Tips for and from Science Mentors

This document describes a number of strategies, techniques, and ideas that a science mentor can use to make the mentor-protégé relationship more productive, effective and rewarding. These ideas come from both current and previous science mentors.

Protégés

- Be ready to adjust and adapt to your protégé's skill level and background
- Give explicit instructions for successful work habits
- Discuss with your protégé your expectations for the summer
- Recognize that the abstract protégés' must write is 'wishful thinking.' Help them to understand that what they say might happen in the abstract, may not happen and that's ok.
- Remember that not everyone learns the same way. Help your protégé figure out how he/she learns best (might be different than what works for you)
- Exude confidence in your protégé

Communication

- Establish regular weekly meeting times
- Check in often, dropping-by or wandering-by is helpful. Keep in regular touch
- Communicate with your protégé's other mentors about progress and set-backs
- Ask simple questions
- Provide continuous feedback to protégé, including gentle guidance but also let them think for themselves
- LISTEN to your protégé, don't assume
- Let your protégé know it's ok to ask really basic questions.
- Reduce scientific jargon in the way you talk as a mentor

Project Definition and Progress

- Define project and plan it with the protégé—joint definition is key,
- Make sure the project fits both the protégé and the mentor's needs
- Pick a project that has an interesting result either way (if it "works" or doesn't work)
- Pick a project that has some relevance to society/bigger picture of topical area
- Get to the project itself quickly
- Plan for a project that can be completed in much less time than 10 weeks (estimates vary, 3, 4 or 5 weeks of actual research—but remember that 3-5 weeks of your research time is not the same as 3-5 weeks of a protégé's time).
- Establish milestones for progress, set intermediate project goals, smaller milestones, track progress plans
- Allow room for project modification if necessary
- Keep the process logical
- Ask questions often to assess how well the project is going

- Convey to the protégé the larger scientific context of what may appear a narrow laboratory task. The protégé should be able to answer, "Why are we doing this?"

Environment

- Make it fun
- Maintain a sense of humor
- Motivate your protégé
- Keep it simple and student friendly
- Create a welcoming atmosphere

Integration

- Make the protégé a part of your lab group, or project group. Include them in working/social life of the lab
- Connect with the protégé's academic program and/or advisor
- Provide broader exposure to scientific world—introduce them to other scientists, concepts in science, how the scientific community works. Think of it as bringing them into the community of scientists
- Make sure to introduce them to younger scientists too, show them how the career transition is made

Your time allocation

- Prepare to spend up to 50% of your time with your protégé at the beginning of the process, this may decrease somewhat as the summer goes on

SOARS/RESESS support for mentors

- Always remember that SOARS/RESESS staff and other mentors are around for support!