

Post-Graduate Training
Where Do I Go From Here?




Shhhhhhh...




Speakers

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Agenda

Part I:
Exploring Post-Graduate Training Opportunities for Pharmacists


Part II:
Next Steps...What to do to Prepare for Residencies and Fellowships

Part III:
Panel Discussion with Current Post-Graduates






Part I:

Exploring Post-Graduate Training Opportunities for Pharmacists




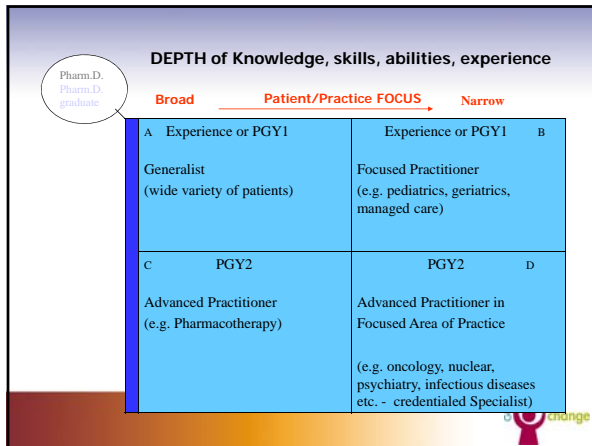
David J. Warner, Pharm.D.
*Director, Residency Program Development
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Why are you here?

- How many know what a residency is or at least have heard of one before today?
- How many know the benefits of completing a residency or residencies?
- How many know that you want to do a residency?
- How many didn't have anything else to do today?






PGY1 Residency

- Trains resident to be competent general practitioner or prepares for advanced training **accelerating growth beyond entry-level professional competence**
- Resident develops competence in the application and management of medications in the treatment of a broad range of patients
- Acute care, ambulatory care, community care, managed care



PGY2 Residency

- Concentrate exclusively on a specific area of pharmacy practice
- Occurs after and builds upon PGY1 program
- Focuses greater depth and breadth of experience in managing more complex patient populations and drug therapies
- New opportunities – emergency medicine, transplant, cardiology, informatics, and more
- New standards, terminology – PGY2



Why accredited program?

- What's the difference between accredited and non-accredited programs?
- Peer review process
- Compliance with standards developed by practitioners
- Demonstrated institutional commitment to quality and education
- Ensuring public safety
- Quality is the foremost consideration



Why are we talking about this?

- American College of Clinical Pharmacy's Vision of the Future: Postgraduate Pharmacy Residency Training as a Prerequisite for Direct Patient Care Practice: **Pharmacotherapy 2006; 26(5): 722-733.**
- ASHP Position Statement 0701 approved June 2007: http://www.ashp.org/s_ashp/doc1c.asp?CID=512&DID=7319#0701. Accessed May 26, 2008.
- ASHP Long-Range Vision for the pharmacy workforce in hospitals and health systems: **Am J Health-Syst Pharm 2007; 64: 1320-1330.**



ACCP Vision of the Future

“Formal, postgraduate residency training will become mandatory before one can enter practice”

- Written by 2004 ACCP Task Force on Residencies
- Approved by the ACCP Board of Regents on July 29, 2004; final revision received on July 18, 2005.



ACCP Vision of the Future

- Provision of direct patient care by virtually all pharmacists will be the standard of pharmacy practice in all patient care settings by 2020.
- Pharmacists will be recognized as health care providers and will be compensated for direct patient care services.
- Contemporary ... Pharm.D. curricula do not produce graduates with the ability levels necessary to manage complex drug therapy [with autonomy and accountability].
- All residencies will be accredited.



Editorial Commentaries

- Residency programs advance practice...and better prepare pharmacists to address the challenges of increasingly complex drug therapy.
- All employers will require candidates for pharmacy generalists and specialists to have completed appropriate residency education and training.



Editorial Commentaries

- The abilities of pharmacists needed for the future will continue to become more complex, requiring even more education and training than is currently needed.
- The most fundamental purpose of residency training is to be the development of clinical maturity.



Clinical Maturity in Pharmacy

- To pursue the purpose and direction of the pharmacy profession, pharmacists must be able to:
 - Become and remain competent
 - Assume personal responsibility and accountability for the outcomes of drug therapy
 - Build appropriate relationships with patients, other health care professionals, third-party payers, and the public
 - Communicate well
 - Demonstrate clinical maturity



Clinical Maturity in Pharmacy

- Pharmacy residency training is a bridge between formal education and pharmacy practice.
- Acquired through rigorous, disciplined training
- Accrues gradually through repetition
- Involves experience with a wide-range of patients
- Requires dedication to patient care

Pharmacotherapy 2006; 26(5): 594-596



ASHP Policy Position

To support the position that by the year 2020, the completion of an ASHP-accredited postgraduate-year-one residency should be a requirement for all new college of pharmacy graduates who will be providing direct patient care.

ASHP House of Delegates Resolution Approved June 2007



ASHP Long-Range Workforce Vision

- Developed through the ASHP Council on Education and Workforce Development and approved by the ASHP Board of Directors on January 11, 2007.
- Medication use in hospitals and health systems is a prominent therapy for virtually all patients, and it is inherently complex and dangerous.
- Interdisciplinary teams will rely on pharmacist leadership for the safe use of medications.
- Licensure alone will be insufficient.

Am J Health-Syst Pharm 2007; 64: 1320-1330.



ASHP Long-Range Workforce Vision

- Pharmacy will be a differentiated workforce
- Pharmacists are only health professionals to focus on medication-use matters across the entire enterprise
- Most pharmacists will focus most of their attention to direct, interdisciplinary, collaborative drug therapy to ensure effective, evidence-based, safe, and cost effective medication therapy.



ASHP Long-Range Workforce Vision

- Clinical pharmacists: accredited PGY1 program and have appropriate experience.
- Advanced clinical practice pharmacists: accredited PGY2 and board certification

Am J Health-Syst Pharm 2007; 64: 1320-1330.



ASHP Vision for Pharmacy Residency Training in 2015

- All residency programs are accredited
- Completion of a residency program is a necessity for new pharmacy graduates entering direct patient care roles.
- Significant growth has occurred in community programs.
- Residencies continue in PGY1 (generalist)-PGY2 (advanced level) sequence pattern
- Residency-trained individuals are recognized among all health-care professionals



APhA Position

- APhA encourages continued growth in the number of accredited pharmacy residency positions in all practice settings
- APhA advocates for the allocation of adequate funding for accredited residencies in all practice settings
- APhA supports post-graduate training for new PharmD graduates

APhA House of Delegates March 14-17, 2008




Why Complete a Residency?

- A competitive advantage in the job market: by 2015, a residency may be required for direct patient care roles
- Networking Opportunities
- Career Planning - Mentorship
- Prerequisite for advanced training, specialization, academia



Why Complete a Residency?

- State of the profession
- Change in pharmacy curriculum
- Professional skills and life skills
- Meet the needs of patients we serve.
- What the residents tell me...



Why I think you should do a residency

- Skills for life
- Skill set for future opportunities: flexibility, adaptability
- Unparalleled opportunities
- Compensation vs. fulfillment
- Think about your career in the long term



Future Challenges:

Sites will look for residency trained individuals

- Aging population
- Patient compliance issues
- New technology
 - Automation
 - Human genome project
- Emphasis on safety
- Changing roles - specialization
- Shortage of pharmacists?



In times like these...

- “Maintaining one’s personal marketability is critical for long-term career success and is even more critical during economic recession (when competition is greater) and when one has had practical experience in only one industry.”

Mary Ann Spilman
Director of executive management programs
University of Maryland University College

Leadership Development. Jerry Bowles. Hemispheres Magazine. October 2002



Wall Street Journal/Harris Interactive Survey: Important candidate attributes

- Communication and interpersonal skills
- Ability to work well within a team
- Personal ethics and integrity
- Analytical and problem-solving skills
- Leadership potential
- Strategic thinking

How to get hired. Ronald Alsop. Wall Street Journal. Sept 22, 2004.



A little friendly advice...

- **Always do the right thing.**
 - Steve Odland, CEO, Office Depot
- **Make ethical behavior the cornerstone of your career.**
 - Jim Quigley, CEO, Deloitte and Touche
- **Master the art of communication.**
 - Jeff Rachor, CEO, Pep Boys
- **Always have a plan. It’s OK to change the plan. It’s not OK to show up without one.**
 - Jonathan Schwartz, CEO, Sun Microsystems



Buffett and Gates

- Use the newspaper test...Buffett
- Lead by example...Gates
- Surround yourself with high-grade people because you will behave as the people around you do... Buffett
- Invest as much in yourself as you can; you are your own best asset by far. Then, follow your passion...Buffett
- Have the right heroes...Buffett

Merger of the minds. Marilyn Hoskins. Nebraska Magazine. Winter 2005.



Future of Residency Training

- Leadership in improving the complex medication use process
- Shifts in the profession
- Continuing need for specialists
- Credentialing and reimbursement
- Requirement for practice



Selecting a Residency

- Accredited vs. Non-Accredited
- Preceptor Complement
- Patient Population and Services
- Teaching Commitment
- Service Commitment
- Work Environment
- Is it the right place for you?



Where are they?

- Nice places: California, Puerto Rico, Hawaii, Arizona, Florida, Alaska, Nebraska, Iowa...all 50 states
- IHS, PHS, VA, Stand-alone pharmacies, clinics, MD offices
- Community pharmacies, Chains
- Managed care organizations

- It's only one year of your life...



How Do I Make Myself Stand Out?

- Do research in advance
- Get involved with extracurricular activities
 - Professional pharmacy organizations
 - Diversify yourself
 - Relevant work experience
- Start networking



In Search of the Ideal Residency Candidate

- We want someone who...
 - Knows why they are seeking a residency,
 - Knows a little about us,
 - Has a vision of their career when they're done,
 - Actively contributes to practice of pharmacy,
 - Is a "good fit" with our staff.
- William Yee, Pharm.D., FCSHP

California Journal of Health-System Pharmacy 1997; 9(5):19.



Sources of Information

- ASHP's website: www.ashp.org
- Residency Directories on line
 - *Opportunities*
- ACCP: directories and website
 - www.accp.com
- APhA: www.apha.org
- AMCP: www.amcp.org
- Community programs:
www.communires.com



Part II: What to do to prepare for residencies and fellowships...



Sarah Boyd, Pharm.D.
Clinical Pharmacy Coordinator
St. John's Regional Medical Center



Overview

- Postgraduate Training Opportunities
- The Midyear Clinical Meeting
 - Navigating the Residency Showcase
 - CareerPharm PPS
- Interviewing Skills
- The ASHP Matching Program



How do I get the most out of the meeting this year?

- Explore the different types of residency programs
- If you are undecided about doing a residency, answer the question...why are you unsure?
- Talk to current residents that are here
 - What are their career paths after residency?
 - Did they have similar fears of doing a residency? If so, how did they overcome them?



Frequently Asked Questions

- What are some key qualifications?
- How important are grades?
- Will I earn a salary?
- Can I only do a residency immediately upon graduation?
- How many residencies should I apply to?
- How will I pay back student loans?




The ASHP Midyear Clinical Meeting

December 6-10, 2009





Student Programming

- **Sunday 4:30pm-6:00pm**
 - ❖ Pharmacy Student Forum Reception and Student Society Showcase
 - ❖ CareerPharm PPS
- **Monday**
 - ❖ Student Poster Session
 - ❖ Residency Showcase
 - ❖ CareerPharm PPS
- **Tuesday**
 - ❖ Student Poster Session
 - ❖ Residency Showcase
 - ❖ CareerPharm PPS
- **Wednesday**
 - ❖ CareerPharm PPS




MCM Residency Showcase

- Informal Interaction with Programs
 - ❖ Residents
 - ❖ Preceptors
 - ❖ Program Directors
- No additional charge to attend
 - ❖ Included in cost of meeting registration
- 3 Sessions
 - ❖ Monday (1-4 p.m.)
 - ❖ Tuesday (8-11 a.m. & 1-4 p.m.)


TIP: DO YOUR HOMEWORK
 Each program will only be at ONE session!
 Session assignments, locations, and booth #'s published online:

www.ashp.org/Midyear2009/ResidencyShowcase



Maximizing the “Showcase” Experience

- **Do your homework**
 - ❖ Talk to your faculty and preceptors
- **Preset questions to ask about each program**
- **Talk to preceptors, program directors and residents**
- **Take notes to keep everyone straight**
- **Correspondence counts**





Who should participate in the showcase?

- **EVERYONE** should participate!
 - ❖ Even if you are not sure that a residency is for you, stop by, take a look around and listen to what is offered at each residency programs
 - ❖ Cost-effective way to learn about programs across the United States



Personnel Placement Service

- **What is it?**
 - ❖ Is NOT Residency Showcase
 - ❖ Personnel...not personal
 - ❖ National pharmacy recruiting event
 - ❖ Scheduled one-on-one interviews for 1500+ Positions
- **Who is it for?**
 - ❖ P4 students (if you are considering - relocating, fellowships, some residencies)
 - ❖ PGY-1 Residents seeking PGY-2 Residency
 - ❖ Pharmacists looking for a job
- **When is it?**
 - ❖ Online postings available in Fall
 - ❖ MCM interviews – Sunday through Wednesday
- **How Do I Sign Up?**
 - ❖ Online Registration, \$60 until October 21, then \$105


Personnel Placement Service

- **Program that brings together applicants and employers for on-site interviews**
- **Typical positions recruited for:**
 - ❖ Specialized residencies
 - ❖ Pharmacy residencies
 - ❖ Fellowships
 - ❖ Industry positions
 - ❖ Clinical pharmacist positions
- **Schedule interviews on the hour or half-hour**
 - ❖ Give yourself time in between interviews




What positions were recruited for using PPS last year?

| Job Title | # of Employer Positions |
|------------------------------------|-------------------------|
| Associate/Assistant Director | 16 |
| Clinical Coordinator | 27 |
| Clinical Pharmacist | 392 |
| College Faculty | 183 |
| Director of Pharmacy | 11 |
| Fellow | 105 |
| Manager/Other Supervisory Position | 49 |
| Medical Liaison | 1 |
| Other | 25 |
| Resident, PGY-1 Pharmacy | 124 |
| Resident, PGY-1 Community | 20 |
| Resident, PGY-1 Managed Care | 17 |
| PGY 1-2, Pharmacotherapy | 4 |
| PGY 1-2, Management | 8 |
| Resident, PGY-2 | 260 |
| Staff Pharmacist | 41 |



- Personnel Placement Service**
- **Completely online process**
 - **Search jobs/residencies**
 - ❖ May save your job searches
 - **Setting up interviews**
 - ❖ Done via the messaging tab
 - ❖ Conduct and store all correspondence with employers
 - ❖ Use this tool to communicate with employers vs. personal e-mail
 - **Obtain the booth assignment number with your scheduled interviews**
- 

Preparing for Onsite interviews



Preparing Residency Application Materials

- Completed application
 - Cover letter/Letter of intent
 - Curriculum Vitae (CV)
 - ❖ Ask preceptors/faculty to proofread and give feedback
 - Transcript
 - Letters of Recommendation
 - ❖ Start working on now.
- ❖ Required materials may vary depending on the program



Interviews at the site after the MCM

- Research program prior to the interview
- Prepare your questions & anticipate theirs
- Bring curriculum vitae (CV)
- Be on time!
- Be courteous
- Be positive
- Send thank-you notes to interviewers
 - ❖ Use snail mail NOT e-mail



Questions to Expect

- Tell me about yourself?
- What are your career goals?
- What strengths do you feel you could offer to this position?
- What are your weaknesses?
- Why are you interested in this position?
- Possible questions on current pharmacy events or situations...



Selecting a Residency

- Accredited vs. Non-Accredited
- Who are my preceptors?
 - Where did they train?
- Patient Population and Services
 - What is your particular area of interest?
- Teaching Commitment
- How much staffing is required?
 - Will I be pulled from my rotation to staff?
- Number of Residents
- Work Environment
- Is it the right place for you?



The Residency Matching Program



The “Match”

- Orderly process for matching residency applicants with acceptable programs and for matching residency programs with acceptable applicants
- Only for ASHP-accredited or accreditation-pending residency programs
- Administered by National Matching Service (NMS) - www.natmatch.com/ashprmp



The "Match"

- Agreement that states you will accept any residency position listed on your rank order list, to which you have matched
- \$112 fee in 2010
- Jan. 8, 2010
 - ✦ Deadline to sign up for the match
- March 5, 2010
 - ✦ Deadline to submit rank order list
- March 17, 2010
 - ✦ Results of the match available
- Process is separate from ASHP MCM, Personnel Placement, Residency Showcase



The "Match"

- You are placed into a position based on the preferences in your list
- Once you submit your list, you cannot accept a residency until Match results are released
- The Match is a binding commitment



Programs' Rank Order Lists

| Program A (2 Positions) | Program B (1 Position) | Program C (1 Position) |
|----------------------------|---------------------------|---------------------------|
| 1. Charles | 1. Baker | 1. Baker |
| 2. Baker | 2. Charles | |
| 3. Able | 3. Able | |

Applicants' Rank Order Lists

| Able | Baker | Charles |
|--------------|--------------|--------------|
| 1. Program B | 1. Program A | 1. Program B |
| 2. Program A | 2. Program B | 2. Program A |
| | 3. Program C | |

<http://www.natmatch.com/ashprmp/>

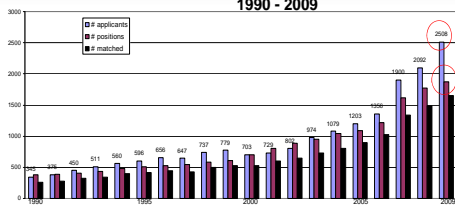


What happens if I don't "Match"?

- Match Results
 - ❖ Matched and Unmatched
 - ❖ Good candidates
 - ❖ Good programs
- Going outside of the Match
 - ❖ "free agency"



ASHP Matching Program for PGY1 programs
1990 - 2009

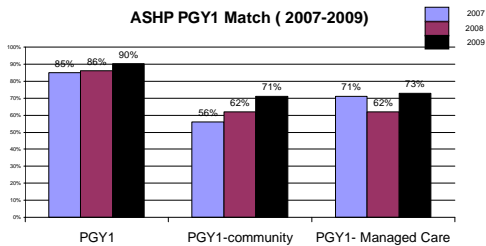


...not everyone will "Match"... but there are NMS Post-match Opportunities



Scrambling Opportunities for a PGY-1

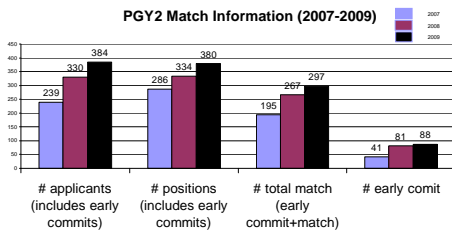
ASHP PGY1 Match (2007-2009)



% of positions filled in the match



Scrambling Opportunities for a PGY-2



How do I make myself stand out?

- Do research in advance
- Get involved with extracurricular activities
 - ❖ Professional pharmacy organizations
 - ❖ Diversify yourself
 - ❖ Relevant work experience
- Start networking



Part II (continued...)

Next Steps...

What to do to Prepare for Residencies and Fellowships



Joseph D. Ma, Pharm.D.
Assistant Professor
UCSD Skaggs School of Pharmacy



Outline

- Definition
- Who cares? (Relevancy of a fellowship)
- Fellowship Overview
 - Academic fellowship (e.g., Bassett)
 - Industry fellowship (e.g., Rutgers)
- Before choosing a fellowship...
 - Fellowship selection
 - Potential obstacles
 - Obtaining information
 - Self assessment
- After choosing a fellowship...
 - Expectations of the fellow
 - Expectations of your mentor (boss)
 - Accessing long-term career objectives



Definition

- A research 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...

*American College of Clinical Pharmacy. <http://www.accp.com/resandfel/guidelines.aspx> (accessed 2008 August 20)



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.
 - Not just an independent researcher



Relevance of a Fellowship

- Identification of research area of interest
- Networking opportunities
- Future employment opportunities (within academia, government, various sectors of industry)
- Promotion of the pharmacy profession*

*Raehl CL et al. Am J Hosp Pharm 1992



Academic Fellowships



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: Not bad! (varies ~\$40K/yr)**
 - Bassett Healthcare from 2002-2004 (\$28-30K/yr)



Academic Fellowships – cont'd

- **Generally an 80/20 split. 80% spent on research-related functions. 20% spent on 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
- **Results are based on 'output' in terms of publications (e.g., manuscripts, abstracts) and completion of a long term, research project.**
 - Quantity or Quality?



Academic Fellowships – cont'd

- **Research-related functions (~80%)**
 - Acquire background knowledge of types of statistical testing (e.g. BE, paired/unpaired t-test, regression analysis, ANOVA). Learn how to use statistical programs (SAS, SYSTAT).
 - Learn how to use PK 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)



Academic Fellowships – cont'd

- **Research-related functions – cont'd**
 - **Research project – Will vary. Usually will involve a human subject/drug study.**
 - Other research projects can include data analyses, outcome/epidemiology research
 - Determine your research project at the start of your fellowship
 - Responsible from start to finish (study execution)
 - Protocol write up and IRB submission
 - Study logistics (data collection forms, ordering drug, etc.)
 - Subject recruitment & scheduling
 - Obtain funding
 - Data analysis
 - Poster/manuscript preparation



Academic Fellowships – cont'd

- **Research-related functions – cont'd**
 - **Publications**
 - An example: Minimum 2, first-author peer-reviewed manuscripts were expected (e.g., Bassett fellowship in clinical pharmacology)
 - One publication will be a review article
 - 2nd publication will involve your research project
 - Presentation of at least 1 abstract and 1 poster at a national meeting



Academic Fellowships – cont'd

- **Clinically-related functions (~20%)**
 - **Spend time as the lead pharmacist for in-patient consultations**
 - (e.g., Bassett fellowship; 2-week on call/pager, consultations for pain management, Abx dosing, DDI/drug information requests, etc.)
 - **Training/supervise pharmacy practice residents who run the consult service**
 - **May have to present lectures to pharmacy students**
 - **Note: NO dispensing/RX staffing requirements**



Types of Academic Fellowships

| | | | |
|-------------------|---|-----------------------|------------------------|
| Ambulatory Care | Cardiology | Clinical pharmacology | Critical care |
| Drug Development* | Geriatrics | Infectious Diseases* | Nephrology |
| Oncology | Outcomes, Medication Safety, & Health Policy research | Pediatrics | Pharmacoeconomics |
| Pharmacogenomics | PK | Transplant | Translational research |
| Pain Management | | | * Most common |


Source: ACCP website





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:** Not bad! (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



Industry Fellowship: An Example



Rutgers Post-Doctoral Industry Fellowship Program

- Key Program Features
 - Career Path Acceleration
 - Outstanding Alumni Track Record
 - Family of Leading Companies
 - Rigorous Academic Component
 - The Pathway to Industry
 - Website: <http://www.rci.rutgers.edu/~ifellows/>



Fellowship Requirements

- Rutgers Component
 - Research project
 - Publication
 - Abstract, paper, poster
 - Administration
 - Course coordination
 - Co-chief Fellow
 - Rotation
 - Affiliated teaching/clinical site
 - Fellows are adjunct faculty
 - Other projects (TBD)
- Monthly Seminar Series
 - 1 year Fellows - 1 presentation
 - 2 year Fellows - 1 presentation/yr



Clinical Pharmacology/Research Fellowship Overview

- 2 year fellowships at:
 - Novartis
 - Hoffmann-La Roche
- Clinical Pharmacology
 - Planning/developing Phase I-II studies
- Clinical Research
 - Phase II/III studies
 - Larger, registrational studies
- Medical Affairs
 - Phase IV studies (post-marketing)



Clinical Pharmacology Studies

- Entry into man (First in Human [FIH])
 - Determine the starting human dose based on preclinical PK and toxicology data
 - Determine what methodologies to use to access drug safety
 - Determine inclusion/exclusion criteria
 - Conduct Site Initiation Visits (SIV)
 - Oversee monitoring visits.
 - Determine where the study will be done? Budget? How will the data be collected?
- Work with other members of the team (biostats, global safety, PKPD, immunology, etc.)



Before choosing a fellowship...

- Fellowship selection
- Potential obstacles
- Obtaining information
- Self-assessment



Fellowship Selection

The most important determinant to fellowship selection = Program reputation*

- Choose a fellowship that is right for you
- Questions to think about
 - Are preceptors renowned 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?
 - What career opportunities do fellows pursue when done?

*Sensl BL, et al. Am J Hosp Pharm 1990



Fellowship Selection – cont'd

- Area of 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?
 - Opportunities for didactic lectures? Opportunities for small group or 1:1 teaching of students/residents?
- 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?

Mo JD, et al. California Pharmacist 2004



Identify Potential 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?
- Fellowships that are not ACCP-run programs
- Applicant selection process – academic success
 - NOT the sole factor

National Institute of Health. <http://www.lrp.nih.gov> (accessed 2008 August 20).



Obtain Fellowship Information

- Key: Don't procrastinate! Start early
- Check with your school's Academic Affairs Office (they may have fellowship contact information)
- Talk to your professors/faculty
- Identify recent graduates who are current fellows
 - Ask questions
- Web-based resources
 - ACCP website (contact preceptors of the program, show an initial interest in the program)
 - Rutgers website and/or other specific websites of where the fellowship is being offered



Self-Assessment

- Maintain good academic standing (grades)
- Show a sincere interest in conducting research
 - Research-related graduation project?
 - Have you worked in a laboratory?
 - Any publications or poster presentations as a result of research?
 - Summer programs?
- Any experience with software programs?
 - Statistics or PK software exposure?
- Communication & writing skills
 - Able to write 'scientifically'
 - Can you explain research findings?
 - Can you defend research findings?



After choosing a fellowship...

- Fellow expectations?
- Mentor (boss) expectations?
- Long term career objectives



Fellow Expectations

- **Meet with your mentor and S-P-E-L-L out your roles and responsibilities (get this on paper)**
 - For example: Review paper
 - Who identifies the topic?
 - Will you compose an outline prior to the write up?
 - Who will be first author?
- **Will you have a 'short leash' or 'long leash'?**
 - No longer a student, but a graduate
 - Hand-holding versus trial by fire
 - Recall the objective of a fellowship – to be an independent researcher



Fellow Expectations – cont'd

- **Identify and agree to the amount of time spent for research-related and clinical-related functions (80/20, 70/30, dynamic)**
 - Attempt to identify what research-related functions you want to do VERSUS what functions your mentor wants you to do
 - "Grunt work" vs. learned experience
 - A balance from both perspectives are needed
 - Access to didactic or off-site training?
 - Funds to purchase textbooks or other educational materials?
 - Is there a schedule set as to when your clinical-duties will occur? Any specific clinical clerkships?



Mentor Expectations

- **Request regularly scheduled 1:1 meetings**
 - Provide project updates
 - Mentor can provide guidance/advice
 - Makes you and your mentor accountable
 - Mentors are always busy!
- **Identify the best method of communication with your mentor**
 - "Old school" – contact the secretary, set up an appointment, meet in person
 - "New school" – email, phone, drop-ins ('plop sessions')



Mentor Expectations

- **Establish and agree on project deadlines (if known)**
 - Draft write up of manuscripts
 - Review of clinical protocols in drug development
 - Abstract/poster/manuscript submission deadlines
- **What professional memberships should you be in?**
 - Will your mentor or program pay for this? If so, how many?
 - Mentor should think about which one is high on scientific applicability and potential networking opportunities



Long Term Career Objectives

- **Year 1 of fellowship:**
 - Talk to past fellows in all areas of pharmacy (academia, industry, FDA, NIH, hospital, insurance companies)
 - Establish an fair perspective of the many areas of pharmacy
 - Identify an area that interests you
 - If you don't know – that's OK
- **Year 2 (or last year) of fellowship**
 - Request that your mentor beginning contacting his/her networks
 - Learn to 'play the game' (qualified for the job vs. sounding desperate for a job)
 - Follow up on any potential contacts/networks from Professional meetings



Part III:

Panel Discussion with Current Post-Graduates



Panelists