Preparing for Transition

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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/](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

At the Bench
- Academia
- Government
- Industry
- Non-governmental organization (NGO)

Away from the Bench
- Education
- Policy
- Business
- Writing
- Law
- Consulting
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

<table>
<thead>
<tr>
<th>MY HIGHLY DEVELOPED SKILLS</th>
<th>SKILLS NEEDED FOR ___________ POSITION</th>
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- 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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- Career Exploration
  - 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
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
Is this a recurring activity
Start date
Target completion date
How will you be accountable

Read articles/books about medical device industry
Yes, weekly.
October 1, 2012
November 1, 2012
Take Erin out to coffee each Wednesday, and tell her about what I've learned.
Career Choice

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• First complete an assessment
  • Skills
  • Interests
  • Values
• Career Exploration
  • 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
- NIH-research, yes; admin, probably yes
- Other Federal (e.g. FDA, yes)
- Science Policy—at least do a fellowship
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.