

Growing up in science: continuing the conversation

A survey on mentorship in CNS, Sackler Neuroscience, and Psychology

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ADMINISTRATION

The survey was distributed to email lists in CNS, Sackler Neuroscience, and Psychology (both C&P and Social). It was administered through Google Forms, and ran from August 6 through 14, 2014.

Recruitment text (August 6, 2014)

As many of you know, last week Cristina Alberini (CNS) and Wei Ji Ma (CNS/Psych) organized an event in which they shared parts of their career stories. They focused on past and present internal struggles, touching upon, among other things, impostor syndrome and their insecurities about changing scientific fields. The attending students and postdocs followed up with a wide-ranging conversation about issues that often receive too little attention.

The group expressed a desire to have meetings like this more frequently. To determine what form these meetings should take and what topics they should address, we've put together a very short, anonymous survey. Please share your opinion here [\[link\]](#). Thanks!

RESULTS

Are you a:

Undergraduate student	0	0%
Graduate student	38	67%
Postdoc	15	26%
Faculty member	1	2%
Research assistant/technician	3	5%
Other staff member	0	0%
Other	0	0%
TOTAL	57	

How interested are you in the following formats?

(ranked by average rating)

Proposed format	1: Not interested	2	3	4	5: Very interested	Average rating
Discussion based on the experiences of one or two faculty members	0 0%	0 0%	3 5%	16 29%	37 66%	4.61
Discussion led by panel (faculty, postdocs, students, etc.)	3 5%	5 9%	9 16%	16 28%	24 42%	3.93
Discussion led by group	5 9%	12 22%	15 28%	12 22%	10 19%	3.19

Summary of comments and suggestions regarding format

Reservations were expressed about a group-led format, considering productivity, manageability, and focus. A smaller number of discussion leaders was preferred, potentially focusing on a specific topic. Multiple viewpoints and experiences were considered valuable, e.g. from junior and senior PIs. Perhaps attendees can submit questions to the discussants beforehand. The value of keeping the meetings informal was mentioned. One commenter mentioned that the format of the first meeting was good.

How interested are you in the following topics (regardless of the format we decide on)?

(ranked by average rating)

Topic	1: Not interested	2	3	4	5: Very interested	Average rating
Self-confidence	0 0%	2 4%	8 15%	12 22%	33 60%	4.38
Finding a scientific niche	1 2%	3 5%	6 11%	13 23%	34 60%	4.33
Dealing with criticism and (perceived) failure	0 0%	2 4%	8 14%	16 28%	31 54%	4.33
Communication, e.g. between student and advisor	1 2%	3 5%	10 18%	14 25%	29 51%	4.18
Non-academic career paths	2 4%	5 9%	7 13%	12 21%	30 54%	4.13
Strategies for time management	3 5%	5 9%	6 11%	17 30%	26 46%	4.02
Impostor syndrome	2 4%	5 9%	10 18%	17 30%	23 40%	3.95
What makes a bad advisor, and what to do about it	3 5%	6 11%	10 18%	16 28%	22 39%	3.84
Dealing with bad interpersonal situations in lab	1 2%	8 14%	9 16%	22 39%	17 30%	3.81
Gender in science	5 9%	9 16%	14 25%	12 21%	17 30%	3.47
Race, socioeconomic background, and culture in science	6 11%	14 25%	14 25%	15 26%	8 14%	3.09

Respondents' comments and suggestions regarding topics:

- I think it'd be great to not only talk about how these issues exist, but to think about how to deal with them. For example, discussing how as a lab or department we should celebrate any accomplishments, rather than just focusing on the failures.
- Dealing with outside life stressors and health/mental health issues that may distract the student/postdoc and impact his/her ability to function.
- How to become a good applicant for non-academic career paths
- Networking, how to find collaboration
- Data management

- Supporting a family on a postdoc salary. Work/life balance in academia

How frequently would you like these meetings to occur? (multiple answers possible)

Weekly	5	6%
Biweekly	17	20%
Monthly	41	47%
A few times each semester	23	26%
No preference	1	1%

Geometric mean of number of times per year (taking the options as 48, 24, 12, and 6): 12.4

How do you think the mentoring mechanisms in our departments can be improved?

Many respondents brought up closely related points:

- Having a mentoring program independent of scientific (i.e. research oriented) mentoring.
- I think it might be useful to have regular meetings with someone in the department - separate from our PIs or committees- to be able to address individual progress in the department. Or, it might even work to have anonymous surveys to fill out about improvements to be made.
- I think we should have a second mentor program (many departments have this). Everyone would be assigned a second advisor that they would not be required to meet with, but that they could rely upon if they need to talk about issues in their lab or issues with their main advisor. Some people, myself included, have a great support network within their labs, but many people don't, and it would be good to have someone to go to when you simply can't discuss something with your advisor.
- I think the kind of meetings proposed here would offer a good mechanism for group mentorship (and the fact that this is occurring in a group I think is even more valuable-- to hear your own concerns echoed by others, etc.). In addition to this group mentorship, I like the idea of having more individual/personal mentors in the department that students can approach confidentially about academic and non-academic issues.
- Institute a formal mentoring system for everyone. Faculty, grad students, post-docs. This will be hard, as genuine mentors are hard to come by.
- Having a non-advisor that someone can go to in the event of doubts, concerns, etc. would be awesome. There are some things that may be better discussed with an "impartial" third party.
- I think an experienced faculty/counselor to whom address to for advice or even only for sharing thoughts, concerns, doubts... Would be extremely helpful.
- I think it would be useful to have a mentor (other than the DGS) who is not in your committee and that you can talk to.
- There are no mentoring mechanisms apart from one's adviser and committee. In my experience, students seek help elsewhere (e.g. student health center) unless their

problems are of strictly academic nature and can be addressed in the committee meeting.

- Early advisement and clear expectations. Earlier involvement from DGS. Also, more communication with faculty mentors through some system that forces interaction. The thesis committee system may not be ideal for getting candid advice from mentors that are not your PI. Probably early DGS involvement could alleviate this.
- Regular (perhaps once a semester), brief meetings with non-advisor mentors
- I think it would be a great idea to have a faculty mentor that is assigned/chosen (that will NOT be a thesis mentor) from the start of the program. It may also be helpful to have a "student buddy" or adviser that is 2 or < years ahead in the program. I have felt like there is a lack of guidance for the first 1-2 years here at CNS. Once you finally join a lab things seem to improve.

Here are the remaining comments:

- With the dismal hiring status in academia, it would be nice to have more info on non-academic career options. Even for those of us who still have our eyes on the academic prize, it would be nice to know our options should our desired academic job not be there for us. There are ways to get information outside of the department (NYU Consulting Club, the STEP program, tech startup bootcamp) but no one really seems to know anything about these programs. [*Here is a link to the STEP program:* <http://research.med.nyu.edu/nyu-science-training-enhancement-program-step/> - wjm.]
- I have went through several mentoring training sessions through the office of postdoc association. I think those training sessions shall also be provided to current PIs.
- I'm not sure this is true for CNS, but in the psychology department since you enter the program assigned to a lab there aren't a lot of opportunities to meet and get close to other faculty members early on. I'm not exactly sure how to remedy the situation but having more faculty-student interaction in a relaxed/casual way couldn't hurt.
- Faculty should be given training in mentoring. That might help a little bit. But overall, it might be a systemic issue in science- publishing rather than mentoring is rewarded, so most faculty have high impetus to publish, less to mentor.
- Small awards ceremony each year/every six months, for everyone (admin, faculty, students...). Not necessarily serious in nature e.g., award for most boring abstract etc.

Other comments/suggestions?

- I really appreciate this effort for open and earnest discussion about issues that are central to our personal, academic, and professional development. Thank you so much for organizing this!
- Good initiative.
- Thank you!

- Overall, I'm beyond happy with the mentoring that I've received here both from my advisor, as well as other faculty members/post-docs/students. Everyone is super helpful, and super knowledgeable.
- It might be also interesting to invite former postdocs from the department with a job now in the academia or outside to share their experiences and give us a realistic approach to the pros and cons of each pathway.
- Wasn't aware of the most recent meeting- please make sure to email everyone at CNS and Sackler Neuro :)

CONCLUSIONS

Format

We will hold a series of monthly, informal meetings around the experiences of one or two faculty members, similar to the first meeting. Attendees can submit questions beforehand.

Topics

Faculty members will be encouraged to discuss topics related to their past and present struggles, including but not limited to finding a scientific niche, dealing with criticism and perceived failure, self-confidence, communication (e.g. between student and advisor), and impostor syndrome. Faculty members have the option of focusing on a specific topic.

Goals

The goals of the meetings will be:

- To create an environment for sharing issues and solutions
- To make faculty more approachable, so that students, postdocs, and research staff would feel a lower barrier to also consult with them outside of the meetings
- To assemble a list of recurring questions, with perspectives from multiple faculty members. Eventually, this could become a reference document for new students, postdocs, and research staff.

General mentorship situation

Many respondents expressed a need for mentorship outside of the advisor, committee, and DGS. The conversation series might function as what one respondent called "group mentorship". In addition, it could alleviate the problem that trainees don't really know professors other than their advisor very well, or find them difficult to approach.

Several respondents specifically suggested a more formal mentorship program, in which students are assigned a non-research advisor. We think that assigned mentorship could be valuable, but might run the risk of feeling forced. Perhaps the conversation series and the ensuing increased approachability of the faculty will serve the mentorship needs of the community. After several months, however, we should re-evaluate the idea of a formal mentorship program. We should also investigate what other, similar graduate programs do.