A Summer Intern's Goals, Milestones and Skills

By Dallas Abbott and Bill Menke

May 1, 2017

Overarching Goals

1. For you to discover what a career in science is like and whether or not one might be proper for you, through your participation in scientific research and culture.

2. For you to develop confidence in your ability to do science through carrying out a research project that leads to meaningful results.

3. For you to develop lasting professional relationships with your mentor, other scientists and fellow interns that will positively influence your career.

Milestones

1. You have been sufficiently trained in workplace safety, interpersonal conduct, professional ethics and administrative procedures to be able to participate in normative institutional life.

2. You have developed a working relationship with your mentor that includes substantive meetings that lead to your having a clear sense of your progress and your mentor's expectations.

3. You can develop a work plan for the day that includes learning new material and applying what you have learned to your project.

4. You can discuss your research informally with staff scientists and interns and formally at group meetings.

5. You can listen to a research seminar and understand the general rationale for the work and the results.

6. You have made enough progress on your research project to reach conclusions that you feel are interesting and important.

7. You can present the results of your research project both orally and in writing and have the sense that others understand you and are interested in what you have to say.

Specific Skills

1. To be able to identify what you need to know to further your research and to find sources of that information, through discussions with experts and library and web research.

2. To be able to read a scientific paper and identify the broad context of the research, the hypothesis being tested, and the chain of logic connecting hypotheses, data and conclusions.

3. To be able to use laboratory and computer resources at a level sufficient to further your research.

4. To be able to write a scientific report, including coherent and well-organized text, figures and bibliography.

5. To be able to prepare and give a presentation that uses a poster or slides and that conveys a scientific idea.

6. To be able to participate in a staff meeting and come away from it with a good sense of what was said and how it relates to you.

7. To be able to plan your workday and wisely budget your time.