

# An Analysis of 2015-16 PharmD Industry Fellowships

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## Introduction:

With the complexities in the healthcare environment and the challenges in unmet medical needs, the pharmaceutical industry is increasingly interested in attracting PharmDs among their top talent. Pharmacists are professionally equipped to contribute to the development, commercialization, promotion, and optimal use of medicines. Industry jobs offer PharmDs an opportunity to apply their scientific training, medication expertise, clinical acumen, to impact patient care on a global scale.<sup>1</sup>

The pharmaceutical industry offers fellowship programs for PharmDs, as a training opportunity for their chosen career path. Fellowships range from 1-2 years, and allow PharmDs to immerse and work in certain functional areas under the mentorship of experienced preceptors.<sup>2</sup> Fellowship programs have grown and evolved over the years to mirror the interests of new PharmD graduates and the needs of the industry.

The objective of this annual report is to increase awareness of the dynamics of current 2015-16 fellowship programs and evaluate trends in PharmD Industry Fellowships.

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## Methods:

### *IPhO Directory*

IPhO maintains a comprehensive, proprietary “National Fellows Database” of all PharmD fellows completing industry-focused fellowship programs. The database provided the following information for this report:

1. Fellowship Departments
2. Fellowship Companies
3. Fellow Alma Mater

### *Program Duration*

In order to group the fellowship programs in regards to the program duration, data was collected from multiple sources:

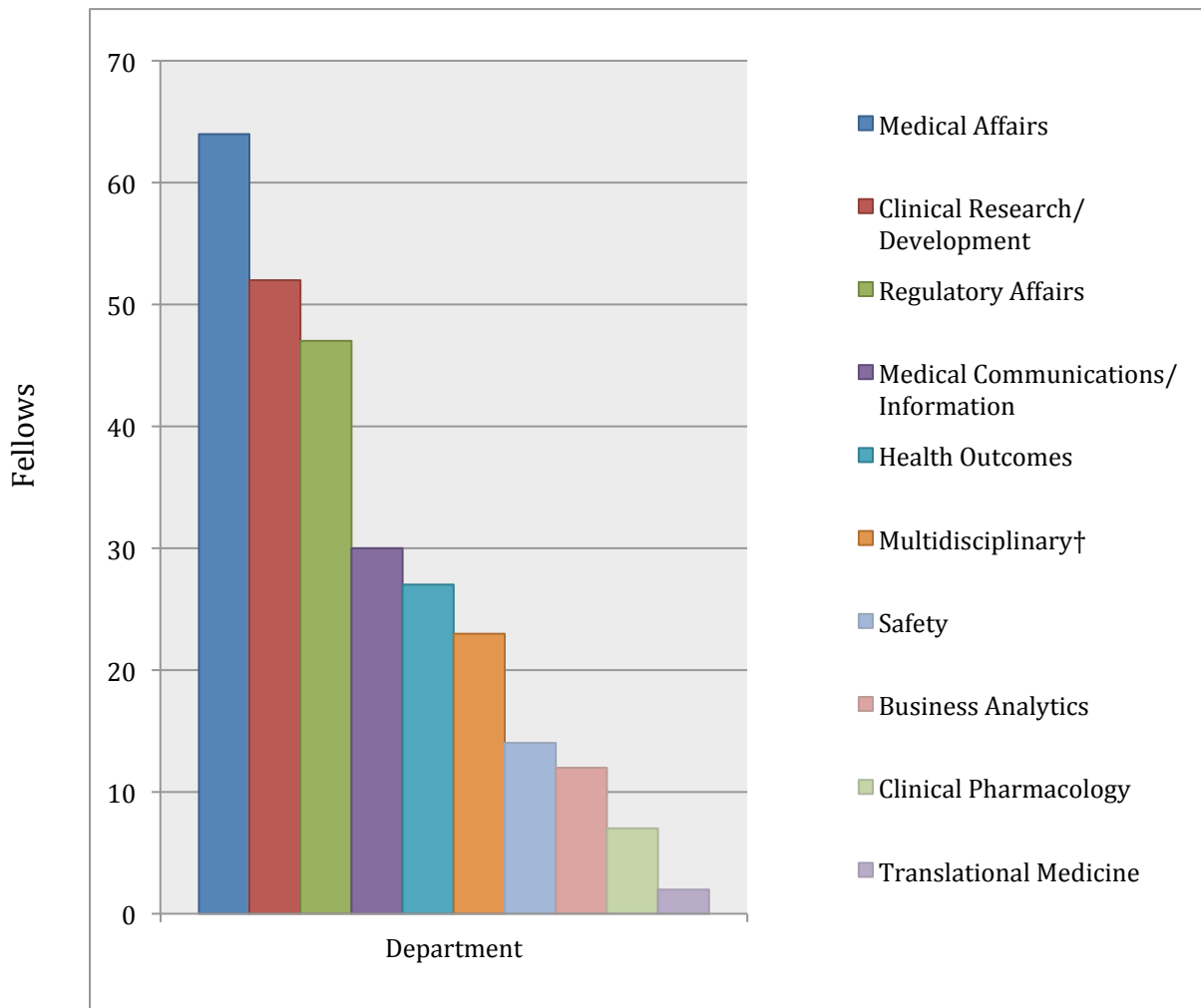
- Program-specific websites
- IPhO Fellowship Catalogue
- Online brochures (from sponsor companies or universities with fellowship programs)

## Results and Discussion:

Results are described in the following areas:

- Fellowship Department
- Sponsor Companies
- Academic Affiliation
- Fellow Alma Mater

## Characterization of PharmD Fellows in 2015-16 Industry Fellowship Programs



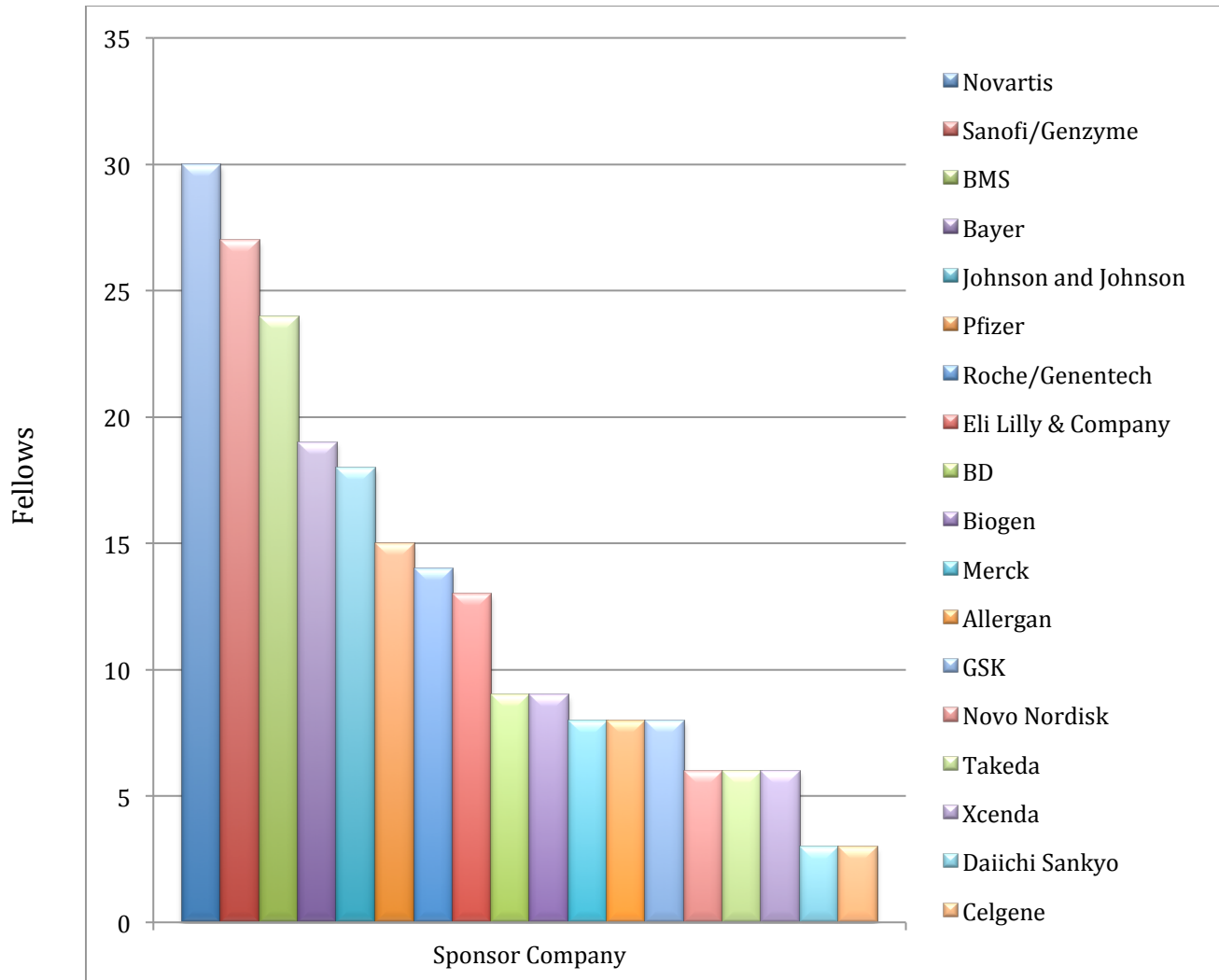
**Figure 1: Most Common Fellowship Departments (n=288 Fellows)\***

†“Multidisciplinary” includes fellows who gain experience in more than one department during their fellowship.

\*Departments containing  $\leq 3$  fellows include: Medication Adherence, Pharmacokinetics/Pharmacodynamics, Managed Markets, and others.

The top five fellowship departments in 2015-2016 were Medical Affairs (n=64), Clinical Research/Development (n=52), Regulatory Affairs (n=47), Medication Communication/Information (n=30) and Health Outcomes (n=27). There was a substantial increase in the number of Regulatory Affairs fellowships offered versus 2014-15. Multiple fellows are gaining experience in more than one functional area through multidisciplinary fellowships.

## Most Common Fellowship Sponsor Companies

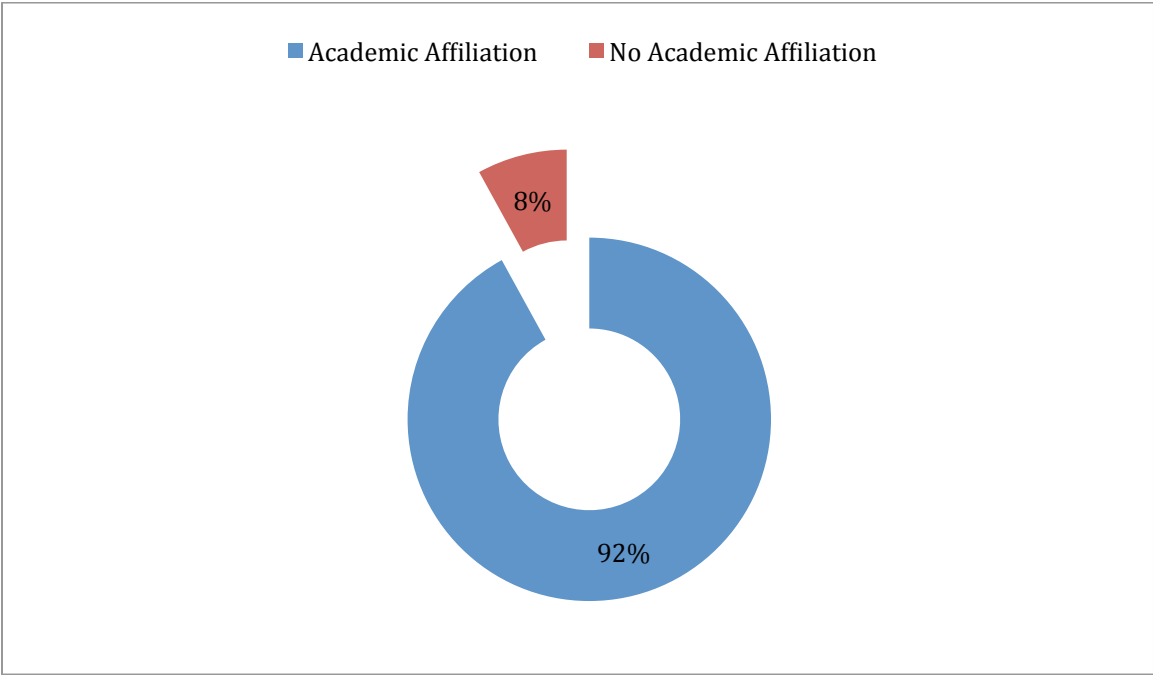


**Figure 2: Most Common Fellowship Sponsor Companies\***

\* The following sponsor companies were combined: Sanofi and Genzyme; Johnson and Johnson, McNeil and Janssen; Roche and Genentech; (BMS= Bristol Myers Squibb; GSK= GlaxoSmithKline; BD= Becton Dickinson)

With over 50 companies hosting fellowships, the top five companies were Novartis (n=30), Sanofi/Genzyme (n=27), BMS (24), Bayer (n=19) and Johnson & Johnson (n=18). These companies have been hosting fellows for many years, and have increased the number of offerings during that time. Several mid-sized companies also added fellowship positions in 2015-16, including Daiichi Sankyo, Celgene, and Takeda.

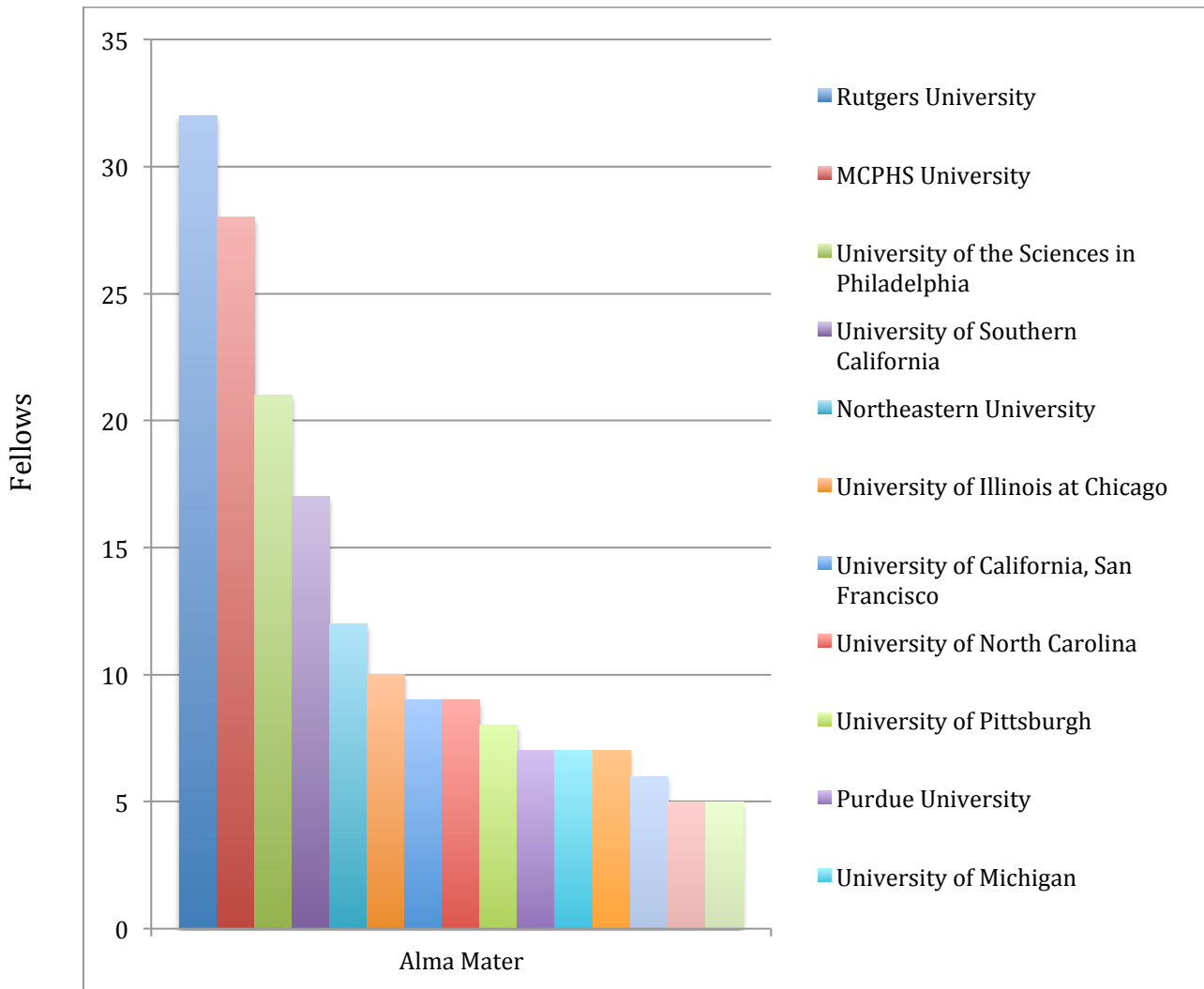
# Fellowships with an Academic-Affiliation



**Figure 3: Fellowship Programs with an Academic Affiliation (n= 288 Fellows)**

Compared with 2014-15<sup>5</sup>, fellowship programs with academic affiliations increased substantially. In 2015-16, about 92% of all fellows participated in a fellowship with an academic affiliation, a 9% increase from 2014-15. Most affiliations are linked with Rutgers University and MCPHS University; both institutions added more fellowships in 2015. An academic affiliated program provides the fellow with opportunities at both the company and the academic institution.

## Alma Maters of Fellows



**Figure 4: Fellow Alma Maters (n= 288 Fellows)**

In 2015-2016, nearly 60 different pharmacy school alma maters were represented amongst the 288 fellows. The most common alma mater was Rutgers University (n=32), followed by MCPHS University (n=28) and University of the Sciences in Philadelphia (n=21). Many Fellows graduated from pharmacy schools in geographical regions that are hubs for pharmaceutical and/or biotechnology companies.

## Limitations

- Data was collected from multiple sources.
- Fellowship Departments (Figure 1) were grouped by the authors according to best fit, since departmental nomenclature varies widely among companies.

## Conclusion

With the abundance of pharmacists entering the workforce, there has been an increasing interest in pursuing an industry career path through post-doctoral fellowships. There has also been a substantial increase in the number of fellowship programs.

This 2<sup>nd</sup> annual report provides student pharmacists and fellowship stakeholders with a better understanding of the current landscape of PharmD fellowship programs. This report will be conducted annually to monitor trends and help prepare student pharmacists as they prepare for fellowships.

## Resources:

1. Romanelli F, Tracy TS. A coming disruption in pharmacy? *Am J Pharm Educ.* 2015 Feb 17;79(1):01.
2. Melillo S, Gangadharan A, Johnson H, Schleck P, Steinberg M, Alexander JG. Postdoctoral pharmacy industry fellowships: a descriptive analysis of programs and postgraduate positions. *Am J Health Syst Pharm.* 2012 Jan 1;69(1):63-8.
3. Various Authors; *Industry Careers: Building a Healthy Future for Student Pharmacists*; 2015; Industry Pharmacists Organization Database
4. Data on file, Industry Pharmacists Organization
5. Jacob B., Allison Hart A., Formella D., McGann S., Alexander JG. *An Analysis of 2014-15 Industry Fellowships and Related Experiences of PharmD Fellows*; 2014-2015