



# Soar ever higher with a pharmaceutical industry fellowship

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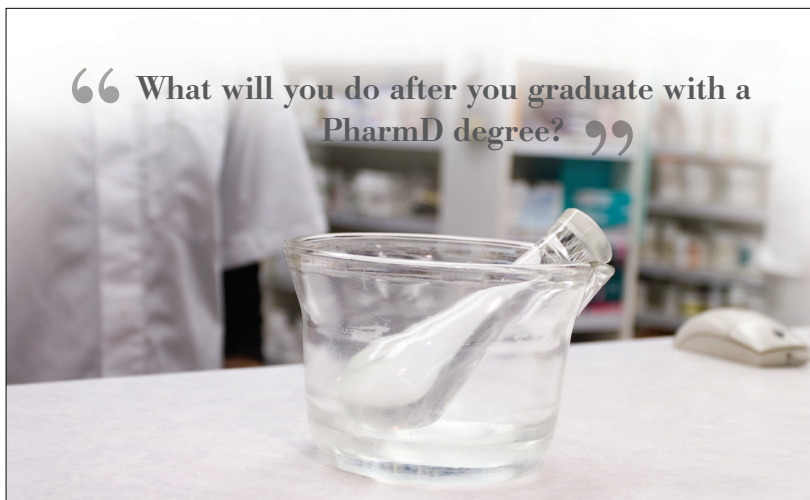
What will you do after you graduate with a PharmD degree? This question is often posed to student pharmacists throughout their academic careers, and with the endless opportunities available, it is no wonder that they often struggle to make a decision.

Postdoctoral training programs, such as industry-based fellowships, offer an exciting and innovative avenue to a nontraditional career path for pharmacists. With the advent of the PharmD degree, many areas within pharmaceutical industry value the clinical knowledge and expertise of pharmacists. A career in the industry can offer an array of opportunities leading to professional development through a challenging career path. Descriptions of some of these opportunities available to PharmDs are provided below.

## Regulatory affairs

Regulatory affairs is an area of the pharmaceutical industry that impacts all aspects of the drug development process. Clinically trained pharmacists with the ability to apply and communicate clinical information find that this field provides a remarkable opportunity for growth.

Regulatory affairs professionals with knowledge of government regulations and guidelines proactively provide strategic guidance in all stages of a product's life cycle. They pursue worldwide registration of investigational



agents through submission of global New Drug Applications, as well as the global maintenance of approved products. Regulatory affairs professionals serve as the primary liaison between companies and global health authorities and are responsible for organizing and leading interactions between these institutions.

Specifically, they are responsible for planning, coordinating, executing, and completing activities to ensure the safety, efficacy, and cost benefit of a drug, biologic, or device. Therefore, strong analytical, organizational,

communication, leadership, writing, time-management, and presentation skills are important to succeed in this arena.

## Marketing and managed markets

Pharmacists interested in the commercial side of the pharmaceutical industry may wish to consider pursuing a career in marketing or managed markets. Pharmacists can combine their clinical knowledge and analytical skills to provide a unique perspective to a team that is usually composed of colleagues with business-focused backgrounds.

Most marketing teams, with recommendations from other departments, define the overall objectives for a product and are responsible for implementing and executing the strategies to make a pharmaceutical product successful. Some of the day-to-day activities may include working with medical education professionals to develop

appropriate educational programming, working with the sales force to develop promotional tools, and working with regulatory affairs to ensure compliance of messages and tools.

Another area pharmacists may wish to consider is managed markets. The managed markets department plays a pivotal role in helping the marketing team achieve its objectives. Managed markets teams are designed to understand and market to key health care stakeholders like managed-care organizations, integrated health care systems, professional associations, chain

pharmacies, state and federal governments, and group purchasing organizations. The managed markets group also fosters key collaborations between major stakeholders and develops innovative initiatives that demonstrate the value of pharmaceuticals. These teams are frequently designed to work across all therapeutic areas, so PharmD graduates with a breadth of clinical expertise can become valuable members of managed markets teams.

### **Clinical pharmacology and clinical research**

Pharmacists are often inclined to pursue careers within the clinical pharmacology or clinical research departments in pharmaceutical industry. Both of these departments focus on the development of investigational agents and marketed products. These disciplines focus on designing clinical trials to establish the safety and efficacy of medications. Clinical research involves the implementation and coordination of these clinical trials.

Clinical pharmacologists study the effect of administering a new chemical entity (drug) for the first time to humans, as well as its interaction with other drugs or foods, and the effects on the disease state. Clinical pharmacology also involves the characterization of the pharmacokinetic and pharmacodynamic properties of a drug. Due to the extensive training and knowledge possessed by pharmacists, they often serve as a valuable resource for the clinical pharmacology department.

Typical responsibilities for clinical pharmacology and clinical research professionals may include designing studies, developing protocols, selecting study sites, managing the study from beginning to end, participating in data analysis, and writing clinical study reports. A fellowship in either department will provide insights into other departments and an understanding of the overall drug-development process.

### **Medical information**

The medical information profession is a common transition for clinically-trained pharmacists into the pharmaceutical industry. This group functions as an interface for health care professionals (HCPs) and consumers to drug manufacturers and, in certain situations, allows for dissemination of information beyond the prescribing information. Typical responsibilities of a medical information specialist include creating and maintaining the standard responses, handling advanced inquiries from HCPs and consumers, and evaluating medical literature. Pharmacists are an asset to the medical information team due to their inherent understanding of pharmacotherapy and ability to communicate with HCPs on a peer-to-peer basis.

A medical information specialist has endless career progression opportunities. With a solid foundation of product knowledge, they can expand their career and venture into various departments within the pharmaceutical industry. Previous medical information fellows have transitioned into a variety of different areas within the industry, including regulatory affairs, clinical affairs, medical affairs, scientific publications, medical science liaisons, and drug safety.

### **An accelerated pathway into industry**

The clinical training of a PharmD program enables pharmacists to serve as valuable resources within various areas of the pharmaceutical industry. Regardless of this fact, entry into the pharmaceutical industry is often difficult due to lack of industry experience, as well as the high level of expertise of competing candidates. Therefore, a pharmaceutical industry fellowship program may create an accelerated pathway into the pharmaceutical industry.

The Rutgers Pharmaceutical Industry Fellowship Program, a nationally recognized and established program, offers unique opportunities in various clinical and commercial areas of interest in the

pharmaceutical industry. These fellowships are designed to identify practice opportunities for pharmacists within the pharmaceutical industry while providing training within different departments of interest.

The program has grown exponentially since its inception 22 years ago. This growth has been driven by the addition of new company partners and the increasing demand for clinically trained pharmacists in the pharmaceutical industry. The fellowship program has made a significant impact on the role of pharmacists within the pharmaceutical industry. To date, more than 400 alumni of the program practice at more than 40 different companies worldwide, including various pharmaceutical companies, medical communication companies, governmental agencies, and advertising agencies.

The fellowship program is structured to provide a challenging postdoctoral experience through a rigorous hands-on pharmaceutical industry fellowship and an adjunct faculty appointment at the Ernest Mario School of Pharmacy. This competitive program allows the PharmD graduate to gain invaluable experience and pursue an accelerated pathway within the pharmaceutical industry. Soar ever higher to your career in industry with a postgraduate industry-based fellowship program.

To learn more about the Rutgers Pharmaceutical Industry Fellowship Program, including descriptions of other career opportunities, information on company partners, a listing of pharmaceutical industry-based summer internships, and the application process, please visit the Web site at <http://pharmafellows.rutgers.edu>.

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