Demographics and Academic Productivity of Cardiothoracic Imaging Fellowship Program Directors in the United States: A Cross-Sectional Review

Herbert Wertheim College of Medicine

Nicholas Jaeger[3], Zachary D. Zippi[1], Benjamin I. Schachner[2], Nathan VanderVeer-Harris[1], Michael Zalkind[1], Justin Stowell[4], Patricia J. Mergo[4]

[1] Herbert Wertheim College of Medicine (HWCOM), Florida International University, Miami, Florida, [2] Miller School of Medicine, University of Miami, Miami, Florida, [3] AdventHealth, Orlando, Florida, [4] Mayo Clinic Florida, Jacksonville, Florida

INTRODUCTION

The subspeciality of cardiothoracic radiology is a rapidly growing field of radiology, with twice as many radiologists completing fellowships in the last 5 years than in the previous 5 years. Even with this expansion, the need for dedicated cardiothoracic imagers trained yearly is not enough to fill developing open positions.

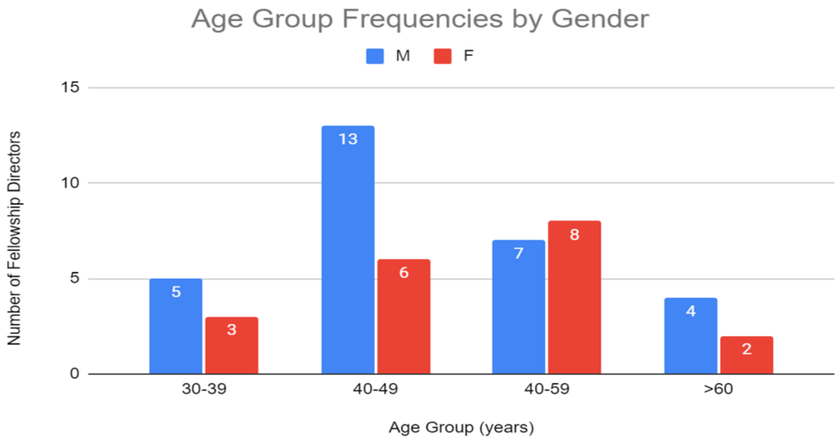
PURPOSE

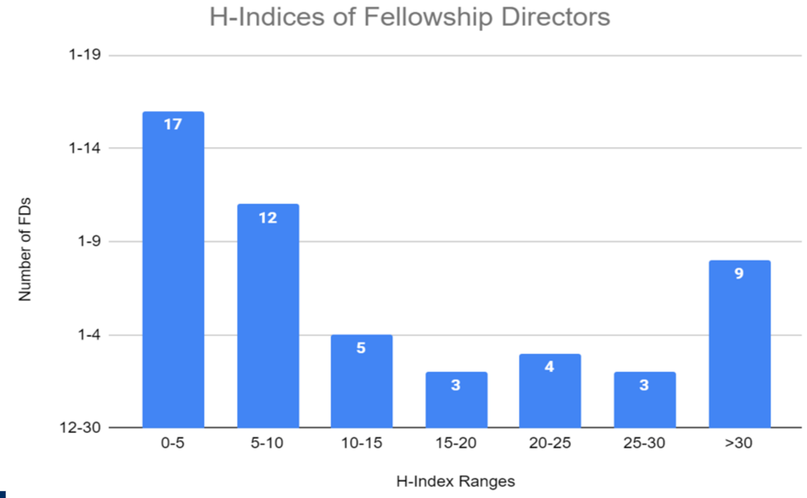
To assess current demographics, measures of academic productivity, and other objective leadership characteristics among United States cardiothoracic imaging fellowship directors (FDs).

METHODS

A survey was sent to active members listed in the Society of Thoracic Radiology Cardiothoracic Imaging Fellowship Directory. Demographic, post-graduate training, and scholarly activity data were collected including, but not limited to, age, sex, residency and fellowship training institutions, time since training completion until FD, length of time as FD, and Hirsch-index (h-Index) to measure research activity. The collection of this was done via respective institutional biographies, Doximity (Doximity.com, Doximity Inc., San Francisco, CA), and curriculum vitae (CV).Emails and questionnaires were sent directly to FDs to acquire their CVs, which were used to assess the year hired by their institution, the year appointed to the fellowship director position, and other demographic information that was not readily available via their respective web pages.

RESULTS





Demographics and Training	
Male	31 (58.49%)
Female	22 (41.51%)
Mean Age	48.52 ± 8.43 (n = 48)
Median Age (Min, Max)	47.5 (35, 67)
Mean FD Scopus h-index	15.68 ± 17.37 (n = 53)
Education and Employment Progression	Mean Score ± SD (n)
Mean calendar year of residency graduation	2005 ± 9.3 (n = 53)
Mean calendar year of fellowship graduation	2007 ± 9.2 (n = 52)
Mean duration from residency graduation to appointment as FD	10.20 ± 7.5 (n = 40)
Mean duration from fellowship graduation to appointment as FD	8.08 ± 7.4 (n = 39)
Mean duration of employment at current institution	10.02 ± 8.8 (n = 45)
Mean duration of FD tenure	6.63 ± 7.7 (n = 40)
Mean time from hire by current institution to appointment as FD	4.18 ± 5 (n = 39)
Mean age at appointment as FD	41.75 ± 7.4 (n = 36)
Institutional Loyalty	n (%)
FDs currently working at same institution as residency training	10 (18.9%)
FDs currently working at same institution as fellowship training	20 (37.7%)
FDs currently working at same institution as both residency and fellowship training	6 (11.3%)
FDS who trained at same institution for residency and fellowship	10 (18.9%)
Correlated h-Indices	r (p)
Years as FD vs Scopus h-Index	0.68 (<0.0001)*
Age vs Scopus h-index	0.63 (<0.0001)*
Years since residency graduation vs Scopus h-index	0.71 (<0.0001)*

CONCLUSIONS

In conclusion, this cross-sectional study shows the present demographics within the cardiothoracic radiology FD position. This field of radiology is observed to have FDs with research productivity that is comparable with other medical specialties. Some radiology residency and fellowship programs were shown to produce more FDs than others, however, we were not able to identify causality. Program directors appear to be selected from a familiar pool of applicants, and ultimately FDs are being replaced by individuals with similar distinctions. Overall, this research into cardiothoracic radiology FDs demographics and research productivity can add to the current body of literature on FDs in various medical specialties. It is essential to continue to reflect on medical leadership as the field continues to advance.

FUTURE DIRECTIONS

Combination of other subspecialities within radiology to compare and contrast the different demographics and academic productivity.