

Research Mentor Training

The selections you have chosen for your customized curricula are drawn from materials based on *Entering Mentoring* (Pfund, Branchaw, and Handelsman, 2014).

The Entering Mentoring-based materials have been developed and tested by many partners across the country. Individual acknowledgements can be found in footers of each page.

A full listing of partners and funders can be found at CIMERProject.org.

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Equity and Inclusion

1. Reflecting on Diversity
2. Reflect on Unconscious Assumptions
3. Implications of Diversity Research
4. Is it OK to Ask?
5. Share Experience as Outsider
6. Dig Deeper
7. Cultural Sensitivity
8. Addressing Equity and Inclusion Full Session
9. Reflecting on Diversity
10. Reflect on Unconscious Assumptions
11. Implications of Diversity Research
12. 3 Case Studies on Equity and Inclusion
13. Share an Experience
14. Dig Deeper
15. Cultural Sensitivity
16. Reflecting on Diversity
17. Unconscious Assumptions
18. Implications of Diversity Research
19. 3 Case Studies on Equity and Inclusion
20. Share an Experience
21. Dig Deeper
22. You Can't Do That
23. Second Language
24. Diversity Challenge
25. Individual Case Studies
26. Share an Experience
27. Dig Deeper
28. Cultural Sensitivity
29. Addressing Equity and Inclusion Full Session

Learning Objective:

Mentors will learn to improve and expand understanding of equity and inclusion and how diversity influences mentor-mentee interactions

Activity

Reflecting on Diversity (13 minutes)

- **TELL:** Acknowledge that, in this society, it is engrained in our subconscious to first think of diversity in terms of race and ethnicity, but remember that it is broader than that. For example, consider the impact of learning and physical disabilities, gender, age/generation, professional experience, sexual orientation, class, religion, and differences in communication, learning, and work styles. Think about the list we generated in the introductory session. Do you have any additions to the list? (If your group did an alternative activity in the introductory session and did not generate a list, you can have them do so now.)
- **NOTE:** Leave this list displayed throughout the session and tell mentors that they can add to it as you move through the other activities. As you add items, you may discuss how these differences impact their mentoring relationships and how they can be capitalized upon to create high-quality, innovative research as time allows.
- **DISCUSS:** How do these differences impact their mentoring relationships and how can they be capitalized on to create high quality innovative research? They may consider the concept of cognitive diversity, or diversity of thought, and how knowledge they've gained from other life experiences has influenced and enriched their thinking as a researcher. List the ideas generated in this discussion on a whiteboard or flip chart.

Learning Objective:

Mentors will learn to recognize the potential impact of conscious and unconscious assumptions, preconceptions, biases, and prejudices on the mentor-mentee relationship and reflect on how to manage them

Activity

Reflect on Unconscious Assumptions (25 min)

- **TELL:** Think about some of your assumptions when you entered the room on the first day of this training—that there would be electricity, a table, a bathroom, etc. Let's think about some of the assumptions we make about the people we work with.
- **TELL:** Read each word on the list below and ask mentors to focus on the first image that comes to their mind and quickly jot down three words that describe the person they pictured. Pacing is important; only leave about five seconds between each item on the list so that they are focused on the first image that comes to mind.
 1. Cook
 2. Pilot
 3. Mountain Climber
 4. Caretaker
 5. Politician
 6. Clinical Researcher
 7. K-scholar
- **DISCUSS (10 min)** with entire group: Have mentors share some of the words they noted about each prompt, with special attention given to the clinical researcher and K-scholar. For example, did their images include mention of gender, race, body shape and size, or age? Was there some uniformity in their images?
- **TELL:** Remind mentors that we all carry these unconscious assumptions and they need not be a source for guilt or embarrassment. We discuss them as a means of raising awareness and being intentional about how we let them influence our behavior.

Learning Objective:

Mentors will learn to recognize the potential impact of conscious and unconscious assumptions, preconceptions, biases, and prejudices on the mentor-mentee relationship and reflect on how to manage them

Activity

Implications of Diversity Research (25 minutes)

- Distribute the Diversity Study Results handout (next page) and let participants read it individually for two to three minutes.
- NOTE: Many of these studies are summarized in the Benefits and Challenges of Diversity, which can be found in the full Curriculum.
- DISCUSS (5 min): in pairs your reaction to one of the studies and the implications for your mentoring practice.
- DISCUSS (10 min): with entire group. You may want to record the ideas generated in this discussion on a whiteboard or flip chart. Guide the discussion using the following questions:
 1. What were your initial reactions to the studies?
 2. Which study captured your attention? Why?
 3. What implications do these study results have for your mentoring practice?
 4. What are two to three practical things you could do to minimize the impact of bias, prejudice, and stereotype in your mentoring relationship?
- NOTE: Refer to the “Benefits and Challenges of Diversity” reading for specific approaches.

Addressing Equity and Inclusion

Activity #3: Diversity Study Results for Discussion

Read the description of the study results and discuss your reaction and the implications for your mentoring practice. See the *Benefits and Challenges of Diversity* article for more details about these and other studies.

Study 1

Blind, randomized trial: When asked to rate the quality of verbal skills indicated by a short text, evaluators rated the skills as lower if they were told an African-American wrote the text than if they were told a white person wrote it, and gave lower ratings when told a man wrote it than when told a woman wrote it.

Study 2

Real-life study: CVs of a real woman were assigned a masculine or feminine name, randomly, and sent to 238 academic psychologists to review either (1) at the time she applied for her faculty position or (2) at the time of her review for an early tenure decision. Respondents were more likely to hire the applicant if a male name was on the CV at the time of job application. Gender of applicant had no effect on respondents' likelihood of granting tenure when their CV was reviewed as part of an early tenure decision. However, there were four times the number of "cautionary comments" in the margins of the tenure packages with female names, such as, "We would have to see her job talk."

Study 3

In studies of mock juries, those that contained members of ethnic minority groups deliberated more effectively and processed information more carefully than juries that lacked ethnic diversity.

Study 4

Real-life study: Parents' estimates of math ability are higher for sons than for daughters, despite no gender differences in grades or test scores.

Study 5

If African-American or female students are asked to identify their race or gender, respectively, at the start of an exam, they will perform less well on that exam.

Many of these studies and others are summarized in Fine and Handelsman (2005). "Benefits and Challenges of Diversity in Academic Settings" (pages 71–81): Madison, WI, and Handelsman, Miller, and Pfund (2007). "Diversity" in *Scientific Teaching*. W.H. Freeman and Company: New York, NY. This activity is from the National Academies Summer Institute on Undergraduate Education in Biology (<http://www.academiessummerinstitute.org>, accessed June 2010).

From Pfund, Christine et al. (2012) Mentor Training for Clinical and Translational Researchers. New York, NY: W.H. Freeman & Co.

For additional resources and complete curriculum—including information on competencies and facilitator notes—visit: CIMERProject.org

Learning Objective:

Mentors will learn to identify concrete strategies for learning about, recognizing, and addressing issues of equity and inclusion in order to engage in conversation about diversity with mentees and foster a sense of belonging

Case Study

Is it OK to Ask?

Last year I worked with a fantastic scholar who has since left to work at another institution. I think that she had a positive experience working with our research team, but a few questions still linger in my mind. This particular scholar was a young African-American woman. I wondered how she felt about being the only African-American woman in our research group. In fact, she was the only African-American woman in our entire department. I wanted to ask her how she felt, but I worried it might be insensitive or politically incorrect to do so. I never asked. I still wonder how she felt and how those feelings may have affected her experience, but I could never figure out how to broach the subject.

Guiding Questions for Discussion:

1. What are the main themes raised in this case study?
2. What might the mentor's intent have been in asking the question, and what might have been the impact on the mentee?
3. How might you react differently to this case if the mentees' difference was one of sexual orientation? How do you engage in such conversations based on interest without sounding judgmental about differences? How do you ask without raising issues of tokenism?

Learning Objective:

Mentors will learn to improve and expand understanding of equity and inclusion and how diversity influences mentor-mentee interactions

Activity

Share an Experience as an Outsider

- Ask mentors to think back to a time when they felt most conspicuous as someone who did not fit in to a situation or setting. Ask: What was the situation, what did it feel like, how did you react? Alternatively, they could share an experience in which they could see that someone else felt like they did not belong or fit in. What kinds of differences make us feel like outsiders and what differences are irrelevant? Why?
- Note: Have each mentor share an experience. If a mentor cannot think of an experience to share, ask them to pass and then come back to them at the end of the activity. As a facilitator, you may need to encourage people to keep their comments relatively short so everyone has a chance to share. The amount of time each person has to talk will depend on the size of the group.

Learning Objective:

Mentors will learn to recognize the potential impact of conscious and unconscious assumptions, preconceptions, biases, and prejudices on the mentor-mentee relationship and reflect on how to manage them

Activity

Dig Deeper

Have mentors visit “Dig Deeper” at http://www.tolerance.org/hidden_bias/index.html and select various tests to better understand their hidden biases and assumptions. At Project Implicit (<https://implicit.harvard.edu/implicit/>), mentors can find a number of tests that enable them to explore specific biases and assumptions, such as those about gender, disabilities, skin tone, etc. These are not only informative, but fun and quick to take. These sites could be explored during the session if computers are available or distributed on a handout or via email and done outside of the session.

Learning Objective:

Mentors will learn to identify concrete strategies for learning about, recognizing, and addressing issues of equity and inclusion in order to engage in conversation about diversity with mentees and foster a sense of belonging

Case Study

Cultural Sensitivity

You just finished your Master's degree in Public Health and a residency in pediatrics. To further your research training, you join an established research team studying the impact of free clinics on public health in economically depressed urban areas. Your project will be to examine the effect of a new free pediatric clinic on children's health in an African-American community. There are many research questions you could ask, but your mentor insists that you use the research questions used in his other studies, so he can compare the data across studies. Most of those previous studies were developed and done in Latino communities. After visiting the community you will study and noting several cultural differences, you believe that the questions for your study should be revised. Your mentor disagrees and tells you to use the standard questions.

Guiding Questions for Discussion:

1. What are the main themes raised in this case study?
2. What could have been done to avoid this situation? What should the mentor do now?
3. What assumptions is the mentor making about the study population and the research? What might the impact be of those assumptions?

NOTE: This case is taken from the mentee's perspective, providing mentors a slightly different lens.

CHAPTER 7

Addressing Equity and Inclusion

OVERVIEW, LEARNING OBJECTIVES, AND ACTIVITIES

Introduction

Diversity, along a range of dimensions, offers both challenges and opportunities to any relationship. Learning to identify, reflect upon, learn from, and engage with diverse perspectives is critical to forming and maintaining both an effective mentoring relationship as well as a vibrant learning environment.

In the last session, your group discussed the importance of assessing mentees' understanding and how to best facilitate their learning. In this session, mentors will expand upon this by considering how to foster an inclusive environment where everyone can do their best learning and create the highest quality of research, both because of and in spite of their diverse perspectives.

Learning Objectives

Mentors will have the knowledge and skills to:

1. Improve and expand understanding of equity and inclusion and how diversity influences mentor-mentee interactions
2. Recognize the potential impact of conscious and unconscious assumptions, preconceptions, biases, and prejudices on the mentor-mentee relationship and reflect on how to manage them
3. Identify concrete strategies for learning about, recognizing, and addressing issues of equity and inclusion in order to engage in conversations about diversity with mentees and foster a sense of belonging

*From Pfund, et al. Mentor Training for Clinical and Translational Researchers (2012).
New York, NY: W.H. Freeman & Co.*

Overview of Activities for the Equity and Inclusion Session: Please note that a core activity is listed for each learning objective. We encourage you to engage the mentors in your group in this activity. There is a list of additional activities that can be used if you have extra time in the session or if the core activity is not working well for the mentors in your group.

	Learning Objectives	Core Activities	Additional Activities
1	Improve and expand understanding of equity and inclusion, and how diversity influences mentor-mentee interactions	Mentors consider the many ways they are and can be different from their mentees and how these differences affect the mentoring experience for both (Activity #1)	Mentors reflect and share an experience in which they felt like an outsider (Activity #5)
2	Recognize the potential impact of conscious and unconscious assumptions, preconceptions, biases, and prejudices on the mentor-mentee relationship and reflect on how to manage them	Mentors reflect on their own unconscious assumptions (Activity #2) Mentors read the results of diversity studies, discuss implications, and brainstorm strategies for reducing bias (Activity #3)	Mentors explore their own biases using an implicit assumptions test and discuss the results (Activity #6)
3	Identify concrete strategies for learning about, recognizing, and addressing issues of equity and inclusion in order to engage in conversations about diversity with mentees and foster a sense of belonging	Mentors break into two or three groups and read one of three case studies (<i>Is It Okay to Ask?</i> , <i>Language Barriers</i> , or <i>You Can't Do That</i>), then discuss reactions (Activity #4)	Mentors read and discuss Case #4: <i>Cultural Sensitivity</i> (Activity #7)

FACILITATION GUIDE

Recommended Session on Addressing Equity and Inclusion (60 minutes)

Materials Needed for the Session

- ▶ Table tents and markers
- ▶ Index cards
- ▶ Chalkboard, whiteboard or flip chart
- ▶ Handouts:
 - ▷ Copies of introduction and learning objectives for *Addressing Equity and Inclusion* (page 59)
 - ▷ Copies of the *Diversity Study Results* handout (page 65)
 - ▷ Copies of *Equity and Inclusion* case studies (*Is It Okay to Ask?*, *Language Barriers*, and *You Can't Do That*) (pages 66–67) and the additional case if desired (page 68)
 - ▷ Copies of *Benefits and Challenges of Diversity in Academic Settings* (pages 69–76)

*From Pfund, et al. Mentor Training for Clinical and Translational Researchers (2012).
New York, NY: W.H. Freeman & Co.*

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Introduction (2 min)

- ▶ REFLECTION: Ask mentors to write down any new mentoring activities they have engaged in since the last session. If none, they should write down something they are thinking about regarding their mentoring relationship based on the previous session.
- ▶ TELL: Review the introduction and learning objectives for the session.

Objective 1: Improve and expand understanding of equity and inclusion and how diversity influences mentor-mentee interactions (13 min)

- ▶ ACTIVITY #1: Reflecting on Diversity
 - ▷ TELL: Acknowledge that, in this society, it is engrained in our subconscious to first think of diversity in terms of race and ethnicity, but remember that it is broader than that. For example, consider the impact of learning and physical disabilities, gender, age/generation, professional experience, sexual orientation, class, religion, and differences in communication, learning, and work styles. Think about the list we generated in the introductory session. Do you have any additions to the list? (If your group did an alternative activity in the introductory session and did not generate a list, you can have them do so now.)
 - ▷ NOTE: Leave this list displayed throughout the session and tell mentors that they can add to it as you move through the other activities. As you add items, you may discuss how these differences impact their mentoring relationships and how they can be capitalized upon to create high-quality, innovative research as time allows.
 - ▷ DISCUSS: How do these differences impact their mentoring relationships and how can they be capitalized on to create high quality innovative research? They may consider the concept of cognitive diversity, or diversity of thought, and how knowledge they've gained from other life experiences has influenced and enriched their thinking as a researcher. List the ideas generated in this discussion on a whiteboard or flip chart.

Objective 2: Recognize the potential impact of conscious and unconscious assumptions, preconceptions, biases, and prejudices on the mentor-mentee relationship and reflect on how to manage them (25 min)

- ▶ ACTIVITY #2: Reflect on Unconscious Assumptions
 - ▷ TELL: Think about some of your assumptions when you entered the room on the first day of this training—that there would be electricity, a table, a bathroom, etc. Let's think about some of the assumptions we make about the people we work with.
 - ▷ TELL: Read each word on the list below and ask mentors to focus on the first image that comes to their mind and quickly jot down three words that describe the person they pictured. Pacing is important; only leave about five seconds between each item on the list so that they are focused on the first image that comes to mind.
 1. Cook
 2. Pilot
 3. Mountain Climber
 4. Caretaker
 5. Politician
 6. Clinical Researcher
 7. K-scholar

*From Pfund, et al. Mentor Training for Clinical and Translational Researchers (2012).
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- ▷ DISCUSS (10 min) with entire group: Have mentors share some of the words they noted about each prompt, with special attention given to the clinical researcher and K-scholar. For example, did their images include mention of gender, race, body shape and size, or age? Was there some uniformity in their images?
- ▷ TELL: Remind mentors that we all carry these unconscious assumptions and they need not be a source for guilt or embarrassment. We discuss them as a means of raising awareness and being intentional about how we let them influence our behavior. The following studies highlight how enculturation affects us all and how it may impact the mentoring relationship.
- ▶ ACTIVITY #3: Implications of Diversity Research
 - ▷ Distribute the *Diversity Study Results* handout (page 65) and let participants read it individually for two to three minutes.
 - ▷ NOTE: Many of these studies are summarized in *Benefits and Challenges of Diversity*, which is included in the materials handed out.
 - ▷ DISCUSS (5 min) in pairs your reaction to one of the studies and the implications for your mentoring practice.
 - ▷ DISCUSS (10 min) with entire group. You may want to record the ideas generated in this discussion on a whiteboard or flip chart. Guide the discussion using the following questions:
 1. What were your initial reactions to the studies?
 2. Which study captured your attention? Why?
 3. What implications do these study results have for your mentoring practice?
 4. What are two to three practical things you could do to minimize the impact of bias, prejudice, and stereotype in your mentoring relationship?
 - ▷ NOTE: Refer to the “Benefits and Challenges of Diversity” reading on pages 69–76 for specific approaches.

Objective 3: Identify concrete strategies for learning about, recognizing, and addressing issues of equity and inclusion in order to engage in conversations about diversity with mentees and foster a sense of belonging (20 min)

- ▶ ACTIVITY #4: Case Studies
 - ▷ Distribute the three *Equity and Inclusion* case studies (*Is It Okay to Ask?*, *Language Barriers*, and *You Can't Do That*) and give participants a couple of minutes to review them and to choose which one they would like to discuss in a small group so that there are two or three groups.
 - ▷ TELL (8 min): Discuss in small groups one of the case studies.
 - ▷ DISCUSS (10 min) with the entire group. You may want to record the ideas and specific strategies generated in this discussion on a whiteboard or flip chart.
 - ▷ NOTE: In some groups, mentors can be fairly quiet and reluctant to speak at first in this discussion, but just give them a few minutes. Once mentors get going with the discussion, it is often rich and engaging. Allowing mentors to choose which case they would like to discuss should help. Views on the impact of race, ethnicity, gender, disability, age, sexual orientation, and background on the research experience vary widely; possible responses to the cases are included below.
 - ▷ There are a few guiding questions at the end of each case (*Is It Okay to Ask?*, *Language Barriers*, and *You Can't Do That*). Some additional questions include:

*From Pfund, et al. Mentor Training for Clinical and Translational Researchers (2012).
New York, NY: W.H. Freeman & Co.*

1. As a mentor, would you feel comfortable asking a mentee about how their identity influences their experiences? How do you decide when asking questions about these issues is appropriate?
 2. Specifically, how would you go about engaging someone in a discussion about their race, ethnicity, gender, disability, age, sexual orientation, or background? How do you engage in such conversations based on real interest without expressing or inadvertently projecting a sense of judgment about differences? How do you ask without raising issues of tokenism?
 3. Do you think everyone should be treated the same? Does treating everyone the same mean they are being treated equally?
- ▷ Possible responses to the *Equity and Inclusion* case studies:
1. General responses to all of the cases:
 - ▷ Race, gender, ethnicity, sexual orientation, and other aspects of diversity have nothing to do with a research experience because the experience should focus on research and not on personal characteristics.
 - ▷ Race, gender, ethnicity, sexual orientation, and other aspects of diversity have everything to do with a research experience and permeate every aspect of the experience, affecting perceptions, confidence, and motivation. Ignoring the impact of diversity sends a message that those aspects of a person play no role in one's work, which may turn students off to science. The level of impact will vary across the relationship. At times it may be invisible. At other times, it may be the most important factor.
 - ▷ Individuals want to be assessed for their abilities, independent of race, gender, etc. The trick is deciding how to balance acknowledging and considering the impact of someone's background without letting it bias your interaction with them.
 - ▷ Regular conversations are important with *all* mentees to check on how they are doing and whether they are happy in their overall environment. This will build relationships that enable mentees to be comfortable sharing concerns *and* enable mentors to notice if there are issues surrounding race or other personal characteristics that need to be addressed.
 2. Possible responses to “*Is It Okay to Ask?*”
 - ▷ There is no consensus on whether and when it is okay to ask directly about race or gender. Some feel it is important to ask early, others feel it is never okay to ask, and others still feel there are special situations when it is necessary to ask.
 - ▷ It is not okay to ask because asking may call attention to the person's “group” and may activate stereotype threat and affect their performance.
 - ▷ It is not okay to ask. Some are tired of telling their story and feel that the question sometimes carries an implicit message of “Explain yourself” or “Justify yourself.”
 - ▷ Establishing a sufficiently personal relationship with *all* mentees allows mentors to better understand diversity-related issues from mentees without directly asking questions about their personal characteristics and background.
 3. Possible responses to “*Language Barriers*”
 - ▷ Having a common language in the lab is important to research as well as lab cohesion.
 - ▷ Emphasizing that everyone be able to communicate in English is different from prohibiting people from speaking to each other in their native language. The issue should be discussed with the whole lab in hope that others will not be uncomfortable when lab members are speaking in a language they don't understand.

From Pfund, et al. *Mentor Training for Clinical and Translational Researchers* (2012).
New York, NY: W.H. Freeman & Co.

- ▷ The mentor should meet with lab members to discuss the issue and establish a policy that would be explained in writing.
 - ▷ Race, language, and ethnicity are intimately tied psychologically, and assumptions about one inform assumptions about the others. Thus even if an English-only policy has practical reasons, it could still be perceived as racism and exclusion. This can be particularly true for those who grew up in an environment in the U.S. where you were punished for speaking in another language in school and where assumptions about your abilities are tied to your language, race, and ethnicity.
4. Possible responses to “*You Can’t Do That*”
- ▷ Dr. Roust is assuming that Dr. Mandova’s research will be of no real value to them, that it is only anecdotal “soft science.” He is not considering how it could provide context to the quantitative research.
 - ▷ Dr. Roust is being realistic when noting the time involved and the risk the mentee is taking in his career. He should further discuss these risks with the mentee and allow him to make his own decision. The discussion should include a plan that will allow the mentee to meet deadlines with his fellowship project.
 - ▷ Dr. Roust is assuming that an Indo-Romanian speaking in accented English would not be well-received among a poor rural population, which could be primarily white. He could discuss his concerns with Dr. Biswas by providing some context for possible reactions Dr. Biswas might get, while being careful not to stereotype the rural white population either. He should further refer Dr. Biswas to someone, or have him seek out someone with experience in community-engaged research. (Dr. Roust may also be assuming the rural population will be white, but he may know their racial composition since he has demographic data on the population.)

FOLLOW-UP ACTIVITY: Encourage mentors to return to their compacts (if applicable) and make any changes based on their reflections on equity and inclusion.

Addressing Equity and Inclusion

Activity #3: Diversity Study Results for Discussion

Read the description of the study results and discuss your reaction and the implications for your mentoring practice. See the *Benefits and Challenges of Diversity* article on page 60–76 for more details about these and other studies.

Study 1

Blind, randomized trial: When asked to rate the quality of verbal skills indicated by a short text, evaluators rated the skills as lower if they were told an African-American wrote the text than if they were told a white person wrote it, and gave lower ratings when told a man wrote it than when told a woman wrote it.

Study 2

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Study 3

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Study 4

Real-life study: Parents' estimates of math ability are higher for sons than for daughters, despite no gender differences in grades or test scores.

Study 5

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Many of these studies and others are summarized in Fine and Handelsman (2005). "Benefits and Challenges of Diversity in Academic Settings" (pages 71–81): Madison, WI, and Handelsman, Miller, and Pfund (2007). "Diversity" in *Scientific Teaching*. W.H. Freeman and Company: New York, NY. This activity is from the National Academies Summer Institute on Undergraduate Education in Biology (<http://www.academiessummerinstitute.org>, accessed June 2010).

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Case #1: Is It Okay to Ask?

Last year I worked with a fantastic scholar who has since left to work at another institution. I think that she had a positive experience working with our research team, but a few questions still linger in my mind. This particular scholar was a young African-American woman. I wondered how she felt about being the only African-American woman in our research group. In fact, she was the only African-American woman in our entire department. I wanted to ask her how she felt, but I worried it might be insensitive or politically incorrect to do so. I never asked. I still wonder how she felt and how those feelings may have affected her experience, but I could never figure out how to broach the subject.

Guiding Questions for Discussion

1. What are the main themes raised in this case study?
2. What might the mentor's intent have been in asking the question, and what might have been the impact on the mentee?
3. How might you react differently to this case if the mentees' difference was one of sexual orientation? How do you engage in such conversations based on interest without sounding judgmental about differences? How do you ask without raising issues of tokenism?

Case #2: Language Barriers

I am a researcher in a very crowded lab. This fall, two new K-scholars started in the lab, both of them Chinese. The scholars were great—they worked hard, got interesting results, were fun to be around, and fit into the group really well. The problem was that they spoke Chinese to each other all day long. And I mean *All day*. For eight or nine hours every day, I listened to this rapid talking that I couldn't understand. Finally, one day I blew up. I said in a not-very-friendly tone of voice that I'd really appreciate it if they would stop talking because I couldn't get any work done. Afterwards, I felt really bad and apologized to them. I brought the issue to my peers and was surprised by the length of the discussion that resulted. People were really torn about whether it is okay to require everyone to speak in English and whether asking people not to talk in the lab is a violation of their rights. We happened to be visited that day by a Norwegian faculty member and we asked her what her lab policy is. She said everyone in her lab is required to speak in Norwegian. That made us all quiet because we could imagine how hard it would be for us to only speak Norwegian all day long.

Guiding Questions for Discussion

1. What are the main themes raised in this case study?
2. What is the intent of an English-only policy? What might the impact be on lab members and the 'lab community' as a whole?
3. How is race a factor in this case? What are the implications of the connections between race, language, and ethnicity?

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Case #3: “You Can’t Do That”

Dr. Roust is a Professor of Epidemiology with a long and successful history of research funding. He is known as an expert in diabetes research. He has recently taken on a very promising new post-doctoral fellow in Epidemiology, a young Romanian of Indian descent, Dr. Biswas, with an interest in the underlying sociocultural factors affecting the prevalence and treatment of Type 2 diabetes. It was agreed that he will be using an unanalyzed data set of Dr. Roust’s to explore demographic patterns of a particular poor rural subgroup. So far things have been going quite well and Dr. Roust is excited about how this new mentee will help fill a gap in his own research. However, after several weeks of working on the secondary data analysis, Dr. Biswas comes to his office very excited about a new direction he would like to take. He has met an historian he would like to add to his mentoring committee, Dr. Mandova. She has research expertise related to cultural understandings of food and dietary patterns in poor rural populations and is participating in an oral history project in their target population. She offered to introduce Dr. Biswas to some of her contacts and would allow him to sit in on interviews with community members. Dr. Biswas believes Dr. Mandova’s research will be a perfect complement to Dr. Roust’s macro-level analysis. Dr. Roust dismisses the feasibility of the idea almost immediately. He doesn’t see how any anecdotal historical data could be used in a convincing way, is concerned by how it will impact the current project effort, and fears that it will be far too time-consuming for Dr. Biswas to stay on track with his fellowship. He also doubts that the NIH would be supportive of the endeavor. He lets Dr. Biswas know his feelings and tells Dr. Biswas not to take such risks so early in his career, especially in a tight funding environment. Dr. Roust also privately wonders how well Dr. Biswas will be received by community members and how well-equipped he is for this kind of research, especially given his own limited cultural knowledge and language barrier.

Guiding Questions for Discussion

1. What are the main themes raised in this case study?
2. Discuss the assumptions Dr. Roust is making about the research and about Dr. Biswas’ competency based on his ethnicity and background. How valid are his concerns? Should Dr. Roust also raise his private concerns with Dr. Biswas or Dr. Mandova, and if so, how?
3. How do our own assumptions about what is acceptable and fundable in research limit creativity and understanding? Is there a middle ground in this case?

*From Pfund, et al. Mentor Training for Clinical and Translational Researchers (2012).
New York, NY: W.H. Freeman & Co.*

Additional Activities (if time allows)

Objective 1; Activity #5

Ask mentors to think back to a time when they felt most conspicuous as someone who did not fit in to a situation or setting. Ask: What was the situation, what did it feel like, how did you react? Alternatively, they could share an experience in which they could see that someone else felt like they did not belong or fit in. What kinds of differences make us feel like outsiders and what differences are irrelevant? Why?

Note: Have each mentor share an experience. If a mentor cannot think of an experience to share, ask them to pass and then come back to them at the end of the activity. As a facilitator, you may need to encourage people to keep their comments relatively short so everyone has a chance to share. The amount of time each person has to talk will depend on the size of the group.

Objective 2; Activity #6

Have mentors visit “Dig Deeper” at http://www.tolerance.org/hidden_bias/index.html and select various tests to better understand their hidden biases and assumptions. At Project Implicit (<https://implicit.harvard.edu/implicit/>), mentors can find a number of tests that enable them to explore specific biases and assumptions, such as those about gender, disabilities, skin tone, etc. These are not only informative, but fun and quick to take. These sites could be explored during the session if computers are available or distributed on a handout or via email and done outside of the session.

Objective 3; Activity #7

Case #4: Cultural Sensitivity

You just finished your Master’s degree in Public Health and a residency in pediatrics. To further your research training, you join an established research team studying the impact of free clinics on public health in economically depressed urban areas. Your project will be to examine the effect of a new free pediatric clinic on children’s health in an African-American community. There are many research questions you could ask, but your mentor insists that you use the research questions used in his other studies, so he can compare the data across studies. Most of those previous studies were developed and done in Latino communities. After visiting the community you will study and noting several cultural differences, you believe that the questions for your study should be revised. Your mentor disagrees and tells you to use the standard questions.

Guiding Questions for Discussion:

1. What are the main themes raised in this case study?
2. What could have been done to avoid this situation? What should the mentor do now? What should the mentee do now?
3. What assumptions is the mentor making about the study population and the research? What might the impact be of those assumptions?

Note: This case is taken from the mentee’s perspective, providing mentors a slightly different lens.

Benefits and Challenges of Diversity in Academic Settings

by Eve Fine and Jo Handelsman

The diversity of a university's faculty, staff, and students influences its strength, productivity, and intellectual personality. Diversity of experience, age, physical ability, religion, race, ethnicity, gender, and many other attributes contributes to the richness of the environment for teaching and research. We also need diversity in discipline, intellectual outlook, cognitive style, and personality to offer students the breadth of ideas that constitute a dynamic intellectual community.

A vast and growing body of research provides evidence that a diverse student body, faculty, and staff benefits our joint missions of teaching and research by increasing creativity, innovation, and problem-solving. Yet diversity of faculty, staff, and students also brings challenges. Increasing diversity can lead to less cohesiveness, less effective communication, increased anxiety, and greater discomfort for many members of a community.¹

Learning to respect and appreciate each other's cultural and stylistic differences and becoming aware of unconscious assumptions and behaviors that may influence our interactions will enable us to minimize the challenges and derive maximum benefits from diversity.

This booklet summarizes research on the benefits and challenges of diversity and provides suggestions for realizing the benefits. Its goal is to help create a climate in which all individuals feel "*personally safe, listened to, valued, and treated fairly and with respect.*"²

"It is time to renew the promise of American higher education in advancing social progress, end America's discomfort with race and social difference, and deal directly with many of the issues of inequality present in everyday life."

—Sylvia Hurtado

Benefits for Teaching and Research

Research shows that diverse working groups are more productive, creative, and innovative than homogeneous groups, and suggests that developing a diverse faculty will enhance teaching and research.³

Some findings are:

- ▶ A controlled experimental study of performance during a brainstorming session compared ideas generated by ethnically diverse groups composed of Asians, Blacks, Whites, and Latinos to those generated by ethnically homogenous groups composed of Whites only. Evaluators who were unaware of the source of the ideas found no significant difference in the number of ideas generated by the two types of groups. However, when applying measures of feasibility and effectiveness, they rated the ideas generated by diverse groups as being of higher quality.⁴
- ▶ The level of critical analysis of decisions and alternatives was higher in groups exposed to minority viewpoints than in groups that were not. Minority viewpoints stimulated discussion of multiple perspectives and previously unconsidered alternatives, whether or not the minority opinion was correct or ultimately prevailed.⁵
- ▶ A study of corporate innovation found that the most innovative companies deliberately established diverse work teams.⁶
- ▶ Data from the 1995 Faculty Survey conducted by UCLA's Higher Education Research Institute (HERI) demonstrated that scholars from minority groups have expanded and enriched scholarship

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and teaching in many academic disciplines by offering new perspectives and by raising new questions, challenges, and concerns.⁷

- ▶ Several investigators found that women and faculty of color more frequently employed active learning in the classroom, encouraged student input, and included perspectives of women and minorities in their coursework.⁸

Benefits for Students

Numerous research studies have examined the impact of diversity on students and educational outcomes. Cumulatively, these studies provide extensive evidence that diversity has a positive impact on all students, minority and majority.⁹

Some examples are:

- ▶ A national longitudinal study of 25,000 undergraduates at 217 four-year colleges and universities showed that institutional policies fostering diversity of the campus community had positive effects on students' cognitive development, satisfaction with the college experience, and leadership abilities. These policies encouraged faculty to include themes relating to diversity in their research and teaching, and provided students with opportunities to confront racial and multicultural issues in the classroom and in extracurricular settings.¹⁰
- ▶ Two longitudinal studies, one conducted by HERI in 1985 and 1989 with over 11,000 students from 184 institutions and another in 1990 and 1994 on approximately 1500 students at the University of Michigan, showed that students who interacted with racially and ethnically diverse peers both informally and within the classroom showed the greatest "engagement in active thinking, growth in intellectual engagement and motivation, and growth in intellectual and academic skills."¹¹ A more recent study of 9,000 students at ten selective colleges reported that meaningful engagement rather than casual and superficial interactions led to greater benefit from interaction with racially diverse peers.¹²
- ▶ Data from the National Study of Student Learning indicated that both in-class and out-of-class interactions and involvement with diverse peers fostered critical thinking. This study also found a strong correlation between "the extent to which an institution's environment is perceived as racially nondiscriminatory" and students' willingness to accept both diversity and intellectual challenge.¹³
- ▶ A survey of 1,215 faculty members in departments granting doctoral degrees in computer science, chemistry, electrical engineering, microbiology, and physics showed that women faculty played important roles in fostering the education and success of women graduate students.¹⁴

Challenges of Diversity

Despite the benefits that a diverse faculty, staff, and student body provide to a campus, diversity also presents considerable challenges that must be addressed and overcome.

Some examples include:

- ▶ Numerous studies have reported that women and minority faculty members are considerably less satisfied with many aspects of their jobs than are majority male faculty members. These aspects include teaching and committee assignments, involvement in decision-making, professional relations with colleagues, promotion and tenure, salary inequities, and overall job satisfaction.¹⁵

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- ▶ A study of minority faculty at universities and colleges in eight Midwestern states showed that faculty of color experience exclusion, isolation, alienation, and racism in predominantly white universities.¹⁶
- ▶ Multiple studies demonstrate that minority students often feel isolated and unwelcome in predominantly white institutions and that many experience discrimination and differential treatment. Minority status can result from race, ethnicity, national origin, sexual orientation, disability and other factors.¹⁷
- ▶ Women students, particularly when they are minorities in their classes, may experience unwelcoming climates that can include sexist use of language, presentation of stereotypic or disparaging views of women, differential treatment from professors, and/or sexual harassment.¹⁸
- ▶ When a negative stereotype relevant to their identity exists in a field of interest, women and members of minority groups often experience “stereotype threat”—the fear that they will confirm or be judged in accordance with the stereotype. Such stereotype threat exists for both entry into a new field and for individuals already excelling in a specific arena. Situations or behaviors that heighten awareness of one’s minority status can activate stereotype threat.¹⁹ Research demonstrates that once activated, stereotype threat leads to stress and anxiety, which decreases memory capacity, impairs performance, and reduces aspirations and motivation.²⁰ Human brain imaging, which shows that activating stereotype threat causes blood to move from the cognitive to the affective centers of the brain, indicates how situational cues reduce cognitive abilities.²¹
- ▶ Research has demonstrated that a lack of previous positive experiences with “outgroup members” (minorities) causes “ingroup members” (majority members) to feel anxious about interactions with minorities. This anxiety can cause majority members to respond with hostility or to avoid interactions with minorities.²²

Influence of Unconscious Assumptions and Biases

Research studies show that people who have strong egalitarian values and believe that they are not biased may unconsciously behave in discriminatory ways.²³ A first step towards improving climate is to recognize that unconscious biases, attitudes, and other influences unrelated to the qualifications, contributions, behaviors, and personalities of our colleagues can influence our interactions, *even if we are committed to egalitarian views*.

Although we all like to think that we are objective scholars who judge people on merit, the quality of their work, and the nature of their achievements, copious research shows that a lifetime of experience and cultural history shapes every one of us and our judgments of others.

The results from controlled research studies demonstrate that people often hold unconscious, implicit assumptions that influence their judgments and interactions with others. Examples range from expectations or assumptions about physical or social characteristics associated with race, gender, age, and ethnicity to those associated with certain job descriptions, academic institutions, and fields of study.

“People confident in their own objectivity may overestimate their invulnerability to bias.”

—Eric Luis Uhlmann and Geoffrey L. Cohen

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Examples of common social assumptions or expectations:

- ▶ When shown photographs of people of the same height, evaluators overestimated the heights of male subjects and underestimated the heights of female subjects, even though a reference point, such as a doorway, was provided.²⁴
- ▶ When shown photographs of men of similar height and build, evaluators rated the athletic ability of Black men higher than that of White men.²⁵
- ▶ When asked to choose counselors from a group of equally competent applicants who were neither exceptionally qualified nor unqualified for the position, college students chose White candidates more often than African American candidates, exhibiting a tendency to give members of the majority group the benefit of the doubt.²⁶

These studies show that we often apply generalizations about groups that may or may not be valid to the evaluation of individuals.²⁷ In the study on height, evaluators applied the statistically accurate generalization that men are usually taller than women to estimate the height of individuals who did not necessarily conform to the generalization. If we can inaccurately apply generalizations to objective characteristics as easily measured as height, what happens when the qualities we are evaluating are not as objective or as easily measured? What happens when, as in the studies of athletic ability and choice of counselor, the generalizations are not valid? What happens when such generalizations unconsciously influence the ways we interact with other people?

Examples of assumptions or biases that can influence interactions:

- ▶ When rating the quality of verbal skills as indicated by vocabulary definitions, evaluators rated the skills lower if told that an African American provided the definitions than if told that a White person provided them.²⁸
- ▶ When asked to assess the contribution of skill versus luck to successful performance of a task, evaluators more frequently attributed success to skill for males and to luck for females, even though males and females performed the task identically.²⁹
- ▶ Evaluators who were busy, distracted by other tasks, and under time pressure gave women lower ratings than men for the same written evaluation of job performance. Sex bias decreased when they took their time and focused attention on their judgments, which rarely occurs in actual work settings.³⁰
- ▶ Research has shown that incongruities between perceptions of female gender roles and leadership roles can cause evaluators to assume that women will be less competent leaders. When women leaders provided clear evidence of their competence, thus violating traditional gender norms, evaluators perceived them to be less likeable and were less likely to recommend them for hiring or promotion.³¹
- ▶ A study of nonverbal communication found that White interviewers maintained higher levels of visual contact, reflecting greater attraction, intimacy, and respect, when talking with White interviewees and higher rates of blinking, indicating greater negative arousal and tension, when talking with Black interviewees.³²

Examples of assumptions or biases in academic contexts:

Several research studies conclude that implicit biases and assumptions can affect evaluation and hiring of candidates for academic positions. These studies show that the gender of the person being evaluated significantly influences the assessment of résumés and postdoctoral applications, evaluation of journal articles, and the language and structure of letters of recommendation. As we attempt

to enhance campus and department climate, the influence of such biases and assumptions may also affect selection of invited speakers, conference presenters, committee membership, interaction, and collaboration with colleagues, and promotion to tenure and full professorships.

- ▶ A study of over 300 recommendation letters for medical faculty hired by a large American medical school found that letters for female applicants differed systematically from those for males. Letters written for women were shorter, provided “minimal assurance” rather than solid recommendations, raised more doubts, and included fewer superlative adjectives.³³
- ▶ In a national study, 238 academic psychologists (118 male, 120 female) evaluated a junior-level or a senior-level curriculum vitae randomly assigned a male or a female name. These were actual vitae from an academic psychologist who successfully competed for an assistant professorship and then received tenure early. For the junior-level applicant, both male and female evaluators gave the male applicant better ratings for teaching, research, and service and were more likely to hire the male than the female applicant. Gender did not influence evaluators’ decisions to tenure the senior-level applicant, but evaluators did voice more doubts about the female applicant’s qualifications.³⁴
- ▶ A study of postdoctoral fellowships awarded by the Medical Research Council of Sweden found that women candidates needed substantially more publications to achieve the same rating as men, unless they personally knew someone on the selection panel.³⁵
- ▶ A 2008 study showed that when the journal *Behavioral Ecology* introduced a double-blind review process that concealed the identities of reviewers and authors, there was a significant increase in the publication of articles with a woman as the first author.³⁶

Reaping the Benefits and Minimizing the Challenges of Diversity

To reap the benefits and minimize the challenges of diversity, we need to overcome the powerful human tendency to feel more comfortable when surrounded by people we resemble. We need to learn how to understand, value, and appreciate difference. Below is some advice for doing so:

Become aware of unconscious biases that may undermine your conscious commitment to egalitarian principles.

One way of doing so is to take the Implicit Association Test (IAT) offered by Project Implicit (a research collaborative at the University of Virginia, Harvard University, and the University of Washington): <https://implicit.harvard.edu/implicit/demo>.

Consciously strive to minimize the influence of unintentional bias.

Question your judgments and decisions and consider whether unintentional bias may have played a role. One way to do so is to perform a thought experiment: ask yourself if your opinions or conclusions would change if the person was of a different race, sex, or religion, etc. Some questions to consider include:

- ▶ Are women or minority colleagues/students subject to higher expectations in areas such as number and quality of publications, name recognition, or personal acquaintance with influential colleagues?
- ▶ Are colleagues or students who received degrees from institutions other than major research universities under-valued? Are we missing opportunities to benefit from the innovative, diverse, and valuable perspectives and expertise of colleagues or students from other institutions such as historically black universities, four-year colleges, community colleges, government, or industry?

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- ▶ Are ideas and opinions voiced by women or minorities ignored? Are their achievements and contributions under-valued or unfairly attributed to collaborators, despite evidence to the contrary in their publications or letters of reference?
- ▶ Is the ability of women or minorities to lead groups, raise funds, and/or supervise students and staff underestimated? Are such assumptions influencing committee and/or course assignments?
- ▶ Are assumptions about whether women or minorities will “fit in” to an existing environment influencing decisions?
- ▶ Are assumptions about family obligations inappropriately influencing appointments and other decisions?

Seek out opportunities for greater interactions with women and minority colleagues.

Get to know women and minority colleagues in your department, your campus, and your professional associations. Pursue meaningful discussions with them about research, teaching methodologies, and ideas about the direction of your department, college, and profession. Listen actively to any concerns they express and try to understand and learn from their perspectives and experiences.

Focus on the individual and on his/her personality, qualifications, merit, interests, etc.

Consciously avoid the tendency to make assumptions about an individual based on the characteristics (accurate or not) of his/her group membership. Likewise, avoid the tendency to make assumptions about groups based on the behavior, personality, qualifications, etc. of an individual group member. Instead, concentrate on the individual and his/her qualities.

Treat all individuals—regardless of race, sex, or status—with respect, consideration, and politeness.

- ▶ Greet faculty, staff, and students pleasantly in hallways or in other chance encounters.
- ▶ Make requests to faculty, staff, and students politely—even when the work you are asking for is part of their obligations.
- ▶ Acknowledge and appreciate the work, assistance, and contributions of faculty colleagues, staff, and students. Do so in public forums as well as privately.
- ▶ Address individuals by their appropriate titles or by their preferred forms of address.

Actively promote inclusive communities.

- ▶ In classroom, committee, laboratory, and departmental settings, work to ensure that everyone has a chance to voice opinions, concerns, or questions. Acknowledge and attribute ideas, suggestions, and comments accurately. Women and minorities often report that their remarks or contributions are ignored or unheard.
- ▶ Support efforts to ensure that leadership and membership of departmental and professional committees are diverse with respect to age, gender, nationality, race, ethnicity, etc.
- ▶ Support efforts to ensure that departmental events such as seminar series and sponsored conferences include presenters of various ages, genders, nationalities, races, and ethnicities.
- ▶ Promote inclusive language by example. Avoid using only male pronouns when referring to groups of both sexes. Avoid language that makes assumptions about marital status and or/sexual orientation, i.e., consider using “partner” rather than “spouse.”
- ▶ Welcome new departmental members by initiating conversations or meetings with them. Attend social events hosted by your department and make efforts to interact with new members and others who are not part of your usual social circle.

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Avoid activating stereotype threat.

In addition to the advice provided above for actively promoting inclusive communities, the following suggestions can prevent the activation of stereotype threat or counteract its effects:

- ▶ Teach students and colleagues about stereotype threat.³⁷
- ▶ Counter common stereotypes by increasing the visibility of successful women and minority members of your discipline. Ensure that the posters and/or photographs of members of your department or discipline displayed in hallways, conference rooms, and classrooms reflect the diversity you wish to achieve. Choose textbooks that include the contributions and images of diverse members of your discipline.³⁸
- ▶ Support and encourage your students by providing positive feedback as well as constructive criticism to ensure that they know their strengths and develop confidence in their abilities. Save your harshest criticism for private settings so that you do not humiliate or embarrass students in front of either their peers or more senior colleagues. Such respectful practices are important for all students, but are likely to be more important for women and members of minority groups, who may have received less encouragement and may be at greater risk of being discouraged due to the influence of stereotype threat. Demonstrate similar respect and encouragement for your colleagues.
- ▶ For more suggestions, see: <http://reducingstereotypethreat.org/reduce.html>.

Conclusion*Diversity is not an end in itself.*

Diversity is a means of achieving our educational and institutional goals. As such, merely adding diverse people to a homogeneous environment does not automatically create a more welcoming and intellectually stimulating campus.

Long-term efforts, engagement, and substantial attention are essential for realizing the benefits that diversity has to offer and for ensuring that all members of the academic community are respected, listened to, and valued.

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Second Edition

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Prepared for WISELI by Eve Fine and Jo Handelsman.

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Learning Objective:

Mentors will learn to improve and expand understanding of equity and inclusion, and how diversity influences mentor-mentee interactions.

Activity

Reflecting on Diversity (10 min)

- **TELL:** Acknowledge that in this society, it is engrained in our subconscious to first think of diversity in terms of race and ethnicity, but remember that it is broader than that. For example, consider the impact of learning and physical disabilities, gender, age/generation, professional experience, sexual orientation, class, religion, and differences in communication, learning, and work styles. Think about the list we generated in the introductory session. Do you have any additions to that list? (If your group did an alternative activity in the introductory session and did not generate a list, you can have them do so now).
- **NOTE:** Leave this list displayed throughout the session and tell mentors that they can add to it as you move through the other activities. As you add items, you may discuss how these differences impact their mentoring relationships and how they can be capitalized upon to create high quality innovative research as time allows.
- **DISCUSS:** How do these differences impact their mentoring relationships and how can they be capitalized on to create high quality innovative research? They may consider the concept of cognitive diversity, or diversity of thought, and how knowledge they've gained from other life experiences has influenced and enriched their thinking as a researcher. List the ideas generated in this discussion on a white board or flip chart.
- **DISCUSS:** How do these differences pose challenges to effective mentoring? They may consider how differences in their mentee's beliefs, work ethic and cognitive ability may present challenges. Also, how does one effectively mentor an entire research team comprised of individuals who are different from one another? How does one develop in their research team members an appreciation for (or at least tolerance of and respect for) differences among individuals on the team?

Learning Objective:

Mentors will learn to recognize the potential impact of conscious and unconscious assumptions, preconceptions, biases, and prejudices on the mentor mentee relationship and reflect on how to manage them

Activity

Reflect on Unconscious Assumptions (25 min)

- **TELL:** Think about some of your assumptions when you entered the room on the first day of this training—that there would be electricity, a table, a bathroom etc. Let's think about some of the assumptions we make about the people we work with.
- **TELL:** Read each word on the list below and ask mentors to focus on the first image that comes to their mind and quickly jot down three words that describe the person they pictured. Pacing is important; only leave about five seconds between each item on the list so that they are focused on the first image that comes to mind.
 1. Cook
 2. Pilot
 3. Mountain Climber
 4. Caretaker
 5. Politician
 6. Clinical Researcher
 7. Health Services Researcher
- **DISCUSS (10 min)** with entire group: Have mentors share some of the words they noted about each prompt, with special attention given to the clinical researcher and health services researcher. For example, did their images include mention of gender, race, body shape and size, or age? Was there some uniformity in their images?
- **TELL:** Remind mentors that we all carry these unconscious assumptions and they need not be a source for guilt or embarrassment. We discuss them as a means of raising awareness so we can minimize their impact on our behavior. The following studies highlight how enculturation affects us all and how it may impact the mentoring relationship.

Learning Objective:

Mentors will learn to recognize the potential impact of conscious and unconscious assumptions, preconceptions, biases, and prejudices on the mentor mentee relationship and reflect on how to manage them

Activity

Implications of Diversity Research (15 min)

- Distribute the *Diversity Study Results* Handout (next 2 pages) and let participants read it individually for two to three minutes.

NOTE: Many of these studies are summarized in “Benefits and Challenges of Diversity”

- DISCUSS (5 min) in pairs, your reaction to one of the studies and the implications for your mentoring practice
- DISCUSS (7 min) with entire group: You may want to record the ideas generated in this discussion on a white board or flip chart. Guide the discussion using the following questions:
 1. What were your initial reactions to the studies?
 2. Which study captured your attention? Why?
 3. What implications do these study results have for your mentoring practice?
 4. What are two to three practical things you could do to minimize the impact of bias, prejudice, and stereotype in your mentoring relationship?

Diversity Study Results for Discussion

Read the description of the study results and discuss your reaction and the implications for your mentoring practice. See the “Benefits and Challenges of Diversity” article in the guidebook for more details about these and other studies.

Study 1: Studies of hiring involve assigning a man’s name or woman’s name to the same application and randomly distributing the applications to a group of reviewers. The reviewers are more likely to hire the person if there is a man’s name on the application. The sex of the reviewer has no effect on the outcome. The result has not changed much over 40 years of doing the study (Steinpreis, Anders et al. 1999; Dovidio and Gaertner 2000; Moss-Racusin, Dovidio, et al. 2013).

Study 2: Many studies show that when reviewers are asked to review job performance based on a written description of the person’s accomplishments, they rate the performance higher if they told that they are reviewing a man. In one study the difference between ratings for men and women candidates was greater when the evaluator was busy or distracted. The sex of the reviewer was not significant (Martell and Leavitt 2002).

Study 3: A linguistic analysis of 300 letters of recommendation for successful candidates applying for (and ultimately being offered) faculty positions at a major medical school showed differences in language and content. Male candidates were referred to more often as “researchers” and “colleagues,” whereas women were referred to as “teachers” and “students.” There were 4X more references to women’s personal lives than to men’s and there were more “doubt raisers” in letters about women (Trix and Psenka 2003).

Study 4: An ecology journal initiated double blind review (authors’ names not revealed to reviewers, reviewers’ names not revealed to authors). During the 6-month period of the trial, the acceptance rate for papers first-authored by women increased significantly. There was no change in the frequency of acceptance of papers first-authored by women in a similar ecology journal during same period (Budden, Tregenza et al. 2008).

Study 5: Evaluators expressed less prejudice against African American candidates if they were instructed to avoid prejudice (Lowery, Hardin et al. 2001).

Mentor Training for **Clinical and Behavioral Researchers**

Equity and Inclusion

Study 6: When participants were shown images of admired black figures they associated negative words with black people less than those who were shown pictures of disliked black figures or not shown pictures at all (Blair, Ma et al. 2001; Dasgupta and Greenwald 2001).

Study 7: Subjects were told to select one of two rooms in which to watch a movie. In each situation there is a handicapped person sitting in one of the rooms. If both rooms are showing the same movie, the subjects were more likely to choose the room where the handicapped person is sitting. If the rooms are showing different movies, the subjects are more likely to choose the room where the handicapped person is not sitting. The result is the same independent of which movie is showing in the room with the handicapped person (Snyder 1979).

Study 8: One study examined differences over a ten-year period of whites' self-reported racial prejudice and their bias in selection decisions involving black and white candidates for employment. They report that self-reported prejudice was lower in 1998-9 than it was in 1988-9. At both time points, white participants did not discriminate against black candidates when their qualifications were clearly strong or weak, but they did discriminate when the qualifications were mixed or the decision ambiguous (Dovidio and Gaertner 2000).

Study 9: Stereotype threat is the anxiety people feel about confirming stereotypes of a group to which they belong. When stereotype threat is activated, usually by reminding a person of their race or sex, a person may identify with a negative stereotype and perform less well than without activation. MRI examination of the human brain shows that activating stereotype threat makes blood move from the cognitive centers to the affective centers of the brain (Krendl, Richeson et al. 2008).

Study 10: A wide range of studies show that racial and ethnic minorities tend to receive lower quality healthcare and are less likely to receive routine medical procedures than non-minorities patients, even when the issue of access to health-care is controlled (Smedley, Stith and Nelson, 2003).

Learning Objective:

Mentors will learn to identify concrete strategies for learning about, recognizing, and addressing issues of equity and inclusion in order to engage in conversation about diversity with mentees and foster a sense of belonging

Case Study

3 Case Studies on Equity and Inclusion

Case #1: *Is it Okay to Ask?*

Last year I worked with a scholar who has since left to work at another institution. She was a great member of the team and generated a fair amount of data. I think that she had a positive experience working with our research team, but there are a few questions that still linger in my mind. This particular scholar was a young African-American woman. I wondered how she felt about being the only African-American woman in our research group. In fact, she was the only African American woman in our entire department. I wanted to ask her how she felt, but I worried it might be insensitive or politically incorrect to do so. I never asked. I still wonder how she felt and how those feelings may have affected her experience, but I could never figure out how to broach the subject.

Guiding Questions for Discussion:

1. What are the main themes raised in this case study?
2. What might the mentor's intent have been in asking the question, and what might the impact be on the mentee?
3. How might you react to this case differently if the mentee was the only openly gay man in the department? How do you engage in such conversations based on interest without feeling or expressing a sense of judgment about differences? How do you ask without raising issues of tokenism? Can you generate questions or approaches to broaching this subject with the mentee?

From Handelsman, J., Pfund, C., Miller Lauffer, S., and Pribbenow, C.M. 2005. Entering Mentoring: A Seminar to Train a New Generation of Scientists. Madison, WI: University of Wisconsin Press.

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Case #2: Communication Challenges

Dr. Hlavek recently joined the faculty as an assistant professor in the School of Public Health. She has an excellent training record and has had strong research mentoring in health services research.

Although her knowledge of the science and research methodology is sound, she struggles with oral presentations as English is not her first language. Recently while giving an important presentation on her research at a professional meeting, someone in the audience commented that she needed to speak slower because he couldn't understand her. Dr. Hlavek was embarrassed and became very self-conscious. Her Slavic accent became more apparent and she started speaking even faster. She also wondered afterwards if her headscarf influenced the public criticism she received.

Guiding Questions for Discussion:

1. What are the main themes raised in this case study?
2. Dr. Hlavek calls you after this presentation. She is very upset about what transpired at the conference and shares her concerns about why she may have been singled out. As her mentor how do you advise her?
3. What are the challenges for a mentor when a mentee's second language skills present a barrier to effective communication of his/her research?

Case #3: “You Can’t Do That”

Dr. Roust is a professor of Epidemiology with a long and successful history of research funding. He is known as an expert in diabetes research. He has recently taken on a very promising new post-doctoral fellow in Epidemiology, a young Romanian of Indian descent, Dr. Biswas, who has an interest in the underlying sociocultural factors affecting the prevalence and treatment of Type 2 diabetes. It was agreed that Dr. Biswas will be using an unanalyzed data set of Dr. Roust’s to explore demographic patterns of a particular poor rural subgroup. So far things have been going quite well and Dr. Roust is excited about how this new mentee will help fill a gap in his own research. However, after several weeks of working on the secondary data analysis, Dr. Biswas comes to his office very excited about a new direction he would like to take. He has met an historian he would like to add to his mentoring committee, Dr. Mandova. She has research expertise related to cultural understandings of food and dietary patterns in poor rural populations and is participating in an oral history project in their target population. She offered to introduce Dr. Biswas to some of her contacts and would allow him to sit in on interviews with community members. Dr. Biswas believes Dr. Mandova’s research will be a perfect complement to Dr. Roust’s macro-level analysis.

However, Dr. Roust dismisses the feasibility of the idea almost immediately; he doesn’t understand how what he considers to be anecdotal historical data could be used in a convincing way: he is concerned how the added work will impact the current project effort and that it will be far too time consuming for Dr. Biswas to stay on track with his fellowship: he also doubts the NIH would be supportive of the endeavor. He lets Dr. Biswas know his feelings and tells him he can’t take such risks so early in his career, especially in a tight funding environment. He also wonders privately how well Dr. Biswas will be received by community members and how well equipped he is for this kind of research, especially given Biswas’s own limited cultural knowledge and language barrier.

Guiding Questions for Discussion:

1. What are the main themes raised in this case study?
2. Discuss the assumptions Dr. Roust is making about the research and about Dr. Biswas’ competency based on his ethnicity and background. How valid are his concerns? Should Dr. Roust also raise his private concerns with Dr. Biswas, and if so, how?
3. How do our own assumptions about what is acceptable and fundable in research limit creativity and understanding? Is there a middle ground in this case?

Learning Objective:

Mentors will learn to improve and expand understanding of equity and inclusion, and how diversity influences mentor-mentee interactions.

Activity

Share and Experience

Ask mentors to think back to a time when they felt conspicuous as someone who did not fit in to a situation or setting. Ask: What was the situation, what did it feel like, and how did you react?

Alternatively, mentors could share an experience in which they could see that *someone else* felt like they did not belong or fit in. What kinds of differences make us feel like outsiders and what differences are irrelevant? Why?

- **NOTE:** Have each mentor share an experience. If a mentor cannot think of an experience to share, ask them to pass and then come back to them at the end of the activity. As a facilitator, you may need to encourage people to keep their comments relatively short so everyone has a chance to share. The time each person has to talk will depend on the size of the group.

Learning Objective:

Mentors will learn recognize the potential impact of conscious and unconscious assumptions, preconceptions, biases, and prejudices on the mentor mentee relationship and reflect on how to manage them

Activity **Dig Deeper**

At Project Implicit <https://implicit.harvard.edu/implicit/> mentors can find a number of tests that enable them to explore specific biases and assumptions, such as those about gender, disabilities, skin-tone, etc. These are not only informative, but fun and quick to take. These sites could be explored during the session if computers are available or could be distributed on a handout or via email and done outside of the session.

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Mentors will learn to identify concrete strategies for learning about, recognizing, and addressing issues of equity and inclusion in order to engage in conversation about diversity with mentees and foster a sense of belonging

Case Study

Cultural Sensitivity

You just finished your master's degree in Public Health and a residency in Pediatrics. To further your research training, you join an established research team studying the impact of free clinics on public health in economically-depressed urban areas. Your project will be to examine the effect of a new, free pediatric clinic on children's health in an African-American community. There are many research questions you could ask, but your mentor insists you use the research questions used in his other studies, so he can compare the data across studies. Most of those previous studies were developed and used in Latino communities. After visiting the community you will study and noting several cultural differences, you believe that the questions should be revised for your study. Your mentor disagrees and tells you to use the standard questions.

Guiding Questions for Discussion:

1. What are the main themes raised in this case study?
2. What could have been done to avoid this situation? What should the mentor do now? What should the mentee do now?
3. What assumptions about the study population and the research is the mentor making? What might be the impact of those assumptions?

Learning Objective:

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Activity

Reflecting on Diversity (10 minutes)

- **TELL:** Acknowledge that in this society, it is engrained in our subconscious to first think of diversity in terms of race and ethnicity, but to remember that it is broader than that. For example, consider the impact of learning and physical disabilities, gender, age/generation, sexual orientation, class, religion, and differences in communication, learning, and work styles. Do participants have any characteristics about themselves they would like to add to a list?
- **NOTE:** Leave this list displayed throughout the session and tell mentors that they can add to it as you move through the other activities. As you add items, you may discuss how these differences can be viewed as assets to mentoring relationships and how they can be capitalized upon to create high quality innovative research, as time allows.
- **DISCUSS:** What do they know about their mentees? How do these differences impact mentoring relationships and how can they be capitalized on to create high quality innovative research? They may consider the concept of cognitive diversity, or diversity of thought, and how knowledge they have gained from other life experiences has influenced and enriched their thinking as a researcher. List the ideas generated in this discussion on a white board or flip chart.
- **DISCUSS:** How do these differences pose challenges to effective mentoring? They may consider how differences in their mentee's beliefs, work ethic and cognitive ability may present challenges. Also, how does one effectively mentor an entire research team comprised of individuals who are different from one another? How does one develop in their research team members an appreciation for (or at least tolerance of and respect for) differences among individuals on the team?

Learning Objective:

Mentors will learn to recognize the potential impact of conscious and unconscious assumptions, preconceptions, biases, and prejudices on the mentor-mentee relationship and reflect on how to manage them

Activity

Unconscious Assumptions (10 min)

- TELL: Think about some of your assumptions when you entered the room on the first day of this training—that there would be electricity, a table, a bathroom etc. Let's think about some of the assumptions we make about the people we work with.
- TELL: Read each word on the list below and ask mentors to focus on the first image that comes to their mind and quickly jot down three words that describe the person they pictured. Pacing is important; only leave about five seconds between each item on the list so that they are focused on the first image that comes to mind.
 1. Cook
 2. Pilot
 3. Mountain Climber
 4. Caretaker
 5. Politician
 6. Clinical Researcher
 7. Community partner
- DISCUSS (10 min) with entire group: Have mentors share some of the words they noted about each prompt, with special attention given to the clinical researcher and community partner. For example, did their images include mention of gender, race, education, expertise, body shape and size, or age? Was there some uniformity in their images?
- TELL: Remind mentors that we all carry these unconscious assumptions and they need not be a source of guilt or embarrassment. We discuss them as a means of raising awareness and minimizing their impact on our behavior. The following studies highlight how enculturation affects us all and how it may impact the mentoring relationship.

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Activity

Implications of Diversity Research (15 min)

- Distribute the *Diversity Study Results* handout (starting on the next page) and let participants read it individually for two to three minutes.
- DISCUSS (5 min) in pairs your reaction to one of the studies and the implications for your mentoring practice
- DISCUSS (7 min) with entire group: You may want to record the ideas generated in this discussion on a white board or flip chart. Guide the discussion using the following questions:
 1. What were your initial reactions to the studies?
 2. Which study captured your attention? Why?
 3. What implications do these study results have for your mentoring practice?
 4. What are the implications of these results for your clinical practice?
 5. What are two to three practical things you could do to minimize the impact of bias, prejudice, and stereotype in your mentoring relationship and in your research?
- Read the description of the study results and discuss your reaction and the implications for your mentoring practice. See the “Benefits and Challenges of Diversity” article in the guidebook for more details about these and other studies.

Study 1: Studies of hiring involve assigning a man's name or woman's name to the same application and randomly distributing the applications to a group of reviewers. The reviewers are more likely to hire the person if there is a man's name on the application. The sex of the reviewer has no effect on the outcome. The result has not changed much over 40 years of doing the study (Steinpreis, Anders et al. 1999; Dovidio and Gaertner 2000; Moss-Racusin, Dovidio, et al. 2013).

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Study 5: Evaluators expressed less prejudice against African American candidates if they were instructed to avoid prejudice (Lowery, Hardin et al. 2001).

Study 6: When participants were shown images of admired black figures they associated negative words with black people less than those who were shown pictures of disliked black figures or not shown pictures at all (Blair, Ma et al. 2001; Dasgupta and Greenwald 2001).

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Study References:

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- Trix, F. and C. Psenka (2003). "Exploring the Color of Glass: Letters of recommendation for female and male medical faculty." *Discourse & Society* **14**(2): 191-220.

Many of these studies and others are summarized in: Fine and Handelsman (2005). "The Benefits and Challenges of Diversity" in *Entering Mentoring: A Seminar to Train a New Generation of Scientists*. Madison, WI: University of Wisconsin Press and Handelsman, Miller and Pfund (2005). "Diversity" in *Scientific Teaching*. New York: W.H. Freeman and Co. This activity was taken from the National Academies Summer Institute on Undergraduate Education in Biology (<http://www.academiessummerinstitute.org>, access June 2010)

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Case Study

3 Case Studies on Equity and Inclusion

Case #1: *Is this okay?*

A new postdoctoral fellow, Dr. Jones recently started working with you on a childhood obesity study evaluating the effectiveness of an intervention being implemented in local community centers. While his initial progress has been good and he always makes your scheduled meetings, you are bothered that you seldom see him in the office. When you ask him about it he explains that he is a single parent with two young children. He doesn't have family nearby to help with childcare and given his school debt, can't afford full-time help. He thus often works from home and after the kids are in bed at night. You say nothing more at the time but feel uncomfortable that you don't have the opportunity for more informal contact and supervision, and don't have experience working with someone in this family situation. Then, the following week Dr. Jones brought his kids with him to a meeting with your community partners, explaining that his sitter wasn't available that day. The kids were a little distracting, though not disruptive, and the community partners truly didn't seem to mind. However, you wonder if you need to have a talk with your mentee or if you are being overly concerned about something that is not really an issue and should wait to see how things play out.

Guiding Questions for Discussion:

1. What are the main themes raised in this case study?
2. How do you picture Dr. Jones and does his image impact your reaction? If you picture him as white and American, would you react any differently if he were a minority or international student? Would his sexual orientation impact your response? Would you react differently if he were female?
3. To what extent do you expect your mentees to conform to your own professional expectations and to what extent do you alter your own expectations to accommodate theirs? Is class a potential factor in this case? How? What about generational differences?

Part of the W.H. Freeman Entering Mentoring Series, 2014.

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Case #2: *But it's the Same Neighborhood*

You just finished your master's degree in Public Health and a residency in pediatrics. To further your research training, you join an established research team studying the impact of free clinics on public health in economically-depressed urban areas. Your project will be to examine the effect of a new free pediatric clinic on children's health in an underserved African-American community. There are many research questions you could ask, but your mentor insists that you use the research questions used in his other studies, so he can compare the data across studies. All of those previous studies were developed and done with Latinos communities. After visiting the African American community you will be working in and noting several cultural differences related to service delivery and health seeking behaviors, you believe that the research questions will need to be revised for your study. Your mentor disagrees and tells you to use the standard questions, and further suggests that you use the same recruitment materials and plan. Two months later, recruitment is going much slower compared to the studies done with Latinos. Your mentor expresses surprise about the problems you are having considering how the African American and Latino communities are only about a mile apart; they practically live in the same neighborhood.

Guiding Questions for Discussion:

1. What assumptions about the study population and the research is the mentor making? What might be the impact of those assumptions?
2. How does the race or ethnicity of the mentor and mentee impact this case? How did you picture them and did that influence your reaction?
3. What assumptions are made about homogeneity within ethnic and racial groups? How does class play a role?
4. What options does the mentee have for trying to get support for his/her view that the materials are inappropriate?

*Note: This case is taken from the mentee's perspective, providing mentors a slightly different lens.

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Case #3: Is it Okay to Ask???

Last year I worked with a scholar who has since left to work at another institution. I think that she had a positive experience working with our research team, but there are a few questions that still linger in my mind. This particular scholar was a young African-American woman. I wondered how she felt about being the only African-American woman in our research group. In fact, she was the only African American woman in our entire department. I wanted to ask her how she felt, but I worried it might be insensitive or politically incorrect to do so. I never asked. I still wonder how she felt about her experience here and how she would describe our institution to others, but I could never figure out how to broach the subject.

Guiding Questions for Discussion:

1. What are the main themes raised in this case study?
2. What might have the mentor's intent have been in asking the question, and what might the impact be on the mentee?
3. If the mentor is asking to find out if the scholar's experiences could inform future faculty retention practices, how could that influence if and how a query is made?
4. How might you react to this case differently if the mentee were the only openly gay faculty member in the department? How do you engage in such conversations based on interest without feeling or expressing a sense of judgment about differences? How do you ask without raising issues of tokenism?

Adapted from Handelsman, J., Pfund, C., Miller Lauffer, S., and Pribbenow, C.M. 2005. *Entering Mentoring: A Seminar to Train a New Generation of Scientists*. Madison, WI: University of Wisconsin Press.

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Activity

Share an Experience

Ask mentors to think back to the time when they felt most conspicuous as someone who did not fit into a situation or setting. What was it, what did it feel like, how did you react?

Alternatively, they could share an experience in which they could see that someone else felt like they did not belong or fit in. What kinds of differences make us feel like outsiders and what differences remain irrelevant? Why? How might this relate to helping mentees gain a sense of belonging?

- **NOTE:** Have each mentor share an experience. If a mentor cannot think of an experience to share, ask them to pass and then come back to them at the end of the activity. As a facilitator, you may need to encourage people to keep their comments relatively short so everyone has a chance to share. The time each person has to talk will depend on the size of the group.

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Activity

Dig Deeper

At Project Implicit <https://implicit.harvard.edu/implicit/>, mentors can find a number of tests that enable them to explore specific biases and assumptions, such as those about gender, disabilities, skin-tone, etc. These are not only informative, but fun and quick to take. These sites could be explored during the session if computers are available or could be distributed on a handout or via email and done outside of the session.

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Case Study **You Can't Do That**

Dr. Roust is a Professor of Epidemiology with a long and successful history of research funding. He is known as an expert in diabetes research. He has recently taken on a very promising new post-doctoral fellow in Epidemiology, a young Romanian of Indian descent, Dr. Biswas, with an interest in the underlying sociocultural factors affecting the prevalence and treatment of Type 2 diabetes. It was agreed that he will be using an unanalyzed data set of Dr. Roust's to explore demographic patterns of a particular poor rural subgroup. So far things have been going quite well and Dr. Roust is excited about how this new mentee will help fill a gap in his own research.

However, after several weeks of working on the secondary data analysis, Dr. Biswas comes to his office very excited about a new direction he would like to take. He has met an historian he would like to add to his mentoring committee, Dr. Mandova. She has research expertise related to cultural understandings of food and dietary patterns in poor rural populations and is participating in an oral history project in their target population. She offered to introduce Dr. Biswas to some of her contacts and would allow him to sit in on interviews with community members.

Dr. Biswas believes Dr. Mandova's research will be a perfect complement to Dr. Roust's macro-level analysis. Dr. Roust dismisses the feasibility of the idea almost immediately. He doesn't understand how what he views as anecdotal historical data could be used in a convincing way. He is also concerned how this would impact the current project effort; that it will be far too time consuming for Dr. Biswas to stay on track with his fellowship. He also doubts that the NIH would be supportive of the endeavor. He lets Dr. Biswas know his feelings and tells him he can't take such risks so early in his career, especially in a tight funding environment. He also privately wonders how well Dr. Biswas will be received by community members and how well equipped he is for this kind of research, especially given his own limited cultural knowledge and language barrier.

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Guiding Questions for Discussion:

1. What are the main themes raised in this case study?
2. Discuss the assumptions Dr. Roust is making about the research, risks, and about Dr. Biswas' competency based on his ethnicity and background. Are his concerns valid? Why or why not? Should Dr. Roust raise his private concerns with Dr. Biswas or Dr. Mandova? If so, how?
3. How do our own assumptions about what is acceptable and fundable in research limit creativity and understanding? Is there a middle ground in this case?
4. Can mentors impact departmental or institutional biases about what is acceptable research?

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Mentors will learn to identify concrete strategies for learning about, recognizing, and addressing issues of equity and inclusion in order to engage in conversations about diversity with mentees and foster a sense of belonging

Case Study **Second Language**

Dr. Hlavek recently joined the faculty as an Assistant Professor in the School of Public Health. She has an excellent training record and has had strong research mentoring in health services research. Although her knowledge of the science and research methodology is sound, she struggles with oral presentations since English is not her first language. Recently while giving an important presentation on her research at a professional meeting, someone in the audience commented that she needed to speak slower because he couldn't understand her. Dr. Hlavek was embarrassed and became very self-conscious. Her Slavic accent became more apparent and she started speaking even faster. She also wondered afterwards if her headscarf influenced the public criticism she received.

Guiding Questions for Discussion:

1. What are the main themes raised in this case study?
2. Dr. Hlavek calls you after this presentation. She is very upset about what transpired at the conference and shares her concerns about why she may have been singled out. What is your response as her mentor?
3. What are the implications of connections between religion, ethnicity, and language?
4. What are the challenges for a mentor when a mentee's second language skills present a barrier to effective communication of his/her research?

Learning Objective:

Mentors will learn to improve and expand understanding of equity and inclusion and how diversity influences mentor-mentee interactions

Activity

Diversity Challenge (15 min)

- TELL: Picture in your mind one particular mentee – one you have now or have had. Got it? Now list up to 10 ways that you are or perceive to be different from your mentee (1 min)
- TELL: In our society, it is engrained in our subconscious to first think of diversity in terms of race and ethnicity, but of course diversity is broader than that. Did any of you get 10 differences? 9? 8? (probe for range)
- TELL: Get in pairs. First, briefly look at each other's lists. Each of you pick one of the differences on your list discuss how you might capitalize on this specific difference to create high quality and innovative research. (4 min)
- DISCUSS: In the large group, share examples of how differences can be viewed as strengths and enhance the quality of research. (10 min)
- TELL: Now look at your list again, and just for yourself, jot down or note which aspects of difference between you and your mentee may be sources of discomfort for you in this or other mentor/mentee relationships.

Adapted from the W.H. Freeman Entering Mentoring Series, 2017.

For additional resources and complete curriculum—including information on competencies and facilitator notes—visit: CIMERProject.org

Learning Objective:

Mentors will learn to identify concrete strategies for learning about, recognizing, and addressing issues of equity and inclusion in order to engage in conversations about diversity with mentees and foster a sense of belonging

Activity

Individual Case Studies (25 min)

- **TELL:** Please create your own “case study” (this can be done as homework before this session or during a 10 minute break if following the 3-day agenda or as part of the session) and be prepared to share it, if you’re willing, for small group discussion. To create your case study: Briefly describe a situation you have been in as a mentor or a mentee, or one you have observed, where there was a challenging situation related to diversity and inclusion that was not dealt with optimally by the mentor. (10 min)
- **TELL:** Choose one of the case studies that a group member wrote or described, and discuss it as a group. You have 10 minutes. Try to discuss at least two of the case studies generated by your group members during this time. Sample discussion questions to put on the board:
 1. What are the key themes of the case study?
 2. What are some different ways that a mentor could deal with a similar situation?
 3. How might our explicit or implicit biases affect how we deal with such a situation?
- **DISCUSS IN FULL GROUP (5 min):** Be sure to ground the discussion in finding strategies (see reading Benefits and Challenges of Diversity, pgs. 79-81, for suggested strategies) to move forward past challenges. [Give this discussion more time, if possible].
- **FOLLOW-UP ACTIVITY:** Encourage mentors to think about their compacts (if applicable) and think about any changes they might make based on their reflections on equity and inclusion.

Adapted from the W.H. Freeman Entering Mentoring Series, 2017.

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Learning Objective:

Mentors will learn to improve and expand understanding of equity and inclusion and how diversity influences mentor-mentee interactions

Activity **Share an Experience**

- Ask mentors to think back to a time when they felt conspicuous as someone who did not fit in to a situation or setting.
- ASK: What was the situation, what did it feel like, and how did you react? Alternatively, mentors could share an experience in which they could see that *someone else* felt like they did not belong or fit in. What kinds of differences make us feel like outsiders and what differences are irrelevant? Why?
- NOTE: Have each mentor share an experience. If a mentor cannot think of an experience to share, ask them to pass and then come back to them at the end of the activity. As a facilitator, you may need to encourage people to keep their comments relatively short so everyone has a chance to share. The time each person has to talk will depend on the size of the group.

Adapted from the W.H. Freeman Entering Mentoring Series, 2017.

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Learning Objective:

Mentors will learn to recognize the potential impact of conscious and unconscious assumptions, preconceptions, biases, and prejudices on the mentor-mentee relationship and reflect on how to manage them

Activity

Dig Deeper

Have mentors visit "Dig Deeper" at http://www.tolerance.org/hidden_bias/index.html and select various tests to better understand their hidden biases and assumptions.

At Project Implicit, <https://implicit.harvard.edu/implicit/> mentors can find a number of tests that enable them to explore specific biases and assumptions, such as our biases and assumptions about gender, disabilities, skin tone, etc. These are not only informative, but also fun and quick to take.

These sites could be explored during the session if computers are available or could be distributed on a handout or via email and done outside of the session.

Adapted from the W.H. Freeman Entering Mentoring Series, 2017.

For additional resources and complete curriculum—including information on competencies and facilitator notes—visit: CIMERProject.org

Learning Objective:

Mentors will learn to identify concrete strategies for learning about, recognizing, and addressing issues of equity and inclusion in order to engage in conversations about diversity with mentees and foster a sense of belonging

Case Study **Cultural Sensitivity**

You just finished your master's degree in Social Work and are pursuing a PhD in the sociology of medicine. To further your research training, you join an established research team studying the impact of free health clinics on access to healthcare in economically depressed urban areas. Your project will be to examine the effect of a new, free clinic on preventative health care in an African-American community. There are many research questions you could ask, but your mentor insists you use the research questions used in his other studies, so he can compare the data across studies. Most of those previous studies were developed and used in Latino communities. After visiting the community, you will study and noting several cultural differences, you believe that the questions should be revised for your study. Your mentor disagrees and tells you to use the standard questions.

Guiding Questions for Discussion:

1. What are the main themes raised in this case study?
2. What could have been done to avoid this situation? What should the mentor do now?
What should the mentee do now?
3. What assumptions about the study population and the research is the mentor making?
What might be the impact of those assumptions?

Adapted from the W.H. Freeman Entering Mentoring Series, 2017.

For additional resources and complete curriculum—including information on competencies and facilitator notes—visit: CIMERProject.org



Mentor Training for Social Science Researchers

Addressing Equity and Inclusion

Stephanie A. Robert and Pamela S. Asquith

Adapted from the
W.H. Freeman *Entering Mentoring Series* 2017



Addressing Equity and Inclusion

Introduction

Diversity, along a range of dimensions, offers both challenges and opportunities to any relationship. Learning to identify, reflect upon, learn from, and engage with diverse perspectives is critical to forming and maintaining an effective mentoring relationship, as well as a vibrant learning environment.

In this session, mentors will consider how to foster an equitable and inclusive environment where everyone can do their best learning and create the highest quality of research, both because of and in spite of their diverse perspectives.

Learning Objectives

Mentors will have the knowledge and skills to:

1. Improve and expand understanding of equity and inclusion and how diversity influences mentor-mentee interactions
2. Recognize the potential impact of conscious and unconscious assumptions, preconceptions, biases, and prejudices on the mentor-mentee relationship and reflect on how to manage them
3. Identify concrete strategies for learning about, recognizing, and addressing issues of equity and inclusion in order to engage in conversations about diversity with mentees and foster a sense of belonging

Note from authors: We acknowledge that a 1 or 2-hour module addressing equity and inclusion is valuable but only begins to raise awareness for mentors on how diversity influences mentor-mentee interactions. Authors and contributors to the *Entering Mentoring Series* continue to enhance its training modules over time in response to participant feedback and ongoing research about effective mentoring practices. The funding of the NIH National Research Mentoring Network (nrmn.net) in 2014 in particular is having a significant impact on expanding mentor training that addresses the need for mentors to delve deeper into understanding how their cultural beliefs, worldviews and identifies influence their mentoring practices. To this end, leaders of the NRMN Mentor Training Core (MTC) have developed mentor training curricula to promote culturally aware mentoring. The *Culturally Aware Mentor Training* curriculum currently being piloted nationally was developed by diverse scholars in the MTC (led by Dr. Angela Byars-Winston) and is implemented as a 6-hour workshop. The overall goal of the workshop is to explore how cultural diversity influences research mentoring relationships and it guides mentors through the development of a culturally aware mentoring plan. The *Culturally Aware Mentoring* workshop is now available.

Overview of Activities for the Addressing Equity and Inclusion session: Please note that the core activity is listed for each learning objective. We encourage you to engage the mentors in your group in this activity. There is a list of additional activities that can be used if there is extra time in the session or the core activity is not working well for your group.

	Learning Objectives	Core Activities	Additional Activities
1	Improve and expand understanding of equity and inclusion and how diversity influences mentor-mentee interactions	Activity #1: 1-Minute Diversity Challenge Activity #2: Is it Okay to Ask?	Activity #4: Reflections on Otherness
2	Recognize the potential impact of conscious and unconscious assumptions, preconceptions, biases, and prejudices on the mentormentee relationship and reflect on how to manage them	Activity #2: Is it Okay to Ask?	Activity #5: Implicit Bias Test
3	Identify concrete strategies for learning about, recognizing, and addressing issues of equity and inclusion in order to engage in conversations about diversity with mentees and foster a sense of belonging	Activity #3: Individual Case Studies	Activity #6: Case Study: Cultural Sensitivity

Facilitation Guide

Recommended Session on Addressing Equity and Inclusion (65 minutes)

❖ Materials Needed for the Session:

- Table tents and markers
- Chalkboard, whiteboard or flip chart
- Handouts:
 - Copies of introduction and learning objectives for *Addressing Equity and Inclusion* (page 65)
 - Copies of *1-Minute Diversity Challenge* Handout (page 70)
 - Copies of *Equity and Inclusion* case studies (Multiple versions of *Is it Okay to Ask?*) (pages 71-73), and the additional case if desired (page 74)
 - Copies of the reading “*Benefits and Challenges of Diversity*” (see homework assignment below) (pages 75-84)

❖ Introduction (5 min)

- TELL: Review the introduction and learning objectives for the session.
 - NOTE: If you did not assign as homework the short paper by Jo Handelsman and Eve Fine titled “Benefits and challenges of diversity,” have them read it after the first activity.

❖ Objective 1: Improve and expand understanding of equity and inclusion, and how diversity influences mentor-mentee interactions

- ACTIVITY #1: 1-Minute Diversity Challenge (15 min) (source: Kelly Diggs-Andrews, PhD Diggs-Andrews Consulting, LLC)
 - TELL: Picture in your mind one particular mentee – one you have now or have had. Got it? Now list up to 10 ways that you are or perceive to be different from your mentee (1 min)
 - TELL: In our society, it is engrained in our subconscious to first think of diversity in terms of race and ethnicity, but of course diversity is broader than that. Did any of you get 10 differences? 9? 8? (probe for range)
 - TELL: Get in pairs. First, briefly look at each other’s lists. Each of you pick one of the differences on your list discuss how you might capitalize on this specific difference to create high quality and innovative research. (4 min)
 - DISCUSS: In the large group, share examples of how differences can be viewed as strengths and enhance the quality of research. (10 min)
 - TELL: Now look at your list again, and just for yourself, jot down or note which aspects of difference between you and your mentee may be sources of discomfort for you in this or other mentor/mentee relationships.

- ❖ **Objectives 1 and 2: Improve and expand understanding of equity and inclusion, and how diversity influences mentor-mentee interactions; Recognize the potential impact of conscious and unconscious assumptions, preconceptions, biases, and prejudices on the mentor-mentee relationship and reflect on how to manage them.**
- **ACTIVITY #2: Case Study #1 (versions a, b, c). *Is it Okay to Ask?* (20 min)**
 - **DO:** Put participants in groups of 3 or 4. Distribute the “*Is it Okay to Ask?*” case study and give participants a couple of minutes to review it; **Give a different version of the case study to each group, without telling them that the case studies are slightly different.**
 - **TELL (8 min):** Discuss the case study in the small groups.
 - a. **DISCUSS (10 min)** with the entire group. [Give this exercise more time if you can]. Begin reporting from the groups. Early in the discussion, you will want to let them know that each group had a slightly different scenario. You may want to record the ideas generated in this discussion on a white board or flip chart. **NOTE:** Additional discussion questions for the full group discussion include. These questions may draw out the potential impact of conscious and unconscious assumptions, preconceptions, biases, and prejudices on the mentor-mentee relationship if not already raised by participants. Did your group agree or disagree on whether it is ok to ask? (and did the general response differ by scenario across the groups?)
 - b. How would you go about engaging people in a discussion about their race, ethnicity, gender, disability, age, sexual orientation, etc.? How do you engage in such conversations based on interest without feeling or expressing a sense of judgment about differences? How do you ask without raising issues of tokenism?
 - c. As a mentor, are you more or less comfortable with discussing different aspects of diversity? How does this reflect explicit or implicit biases that you might have?
 - d. As a mentor, reflect on how diversity can be viewed as an asset to a mentor-mentee relationship. How might you reframe conversations with mentees in terms of how you can benefit and learn from experiences that differ from your own?

❖ **Objective 3: Identify concrete strategies for learning about, recognizing and addressing issues of equity and inclusion, in order to engage in conversations about diversity with their mentees and foster a sense of belonging**

➤ **Activity #3: Individual Case Studies (25 min)**

- **TELL:** Please create your own “case study” (this can be done as homework before this session or during a 10 minute break if following the 3-day agenda or as part of the session) and be prepared to share it, if you’re willing, for small group discussion. To create your case study: Briefly describe a situation you have been in as a mentor or a mentee, or one you have observed, where there was a challenging situation related to diversity and inclusion that was not dealt with optimally by the mentor. (10 min)
- **TELL:** Choose one of the case studies that a group member wrote or described, and discuss it as a group. You have 10 minutes. Try to discuss at least two of the case studies generated by your group members during this time. Sample discussion questions to put on the board:
 - What are the key themes of the case study?
 - What are some different ways that a mentor could deal with a similar situation?
 - How might our explicit or implicit biases affect how we deal with such a situation?
- **DISCUSS IN FULL GROUP (5 min).** Be sure to ground the discussion in finding strategies (see reading Benefits and Challenges of Diversity, pgs. 79-81, for suggested strategies) to move forward past challenges. [Give this discussion more time, if possible].
- **FOLLOW-UP ACTIVITY:** Encourage mentors to think about their compacts (if applicable) and think about any changes they might make based on their reflections on equity and inclusion.

Additional Considerations as a Facilitator

- Views of the impact of race, class, ethnicity, gender, disability, age, sexual orientation, background on the research experience vary widely. Remember that as a facilitator you are not expected to be an expert on the topic. Given that some facilitators have expressed less comfort mediating this session, we have included some possible responses to the cases below. Given the complexity of human relationships and the importance of situational contexts, these responses are of course by no means exhaustive or comprehensive. Further, we do not claim they are the ‘right’ answers, but merely responses you may expect to hear.

1. Possible general responses to all of the cases:

- ◆ Race, gender, ethnicity, sexual orientation, and other aspects of diversity have nothing to do with a research experience because the experience should focus on research and not on personal characteristics.
- ◆ Race, gender, ethnicity, sexual orientation, and other aspects of diversity have everything to do with a research experience and permeate every aspect of the experience, impacting perceptions, confidence, and motivation. Ignoring the impact of diversity sends a message that those aspects of a person have no role in one’s work, which may turn students off to science. The level of impact will vary across the relationship. At times it may be invisible. At other times, it may be the most important factor.
- ◆ Individuals want to be assessed for their ability, independent of race, gender, etc. The trick is deciding how to balance acknowledging someone’s background and taking it into consideration when deciding how to work with that person, but not letting a person’s background bias your interaction with them.
- ◆ Regular conversations with ALL mentees to check on how they are doing and whether they are happy in their overall environment are important. This will build relationships that allow mentees to be comfortable sharing concerns AND allow mentors to notice if there are issues surrounding race or other diverse personal characteristics that need to be addressed, or identify opportunities for growth.

2. Possible responses to “Is It Okay to Ask”?

- ◆ There is no consensus on if and when it is — “OK to ask”. Some feel it is important to ask early, others feel it is never ok to ask, and others still feel there are special situations when it is necessary to ask.
- ◆ It is not ok to ask. Some are tired of telling their story and feel that the question sometimes carries an implicit “explain yourself” or “justify yourself.”
- ◆ Establishing a sufficiently personal relationship with ALL mentees allows mentors to better understand diversity-related issues from mentees without directly asking questions about their personal characteristics and background.

One-Minute Diversity Challenge

- 1.
- 2.
- 3.
- 4.
- 5.
- 6.
- 7.
- 8.
- 9.
- 10.

Case #1a:

Addressing Equity and Inclusion

Is it Okay to Ask?

Last year I had a new graduate student join my research team. She has been a great member of the team and has contributed significantly to the research project. I think that she has had a positive experience working with our research team. This particular scholar is an African-American woman and I wonder how she has felt about being the only African-American woman in our research group. In fact, she is the only African American woman in our entire department. I have wanted to ask her how she feels, but I worry it might be insensitive or politically incorrect to do so. I have never asked. Should I ask? Is it too late to ask now that it has been a year and I haven't asked?

Guiding Questions for Discussion:

1. What are the main themes raised in this case study?
2. What might the mentor's intent have been in asking the question, and what might the impact be on the mentee?
3. How do you engage in such conversations based on interest without feeling or expressing a sense of judgment about differences? How do you ask without raising issues of tokenism? Can you generate questions or approaches to broaching this subject with the mentee?

Adapted from Handelsman, J., Pfund, C., Miller Lauffer, S., and Pribbenow, C.M. 2005. Entering Mentoring: A Seminar to Train a New Generation of Scientists. Madison, WI: University of Wisconsin Press.

Case #1b:

Addressing Equity and Inclusion

Is it Okay to Ask?

Last year I had a new graduate student join my research team. She has been a great member of the team and has contributed significantly to the research project. I think that she has had a positive experience working with our research team. This particular scholar is from China and I wonder how she has felt about being the only international woman in our research group. In fact, she is the only international woman in our entire department. I have wanted to ask her how she feels, but I worry it might be insensitive or politically incorrect to do so. I have never asked. Should I ask? Is it too late to ask now that it has been a year and I haven't asked?

Guiding Questions for Discussion:

1. What are the main themes raised in this case study?
2. What might the mentor's intent have been in asking the question, and what might the impact be on the mentee?
3. How do you engage in such conversations based on interest without feeling or expressing a sense of judgment about differences? How do you ask without raising issues of tokenism? Can you generate questions or approaches to broaching this subject with the mentee?

Adapted from Handelsman, J., Pfund, C., Miller Lauffer, S., and Pribbenow, C.M. 2005. Entering Mentoring: A Seminar to Train a New Generation of Scientists. Madison, WI: University of Wisconsin Press.

Case #1c:

Addressing Equity and Inclusion

Is it Okay to Ask?

Last year I had a new graduate student join my research team. She has been a great member of the team and has contributed significantly to the research project. I think that she has had a positive experience working with our research team. This particular scholar is a Muslim woman and I wonder how she has felt about being the only Muslim woman in our research group. In fact, she is the only Muslim woman in our entire department. I have wanted to ask her how she feels, but I worry it might be insensitive or politically incorrect to do so. I have never asked. Should I ask? Is it too late to ask now that it has been a year and I haven't asked?

Guiding Questions for Discussion:

1. What are the main themes raised in this case study?
2. What might the mentor's intent have been in asking the question, and what might the impact be on the mentee?
3. How do you engage in such conversations based on interest without feeling or expressing a sense of judgment about differences? How do you ask without raising issues of tokenism? Can you generate questions or approaches to broaching this subject with the mentee?

Adapted from Handelsman, J., Pfund, C., Miller Lauffer, S., and Pribbenow, C.M. 2005. Entering Mentoring: A Seminar to Train a New Generation of Scientists. Madison, WI: University of Wisconsin Press.

Additional Activities (if time allows):

Objective 1; Activity #4:

Ask mentors to think back to a time when they felt conspicuous as someone who did not fit in to a situation or setting. ASK: What was the situation, what did it feel like, and how did you react? Alternatively, mentors could share an experience in which they could see that *someone else* felt like they did not belong or fit in. What kinds of differences make us feel like outsiders and what differences are irrelevant? Why?

NOTE: Have each mentor share an experience. If a mentor cannot think of an experience to share, ask them to pass and then come back to them at the end of the activity. As a facilitator, you may need to encourage people to keep their comments relatively short so everyone has a chance to share. The time each person has to talk will depend on the size of the group.

Objective 2; Activity #5:

Have mentors visit "Dig Deeper" at http://www.tolerance.org/hidden_bias/index.html and select various tests to better understand their hidden biases and assumptions. At Project Implicit <https://implicit.harvard.edu/implicit/> mentors can find a number of tests that enable them to explore specific biases and assumptions, such as our biases and assumptions about gender, disabilities, skintone, etc. These are not only informative, but also fun and quick to take. These sites could be explored during the session if computers are available or could be distributed on a handout or via email and done outside of the session.

Objective 3; Activity #6:

Case #4: *Cultural Sensitivity*

You just finished your master's degree in Social Work and are pursuing a PhD in the sociology of medicine. To further your research training, you join an established research team studying the impact of free health clinics on access to healthcare in economically depressed urban areas. Your project will be to examine the effect of a new, free clinic on preventative health care in an African-American community. There are many research questions you could ask, but your mentor insists you use the research questions used in his other studies, so he can compare the data across studies. Most of those previous studies were developed and used in Latino communities. After visiting the community, you will study and noting several cultural differences, you believe that the questions should be revised for your study. Your mentor disagrees and tells you to use the standard questions.

Guiding Questions for Discussion:

1. What are the main themes raised in this case study?
2. What could have been done to avoid this situation? What should the mentor do now? What should the mentee do now?
3. What assumptions about the study population and the research is the mentor making? What might be the impact of those assumptions?

Adapted from the W.H. Freeman Entering Mentoring Series, 2017.

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CIMERProject.org

Benefits and Challenges of Diversity

By Jo Handelsman and Eve Fine

The diversity of a university's faculty, staff, and students influences its strength, productivity, and intellectual personality. Diversity of experience, age, physical ability, religion, race, ethnicity, gender, and many other attributes contributes to the richness of the environment for teaching and research. We also need diversity in discipline, intellectual outlook, cognitive style, and personality to offer students the breadth of ideas that constitute a dynamic intellectual community.

A vast and growing body of research provides evidence that a diverse student body, faculty, and staff benefits our joint missions of teaching and research by increasing creativity, innovation, and problemsolving. Yet diversity of faculty, staff, and students also brings challenges. Increasing diversity can lead to less cohesiveness, less effective communication, increased anxiety, and greater discomfort for many members of a community.¹

Learning to respect and appreciate each other's cultural and stylistic differences and becoming aware of unconscious assumptions and behaviors that may influence our interactions will enable us to minimize the challenges and derive maximum benefits from diversity.

This booklet summarizes research on the benefits and challenges of diversity and provides suggestions for realizing the benefits. Its goal is to help create a climate in which all individuals feel *"personally safe, listened to, valued, and treated fairly and with respect."*²

"It is time to renew the promise of American higher education in advancing social progress, end America's discomfort with race and social difference, and deal directly with many of the issues of inequality present in everyday life."

Sylvia Hurtado

Benefits for Teaching and Research

Research shows that diverse working groups are more productive, creative, and innovative than homogeneous groups, and suggests that developing a diverse faculty will enhance teaching and research.³

Some findings are:

- A controlled experimental study of performance during a brainstorming session compared ideas generated by ethnically diverse groups composed of Asians, Blacks, Whites, and Latinos to those generated by ethnically homogenous groups composed of Whites only. Evaluators who were unaware of the source of the ideas found no significant difference in the number of ideas generated by the two types of groups. However, when applying measures of feasibility and effectiveness, they rated the ideas generated by diverse groups as being of higher quality.⁴
- The level of critical analysis of decisions and alternatives was higher in groups exposed to minority viewpoints than in groups that were not. Minority viewpoints stimulated discussion of multiple perspectives and previously unconsidered alternatives, whether or not the minority opinion was correct or ultimately prevailed.⁵
- A study of corporate innovation found that the most innovative companies deliberately established diverse work teams.⁶
- Data from the 1995 Faculty Survey conducted by UCLA's Higher Education Research Institute (HERI) demonstrated that scholars from minority groups have expanded and enriched scholarship and teaching in many academic disciplines by offering new perspectives and by raising new questions, challenges, and concerns.⁷
- Several investigators found that women and faculty of color more frequently employed active learning in the classroom, encouraged student input, and included perspectives of women and minorities in their coursework.⁸

Adapted from the W.H. Freeman Entering Mentoring Series, 2017.

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CIMERProject.org

Benefits for Students

Numerous research studies have examined the impact of diversity on students and educational outcomes. Cumulatively, these studies provide extensive evidence that diversity has a positive impact on all students, minority and majority.⁹

Some examples are:

- A national longitudinal study of 25,000 undergraduates at 217 four-year colleges and universities showed that institutional policies fostering diversity of the campus community had positive effects on students' cognitive development, satisfaction with the college experience, and leadership abilities. These policies encouraged faculty to include themes relating to diversity in their research and teaching, and provided students with opportunities to confront racial and multicultural issues in the classroom and in extracurricular settings.¹⁰
- Two longitudinal studies, one conducted by HERI in 1985 and 1989 with over 11,000 students from 184 institutions and another in 1990 and 1994 on approximately 1500 students at the University of Michigan, showed that students who interacted with racially and ethnically diverse peers both informally and within the classroom showed the greatest “engagement in active thinking, growth in intellectual engagement and motivation, and growth in intellectual and academic skills.”¹¹ A more recent study of 9,000 students at ten selective colleges reported that meaningful engagement rather than casual and superficial interactions led to greater benefit from interaction with racially diverse peers.¹²
- Data from the National Study of Student Learning indicated that both in-class and out-of-class interactions and involvement with diverse peers fostered critical thinking. This study also found a strong correlation between “the extent to which an institution’s environment is perceived as racially nondiscriminatory” and students’ willingness to accept both diversity and intellectual challenge.¹³
- A survey of 1,215 faculty members in departments granting doctoral degrees in computer science, chemistry, electrical engineering, microbiology, and physics showed that women faculty played important roles in fostering the education and success of women graduate students.¹⁴

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CIMERProject.org

Challenges of Diversity

Despite the benefits that a diverse faculty, staff, and student body provide to a campus, diversity also presents considerable challenges that must be addressed and overcome.

Some examples include:

- Numerous studies have reported that women and minority faculty members are considerably less satisfied with many aspects of their jobs than are majority male faculty members. These aspects include teaching and committee assignments, involvement in decision-making, professional relations with colleagues, promotion and tenure, salary inequities, and overall job satisfaction.¹⁵
- A study of minority faculty at universities and colleges in eight Midwestern states showed that faculty of color experience exclusion, isolation, alienation, and racism in predominantly white universities.¹⁶
- Multiple studies demonstrate that minority students often feel isolated and unwelcome in predominantly white institutions and that many experience discrimination and differential treatment. Minority status can result from race, ethnicity, national origin, sexual orientation, disability and other factors.¹⁷
- Women students, particularly when they are minorities in their classes, may experience unwelcoming climates that can include sexist use of language, presentation of stereotypic or disparaging views of women, differential treatment from professors, and/or sexual harassment.¹⁸
- When a negative stereotype relevant to their identity exists in a field of interest, women and members of minority groups often experience “stereotype threat”—the fear that they will confirm or be judged in accordance with the stereotype. Such stereotype threat exists for both entry into a new field and for individuals already excelling in a specific arena. Situations or behaviors that heighten awareness of one’s minority status can activate stereotype threat.¹⁹ Research demonstrates that once activated, stereotype threat leads to stress and anxiety, which decreases memory capacity, impairs performance, and reduces aspirations and motivation.²⁰ Human brain imaging, which shows that activating stereotype threat causes blood to move from the cognitive to the affective centers of the brain, indicates how situational cues reduce cognitive abilities.²¹
- Research has demonstrated that a lack of previous positive experiences with “outgroup members” (minorities) causes “ingroup members” (majority members) to feel anxious about interactions with minorities. This anxiety can cause majority members to respond with hostility or to avoid interactions with minorities.²²

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Influence of Unconscious Assumptions and Biases

Research studies show that people who have strong egalitarian values and believe that they are not biased may unconsciously behave in discriminatory ways.²³ A first step towards improving climate is to recognize that unconscious biases, attitudes, and other influences unrelated to the qualifications, contributions, behaviors, and personalities of our colleagues can influence our interactions, *even if we are committed to egalitarian views.*

Although we all like to think that we are objective scholars who judge people on merit, the quality of their work, and the nature of their achievements, copious research shows that a lifetime of experience and cultural history shapes every one of us and our judgments of others.

The results from controlled research studies demonstrate that people often hold unconscious, implicit assumptions that influence their judgments and interactions with others. Examples range from expectations or assumptions about physical or social characteristics associated with race, gender, age, and ethnicity to those associated with certain job descriptions, academic institutions, and fields of study.

“People confident in their own objectivity may overestimate their invulnerability to bias.”

ERIC LUIS UHLMANN AND GEOFFREY L. COHEN

Examples of common social assumptions or expectations:

- When shown photographs of people of the same height, evaluators overestimated the heights of male subjects and underestimated the heights of female subjects, even though a reference point, such as a doorway, was provided.²⁴
- When shown photographs of men of similar height and build, evaluators rated the athletic ability of Black men higher than that of White men.²⁵
- When asked to choose counselors from a group of equally competent applicants who were neither exceptionally qualified nor unqualified for the position, college students chose White candidates more often than African American candidates, exhibiting a tendency to give members of the majority group the benefit of the doubt.²⁶

These studies show that we often apply generalizations about groups that may or may not be valid to the evaluation of individuals.²⁷ In the study on height, evaluators applied the statistically accurate generalization that men are usually taller than women to estimate the height of individuals who did not necessarily conform to the generalization. If we can inaccurately apply generalizations to objective characteristics as easily measured as height, what happens when the qualities we are evaluating are not as objective or as easily measured? What happens when, as in the studies of athletic ability and choice of counselor, the generalizations are not valid? What happens when such generalizations unconsciously influence the ways we interact with other people?

Examples of assumptions or biases that can influence interactions:

- When rating the quality of verbal skills as indicated by vocabulary definitions, evaluators rated the skills lower if told that an African American provided the definitions than if told that a White person provided them.²⁸
- When asked to assess the contribution of skill versus luck to successful performance of a task, evaluators more frequently attributed success to skill for males and to luck for females, even though males and females performed the task identically.²⁹
- Evaluators who were busy, distracted by other tasks, and under time pressure gave women lower ratings than men for the same written evaluation of job performance. Sex bias decreased when they took their time and focused attention on their judgments, which rarely occurs in actual work settings.³⁰
- Research has shown that incongruities between perceptions of female gender roles and leadership roles can cause evaluators to assume that women will be less competent leaders. When women leaders provided clear evidence of their competence, thus violating traditional gender norms, evaluators perceived them to be less likeable and were less likely to recommend them for hiring or promotion.³¹
- A study of nonverbal communication found that White interviewers maintained higher levels of visual contact, reflecting greater attraction, intimacy, and respect, when talking with White interviewees and higher rates of blinking, indicating greater negative arousal and tension, when talking with Black interviewees.³²

Examples of assumptions or biases in academic contexts:

Several research studies conclude that implicit biases and assumptions can affect evaluation and hiring of candidates for academic positions. These studies show that the gender of the person being evaluated significantly influences the assessment of résumés and postdoctoral applications, evaluation of journal articles, and the language and structure of letters of recommendation. As we attempt to enhance campus and department climate, the influence of such biases and assumptions may also affect selection of invited speakers, conference presenters, committee membership, interaction, and collaboration with colleagues, and promotion to tenure and full professorships.

- A study of over 300 recommendation letters for medical faculty hired by a large American medical school found that letters for female applicants differed systematically from those for males. Letters written for women were shorter, provided “minimal assurance” rather than solid recommendations, raised more doubts, and included fewer superlative adjectives.³³
- In a national study, 238 academic psychologists (118 male, 120 female) evaluated a junior-level or a senior-level curriculum vitae randomly assigned a male or a female name. These were actual vitae from an academic psychologist who successfully competed for an assistant professorship and then received tenure early. For the junior-level applicant, both male and female evaluators gave the male applicant better ratings for teaching, research, and service and were more likely to hire the male than

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the female applicant. Gender did not influence evaluators' decisions to tenure the senior-level applicant, but evaluators did voice more doubts about the female applicant's qualifications.³⁴

- A study of postdoctoral fellowships awarded by the Medical Research Council of Sweden found that women candidates needed substantially more publications to achieve the same rating as men, unless they personally knew someone on the selection panel.³⁵
- A 2008 study showed that when the journal *Behavioral Ecology* introduced a double-blind review process that concealed the identities of reviewers and authors, there was a significant increase in the publication of articles with a woman as the first author.³⁶

Reaping the Benefits and Minimizing the Challenges of Diversity

To reap the benefits and minimize the challenges of diversity, we need to overcome the powerful human tendency to feel more comfortable when surrounded by people we resemble. We need to learn how to understand, value, and appreciate difference. Below is some advice for doing so:

Become aware of unconscious biases that may undermine your conscious commitment to egalitarian principles.

One way of doing so is to take the Implicit Association Test (IAT) offered by Project Implicit (a research collaborative at the University of Virginia, Harvard University, and the University of Washington): <https://implicit.harvard.edu/implicit/demo>.

Consciously strive to minimize the influence of unintentional bias.

Question your judgments and decisions and consider whether unintentional bias may have played a role. One way to do so is to perform a thought experiment: ask yourself if your opinions or conclusions would change if the person was of a different race, sex, or religion, etc. Some questions to consider include:

- Are women or minority colleagues/students subject to higher expectations in areas such as number and quality of publications, name recognition, or personal acquaintance with influential colleagues?
- Are colleagues or students who received degrees from institutions other than major research universities under-valued? Are we missing opportunities to benefit from the innovative, diverse, and valuable perspectives and expertise of colleagues or students from other institutions such as historically black universities, four-year colleges, community colleges, government, or industry?
- Are ideas and opinions voiced by women or minorities ignored? Are their achievements and contributions under-valued or unfairly attributed to collaborators, despite evidence to the contrary in their publications or letters of reference?
- Is the ability of women or minorities to lead groups, raise funds, and/or supervise students and staff underestimated? Are such assumptions influencing committee and/or course assignments?
- Are assumptions about whether women or minorities will “fit in” to an existing environment influencing decisions?
- Are assumptions about family obligations inappropriately influencing appointments and other decisions?

Seek out opportunities for greater interaction with women and minority colleagues.

Get to know women and minority colleagues in your department, your campus, and your professional associations. Pursue meaningful discussions with them about research, teaching methodologies, and ideas about the direction of your department, college, and profession. Listen actively to any concerns they express and try to understand and learn from their perspectives and experiences.

Focus on the individual and on his/her personality, qualifications, merit, interests, etc.

Consciously avoid the tendency to make assumptions about an individual based on the characteristics (accurate or not) of his/her group membership. Likewise, avoid the tendency to make assumptions about groups based on the behavior, personality, qualifications, etc. of an individual group member. Instead, concentrate on the individual and his/her qualities.

Treat all individuals—regardless of race, sex, or status—with respect, consideration, and politeness.

- Greet faculty, staff, and students pleasantly in hallways or in other chance encounters.
- Make requests to faculty, staff, and students politely - even when the work you are asking for is part of their obligations.
- Acknowledge and appreciate the work, assistance, and contributions of faculty colleagues, staff, and students. Do so in public forums as well as privately.
- Address individuals by their appropriate titles or by their preferred forms of address.

Actively promote inclusive communities.

- In classroom, committee, laboratory, and departmental settings, work to ensure that everyone has a chance to voice opinions, concerns, or questions. Acknowledge and attribute ideas, suggestions, and comments accurately. Women and minorities often report that their remarks or contributions are ignored or unheard.
- Support efforts to ensure that leadership and membership of departmental and professional committees are diverse with respect to age, gender, nationality, race, ethnicity, etc.
- Support efforts to ensure that departmental events such as seminar series and sponsored conferences include presenters of various ages, genders, nationalities, races, and ethnicities.
- Promote inclusive language by example. Avoid using only male pronouns when referring to groups of both sexes. Avoid language that makes assumptions about marital status and or/sexual orientation, i.e., consider using “partner” rather than “spouse.”
- Welcome new departmental members by initiating conversations or meetings with them. Attend social events hosted by your department and make efforts to interact with new members and others who are not part of your usual social circle.

Avoid activating stereotype threat.

In addition to the advice provided above for actively promoting inclusive communities, the following suggestions can prevent the activation of stereotype threat or counteract its effects:

- Teach students and colleagues about stereotype threat.³⁷
- Counter common stereotypes by increasing the visibility of successful women and minority members of your discipline. Ensure that the posters and/or photographs of members of your department or discipline displayed in hallways, conference rooms, and classrooms reflect the diversity you wish to achieve. Choose textbooks that include the contributions and images of diverse members of your discipline.³⁸
- Support and encourage your students by providing positive feedback as well as constructive criticism to ensure that they know their strengths and develop confidence in their abilities. Save your harshest criticism for private settings so that you do not humiliate or embarrass students in front of either their peers or more senior colleagues. Such respectful practices are important for all students, but are likely to be more important for women and members of minority groups, who may have received less encouragement and may be at greater risk of being discouraged due to the influence of stereotype threat. Demonstrate similar respect and encouragement for your colleagues.
- For more suggestions, see: <http://reducingstereotypethreat.org/reduce.html>.

Conclusion

Diversity is not an end in itself.

Diversity is a means of achieving our educational and institutional goals. As such, merely adding diverse people to a homogeneous environment does not automatically create a more welcoming and intellectually stimulating campus.

Long-term efforts, engagement, and substantial attention are essential for realizing the benefits that diversity has to offer and for ensuring that all members of the academic community are respected, listened to, and valued.

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http://wiseli.engr.wisc.edu/docs/benefits_references2012.pdf

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