

Have the new training pathways enhanced academic productivity in plastic surgery?

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OBJECTIVE- To evaluate the effect of different surgical training pathways on the academic performance of plastic surgical (PS) divisions.

METHODS- Eighty-two academic parameters for 338 PS, 1737 general (GS), and 1689 specialist (SS) surgeons from the top-50 NIH funded academic departments of surgery were examined using data gathered from websites, SCOPUS, and NIH RePORT.

RESULTS: The median size of a PS division was seven faculty. PS faculty had lower median publications/citations than GS and SS (PS: 25/328, GS: 35/607, SS: 40/713, $p < 0.05$). Publication (P) and citation (C) differences were observed at all ranks: assistant professor (PS: 11/101, GS: 13/169, SS: 19/249), associate professor (PS: 33/342, GS: 40/691, SS: 44/780) and professor (PS: 57/968, GS: 97/2451, SS: 101/2376). PS had a lower percentage of faculty with current/former NIH funding (PS: 13.5%, GS: 22.8%, and SS: 25.1%, $p < 0.05$). Academic productivity for PS faculty was dramatically improved in integrated residency programs. P/C for PS faculty from divisions with traditional 3-yr fellowships were 19/153, integrated 5-yr residency were 25/329, and both traditional and 5-yr programs were 27/344, $p < 0.05$. Cranio-facial reconstructive and hand fellowships further increased productivity within the integrated residency-fellowship programs. P/C for programs that also had a cranio-facial reconstructive fellowship were 32/364, and for those that additionally had a hand fellowships were 45/536. PS faculty at divisions with integrated training programs also had a higher frequency of NIH funding (PS% with current/former NIH funding, 2-yr fellowships: 5.8%, integrated 5-yr residency: 7.9%, and both 5-yr/2-yr programs: 18.7%).

CONCLUSION: PS divisions vary in degree of academic productivity. Dramatically improved scholarly output is observed with integrated residency training programs and advanced specialty fellowships. Recruiting trainees into earlier in their careers into PS and providing advanced additional training options may represent

successful mechanisms to improve research productivity within PS divisions.