Summer Breaks Offer CCP Students Opportunity to Expand Horizons

Our Chicago College of Pharmacy (CCP) students have summer breaks after their first and second years in the curriculum. Many students take advantage of this time to participate in internships or research opportunities to maximize their real world pharmacy experiences. This helps guide them when choosing classroom and rotation electives later in the curriculum and prepares them to make informed career decisions.

We have featured a few of the numerous CCP students who participated in summer internship opportunities last summer, after their PS-I and PS-II years (their current year in school is noted). Here, they talk about how their experiences are impacting their future pharmacy career paths and professional growth.

Dalila Masic, PS-III
Captain James A. Lovell Federal Health Care Center
North Chicago, IL

What activities did you do in your internship?
As a pharmacy student I went on rounds with the medical team in the intensive care unit (ICU); I had ambulatory care appointments with patients to manage their diabetes and anticoagulation medications; and I collected data on an adverse event that was reported to MedWatch to present to the Pharmacy and Therapeutics committee. My favorite experience was rounding in the ICU because I realized how vital pharmacists are to the healthcare team. All of the medication questions from the attending physicians were directed to me, so it was a great learning opportunity.

What did you enjoy most about your opportunity?
I enjoyed learning more about clinical pharmacy, and the opportunity to apply all of the clinical knowledge that I had gained throughout my PS-II year to actual patients. I was surprised how many interventions clinical pharmacists made in both the critical care setting and the ambulatory care setting. In the critical care setting, pharmacists were the medication experts on the team and participated in discharge counseling. In the ambulatory care setting, pharmacists are considered mid-level practitioners so they are able to meet with patients on an appointment-basis and change medication therapies based on a patient’s response without consulting the primary care physician. This experience made me realize that I want to pursue a residency and become a clinical pharmacist.

How did this experience differ from your rotation experiences?
This experience differed from my Introductory Pharmacy Practice Experience (IPPE) rotations because it was much more hands-on. I was able to work with patients along with fourth-year pharmacy students who were on their APPE rotations. It felt as if it was a 10-week Advanced Pharmacy Practice Experience (APPE) rotation for me.

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**A Student’s Perspective: How I Spent My Summer Vacation**

*By Greg Hakala, Third-year Pharmacy Student*

The best part of the pharmacy school curriculum is you still get to enjoy two summer breaks from coursework. Many students choose to do internships, research, or work full-time. There are many options to broaden your horizons. For my summer vacation, I decided to finally take the trip I have been thinking about since I was a child. I went backpacking across 10 countries in Europe.

During my time there, I witnessed many different cultures and types of healthcare. I saw everything from the outdated hospitals in Hungary, to the free healthcare in France. When I was in Sweden, I went to a pharmacy for some quick headache relief. Within a few minutes, there was a pharmacist in the aisle asking me what I was looking for and how he could help. He helped me find the best treatment for a small headache and provided all the counseling points that were needed.

Whether you want to spend your summer gaining professional pharmacy experience or exploring a different culture, the choice is yours. Either way, you are investing in your future.

I would recommend a pharmacy internship or job to anyone who desires more practical experience. Not only will you gain insights on how pharmacies and/or managers perform, but it will give you an idea on which career direction in pharmacy you want to pursue. With all the different paths available, it is critical to narrow down your choices before you graduate. Doing any pharmacy-related activity over the summer will help you determine what you enjoy, build your knowledge, add to your experiences, and perhaps help you establish relationships with people who can assist you with getting a job once you are a pharmacist.

If you decide to finally get real-world pharmacy experience with an internship, or take a trip of a lifetime, just make sure you choose what makes you happy and has a hand in rounding out your resume.

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**Summer Internships**

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Christina Kim, PS-III
NorthShore Health Care – Skokie Hospital, Skokie, IL

**How did you achieve this opportunity?**

I found out about this internship on the hospital’s website and through a friend, who completed this internship the year before I did. The application process included a statement of interest, a resume, a transcript, and three school/professional references. After application packages were screened, selected candidates were required to go through a telephone interview process.

**What activities did you do as part of your internship?**

I mainly worked with my manager pharmacist on learning the roles of a clinical pharmacist. I spent much of my time working on patient medication planning notes, as well as conducting warfarin counseling and medication reconciliations. At times, I worked with other pharmacists on special projects that needed to be completed. What I enjoyed most about this internship was that I had the opportunity to experience areas such as IV compounding, critical care, the neo-natal intensive care unit, the operating room pharmacy, and oncology. My manager allowed me to explore different areas and expand my horizons.

**How did this experience differ from your curricular rotation experiences?**

Since I had just finished my second year in pharmacy school, I did not really have any clinical rotation experiences. At first, the internship seemed very overwhelming because I was not very knowledgeable in using their system and looking up treatment guidelines. However, I challenged myself to ask questions. I learned to look up information in an efficient manner, and without a doubt, I feel that this internship helped me during my third-year clinical rotations, which I just completed. Although I am not 100% sure as to what area of pharmacy I would like to pursue, this internship allowed me to realize that there are many careers in pharmacy available and that the clinical roles of a pharmacist are continuously expanding.

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Jamie Nelson, PS-II
Jewel/Osco (Albertsons) Pharmacy
Corporate office in Franklin Park, IL; pharmacy in Minooka, IL

Tell us what you did during your internship.
During the internship, I was able to attend a diabetes education class, as well as do patient screenings, such as blood pressure, blood glucose, and cholesterol screenings. I also practiced drug utilization reviews with the pharmacists. My favorite was performing health screenings, because it gave me hands-on experience with patients. I enjoyed being able to perform pharmacist duties. It was nice to have more responsibilities than the technicians.

What surprised you?
I was surprised how many people declined free health services. During the internship, I tried to recruit people to get their shingles and pneumonia vaccines, attend free diabetes education classes, and attend free comprehensive medication reviews. Most people told me no.

How did this experience help to shape your pharmacy career aspirations?
This experience made me realize that community pharmacists are able to do much more than check prescriptions. There are a lot of opportunities for patient education and clinical services in the community setting. Also, because community pharmacy is the most easily accessible to patients, there is a lot of potential for getting patients more involved in managing their health.

Tina Lertharakul
Takeda Pharmaceuticals
Deerfield, IL

How did you achieve this opportunity?
I was interested in learning more about the pharmaceutical industry, and I know there are several top-ranked pharmaceutical companies in Illinois. The College Relations Summer Internship Program at Takeda Pharmaceuticals offers several positions for pharmacy students in various departments. The application is done online; there are about 25-30 positions, and about 10 positions are available for pharmacy students. It is a fairly competitive application process, which can take up to 3-4 months before getting an offer letter. I submitted a cover letter and CV online in December, received a video interview in January, then did a phone interview, and got offered a position in March.

How did this experience differ from your rotation experiences?
This summer internship is 40 hours per week for 12 weeks. I was put on two main projects and helped the team on various assignments. Each day was always something different, which made the internship even more interesting. A typical day for me consisted of meetings (teleconference and in-person), attending department discovery sessions, one-on-one meetings with managers and/or directors from various departments, as well as working on projects.

What surprised you?
Not only did I learn about the different components within industry and the various roles that pharmacists can play in drug development processes, I definitely learned a lot about myself and the goals I would like to achieve upon graduation. My department and managers incorporated me as part of the team, and I was never once treated like an intern throughout the entire program. I know in school we’re taught about the importance of communication and working in a team environment. These two skills are so prevalent and crucial in an industry setting. I was constantly in meetings, not only within the company but also with representatives from other places within the U.S. and globally as well (i.e. UK and Japan offices). This internship definitely refined my communication skills.

Jan Kum, PS-III
Amgen
Thousand Oaks, CA

What did you enjoy most about your opportunity?
I had an opportunity to learn about the pharmaceutical industry, a sector that I am not well-versed in. I was exposed to all facets of the cross-functional work assignments involved for drugs to gain FDA approval. Because we did not work directly with patients, we had a completely different environment than from our rotation experiences in community pharmacies or hospitals.

What surprised you?
What surprised me most was how much my managers valued the interns. Not only did they admire our fresh outlook, but also depended on us to bring upon novel changes. I was assigned important projects and deliverables to meet throughout the summer, and I loved how I was continually supported. The senior manager in my department blocked off an hour of her schedule every day to teach me something new about the industry sector whether it pertained to our department or not.

What advice would you give to pharmacy students interested in summer internships?
Be proactive, apply early, and when invited for an interview, be sure to prepare by learning about the company in detail, especially current news.
Student Research Poster Presentations

Numerous CCP students participate in research opportunities with faculty members. The result of some of their work is reflected in posters that were accepted for display at the recent American Society of Health-System Pharmacists (ASHP) Clinical Midyear Meeting in New Orleans, LA. Listed below is the collection of posters presented by students who lead these research investigations under the mentorship of various Midwestern University faculty members. CCP students are noted in bold.

Aiwohi, C.; Loukitcheva, A.; Gilchrist, A.; O'Donnell, J.N.; Rhodes, N.J.; Scheetz, M.; Wang, S. "Local prevalence of the cefazolin inoculum effect on methicillin-susceptible staphylococcus aureus (MSSA) isolates from four major Chicago medical institutions."


Catovic, L.; Tran, C.; Gener, J.; O'Donnell, J.N.; Scheetz, M. "Impact of targeted antimicrobial stewardship interventions using rapid laboratory diagnostics."


Day, J.; O'Donnell, J.N.; Rhodes, N.J.; Miglis, C.; Scheetz, M. "Pharmacokinetics of oral fosfomycin during extended treatment courses."

Desai, D.; Cho, H.; McLaughlin, M. "Safety and tolerability of high dose protease inhibitors (atazanavir/ritonavir and lopinavir/ritonavir) in pregnant women with human immunodeficiency virus."

Hamoud, S.; Masic, I.; Kalfayan, N.; Gorgi, N.; McLaughlin, M. "Analysis of antiretroviral regimens and reported method of contraception for HIV+ women."


Harrison, H.; Lee, J.; Wang, S. "Evaluation of treating asymptomatic bacteriuria in a large academic medical center: a retrospective study."

Hutson, C.; Chaney, W. (Loyola) "Safety and efficacy of protocolized care and neostigmine continuous infusion for colonic ileus."


Karin, A.; McLaughlin, M. "Role of pharmacy students on an Infectious Diseases Center Quality Committee."

Katsoulis, G.; Polisetty, R. "Impact of procalcitonin testing on reducing antimicrobial use in lower respiratory tract infection patients in a community hospital."

Kim, C.; Mazan, J.; Quinones-Boex, A. "Comparison of community and hospital pharmacists’ attitudes and behaviors on medication error disclosure."


Lee, M.; DiGrazia, L. "Antifungal prophylaxis consideration in patients being treated with blinatumomab for Philadelphia chromosome-negative relapsed or refractory b-cell acute lymphoblastic leukemia: a case report."

Liu, J.; Chiu, B.; Wang, S.; Rhodes, N. J. "Evaluation of clinical outcomes among patients with Gram negative bloodstream infections (GNBSIs) due to Enterobacteriaceae and non-Enterobacteriaceae according to cefepime SDD MIC determination."

Martinez, E.; Scardina, T. (Loyola) "Clostridium difficile infection (CDI) in bone marrow transplant recipients."

Masic, D.; Gettig, J.; McLaughlin, M. "Analysis of descriptive themes and errors in letters of recommendation for postgraduate year one (PGY-1) pharmacy residency candidates."

Masic, I.; McLaughlin, M. "Appropriateness of NRTI dosing during CVVH at a large academic center."

Musaraj, G.; Liu, J.; Rhodes, N. J.; Scheetz, M. "Exploration of cefepime-associated neurotoxicity (CAN) and downstream clinical outcomes."


Nguyen, P.; Komperda, K.; Arellano, R. "Dyslipidemia guideline comparison: a retrospective chart review."

Nguyen, R.; Patel, P.; McLaughlin, M. "Unavailability of outpatient medications: trends and management."


Oriakhil, E.; Wenzel, R. (Presence St. Joseph Hospital) "Intravenous diphenhydramine in the treatment of acute migraine."

Patel, N.; McLaughlin, M. "Reasons for use of atovaquone in a kidney transplant population."

Patel, R.; Arif, S.A.; Harpe, S. "Effects of Providing Medication Reconciliation Services on Pharmacy Student Knowledge and Attitudes at a Large Academic Medical Center."


Timmerman, M.; DiGrazia, L.; Seddon, A.; Gilchrist, A. "oral lorazepam for seizure prophylaxis in adult patients treated with high dose intravenous busulfan before hematopoietic stem cell transplantation: A retrospective study."


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Dual Acceptance Program (DAP) applications due - February 15, 2016

For any questions relating to your application and/or admission, please call the Midwestern University Office of Admissions at 800/458-6253 or admisill@midwestern.edu.