From empirical to intentional: how I learned to mentor

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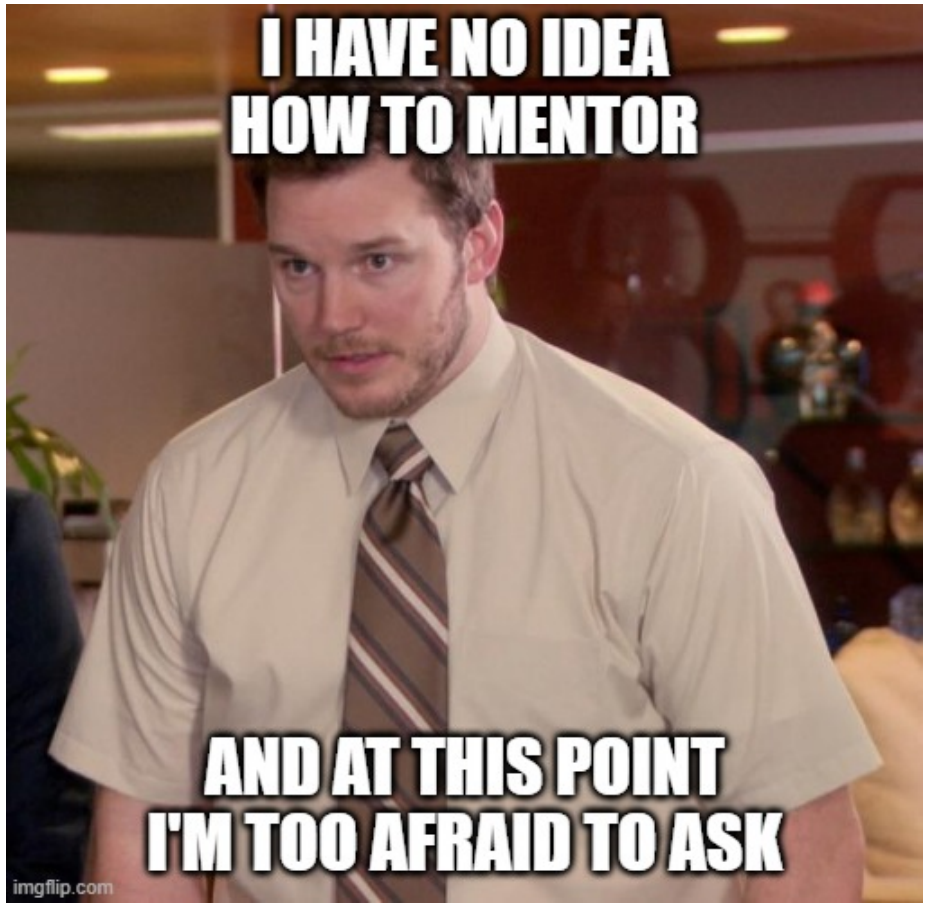
More realistic introduction:

Day 1 Assistant Professor

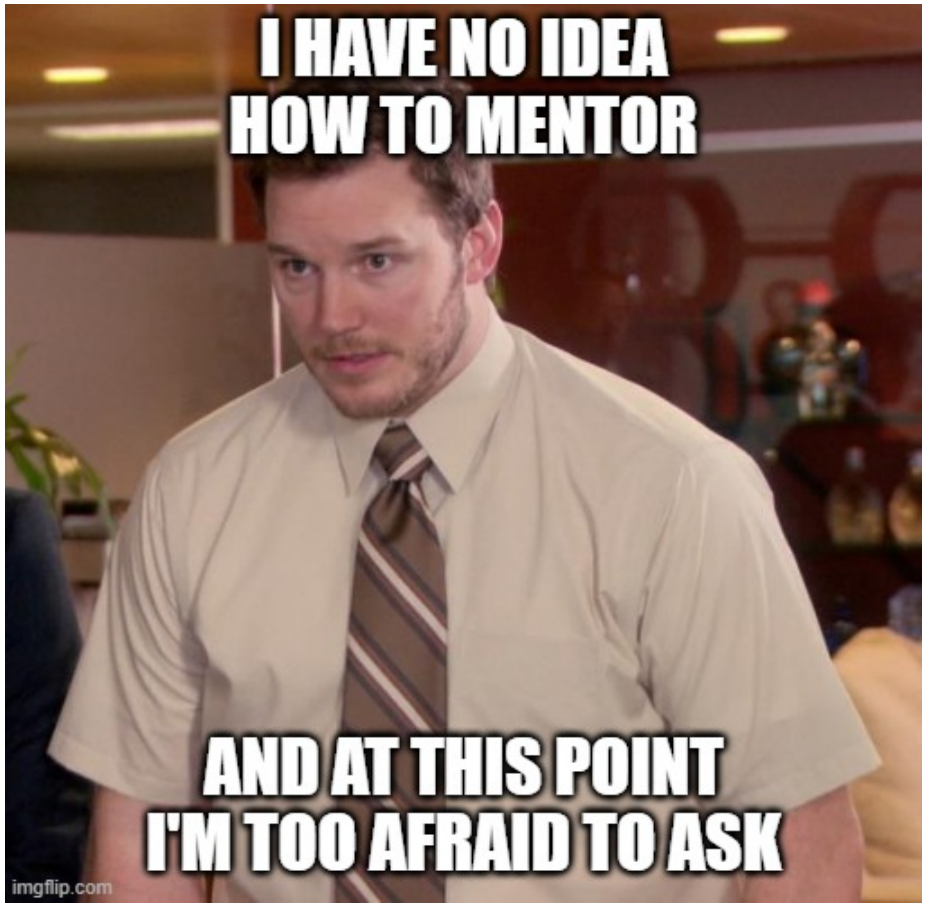


Day 6360 Professor

Traditional academic training

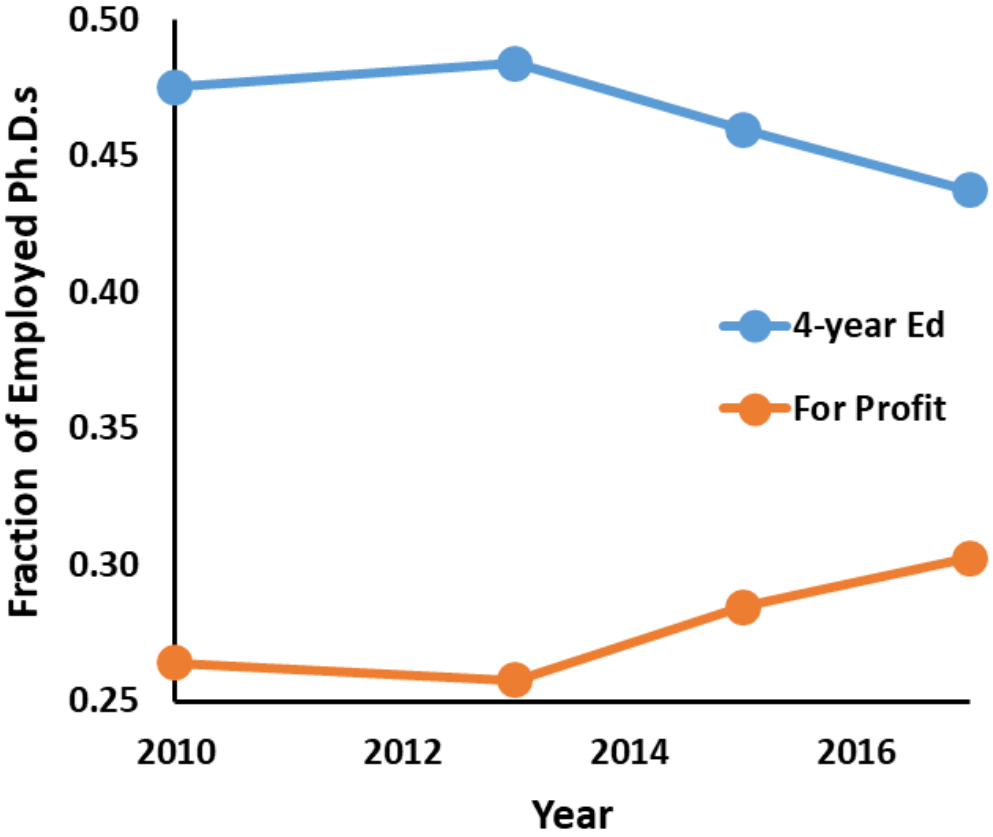
- All about research
- Evaluated on productivity, impact, funding, ***not mentoring***
- May have supervised UG's or Grads, ***but not in an official capacity***
- Mentoring style ***absorbed*** not ***taught***

Day 1 Assistant Professor



Traditional academic career path

- Academic families or lineages
- “As a professor, I’m training students to carry on my research legacy.”
- This no longer works, ***and hasn’t for some time***

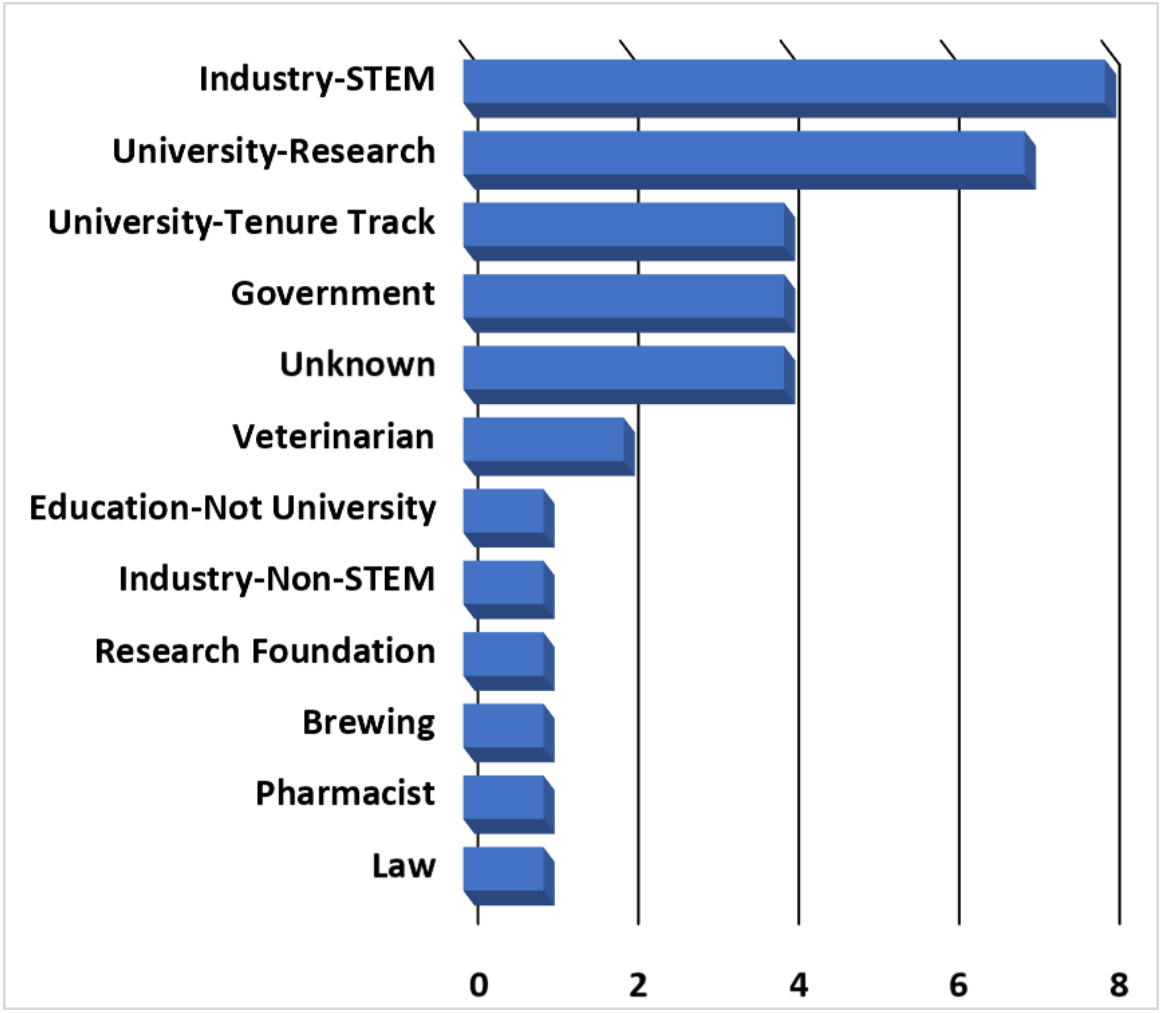


Biological, Agricultural and Environmental Life Sciences Ph.D. Employment Data

-National Center for Science and Engineering Statistics Survey of Doctorate Recipients: 2010-2017 Table 12.

What I think I know about mentoring

- My trainees are largely not tenure track academics
- ***I need to prepare them for non-academic positions***
- I have to know their goals



What I think I know about mentoring

- My trainees are largely not tenure track academics
- ***They have their own motivations***
- I have to understand these

Academic Freedom

David Kirchman
Maxwell P. and Mildred H. Harrington Professor

American Academy of Microbiology

Wrote the book on Microbial Ecology (two actually)

“Thanks for bearing with all this. Probably way past being useful and instructive, but, hey, that’s why I’m in academia.”

-If you can get it funded, you can work on it

-If you can get students to take it, you can teach it

What is my mentoring philosophy?

- Humanity first
- Science second
- Trainee goals are key

Science vs. science

- A job/career in science is ***one component*** of a life
- A job/career in science is not worth your life
- Calculate whether sacrifices for job/career are worth it
  - 5 year LDR with my partner
  - No Microbiology program at UD

Intentional mentoring – parts of the path

- Outline expectations

Hanson Lab Statement of Rights, Responsibilities and Expectations

As a student or lab member:

You have the right to

- a safe workplace that enables your success and creativity
- shape your project and your career development
- have your contributions fairly acknowledged
- request meetings with me outside of regularly scheduled ones

You have the responsibility to

- communicate unsafe conditions to me and other lab members
- anticipate safety issues and work to resolve those that arise
- not infringe on the productivity of other lab members
- actively participate in project planning and defining your career goals
- conduct your experiments and analyze your data openly and honestly
- speak up if you think your work is not being appropriately credited
- define meeting topics and be prepared so that meetings are efficient
- provide the PI an opportunity to address and resolve issues that arise

You are expected to

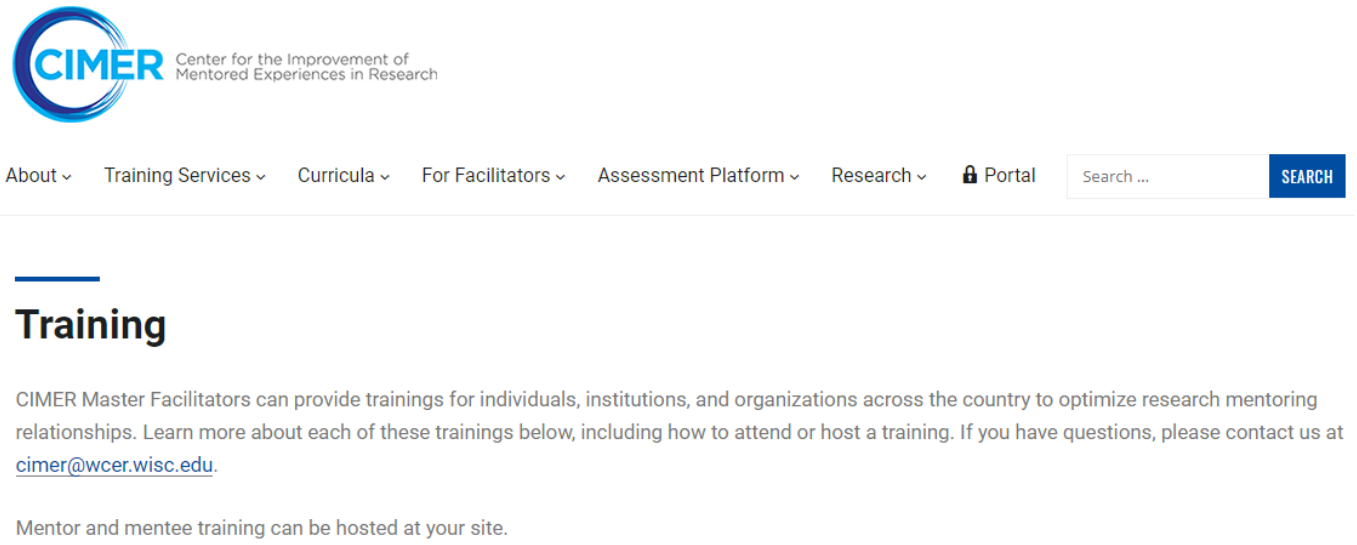
- communicate effectively and respectfully with your colleagues
- offer constructive criticism about ideas, experiments, papers, etc.
- work together to resolve differences and to be reasonable when resolving issues
- be engaged in your project and to generate ideas for how to advance it
- troubleshoot experiments and solve problems, both yours and others
- actively read the scientific literature to help fulfill the expectations above
- do tasks/chores that help the lab as a whole operate smoothly
- seek out and pursue opportunities to support your research and career development

Available on Project WiCCED Site

Intentional mentoring – parts of the path

- Outline expectations
- Train mentees to mentor
- Train the mentors
- NSF National Research Traineeship Grant will address at UD if funded

	Year 1			Year 2		
	Fall	Spring	Summer	Fall	Spring	Summer
Course 1						
Course 2						
External Experience						
Entering Mentoring Workshop						
Attend Scientific Meeting						
Mentor UD Envision REU intern						



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