# Philadelphia College of Pharmacy



### Introduction

- In 2011, the prevalence of board certified pharmacy practice faculty in the United States was 37%.<sup>1</sup>
- With an increasing number of board certified pharmacists, expansion of the number of the Board of Pharmacy Specialties (BPS) specialties, and pharmacists pursuing multiple certifications, the true prevalence of board certification as well as barriers and motivators for board certification are currently unknown.
- In addition, limited data exist on the value of BPS certification, as it relates to professional accomplishments and career advancement.

#### Objective

To determine the prevalence of board certification among pharmacy practice faculty in the United States and to describe the motivators and barriers to board certification as well as professional achievements and accomplishments that may support career advancement for pharmacy practice faculty.

#### Methods

- **Phase I:** The lists of pharmacy practice faculty from the American Association of Colleges of Pharmacy (AACP) and board certified pharmacists from BPS were cross-referenced to determine the prevalence of board certified pharmacy practice faculty in the United States. "MERGE" function in SAS v.9.4 was used to match-merge the two databases based on name, state, and email.
- **Phase II:** The pharmacy practice faculty in the AACP list were stratified by rank and invited to participate in the survey comprising 52 questions about professional characteristics, motivators and barriers to board certification, and professional achievements and accomplishments that may support career advancement for pharmacy practice faculty.
- Statistical analyses:
  - The rates of board certification grouped by relevant variables were compared using Chi-square goodness of fit test.
  - A multinomial logistic regression model was utilized to assess the effect of relevant predictors of board certification and multiple board certifications.
  - The effect of motivators and barriers on the actual number of board certification was investigated using a Poisson regression model.
  - Data collection was performed using Qualtrics<sup>®</sup>.

#### Results

- Among 2284 pharmacy practice faculty invited to participate in the study, 746 completed the survey (32.7% response rate).
- Pharmacy practice faculty characteristics:
  - The majority of respondents were currently board certified (73.2%), full-time faculty (97.3%) who have been in academia for a median of 11 years.
  - Most pharmacy practice faculty were involved in didactic (98.9%) and experiential (92.9%) education for the Doctor of Pharmacy program.
  - Less than 50% of respondents reported engagement in postgraduate or interprofessional education.
  - The majority of pharmacy practice faculty graduated with a Doctor of Pharmacy degree (97.9%) and completed one or two years of postgraduate training (77.9%), which was primarily PGY1 (75%) and PGY2 (39.7%) residencies.
  - About one-half of respondents reported teaching at a public college or school of pharmacy that was established more than 50 years ago and admitted less than 100 students per year.

Table 1. Prevalence of Board Certification Among   Pharmacy Practice Faculty (N=3276)	n (%)
Overall	1846 (56.4)
By Faculty Rank	
Assistant Professors	894 (61.4)
Associate Professors	664 (58.5)
Professors	288 (42.1)
Table 2. Number of Board Certifications per   Pharmacy Practice Faculty (N=1846)	n (%)
One Specialty	1482 (80.3)
Two Specialties	347 (18.8)

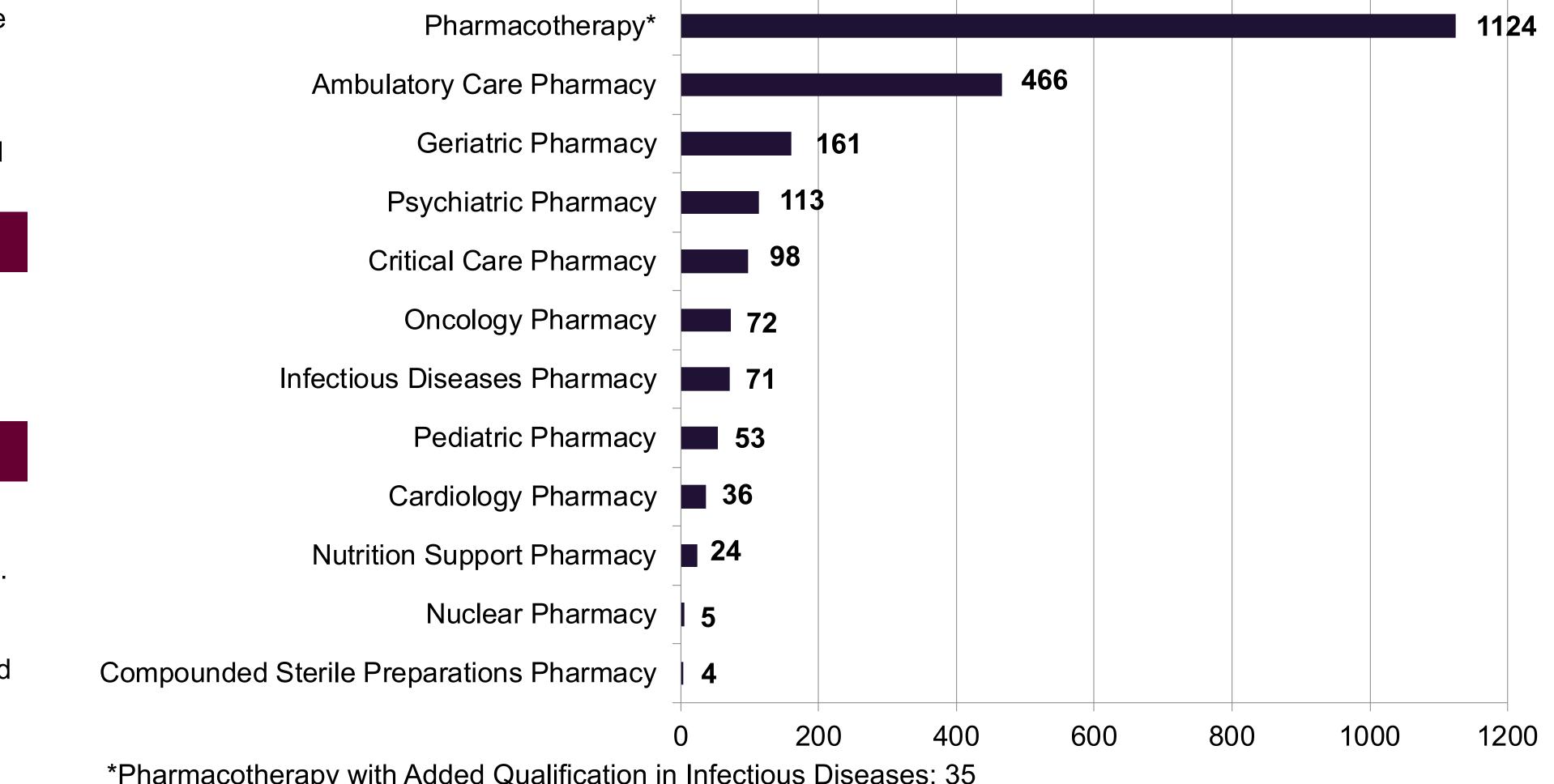
Three Specialties

## Prevalence and Value of Board Certification Among Pharmacy Practice BICENTENNIAL Faculty at Colleges and Schools of Pharmacy in the United States

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### **Results (Continued)**

#### Figure 1. Pharmacy Practice Faculty Board



\*Pharmacotherapy with Added Qualification in Infectious Diseases: 35 Pharmacotherapy with Added Qualification in Cardiology: 23

Table 3. Reasons and Motivators/Barriers for Board   Certification	Never Certified (N=173)	Previously Certified (N=27)	Currently Certified (N=546)	P value
Reasons for obtaining board certification, n (%)			n=545	
To be recognized as expert in the field	-	18 (66.7)	331 (60.7)	0.5373
Personal growth	-	10 (37.0)	225 (41.3)	0.6615
Recognition by peers	-	11 (40.7)	184 (33.8)	0.4552
To keep current with the latest advancements in the profession	-	7 (25.9)	181 (33.2)	0.4315
Job security	_	2 (7.4)	107 (19.6)	0.1144
Job requirement	-	0 (0)	95 (17.4)	0.0138
To serve as example for trainees and peers	_	4 (14.8)	102 (18.7)	0.6106
Increased confidence	-	5 (18.5)	42 (7.7)	0.0614
Other	_	0 (0)	36 (6.6)	0.4031
Salary increase	-	0 (0)	20 (3.7)	0.6162
Barriers to board certification, n (%)	n=167	n=26		
Too time consuming to prepare for the examination and/or maintain certification	91 (54.5)	18 (69.2)	-	0.1585
No perceived need	92 (55.1)	7 (26.9)	-	0.0075
No perceived benefit	74 (44.3)	6 (23.1)	-	0.0409
Other	42 (25.2)	8 (30.8)	-	0.5429
No longer relevant, I no longer practice	24 (14.4)	13 (50.0)	-	0.0001
Employer does not recognize the value of this credential	12 (7.2)	3 (11.5)	-	0.4318
Not yet qualified to sit for examination	8 (4.8)	0 (0)	-	
Motivators to board certification, n (%)	n=167			
Job requirement	92 (55.1)	-	-	
Salary increase	88 (52.7)	_	-	
Increase or change in clinical responsibilities	40 (23.9)	_	-	
Nothing would motivate me to obtain board certification	34 (20.4)	-	-	

17 (0.9)

d Certificatio	ns (N=2227)
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Results (Continued)								
Table 4. Accomplishments and Achievement	All Respondents (N=746)	Never Certified (N=173)	Previously Certified (N=27)	Currently Certified (N=546)	P value			
Publications and presentations in the pa	ast 5 years							
Research publications, n (%)	609 (81.6)	126 (72.8)	23 (85.2)	460 (84.3)	0.0029			
Non-research publications, n (%)	602 (80.7)	123 (71.1)	26 (96.3)	453 (82.9)	0.0003			
National presentations, n (%)	623 (83.5)	134 (77.5)	23 (85.2)	466 (85.4)	0.0498			
Number of peer-reviewed research publications	n=609	n=126	n=23	n=460				
Median [IQR]	4 [2-8]	4 [2-8]	3 [2-8]	4 [2-7]	0.9664			
Number of peer-reviewed non-research publications	n=602	n=123	n=26	n=453				
Median [IQR]	3 [2-6]	3 [2-5]	2.5 [1-5]	4 [2-7]	0.0082			
Number of national presentations	n=623	n=134	n=23	n=466				
Median [IQR]	7 [3-15]	6 [3-14]	6 [3-16]	7 [3-15]	0.4141			
Grant funding as principal investigator	or co-investigato	r in the past 5	years					
Grants submitted for consideration, n (%)	n=725	n=168	n=26	n=531				
Yes	420 (57.9)	93 (55.4)	17 (65.4)	310 (58.4)	0.5789			
Number of grants submitted for consideration	n=413	n=92	n=17	n=304				
Median [IQR]	3 [2-5]	3 [2-5]	6 [2-10]	2 [1-4]	0.0186			
Receipt of grant funding, n (%)	n=727	n=168	n=26	n=533				
Yes	336 (46.3)	82 (48.8)	13 (50.0)	241 (45.3)	0.6763			
Number of grants awarded	n=328	n=81	n=13	n=234				
Median [IQR]	2 [1-3]	2 [1-4]	4 [1-5]	2 [1-3]	0.0186			
Monetary value of all grants awarded	n=314	n=79	n=13	n=222				
Median [IQR]	30,000 [5,000- 200,000]	65,000 [10,000- 500,000]	450,000 [50,000- 1,889,744]	20,000 [5,000- 150,000]	0.0014			
Leadership in professional organization	s in the past 5 ye	ears						
Leadership role, n (%)	n=722	n=168	n=26	n=528				
Yes	478 (66.2)	100 (59.5)	13 (50.0)	365 (69.1)	0.0148			
Number of leadership roles								
Local level	n=239	n=51	n=7	n=181				
Median [IQR]	2 [1-3]	2 [1-3]	2 [1-4]	2 [1-3]	0.4813			
Regional level	n=170	n=38	n=4	n=128				
Median [IQR]	1 [1-2]	1 [1-2]	1.5 [1-2]	1 [1-2]	0.9991			
National level	n=325	n=65	n=8	n=252				
Median [IQR]	2 [1-4]	2 [1-3]	1.50 [1-3]	2 [1-5]	0.0335			
Fellowship status, n (%)	n=721	n=167	n=26	n=528				
Yes	187 (25.9)	43 (25.8)	14 (53.9)	130 (24.6)	0.0040			
	Conclus	sions						

- opportunities for continued growth.

- 1. Toussaint KA, et al. *Pharmacotherapy*. 2013;33(1):105-111.

• Although the prevalence of board certified pharmacy practice faculty has increased since 2011, there are

• The most common reasons as well as motivators and barriers to board certification remained the same. • Our study suggests a positive association between board certification and professional accomplishments and achievements that may support career advancement for pharmacy practice faculty.

### References

### Disclosures

• Authors of this presentation received the Board of Pharmacy Specialties Seed Grant. • Dr. Angela Bingham serves on the BPS Specialty Council on Nutrition Support Pharmacy.