

2018 Ethics Discussion Cases – Introduction to Biases

Biases related to gender, race, ethnicity, age, disabilities, sexual orientation, and other characteristics have the potential to limit the diversity of the biomedical research community. Biases can impact decisions and actions related to hiring and interviews, mentoring and training, research assignments, study designs, career advancement, recommendations, promotions, and funding. Overt biases reflected in messages and behaviors can also adversely impact the research and organizational environment, such as by creating inequities or an uncomfortable work culture.

Biases can take different forms. Explicit or conscious biases emerge from established institutional practice and policy as well as individual prejudices. Implicit or unconscious bias occurs automatically and unintentionally, escaping the conscious awareness of an individual or group, and so can be especially insidious and difficult to recognize.

This year's research ethics discussion cases are intended to increase recognition of different types of bias and the contexts in which bias can occur in the biomedical research community.

It is incumbent upon researchers at all levels to be aware of biases in themselves and in their research environment, and to be able to effectively address, manage, or eliminate them when necessary. Reducing all types of bias has been shown to increase diversity, which itself is beneficial to the biomedical research enterprise.

Approaches to minimizing biases include education, awareness (of both self and others), motivation, and accountability.

Some links related to implicit biases and diversity:

<https://diversity.nih.gov/sociocultural-factors/implicit-bias>

<https://implicit.harvard.edu/implicit/takeatest.html>

Gender Bias in Academia

Dr. Virginia Mason is an accomplished scientist at a prestigious university who has worked her way up the ranks to Assistant Professor. She has published 9 papers while on tenure track (for a career total of 40), with successful trainees and a very good reputation in her field. Her tenure review panel receives positive external letters of recommendation, with very strong support from experts in her specific field, particularly praising her as an excellent collaborator, mentor, and team player. By contrast, she received weaker positive support from leaders in related fields she had not met, who seemed concerned about the expected impact of her future research contributions.

At the same time, Dr. David Singletary, another member of the department with a fairly similar record of publications and successful trainees while on tenure track (with a career total of 25 papers), is also being considered for tenure. His external evaluation letters are generally glowing, praising him as driven, ambitious, performing high-impact research, and a future leader.

Discussion Questions

1. What scientific and personal criteria are – or should be – important for hiring for an academic position and receiving tenure?
2. How might unconscious biases enter and influence the evaluation process?
3. How important is “networking” for career success in academia, the government, or private sector? Can biases occur in networking and mentoring?

On a split vote, the tenure panel finds that the two scientists are talented and recommends that both receive tenure. The original department chair who hired both researchers and strongly supported Dr. Mason’s promotion recently retired. The incoming chair wants the department to move in a new research direction different from that of the two tenure candidates, so he announces his intention to reduce the size of the department by one person to permit a future new recruitment. The next day, Dr. Mason learns that only Dr. Singletary is put forward for tenure. She requests an appointment with the chair, but his assistant makes clear that he is overbooked and about to leave for a conference in Thailand. The university Dean typically supports departmental decisions regarding tenure actions, so Dr. Mason appeals to the university President, Board of Regents, and the press, citing gender bias.

Discussion Questions

4. What factors do you feel that the President and Board should consider in this case?
5. What collateral effects might result from this case for the university and for Dr. Mason; e.g., in terms of reputation, future opportunities, recruitment, etc.
6. Would there be any differences if this scenario occurred in the NIH intramural program, and the decisions were made by a new Scientific Director?

A reporter learns that the new chair hosts a weekly poker game at his home, to which all department members are invited. Dr. Singletary often participates, but Dr. Mason does not.

Discussion Questions

7. How relevant is this fact, and what issues are involved?
8. At various points in this case, what might have been done differently to avoid or reduce problems?
9. Can the existence and consequences of biases be evaluated through external investigations?

Responsible and Equitable Mentoring of Fellows

Training and Career Goals

Dr. Anderson, a second-year postdoctoral fellow at NIH, sets up a meeting with the lab chief, Dr. Li, during which Dr. Anderson mentions some reflections regarding future career plans. Even though the experimental work has been very successful, Dr. Anderson is considering becoming a science writer instead of remaining a bench scientist. Dr. Li listens but does not comment on what Dr. Anderson is discussing. In the weeks ahead, however, Dr. Anderson finds it difficult to get time with Dr. Li to discuss their latest experimental data and to receive guidance on the manuscript. Also, two other fellows in the lab have been assigned by Dr. Li to begin new experiments extending the current findings, while Dr. Anderson is not offered participation in them.

Discussion Questions

1. Did Dr. Li respond to Dr. Anderson's revelations appropriately? What responsibilities do mentors have regarding the provision of career advice?
2. Were the subsequent events warranted? What are the immediate and long-term consequences for Drs. Anderson, Li and the lab generally?
3. What options does Dr. Anderson have in this situation? Is participation in new experiments justifiable if one is considering leaving research?

Trainee Growth and Independence

Bob is a graduate student starting his second year of NIH research in the lab of Dr. Smith, a tenure-track investigator. Bob's project involves harvesting brain tissue from a number of mouse models that took the lab a long time to generate. The project is well-defined, but many of the techniques involved are new for Bob, and challenging to master. Bob is highly motivated by the project and science in the lab, but is increasingly frustrated with how Dr. Smith is managing his project. With the rationale that the animals are in limited supply and very valuable, or that the research must move to publication as quickly as possible, Dr. Smith often instructs the more experienced lab technicians and trainees in the lab to perform critical steps of Bob's experiments. Bob is feeling increasingly demoralized and disengaged from Dr. Smith and the lab.

Discussion Questions

1. What does Bob, as a trainee, have a right to expect from his experience in the Smith lab? Do expectations vary with the trainees' skill levels?
2. What are Dr. Smith's interests at his career stage? How should he balance his professional development interests and needs with those of his trainees?
3. What steps could Dr. Smith take to increase Bob's engagement and satisfaction with his experience in the lab?

Diversity and Bias – Approach to Disabilities

Dr. Jones was recently contacted by a number of graduating PhDs who were interested in coming to her lab as postdoctoral fellows. Having just learned she would have a fellowship opening soon, she was pleased to be able to give these applicants serious consideration. Based on their training and publication record, two candidates, Dan and Frank, distinguished themselves above the rest, and Dr. Jones decided to invite them to NIH to interview and give seminars.

Arrangements for the visits proceeded smoothly, but as Dan's visit was being finalized he communicated to Dr. Jones that he uses a wheelchair. Dr. Jones was caught off guard by this news, but she quickly thought to ask what accommodations Dan might need during his visit. Having little experience with the needs of such individuals, she was relieved to establish that there were no obvious concerns or special requirements.

Dan and Frank both gave solid seminars and interacted well with the lab staff. Dr. Jones felt that either would likely be successful in the lab, which created a difficult decision for her. In the end, Dr. Jones extended the offer to Frank with the justification that his background provided slightly better preparation for the lab's research, but she remained uncertain about whether she was making the right decision, or for the right reasons. She considered herself enlightened on issues related to discrimination, and was very aware of the need to recognize biases, both unconscious and explicit.

Discussion Questions

1. At what point in the initial discussions should a trainee candidate in need of special accommodation reveal that to the PI?
2. What legitimate concerns might Dr. Jones have about Dan joining the lab?
3. Persons with disabilities are considered an underrepresented group. Are there ways in which their situation differs from that of persons who are underrepresented by virtue of race, ethnicity, etc.?
4. What options and resources are available at NIH for accommodating trainees with disabilities? For example, would Dr. Jones be able to adjust her lab layout for Dan?

Relevant NIH Resources and Policies

Guidelines for Mentoring an NIH Trainee Who is Deaf or Hard of Hearing

https://oir.nih.gov/sites/default/files/uploads/sourcebook/documents/mentoring/guidelines-mentoring_deaf_trainee.pdf

NIH Manual Chapter 2204-Reasonable Accommodations

<https://policymanual.nih.gov/2204>

Implicit/Unconscious Biases?

A senior investigator decides to share an article discussing a scientific analysis of racial profiling. However, contrary to her usual practice of sending out articles to the entire branch/group on a weekly basis, she only sends this article to the three minority staff members working in the lab.

1. What might have been her assumption?
2. Could there have been a good (or bad) reason for doing so?
3. How should members of her group respond?

A collaborator from an outside organization arrives to present at a meeting of 15 NIH senior investigators. Walking directly to the only minority investigator (a woman) at the conference room table, the collaborator assumes she is administrative support staff and asks if she can make enough copies of the presentation for everyone in the meeting.

1. What is the unconscious bias here?
2. Would you do something if you were one of the other senior investigators?

Should the following questions or comments posed in a neutral or friendly manner be considered innocent or implicit bias? What are the assumptions, and what would you do if you were the recipient or happened to overhear?

1. Where are you from? (Said to an Asian-American from Ohio)
2. I bet you make great tacos – can you bring that to the party?
3. How was your Chinese New Year's celebration? (asked of any Asian-American).
4. Jennifer, would you like to give us the Hispanic perspective on this?
5. We should look at all the candidates but the most important consideration is to hire the best person for the job. (What does 'best person' mean?)
6. You certainly look different from what I expected after reading your work.
7. Why can't you be like all the others here?