

Mentoring Graduate Students and Postdocs

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What is a “mentor”?

- Senior person who helps young colleague (e.g., trainee, junior faculty member) progress/stay on track for advancement and career success
- Graduation (grad student), getting a job (postdoc), promotion & tenure (faculty)
- Reads papers, grants, applications, etc.
- Advises on lab work, career, etc.
- Takes someone “under their wing”
- “Peer mentoring”

What should a trainee expect from a mentor?

- For a grad student--teaches how to design (and perform) experiments, interpret data, take the next step... (a postdoc really should already know how to do this—but not always)
- Has trainee's best interest at heart
- Leader in their field and shows how to be a leader
- Always supports the trainee
- Once a mentor, always a mentor

Leadership begins at the top

Lead by example...

A fish rots from the head...

Mentoring is a “two-way street”

- The mentor teaches, advises and leads
- Every mentee is different; as such, the mentoring is (and should be) different
- However,
- A mentor also learns from the mentee
- But this can be a bit dependent upon the different mentoring styles

Mentoring Styles: two ends of the spectrum

- “Sink or Swim”
- “I Wanna Hold Your Hand”

Mentoring Styles: “Sink or Swim”

- Virtually all responsibility is in the hands of the student or postdoc
- Minimal oversight
- Teaches trainees independence
- Learn lessons “the hard way”
--aka, “School of hard knocks”

Mentoring Styles: “I Wanna Hold Your Hand”

- Direct opposite of “Sink or Swim”
- Mentee has virtually no responsibility for the intellectual direction of the project
- Very hands on mentoring--control
- Difficult to teach trainees independence or how to think/design proper experiments, etc.
- Learn lessons by instruction (i.e., told by the mentor)
- Mentor cannot learn much from mentee this way

In the end, use the mentoring style that works best for YOU...

It can be the first way, the second, or a combination of the two

There is really NO right or wrong style, so long as you treat your trainees with respect

Work Hard/Play Hard

- Show acknowledgement of mentees' efforts
- You can do this in many different ways:
 - Praise their work “publicly”
 - Tell them during a one-on-one meeting
 - Give them incentive to continue their excellent work
 - Announcement in department's newsletter and/or lab homepage
- A little goes a long way and helps the mentee feel good about him/herself

Work Hard/Play Hard

What do I do?

- Lab lunches (e.g., India Gardens)
- Bowling
- Rathskeller (also after qualifying exam)
- Receptions at my home for people leaving the lab
- E-mail my Chair of trainee accomplishments and accolades (c.c. Office Manager)

Is graduate training a 40 hr/week job???

- Lots of students think so
- Are you OK with students working Monday – Friday for 40 hours?
- How did you get to run a lab?
- Make your ground rules clear upfront
- Stick to your guns
- Trainees need a realistic understanding of what it takes to be successful

Is postdoctoral training a 40 hr/week job???

- Are you OK with postdocs working Monday – Friday for 40 hours?
- Postdocs should be much more productive from the get-go than most graduate students
- Even so, it is your lab; you must decide what you think is best
- Make your ground rules clear upfront
- Stick to your guns
- All trainees need a realistic understanding of what it takes to be successful
 - Ask them what they want to do in their next step

How is the mentoring of postdocs different from graduate students?

- Postdocs should already know how to think
- Your expectations should be higher
- More independent upfront
- Should help you mentor younger postdocs and graduate students (including rotation students)
- A postdoctoral fellowship is more like a job, even though it really is training

Office of Postdoctoral Affairs

- Established 2007
- Part of Graduate School office
- Has a Director (Jennifer Williams)
- Website:
<http://grad.medicine.iu.edu/body.cfm?id=7690&TopID=7690>
- Tell your postdocs about it; you are responsible for informing them about certain resources available to them in their role as postdoctoral fellows—it can only help you

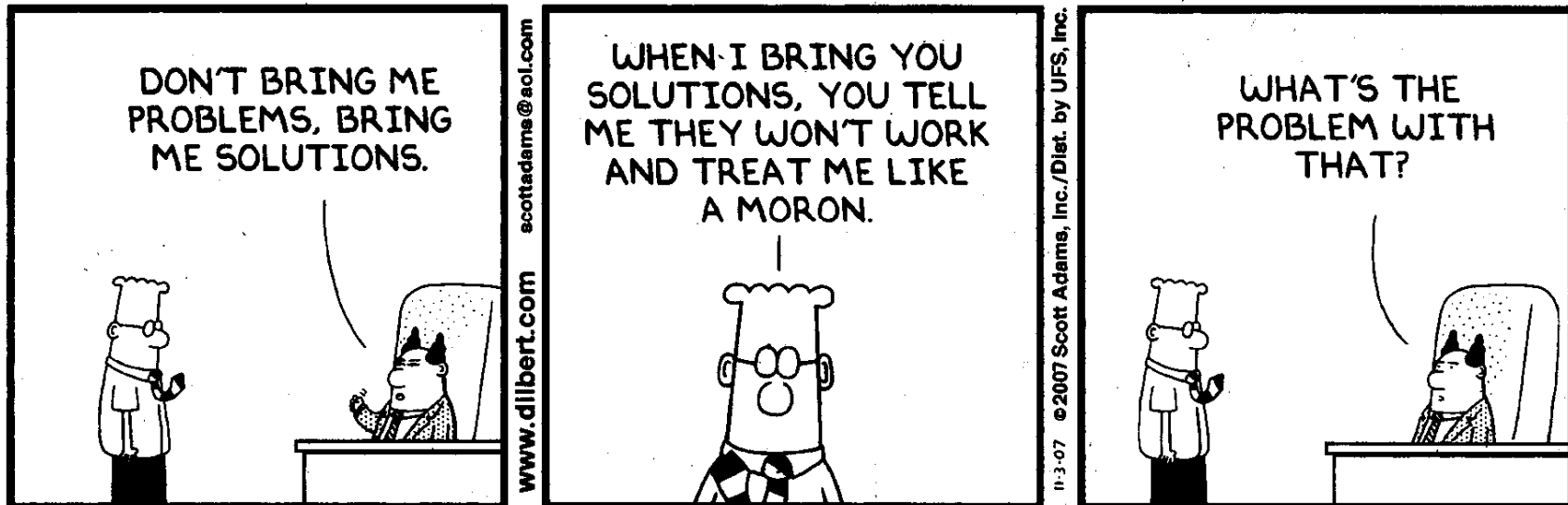
Mentoring URM students and postdocs

- “Mentoring is mentoring”
- Cultural competence
- How is IU different from their previous institution(s)?
- Be sensitive to the existence of potential problems that may reflect a lack of cultural competence in others if (or when) a concern is brought up to you as mentor
- Simply treat everyone the same

Respecting your Trainees

DILBERT

by Scott Adams



The same goes with ideas for experiments and/or projects...

“Pushing Buttons”

How do you get trainees to follow direction?

- Do not belittle them
- Give them some “control” over their project(s)
- Pat them on the back occasionally, even for something small (especially if things have not been working well for them lately)
- “Kick them in the butt” if needed
- Attending national meetings is a great motivator

Being Available

- You have to meet with your trainees on a regular basis
- Ask to see the bad data with the good
- They are not employees (especially students)
- Show interest in them as people as well as budding scientists
 - but you cannot be their best friend
 - you are their mentor

Talking to your trainees regularly...

- How is your science going?
- Are you having any problems in the lab?
- When is your next committee meeting scheduled?
- Go over their results and talk about the data critically—don't “candy-coat” efforts that need improvement
- Communication is essential

More about being a good mentor...

- Know about the requirements for graduation
 - e.g., how many credits for this or that
- Know which courses they are taking
 - for postdocs (Ethics—G505)
- Talk with them about their courses
- Have a good rapport with your department's graduate advisor
- Be on top of things as Chair of your student's thesis committee

Dealing with serious issues:

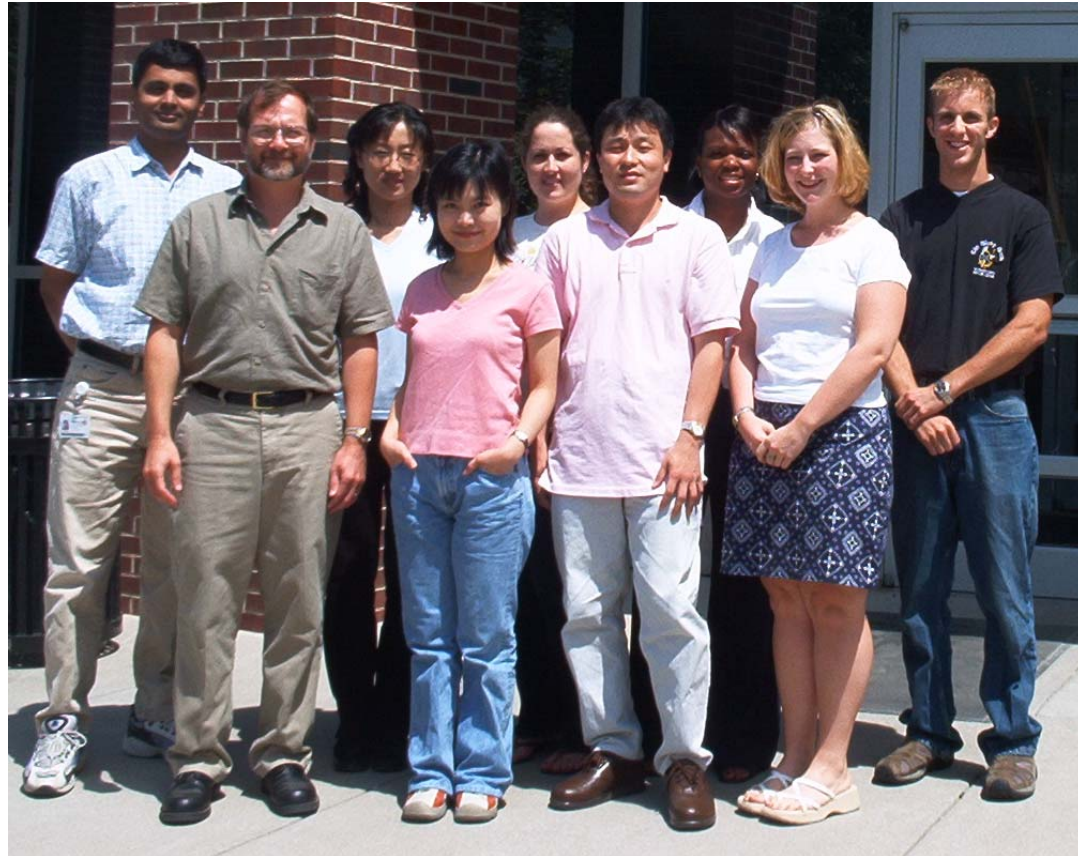
- Sexual harassment
- Racial insensitivity
- Sabotage or theft
- Data fabrication
 - check raw data when you meet trainee
- Know whom to go to for each:
 - best places to start: OFAPD; Graduate School office; Postdoc Office

Disagreements with your trainees

- Data interpretation
 - you are the Senior author usually
- Level of their effort in the laboratory
 - Not putting in the time you deem necessary for their project's success
- Expectations of you as a mentor
- Personality clashes
- Hopefully, it only goes so far as to agree to disagree
- What if it goes beyond?

I need to “talk the talk...”

**Your success is dependent upon
those you mentor...**



If they do well...

You look good!

You know what the opposite is!

Your success is dependent upon those you mentor...



Jacqueline A. Hobbs, M.D., Ph.D.

Postdoc in lab: 1999 – 2001

Currently:

Assistant Professor

Department of Psychiatry,

University of Florida College of Medicine

One first author, one co-authored manuscript

Your success is dependent upon those you mentor...



Tonya Roberts Webb, Ph.D.

Graduate Student in lab: 1999 – 2003

Currently:

Postdoctoral Fellow

Jonathan Schneck's laboratory

Johns Hopkins School of Medicine

KO1 grant awarded 2007

4 first author, 3 co-authored manuscripts

Your success is dependent upon those you mentor...



Gourapura J. Renukaradhya, D.V.M., Ph.D.

Postdoc in lab: 2002 – 2008

Currently:

Assistant Professor

Food Animal Health Research Program

Ohio State University School of Veterinary

Medicine

5 first author, 7 co-authored manuscripts

You can only do your best...

- It is important to be a good mentor
- You do get better over time
- “Practice makes perfect”
- We can never be perfect
- You will make mistakes (we all do)
- Learn from your mistakes
- Don’t make the same mistake twice
- Luck does play a role, too...

ZIGGY

WISDOM COMES WITH AGE

...BUT SOMETIMES
IT'S AN OPTIONAL
FEATURE!



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TOM WIDSON

Additional questions?

**Please fill out the evaluations
and hand in as you leave**

Thank you for attending...