Case studies:

1. **Authorship?**: A postdoc leaves the laboratory and takes a full-time teaching position because her NIH postdoctoral fellowship has ended and the PI of the lab has no other funding to support her. Because of her heavy teaching load, she has not been able to find the time to write up her manuscript. When she was in the lab, she designed the fellowship project, wrote the NRSA proposal to support it, and worked on the project for 3 years, of course with her PI’s advice and guidance. Two years after leaving the lab, she notices that her paper appears in a prestigious journal, and it consists solely of the data that she collected, but her name is neither listed as an author nor in the acknowledgements. The paper has four authors: the first author is a graduate student who joined the lab just after she left to take the teaching position. The next two authors are also graduate students, one of whom is a co-first author, who were in the lab concurrently with her but did not participate in her research. The last author is the PI of the lab. On submission of the manuscript, all authors clicked the agreed box, stating that they made substantial contributions to the manuscript to justify authorship.

   **Questions:**

   Were there ethical breeches?

   What should the postdoc now do? Does she have any responsibility for the current situation?

   What was the PI’s responsibility, and does he/she now need to take action?

   Did the graduate students who agreed to be authors act appropriately? Does writing alone, justify authorship?

2. **Do controls matter?**: A reviewer is reading a submitted manuscript and notices a problem with some of the figures. It appears that two of the figures showing control data for two different experiments are identical. The reviewer calls the editor and the editor decides to suspend further review, pending resolution of the issue. The editor calls the senior author on the paper, an NIH-funded, well-known professor at a Big Ten University, who says he’ll talk to the graduate student who did the work and call back. It turns out that the graduate student did a control for only one of the experiments. He said, because his advisor told him that he was confident the control would show the same result as for the other experiment, he merely copied the control data for the other experiment to save time so that the manuscript could be submitted prior to submission of his pre-doctoral fellowship application, which was due the following week. The senior investigator calls the editor back to discuss what should be done next.

   **Questions:**

   Were there ethical breeches?

   What should be done next? By the editor, senior author, graduate student? Does anyone else need to be involved?
Did the senior author act appropriately before submission of the manuscript?

Should the graduate student be kicked out of the graduate program for misconduct?

Do controls need to be conducted in parallel with experiments, or can they be done later?

3. Conflict-of-interest?: A senior scientist is asked to review a manuscript by a competing junior investigator for a high-impact journal. He has a similar manuscript that he is working on, and his postdoc recently heard the junior investigator present the data for the manuscript at a scientific conference. Although agreeing to review within two weeks, he fails to do so, and he delays his review for an additional two weeks, despite promising the editorial office on two occasions after the deadline passed that he would review within a “couple of days.” In his review, he recommends major revision and suggests that the authors conduct several more experiments that will take many months to complete. The editor agrees with this and makes the decision of major revision, although the other reviewer recommended only minor revision. The senior investigator and his postdoc then submits their work to another high-impact journal, and it appears online as a preprint 2 months later; they fail to cite the unpublished work of the junior investigator, although they were well aware of it.

Questions:

Were there ethical breeches?

Should the junior scientist take some sort of action?

If so, is the editor required to take action? Could the editor have done anything differently during the review/decision process?

Did the senior investigator do anything inappropriate, and is any action by him now required?