## Author's Commentary on "Ownership of Knowledge and Graduate Education"

Commentary On

Ownership of Knowledge and Graduate Education

This case raises three primary ethical issues: 1) ownership of ideas in the scientific process; 2) understanding professional obligations toward others and oneself; and 3) power differentials between these roles that can easily be exploited. What exacerbates the ethical concerns in this case is the lack of clear communication among those involved.

In Part 1, several incidents of miscommunication or lack of communication led to each person's perceptions. Moss feels that her ideas are not receiving proper credit, that Reynolds is taking advantage of her and that Abrams is not willing to champion her cause. These feelings arise from expectations that Moss may have had before entering the laboratory. She believes that her ideas should receive personal credit and that her research mentor should protect her when conflicts arise in the lab. Abrams' mentoring style cannot accommodate Moss's wishes. However, even if Abrams' mentoring style were made explicit to Moss, unexpected situations may arise in one's career. Continued communication between Moss and Abrams seems to be lacking. Both Moss and Abrams should strive to improve communication to resolve conflicts.

Reynolds is trying to write research grants, which is of paramount importance to a post-doc. He included Moss by asking her to read the proposal, which may have been his way of respecting Moss's ideas. His responsibility to Moss is somewhat ambiguous because although he is including her, she believes that she deserves more credit The issue here is whether Reynolds is taking credit for Moss's idea, and that is not clear from the case study. It could be argued that Reynolds is the most ethical of the three because he is trying to keep the laboratory funded, he appreciated Moss's ideas enough to include them in a grant proposal, and he suggested that Moss stay involved with the project. But that ignores Moss's concerns that she is being exploited by Reynolds. Abrams is a busy researcher in a

competitive field. Professors with active research programs have many demands on their time. Resolving conflicts between people in the lab may not be a high priority, especially since graduate students and post-doctoral fellows are expected to behave like responsible adults. The real issue, then, is how to create policies in the laboratory to prevent unreasonable expectations, and, when new situations arise that cause conflict, to resolve these issues. One alternative is to discuss the situation with someone outside the lab. That could lend a fresh analysis of the situation and perhaps a swift resolution of the problem. Another, more feasible, option is to have regular, individual conversations between the lab director and the employees to try to avoid confrontations.

The ownership of ideas in scientific research is an ambiguous ethical issue. The scientific community is debating whether conceptualization of an experiment constitutes work that should receive credit and, in some cases, authorship. In Part 2 of the case, both Reynolds and Abrams agree that ideas are cheap, but results are priceless. Moss feels that she deserves credit for her ideas and first shot at the bench work. Reynolds and Abrams agree that she can do the experiments, but they refuse to credit her ideas. In this particular case, Moss will get credit if she completes the experiments. If she does not do the experiments, however, will she still be acknowledged? Or more importantly, *should* she be acknowledged? Because the ideas belong to the laboratory, someone else may do the experiments before Moss has a chance. Unless Abrams and Reynolds agree to let Moss have the first attempt, Moss may again feel exploited. At that point, the issues of power differentials would have to be addressed.