

## **“Know your Penn State Scientist”**

**PROJECT:** This project is aimed at learning about a Penn State lab by interviewing the principal investigator and a trainee of the lab to learn about their motivation and rationale for their research question(s), attending a lab meeting, reading 2-3 papers from the lab, and highlighting the significant contributions of the lab.

**Please CC me on the emails that you send to the PIs. If you have any difficulties please let me know.**

### **(i) REPORT should about 6 pages – Times New Roman, 12 pt font, single spaced**

A report containing about 6 pages should contain the following:

- (a) A summary of the interview (cover various topics as outlined in the example questions below) – 3-4 pages
- (b) A summary of the lab meeting that you attended – 1 page
- (c) A summary of the papers published by the lab and their broader relevance – 1-2 pages
- (d) Overall impression of your experience – 1 page

### **(ii) The following are the components of this project:**

**(1) Find a research lab:** Find a research laboratory at Penn State that you would like to learn about. You may write to multiple PIs and choose one research lab that piques your interest. Explain the project to the PI and seek his/her permission for an interview. You may conduct multiple interview sessions to cover the list of questions.

**(2) Interview:** Conduct interviews with the principal investigator (i.e. professor who is the head of the lab) and a trainee (graduate student or postdoc), and seek information regarding the lab’s research (example questionnaire below). It is the student’s responsibility to seek out professors and graduate students of labs, obtain permission, and find times to conduct the interviews. All interviews should be direct, and interviews through email or phone are not allowed.

**(3) Read and summarize 2-3 key papers from the lab:** Obtain 2-3 important papers from the lab and write a one-page summary (total) of those papers

**(4) Attend a lab meeting:** Seek permission and attend a lab meeting of the research lab. Write a summary on (a) how the meeting was organized, (b) a summary of topics discussed in the meeting, (c) your impression of how science is discussed and communicated in that setting, and (d) your suggestions for improving the lab meeting to enable more effective communication and discussions.

### **(iii) The following are example questions for the interview:**

#### **Principal Investigator Interview**

- (1) What motivated you to perform research in this area?
- (2) What are the outstanding questions that you are trying to address in your research?
- (3) What are the significant contributions of your research?
- (4) Please suggest to me two to three important papers from your lab. I will have to write a summary of them.
- (4) What are the broader impacts to human health (if applicable), current knowledge in the field, education, and society?
- (5) What skills and qualities do you expect from your trainees?
- (6) What are the key skills that your trainees get out of working in your lab?
- (7) How do you envision your field to progress in the next 5 years?

## Functional Genomics

### **Trainee Interview**

- (1) What motivated you to join this lab?
- (2) What are the outstanding questions that you are trying to address in your project?
- (3) In terms of lab research, what would you term as success?
- (4) What are the broader impacts to human health (if applicable), current knowledge in the field, education, and society?
- (6) What are the key skills that you are learning from this research?