NIH Funding to Plastic Surgery Residency Programs

Introduction: Grants awarded by the National Institutes of Health (NIH) are widely regarded as the gold standard in biomedical research, as the NIH is the preeminent supporter of scientific inquiry in the U.S. Our objectives were to describe the portfolio of NIH grants to plastic surgery faculty and characterize the distribution of research dollars in the U.S.

Methods: Active faculty listings of integrated, combined, and independent plastic surgery programs in the U.S. were obtained from official program websites. The NIH RePORTER was queried with each faculty name for recent awards (2009-2015). Grants were categorized by funding mechanism, NIH agency, and dollars. Funded projects were classified as either basic/translational or clinical research. Total NIH funding was summed by organization and compared by U.S. region. Differences in NIH funding were assessed via Kruskal-Wallis and Mann-Whitney U tests.

Results: 4.3% of plastic surgery faculty had NIH funding (30/698) at 18 unique institutions (18/70, 26%). Over 6 years, 48 projects were funded for 149 fiscal years amounting to \$50 million. The R01 funding mechanism was the most popular (54%, 81/149). A minority of funding supported clinical research (35.5%, p < 0.05). Twelve NIH agencies granted funding and the biggest supporters were National Institute of Dental and Craniofacial Research (23.4%) and the National Institute of Arthritis and Musculoskeletal and Skin Diseases (20.5%). The programs with the most NIH funding were Stanford University (40%), University of Michigan (31%), Washington University (14%), University of Pittsburgh (6%), and Harvard University (5%). These 5 programs accounted for 79% of all funding. Programs in the Midwest received the greatest funding (39%, p < 0.05).

Conclusions: A plurality of NIH grants to plastic surgery faculty supports basic/translational research. While a few programs received the most funding, there was a wide distribution of NIH funding agencies. These findings highlight a diversity of research interests and future opportunities for NIH funding in the field of plastic surgery.