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Background

- It is becoming increasingly essential for PharmD students interested in careers within the pharmaceutical industry to attain additional training through post-doctoral fellowships, the largest of which is the Rutgers Pharmaceutical Industry Fellowship (RPIF) Program.
- Furthermore, the national growth of new pharmacy schools and limited numbers of post-doctoral fellowships have promoted a more competitive environment for candidates.
- In order to strengthen their candidacy for post-doctoral fellowships candidates seek out work, internship, and rotational experiences in the pharmaceutical industry.
- Thus, strong pharmacy training and rotational experiences in the pharmaceutical industry became a growing priority.

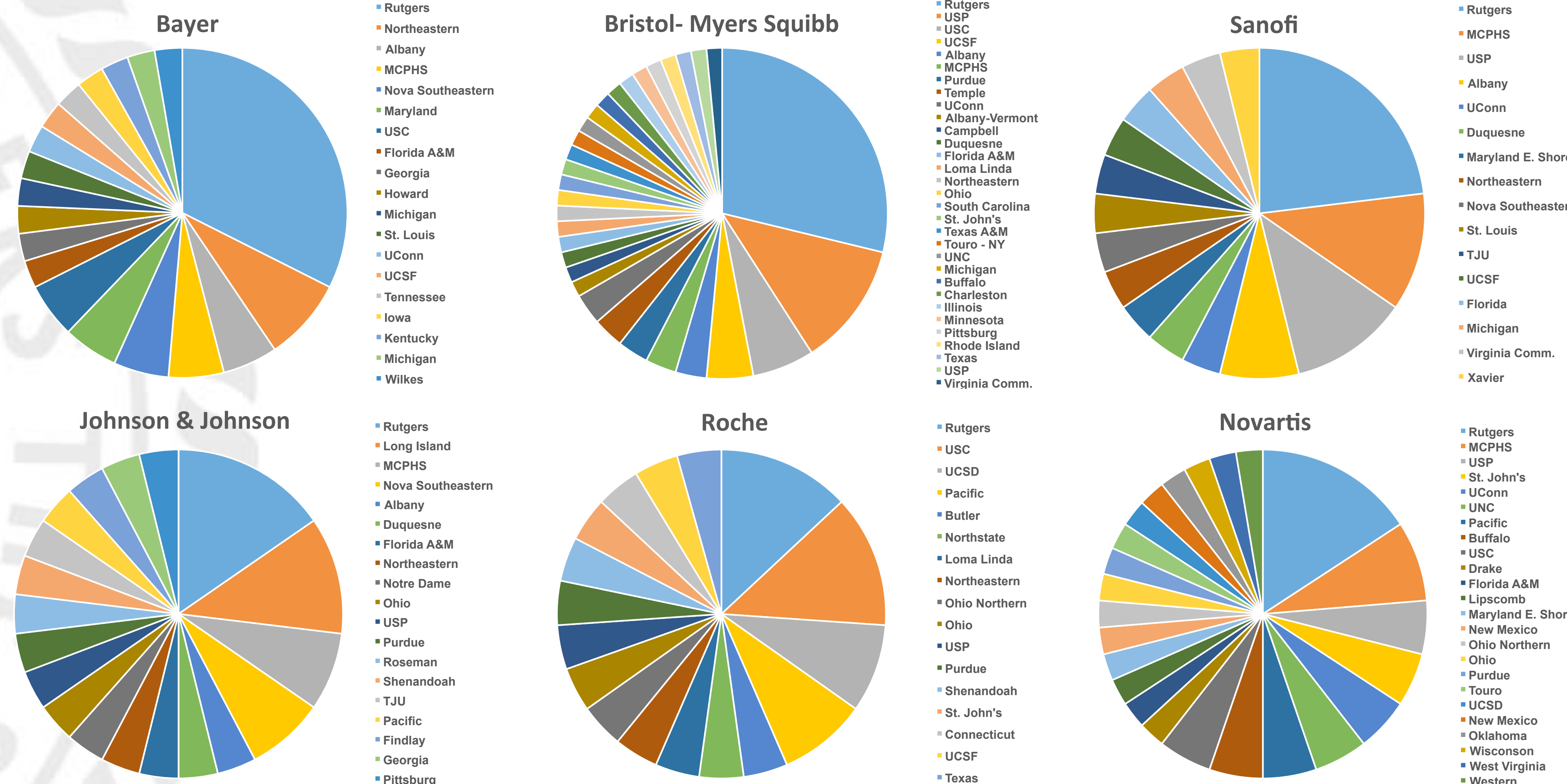
Objective

The objective of this study is to characterize recent RPIF fellows based on their pharmacy school training and related industry experiences prior to their acceptance into the RPIF fellowship.

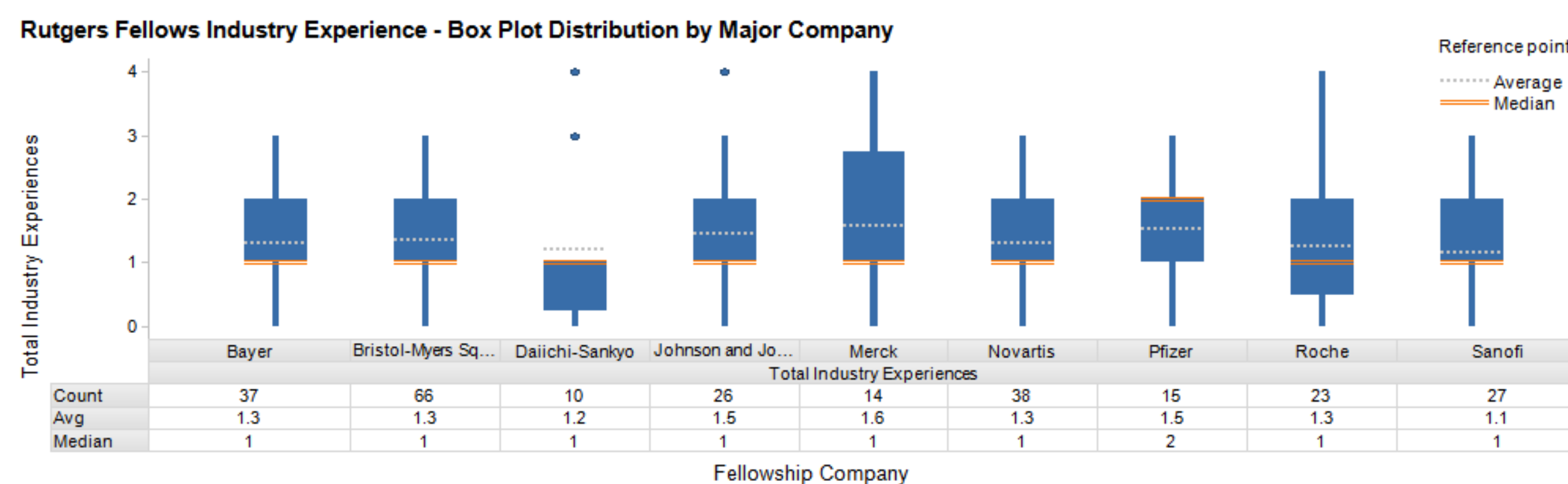
Methods

- This is a real-world cross-sectional study of information presented on the curricula vitae (CV) of fellows that have accepted a position within the RPIF program from 2011 through 2015.
- 275 Fellows' CVs were collected and analyzed for each candidate cycle over the past five years.
- The information was extracted from the CVs using a standardized data collection form and included the following:
 - Sponsoring company
 - Year of acceptance into RPIF program
 - Pharmacy school attended
 - Work and internship experiences
 - Advanced practice industry rotation experiences by company.
- The information was then de-identified, summarized, and analyzed using descriptive statistics in order to compare the backgrounds of each candidate relative to their respective sponsoring company.
 - The schools of pharmacy represented at each company for the past five years is shown proportionally
 - The percentage of fellows with any work, internship, or rotation experiences in the pharmaceutical industry prior to accepting their RPIF position delineated by sponsoring company is calculated
 - The number of industry experiences per fellow is represented by a boxplot by sponsoring company
 - The number of fellows who had any industry experience prior to their fellowship at the same company that became their sponsoring company in the fellowship was also calculated
- The project received an exempt status from the Rutgers IRB.

Results



| Fellowship Company | N | Industry Work Experience | Industry Intern Experience | Industry Rotation Experience | Any Industry Experience |
|----------------------|----|--------------------------|----------------------------|------------------------------|-------------------------|
| Roche | 23 | 4% | 48% | 48% | 74% |
| Bayer | 37 | 11% | 35% | 70% | 86% |
| Bristol-Myers Squibb | 66 | 6% | 36% | 71% | 85% |
| Johnson & Johnson | 26 | 12% | 27% | 69% | 77% |
| Novartis | 38 | 18% | 39% | 47% | 82% |
| Sanofi | 27 | 0% | 33% | 70% | 78% |
| Daiichi-Sankyo | 10 | 10% | 20% | 60% | 70% |
| Merck | 14 | 14% | 36% | 79% | 86% |
| Pfizer | 15 | 20% | 33% | 67% | 80% |



Discussion

- Over the past 5 years Rutgers University has represented 22.3% of fellowship positions in the RPIF program, averaging the 12 positions per year.
- Other top schools represented at companies in the RPIF program across companies are University of Sciences in Philadelphia (8%), Massachusetts College of Pharmacy and Health Sciences (5.8%), University of Southern California (4.7%), Albany College of Pharmacy (3.3%).
- The companies with the largest diversity in fellow alma maters over the past five years are Bristol-Myers Squibb (31), Novartis (24), and Johnson & Johnson and Bayer (19).
- The percentage of fellows with any industry experience prior to the RPIF program is 81%.
- The number of fellows who had a prior industry experience at the same company as what would be their sponsoring company was 35 out of 275 accepted fellows. This equates to approximately 12.7% of accepted fellows.

Limitations

- The data collection process was not blinded, even though the analytic process was blinded.
- We cannot account for any applicants who were offered positions at RPIF but declined the offer.
- Because this is a cross-sectional study we cannot draw any cause-effect relationships between the candidate experiences & training to acceptance to the RPIF program.
- We cannot account for other factors that may influence successful candidacy for the RPIF Program, such as; level of performance in the interviewing process, the strength of letters of recommendation, and presentation/writing abilities
- We only evaluated information presented on CVs not a complete list of candidate experiences.
- We only evaluated PHARMA experiences not industry-associated experiences; such as, managed care organizations, writing/research/marketing vendors, and consulting companies etc.

Conclusions

- Although Rutgers University is the largest cohort of fellows represented in the RPIF program, the diversity of pharmacy schools is still well represented in both the overall and company-specific programs.
- The majority of RPIF fellows have prior industry experience, although every major company has at least 1 fellow without prior industry experience.

References

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Disclosure

All authors are affiliated with the Rutgers Institute for Pharmaceutical Industry Fellowship Program and are paid employees of Rutgers, the State University of New Jersey.

