

Professional Development:

- ✓ **Residencies**
- ✓ **the ASHP Midyear
Clinical Meeting**
- ✓ **and more . .**

By
Katherine P. Smith, Pharm.D

Edited By
Sandra L. Baldinger, Pharm.D., M.S

Acknowledgements

Katherine P. Smith would like to thank Judy Curtis, Andrea Seitzman, Maryam Behta, Brian Martin, and the University of Maryland School of Pharmacy class of 1998.

Any correspondence regarding this publication should be sent to the publisher, American Society

Table of Contents

Preface

This is a guide for those who are interested in applying for a residency training program following

Residency Training

Definition

According to *Opportunities: The Source for Pharmacy Residency Information*, the American Society of Health-System Pharmacists' (ASHP) online publication, "a pharmacy residency is a structured, directed, salaried, postgraduate training program in a defined area of pharmacy practice, typically lasting one year." Generally, residencies provide advanced training to pharmacists in a variety of pharmacy practice areas. There are different types of residencies and practice sites. The two main types of residencies are pharmacy practice and specialty. This guide will mostly focus on pharmacy practice residencies.

Pharmacy Practice and Specialty Residency Programs

ASHP states that "a pharmacy practice residency focuses on the development of competence, skills, and application of drug therapy knowledge in providing the broad scope of pharmaceutical services to patients. Pharmacy practice residencies with emphasis in acute care, community care, home care, long-term care, and managed care are available. Pharmacy practice residencies concentrate on direct patient care, drug information and drug policy development, practice management, and other pertinent areas specific to the practice setting." Most students enter a pharmacy practice residency following graduation.

A specialty residency is a program that provides training in a focused area of pharmacy practice (e.g., geriatrics). Specialty residencies utilize and build upon the fundamental practice skills acquired during a pharmacy practice residency, and are typically undertaken following completion of a pharmacy practice residency. Some specialty residency programs do not require a pharmacy practice or accredited residency; be sure to ask specific programs about their requirements. There are fifteen different types of specialty residencies accredited by ASHP (see Accredited and Non-accredited Residency Programs below). Other sources for specialty residency information include the American College of Clinical Pharmacy (ACCP) directory and the faculty at your school.

Specialty residency programs do not participate in the Residency Matching Program (see Residency Matching Program). Apply directly to the programs. Write letters or call the directors or coordinators of these programs in the fall. October and November are usually the best times to contact program directors because they may not have application materials ready before that time. Attendance at the ASHP Midyear Clinical Meeting (MCM) is a good way to meet numerous

Accredited and Non-accredited Residency Programs

When a program is accredited, it has gone through an extensive evaluation process and a site visit by ASHP. The purpose of accreditation is to provide consistency in the training received by residents in different programs. Accredited residencies are structured in the experiences they provide for the resident. They also have criteria for the qualifications of the residency preceptors and directors. As an applicant you may want to consider that by applying for an accredited residency, ASHP has ensured that you receive the training you expect from the program. Some employers may specifically look for someone who has completed an accredited residency.

The decision regarding whether to do an accredited or non-accredited residency becomes especially confusing with specialty residencies. A non-accredited specialty residency may be preferred if you are seeking a specific type of pharmacy training. You may want to pursue a specialty residency to prepare you for a more unusual type of pharmacy practice.

There are also programs with an “accreditation-pending” status. This means that the programs have been initially approved by ASHP. In order to be fully approved, a resident must complete the program during its pending status. There are advantages and disadvantages to these programs as well as with newly accredited programs. One advantage is that the program is more likely to be flexible with your needs and you may be able to set groundwork for future residents. A di73.4(s)-3(ing)urdr 172.2(t)ban-0.002

Resident Activities

During your first month, you should receive an orientation to the institution and your schedule for the year will be decided. Be prepared to be totally confused and lost during your first few weeks. This is completely normal, but be sure to ask questions. Second-year residents are usually a very valuable source of information about your program.

You will complete several core and elective rotations that last anywhere from four to six weeks. Your residency core rotations depend on the program; however, almost all accredited programs will offer some type of experience with acute patient care, ambulatory patient care, drug information and drug use policy development, and practice management. Possible core rotations

Staffing is a common requirement of a resident. This refers to the amount of time you spend entering orders, answering phones, making IVs, filling carts, and checking orders in the pharmacy. Most programs require you to staff every other weekend; other programs may require you to staff during the week. This may vary depending on the number of residents in a program and the staffing needs of the institution. By working in the pharmacy, you will have a better understanding of the system. The pharmacy staff may be much more willing to help you since they will have seen your face before. In the future, if you will be working for an institution that requires you to staff, they may feel better knowing that you have had some training during your residency.

Teaching may be another resident responsibility. If you are at a teaching institution affiliated with a school of pharmacy, you may see pharmacy students quite frequently. Some programs

residencies. You can contact ACCP through their web site (www.accp.com) or by phone, (816) 531-2177.

APhA also provides information about many U.S. and Canadian pharmacy residencies. Their web site is www.aphanet.org and phone is (202) 628-4410.

Fellowships

Fellowships are designed to train pharmacists to conceptualize, plan, conduct, and report independent research. The program is under the guidance of a researcher-preceptor who offers the fellow an individualized learning experience. That experience gives the fellow the training necessary to conduct collaborative research or to function as a principal investigator. The type of research performed can range from pharmacy policy to drug development to laboratory bench-type research.

Pharmacists in fellowship programs may spend some time in patient care but generally spend much less time than residents. Fellows may also have teaching responsibilities in addition to research activities. These programs are often longer than 12 months. One of the most important factors in selecting a pharmacy fellowship is matching your interests to the type of research being conducted by the fellowship preceptor. Participants may be expected to have some prior experience in the research area through practice during school or through a residency. While some programs consider a residency a prerequisite to a fellowship, some pharmaceutical company-sponsored fellowships at academic centers do not require them.

ASHP-accredited specialty residency programs

Clinical

Pharmacokinetics

Critical Care

Drug Information

Geriatrics

Infectious Diseases

Internal Medicine

Managed Care Pharmacy Systems

Nuclear Pharmacy

Nutritional Support

Oncology

Pecredited3(l)11(o.8(s)T-0.003030p(a)-0.TJ0 -.1566 TD-0.-1.5h)-12.4(ar)-6(Inf)-1orl(ir-0.-1.5ap)-12.211(o)7.6(g)-16.5

Surgery
Toxicology
Transplantation

For additional information . . .

Bucci KK, Knapp KK, Ohri LK, Brooks PJ. Factors motivating pharmacy students to pursue residency and fellowship training. *Am J Health-Syst Pharm.* (1995); 52:2696–701.

Goeckner BJ, Schmidt SM, Ponzillo JJ. Pharmacy residency training programs: a resident's perspective. *Pharm Pract and Mgmt Quarterly.* (1995); 15(2):10–9.

King DL. Planning for the ASHP Resident Matching Program. *Am J Health-Syst Pharm* (1995); 52:1863–4.

Knapp KK. Finding and applying for a residency position. *Am J Hosp Pharm.* (1993); 50:2286–9.

Letendre DE, Brooks PJ, Degenhart ML. The evolution of pharmacy residency training programs and corresponding standards of accreditation. *Pharm Pract and Mgmt Quarterly.* (1995); 15:30–43.

Lum BL, Cox D. Helping clerkship students apply for residencies. *Am J Health-Syst Pharm.* (1995); 52:209–10.

Pierpaoli PF, Flint NB. Residency training—the profession's forge for leadership development. *Pharm Pract and Mgmt Quarterly.* (1995); 15(2):44–56.

VanDenBerg C, Murphy JE. Satisfaction among residents in ASHP-accredited pharmacy residency programs. *Am J Health-Syst Pharm.* (1997); 54:1521–7.

P reparing for the Midyear

Clinical Meeting

If you travel infrequently, speak to someone who does to consult about what you will need. Garment bags are great for suits but make sure you can carry it along with you. ~~Check the MCM, it may be set back on the Internet for the weather forecast for that region.~~

Registration

General

You can register for the MCM in early fall. There is no late fee for students, but you should register as soon as possible so you can begin to receive the program materials. You can register on ASHP's web site or call ASHP.

Once you have registered for the MCM, you will receive program information. One of the best places to look for specific information about the meeting is in the October 15th issue of the *American Journal of Health-System Pharmacy (AJHP)* and the Meetings and Education section of ASHP's web site. If you joined ASHP, realize that it may take up to six weeks before you begin receiving *AJHP*. Pay close attention to the Residency Showcase schedule (see Residency Showcase).

Personnel Placement Service

Personnel Placement Service (PPS) is a career assistance program offered in conjunction with the ASHP MCM. Information about signing up for PPS and how it works is available at <http://pps.ashp.org>.

When registering for PPS, you will be asked to write a short personal ad about yourself in 50 characters or less. Most people state the position they are seeking, the school they are attending, brief information about work experience, pharmacy affiliations (e.g., fraternities, societies), and when they will be available. Here are two sample ads:

Pharmacy Practice Residency: Pharm.D. conferred in May 1999 (University of Iowa); Interests include primary care/ambulatory care, internal medicine, cardiology; Experience: Clinical clerkships in cardiology, family medicine, critical care, infectious disease, community pharmaceutical care; Oncology Research experience; Four years internship experience in a community pharmacy; Member: ASHP. Phone, E-mail or Contact: name, address.

Pharmacy Practice Residency: Pharm.D. May, 1999 (Oklahoma), B.S. Marketing (University of Oklahoma); Experience: hospital, community, clinical rotations; Interests: cardiology, oncology, ambulatory care, industry; Memberships (positions held): ASHP (Student Delegate), SOSHP (Vice-President, Historian), Kappa Psi (Treasurer), PLS (Vice-President), ASP (Student Delegate), NCPA, APhA; Available 7/99. Phone or contact: name and address.

The registration form allows you to select what type of position you are interested in and in what geographical area. Some positions may not contact you if you are not willing to leave your region. Keep an open mind for now since something really great might become available in a region where you were not originally interested in going.

Many residency programs do not participate in PPS. Therefore, before registering for PPS, you should ask the programs you are interested in applying to if they will be interviewing at PPS.

Residency Matching Program

The Residency Matching Program is a separate function from the MCM. The MCM gives students an opportunity to learn about residency programs in one location. The Match occurs after the MCM and matches applicants and programs. For more information visit: www.natmatch.com/ashprmp.

Contacting Programs

Once you receive residency information (e.g., ASHP Residency Directories), you need to consider which program(s) to pursue. How do you know what program is right for you? Try to define your career goals. Where would you like to see your career in the immediate future and long term? Consider what experiences you have liked and disliked during your education. Are there pharmacy practice areas of interest you want to pursue further or areas you want more experience in? Are there areas of practice that you would like to gain experience in to help you make a more informed career decision? What pharmacy practice area(s) do you not enjoy? Also, consider any geographical restrictions.

After reviewing the directories, you should consider requesting applications from residency programs for which you are interested. This information can usually be picked up during the

scholarships. If you have publications, make sure they are referenced appropriately. Listing a publication that is “in press” is fine as long as it is really “in press.” This means that it has been accepted by a journal and that it will be published. It does not mean that it is sitting on your preceptor’s desk waiting to be submitted. Most people list items on their CV in reverse chronological order (most recent to least recent).

This is not the time to be humble. Describe your experiences in a way that makes you appear to be an extremely mature, qualified, and responsible individual. Do not fabricate information on your CV. Pharmacy is a small world, and employers can easily pick up on what is untrue—it may just take one phone call.

Once you have put together a rough draft, have someone review it and critique it for you. He or she can help you sort out what should and should not be on it. (See Appendix A for a sample CV.)

Be sure to print multiple copies of your CV and list of references on bond paper. Cotton is the

Midyear Clinical Meeting

The Meeting

The ASHP MCM is the largest pharmacy and pharmacy student meeting that occurs once a year in December. The location of the midyear varies from year to year. Students may go to the MCM to interview for residencies, jobs, and fellowships. Pharmacists and pharmacy students come to learn more about their practice and to network with professionals in their field. Educational opportunities include workshops, lectures, poster sessions, and roundtable discussions. Most activities are included in the cost of registration with the exception of a few pre-meeting workshops.

The exhibit hall is an interesting part of the MCM experience. This is where the pharmaceutical industry displays and markets its products. It is almost a competition between the companies to see who can come up with the most interesting exhibit for their line of products. Once you register for the meeting, you will begin to receive brochures and pamphlets regarding these exhibit booths and educational sessions.

Networking

The MCM is also a good place to meet students from other schools. A student reception is held at the MCM, usually on Sunday evening. This is also where the winners of the Clinical Skills Competition are announced. If you are interested in residencies in a particular city, meeting fellow pharmacy students from that area can be quite helpful. It is likely that a few of them have done rotations at that hospital.

The most important thing to remember about the MCM is to enjoy yourself while working hard. Your school of pharmacy may have an evening reception at the MCM. Graduates of your school who are in residency programs may be there to catch up with professors and classmates. They may be able to provide you with an interesting perspective on a residency program since they were trained at your school. There are also receptions offered by the different state societies, and a residency director or prospective employer may invite you to attend. These are great opportunities to get to know other people associated with the residency and the current residents. Do not hound the current residents if you can avoid it. Most of the time they are worn out at the MCM because they are interviewing for positions or residencies too. If you see them at a state society meeting catching up with old friends, it may be wise to just say hello and be on your way.

Keep in mind that during the Residency Showcase you do not schedule times to meet with people. The exhibit booth may be overflowing with interested students. It is, however, a place to be on your best behavior and in your best suit. This will most likely be the first impression the program will have of you, and you want to make a good impression. Although it is an intimidating sight, make your way through and find out what you need to know about the program. Ask the questions you prepared for the programs that you are considering, and make sure you speak with one of the current residents. There will almost always be someone there who can be an invaluable source of information. This is your chance to get more specific information about the program and see what the current residents have to say about the program. It is fine to take short notes while talking to the residents and/or program directors. However, if you do not feel comfortable doing this or are not able to, before going to the next residency booth write down your thoughts or answers to the questions you asked so later you can recall what you learned about the program.

The hardest part is figuring out what makes them different. Since the residency booths can be very crowded and time to speak with current residents and program directors may be limited, the more information you can find out about the program before you get to the showcase, the better. This will allow you to focus your time and energy on programs that appeal to you.

Different programs are scheduled to be in the showcase on different days. Make sure you will be able to go to the showcase on days when the programs you are interested in will be there. This information is available on the ASHP Web site. The site provides detailed information about the programs, discussions, presentations, and posters sessions that will be held at the MCM.

The Residency Showcase should not be confused with PPS. They are completely separate

a new ASHP customer (i.e., have never purchased from ASHP), please allow for a 2-

Post a Resume

If you register online, the PPS web site includes screens that walk you through the process to post your mini-resume with tips for completing each section. Drop-down menus will be provided to indicate the job title you are seeking, preferred practice area and location, start date, and other details. The drop down selections represent searchable fields employers will use to find your listing online. The same information is also requested on the mail/fax PPS registration form.

Space is also provided to describe the school you are attending/residency/current position, prior work experience, pharmacy affiliations (e.g., fraternities, societies), and special skills such as languages or computer expertise. This section is limited to approximately 50 words. The PPS web site will merge the drop-down selections and 50-word description to create your mini-resume for prospective employers. Once you post your resume online (or ASHP posts your resume), be sure to review it for accuracy and print a copy for your records. All listings received by October 1 (by mail/fax) and October 15 (by online registration) will be published in an Advance Listings Book for employers (in addition to being posted on the PPS web site). For maximum exposure for your resume, register by the advance deadline.

Search and screen listings.

You can search all available jobs/residencies by type, practice area, location, salary, and other criteria in early November on the PPS web site. Listings will be continuously

interest in interviewing. Message forms will be available on the PPS web site. We strongly recommend that you address message forms to employers, attach your resume, and bring them to the meeting.

Important PPS Dates

October 1	Deadline for advance mail/fax PPS registration
October 15	Deadline for advance online PPS registration
	Deadline to edit to PPS listings
	Deadline for PPS cancellation

Residency

Application Process

Applications

Return home and look at all the residency program information you acquired. Carefully decide where you would like to apply and interview. Begin to complete all the application requirements as soon as possible. If you have not yet requested an application, do so now. It may take anywhere from one week to one month to get the application in the mail. Most programs have application deadlines between December 27th and January 31st. This does not leave you much time after the MCM, so there are some things you should try to do before you leave for the MCM.

Recommendation Letters

If you have not already been talking to a pharmacy professor about your plans, consider doing that now. The more a professor knows about you and what you want to do after pharmacy school, the better his or her recommendation letter will be. It cannot be emphasized enough that you should give your professors and employers plenty of time to write your recommendation letters—try to give at least one month's notice before letters are due. When providing materials for professors or employers that will be writing letters, make sure everything is in one envelope with your name on it so that letters will be less likely to be lost. Give them 1) a list of the programs you are applying to, 2) clear instructions about who to address the letter to and where to send it, and 3) addressed stamped envelopes for the letters to be mailed to each residency program. Including a copy of your CV with the paperwork you give to these people is extremely helpful to those who have to write your letters. You should also try to discuss your career goals with them, your reasons for selecting the residency programs you are going to apply to, your strengths and weaknesses, and any other information that will help them complete your letter(s) of recommendation. Letters that give specific examples of accomplishments of the applicant have much more of an impact than letters that state attributes very generally.

Be careful whom you choose to write the letters. If a professor you are considering is someone who consistently returns exams very late, think about how that person may handle your recommendation letter. Some professors or employers will say positive things about an applicant

Some places may ask that you provide a recommendation letter from an employer. Ensure the person knows what is expected. Professors have probably written several recommendation letters; employers may not have had to write as many and may be unfamiliar with the length and format of a letter. There are various standard recommendation forms floating around that you may be tempted to use to save your professors time and energy. If you really care about your

Some programs may require only a letter of intent or personal statement, both, or a variation of

only be presented to residents if at all. Do not attempt to ask all of these questions at the MCM. Ask the most crucial question for the limited amount of time you have at the MCM and the remainder during your interview.

After your interview, be sure to write a formal and succinct thank you note. Thank you notes for the residents are a nice touch. You should mail them as soon as possible and before the deadline for submitting match results.

Presentations

Although it is unusual for a pharmacy practice residency (not for a specialty) to require presentations during an interview, a few programs have asked applicants to give a presentation. Before you decide on a topic or format, ask the program director what is expected in the presentation. Find out what type of topic is preferred, whether AV equipment is required and if it will be provided, who your audience will be (e.g., pharmacists, physicians, students), and the desired length of your presentation. Do not be afraid to ask questions.

Quizzes

Other programs have been known to give a small quiz during the interview. This is not something to be too concerned about since there will be no way to study for it. Of all possible scenarios during an interview, the one disliked the most by applicants is being asked cl..4(is)-88.6(l..4vb)-12.7(8.6(n.6(is)s)-88.d

- ◆ Do you have any ideas for your major project?
- ◆ Scenario: You are the only pharmacist in the pharmacy. On the phone is a nurse wanting to know dosing for a dopamine drip for a patient who is crashing. At the window is a doctor who is ranting and raving about an enoxaparin order that wasn't approved. On the other line is a nurse calling about a patient with a vancomycin level of 15. In what order do you handle these problems?
- ◆ Would relocating be a problem?
- ◆ If you were alone on a desert island, what three medications would you bring with you?
- ◆ What makes you better for this position than other candidates?
- ◆ What do you anticipate a typical day in your career to be like?
- ◆ What qualities do you expect in a preceptor?
- ◆ Choose a topic relating to clinical pharmacy, and we'll ask you a question about it.
- ◆ Do you have any publications?

Questions to ask

In general

- ◆ How easy is it to get a desired elective rotation?
- ◆ How many hours of staffing are required per week/ month?
- ◆ Are residents ever pulled from clinical areas to staff?
- ◆ Can rotations be changed during the year?
- ◆ How is the topic of the residency project decided?
- ◆ Is code team participation required or optional?
- ◆ Are there any opportunities to teach or precept pharmacy students?
- ◆ Are there any opportunities to publish?
- ◆ Is it possible to do a rotation at another institution?
- ◆ How do you think this year's residents are doing?
- ◆ What are the current residents' research projects?
- ◆ What are the strengths/weaknesses of the program?
- ◆ What will participation in the program do for me?
- ◆ How are residents evaluated during the program?
- ◆ Do the pharmacy faculty ever work with the medical faculty on research projects?
- ◆ How would you describe the relationship between the distributional pharmacists and the "clinical" pharmacists or residents?
- ◆ Are residents given the opportunity to attend national pharmacy meetings? (e.g., ASHP, APhA, ACCP, SCCM, etc.) If so, is funding available?
- ◆ Do pharmacists or residents ever give lectures to medical housestaff?
- ◆ Can residents select their own ambulatory clinic? What clinics are available?
- ◆ Is it possible to tailor the structure of the residency to meet my interests (infectious disease, pediatrics, etc.)?

Residents only

- ◆ What time do you get to work on average?
- ◆ Have you had any problems working with the residency director/preceptor?
- ◆ Do you ever spend time with the other residents outside of work?

- ◆ What do you plan to do next year?
- ◆ What would you change about this residency program?
- ◆

R residency

Matching Program

The Process

This is one of the most confusing components of the residency process. The Match applies only to ASHP- accredited pharmacy practice residencies. The matching process is administered by

program rankings. If this is to be done, the applicants must request a Couples Rank Order List to replace the original Rank Order List.

Sending in the Rank Order List

So, it is early March and your Match Rank Order Lists are due. If you mail your Rank Order List to the NMS, be sure to include enough postage to get to Canada for all correspondence with NMS.

By now you should have received in the mail your code number and your confidential personal identifier. Your code number should be made available to all programs with which you are interviewing. You can put this code number in your letter of intent, or you can let them know

during the interview. They also receive a list of all app12.3(p) aehorsto the(Matc)-8.2(h)-12.3()-12(w)913(i)-9(th(t)-13.5

rat(this)-7.6(tiem)-25(e)03(,)-12(y)16.5(o)-1173(u)-12(ial)-832(l)3.7(bo)-1173(e)03(e i)-832(n)01.3(s)-7.6tM)-09(r)15.9
o y(r)-6.1()-12Lis,()-24.1(y)1635(o)-1193(is)-7.8heo plll(h)-1193hem wi(r)-6.1(s)-7.8(l)-8.5ao02.1tder)-6.1(t)-13.1(o)
yney a r ea(s)-7.8nkd(to c)-789ao02.1(l)-8.5(l)352(N)-1467(M)-012(B)-95((to c)-789(o)-1193n f)-1315iro15.9e(tr)
p12.36pe aep12.36p(e)-061er sn l(i)-6.2dbintfteer ha.Math Resoul78.2(t)-120(s)J19.6 0 0 19.6 9-0.4 452.48639 r
mlg.oaso iweersh o
o w w te (lef)-1320(t)-120ber s 1.2(r)-6.2en0[co 1.2lf o (y)1621(o)-13(, (le)-12 f)-1320them now91
o084(r)1581l tolh th(now9181lth)-1163ohp12y a r lf s o084f. thyof ral y (s)-755ho(lh)-0, do
rea(c)-7.9ou f(r)-6.2-o1580emn()-12(lett)-1320ber ad pur (y)1621((u)-12d(i)-8.6d nou)-12t geuy fi s
e tMatcyon to u re. Reemeer tat y a ro tate
y wn (d)-12 togn)-1981o cii pur and(asc)-779 kw yeo en p12.34pe aep12.3.4(e)-042er sn l(i)
f (ii)(d)-12pos)-1255(tf)-1388((o)-1063ns)-1255 w8981(i)(il)-12behem a(deao)-1063viao(l to n 19.258 (s)-8.54ts iild
a(deavc)-7.9a(i)-8.6lao tss3(h)-7.9.t purr shavcean y
ss a(e)-02[s]-813(s)-813 to tdeolhis olf unemapeplh cs plh cs ail30.2gnn(e)-02[ur a(e)-02[s]-813(s)-813 to td
ap(l)-1255(c)-789antis ido em ts p12.324oen ws (s)-813eeem ea()-14.1em e(s)-813eaer rp12.
e f i s s eba(s)-823i(s)-823)r. uail3015(em)-2464oes.li(k)5695((s)-823tt)-65(ii)839(al3015ii)839(neu)-1.33(d(t)
tf tde ert i(o)-103(n)-12(iii)839(al3015(bde)-1233(o f)-1355 f)-1355(e)-030er)-653(d(dL r)-355(e)-033(cs)823(e)-03

C onclusion

A tremendous opportunity awaits students that are willing to put in the time and effort needed to

Appendix A—Curriculum Vitae

Random L. Student

December 1997

835 W. Orioles St.
Pharma, MD 21201
(410) 555-5555
random@pharm.edu

923 W. Rain Street
Seattle, WA 98112
(206) 555-5555

Education

Doctor of Pharmacy
(anticipated May 1998)

University of Pharma School of Pharmacy

Bachelor of Arts

Psychology; University of Anystate 1993

Professional Experience

Big Cheese Hospital, Compound, MD

Honors and Awards

University of Pharma

Phi Lambda Sigma leadership honor society	October 1997
ASHP student leadership award	February 1997
Rho Chi recognition certificate for scholastic achievement	May 1997
University of Pharma School of Pharmacy leadership award	May 1997
State of Pharma Senatorial Scholarship for academic achievement	September 1995

University of Anystate

Hughes undergraduate biological science education grant	September 1992
Undergraduate research opportunity program grant	September 1992

Publications/ Poster Presentations/ Senior Thesis

Watkins LR, Wiertelak EP, Goehler LE, Student RL, Martin D, Maier SF. Characterization of cytokine-induced hyperalgesia. *Brain Research* 1994;654(1): 15–26.

Wiertelak EP, Student RL, Furness L, Mooney-Heiberger K, Mayr T, Maier SF, Watkins LR. Acute and conditioned hyperalgesic responses to illness. *Pain* 1994; 56(2): 227–34.

Watkins LR, Wiertelak, Goehler LE, Mooney Heiberger K, Martinez J, Furness L, Student RL, Maier SF. Neurocircuitry of illness-induced hyperalgesia. *Brain Research* 1994; 639(2): 283–99.

Watkins LR, Wiertelak EP, Furness L, Student RL, Martinez J, Maier SF. Neurocircuitry of centrifugal pain facilitory systems: anti-analgesia and hyperalgesia. Poster presentation. Society for Neuroscience annual meeting 1993.

LPS-induced hyperalgesia measured by both the tail-flick and formalin tests of pain sensitivity. *Senior Thesis*. University of Anystate, department of behavioral neuroscience, 1993.

Research Experience

University of Anystate, department of psychology behavioral neuroscience laboratory

Assisted with development of a rodent model for illness induced hyperalgesia.

Performed rodent spinal cord and brain dissection and other histology techniques for neurocircuitry studies. Conducted rodent conditioning sessions for studies of antianalgesia and conditioned analgesia. Assisted with rodent stereotaxic surgeries and performed post-op care duties. Trained other undergrads

10.5()0.7(t)-6.8(steo)15()In ag rodeh6(ilTw[Br)e

Extracurricular Activities

American Society of Health-System Pharmacists, University of Pharma School of Pharmacy, student chapter founding member and president	Spring 1996–Spring 1997
American Society of Health-System Pharmacists, University of Pharma School of Pharmacy student liaison	Fall 1996–Spring 1997
Alpha Zeta Omega pharmacy fraternity member	Fall 1996–Present
Asthma & Allergy foundation of America Asthma care training instructor for children and their parents	Spring 1997

Presentations

New treatment options for Parkinson's disease Geriatric clinic in-service—Veterans Administration Medical Center	November 1997
Idiopathic thrombocytopenic purpura Pharmacy staff in-service—University Hospital	October 1997
Pathophysiology and treatment of sickle cell disease in adolescent patients Pharmacy staff in-service—University Hospital	October 1997

Experiential Rotations

Institutional pharmacy Inpatient pharmacy, <i>State Psychiatric Hospital</i>	Aug–Sept 1996 Janice Keys, R.Ph.
Community pharmacy <i>Small's pharmacy</i>	July–Aug 1997 Jonathan Pestle, R.Ph.
Community clinical pharmacy <i>Massive Discount Drug</i>	Aug–Sept 1997 Anita Vacation, R.Ph.
Institutional clinical pharmacy Pediatric pharmacy, <i>University Hospital</i>	Sept–Oct 1997 Samantha Smiles, Pharm.D. BCPS
Community clinical pharmacy Outpatient pharmacy, <i>University Hospital</i>	Oct–Nov 1997 Douglas R. Free, Pharm.D.
Outpatient clinic Anticoagulation clinic, <i>Catholic Hospital</i>	Aug–Oct 1997 Vivian Kay, Pharm.D.
Outpatient clinic Geriatric clinic, <i>VA Medical Center</i>	Oct–Dec 1997 Michael M. Mental, Pharm.D. BCPS
Elective pharmacy experience	Nov–Dec 1997

Pending Rotations

Institutional clinical pharmacy Feb–Mar 1998
Solid organ transplant unit, *Research Hospital* Courtney Liver, Pharm.D.

Elective pharmacy experience Mar–Apr 1998
Leukemia/BMT, *University Hospital* Denise Loveancare, Pharm.D.

Elective pharmacy experience Apr–May 1998
Poison Center Ira Rinsewell, Pharm.D.

Elective pharmacy experience May–June 1998
Drug Information Service, *University Hospital* Fred Depeedearr, Pharm.D. BCPS

Professional Organizations

American Society of Health-System Pharmacists 1996–Present
Maryland Society of Health-System Pharmacists 1996–Present
Academy of Students of Pharmacy 1994–1995
Anystate Pharmaceutical Association 1994–1995

References

William Advisor, Pharm.D.
Allied Health Building
100 Drug St.
Pharma, MD 11111
(M)15.5(a)-0.5(r)-17.1(y,eTc0.0076 Tw())5(ude555)w 10.1(t)- mTw()ude556S.7(u)9.(v)9(e)7ie o 486.36.7(m

Appendix B—Letter of Intent

835 West Orioles St.
Pharma, MD 21201
January 2, 1998

Steven L. Residency, M.S., R.Ph., FASHP
Director, Pharmacy Services
University Medical Center
1501 North Compounding Avenue

Appendix C—Personal Statement

While writing my curriculum vitae, I thought about what type of person would be

