

Case Study 1. In With the Old, Out With the New?

In Fall 2011, you accepted Michael into the lab as a first year graduate student. He came to graduate school highly recommend with a great letter from his undergraduate research advisor who you knew as a post-doc. During the subsequent semester, you found that the student was far less-well prepared for graduate school and lab work than the student (or his undergraduate mentor) had let on. While he did well in his classes, methods he said he ostensibly “knew” from his undergraduate lab experience were a challenge for him on your projects. Michael has struggled to contribute effectively to the lab. He frequently comes to you with very basic questions, answers to which you thought he should know. While you would have preferred a student with more independence, you expect the situation might improve over time as he gains more experience and confidence. You begin to get frustrated with Michael’s slow progress toward independence.

In May 2012, a colleague in your department who works in a similar area leaves for another institution. His advanced graduate student Melissa opts to stay at your university. Melissa has done very well in your colleague’s laboratory but is only partway through her Ph.D. and likely has another 2-years of research left as she finishes her dissertation. You do not have the resources to support both Melissa and Michael in the lab. Your chair is pushing you to take Melissa since otherwise she may not have another lab to join. What do you do?

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- Do you accept Melissa into the lab? Do you ask Michael to leave the lab and/or the program? Why or why not?
 - What are your obligations to Michael?
 - Does it matter that you know Michael’s undergraduate mentor?
 - What are your obligations to Melissa?
 - Is it appropriate for the chair to pressure you to accept Melissa into your lab even through that might have negative consequences for Michael?
 - Are there factors left ambiguous in the case study that might influence you one way or another? What types of extenuating circumstances might influence your decision?

Case Study 2. Laboratory Personalities

Adapted from the Resources for Research Ethics Education, Case Study 3 by Allan Shipp, Copyright AAMC. <http://research-ethics.net/topics/mentoring/#discussion>
Accessed on 7/23/12.

Amos Jones was accepted to an excellent graduate program in a prestigious chemistry department. The faculty was relatively small but there were two outstanding professors Amos whose labs he was considering, Claire Cheng and Patricia Slocum. Amos had been encouraged to train under Dr. Slocum by his undergraduate advisor.

When inquiring about the research in the two labs, Amos was told by Dr. Slocum's students and post-docs that he would be given a specific project, he would be expected to communicate results only to his direct supervisor, and he would have to give a formal presentation on the progress of his research once every two months. They noted that daily handwritten and dated entries were required for their laboratory notebooks. Much of the work had potential for commercial applications, so the laboratory was locked even during the day, with entry limited to lab personnel staff. The graduate students were reluctant to describe their experiments Amos. The pace was very intense and trainees were required to prepare abstracts for two national meetings every year. The trainees also noted that many famous investigators visited the lab, spending time in formal and informal scientific discussion. Trainees were allowed to examine copies of papers that Dr. Slocum had received for review and to discuss them at lab meetings. They also saw an occasional grant application under review. The trainees expected to be in great demand for postgraduate fellowships.

Professor Cheng's students reflected on the openness of the laboratory and her constant and immediate availability. They thoroughly enjoyed broad scientific interplay within the lab and with other investigators on campus and elsewhere. They indicated that they were encouraged to explore their own ideas and expected to select their own thesis project. The students gave no formal presentations except when rehearsing for meetings. Progress in the laboratory was episodic rather than steady as various concepts were explored. Although their notebooks were not specifically examined, Dr. Cheng knew about every experiment and provided constructive criticisms and suggestions. Dr. Cheng did not go to many conferences and refused to show papers she received for review to her trainees. The students admitted that they felt a little out of touch with the newest developments in the field. Although Dr. Cheng did not enjoy the same prestige and reputation as that of Dr. Slocum, the trainees said Dr. Cheng's lab was a much more pleasant and collegial environment in which to work.

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- Compare and contrast the styles of these two faculty members?
 - What characteristics of good mentoring are on display in each lab?
 - What potentially questionable mentoring practices are evident?

Case Study 3. Explosive Personalities.

You run a research group with many personalities. One afternoon Carly, a 3rd year graduate student, comes to you visibly upset. James, a 4th year graduate student in your group has referred to her as a “bitch”. You call James into your office, where you clearly express that in your laboratory there is zero tolerance for derogatory statements towards a fellow group member based on gender, race, age or any other stereotype. As the PI you understand that there will be disagreements, but statements like this are inflammatory and are completely unproductive towards settlement of any conflict.

James apologizes to you and agrees that the use of this word was in poor taste and further agrees to apologize directly to Carly. He marches into lab, and announces loudly to everyone present (who by now know what is going on) that he was wrong, and he regrets calling a Carly a “bitch”, what he meant to say was that she is an “asshole”. His opinion is that there is no way that could be construed as a gender-biased statement, so he is in the clear.

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- Imagine that you are the PI. What could you have done differently in this situation? (by the way, hind sight is always wonderful in scenarios like these...)
 - What actions could/should you take with respect to James? Will any of these potential actions help to fix the problem? Is there a risk that some of the possible actions might further exacerbate an already bad situation?
 - Are there ways to diffuse the broader tensions in the lab as a whole as a result of this altercation?