Fellowship Programs and Career Tracks

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Outline

• Definition of a fellowship
• Fellowship programs
  – Academic fellowship
  – Industry fellowship
• How to get started?
  – Which fellowship to pick from?
  – What are the barriers/obstacles?
• Career opportunities from fellowships
• Panel session of current fellows
Definition

• A fellowship is a “directed, highly individualized, postgraduate program developed to prepare the participant to become an independent researcher.”*

• However, there is a little bit more to add to this definition...

Definition – cont’d

- The previous definition is academically focused.

- The definition does not consider how a fellowship is viewed from an industry perspective.

- The previous definition needs to consider what types of careers/jobs will be available upon completion of a fellowship.
Fellowship Types -
Academic Fellowship
Academic Fellowships

• Setting: College, University and/or hospital
  – (some fellowships can be divided; 1 year at an academic institution, another year in industry)

• Duration: 2 to 3 years

• Previous experience: Completion of residency is usually required (there are exceptions)

• Salary: varies ~$40K/yr
  – Bassett Healthcare from 2002-2004 ($28-30K/yr)
Academic Fellowships – cont’d

• Generally an split of your time b/t research-related and clinically-related functions.
  – Key point: The majority of time will be spent on research-related functions
  – This contrasts the amount of time spent for research-related functions for a residency
• Research-related functions
  – Research project – Will vary. Usually will involve a human subject/drug study.
  – Learn how to use PK and statistical softward programs (WinNonlin, NONMEM)
  – Potential for additional didactic coursework
  – LOTS of background reading related to your research project/area of research interest
  – Journal club (related to your research interest/ focus)
  – Scientific writing (posters, abstracts, manuscripts)
Academic Fellowships – cont’d

- Clinically-related functions (~20%)
  - May spend time as a pharmacist for patient consultations
    - INPT. consultations for pain management, Abx dosing, DDI/drug information requests, etc.
    - Shadow pharmacists/MDs in various therapeutic areas
    - May have to present lectures to pharmacy students
    - Generally no dispensing/RX staffing requirements
Search Directory

Please perform your search by selecting the criteria for your interests (Default settings will return all listed):

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- Program Type

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Fellowship Types - Industry Fellowships
Industry Fellowships

• Setting: Pharmaceutical or Biotech company

• Duration: 1 to 2 years
  – Some fellowships can be divided; 1 year at an academic institution, another year in industry

• Previous experience: None (residency is not required)

• Salary: varies; $40-60K/year
Industry Fellowships

• Experiences gained in several areas or departments:
  – Medical Affairs
  – Medical Communications/Education
  – Global Marketing/Market Research
  – R & D Strategy and Analysis
  – Clinical Operations/Clinical Research
  – Clinical Pharmacology/Early Development
  – Regulatory Affairs
Rutgers Pharmaceutical Industry Fellowship Program

In 1984, the Ernest Mario School of Pharmacy and two pharmaceutical companies initiated a collaborative pilot program to evaluate the potential contributions of clinically trained pharmacists within a pharmaceutical industry.

http://pharmafellows.rutgers.edu/home/index.php
Allergan-USC Fellowship Program

• 1 Year Opportunities
  – Diverse range of department positions within Allergan
  – Access to USC Regulatory Science courses and tuition remission for 4 units/semester
  – Teaching opportunities at USC
  – Participation and financial support for professional conferences and workshops
  – Formal and informal networking
  – Community service and social events
Allergan-USC Fellowship Program

- **2013-4 Fellowship Positions:**
  - Global Pharmaceutical Sciences
  - Clinical Development
    - Neurology
    - Retina
  - Medical Affairs
    - Medical Scientific Affairs
    - Neurosciences Strategy Development and Data Generation
    - Publications Planning and Medical Writing
  - Drug Delivery Sciences
  - Pharmaceutical Development
Allergan-USC Fellowship Program

- **Requirements**
  - PharmD, PhD or MD (< 5 yrs since graduation)
- **Applications**
  - Application, transcripts, essay, written recommendations
- **December 16 (early review); January 2 (hard deadline)**
- **Interviews and Selections**
  - 1st tier interviews at national meeting (ASHP, AAPS)
  - 2nd tier interviews onsite: January
  - Selection January/February

http://pharmacyschool.usc.edu/programs/fellowship/
Clinical Pharmacology/Research Fellowship Overview

- Generally 2 year fellowships
- Clinical Pharmacology
  - Planning/developing Phase I-II studies
- Clinical Research
  - Phase II/III studies
  - Larger, registration studies
- Medical Affairs
  - Phase IV studies (post-marketing)
Which fellowship to pick from?
Fellowship Selection

The most important determinant to fellowship selection = Program reputation*

• Questions to ask
  – Are preceptors renown for their clinical, teaching, or research experience?
  – How long has the program been in existence?
  – How many fellows have completed the program?
  – What is the retention rate of fellows?
  – How are fellows treated (responsibilities)?

Fellowship Selection – cont’d

• **Area of Pharmacy research**
  - What are the research areas available? Program location? Working environment?

• **Potential for career advancement**
  - Current positions of past fellows? Will program completion improve employment opportunities or fulfill career objectives?

• **Teaching opportunities?**

• **Benefits package**
  - Paid sick, holiday, vacation leave? Reimbursement for professional expenses? Relocation reimbursement? Health insurance coverage?

• **Miscellaneous**
  - Recommendations from current/past fellows? Amount of salary/stipend? How many fellows are accepted
What are the barriers/obstacles?
Potential barriers/obstacles

• Financial
  – Reduced salary/stipend
  – Repayment of student loans

• Options are available
  – Postponement of federal educational loans (loan deferment)
  – Federal agencies (NIH) may be able to repay a significant portion of educational loans*

• Program location
  – Out of state? BUT relocation expenses may be covered

• Fellowships that are not ACCP-approved

• Applicant selection process – academic success
  – NOT the sole factor

Career Opportunities from a fellowship
Career Opportunities

• Opportunities for the ‘non-traditional’ careers
• Depends on what area your focused on during fellowship
• For example, if fellowship had emphasis in clinical pharmacology/drug metabolism, fellows who completed the Bassett Healthcare fellowship were employed in
  – Biotech and/or pharmaceutical industry
  – Academia (Clinical vs. Basic Sciences faculty track)
  – Government (FDA CDER/CBER Office of Clinical Pharmacology)
  – Consulting for various biotech/pharma. companies
Panel Session

- **Lisa Lam, PharmD**
  - Graduate: UCSF School of Pharmacy
  - Clinical Pharmacology Oncology Pfizer/UCSD fellow
  - Email: lisalam@ucsd.edu

- **Katie Moy, PharmD**
  - Graduate: UCSD SSPPS, Class of 2014
  - Baxter Medical Information Fellow
  - Email address: kathleen_moy@baxter.com

- **Jennifer Tran, PharmD**
  - Graduate of the Arnold & Marie Schwartz College of Pharmacy at Long Island University (Brooklyn, New York)
  - Medical Scientific Affairs Allergan-USC Fellow
  - Email: Tran_Jennifer @allergan.com

- **Raynold Yin, PharmD**
  - Graduate: California Northstate University College of Pharmacy
  - Ambulatory Care Outcomes Fellow
  - Email: ryin@westernu.edu
Potential Panel Questions

- What made you choose a fellowship over a residency?
- What were some activities that you completed in pharmacy school that helped you attain your fellowship?
- What opportunities are available for you after your fellowship?
- What advice would you give a student who has interest in pursuing a fellowship?
- Describe a ‘work day’ in your fellowship....