

Missing Seats at the Table – Diversification of Academic Surgery, its Leadership, and the Influence of Intersectionality

Andrea N. Riner MD MPH¹, Kelly M. Herremans MD¹, Daniel W. Neal MS¹, Crystal Johnson-Mann MD¹, Steven J. Hughes MD¹, Kandace P. McGuire MD², Gilbert R. Upchurch Jr. MD¹, and Jose G. Trevino MD²

1. Department of Surgery, University of Florida College of Medicine, Gainesville, FL
2. Department of Surgery, Virginia Commonwealth University, Richmond, VA

Background: Gender and racial/ethnic diversity in academic surgery are lacking, particularly among leadership. Attention has been drawn to the “leaky pipeline” for women and underrepresented in medicine (URM) trainees and faculty. However, URM data has historically been presented without stratification by gender, leaving a paucity of data on how the trajectory may differ between males and females. This is of particular importance given the historical predominance of males and more recent rise of women and URM groups, as well as the possible influence of intersectionality. We hypothesize that while surgical faculty are becoming more diverse, trends in male and female URM representation differ, particularly among leadership positions.

Methods: This study provides a cross-sectional and longitudinal analysis of medical school graduate, surgical resident and faculty census data. Faculty ranks included Instructor, Assistant Professor, Associate Professor, Full Professor and Chair. Gender and race/ethnicity were obtained from AAMC FACTS, GME Track and FAMOUS databases. Descriptive statistics including average annual percent change in representation are reported based on level of training or faculty rank. Medical school graduate, surgical resident and faculty members captured in census data from 2013-2019 were included in the analysis. General Surgery, Plastic Surgery, Neurosurgery and Urology residents were included to align with reporting of surgical faculty in the FAMOUS database.

Results: Increased representation was noted in male medical school graduates across Black, Hispanic/Latinx (H/L), Asian, and multi-race/ethnic students. Among females, an increase in

representation was experienced by only Asian and multi-race/ethnic students. Conversely, recruitment of Black (3.8%), Asian (16.5%) and multi-racial/ethnic (3.9%) surgical residents was significantly less than medical school graduates. Fewer Black graduates entered surgical residencies in 2019 compared to 2013, while Latina recruitment remained stagnant. Female URM faculty experienced an increase in representation at Instructor, Assistant and Associate Professor appointments, with a more favorable trajectory than URM males across nearly all ranks. White faculty maintain most leadership positions (77%) as Full Professors and Chairs. Among Full Professors, while Black and H/L males had modest increases in representation, Black and H/L female representation remained constant or decreased, respectively. H/L (5.3%) and Black (3.4%) representation as Chairs has not changed. From 2013-2019, only 1 Black and 1 H/L female ascended to Chair, whereas 5 Asian females achieved this rank.

Conclusions: A disproportionately small number of minorities ascend to leadership positions in academic surgery and suggest worrisome trends in URM students pursuing surgical careers, particularly URM females. Intersectionality of gender and race/ethnicity may leave URM females more disadvantaged than their male colleagues in achieving leadership positions, despite superior representation at junior and mid-career faculty positions. These findings highlight the urgency to diversify surgical leadership.

Drs. Riner and Herremans are supported by T32 HG00895.