Effective mentoring: Developing your own style

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What does a mentor do?

1. Engages trainees in ongoing conversations
2. Helps socialize the trainee into the culture of the discipline
3. Provides constructive support and feedback
4. Provides encouragement and support
5. Helps foster networks
6. Looks out for the trainee’s interests
7. Treats students with respect
8. Provides a personal touch
Why be a good mentor?

1. Increase individual motivation and morale
2. Improve team performance
3. Provide personal satisfaction
4. Grow your own reputation and network
How to be a good mentor

First, get to know yourself well

Research shows that in general scientists are:
More conscientious and orderly
More dominant, driven or achievement oriented
More independent and less sociable
More emotionally stable or impulse controlled

Can also be:
Dominant, arrogant, self-confident, or hostile
Autonomous, independent, or introverted
Driven, ambitious, or achievement oriented
Open and flexible in thought and behavior
Common issues of lab leaders

Were unaware of interpersonal conflict among lab members

Were unaware of hidden agendas on the part of lab members

Did not understand the motivation and needs of lab members

Were unaware of expectations of lab members

Did not listen carefully to team discussion

Misread lack of argument as agreement

Interpreted conflict as unhealthy when it was actually constructive

Misread team members’ ability to work together
Common bad results

In management sessions, 75% reported spending 10-25% of their time on “people problems”

More than 66% reported having between 1-5 “uncomfortable interactions” with people at work each week.

Almost 2/3 reported that interpersonal conflict had hampered progress on a scientific project between 1-5 times in their career.
Stages of mentoring – the long view

1. **Initiation** – the first several months of the mentoring relationship when both mentor and protégé are getting to know each other and settling into the relationship.

2. **Cultivation** – the steadiest and longest phase of the mentoring relationship; “the active and productive season of mentorship”

3. **Separation** – This phase begins slightly before or slightly after the protégé’s graduation and represents a dramatic shift in the relationship. The changes that take place during this phase can be difficult to manage but are important in setting the tone for the final stage of the mentoring relationship.

4. **Redefinition** – When the mentoring connection continues after separation, the relationship must be redefined to fit the new circumstances.
Know what you want, set realistic expectations

• Just as a teacher has the authority to set the terms for a course, a mentor has the authority to set the terms for a mentoring relationship. That means that you can be clear with students what forms of mentoring you will provide (e.g. constructive feedback, networking assistance) and what forms you will not provide (e.g. friendship).

• No single mentor can provide all forms of mentoring a student requires. Encourage your students to have multiple mentors that play different roles in their professional development.

• Bear in mind that each student is different, so the kind of mentoring you offer a particular student might be different to the kind you offer to another student. Seek feedback from your student about your mentoring so you can tailor your work with that student over time.
Advice for new mentors

Take care in who you choose to mentor – is s/he a good match for you?  
Do you have the time?

Establish protected time

Get to know the person, build a relationship

Listen patiently – notice an onset of depression, look for the real problem

Share yourself but talk less, listen more

When you do talk, be constructive
Advice for new mentors

Provide introductions

Nurture self-sufficiency

Don’t abuse your authority

Establish traditions; celebrate achievements and birthdays

Do not avoid difficult conversations! They only get more difficult with time.
Know your limits

Not everyone is a good match for you.

Not everyone is going to work out. Do not keep a dominant negative.

You are not the trainee’s friend – you are their boss.
Keep the relationship professional.

You are also not the trainee’s parent/sibling and you do not want them to develop an unhealthy dependence on you. Promote their independence.

Advisors are not always mentors. Invite other mentors: other faculty, trainees.
Be aware of ethnicity, culture, age, sex, and disability differences.
Help build their network – again promoting independence from you.

You are not a trained psychologist. Know what resources are available when you run into this problem (and you will).
Practice makes perfect; start now

Volunteer to mentor a rotation student

Adopt a graduate student in your laboratory

Adopt an undergraduate student for the summer, a semester, or longer

Adopt a high school student for the summer, a semester, or longer

*Keys to success*: establish your expectations and a feasible research plan in advance. Communicate, communicate, communicate. Give feedback, support, and maintain enthusiasm. Teach techniques; do not expect anyone to have good technical skills without being taught them. Expect that this will take quite a lot of time and patience.
Writing letters of recommendation

- Be honest with trainees
- Be honest with readers
- Be specific about the person
- Be relevant about the position under consideration
- Get your facts straight
- Share your insights and provide overall evaluation
- Keep copies of your letters
A (Very) Personal Perspective on Mentoring

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Choose your lab members carefully

- Getting a couple of good people into your lab may well decide if you get tenure.
- No lab members are better than grossly underperforming lab members.
- Be sure the objective of a prospective lab member and your own objectives align.
- Prospective lab members should know and buy into your expectations. See: http://structbio.vanderbilt.edu/sanders/Sanders_Lab_Guide_Comprehensive.pdf
- One bad apple really can ruin the barrel.
- If it seems too good to be true...
- Your age and their age.
- There is usually a honeymoon period.
- Past performance is the best predictor of future success.
- Even the best mentor cannot “save” some trainees.
- Think hard before hiring someone pursuing a 2nd or more postdoc position.
- Always do a face-to-face interview if possible. (Where they stay...)
- Red flags usually are red flags.
Postdocs vs students vs. techs

- Hard for new faculty to get top postdocs at non-elite schools.
- Often good postdocs come to labs of young faculty via serendipity.
- Students may be talented and motivated, but realize there usually is a lag time to the point where they will become productive, even for the best students.
- Students are the hardest to predict... some start strong and finish weak, others get off to a bumpy start but end up blossoming. Hard to tell a diamond in rough from glass. Your mentoring will help decide the outcome, but there are other factors you have no control over.
- Nashville is good place to find good techs...
- Techs come in a variety of flavors:
  - People biding their time till they can get into med school (or in a holding patter for some other reason).
  - Young scientists who don’t yet know what they really want to do
  - Career techs of varying talent, motivation, and commitment (often with a track record that may provide much insight).
Remember That Your Relationship With Your Trainees is First and Foremost Professional

- Be careful about jumping into friendships and socializing with your trainees. You might one day have to discipline or even terminate some of them.

- Each lab has its own style and the dynamics of a professor with lab members varies a lot from lab to lab. Even within a single lab the general tone of the interactions will drift with time as you mature and as the composition of your lab changes. My Vanderbilt labs are somewhat different in character than my CWRU labs.

- You must respect the members of your lab and seek their well-being. They must respect you and acknowledge your authority, where appropriate.

- Anything you say or do to a trainee that crosses “boundary lines” could eventually come back to haunt you. Be careful. What appears to be an innocent endearing contact between quasi-friends may later be brought up in a very different light if there is a major falling out.

- You are not cool. You are the boss. You aren’t going to get invited to many student or postdoc parties.

- Lab should be fun, but this will be more the consequence of a well-functioning lab than the ingredient that creates it.

- Despite the above disclaimers it is a happy fact that some of your trainees will indeed eventually turn out to be your friend for life (and vice versa).
Mentoring

• We all need mentoring—all the way through our careers. Even very successful senior faculty.

• Lead by example.

• It helps to have your office in or near your lab.

• Realize you are always being watched, even when you don’t realize it. In this regard it is like having kids.

• Members of your lab need to know that you truly care for them and their career even if you are not personally close or come to a point where you and your trainee may not like each other.

• Don’t play favorites, but note the point below.

• The way you mentor your trainees will often be very trainee-specific. What works for one trainee may be very different for other trainees.

• Never pit members of the lab against each other.

• High quality group meetings are important to establish, but are challenging when the lab is very small.

• Conferences, lab retreats, lab hikes, lab parties, etc. are unique mentoring opportunities.
Some Challenging Trainee Phenotypes

- The moonlighter
- The polymath
- The mentally ill
- The person interested in everything
- The writer
- The slob
- The person who’d rather be doing something else
- The nightowl
- The unauthorized collaborator
- The manic-depressive
- The self-appointed PI
- The secretive hider
- The genius sluggard
- The wet lab scientist who’d rather being a computational scientist
- The person who chose your lab and now you can’t understand why they chose your lab