CASE # 1: DIFFERENT SUPERVISING AND MENTORING STYLES

Dr. Felecia Garcia is a first-year postdoctoral fellow in Dr. Montgomery (Monty) Morton's laboratory. Because Dr. Morton's laboratory emphasizes independence, Dr. Garcia chooses her own project, plans experiments herself, and meets with Dr. Morton (who travels extensively) every 2-3 months to discuss her data, figures, and conclusions for papers. She knows that, regardless of how she performs, Dr. Morton will write a glowing generic recommendation for any job to which she applies, and that she can take her project to her next position. She is uneasy, however, because a 6th year postdoctoral fellow in her lab has had his main paper rejected from 10 journals so far, even though Dr. Morton helped to write the paper.

From speaking with Dr. Walter Wong, a postdoctoral fellow from the lab next door, Dr. Garcia is surprised to learn that other labs are different. Dr. Wong is supervised by Dr. Colin Powell, who stresses publication productivity in high-impact journals. Postdoctoral fellows are assigned specific projects, meet with Dr. Powell weekly on an individual basis to discuss experimental details, and keep up with the competition by reading grants and papers reviewed by Dr. Powell. Dr. Wong expresses nervousness about his upcoming yearly evaluation, when Dr. Powell provides each lab member an in-depth, written performance critique. He actively helps fellows compete for the jobs for which he decides they are best suited, and his recommendation letters describe strengths and weaknesses. Part of their project may be taken to future jobs, based on a written agreement.

Discussion Questions

1. What are the advantages and disadvantages/problems with each of these different supervisory and mentoring practices? What if the trainees were graduate students?

2. What are the advantages and disadvantages for the supervisor?

3. Is Dr. Powell practicing favoritism, discrimination, or personalized mentoring?

4. What are the responsibilities of a mentor for training of a fellow and for advocacy?

Dr. Garcia and Dr. Wong debate whether they should ask their supervisors for changes in how they are mentored.

Discussion Questions

1. What responsibilities do postdoctoral fellows have concerning how they are mentored and the information they receive?

2. How candid should they be with their mentors?

3. Should mentors clarify their lab supervising and mentoring style before a fellow joins their lab?

Case # 2: MENTORING OF NON-ACADEMIC STAFF

Dr. Beth Hillary is PI of a patient-oriented research team that includes Gillian Roberts, a GS-12 senior technician, a research nurse, Kerry Eastwood, and a data manager. Working with tissue biopsies collected by Ms. Eastwood, Ms. Roberts has cloned a gene encoding a trans-membrane protein that seems to be associated with reduced risk of metastatic disease. This discovery in patient samples was unexpected, and Ms. Roberts feels that further characterization of the cells is warranted. Dr. Hillary agrees and indicates that the specimen processing methods used by Ms. Eastwood should be refined and standardized to enhance yield of the cultured cells.

Discussion Questions

1. Should the nurse's role in the project be viewed differently from that of the technician?

2. Should the data manager's role in the project be viewed differently than those of the technician or research nurse?

3. Who should be included as co-authors on the abstract based on this work? Who should be given an acknowledgement?

Dr. Hillary is interested in making induced pluripotent stem cells (iPSCs) from patient materials and wants cell lines to be derived by a commercial laboratory that does such preparations on a fee-for-service basis. Ms. Roberts wants to continue working with this discovery and argues that Ms. Eastwood can readily obtain more specimens of the required quantity and quality and that Ms. Roberts could readily learn the technology for making iPSCs. Dr. Hillary comments that this would be time-consuming and would unnecessarily slow down Ms. Roberts work in other areas. Dr. Hillary indicates that if Ms. Roberts is interested in learning how to make iPSCs she should enroll in a techniques course at a later time. Ms. Roberts is not happy with this suggestion, as the course will require extra hours beyond the standard workday. Dr. Hillary arranges for samples to be obtained from an additional cohort of patients and is anxious to write an abstract for the upcoming meeting.

Discussion Questions

1. Can the supervisor's decision be justified in your view?

2. Is this decision a mentoring issue, a management issue, or both?

3. Can you suggest resolutions to this problem?

4. What if the technique required were not readily available? What if Dr. Hillary wanted to collaborate with another lab which had the technical expertise to perform the experiments required?

5. What if the technician were a trainee?

Case # 3: INTELLECTUAL PROPERTY WITHIN LABS AND BRANCHES

Dr. Ipsita Patel, a postdoctoral fellow, has prepared a research proposal in the form of an NIH grant application as part of a grant writing course she has been taking. Dr. Patel came up with the idea for the proposal after reading the Annual Report of her mentor, Dr. Howard Hunt. She has developed the idea thoroughly, and her mentor provided only minimal assistance in the development of her grant proposal. Several weeks later, Dr. Patel learns that some of the ideas from her proposal have been included in Dr. Hunt's write-up for his upcoming BSC review.

Discussion Questions

1. Are there any intellectual property issues in this situation? Does this depend on the extent to which the PI's Annual Report served as the starting point for Dr. Patel's proposal?

2. Would the number and importance of novel aspects in Dr. Patel's proposal alter the interpretation?

3. Should the mentor have discussed his BSC write-up with Dr. Patel?

Dr. Camilla DeCarvell is a senior postdoctoral fellow in Dr. Hunt's lab who has accepted a tenure-track position in another NIH institute. Dr. Hunt requests a meeting with her privately shortly before her departure. In the meeting, Dr. Hunt hands Dr. DeCarvell a document that outlines her contributions during her time in his lab, lists biological materials that Dr. DeCarvell will be allowed to take from the laboratory (but only if she agrees to continue collaborating with Dr. Hunt in her new position), and spells out several areas not yet under investigation in Dr. Hunt's laboratory that Dr. DeCarvell is forbidden to work on in her new position. Dr. Hunt asks her to take the document home, read it carefully, and return the signed copy to him in the morning. Dr. DeCarvell leaves the office and is quite upset with this situation. She believes Dr. Hunt is acting selfishly and unethically.

Discussion Questions

1. Should Dr. DeCarvell sign the document?

2. What other recourse does she have to resolve this situation?

3. Should she discuss this with the lab chief in her new institute and seek her advice?

Case # 4: HANDLING OF PERSONAL RELATIONSHIPS IN THE LABORATORY

Dr. Paulo Maggiano is a post-doctoral fellow at the NIH, where he is immersed in his research in cell biology in Dr. Gracinha Leporace's laboratory. Shortly after arriving at the NIH, Dr. Maggiano became involved in a romantic relationship with Ms. Sylvia Stone, a technician working in Dr. Leporace's laboratory. Everyone in the lab knew about their relationship. Others in the lab begin to notice that Dr. Maggiano interacts with Ms. Stone differently than with the other technicians in terms of lab assignments and instruction time. When Dr. Leporace learns about it, she informs Dr. Maggiano that she expects him to end the relationship or have either he or Ms. Stone find another lab. Dr. Maggiano argues that this is direct interference with personal matters and that such relationships are of no concern to the advisor. In particular, he points out that no one has complained about the work performed by either him or Ms. Stone. Dr. Leporace counters with the fact that twice in the past her laboratory has been significantly disrupted by romantic relationships between her lab staff. These situations have resulted in ill will, diminished productivity, and a negative effect on the overall morale of her laboratory group. Dr. Leporace indicates that she has carefully considered the implications of such relationships and has decided that the only reasonable thing to do is to prevent the problems before they occur.

Discussion Questions

1. When do personal relationships within a laboratory become a legitimate concern of the lab chief?

2. Are romantic relationships always a bad idea within the same laboratory or research group?

3. How should a lab director handle these relationships? Should they prohibit them? Would it matter if Ms. Stone were a trainee rather than a technician?

4. Discuss the issues of mentorship responsibilities, ethics, and conflicts of interest that you feel are important to this scenario.

The relationship between Dr. Maggiano and Ms. Stone soon ends for other reasons. In the weeks following the break-up, Dr. Leporace notices that Dr. Maggiano seems to be in a somber mood. He keeps to himself, is irritable when approached by others in the lab, and when he does talk to people he is hostile or aloof. Although he is still completing his work, he has become difficult to work with. This pattern continues for several weeks. One afternoon, Dr. Leporace notices that Dr. Maggiano is acting very oddly. He is overreacting to minor incidents and is unable to maintain his focus on his work. Dr. Magianno exhibits this unusual behavior several times. Dr. Leporace suspects Dr. Maggiano may have a substance abuse problem or other psychological issues.

Discussion Questions

1. Is Dr. Leporace obliged to act on these observations about Dr. Maggiano's behavior? Does Dr. Leporace have to wait until Dr. Maggiano's work performance actually deteriorates?

2. What actions, if any, should Dr. Leporace take? What resources are available at NIH to deal with this type of situation?