

## Ask Professor Sarah Bellum

Professor Sarah Bellum answers your questions on navigating the often-uncharted waters of early career development. Professor Bellum was inspired by Ms. Mentor, a column by *Emily Toth* appearing in *The Chronicle of Higher Education*, and is written by *Patricia L. Clark*, chair of the Early Careers Committee. Do you have a question for Professor Bellum? Send it to [sarah\\_bellum@biophysics.org](mailto:sarah_bellum@biophysics.org). Your privacy is assured!

**Q:** *I knew ahead of time that the lab I joined works in a very competitive field, but the competitiveness seems to carry over to how people in the lab relate to one another. For example, I just presented my work at lab meeting, and I can't believe the abuse I received! The worst of it came from my labmates, but my advisor did nothing to step in and stop it. I didn't decide to go to graduate school to have my ideas dismissed, my hypotheses scoffed at, and my experiments picked apart. I was really excited to start graduate school, but now I think it may not be for me.*

*--Scorned in Cincinnati*

**A:** Every lab does have a distinct personality, and this can range from warm-and-fuzzy ("Let's all bake cookies for each other's birthdays!") to outright mistrust ("I label my reagent bottles with a code, rather than the contents, to make sure my labmates can't use my buffers."). Lab personalities are often determined largely by the personality of the PI, with significant influence from the personalities of the senior students/postdocs/scientists; as a result, how people in the lab relate to one another can and will change over time, but probably will not undergo a dramatic transformation. So it is possible that you have joined a lab with a personality that is more cutthroat than your own personal makeup.

It is certainly possible to succeed in a laboratory that has a personality that is very different from your own, but keep in mind that being in such an environment will probably be more stressful than being in an environment that more closely matches your own personality. After all, lab work means long hours together with your labmates, in close quarters, over several years, so personality mismatches that

may seem minor under other circumstances are greatly amplified by these conditions.

Also keep in mind that the time to discover your lab's personality is when you are rotating through it, or interviewing. But do not expect to learn about lab personality from the PI! Many PIs are not at all aware of the subtleties of their lab's interpersonal dynamics. Or if he/she is aware, the

---

**“Lab personalities are often determined largely by the personality of the PI, with significant influence from the personalities of the senior students/postdocs/scientists...”**

---

information may be out-of-date or inaccurate (seen, perhaps, through the rosy glaze of how the PI hopes people are getting along, rather than how they actually are getting along). Instead, talk to the lab members them-

selves: individually, and out of earshot from their labmates and the PI, most people will provide an accurate impression of the lab. But do make sure you talk to several

people to make sure you have heard from someone other than the lab Pollyanna (or pessimist). Even better, try to attend a few regular lab meetings;

these often provide a clear window into lab relations.

But it is also possible that you are having nothing more than a very normal reaction to your first few lab meeting presentations: intense defensiveness. After all, you are describing a project about which you care deeply (or at least, on which you have devoted a large amount of time), to a group of people you may still not know very well. And, you are describing decisions you have made about experimental planning, project direction, etc., so it is easy to feel like any negative comments are attacks on you and your judgment.

But the receipt of constructive criticism is perhaps the most important element of lab meetings! After all, this is the home crowd: these are the people you want tearing apart your experiments (for example, identifying that control you forgot to include!), before you go off and talk about your work

---

**“...the receipt of constructive criticism is perhaps the most important element of lab meetings!”**

---

with people outside the lab. Your labmates have a familiarity with the ins and outs of your project that put them in an ideal position to offer excellent suggestions and effective criticism.<sup>1</sup>

In fact, it could be argued that a much worse scenario arises when the lab

meeting crowd is too complacent, willing to soak up whatever you are saying, without ever applying a critical filter. If lab meeting were merely a pep rally for your project, how would you learn to defend your ideas and experimental approaches? What would motivate you to work out an elegant control experiment to satisfy the skeptics? Quality, constructive criticism at group meeting will help you when it comes time to draft a manuscript reporting your results: you need to know the red flags your studies raise in peoples' minds, so you can construct the arguments to allay these concerns before the manuscript goes out for review.

Your lab may be more critical than most, since it does work in a very competitive field. Your advisor and senior labmates are probably used to having their talks and poster presentations closely scrutinized by the competition at the big national/international meetings. This is good; the scrutiny at lab meeting

will keep you on your toes now, and help prevent you from feeling dissected when you are the one up in front of the outside audience.

Keep these points in mind the next time you present, and remember: in a well-managed lab, the criticism is directed only at the project, and never at the presenter.

N.B.: It is never a good idea to use a code to label your reagent bottles, no matter how inhospitable your laboratory environment. Even if you remember what is in each bottle, in an emergency (like if one of those bottles breaks), if you are not around, it is important that your labmates be able to identify the contents and clean up the mess appropriately.

<sup>1</sup> For more information on the elements of productive lab meetings, check out the following article published by the Women in Cell Biology (WICB) committee of the American Society of CellBiology(ASCB):

<http://www.ascb.org/news/vol21no7aug/wicb.html>

## 2004 Biophysical Discussions October 28—31, 2004 Asilomar, California

### Probing Membrane Microdomains

The Organizing Committee :

*Ken Jacobson*, University of North Carolina, Chair

*Barabara Baird*, Cornell University

*Michael Edidin*, Johns Hopkins University

*Mike Saxton*, University of California, Davis

*John Silvius*, McGill University

*Kai Simons*, Max-Planck-Institute

*Nancy L. Thompson*, University of North Carolina

Interested participants may apply beginning March 5, 2004 at

[www.biophysics.org](http://www.biophysics.org).

*Application Deadline: May 15, 2004*

Visit [www.biophysics.org](http://www.biophysics.org) for updates.

## 2004 Annual Meeting Deadlines

**Abstract Submission**  
*October 5*

**International Travel Applications**  
*October 5*

**Student Travel Application**  
*October 5*

**SRAA Poster Competition**  
*October 5*

**MARC Travel Award Applications**  
*October 5*

**Abstract Revision**  
*October 10*

**Abstract Withdrawal**  
*October 27*

**Student Housing Reservations**  
*November 7*

**Special Equipment Reservation**  
*December 1*

**Early Registration**  
*December 12*

**General Housing Reservations**  
*January 5*

