

PBF Class of 2010 Survey Summary

January 30, 2019

Each year a survey is conducted of the individuals who began their fellowships eight years earlier. All 10 of the 2010 fellows completed their fellowships in 2013 and completed the survey. This class of fellows has done exceptionally well. All of them currently hold faculty positions (five are Assistant Professors and five are Associate Professors) in schools of Medicine and Public Health in the areas of Pulmonary, Critical and Sleep, Allergy, Infectious Disease, Immunology and Emergency Medicine. This puts them with the top PBF classes with 100% retention in academic research.

Each graduate spends a significant amount of time in research averaging 69 % (range 15-100%) which also places them among the top groups (Table 2). Their areas of research include basic and translational research in areas ranging from genetics and genomics to inflammation to respiratory physiology.

For comparison with the 2010 PBF Fellows, Table 1 below shows the five-year post-PBF Fellowship retention rates in academic research for the 2003-2009 PBF Fellows and the overall retention rate for the 1976-2006 PBF Fellows who responded to our survey.

TABLE 1: Retention rates in academic research for PBF Fellows						
Shown are five-year retention rates for 2003-2010 fellows and overall retention rate for 1976-2006 fellows						
Survey Group	n	Past PBF Fellows still in academic research	no research effort	1-49% effort	50-74% effort	≥ 75% effort
1976-2006 Fellows	365	83% (n=303)	17% (n=62)	27% (n=100)	23% n=84)	33% (n=119)
Class of 2003	12	100% (n=12)	0	17% (n=2)	33% (n=4)	50% (n=6)
Class of 2004	15	100% (n=15)	0	13% (n=2)	47% (n=7)	40% (n=6)
Class of 2005	17	76% (n=13)	23.5% (n=4)	6% (n=1)	47% (n=8)	23.5% (n=4)
Class of 2006	15	73% (n=11)	27% (n=4)	0	20% (n=3)	53% (n=8)
Class of 2007	18	89% (n=16)	11% (n=2)	6% (n=1)	11% (n=2)	72% (n=13)
Class of 2008	17	94% (n=16)	6% (n=1)	6% (n=1)	18% (n=3)	70% (n=12)
Class of 2009	10	90% (n=9)	10% (n=1)	10% (n=1)	20% (n=2)	60% (n=6)
Class of 2010	10	100% (n=10)	0	20% (n=2)	30% (n=3)	50% (n=5)

2010 PBF Fellows Survey conducted in October and November 2018

Their research is clearly impactful as evidenced by the number of publications from 2010-2018: total of 217 with an average of 22 per fellow (range 6-44) or 3 per year (range 0.75-5.5). They were first or senior author on 67 of those publications (individual range 0-19) and they continue to publish in high impact journals (Tables 2 and 3). Of note, as the areas of research continue to evolve the list of journals currently used to assess impact will need to be expanded to include key clinical journals including JAMA (IF = 47), New England Journal of Medicine (IF=79), Lancet (IF=39), European Respiratory Journal (IF=12), and others.

TABLE 2: 2010 PBF Fellows: Peer-reviewed publications in high-impact journals since PBF Fellowship		
Journal	Impact Factor	# of Publications
Nature	41.5	2
Nature Medicine	32	1
Nature Genetics	28	0
American Journal of Respiratory & Critical Care Medicine	15.2	1
Journal of Clinical Investigation	13.2	5
Proceedings of the National Academy of Sciences	9.5	5
Journal of Immunology	4.5	4
Am Journal of Physiology: Lung Cellular & Molecular Physiology	4.1	7
American Journal of Respiratory Cellular & Molecular Biology	3.89	8

TABLE 3: Peer-Reviewed Publications per Year			
Survey Group	n	Average Pubs/Yr	Average Pubs/Yr as 1st, 2nd, or last author
PBF Fellows, years 1976-2006	365	2.7	1.8
PBF Fellows, class of 2003	12	1.7	1.3
PBF Fellows, class of 2004	15	3.9	2.1
PBF Fellows, class of 2005	17	2.1	1.3
PBF Fellows, class of 2006	15	2.5	1.6
PBF Fellows, class of 2007	18	2.6	1.2
PBF Fellows, class of 2008	17	3.3	1.5
PBF Fellows, class of 2009	10	4.1*	2.3*
PBF Fellows, class of 2010	10	3.0	1.0+

+Note: With expanding areas of research, we will need to change the list of impact publications in the future, to include (i.e.) JAMA, NEJM, Lancet, ERJ . . .)

*Note: These numbers for the 2009 class are exceptionally high due to one fellow with 109 publications in the eight years since beginning his PBF Fellowship.

In aggregate this class of fellows has obtained \$12,393,000 in direct research funding (range: \$80,000 to \$2,740,000). The cost of supporting this group of fellows was \$1,560,000 so the total ROI (new research dollars: invested dollars) is 8:1 (Table 4). This is a bit lower than most previous classes but it is still an impressive return on investment.

TABLE 4				
Direct research dollars received during 8-year period following PBF Award start date				
Survey Group	n	PBF Funding for Fellows Group	Total research dollars rec'd by survey group since PBF Fellowship	ROI
PBF Fellows, class of 2003	12	\$1.73M	\$20.78M	14.5
PBF Fellows, class of 2004	15	\$1.86M	\$27.83M	14.7
PBF Fellows, class of 2005	17	\$2.24M	\$24.67M	11.0
PBF Fellows, class of 2006	15	\$2.07M	\$40.7M	19.7*
PBF Fellows, class of 2007	18	\$2.59M	\$37.8M	14.6
PBF Fellows, class of 2008	17	\$2.55M	\$43.7M	17.1**
PBF Fellows, class of 2009	10	\$1.56M	\$28.3M	18.1
PBF Fellows, class of 2010	10	\$1.56M	\$12.4M	8.0

* ROI reflects the extraordinarily high research funding received by two 2006 PBF Fellows. ROI for the other 13 fellows is 6.8.

** ROI reflects the extraordinarily high research funding received by two 2008 PBF Fellows, ROI for the other 15 fellows is 11.1.

CONCLUSIONS

All 10 of the 2010 PBF Fellows hold academic appointment and continue to be engaged in research. This puts this class in the group with the highest retention rates in academia. All of the fellows have obtained some independent research funding. Although the ROI for this group is lower than many previous years, the fellows have published at an annual rate that is slightly higher than the average of the previous eight years of classes.