THE GEORGE WASHINGTON UNIVERSITY
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Preparing for Transition

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THE INSTITUTE FOR
BIOMEDICAL SCIENCES

Presenter Disclosure

- No relationships to disclose

Thanks to:

Kim Shafer-Weaver, PhD (invitation)
Sharon Milgram, PhD (some slides)

Who am I?

- B.S. Biological Sciences, Indiana University
- Research Assistant, Indiana University School of Medicine
- Ph.D. Pharmacology, Duke University
- Postdoctoral Fellow, Uniformed Services University
- Research Faculty, Uniformed Services University
- Hired as an Assistant Professor at GWU
- Currently, Professor of Pharmacology & Physiology, GWU
- Director, Institute for Biomedical Sciences, GWU (PhD training program)
- Associate Dean for Graduate Education, GWU SMHS

How did I get here?

- Went into science because it was challenging and interesting
- Always thought I would choose industry, but did a post-doc because most industry jobs required it
- Was given a task by my chair at USUHS to tutor failing medical students (first teaching experience)
- Was asked to lecture in Medical Pharmacology at USUHS (more teaching experience)
- Was Co-PI on my post-doc mentor's grant (grant writing experience)
- Got a tenure track faculty job at GWU

How did I get here (part 2)

- Wonderfully supportive environment at GWU (but no start-up money)
- Wrote grants
- Worked on teaching
- Got grants
- Attracted graduate students
- Was asked to head Neuroscience Program
- Two years later was asked to direct entire graduate program (Institute for Biomedical Sciences)
- One year later was appointed Associate Dean for Graduate Education

Full disclosure

- I was lucky
- I didn’t really plan all that much
- Life was easier when I started my career

Skills needed for a career in Biomedical Science

- Think about a problem
- Express your ideas verbally
- WRITE WELL
- Be organized
- Play well with others

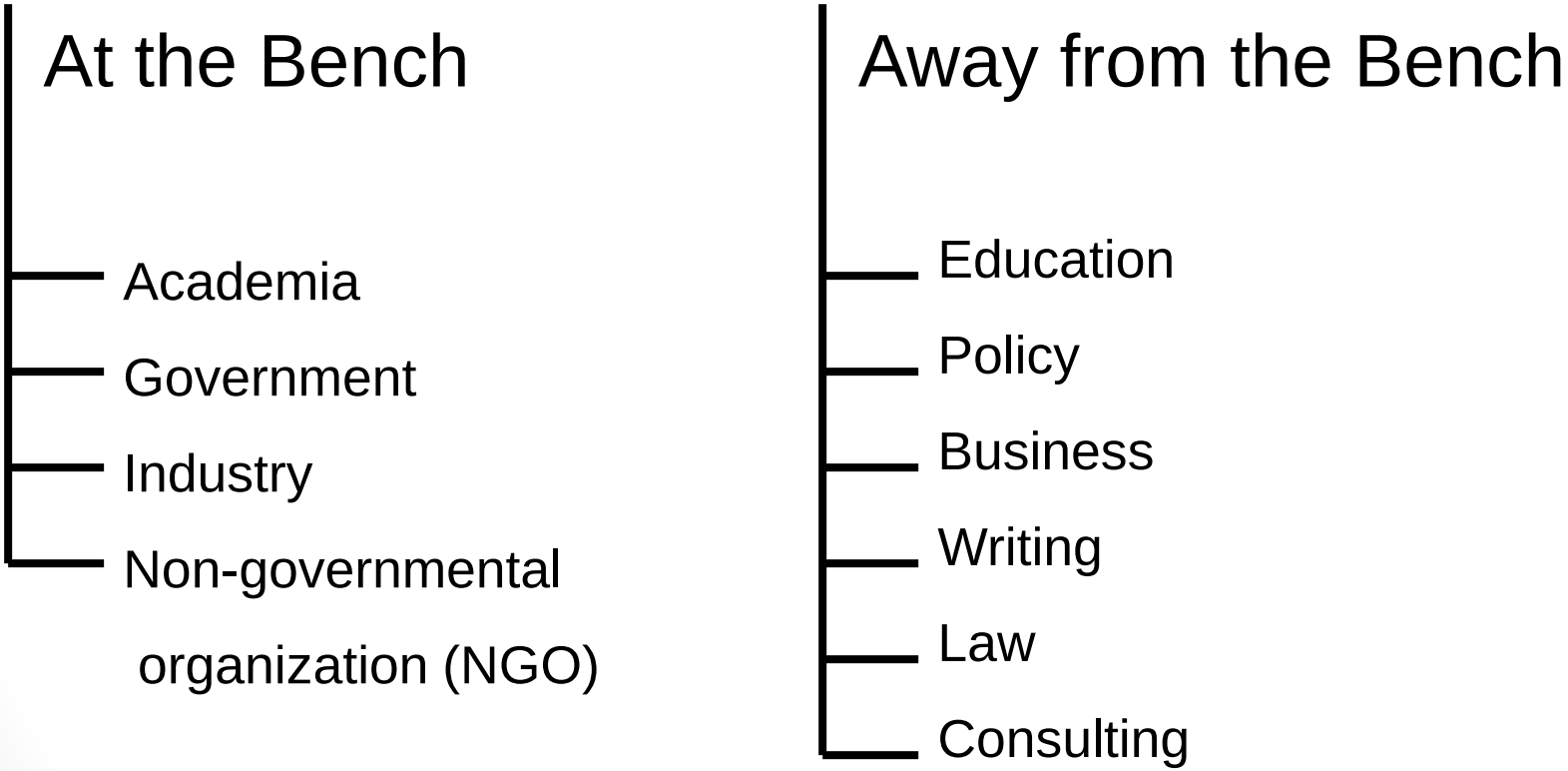
Career Choice

- Individual Development Plan (IDP)
- http://myidp.sciencecareers.org/
- First complete an assessment
  - Skills
  - Interests
  - Values

Skills You May Have

- Technical
- Analytical
- Learning
- Communication
- Teaching
- Project management
- Budget management
- Self management
- People management
- Leadership

An Expanding List of Options



Gaining Options Knowledge

- Read
  - Books – the Office of Intramural and Training (OITE; https://www.training.nih.gov/home) at NIH has a good career library
  - Blogs – including the OITE Careers Blog
  - Web sites – find links at the Career Services web site
- Attend workshops (like this one)
  - Fellows Committee (Felcom) https://www.training.nih.gov/felcom, and OITE programs
  - Local and national opportunities
- Talk with mentors, colleagues and friends
- INFORMATIONAL INTERVIEWING

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- Career Exploration
  - Informational interviews

Informational interview

http://myidp.sciencecareers.org/TalkToPeople/InfoInterviews

- Through the informational interviewing process, you can learn:
  - the pros and cons of a career path
  - how to make a successful transition onto that new path
  - how to conduct an effective job search in that field

http://myidp.sciencecareers.org/TalkToPeople/InfoInterviews

- **How to conduct an informational interview**
  Email an invitation to your informational interview "target" (download example correspondence).
- Tell him or her that you seek advice, not a job offer.
- Ask to set up a 30-60 minute appointment to talk.
- Take a customized list of questions to your meeting (view a list of questions related to your top values, and download other general questions).
- Conduct the informational interview.
- Follow up with a thank you note (download example correspondence).
- If appropriate, follow up periodically.

This activity will help you establish a network

Comparing Your Skills to the Job

MY HIGHLY DEVELOPED SKILLS	SKILLS NEEDED FOR _____ POSITION
1. 2. 3. 4.	1. 2. 3. 4.

- Then ask:
  - Do I have the credentials and formal recognition to back up my skills?
  - Where am I lacking important skills or credentials? What can I do about it?
  - Is there enough overlap to begin searching?

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  - Informational interviews
- Set Goals

Set goals

http://myidp.sciencecareers.org/CareerAdvancementGoals/QuickTips

- **Get started... with Career Advancement Goals**

  Progress toward your ideal career path will greatly benefit from achieving various “career advancement goals."
- These include but are not limited to:
  - expanding your professional network; updating your CV; identifying new mentors; reading about career options; attending career-related events; arranging informational interviews

http://myidp.sciencecareers.org/CareerAdvancementGoals/QuickTips

- **How to set a SMART goal**
- S – Specific – Is it focused and unambiguous?
- M – Measureable – Could someone determine whether or not you achieved this goal?
- A – Action-oriented – Did you specify the action you will take?
- R – Realistic – Considering difficulty and timeframe, is this goal attainable?
- T – Time-bound – Did you specify a deadline?

Example

http://myidp.sciencecareers.org/CareerAdvancementGoals/QuickTips

SMART goal	Read articles/books about medical device industry
Is this a recurring activity	Yes, weekly.
Start date	October 1, 2012
Target completion date	November 1, 2012
How will you be accountable	Take Erin out to coffee each Wednesday, and tell her about what I've learned.

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  - Informational interviews
- Set Goals
- Implement Plan
  - Mentoring Team

Implement Plan

http://myidp.sciencecareers.org/Mentors/QuickTips

- Seek multiple mentors, each with a different perspective or expertise that fits your mentoring needs.
- You may want mentors to guide your research, help you reach your work/life balance goals, or provide perspective on transitioning into a new career path.
- Gather strong letters of recommendation
  - Not cookie cutter
  - Make sure the referee is prepared to write a GOOD letter

To postdoc or not to post-doc

- Academia—YES, essential
- Industry—highly recommended (some industries have their own postdoctoral programs; some offer internships)
- Good article on the industrial training route
  - http://sciencecareers.sciencemag.org/sites/default/files/printed_publications/science.opms.r0800055.pdf
- NIH-research, yes; admin, probably yes
- Other Federal (e.g. FDA, yes)
- Science Policy-at least do a fellowship
  - http://biocareers.com/resource/getting-started-science-policy

CV or resume preparation

- For academics (CV)
- Lists everything you have done (no high school chorus, please)
  - Training
  - Publications
  - Funding
- For industry (usually a resume)
  - More focused
  - Based on Skills
  - What you can contribute to the company

Lots of sites on the internet where you can compare and contrast (e.g. oitecareersblog.wordpress.com)

Academics preparation

- Do a postdoc
- Apply for grants staring NOW
- Your chances of being hired increase dramatically upon demonstration that you can attract external funding
- Fellowships (pre-doc: NRSA, foundations, societies)
- Fellowships or early career (post-doc: NRSA, K awards, foundations)
- Get some teaching experience
  - TA in undergrad course
- Assemble mentor group (some schools will do this for you)
- Say no to some requests (not too many committees!)

Academics: Appointments, promotion and tenure (APT)

- To progress through the system, be familiar with the Faculty Code
  - Three pillars for promotion and tenure: research, teaching, service)
- Meet with your mentoring group (should include teaching coaches, research coaches, others as required)
- Have annual reviews with your chair and or faculty dean
- Usually have 6 years to a tenure decision

Industry preparation

- Do a postdoc or internship
- Acquire a wide range of technical skills that are application transferrable
- Network

Industry requirements

- Be nimble
  - Often project gets changed as industry's focus shifts
- Be a team player
  - Lots of components and often developing/testing product involves many separate groups
- Be prepared to move away from the bench
  - Usually scientists move into management to progress
- Scientists in industry tend to move jobs more than scientists in academia

Government preparation

- Postdoc as appropriate for desired position
- Policy or other fellowship for more administrative job
- Make sure to complete the usually extensive set of forms
- Utilize OITE resources at NIH

Government opportunities

- Intramural positions (NIH)
  - Sometimes short term
  - Few staff fellows
- NIH Admin
- Often helps to get some postdoc experience or policy fellowship specific to area of interest, establish networks
- Other Federal
  - SF171

Summary

- **“In the field of experimentation, chance favors only the prepared mind.”**

  Louis Pasteur

- **“In the field of science, success favors only the prepared mind.”**

  Linda Werling

Most and least favorite aspects of current position

- Most favorite
  - Working with students (and other smart people)
  - Designing curricula
  - Teaching
  - Interacting with a larger university community
  - Juggling responsibilities

- Least favorite
  - Administrivia
  - Juggling responsibilities (yes-on this list, too)
  - Many committees

Thank you for your kind attention.

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