Mentoring Case Studies

Icebreaker: After reading “Truth and Consequences” (Science, September1, 2006; pp. 222-226), what would you have done if you were one of the graduate students considering blowing the whistle on your advisor?

1. Advice about Mentors
You are entering your second year in the PhD program. Even though it is early in your graduate career, the department advises all students to select a supervisor for the beginning phases of graduate research. Asking around, several fellow-graduate students give you some advice.

Angel recommends that you pick the supervisor with the research expertise in an area you are the most interested in. He thinks you should pursue those questions you are the most interested in, otherwise the three or four years of graduate school will be unbearable.

Barbarosa tells you it doesn’t matter whether the supervisor’s research is of interest to you. You should select the most famous professor because in the end you will need a job and that requires letters and the benefits of associating with well-known individuals. You can always pursue your interests later.

Correl suggests that you pick someone you feel comfortable working with, otherwise you will be left on your own and that makes graduate work that much more difficult. Guidance is the most important thing in a supervisor.

And lastly, Devon explains that it doesn’t really matter who you choose. Pick someone and see who works. You can always change supervisors later. You may even change your interests later. It’s really no big deal.

Discussion Questions
1. Whose advice do you think is most helpful? Least helpful? Why?
2. Are there some other considerations not included that you should think about? Why are they important?
3. In your own words, what is the role/purpose of the mentor/supervisor in your graduate career? Now take the mentor/supervisor’s point of view: what is the role/purpose of the mentor/supervisor?
2. Serving Two Masters
Josiah Grant often puts himself into a pickle. He is constantly balancing the many tasks required of him by different professors in his program. Josiah is now working as a TA for Professor Lattour, and he is doing research with his advisor, Professor Poincare. Professor Lattour has asked Josiah to prepare several lectures for the class while the Professor is at a conference in the south of France. This is not an unusual request, but it will require much of Josiah's time and energy while Professor Lattour is gone. Josiah mentions this to his advisor who becomes upset. Professor Poincare says he will talk to Professor Lattour and explain why Josiah's lab duties must come before preparing lectures. But Josiah is frustrated. He would rather prepare the lectures than perform additional lab work. Also, he feels he should handle it himself rather than having two professors negotiate for his time. He informed Professor Poincare out of a sense of responsibility. He wasn’t expecting this reaction, and he is concerned what Professor Lattour may think of Josiah after Professor Poincare confronts him. At the same time, he realizes his teaching position with Professor Lattour will be over at the end of the semester while his work with his advisor will continue throughout his graduate career.

Discussion Questions
1. Should Josiah let Professor Poincare confront Professor Lattour? If not, how should he approach Professor Poincare, who is obviously upset by the arrangement? If so, what will the consequences be for Josiah?
2. What are Professor Poincare’s responsibilities as Josiah’s advisor in this case? What are Professor Lattour’s responsibilities as Josiah’s instructor?
3. What could Josiah have done differently to avoid this situation?

3. Caught in the Middle
Professors Hegel and Hume are two members of Homer's dissertation committee. They disagree about the best method for Homer's dissertation. But Homer doesn’t feel comfortable asking either Hegel or Hume to step down from his committee. Besides, his topic still requires the expertise of both professors. So, Homer meets with each professor to discuss the issues. After two weeks of going back and forth Homer thinks they have fashioned a solution that will satisfy both professors. The downside is that even though this solution resolves the disagreement between Professors Hegel and Hume about methodology, it will require extensive revisions in the existing draft, and it will impose substantially more work for Homer to collect more data resulting in a delay to his graduation plan of about a year. Homer worries that the new plan will extend his time in the program but he weighs this against the fact that the original idea would still have created disagreement among his committee members likely causing other delays.

Discussion Questions
1. Is the compromise that Homer made a good idea? Was it his responsibility to negotiate this agreement, or should one of the professors have taken the lead?
2. Who should Homer go to for advice in this case, if neither Hegel nor Hume were willing to budge on their methodological views?
3. How could this situation have been avoided in the first place? Could it have been avoided?
4. Playing Favorites
Professor Huffandpuff serves as dissertation advisor for two students, Sun and Moon. Sun is a hard working graduate student with a good grasp of the topic area and methodology required for his dissertation research, but has made only marginal progress. Sun continues to work in hopes of eventually developing a career as an academic researcher and teacher. Moon, on the other hand, is a brilliant student who promises to contribute an original and potentially influential dissertation. However, Moon feels slighted by Professor Huffandpuff because the professor spends considerably more time helping Sun than helping Moon with her own research questions. Professor Huffandpuff explains that she treats Sun and Moon differently, not because of personal preferences, but because Moon doesn’t plan to continue on in academia. Prof. Huffandpuff feels more time should be spent developing Sun’s skills so he can get an academic job.

Discussion Questions
1. Is Moon being treated unfairly? Should it matter what your goals are after completing the dissertation?
2. Consider an alternative explanation: Professor Huffandpuff thinks Sun needs more help because he just needs more attention in order to finish his work. Moon works independently and doesn’t seem to need the additional attention. Assume that both Sun and Moon plan similar futures after the dissertation. Is this fair?
3. Is it ever permissible for the advisor to treat his or her advisees differently? If so, why and under what conditions?
5. Romance in the Lab
Josef and Julia are new graduate students in the lab of Professor Woodworth. As part of her introduction to new graduate students Prof. Woodworth has a number of rules for the conduct of her lab. Some are expected: be on time for all laboratory functions, keep your lab station clean of clutter, and be collegial with your lab-mates. But one rule sticks out. Although Prof. Woodworth encourages students to be friends in and out of the lab, she doesn’t allow any romantic relationships between laboratory members. It has caused serious problems for her in the past and she wants to avoid the jealousy and nastiness that can result from a romantic relationship. “We are all here to do scientific work, not find a mate,” Prof. Woodworth explains. If a romantic relationship does develop, Prof. Woodworth requires at least one of the two involved to leave her lab, and it is up to the involved students to decide who leaves and who stays. Both Josef and Julia agree to Prof. Woodworth’s rules, but in a private conversation outside the lab Josef complains to Julia about the “no romance” rule. “What I do in my private life is my own business. Its not right for Prof. Woodworth to tell me who I can or can’t be involved with.” Julia replies, “Perhaps you are right, but those are the rules. If you want to work with Prof. Woodworth, those are the conditions you have to live with.”

Discussion Questions
1. Is Josef correct to think that relationships between laboratory advisees are personal matters that should not concern the advisor?
2. Given the past experience by Woodworth, is she correct to institute a policy that restricts romantic relationships in her laboratory? Does the policy constitute a conflict of interest?
3. Suppose that after a short while in Woodworth’s lab the relationship between Josef and Julia grows into a close relationship. They are both reluctant to admit it but they would like to become romantically involved. What should they do about their feelings for each other? Should they consult with Prof. Woodworth before their relationship progresses any further?
4. Are romantic relationships always detrimental to research environments? For instance, it is not unusual to hear about how married faculty met: one was the advisor for the other. If the two involved can be responsible adults about the relationship, what is wrong (if anything) with becoming romantically involved with those you work closely with?
6. Not Available
Gully is having some difficulty setting up an experiment. He seeks out his professor for help but the professor is often not available. “I have a grant deadline and then a presentation to prepare for some investors,” Professor Tully explains. Professor Tully recommends that Gully find one of the post-docs to help him in the meantime. Gully is upset. He feels Professor Tully is not being helpful at all. He worries that he won’t be able to finish his doctoral work in a reasonable amount of time unless Professor Tully can provide more time. In addition, he doesn’t think he has the time to change advisors. No one else is doing the same research as Professor Tully. After some time Gully asks one of the post-docs for help. The post-doc warns Gully not to read too much into Professor Tully’s behavior. He does it to everyone. The post-doc advises that Gully just find his way around until he finds something to work on that will attract the attention of Professor Tully. Focus her attention. Besides, explains the post-doc, Professor Tully is well-known and may even have a job or two to offer the graduate student in the near future: He runs a successful biotech firm that develops some of the new technology coming out of his laboratory. Gully would welcome the opportunities, but is finding it difficult to feel he has made any progress without some help from the Professor.

Discussion Questions
1. Is there a problem here? If you were in the graduate student’s position what would you do?
2. Is the Professor shirking her duties toward the graduate student? If so, what should she be doing?
3. Suppose the graduate student is very upset and confronts the Professor about her availability. Professor Tully tells the Gully he is free to find another faculty mentor. What should the Gully do? Has he burned his bridges with Professor Tully?