Guidance in Lab Research

Establishing a good working relationship with your mentor(s)
A mentor is a person with superior rank or authority and influence in his or her field who commits time, emotional support, and intellectual strength to encourage growth and development in an understudy.
Who are your mentors?

• Sponsoring professor
• Grad students or Postdoctoral fellows
• Other undergraduates (peer mentors)

Take advantage of them all!
Your sponsoring professor

• Be respectful of their time, but make sure they make time for you
• Come prepared for presentations and one-on-one meetings
• Have a discussion about expectations early on
• Ask for help when you need it!
Schedule regular one-on-one meetings

“Well, a pop-up doctoral dissertation is certainly an original idea…”

www.gradresources.org/articles/cartoon2.gif
One-on-one meetings: How to prepare?

- Bring your data and notebook
- Bring specific comments and questions
- Be forward-thinking
- Accept constructive criticism... and ask for it!
- Ask for additional reading... and do it!
- Make short and long-term “deadlines” together
My mentor has no time/does not want to meet--what now?

- Send the professor a well-written, 1-2 p. progress summary every month to:
- Stay on the professor’s radar
- Interest the professor enough that s/he will grant a meeting
- Have something to show others to solicit guidance
- Achieve clarity on the problem by writing about it
Establish good relationships with other lab members

• They are great resources for everyday issues: protocols, reagents, equipment…
• They are great sounding boards for ideas that you’re not quite ready to mention to the prof
• The lab could become your “extended family”

Earn their respect by being a good lab citizen!
Getting the most out of your research experience

• Schedule regular meetings with your mentors
• Attend lab meetings… and participate!
• Present your work at lab meeting regularly
• Keep a detailed lab notebook
• Write progress reports and ask for review
• Become an expert in your field
Getting the most out of your research experience

• Take every opportunity to explain your work to others, both formally and informally
• Make an attainable, but ambitious, final “goal”
• Don’t get discouraged! It is common for progress to come in “fits and starts”
• Be flexible and adapt to unexpected results - don’t expect to adhere to a rigid plan