Factors influencing fellowship selection, career trajectory, and academic productivity among plastic surgeons

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Background: Several factors influence the career trajectory of graduating plastic surgeons, and our study sought to capture characteristics of plastic surgery trainees as they relate to outcomes including fellowship selection, career choice, and academic productivity.

Methods: Anonymous online survey data was obtained from members of the American Society of Plastic Surgery (ASPS). Correlative analysis was performed implementing Pearson chi-square, Mann-Whitney, and Kendall tau-b to determine significant correlations defined by $p < 0.05$.

Results: A total of 624 (13.7%) plastic surgeons completed the study out of 4543 survey invitations. Greater numbers of publications upon entering residency ($p < 0.05$) and upon graduating from residency ($p < 0.0001$), stronger perceived mentorship during residency ($p < 0.01$), graduating from an integrated program ($p < 0.01$), and fellowship training ($p < 0.001$) were all correlated with a future career in academia (Table 1). Additionally, fellowship training and number of publications during and prior to residency were correlated with eventual academic productivity ($p < 0.05$). Lastly, individual tendency to prioritize economics ($p < 0.01$) or geographic location ($p < 0.05$) was associated with eventual private practice, while prioritization of research ($p < 0.01$) and culture of training institute ($p < 0.001$) predicted academic careers.

Conclusions: Graduating plastic surgery residents from integrated programs, with greater numbers of publications, stronger mentor relationships, and fellowship training were more likely to become academic surgeons. Among this academic cohort, fellowship training and greater numbers of publications before and during residency were significantly correlated with increased academic productivity as an attending surgeon.

Disclosure/Financial Support:
The study was not funded. The authors report no financial conflicts of interest.

Table 1. Summary of Significant Associations

Academic Practice	Pursuit of any Fellowship Training	Academic Productivity*

• *More publications entering residency*
• *More publications upon graduation from residency*
• *Stronger mentor relationships*
• *Integrated residency*
• *Any Fellowship training*
  o *Craniomaxillofacial specifically*
  o *Microvascular specifically*
• *Prioritize research*
• *Strong culture of training institution*
• *Lower priority of economics*
• *Lower priority of geographical location*
	• *Fewer dependents*
	• *Integrated residency*
	• *More publications upon graduation from residency*
		• *More publications entering residency*
		• *More publications during residency*
		• *Any fellowship training*
		• *Increased percent effort dedicated to academic endeavors*
		• *Non AOA status*

*Among only academic or mixed-practice physicians