

Fellowship Candidates' Awareness of Pharmaceutical Industry-Based Postgraduate Training Programs and Career Opportunities



RUTGERS

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BACKGROUND

Pharmaceutical industry-based training programs (both academic-affiliated and sole-sponsored fellowships and residencies) offer PharmDs an opportunity to gain specialized experience in a particular discipline within the pharmaceutical industry, with the goal of providing sufficient training to the participant to pursue a career within industry. A retrospective study conducted by Lam et al.¹ demonstrated a substantial, steady rate of growth of these programs over the last 20 years (1981-2004). In fact, nearly 3% of pharmacy school graduates apply to these programs annually, yet the means through which candidates become aware of opportunities within industry are poorly understood.

OBJECTIVE

- To assess pharmaceutical industry fellowship candidates':
 - Sources of information about postgraduate training programs and career opportunities within industry
 - Perceptions of whether or not current sources of information about industry opportunities are sufficient

METHODOLOGY

- Self-selected candidates for the Institute for Pharmaceutical Industry Fellowships who attended a fellowship information session at Rutgers University (November 2004) and/or the Personnel Placement Service at the December 2004 American Society of Health-System Pharmacists (ASHP) Midyear Meeting were asked to complete an anonymous 6-item questionnaire

- Respondents were asked to identify the following in the questionnaire:
 - Pharmacy school background
 - Sources of awareness of industry fellowships
 - Sources of awareness of career opportunities within industry
 - Level of support from faculty for industry career opportunities

DEMOGRAPHICS

- A total of 200 candidates completed the survey; all surveys were included for the analysis
- The top 5 represented pharmacy schools (Rutgers University, St. John's University, University of Maryland, University of the Sciences in Philadelphia, and University of Michigan) comprised approximately 2/3 of all respondents

- Among the respondents, the following schools were represented:

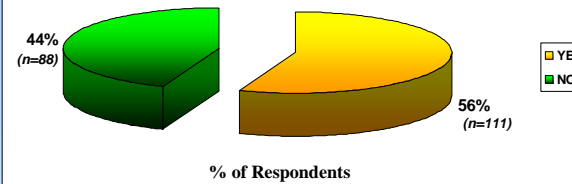
School	n	School	n
Rutgers, The State University of New Jersey	55	Hampton University	2
St. John's University	25	Lebanese American University	2
University of Maryland	16	Mercer University	2
University of the Sciences in Philadelphia	15	St. Louis College of Pharmacy	2
University of Michigan	10	University of Southern California	2
Temple University	7	Wilkes University	2
Massachusetts College of Pharmacy and Health Sciences	6	Columbia University	1
Northeastern University	5	State University of New York - University at Buffalo	1
University of Rhode Island	5	Texas Southern University	1
Long Island University	5	Howard University	1
University of Florida	5	North Dakota State University	1
Florida A & M University	4	Nova Southeastern University	1
Creighton University	4	University of Pittsburgh	1
Duquesne University	3	University of Texas at Austin	1
Virginia Commonwealth University	3	Wayne State University	1
University of California, San Francisco	3	University of Nebraska Medical Center	1
University of Illinois at Chicago	3	University of Colorado	1
Auburn University	2	University of Arizona	1
Other (n=46)	2		

* n = Number of Respondents

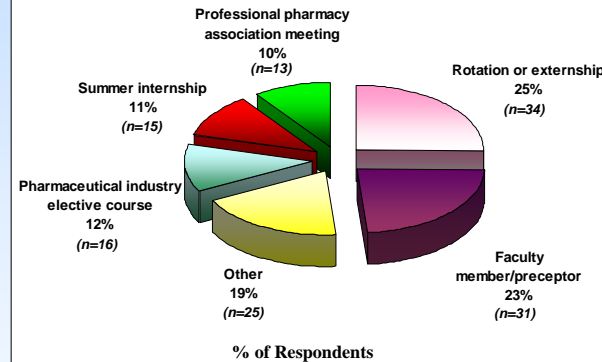
RESULTS

Awareness of Postgraduate Industry-Based Training Programs Prior to the ASHP Midyear

Do you feel that you received sufficient information regarding postgraduate pharmaceutical industry-based training programs prior to the ASHP Midyear?



Sources of Awareness – Overall

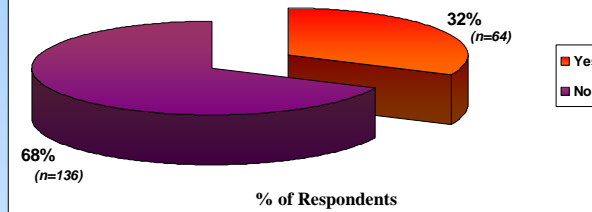


Sources of Awareness - Stratified by School

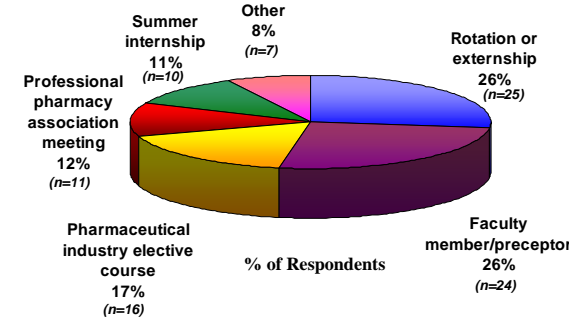
School	Faculty member/preceptor	Pharmaceutical industry elective course	Rotation or externship	Summer internship	Professional pharmacy association meeting	Other
Rutgers University (n=41)	10	10	11	5	3	2
St. John's University (n=12)	3	0	4	1	2	2
University of Maryland (n=12)	3	0	2	1	2	4
University of the Sciences in Philadelphia (n=12)	3	0	4	0	2	3
University of Michigan (n=11)	3	1	5	0	0	2
Other (n=46)	9	5	8	8	4	12

Awareness of Career Opportunities in Industry During Pharmacy School

Do you feel that you received sufficient information regarding career opportunities for pharmacists in industry during pharmacy school?



Sources of Awareness - Overall

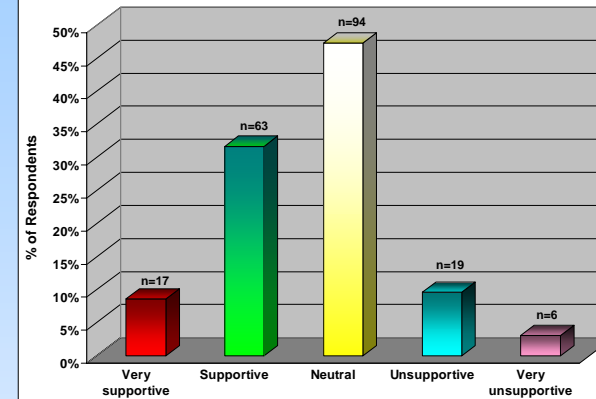


Sources of Awareness - Stratified by School

School	Faculty member/preceptor	Pharmaceutical industry elective course	Rotation or externship	Summer internship	Professional pharmacy association meeting	Other
Rutgers University (n=37)	10	11	12	3	1	0
St. John's University (n=6)	2	0	1	0	3	0
University of Maryland (n=7)	2	0	0	0	3	2
University of the Sciences in Philadelphia (n=7)	1	0	2	2	1	1
University of Michigan (n=7)	1	1	3	0	0	2
Other (n=29)	8	4	7	5	3	2

Level of Faculty Support for Career Opportunities in Industry

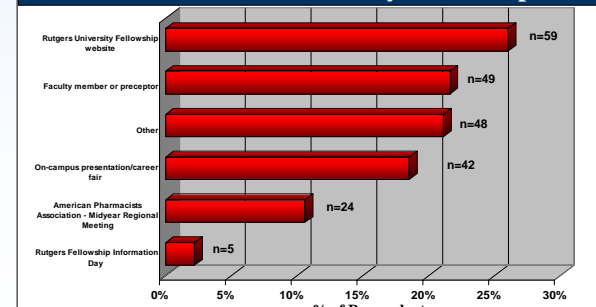
Overall



Stratified by School

School	Very supportive	Supportive	Neutral	Unsupportive	Very unsupportive
Rutgers University (n=54)	8	22	20	3	1
St. John's University (n=25)	2	4	15	3	1
University of Maryland (n=16)	2	5	9	0	0
University of the Sciences in Philadelphia (n=15)	0	7	8	0	0
University of Michigan (n=10)	1	2	7	0	0
Other (n=79)	4	23	35	13	4

Sources of Awareness for the Institute for Pharmaceutical Industry Fellowships



DISCUSSION

- A disparity existed between candidates' awareness of postgraduate training programs versus career opportunities in industry: the majority of respondents felt that they received sufficient information on postgraduate industry training programs prior to Midyear, but felt they did not receive sufficient information on career opportunities in industry during school
- Overall, respondents felt that their top information source for the ASHP Midyear was rotation/externship (25% of respondents) followed by faculty member/preceptor (23%)
- Overall, rotation/externship and faculty member/preceptor were equally indicated by respondents as their top information source (26% each) for industry career opportunities during school
 - Results were inconsistent when stratified by school
- Overall, most respondents (47%) reported a "Neutral" level of faculty support for industry career opportunities
 - Results were consistent when stratified by school with the exception of Rutgers University
 - Among respondents who felt that there was limited faculty support for industry career opportunities, many indicated that their school placed greater emphasis on postgraduate clinical pharmacy careers

LIMITATIONS

- Study participants were self-selected candidates for the Institute for Pharmaceutical Industry Fellowships; therefore, the results of the analysis are not projectable to the general pharmacy student population
- Data may have been skewed as the number of respondents per pharmacy school was not evenly distributed; for example, Rutgers University alone represented 28% of all respondents
- The analysis of sources of awareness for industry training programs and career opportunities was initially designed to include only respondents who felt that they had received sufficient information concerning training programs and career opportunities, respectively; however, respondents who felt that they did not receive sufficient information but who still provided a response concerning sources of awareness were also included in the analysis

CONCLUSIONS

This study was intended to determine fellowship candidates' awareness of postgraduate training programs and career opportunities within industry. Based on the survey findings, the majority of candidates felt that they received sufficient information on industry training programs but insufficient information on industry career opportunities during school. In addition, most candidates felt that rotations/externships and faculty members/preceptors were their best sources of awareness for training programs and career opportunities within industry.

REFERENCES

- Lam AW, Brady PK, Chow W, et al. Emerging trends within industry-based post-graduate training programs for pharmacists [poster]. Presented at the 38th Annual American Society of Health-System Pharmacists Midyear Clinical Meeting; December 2003, New Orleans, LA.