U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES National Institutes of Health 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

> **Risk** communication

#### Governmental needs



## Training





Scientific



## **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

Scientific & Govt Responsibilities

Don't always choose research studies

Administrative Hurdles

**Paperwork** 

**Required training** 

Time is not under one's own control

Scientific investigation by contract (annual budget)

#### 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

U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES National Institutes of Health 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