Straight from the Horse’s Mouth: Mentors, Mentees & Recruiters Tell All about Careers for Epidemiologists

U.S. Government: Combining Research, Mentoring & Service Work

Martha S. Linet, M.D., MPH

Workshop at ACE Annual Meeting September 13, 2009
Career Experience

- 7 years in academia - Johns Hopkins School of Public Health, Dept of Epidemiology
  - 2 years Instructor
  - 4 years Assistant Professor
  - 1 year Associate Professor
- 22 years at National Cancer Institute
  - 7 years as Expert
  - 15 years as Senior Tenured Investigator including 7 years as Branch Chief
Govt Research has a Mission

**Primary Mission:** To identify and quantify cancer risks associated with postulated carcinogens, and evaluate factors that may modify carcinogenesis

**Other Goals:** To improve exposure assessment, model uncertainty, and elucidate biological mechanisms of carcinogenesis
Govt Researcher: Other Vital Roles

Division of Cancer Epidemiology & Genetics:
Intramural Research Program

Governmental needs
Training
Scientific Service
Risk communication

Burlington County Health Department
Benefits: Research, Mentoring, Service

- Full-time research

- Mentoring
  - Pre-docs & post-docs: one-on-one
  - Short courses & lectures in academia

- Use expertise for public service
  - Carry out Congressionally mandated studies
  - Address national and international concerns
  - Serve on national & international Committees
  - Produce software, monographs, & educational materials
  - Leadership in professional organizations
Examples of Service

- Congressional mandate: cell phones and brain tumors
- Address national & international concerns: cancer risk projection for screening procedures
- Produce software (risk calculator for cancer risks from fallout)
- Create websites (Chernobyl residents, families at high risk of cancer)
### Disadvantages: Scientific, Govt Responsibilities, Administrative Hurdles

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<tr>
<th>Scientific &amp; Govt Responsibilities</th>
<th>Administrative Hurdles</th>
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<tbody>
<tr>
<td>Don’t always choose research studies</td>
<td>Paperwork</td>
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<tr>
<td>Time is not under one’s own control</td>
<td>Required training</td>
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<td>Scientific investigation by contract (annual budget)</td>
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Why Government Research Agency?
Late Career Perspective

- Good fit if you:
  - Wish to focus on research, mentoring, public service
  - Have a clearly defined research specialty
  - Are energized by working in a highly collaborative research setting
  - Would like to work on high-risk and/or international studies
  - Can juggle, multi-task, and be flexible

- May not be a good fit if you:
  - Wish to pursue a broad range of research topics
  - Like to spend lots of time teaching in classroom settings
  - Hope to combine private sector consulting with research
Working in the Government Intramural Research Program: The National Cancer Institute

Preetha Rajaraman, PhD

ACE Career Development Workshop, September 13, 2009
Preetha’s Background

• MS in Environmental Health from University of Washington (focus Industrial Hygiene)

• 2 years work experience in research group within Washington State Dept. of Labor and Industries

• PhD in Epidemiology from Johns Hopkins with focus on environment and cancer

• 7+ years in Radiation Epidemiology Branch, Division of Cancer Epidemiology and Genetics
  – 3 years pre-doctoral fellowship
  – 4 years postdoctoral fellowship
  – 6 months as tenure track investigator
Why Intramural Research Program?

• Pre-doctoral work
  – Opportunity to learn molecular epidemiology from the experts in the field
  – Concentration of exceptional cancer epidemiologists
  – Excellent resources
  – Location

• Post-doctoral work (easy decision!)
  – Continue dissertation work, and build research areas
  – Excellent scientific and career mentorship
After Post-Doc: 
Factors considered in Job Search

• Type of Job
  – Job description / duties
  – Independence to pursue research ideas
  – Availability of teaching opportunities
  – Opportunity for growth and new challenges

• Specifics
  – Early career support
  – Publication/grant record of recent hires
  – Availability of resources relevant to my research
  – Location, pay, benefits, stability
Final choices and decision

- Academic versus intramural research program (IRP)
- Chose IRP based on
  - early career support:
    - Mentoring
    - Projects
    - 7-yr commitment
  - research opportunities, resources
  - location, salary/benefits
Experience in Intramural so far

• Strong early career support
  – Ability to build research areas of interest
  – Availability of resources
• Flexibility (performance-oriented)
• Opportunity to mentor
• Options for classroom teaching, grant-writing - have to be pro-active
• Work with federal policy and programmatic goals
• Opportunity for growth and new challenges
Why Government Research Agency?

• Good fit if you:
  • Want to focus on research, publications
  • Already have a good idea of your research interests
  • Enjoy collaborative and inter-disciplinary work
  • Can be flexible

• May not be good fit if:
  • You would like to develop your research program independent of programmatic goals
  • Teaching is very important to you