



# A Review of Major Post-Doctoral Pharmaceutical Industry Programs



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## Introduction

The goal of post-doctoral fellowships/residencies is to provide specialized postgraduate training in a particular discipline. Such is the case for pharmaceutical industry-based postgraduate training programs, which have been available to pharmacists for more than twenty years. Although these programs have grown significantly in size and scope, awareness and understanding of the different offerings remains low. The lack of awareness is compounded by the complexity of evaluating the wide variety of different program options and how they relate to career goals of prospective program candidates. This project compares the major postgraduate fellowship/residency programs that provide pharmaceutical industry-based training, including the Rutgers Post-Doctoral Industry Fellowship Program, the Eli Lilly Visiting Scientist Program, and the various programs offered by GlaxoSmithKline. Some of these programs are structured as University/Industry collaborations and may include an academic component.

## Methods

Program directors from a few of the most established industry fellowship/residency training programs available to PharmDs were surveyed to gather information on the availability and description of positions, application requirements, interview process, promotion, and benefits. Data was collected from the completed surveys was supplemented by information from the respective program websites.

## Rutgers Post-Doctoral Industry Fellowship

- **Design:** To provide specialized training in traditional and non-traditional disciplines within the pharmaceutical industry
- **Length:** 1- & 2-year fellowships
- **Locations:** NJ/NY/CT tristate area
- **Required degree:** PharmD
- **Affiliated Industry Partners:**

Aventis	Ortho Biotech
Berlex Laboratories	Ortho-McNeil
Bimark Medical Communications	Purdue Pharma
Bristol-Myers Squibb	Sankyo Pharma
Hoffman-La Roche	Sanofi-Synthelabo
Novartis	TKL Research

Area of Study	Rutgers	Lilly	GlaxoSmith-Kline
Clinical Research/ Operations*	✓	✓	✓
Clinical Pharmacology	✓		
Regulatory	✓	✓	
Drug Safety & Epidemiology	✓	✓	
Health Outcomes <sup>†</sup>		✓	✓
Marketing	✓	✓	
Market Research	✓		
Consumer Health	✓		
Continuing Medical Education	✓		
Medical Information	✓	✓	✓
Medical Writing	✓		
Medical Affairs	✓		
Medical/Scientific Liaison	✓	✓	
Medical Communication Vendor	✓		

\*Description may vary according to company, includes clinical investigations, clinical operations, clinical research, clinical development and contract clinical research  
<sup>†</sup>Rutgers offers Health Outcomes Fellowships under a different program

## Eli Lilly Visiting Scientist Program

- **Design:** To train professionals for a career in the pharmaceutical industry
- **Length:** 1-year program
- **Locations:** Indianapolis, IN
- **Required degree:** PharmD, MD, Masters, or PhD
- **Affiliated partners:** None

## Interview/Application Process

- All three programs recruit at the ASHP Midyear meeting
- Other program sources of information may include website, pamphlet/brochures, career fairs, presentations and post-graduate showcases
- Programs may request a curriculum vitae or resume, letters of recommendation, transcripts, and/or a letter of intent
- During on-site interviews, the GlaxoSmithKline and Rutgers programs may request that the candidate give a presentation or produce a writing sample
- Eli Lilly's Visiting Scientist program requires all candidates to give a presentation during their on-site interview

Parameter	Rutgers	Lilly	GlaxoSmith-Kline
Year of Inception	1984	1995	1979
# of Program Graduates	~250	~50	150
Current # PharmD Fellows	66	9	9
Employer Partners	Rutgers 12 Companies	Lilly Self-administered	Various 4 Institutions
Location	NJ/NY/CT	IN	NC & PA
Program Duration	1- & 2-year	1-year	1- & 2-year
Participant Designation	Fellow	Visiting Scientist	Fellow or Resident
Prerequisite Degree	PharmD	PharmD, Masters, MD, PhD	PharmD, MD, PhD

## GlaxoSmithKline Fellowship /Residency Program

- **Design:** To prepare residents/fellows for future career opportunities in the pharmaceutical industry, managed care organizations, and/or academia
- **Length:** 1- and 2-year residencies/fellowships
- **Locations:** Philadelphia, PA & Research Triangle Park, NC
- **Required degree:** PharmD, MD, or PhD
- **Affiliated academic partners:**

University of Sciences in Philadelphia College of Pharmacy  
Thomas Jefferson University  
University of North Carolina at Chapel Hill  
Duke University Medical Center

## Conclusions

The Rutgers Post-Doctoral Industry Fellowship program, Eli Lilly Visiting Scientist program, and the various GlaxoSmithKline residencies and fellowships offer unique opportunities for graduates to gain experience in the pharmaceutical industry. These programs differ in their fellowship/residency offerings, locations, program length, and required credentials. All three programs recruit at the ASHP Midyear meeting. The application process may differ among programs, however, all programs require similar application materials. Prospective fellowship/residency candidates should use available information to help identify the program which best fits their overall individual goals.

## References

1. Rutgers web site: <http://rci.rutgers.edu/~ifellows>
2. GlaxoSmithKline web site: [http://www.gsk.com/careers/us-university/university\\_us\\_residencies.htm](http://www.gsk.com/careers/us-university/university_us_residencies.htm)
3. Eli Lilly web site: <http://campuszone.lilly.com/scientist/index.html>
4. Survey results