Straight from the Horses' Mouths: Mentors, Mentees, and Recruiters Tell All about Careers for Epidemiologists in Government, Industry, Academia, and Consulting (9/3/2009)

Notes from the Q & A Session

Participants: Martha Linet, MD, MPH / Preetha Rajaraman, PhD; Sandy Sulsky, PhD, MPH / Gregory Mariano, MPH; Vic Schoenbach, PhD / Ahinee Amamoo, MS; John Acquavella, PhD / Ryan Kilpatrick, PhD

Moderator: Stella Aslibekyan, MS

Q: What issues could arise when a study involves a drug that has been provided to the investigator?

John Acquavella: These are called investigator-sponsored studies. At Amgen, the company reviews the study to ensure safety but other than that, it employs a hands-off policy. One exception to this rule comes from reporting requirements of the federal government for certain drug studies.

Q: Please address the issue of "overqualification" in your field.

Vic Schoenbach: One can never be overqualified for academia.

John Acquavella: For epidemiologists at Amgen, 95% of entry-level positions require a PhD, and these PhDs usually don't lead projects but rather act in support of projects.

Sandy Sulsky: Similarly to Amgen, Environ practices skills-based assessment vs. degree-based assessment. We hire a fair amount of Master's students, and 4 out of 12 hires this year have PhDs. Sometimes being underexperienced is a bigger issue than overqualification.

Martha Linet: The NIH is a very PhD- and MD- oriented place, so it's hard to be overqualified.

Q: How do companies ensure that their research is truly independent of commercial influence?

John Acquavella: At Amgen, the commercial side of the company is separate from research and development. The firewall between the two is taken very seriously and is rigorously monitored by the compliance department.

Q: Is it necessary to have experience with randomized clinical trials (RCTs) to apply for an industry job?

John Acquavella: For our department, it is not a requirement at all even though you are likely to learn a lot about RCTs on the job, because our research often informs clinical trials.

Q: What do you think of epidemiologists applying for faculty jobs at liberal arts colleges?

Vic Schoenbach: For a thorough discussion of that phenomenon, I would highly recommend David Frazier's essay titled "Epidemiology as a liberal art."

Q: How does the model of mentoring differ between industry and consulting?

Greg Mariano: At Environ, we don't work with only one mentor, but actually interact with several managers. Depending on the project, any of them may be available for guidance, and I've never had my questions left unanswered.

Ryan Kilpatrick: Regardless of the setting, it is always important to find a good mentor. Amgen has a formal mentoring program, which has worked great.

Q: Most graduate school training is focused on preparing for a job in academia; how would we go about acquiring skills that would be better suited for the industry?

Ryan Kilpatrick: Attitudes towards industry vary by program. When I was in graduate school, my mentor almost fell off the chair when he heard that I was considering industry. I would advise attending forums like this one, getting an internship in the industry, etc.

John Acquavella: Our group is set up around therapeutic areas (e.g. osteoporosis), and it's hard to find people who've done their dissertations on these specific areas. So instead, we look for broader qualifications—technical skills, leadership, ability to work in groups, communication skills (we usually ask candidates to make a presentation), inventiveness, creativity, etc. Descriptive epidemiology skills are also very important and often overlooked—most PhD students are totally focused on analytics.

Martha Linet: It is very important to communicate your goals to your advisor, and also to meet people through professional organizations (such as ACE) to establish a dialogue that would help you figure out what skills may be important.

Q: Are there a lot of jobs in the consulting area?

Sandy Sulsky: The field has grown over the last 10-15 years, especially in areas like Boston and DC. There are a number of firms that act on a consulting platform, e.g. in health outcomes research or environmental work. You could narrow your range of interests to such an area, and then find suitable organizations. The recession has had a negative effect on the number of jobs in consulting, but the field is still expanding.

Q: How are jobs in the federal government different from jobs in state governments?

Preetha Rajaraman: If you work for a state government, you will be dealing with state-specific concerns, while in the federal government you will focus on the "big picture." Also, in the federal government you'll have more opportunities to work on international issues.

Q: How do recent Epidemiology PhD graduates from the less "famous" programs (or universities that don't have Schools of Public Health) become "competitive" applicants for academic positions?

Ahinee Amamoo: Market yourself. You are your best advocate. Obtain very strong research experience, publications, grant writing experience, etc.

Vic Schoenbach: Try to find ways to talk positively about specific assets of your university. E.g. if you are in a smaller program, you could talk about individualized attention, etc.