

# Shedding light on five common grad school misconceptions

By Nicholas E. Hagemeyer, PharmD, PhD

What's the first word that comes to mind when you hear the words "post-graduate training"? I am guessing a majority of you would say "residencies."

When I was a student pharmacist, I would have said the same. During my advanced pharmacy practice experiences, I developed a desire to further my education, but I wasn't convinced that a residency was the best fit. After some serious mentoring by one faculty role model, I decided to pursue graduate school.

That might sound like torture, and it did to me, too, in some regards. I essentially had to take someone else's word that this path would take me to where I wanted to go. I am grateful that my mentor was right!

The multiple types of postgraduate training available to PharmD earners could be considered a blessing and a curse. It is great to have many opportunities, but it is also somewhat paralyzing to have to choose between several paths that can ultimately lead to the same endpoint. For example, you could choose to earn an MS, a PhD, an MBA, or an MPH, or you could complete a residency or fellowship—and still obtain a faculty position in a school or college of pharmacy or a position in an institutional or industrial setting. Wouldn't only one path be easier?

The purpose of this article is to provide perspective regarding five misconceptions of pharmacy graduate school so that you might be better informed connoisseurs of postgraduate training opportunities.

## #1: More of the same

There are definitely more differences than similarities when comparing and contrasting PharmD and graduate school curricula. As a student pharmacist, upon completion of the required coursework and experiential training, you earn the PharmD degree. Graduate school is not as structured. Coursework is required, but usually individualized to each graduate student; courses are chosen to meet specific interests or career goals.

Grad school courses tend to place less focus on evaluation or testing. Rather, courses focus on developing a scientific way of thinking. There are exceptions to this general description of graduate-level coursework, but most courses are more relaxed in terms of grades than courses taken in the PharmD curriculum. The ability of graduate students to succeed in graduate-level courses is usually of little concern. The ability to conduct independent research, however, takes precedence.

Research is the primary focus (but not the only focus—see Misconception #2) of graduate education. Whether you intend to make research the focus of your career or are simply using graduate school as a stepping stone for your career, you will be expected to conduct research while in graduate school. I think it's fair to say that the depths of research are explored in grad school much as the depths of pharmacotherapy are explored in many postgraduate year 2 residency programs.

Research can be one of the most frustrating, yet rewarding, tasks you

undertake in life. It is interesting to be in a situation where you ask a question for which potentially no one knows the answer and exciting to be the individual who finds the answer! Think about a pharmacy topic that is particularly interesting to you. You can conduct research on that topic. The key is finding the topics that interest you to the extent that you can spend a significant amount of time conducting research on those topics and still enjoy them.

In short, the PharmD curriculum and graduate school are very different. The PharmD curriculum provides you with the foundation on which a successful pharmacy practice can be erected with a commitment to lifelong learning. Grad school provides you with opportunities to learn how to think critically, solve problems that perhaps no one has solved before, and conduct independent research.

## #2: It's all bench research

Many students picture research involving chemicals, a bench, and some lab equipment. Indeed, lab research with pharmacologic products is conducted in pharmacy research programs. Many other types of research exist, however.

One of my interests is student pharmacist learning strategies. Therefore, my lab is often the classroom setting. Other researchers use computer databases to conduct research. In that situation, the computer or means of accessing the data is the lab. Industrial pharmacy researchers might be interested in a new method of manufacturing a tablet. The laboratory would therefore be the setting in which the mechanisms exist to manufacture the tablet.

You can see from just a few examples that research has many different forms and takes place in many different settings. Bench research does exist, but

a dislike for this type of research is not reason enough to reject all research-related careers. I made this mistake early in pharmacy school. Fortunately, a pharmacy faculty member reached out to me and shed light on my misconception of research. Research areas are even broader than pharmacy practice areas.

### #3: Research is boring

Research has an associated stigma that makes many students cringe. This is unfortunate given that the profession itself is built on the foundation of research that has been conducted through the years. Research improves patient care, outcomes, and student pharmacist learning; informs policy; and serves to better the profession in many additional ways.

The misconception that all research is boring indicates a lack of understanding. I think it is safe to say that every student pharmacist encounters some subject, topic, or patient that is of particular interest. What many fail to realize is that they can likely positively influence and contribute to that area of interest through conducting research. My frustration now is that I have too many areas of interest and too little time to learn more about each area.

I must confess that I definitely consider some research to be boring; whether my perception is one of disinterest or just plain ignorance is questionable. Fortunately, other researchers enjoy topics that I consider boring. Those researchers probably consider my areas of interest boring. Misconception #3 is an overstatement that is accepted as truth by many student pharmacists. Some research may be perceived as boring, but it is extremely likely that when you stop to consider the broad range of topics that can be researched, you can find a topic of interest. Though difficult for

some to admit, research can be invigorating!

### #4: What about patient care?

The primary purpose of the profession is the provision of patient care. Often a disconnect is perceived between research and patient care, and for good reason. Bridging research and patient care is difficult.

Yet patient care can be provided both directly and indirectly. Researchers are involved in both types of patient care. Clinical researchers may directly interact with patients on a daily basis. The pharmacologist focused on drug development may have no direct interaction with patients, but may develop a novel medication that improves or saves the lives of many patients.

The important point is that all research should have the primary focus of improving patient care. While not all researchers interact directly with patients, their efforts still advance patient care.

### #5: Grad school delays life

The days, months, and years will pass by whether you're pursuing graduate study or working in a practice setting. Therefore, if you define life in terms of time, you can't delay it. I really struggled with this concept.

I had a sense that I had been delaying life while in pharmacy school. By no means did I want to continue delaying life by pursuing graduate school. Often a life event can change one's perception of reality. My kids changed that perspective for me. I was forced to come to an understanding that I'm a dad no matter where I work or what type of education I'm pursuing.

I haven't delayed life whatsoever to complete graduate school. Delaying life is not possible. Delaying enjoyment of some of the finer things in life may result from pursuing graduate educa-

tion; however, graduate school might also give you the perspective to better define what those finer things in life actually are.

### Gather opinions

My goal is not to persuade every one of you to pursue graduate school. My goal is to give you a clearer picture of graduate education. If you have additional questions about graduate school, I encourage you to seek out those individuals at your institution and beyond who have completed graduate school. Gather a variety of thoughts and opinions before making any career decisions.

Reflect on what you want your future profession to be. Where will you be most able to help others, whether patients, students, health professionals, or some other group of individuals? Conduct some research regarding pharmacy career paths that may be less traveled, including careers resulting from graduate education.

At a minimum, you will learn more about the profession you have chosen. But perhaps you will find your niche—the path that best allows you to use your skills and talents to better your profession, help others, and find fulfillment in your work. That is my desire for each of you.



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