, because inclusion of and respect for diverse people, experiences, and ideas lead to superior solutions to world challenges and advances chemistry as a global, multidisciplinary science.

### Contact Us:

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ACS Office of Philanthropy  
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ACS Scholars Endowment Founder Joe Vacca, retired Vice President of Chemistry, Merck & Co., meets with his 2018 ACS Scholar Johanna Masterson, now a grad student at Princeton University.

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

9



**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
- Mechanical recycling and its limitations and the emerging solutions for chemical recycling

Co-produced with: ACS Division of Polymer Chemistry

**I CAN BE A SCIENTIST TOO!**  
HOW TO CREATE OPPORTUNITY IN THE STEM CLASSROOM

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Speaker: Davis Tran, Wakefield High School / Jason Love, Wakefield High School / Nelson Fuamenya, Wakefield High School / Ana Munoz, Wakefield High School / Hina Aftab, Wakefield High School / Verlese Gaither, Wakefield High School  
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Co-produced with: American Association of Chemistry Teachers, ACS Department of Diversity Programs, ACS Diversity, and the ACS Inclusion & Respect Advisory Board



**tips for APPLYING TO GRAD SCHOOL IN CHEMISTRY**

Date: Wednesday, February 3, 2021 @ 2-3pm ET

Speaker: Brian Gboney, Brooklyn College and CUNY  
Moderator: Blake Aronson, American Chemical Society

Register for Free!

What You Will Learn:

- What are your graduate degree options in chemistry
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- What to expect in graduate school in chemistry

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10

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

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THIS ACS WEBINAR WILL BEGIN SHORTLY...

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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,  
MULTIFACETED,  
and PERSONAL



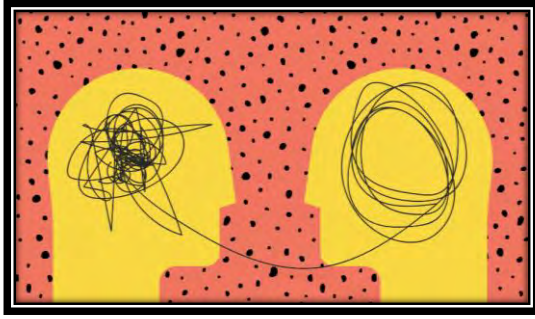
**Renetta Garrison Tull**  
*Vice Chancellor of Diversity, Equity and Inclusion, University of California, Davis*



**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*

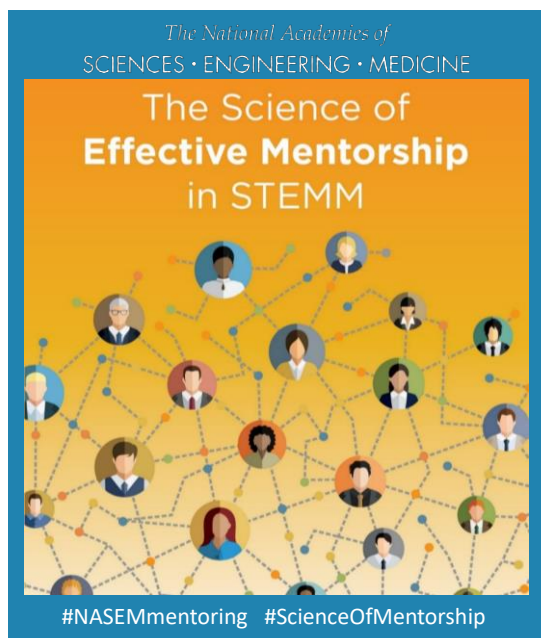


## Jodi Wesemann

*Assistant Director for Educational Research, American Chemical Society*







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## Read the Report

[www.nap.edu/MentorshipInSTEMM](http://www.nap.edu/MentorshipInSTEMM)

## Use the Online Guide

[www.nap.edu/resource/25568/interactive](http://www.nap.edu/resource/25568/interactive)

## Listen to the Podcast

[thescienceofmentorship.transistor.fm](http://thescienceofmentorship.transistor.fm)

## Learn about the Project

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## 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.



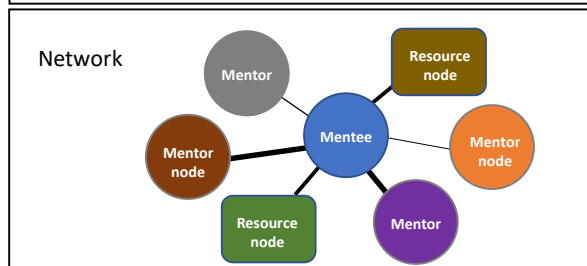
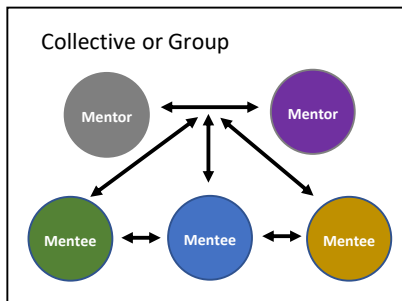
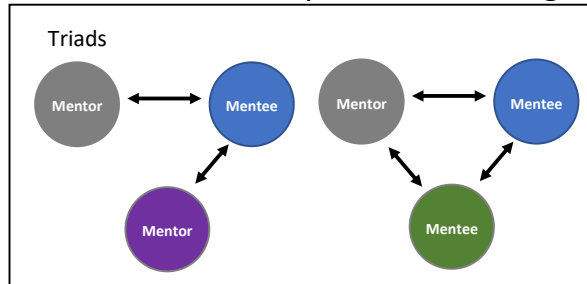
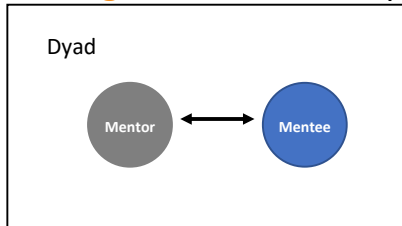
The Science of Effective Mentorship in STEMM Online Guide V1.0  
([www.nationalacademies.org/MentorshipInSTEMM](http://www.nationalacademies.org/MentorshipInSTEMM))

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

# Putting Research into Practice

From *The Science of Effective Mentorship in STEMM, 2019* ([www.nap.edu/MentorshipInSTEMM](http://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](http://www.nationalacademies.org/MentorshipInSTEMM))



## Gilliam Mentor Training

134
30

MENTORS TRAINED  
SINCE 2016
HOURS OF CULTURALLY  
RESPONSIVE MENTOR  
TRAINING

**Building inclusive environments for students  
in science by working with faculty to:**



Become aware of  
their own cultural  
identities



Understand the  
critical role of  
listening



Feel comfortable  
engaging across  
cultures



## 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>

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ASK YOUR QUESTIONS AND MAKE YOUR COMMENTS IN THE QUESTIONS PANEL NOW! <sup>27</sup>



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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
- Chemical pathways for breaking down single-use plastics with an emphasis on polyethylene
- 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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HOW TO CREATE OPPORTUNITY IN THE STEM CLASSROOM


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- Practical takeaways to encourage equity and inclusivity in the STEM classroom
- Overcoming challenges and barriers to achieving equity

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