Culturally Aware Mentoring: Optimizing Mentoring Relationships

Wednesday, March 18, 2020

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Professor, Department of Medicine
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University of Wisconsin - Madison

Jacqueline Looney
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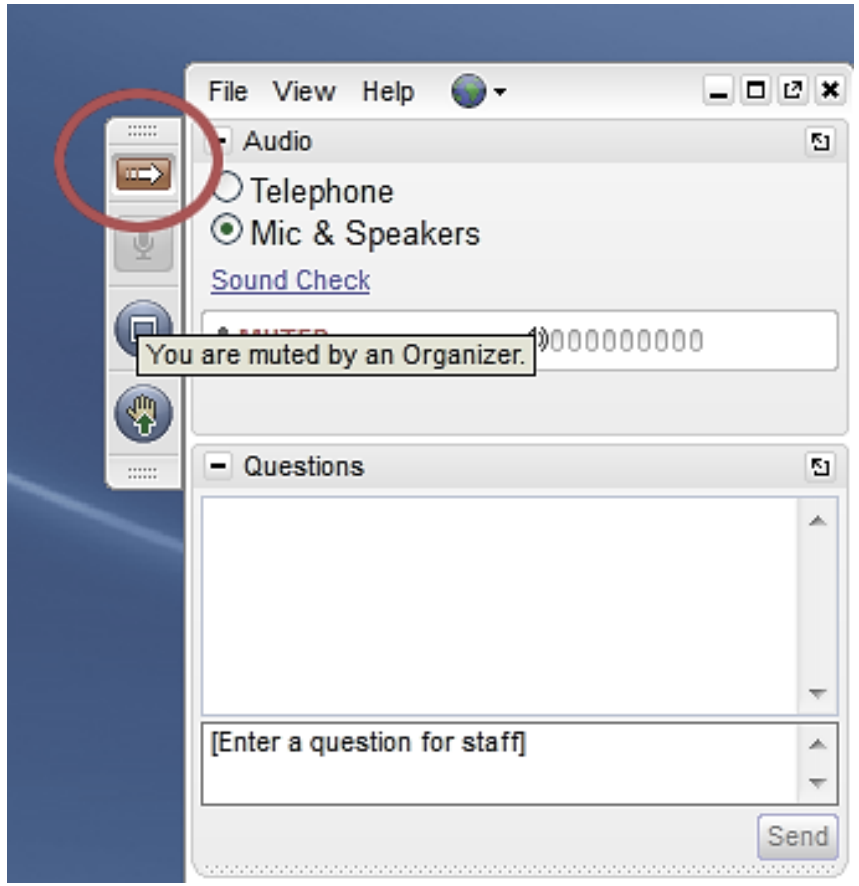
Plan for today

- **Four speakers** will speak for approximately **45 minutes** total, followed by Q & A
  - **Jeff Engler** of the Council of Graduate Schools will speak for approximately 5 minutes introducing the speakers and discussing CGS mentoring initiatives.
  - **Christine Pfund**, **Angela Byars-Winston and Jacqueline Looney,** and will each speak for 10-12 minutes reviewing recent science of mentorship at the national level; about how to address the role of culture with mentoring relationships; how to cultivate a culture of mentorship at your institution; and examine resources for advancing mentorship initiatives on your campus.

Technical Support

- Webinar **recording and slides** will be **emailed** to participants and **posted** on the CGS website
- Please **submit questions** through the GoToWebinar **control panel**
- **Technical issues**? Troubleshooting help available: http://support.citrixonline.com/en_US/webinar



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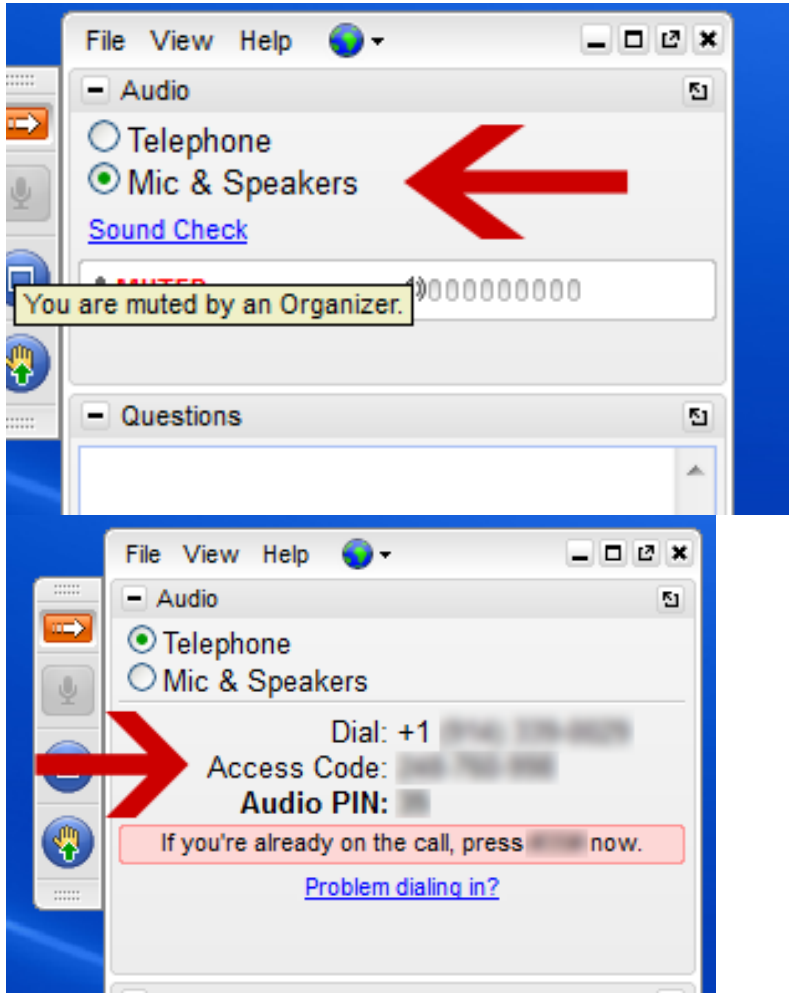
- If you experience trouble with a telephone connection, click “Problem dialing in?” for an alternate phone number to dial.



Introduction:
Jeff Engler

Overview of Today's Webinar

- Review recent studies of the national landscape of mentorship
- Learn how to address the role of culture with mentoring relationships
- Learn how to cultivate a culture of mentorship at your institution
- Review resources for advancing your local mentorship initiatives

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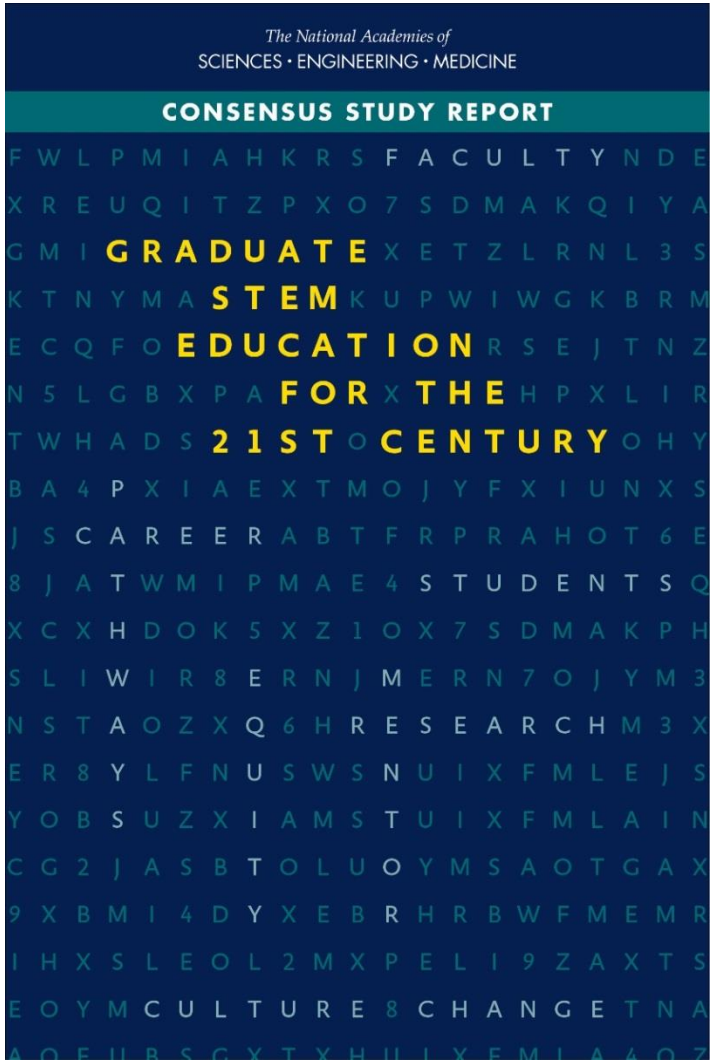
The Committee on Graduate STEM Education for the 21st Century



Key Takeaways: Mentoring

Mentoring Matters

- Notably for doctoral students

Mentors and Advisors Need Support and Resources

- Set expectations, improve mentoring

Incentives and Recognition

- Incentivize and reward contributions to mentoring and advising

Mentors and Advisors, Networks of Support

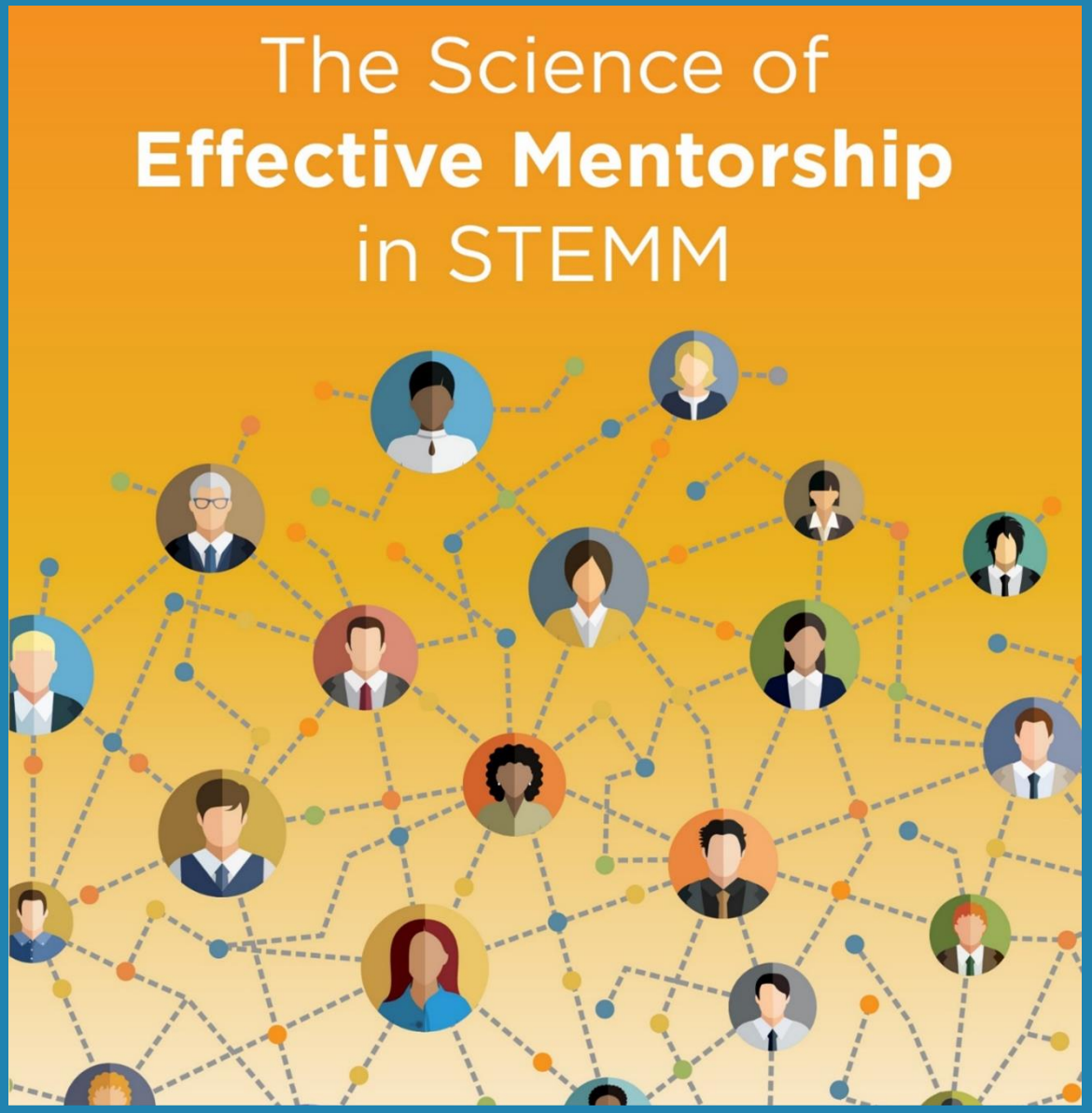
- Through exposure and opportunities, students should be able to build networks to gain different expertise and support

Chaired by Dr. Alan Leshner, CEO Emeritus, AAAS
Released in May 2018

The National Academies of

SCIENCES • ENGINEERING • MEDICINE

The Science of **Effective Mentorship** in STEMM



#NASEMmentoring

Who is on the Committee?

Angela Byars-Winston (*Chair*)
University of Wisconsin–Madison

Erin Dolan
University of Georgia

Juan E. Gilbert
University of Florida & iAAMCS

Sylvia Hurtado
University of California, Los Angeles

Laura Lunsford
Campbell University

Staff
Maria Lund Dahlberg, Study Director
Thomas Rudin, BHEW Director
John Veras, Senior Program Assistant
Austen Applegate, Research Associate
Joe Alper, Consultant Writer

Richard (Rick) McGee
Northwestern University Feinberg School of Medicine

Christine (Chris) Pfund
University of Wisconsin–Madison & CIMER

Christiane Spitzmueller
University of Houston

Keivan G. Stassun
Vanderbilt University

Renetta Tull
University of California, Davis

Sponsors

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The National Academies of Sciences Engineering Medicine Gulf Research Program
Burroughs Wellcome Fund

Additional funding providing by: National Academy of Sciences Kobelt Fund; National Academy of Sciences Scientists and Engineers for the Future Fund; National Academy of Sciences Coca–Cola Foundation Fund

OVERVIEW

What is Mentorship?

- The Committee's definition of mentorship
- Structures of mentorship

How do Identities Affect Mentorship in STEMM?

- Findings about identity and STEMM
- The role of culturally responsive mentorship

What is the Role of the Institution?

- Inclusive excellence
- Overcoming barriers

How can we Create a Culture of Effective Mentorship?

- The Committee's recommendations

What is Mentorship?

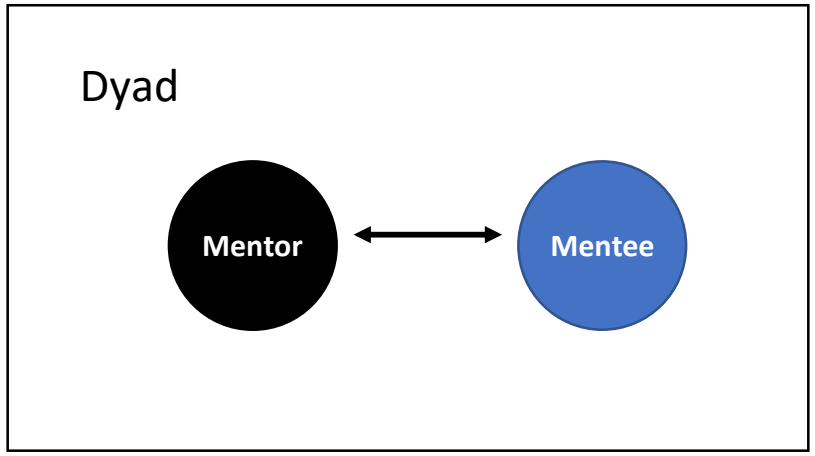
Mentorship is a professional, working alliance in which individuals work together over time to support the personal and professional growth, development, and success of the relational partners through the provision of career and psychosocial support.

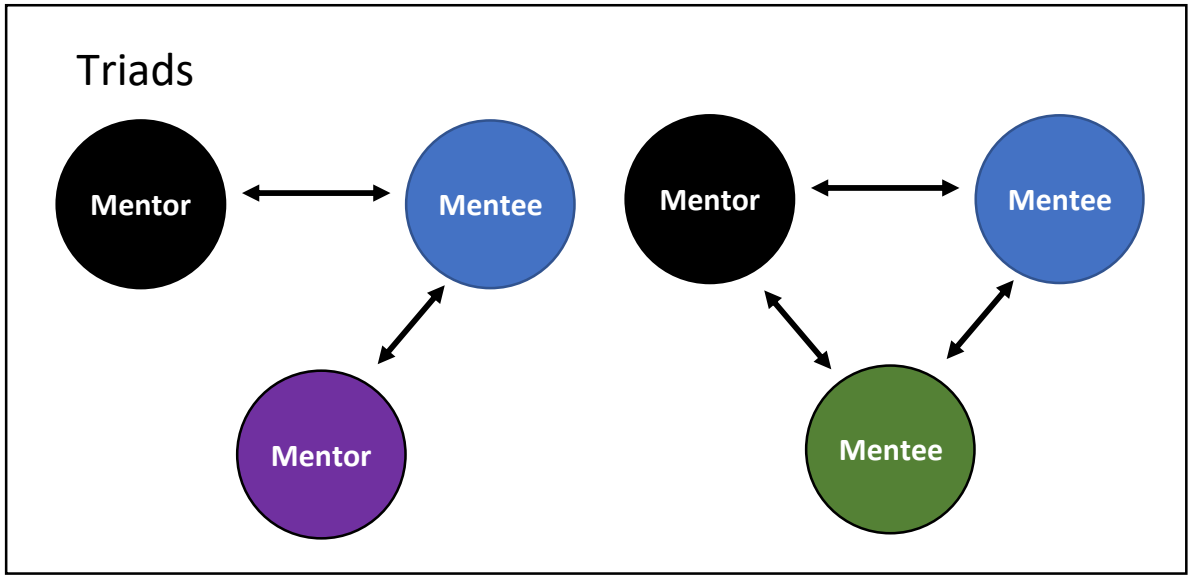
Mentorship includes **career support functions** (e.g., career guidance, skill development, sponsorship) and **psychosocial support functions** (e.g., emotional support or role modeling) aimed at mentee talent development.

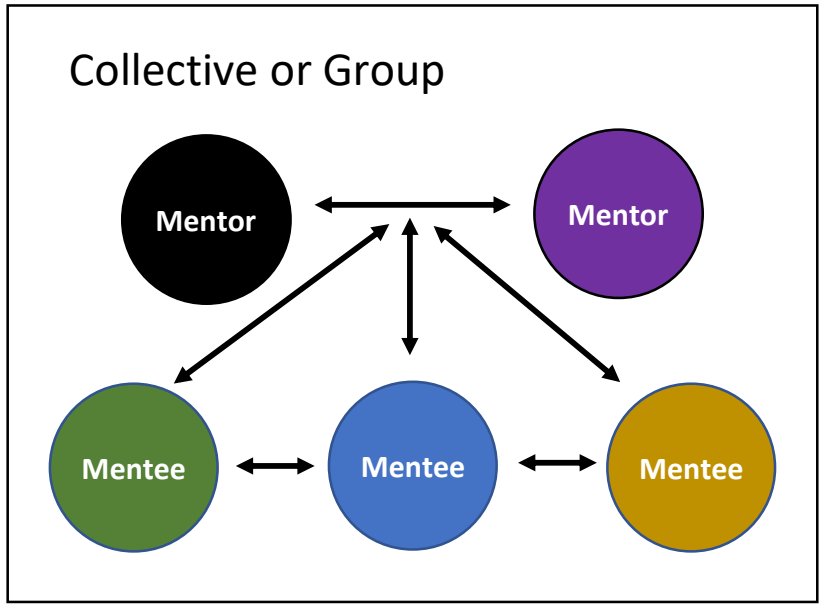
It complements other developmental processes like teaching or coaching to support mentees knowledge and skills development, and is essential to holistic development of STEMM professionals, including STEMM identity development.

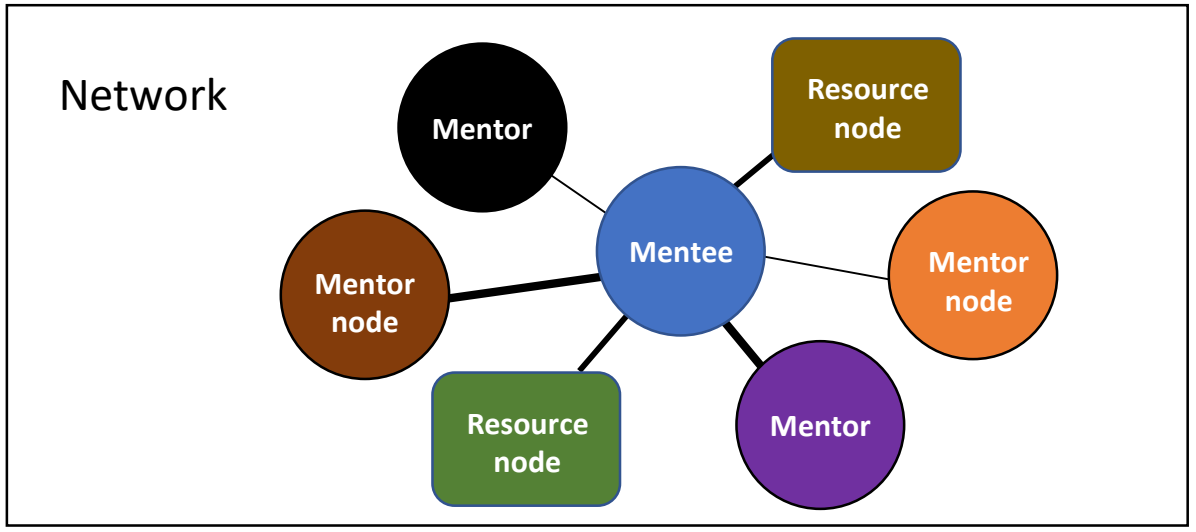
What is Mentorship? Structures

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









How do Identities Affect Mentorship in STEMM?

Identity plays a pivotal role in the formation and development of social relationships such as mentorship.

Specific dimensions of identity—**science identity, cultural identities**—are linked empirically to:

- academic and career development
- the experience of mentoring relationships in STEMM

Mentorship can ameliorate negative effects of students' feelings of being "othered" due to their non-science identities in STEMM by increasing inclusion and psychosocial support.

How do Identities Affect Mentorship in STEMM?

Culturally responsive mentoring is a learned skill in which mentors, regardless of their race or gender, show interest in and value students' cultural backgrounds and social identities. It may help students navigate invalidating experiences in academia, affirm belonging in STEMM contexts, and reinforce their belief in their own ability to be successful in STEMM.

Mentees without access to culturally responsive mentoring can experience **identity interference**, which can result in depression, reduced psychological well-being, and lower academic or professional performance.

What is the Role of the Institution?

- Institutions can **broaden access to quality mentorship and support systems**
- Current mentoring systems are structured to benefit the prototypical STEMM mentee. But mentoring has been used to develop **cultures of inclusive excellence** supporting the development of diverse STEMM professionals.
- Institutions can **recognize and address barriers to implementation** of effective mentorship
- Institutions can **support more effective mentorship** on their campuses with the help of the online guide found at:

www.nationalacademies.org/MentorshipInSTEMM

How can we Create a Culture of Effective Mentorship?

1. Adopt an Operational Definition of Mentorship in STEMM
2. Use an Evidenced-Based Approach to Support Mentorship
    - Program leaders should support mentorship by providing guidelines, tools, and processes to ensure clear expectations and participation in mentorship education.
3. Establish structured feedback systems
4. Train mentors to be culturally responsive to Recognize and Respond to Identities in Mentorship
5. Support multiple mentorship structures
6. Reward Effective Mentorship
7. Mitigate Negative Mentorship Experiences

Where can you learn more?

Read the Report

www.nap.edu/MentorshipInSTEMM

Use the Online Guide

www.nationalacademies.org/MentorshipInSTEMM

Learn about the Project

www.nas.edu/mentoring

Join the Conversation

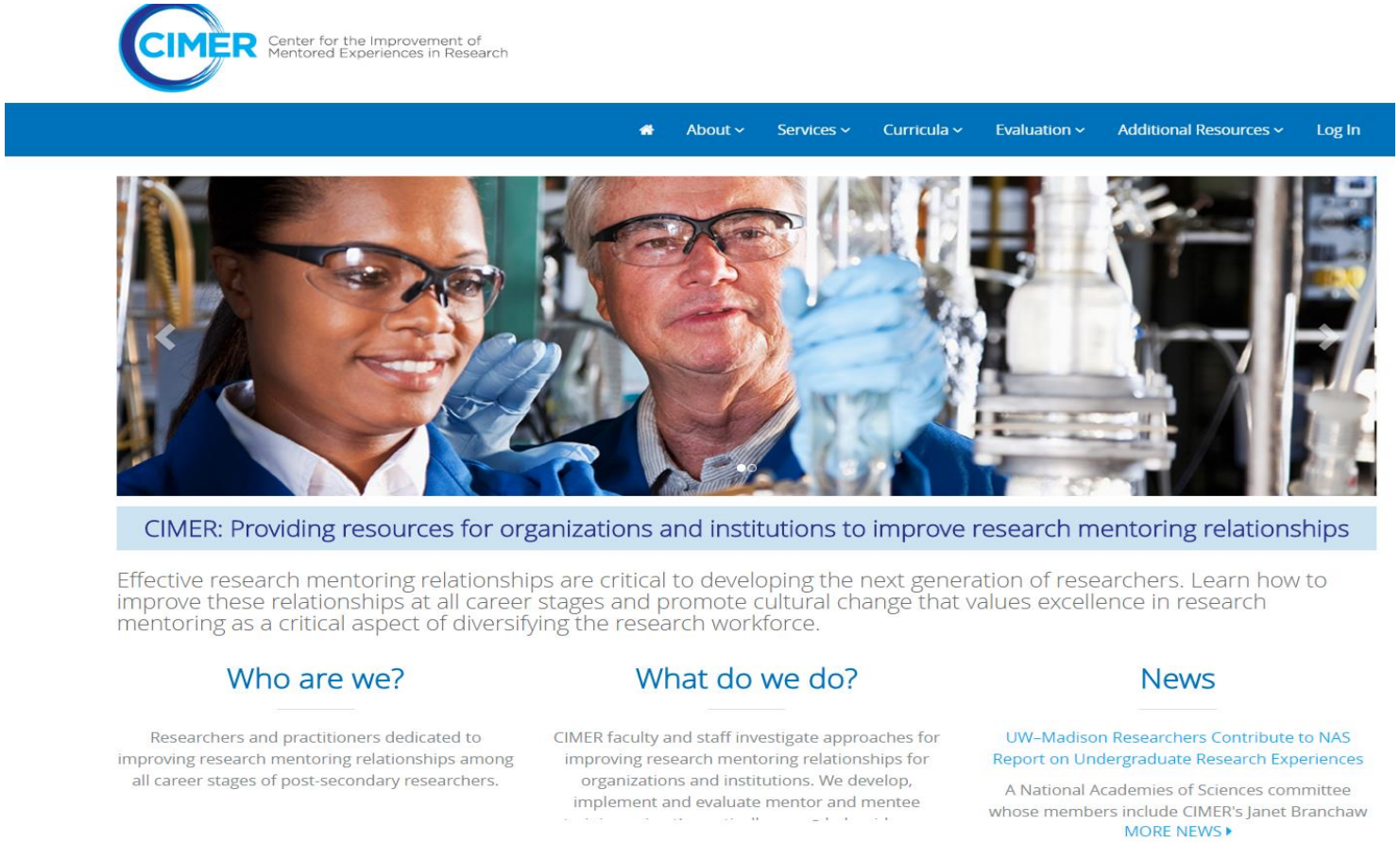
#NASEMmentoring

Ask a Question or Make a Comment

mentoring@nas.edu

Where can you learn more?

Center for the Improvement of Mentored Experiences in Research (CIMER)



www.cimerproject.org

https://sites.lsa.umich.edu/humanities-phd-proj/

Resources for Mentoring Graduate Students

Mentoring students for the full range of professional careers begins with early discussions about possibilities and paths. Resources here identify issues to consider and approaches to addressing them from the beginning of students' graduate programs through the dissertation.There are also many resources in the student section you will find useful as you mentor students.

Resources

Mobilizing the Humanities for Diverse Careers

June 25, 2018

This piece from Anne Krook encourages humanities graduate departments to focus "on two problems whose fixes are within our ...Read More »

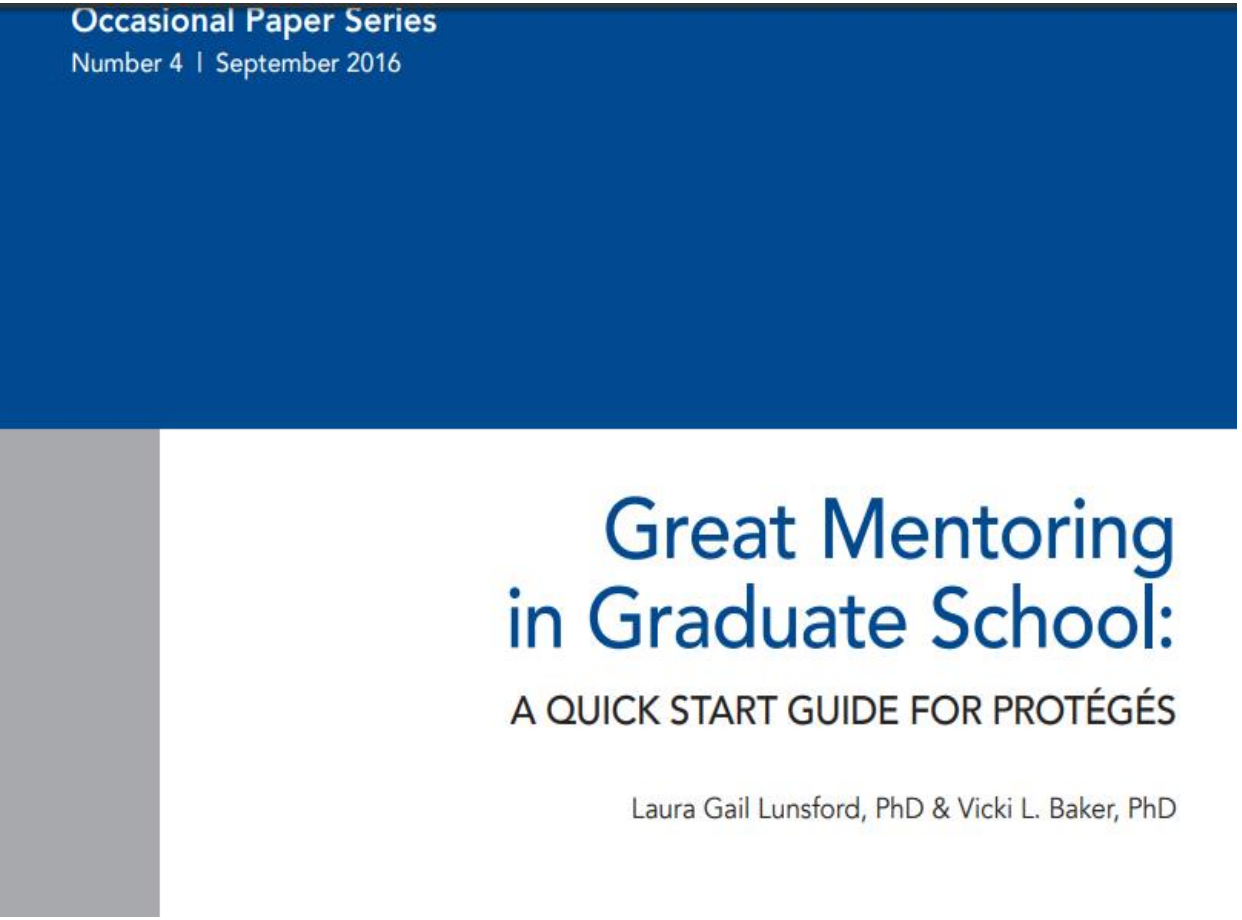
How Graduate Advisers Can Bolster Their Career Guidance

POST BY TAG

- Alumni Voices
- Course Innovation
- Cover Letters
- CV to Resume
- Digital Humanities
- Employment Data
- Faculty Resources
- Featured
- Graduate Program Innovation
- Instructional Consultant
- Internships
- Interviewing
- Job Search
- Libraries and Archives
- Mentoring
- Museums
- Post-Candidacy
- Pre-Candidacy
- Professional Identity
- Public Humanities
- Student Resources

Council of Graduate Schools (CGS): Resources

https://cgsnet.org



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Culturally Aware Mentoring:
Implications for Graduate Student Development

Angela Byars-Winston, PhD, Professor
Department of Medicine
Council of Graduate Schools Webinar March 18, 2020

This We Know (about students):

Mentoring quality and access vary by demographic group, discipline

- Students from UR racial/ethnic groups report that their primary advisor is less respectful of their ideas compared to White students
- Women from UR groups report less respectful and sometimes less instrumental primary advisors than all other groups

- Systematic disadvantage by discipline:
  - Students in biological/physical sciences report their primary and secondary advisors to be overwhelmingly less supportive than those in the social sciences and humanities.

(Noy & Ray 2012)

Ong et al. (2011) *Harvard Educational Review*

N=116 studies 1970-2008; Women of Color in STEM

Most experiences characterized by:

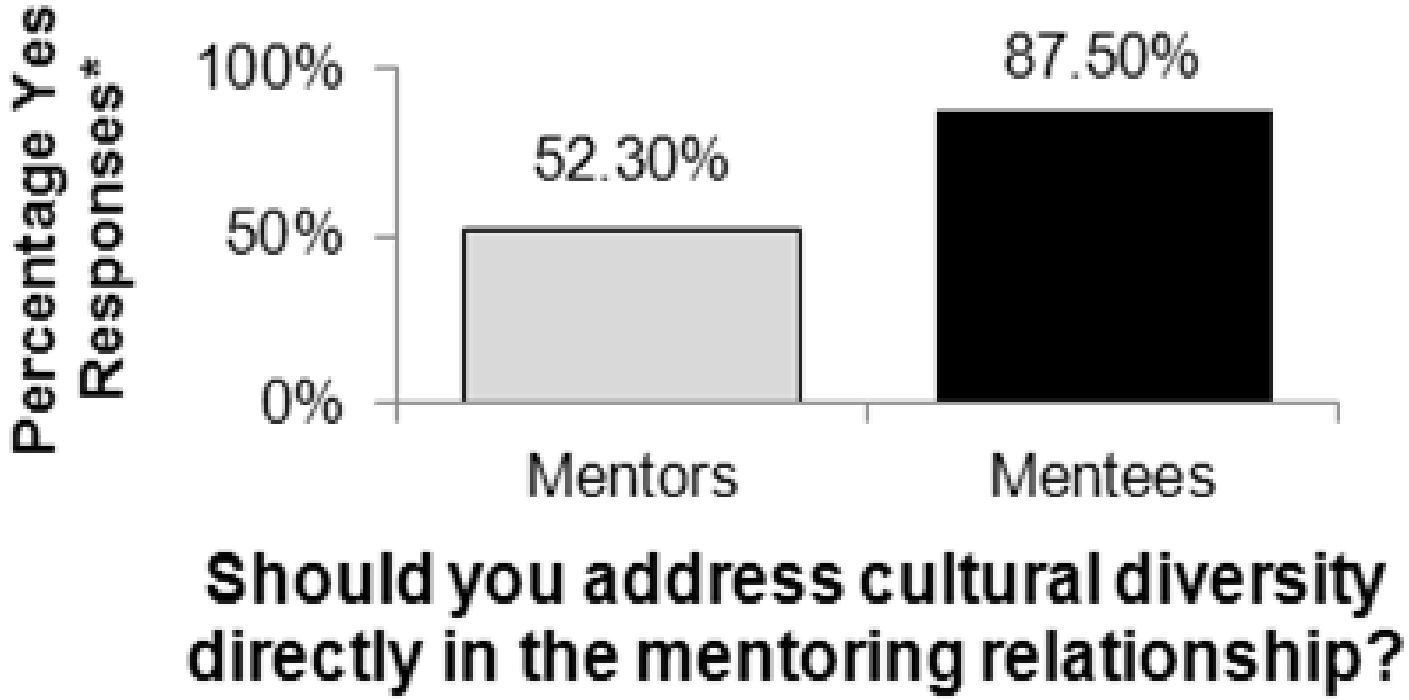
- Isolation
- Sexism
- Racism
- Problematic relations w/ faculty and peers – largely male

- *More impactful than funding, departmental composition, assistantships*

This We Know (about faculty):

- Many do not know of or believe the dual realities that many of their trainees experience, especially those from groups underrepresented in STEM (Alexander & Hermann, 2016)
- Many do not believe socioemotional, instrumental functions are part of their mentorship role (Laursen et al. 2010)
- Many adopt a colorblind ideology in general (Prunuske et al., 2014)

Mentor and Mentee Views on Addressing Cultural Diversity in Research Mentoring Relationships



** Results compare Yes responses with those responding No or not indicating an opinion.*

Byars-Winston et al., *in press J of Div High Ed*

Qualitative Findings

- **Cultural diversity often viewed as interference variable**

  "I don't care where you're from…it's science" [mentor]

  "I think that race or ethnicity or background doesn't really have anything to do with it, and I think it's almost out of place to bring that up." [mentee]

- **For mentors who experienced culture and science as related, they focused on their mentees' culture, not their own**

  "I do think people come in with difference perspectives and those perspectives alter how they view research and how they view the lab environment" [mentor]

- **Mentors and mentees disagree on whose role it should be and when to address diversity**

  "If where they're from and how they're communicating is important to the discussion then they should feel empowered enough to bring it up." [mentor]

Both mentors and mentees noted that addressing cultural diversity is complex, for which few feel equipped to handle

Byars-Winston, Leverett, Benbow, Pfund, Thayer-Hart, Branchaw *In Press*
NIH R01 Grant #GM094573

Motivated Mentoring Study (Butz et al., 2019)

Not self-determined/
Externally controlled

Self-determined/
Internally controlled

Amotivation

Extrinsic Motivation

Intrinsic
Motivation

**Not Relevant/
Valuable**

"The best part about science is that it **doesn't care about race or ethnicity** (some scientists care, but that's immaterial). My aim is to mentor students at their ability level, but without directly acknowledging race/ethnicity explicitly."

Motivated Mentoring Study (Butz et al., 2019)

Not self-determined/
Externally controlled

Self-determined/
Internally controlled

Amotivation	Extrinsic Motivation	Intrinsic Motivation
Not Relevant/ Valuable		
Lacking Competence		
Will Not Lead to Desired Outcome		
Efforts Focused Elsewhere		

Identification/ Integration

"I want to provide all my mentees with a chance to thrive, and **part of doing that is knowing how my privilege as a white person might be affecting** the way I interact with my mentees who come from different backgrounds."

Addressing Cultural Diversity in STEMM Mentorship

Culturally responsive mentoring is a learned skill set in which mentors, regardless of their race or gender, show interest in and value students' cultural backgrounds and social identities. It may help students navigate invalidating experiences in academia, affirm belonging in STEMM contexts, and reinforce their belief in their own ability to be successful in STEMM.

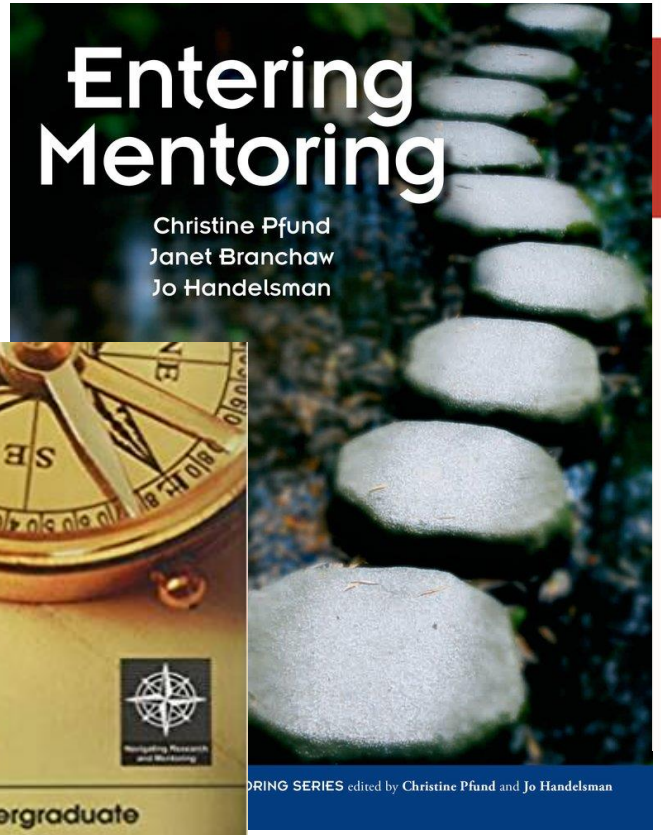
Building Research Mentors' Capacity to Engage with Cultural Diversity

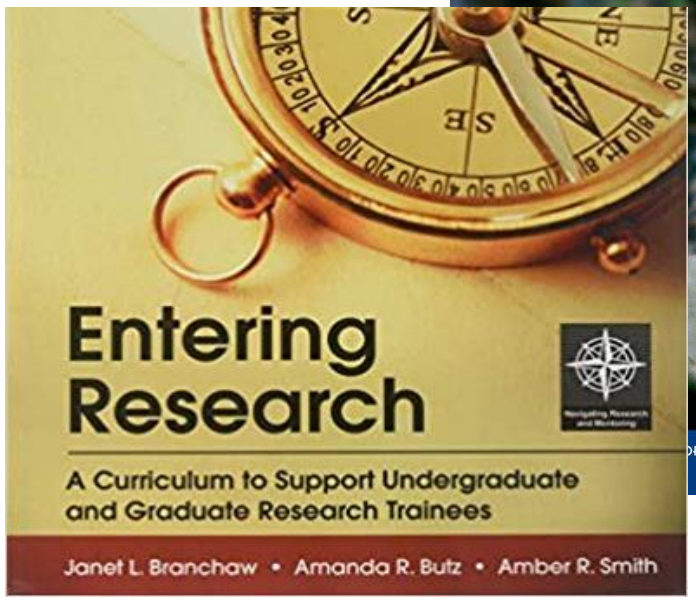
Evidence-Based Interventions

1. NIH-funded National Research Mentoring Network – Culturally Aware Mentor (CAM) Training
2. Howard Hughes Medical Institute Gilliam Fellowship/BWF – Optimizing Mentoring Relationships

Culturally Aware Mentor Training
(6hrs in person + ~1.5hrs online session)

Training for Mentors/Mentees





www.nrmnet.net

www.cimerproject.org/

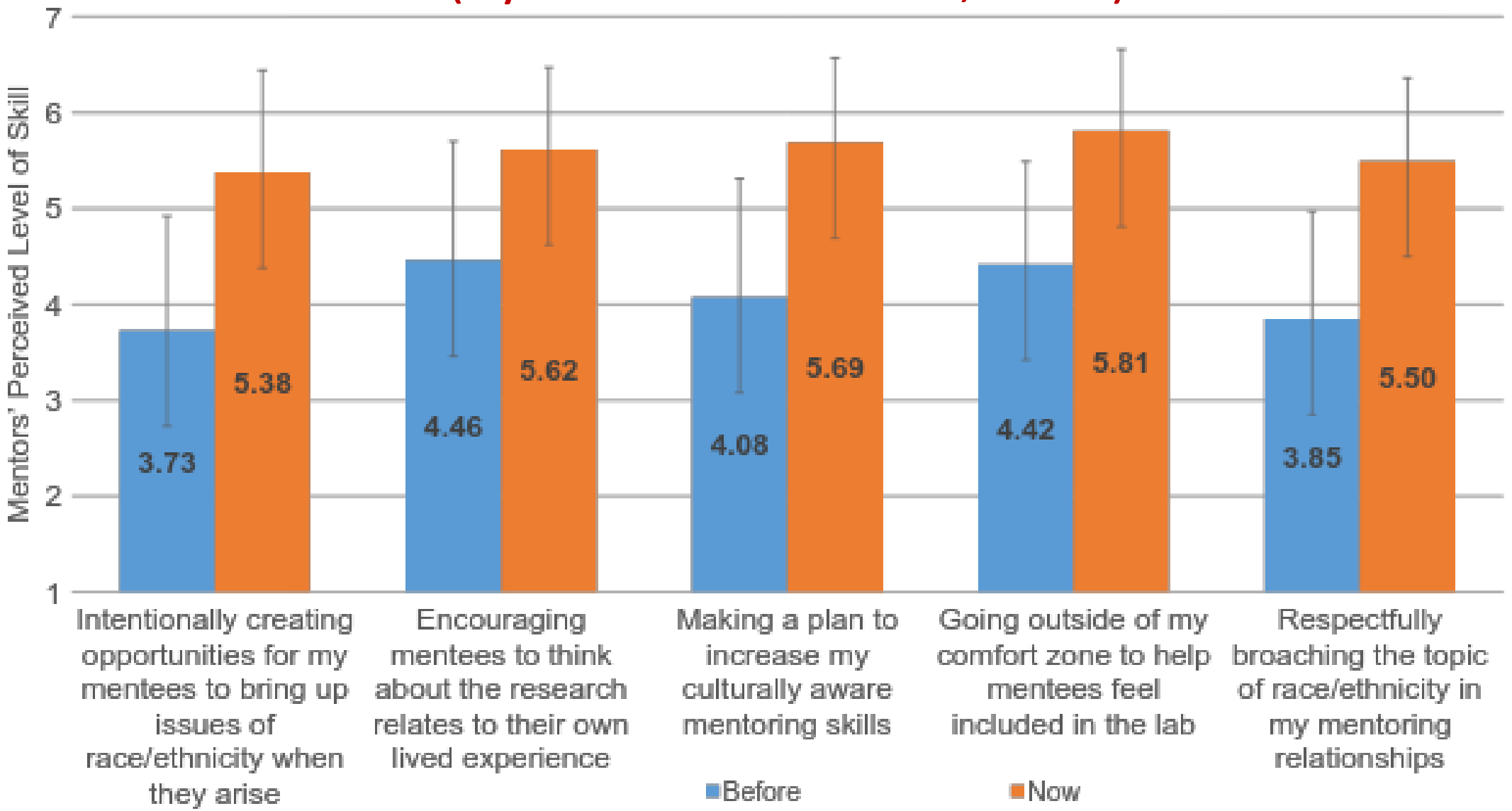
Culturally Aware Mentorship Training

Part 1:
Intrapersonal

Part 2:
Interpersonal

Part 3:
Skill Building

Perceived Skill Gains from CAM Participants 1 Site (Spr 2016) (Byars-Winston et al., 2018)



N = 26; All differences significant at $p < .001$; effect sizes $d_z > 1.40$

Lasting Impacts of CAM Intervention (18-24 mos)

It was nice to sort of reflect on, you know, my own awareness of my race and my social category. I kind of get so caught up in thinking about other people that I don't always [consider] my own, and so especially because I consider my background pretty boring. You know, so really kind of reflecting on that and trying to see where that gap might be and how to fill it. **(Intrapersonal)**

I think [the training] has opened my mind into understanding that there are differences…I always looked at myself as someone who is colorblind and culture-blind in the sense that I didn't judge people based on their color and culture. But there is another side to that, as well. Other than not judging people on it, you have to show your respect to it. And there are times that you need to acknowledge that difference. And so that's what I learned from these workshops, that just not judging people based on them is not enough. Sometimes you do need to acknowledge the difference and validate the difference because the difference is a good thing, it's not a bad thing. **(Interpersonal)**

[I am] more comfortable navigating discussions that are needed about cultural competency and things like that…more comfortable speaking up when someone says something that I'm like, 'Oh my goodness, what did you just say?' I think particularly with students, I'm more comfortable saying, 'OK, time out.' So, I think all of the trainings have helped me gain a little bit more confidence in my ability to speak up.

(Skills)

More Information about CAM:

NIH-funded U01 Research Project 2019-2024, #GM132732

Randomized Controlled Trial to test Impact of CAM Interventions on Individual Mentors (PhD Students, biomedical related) and Institutions

Webpage: https://cimerproject.org/cam-nrmn/

Email: cam-nrmn@wcer.wisc.edu

Research Program Manager: Ellyssa Eiring

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Cultivating a Culture of Mentoring

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Good Mentoring in Graduate School

Students who have mentoring relationships are:

- **More productive**
- **More involved in departments**
- **More satisfied with programs**

Students who have mentoring relationships are:

- **Well trained in discipline**
- **Successfully complete degree**
- **Obtain promising job opportunities**

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Good Mentoring in Graduate School

Professor
Robyn Wiegman

2013 Mentoring Award Recipient
Literature & Women's Studies

Seek out multiple mentoring

- **Advocates**
- **Sponsors**
- **Role Models**
  Teachers
- **Advisers**
- **Supporters**
- **Tutors**
- **Masters**
- **Coach**
- **Friend**

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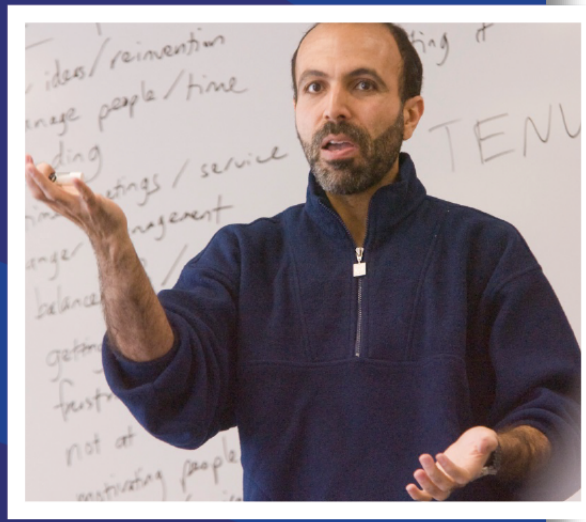
Let's Talk About Mentoring

Professor
Mohamed Noor



2009 Mentoring Award Recipient
Biology

Goals

- To learn about importance of establishing supportive mentoring relationships
- To start thinking early and seriously about the role a mentor will play in your success at Duke
- To discuss some initial strategies in navigating potential mentoring situations

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Mentoring Discussion Questions

Assistant Dean
J. Alan Kendrick

Graduate Student Development

1. What do you think a mentor should do for you?
2. What should your mentor expect from you?
3. How does the mentee benefit the mentor?
4. What do you think about having multiple mentors? How might you put together your team of graduate school mentors?
5. How do issues of identity and diversity influence mentoring relationships?

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Mentoring Resources

Courtnea Rainey

Ph.D. Candidate
Psychology & Neuroscience
Facilitator, 2015 Mentoring Workshop

An overview of the Cultivating a Culture of Mentoring: **http://gradschool.duke.edu/mentoring**

Student and Faculty resources are available on The Graduate School website

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Questions?

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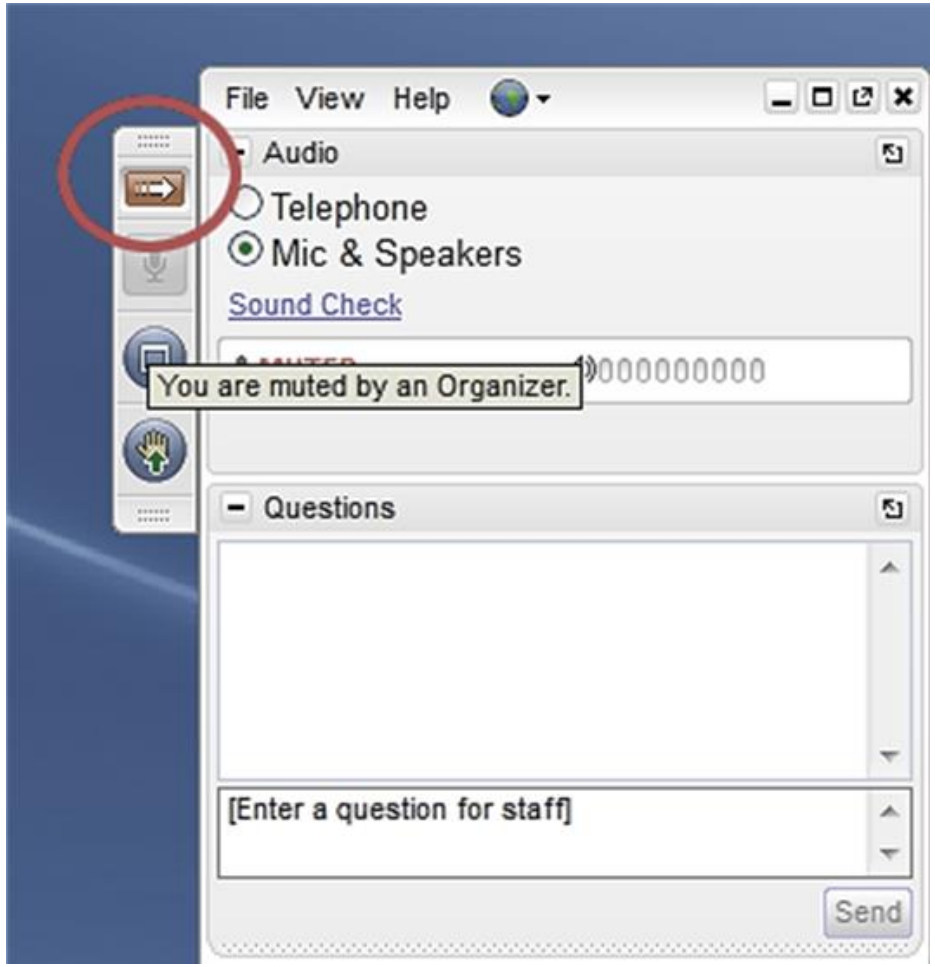
Type them into the Questions box on the GoToWebinar control panel.



Thank You for Participating!

- Upcoming CGS webinar:
  - Becoming a Graduate Career Development Professional
    - *Wednesday, March 25, 2020 from 2:00-3:00 PM ET*

    Visit http://cgsnet.org/cgs-webinars for more information on upcoming webinars as well as recordings of past webinars.