



Pharmaceutical Industry Essentials (PIE) Elective Course (10) 45–60 Minute Modules

Target Audience:

This course is intended to benefit students and practicing pharmacists who do not, or did not, have access to an industry elective and/or rotation during their academic career and desire to pursue or transition to industry practice.

Course Introduction:

The number of traditional pharmacy practice positions have been stagnant in recent years, and for the first time in the US, student applications and enrollment have declined by approximately 25%. Additionally, research has documented challenges to job satisfaction among traditional pharmacy practitioners within the last decade. Very recent examples of salary and job satisfaction surveys conducted by Pharmacy Times and Drug Topics report very low job satisfaction among traditional pharmacy providers. These surveys reported between 30-50% dissatisfaction and over 30% were so dissatisfied that they were either looking to change careers and/or would not have chosen pharmacy school if they had to choose all over again. This data is very disconcerting and reflects continuing trends during the past decade.

Recently, the Industry Pharmacists Organization (IPhO) conducted a first-of-its-kind industry-focused job satisfaction research study to expand currently available data. IPhO conducted a survey of 343 industry pharmacists in 2021. The survey questions were designed to closely match the recently published pharmacist job satisfaction studies. Among the total surveyed candidates (N=348), nearly 80% of respondents rated their job satisfaction a 6 or 7 on a scale of 1-7. This was double the job satisfaction rates reported in traditional pharmacy practice settings.

Meanwhile, the interest in pursuing a non-traditional professional path has expanded, particularly as such opportunities have increased beyond the realm of community and hospital pharmacies. One such avenue for a pharmacist is a career in the pharmaceutical industry, where knowledge and awareness is increasing for new pharmacy graduates and established pharmacists. This career route allows pharmacists to utilize their clinical knowledge to impact patient health on a broader scale.

While traditional pharmacy practice settings are facing numerous challenges, career opportunities for PharmDs in the pharmaceutical industry have been growing. Reasons for this increase include the growing number of pharmacy school graduates who want to pursue an industry career and the need among industry employers to hire PharmDs with expertise to support product portfolios that often include many complex specialty pharmaceuticals.

The pharmaceutical industry, including all the organizations that support it, offers exciting and professional challenges and opportunities for pharmacist graduates. Consistent with the changing roles of pharmacists in traditional healthcare practice settings, industry has also undergone



significant changes resulting in a growing diversity of positions that are being filled by pharmacists throughout the commercialization process of pharmaceutical products.

This course provides the essential foundation of industry knowledge that is critical for industry candidates to compete for these very competitive industry fellowships and positions. Each module explores various aspects of the pharmaceutical industry, from drug development and regulatory approval to medical affairs, marketing and managed markets strategies. Each functional department will be described and discussed with a focus on the roles, responsibilities, and opportunities for pharmacists to successfully contribute and achieve high levels of professional satisfaction.

References:

National Pharmacist Workforce Studies. American Pharmaceutical Association, National Alliance of State Pharmacy Association, American Association of Colleges of Pharmacy. Reports 2014, 2019, and 2022. <https://www.aacp.org/article/national-pharmacist-workforce-studies>.

2022 Salary and Job Satisfaction Survey Results. (Part 3) Pharmacy Times. March 2023. <https://www.pharmacytimes.com/view/2022-pharmacists-are-moderately-satisfied-with-salary-job-satisfaction-survey-shows-part-3-2022-Pharmacy-Salary-Survey>. Drug Topics.

December 2022. <https://www.drugtopics.com/view/2022-pharmacy-salary-survey#>

Why Pharmacy Workers at CVS and Walgreens are Protesting. New York Times. November 1, 2023.

Amir Chadha PharmDc, 2023; Srayant Gayam, PharmDc 2023, Rutgers University; Jerry Silverman, BS Pharm, Industry Pharmacists Organization. Poster Presentation. American Society of Health-System Pharmacists. Annual Midyear Meeting. December 2021.

Course Delivery Formats:

This industry elective certificate course, Pharmaceutical Industry Essentials (PIE) is offered through (10) 45–60-minute self-study modules. Resources and slide handouts are provided for each module. At the conclusion of the course, participants must complete a 50-question multiple choice post-test and receive a minimum of 70% to receive a Letter of Completion and Digital Badge.

Topic-related questions can be directed to the course instructor throughout the course via e-mail; [coachjerry@industrypharmacist.org]. The certificate course must be completed within one year from the date of registration.

Course Architect and Instructor Biography:

Jerry Silverman, BS Pharm
Senior Consultant, Coach, and Industry Instructor



Jerry Silverman is a highly experienced and inspiring industry professional with a successful record of accomplishments in a wide variety of areas including sales and marketing, training, new product development, and launch commercialization. He has worked in corporate, “big pharma”, and on the “agency-side” over the course of his career, and he continues to be a strong advocate for the value of industry pharmacists, fellows, and students through coaching, mentoring, and teaching.

Mr. Silverman began his industry career with Eli Lilly as a pharmaceutical representative in Rochester, NY where he was responsible for hospital anti-infectives.

Jerry participated in a 3-year leadership development program at the Eli Lilly corporate headquarters. There, he rotated through new product planning, training, and marketing. Upon completing this leadership development program, Jerry was recruited to join Searle in their Cardiovascular Medicines Marketing Group, where he rose to Director and had marketing responsibilities for the “blockbuster” antihypertensive agent, Calan SR.

After 12 years in “big pharma”, Mr. Silverman founded BIMARK Medical Communications where he utilized his extensive experience in pharmaceutical marketing and training to build a successful agency over a twenty-year period.

Mr. Silverman is most proud of his contributions to the professional growth and advancement of industry pharmacists. His company served as an APPE for five schools of pharmacy in the NY/NJ/PA metropolitan area for almost two decades. BIMARK was invited to participate as the first medical communications fellowship to be affiliated with the Rutgers Post-Doctoral Program. Coach Jerry served as a preceptor and mentor to over 300 student pharmacists and PharmD Fellows. Additionally, BIMARK served as the medical communications agency responsible for the national marketing campaign for the Rutgers Pharmaceutical Industry Fellowship Program.

In 2008, Mr. Silverman was honored by the Alliance for Continuing Medical Education (ACME) for his commitment to the training of industry pharmacists.

Jerry continues to devote his time and passion to advocating for industry pharmacy practice by serving on the IPhO leadership committee. Over the past decade, Jerry has held numerous leadership roles including creating the IPhO Coaching Services, leading the development and production of the IPhO Annual Meeting, and supervising the student chapter network.

Course Objectives:

At the completion of this course, participants will be able to:

- Identify the needs, wants, and concerns of key stakeholder constituencies and their relationships that make up and influence the pharmaceutical industry sector, including manufacturers, public and private insurers, governmental regulatory bodies, healthcare providers, patients, and advocacy groups.
- Describe the variety and functions of companies and organizations that support pharmaceutical manufacturers and opportunities for pharmacists’ employment, including



Clinical Development, Regulatory Affairs, Medical Affairs, Field Medical Affairs, HEOR, Pharmacovigilance, Medical Information, Medical Communications, and Marketing.

- List the core functions and responsibilities of professional staff within departments of the pharmaceutical industry that commonly employ pharmacists.
- Recognize how the effects of healthcare management principles by private and public payers have increased the opportunities for pharmacists to have a greater role within the pharmaceutical industry.
- Appreciate the critical skills and professional experiences required to secure an industry fellowship, direct-to-industry entry-level opportunity, or transition to an industry position.

Course Assessment:

The course assessment is a 50-question multiple choice post-test and program evaluation. A 70% minimum score is required to receive a Letter of Completion and Digital Badge.

Topical Outline:

- Course Intro and Overview
- Industry Stakeholders, Structures, and Relationships
- Forces Shaping the Pharmaceutical Industry
- Drug Development Timeline and Signature Activities
- The Role of CROs in the Pharma Industry
- Regulatory Affairs and FDA Labeling
- Regulatory Affairs Promotion and Advertising
- Medical Affairs and Med Strategy
- Field Force Structures and Relationships
- Roles and Responsibilities of Field Medical Liaisons
- Health Economics and Outcomes Research Principles
- Drug Safety and Risk Management (Pharmacovigilance)
- Industry FDA Regulations Governing Scientific Exchange Between Pharma and Providers and Consumers
- Medical Information Resources and Pharmacist Responsibilities
- Developing Publication Plans
- Capabilities and Deliverables of Medical Education and Communications Companies
- Opportunities in Pharmaceutical Marketing and Communications