Physics 596 – Fall 2022

Scientific Ethics Case Study #4*: Record Keeping

Part I: A student has entered a laboratory in which the recordkeeping procedures and practices have not been formally reviewed, and each member of the lab seems to use his or her own style. The new student often works late in the evening and sometimes writes data down on yellow pads of paper. After several exciting months of results, the student writes up several tables and graphs to be put into a manuscript. While the PI is reviewing these materials, he raises a question about the details of the protocol used for one of the experiments. To his horror, the student can no longer find the particular piece of paper on which those data were written.

Some questions to consider: Can the data be used? How should records be kept? How important are duplicate records? If the student leaves the group, does he or she get to keep the original lab books? If a student works on a project and then leaves the lab, may the student continue the project?

Part II: A student who is in her third year as a PhD student is working with Professor X in a very active laboratory. One evening when she returns to the laboratory to check on the progress of an experiment, she finds Professor X and one of the postdocs reading her lab notebook. She is instantly angry and defensive.

Is it a reasonable reaction? Consider and discuss.

*Before discussing the cases: Identify people in the group for the following presentation duties: (i) A person to present the 'case' in their own words to the rest of the class; (ii) a person to present one point of view in this study; (iii) a person to present the opposing point of view; and (iv) a person to lead a class discussion of the case. Feel free to take notes as necessary to present your discussions to the class.

Discuss this case study with your team and prepare to relate your discussions to the rest of the class.