

## **Some Personal Views and Advice from Women Currently Teaching Physics or Studying Gender and Ethnic Diversity in Physics**

*From the Director of Science Student Diversity Programs, UC Berkeley:*

“The listserv WIPHYS, and the APS website, is a good place for women--and men who are concerned about or find common cause with women--in physics to be connected.”

<http://www.aps.org/educ/cswp/wiphys.html>

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From the WIPHYS homepage (first link, above):

The Committee on the Status of Women in Physics (CSWP), one of the committees of the American Physical Society (APS) welcomes you to WIPHYS, its electronic mailing list. The WIPHYS list is dedicated to the discussion of issues involving women in physics. We believe an electronic forum offers unique possibilities to assist in creating an atmosphere of cooperation, mentoring, and support in a field where women are a minority, and thus often feel quite isolated. It also enhances our ability to offer services to our constituency. WIPHYS was "officially" started in January 1993, and now has over 500 subscribers.

Examples of the kinds of postings appearing on WIPHYS:

- Discussion of issues involving women in physics
- Announcement of government or privately sponsored programs designed to aid in establishing the careers of women scientists
- Postings of job listings
- News about women in physics
- On-line mentorship
- Information on women's events at APS meetings (postings on informal and planned dinners, receptions, sessions; help for those seeking roommates)
- Advice on teaching (suggestions for textbooks, discussion of different learning styles)

To sign up, send a message to

[majordomo@aps.org](mailto:majordomo@aps.org)

Leave the subject line blank. The body or text of the message should read:

subscribe wiphys

*From a recently tenured physics professor at a liberal arts college:*

... so much depends on a few (either excellent or terrible) faculty members, and as these things can change fast over time, old info. probably isn't much better than no info.

At almost any institution, there are faculty who are incredibly helpful and faculty with whom it would be very difficult for a woman to succeed. Therefore, the most important thing is to get a good feel for the place by talking with LOTS of students (and especially women students) when you visit. The other most important thing (is it possible to have two most important?) is to continue this networking once you get to grad school. That is, NEVER join a research group or commit to be the student of a particular prof. without talking to that person's current students. Listen hard to the underground info about which advisors are good to work with before making choices. Don't feel rushed to pick the first advisor who offers you a place - the biggest influence on your professional life (both in grad school and after) is your thesis advisor. Choose well in this regard, and things will be good.

Needless to say, this general advice applies to students in general, not just to women. But, women will want to be particularly careful to hear what former (women) students say about working with particular people. Also, if you are considering working with a long-time faculty member who has NEVER graduated a woman student, ask why very seriously before joining up. On average, grad schools are running about 15% women, so anyone who has been an advisor more than 10 years ought to have had at least one woman come through their group.

On a similar note, I would be very hesitant to attend a grad. program with no women on the faculty. It is hard to attract women faculty, but not that hard. Any place that hasn't succeeded in getting even one woman should receive at least a bit of extra scrutiny before deciding on it.

*From a tenure-track professor at a small liberal arts college, formerly director of the Society of Women Physics Students at UC Berkeley*

My personal opinion is that the attitude of the school toward women matters, but what makes the biggest difference in anyone's happiness in grad school (not just women) is who they choose as their research advisor. And in general an advisor with a lot of women is likely to be a good one to choose. Or at least thoroughly inquire about any potential advisor from their current grad students.

On a more direct front, they could try directly emailing women grad students at the school(s) they are potentially interested in.

Of course neither of these suggestions is particularly useful for deciding which schools to apply to in the first place. I really don't know what to suggest there. But I am also not sure if retention is a good measure of how well the school itself is at treating women. Berkeley for example has a terrible retention rate for women in physics, but I (and the women I know- admittedly all women who did graduate) felt that Berkeley really bent over backwards to try to make things good for women there. I mean they gave me \$10,000/year to run SWPS- so that says something. And yet many women grad students left.

Maybe it has a lot to do with the kind of fellow students at the school (academically competitive school = aggressive male students?) and not so much to do with administration. Unfortunately, this means that if women want to go to good schools, get good jobs, etc.- they just have to be able to deal with this "aggressive" culture. And I can tell you it isn't always easy, but that's the way it is. And we can't change that overnight.

*From a postdoctoral fellow at Harvard who studies gender and ethnic issues in doctoral science education (she went to Swarthmore for her undergrad degree):*

... a student's success in a Ph.D. program is highly correlated with how comfortable they feel in their department. ...

... there are definite commonsensical elements that can allow you to predict satisfaction at one place versus another. These include a critical mass of people who look like you, an administration and faculty who treat you like you belong, and mentors--male and female-- and research group members who treat you with respect and promote your work. ...

... As prospective grad students, they should VISIT the campuses and ask,

- How many female graduate students (and percentage of the total) are there? Who are they working with/who has a track record of working successfully with women? How many female Ph.D. students graduated last year? How many dropped out? Are women happy in the department? May I talk with one or two of them alone?

- What is the peer culture like? Are there grad student study groups and social activities? Is there a support program for women in physics? (official or unofficial) If yes, does the administration support it--financially, through faculty sponsorship, etc.? Is the program intended to help graduate students and/or undergraduates? What are its main activities?

- How many female faculty are there? How many of these are on tenure-track? How many have tenure? (3 is a reasonable number to look for) [too often, departments try to 'dress up' their diversity lists by having women as adjunct professors; if women come to do graduate work with the idea that they'll work with these women, they'll be disappointed to learn that the adjuncts have no status or power in the department, and possibly no reward and therefore no interest in advising students] Does the department have a plan to recruit and retain more women as tenure-track faculty? If so, where are they in carrying out this plan?

... Science students I've taught and worked with have found this book helpful, so you might want to recommend it:

*The Woman's Guide to Navigating the Ph.D. in Engineering & Science*, by Barbara B. Lazarus, Lisa M. Ritter, Susan A. Ambrose