

# 2020 Duke Department of Neurology Self-Assessment

## Introduction

During the 2019-2020 academic year, the Neurology Department Diversity and Inclusion Committee spearheaded five departmental self-assessment reviews to ensure the department was living up to its commitment to provide a diverse and inclusive community where all members thrive in a welcoming and engaging environment. This project was performed as part of the Committee's 2019-2020 theme of Accountability. The five reviews included a departmental census, a gender pay equity analysis, a grand rounds speaker analysis, and a residency recruitment process analysis, and a diversity and inclusion satisfaction survey. The results of these analyses are published here to promote departmental transparency.

## Summary of Findings

The Department Census revealed many ways in which we are diverse, such as our family backgrounds, outside interests, languages spoken, and religious identities, but revealed other aspects of the department where diversity is lacking, most notably with race. For example, Duke Neurology currently employs 1 Hispanic and 0 Black clinical neurologists, well below the national averages, while only two research faculty identify as Black. The national average for women on faculty in academic neurology departments is 30%; Duke is slightly higher than this average but still well below 50%. Duke Neurology also has very few members who identify as non-binary or prefer pronouns other than he/him and she/hers.

The gender pay equity analysis demonstrated remarkable equity between male and female clinical assistant professors with women making an average salary that is 99% of the average men's salary. The research assistant professors demonstrated a greater pay gap with women earning an average salary that was 13.5% lower than the average men's salary. This gap could potentially be explained by duration of service as most of the men who are assistant professors of research have been at Duke for more than 10 years and most of the women who are assistant professors have been here fewer than 10 years.

The gender analysis of Grand Rounds speakers indicated that men and women from Duke speak in proportion to their numbers in the department (62%-38%). When outside speakers are invited, women and men speak at a rate much closer to 50% each. The racial analysis of Grand Rounds speakers among Duke speakers is again proportionate to the rates in the department (72% White, 23% Asian, 5% Black/Hispanic/Native American). Duke Neurology did not invite a guest speaker from a traditionally underrepresented racial group to speak at Grand rounds between 2016-2019.

The residency offered interviews to approximately the same percentage of applicants from under-represented and non-under-represented backgrounds for the third consecutive year, validating the holistic method of reviewing applications adopted in 2017.

The Diversity and Inclusion Survey revealed three areas where members felt most disrespected: job title, age, and sex/gender. Nurses, APPs, and administrators were most likely to feel disrespected due to their

jobs. Women were more likely than men to feel disrespected due to gender. And members in their 20s and 30s reported the most disrespect based on age. The department Chair and Diversity and Inclusion officer were generally given high marks for commitment to diversity and inclusion and value to the department, respectively. The Diversity and Inclusion Grand Rounds Series and the diversity and inclusion monthly emails were both highly rated endeavors.

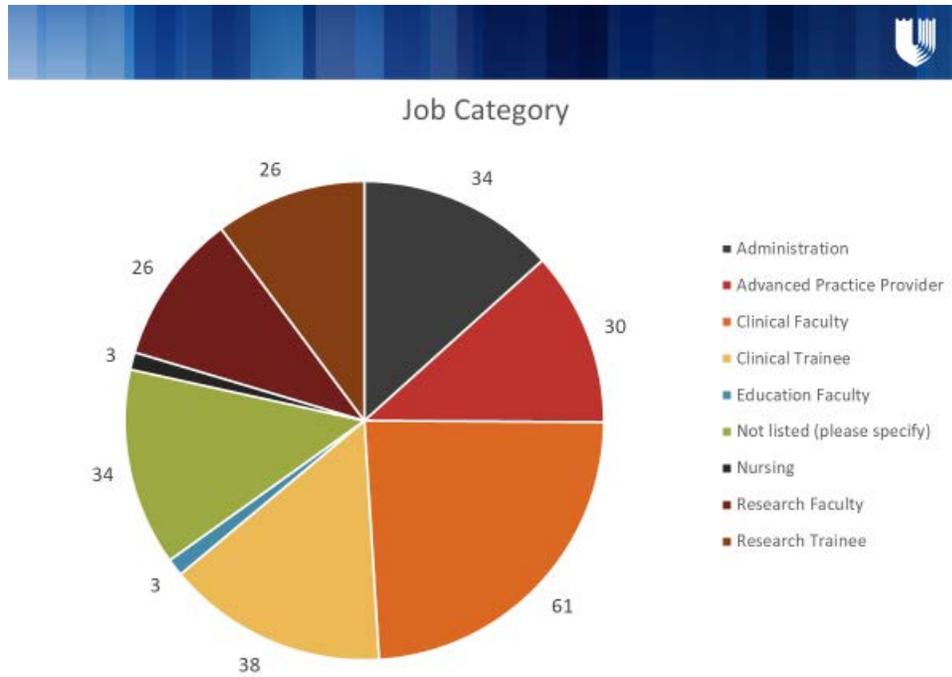
### **Future Plans**

The Diversity and Inclusion Committee's 2020-2021 theme will be "Equity." The results of these 5 self-assessments will guide our efforts going forward. The department will continue to strive to recruit diverse faculty, especially those who are Black and Hispanic, as these groups are markedly under-represented among the faculty. Likewise, a concerted effort will be made to invite Grand Rounds speakers from under-represented groups utilizing such resources as the Society for Black Neurologists Speakers Bureau. The gender pay gap among research faculty will be further analyzed to account for duration of service to Duke to determine if the gap is a result of women being hired more recently than the men of the same rank. The residency will continue its efforts to recruit diverse trainees through attendance at the SNMA annual conference, the AAN residency fair, connections to Howard University's Student Interest Group in Neurology, and the Society of Black Neurologists. The Diversity and Inclusion Committee will partner with the Women in Neurology Group to identify and correct sources of gender-based disrespect. The Committee will also pursue efforts to reduce job-related disrespect by improving recognition for administration and research technicians in the department and exploring options for including APPs as faculty.

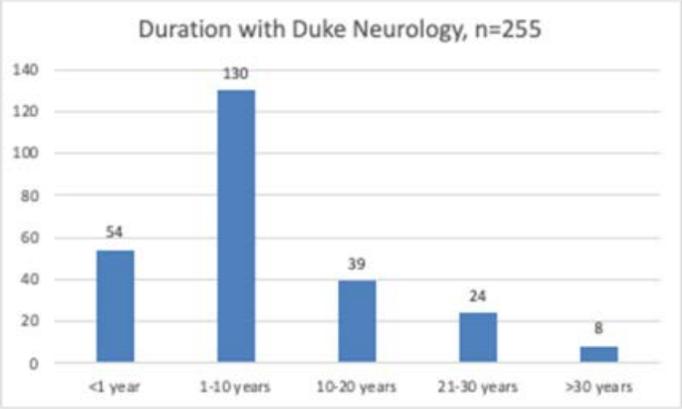
## Department Census

259 members of the department responded to the survey, which was a response rate of approximately 86%.

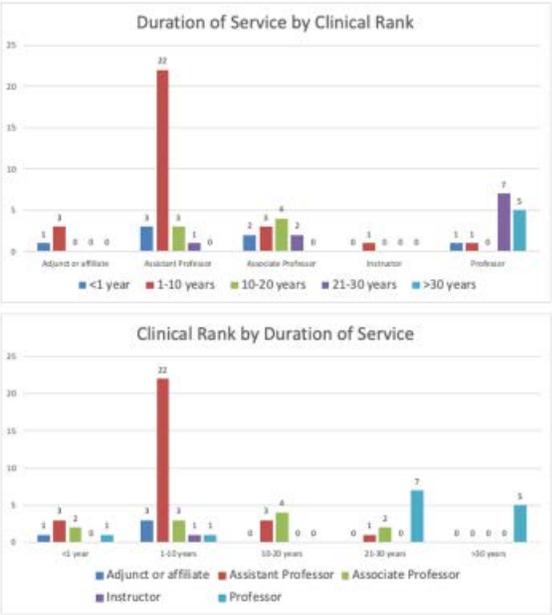
### Job title and rank



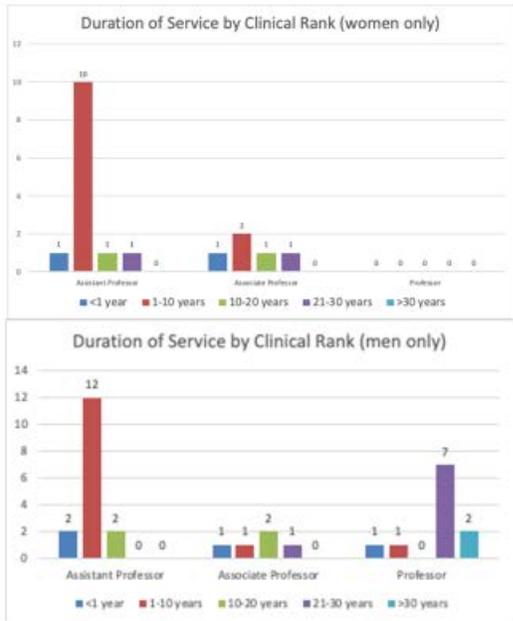
About half of the department is primarily clinical. About 1/6 are administrative, and another 1/3 are researchers. The "not listed" category is composed mostly of research technicians.



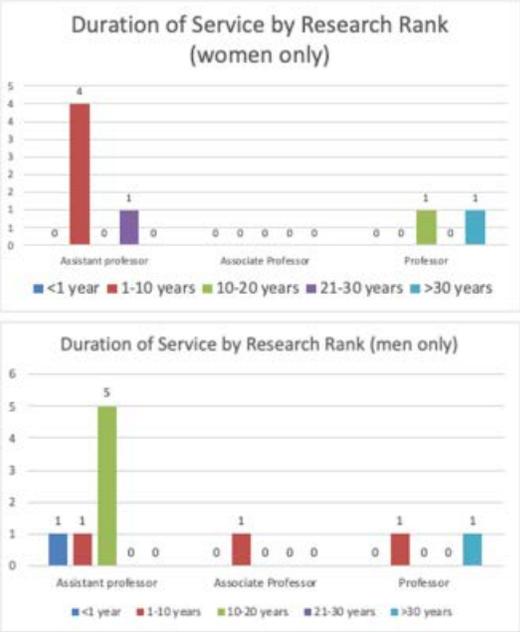
Nearly three quarters of the department has been here 10 years or fewer. Similar trends held for all job category subgroups.



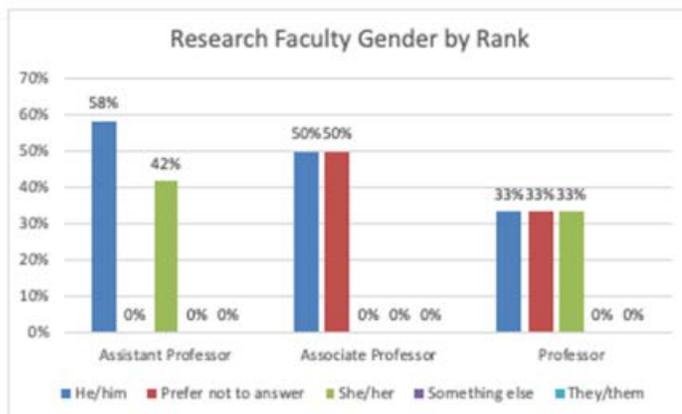
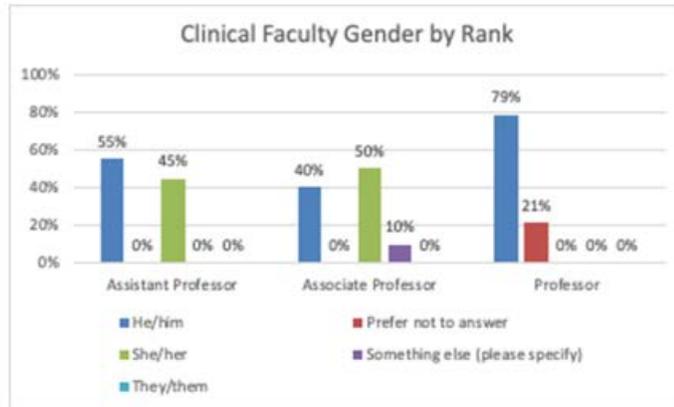
These charts indicate that a small number of assistant professors have been at Duke for more than 10 years and that most of our new clinical hires are in junior positions.



These charts indicate that men and women who have been at Duke for 10 or more years are similarly likely to remain at the assistant professor rank.

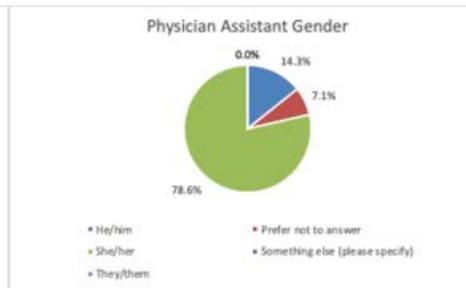
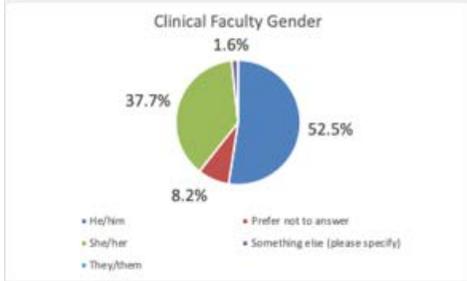


Among primary researchers, men are more likely to remain at the assistant professor rank than women after 10 or more years, but very few women have been here that long.



There is substantially more gender balance at the assistant and associate professor faculty levels than at the professor rank. There is more gender balance among research faculty at the professor level, but there is a predominance of men at the assistant professor level.

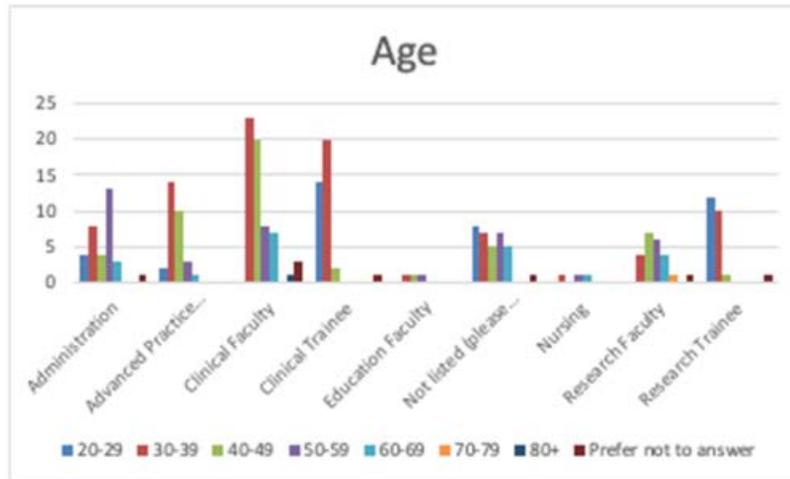
# Gender





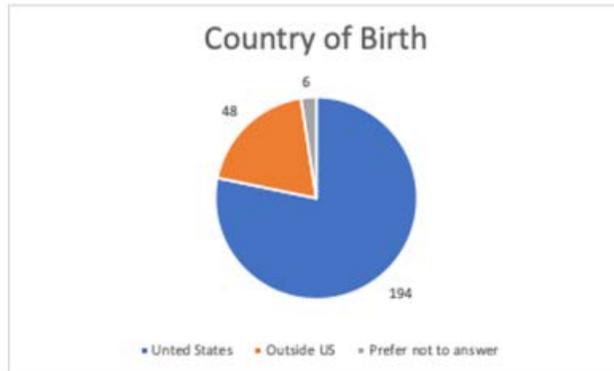
Gender identity analysis relied on the use of pronouns with he/him representing men and she/her representing women. No clinical providers selected non-binary pronouns. Clinical faculty and trainees are 50-60% men. APPs are substantially more likely to be women (~75%). While research faculty are more than 50% men, a higher percentage of trainees are women. Administration (not pictured) is overwhelmingly female (88%).

## Age



As would be expected, the youngest members of the department are trainees. High numbers of clinical faculty are in their 30s and 40s. The only group that skews somewhat older is administration.

## Background



## Country of Birth

- Australia (2)
- Brazil
- China (9)
- Canada (3)
- Chile
- Cuba (US Naval Base)
- Egypt
- Germany
- India (9)
- Israel (2)
- Lebanon
- Pakistan (3)
- Panama
- Philippines
- Poland
- Saudi Arabia
- South Africa
- South Korea
- St. Kitts
- Switzerland
- Venezuela
- Zimbabwe

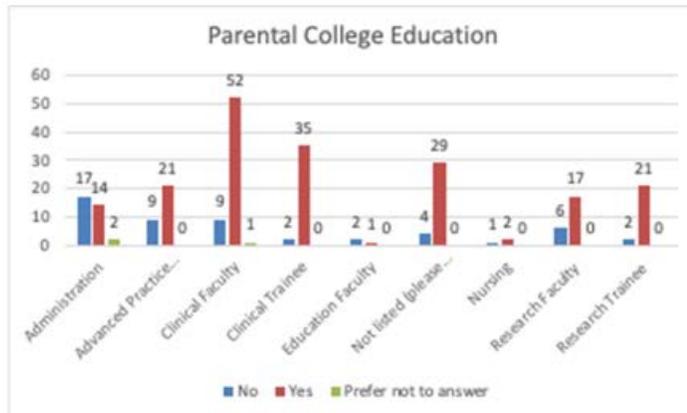
Nearly a quarter of the department was born outside the United States with China and India being the most common countries of origin outside the US. All six populated continents are represented in the department.



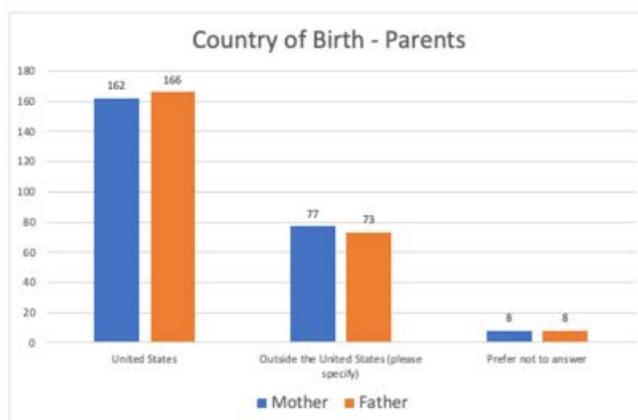
## First Languages

- Arabic (2)
- Bengali
- Chinese (8)
- Farsi
- German
- Gujarati (3)
- Hebrew (2)
- Hindi
- Italian
- Korean
- Marathi
- Polish
- Portuguese
- Shona
- Spanish (4)
- Tagalog
- Telugu
- Turkish
- Urdu (2)

English is the first language of 84% of the department. The most common first language other than English is Chinese. 7% of the department speaks 3 or more languages. In addition to the first languages noted above, the department is also home to speakers of French, Hungarian, Punjabi, and Russian.



Using the U.S. Department of Education’s definition of “first generation college student,” there is a relatively small but notable number of members in each job category who were in the first generation of college students in their families (noted in blue).



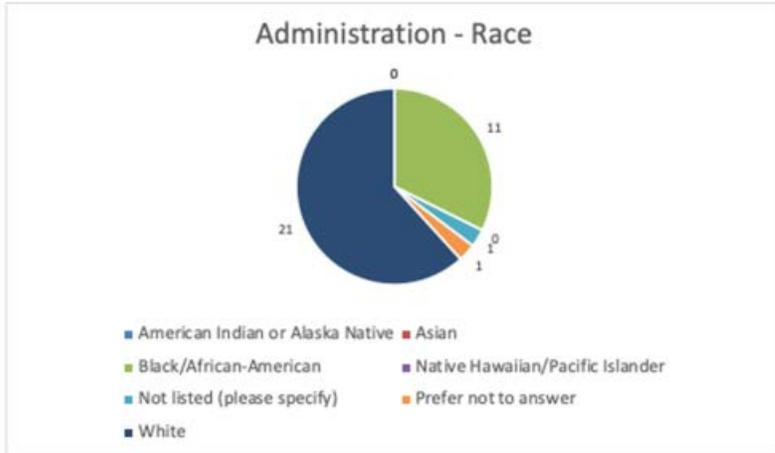


## Parental Birthplace

- Australia
- Bangladesh
- Brazil
- Canada
- China
- Ecuador
- Egypt
- Germany
- Great Britain
- Hungary
- India
- Iran
- Ireland
- Israel
- Italy
- Lebanon
- Mexico
- Namibia
- Pakistan
- Panama
- Philippines
- Poland
- Russia
- Scotland
- South Korea
- Spain
- St. Kitts
- Taiwan
- Turkey
- Vietnam
- Zimbabwe

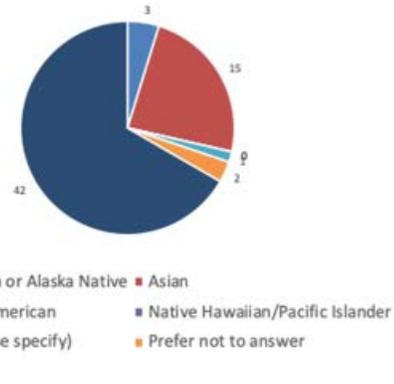
Approximately 30% of the department has parents who were born outside the US. This is a slightly higher rate than we see for members of the department born outside the US, suggesting a low number of members who are the first generation in their families to be born in the US.

## Race/Ethnicity

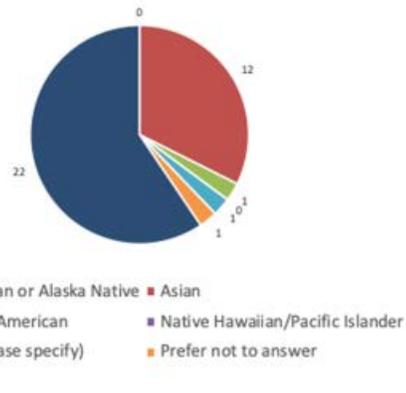




Clinical Faculty - Race

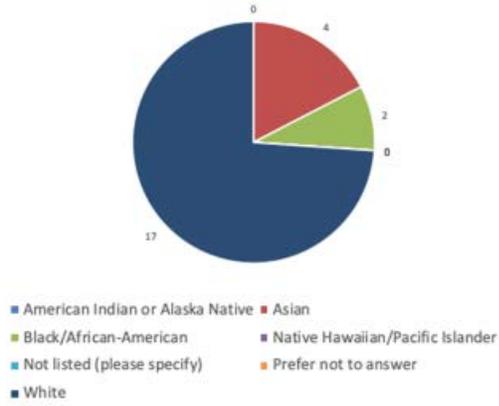


Clinical Trainee - Race

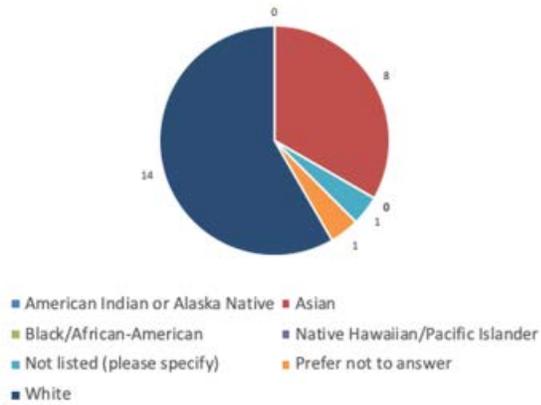




Research Faculty - Race

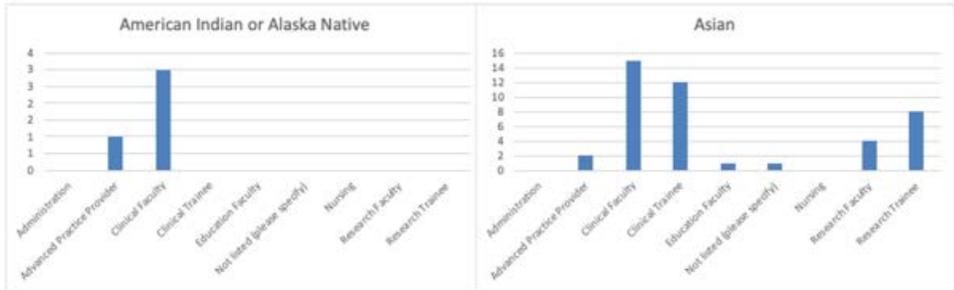


Research Trainee - Race

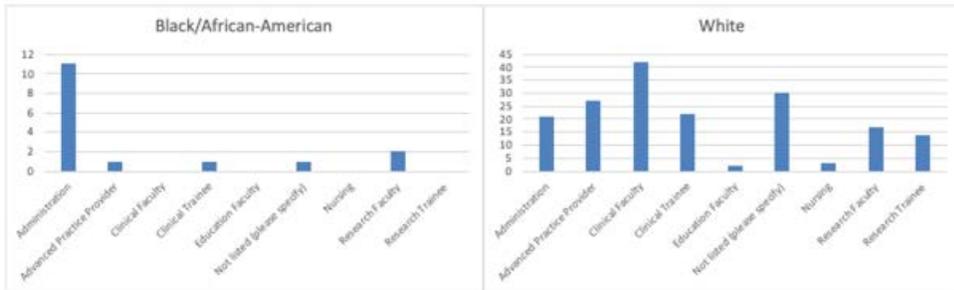




### Job Category by Race



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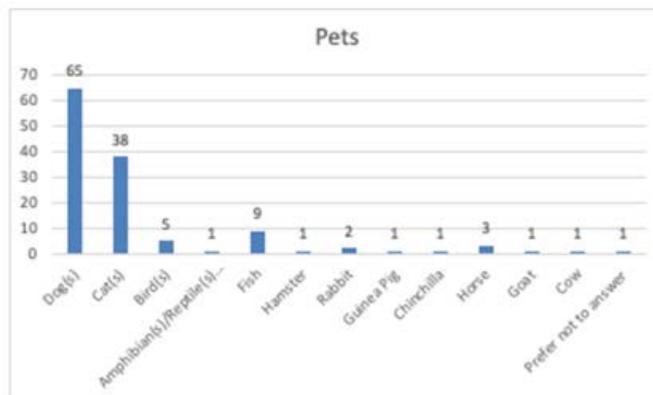
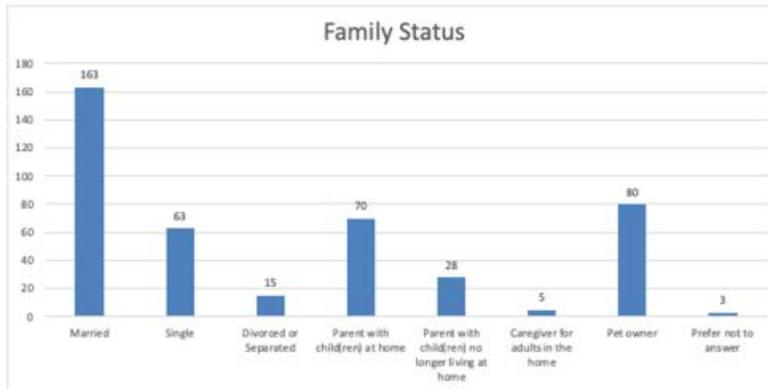




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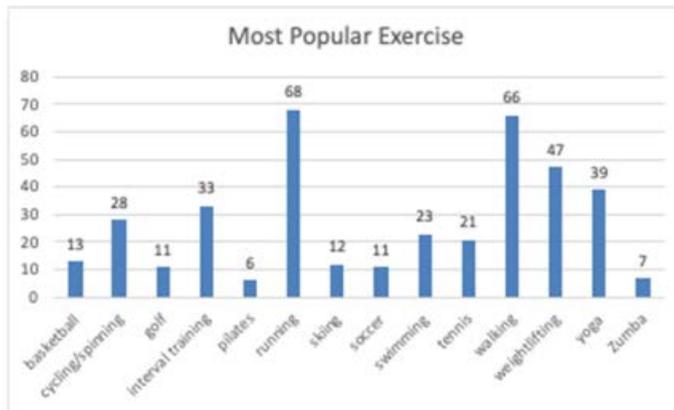
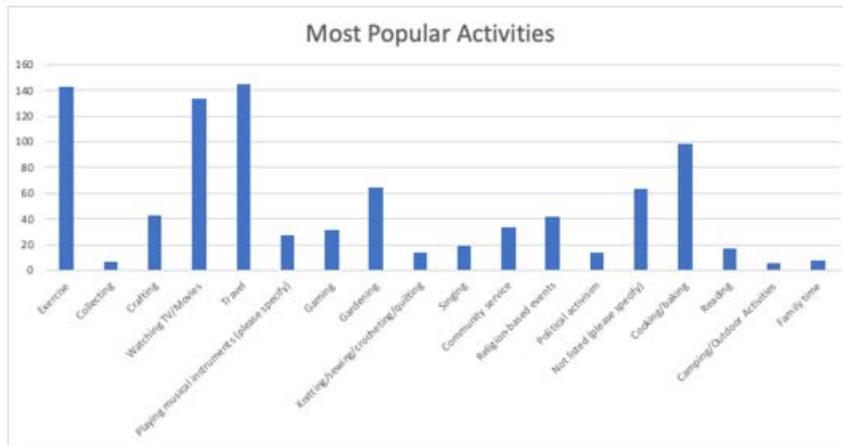
Clinical providers are overwhelmingly White and Asian. No clinical faculty identified as Black; one clinical trainee and one APP identified as Black. Two members of the research faculty identify as Black. Members who identify as Black are most prevalent in administrative positions. Members who identify as American Indian or Alaskan Native are most prevalent in clinical faculty positions. Members who identify as Asian are split between clinical and research positions with none in administration. Members who identify as White are represented in all job categories. There are low numbers of Hispanic/Latino members spread across the department. The AAMC reports that the racial breakdown of clinical neurologists in academic medical centers is: Asian 20%, Black 3%, Native American/American Indian 0.1%, Hispanic 7%, Multiple 1%, Other 1%, White 68%. Duke has a lower percentage of Black and Hispanic neurologists and a higher percentage of Native American neurologists than the national numbers would predict. The most recent study of graduating medical students indicated 8.1% of students entering neurology were from an underrepresented racial group but did not specify further. Duke is currently at 6% trainees from an underrepresented group. Statistics on racial breakdowns for other job categories is not available.

## Personal



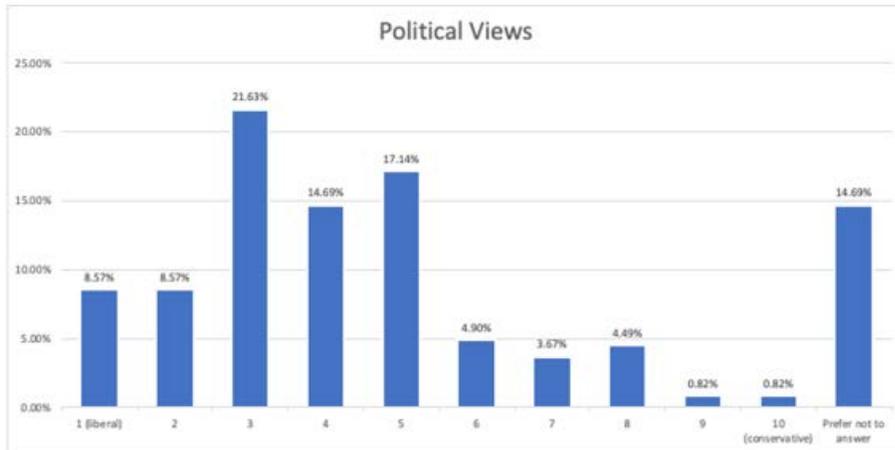
The majority of members are married. Less than half the members reported being parents of either children at home or grown children. About a third of respondents reported owning at least one pet.

Dogs are far more popular than cats in the department, which is in line with national data, but pet ownership among members is low compared to the general population.

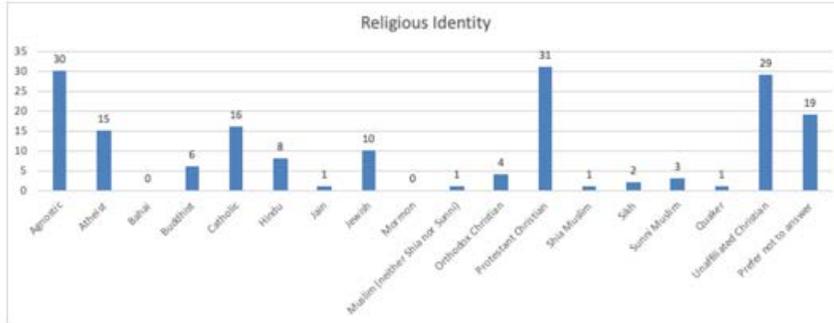


The most popular activities are travel and exercise, and the most popular forms of exercise are running and walking with weightlifting, yoga, and interval training next. Other popular activities are watching tv/movies, cooking/baking, and gardening. Activities not listed but reported by at least one member included languages, chess, programming, dance, investing, liquor, motorsports, painting, photography, and shopping. The additional forms of exercise that were not listed but reported by at least one member

were hiking, climbing, rowing, bowling, cricket, CrossFit, skating, hockey, jai alai, Orange Theory, tai chi, volleyball, badminton, barre, pickleball, and softball.



Members of the department skew left of center politically, in the moderate-liberal range. There was a relatively high non-response rate for this question. Subgroup analysis showed the faculty slightly to the left of the non-faculty members.



The department is predominantly Christian with the highest number of Protestants followed by unaffiliated and then Catholic and Orthodox. The next largest group was agnostics with a notable group of atheists as well. Jewish and Hindu were the next most prevalent groups.



## Non-health care careers

- Veterinarian
- Engineer
- **Lawyer**
- Songwriter/rock star/musician
- Restaurateur
- Research
- Coffee Shop employee
- **Scientist (various fields)**
- Clinical psychologist
- Economist
- Farmer
- Coach
- **Teacher**
- Accountant
- Epidemiologist
- Professor
- Florist
- Law Enforcement
- Design
- Landscaping
- Game Warden
- Travel agent/travel correspondent
- Astronaut
- Chef
- Real Estate Developer
- Book store owner
- Used car salesman
- Software engineer
- Running a nonprofit
- Private investigator
- International Management
- Artist
- Diplomat
- Stay-at-home parent
- Meteorologist
- Writer
- Pilot
- Wedding planner
- **Humanities scholar (various fields)**
- Entrepreneur
- Mechanic
- Banker
- Model
- Military
- Horse trainer
- Advertising
- Brewer
- Archeologist
- International relations
- Marketing
- Human resources

If not in a health care field, members suggest a wide variety of alternative careers for themselves. Responses were consolidated if generally similar to conserve space.

## **Faculty Pay Review**

Anonymous salary data for faculty was provided by J.T. Solomon, Chief Department Administrator for the purpose of determining the presence of a gender pay gap. Given the low number of women at the associate and professor levels, statistical analysis could not be performed for these ranks. Thus, the analysis looked at women and men at the assistant professor rank only with data collected by 12/31/19. Nationally in clinical academic medicine, women are reported to earn 88% of the salaries earned by men in equivalent positions. At Duke Neurology, the average clinical assistant professor salary for women is 99% of men with a median salary that is 98% of the median for men. Men compose both the lowest and highest paid assistant professors. The highest paid man earns 1% more than the highest paid women. The lowest paid man earns 5.2% less than the lowest paid woman. The departmental census indicated that men and women at the assistant professor level have worked at Duke for approximately the same duration of time, with nearly all having a Duke tenure of 1-10 years. In summary, the clinical assistant professors are equally compensated without a notable gender pay gap.

Research assistant professors demonstrated a gender pay gap of 12.6% (median) and 13.5% (mean). Data on salary ranges was not provided for analysis. Nationally, as of 2017, the basic science gender pay gap was approximately 20%.

## Grand Rounds Speaker Review

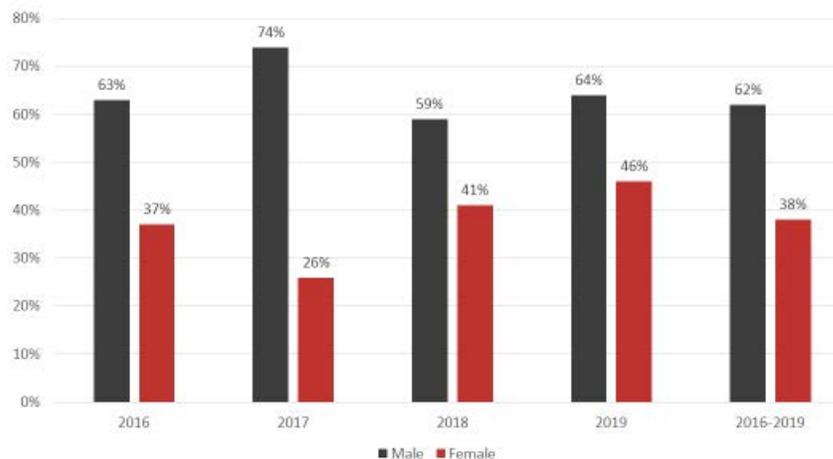


### Methodology

- Neurology Grand Rounds online archive reviewed from 2016-2019
- Reviewer made best guess as to speaker's race and gender
- Caveat: race and gender are self-identifiable traits that cannot be determined without asking the individual. This analysis must be interpreted cautiously as a result.

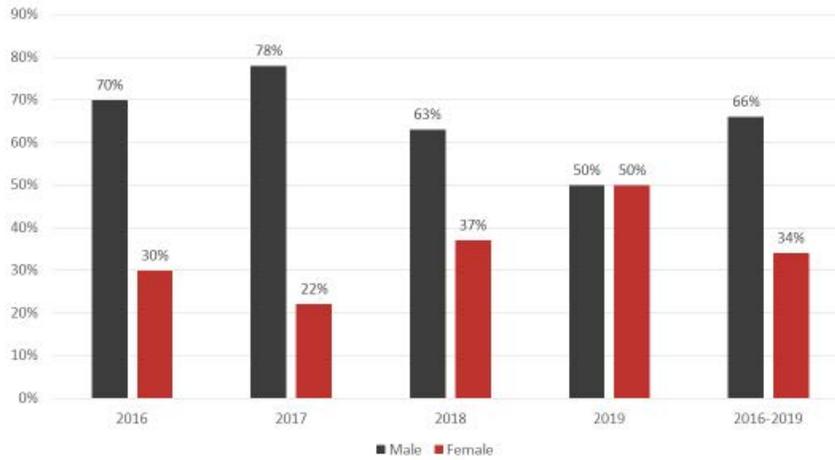


### Gender - overall

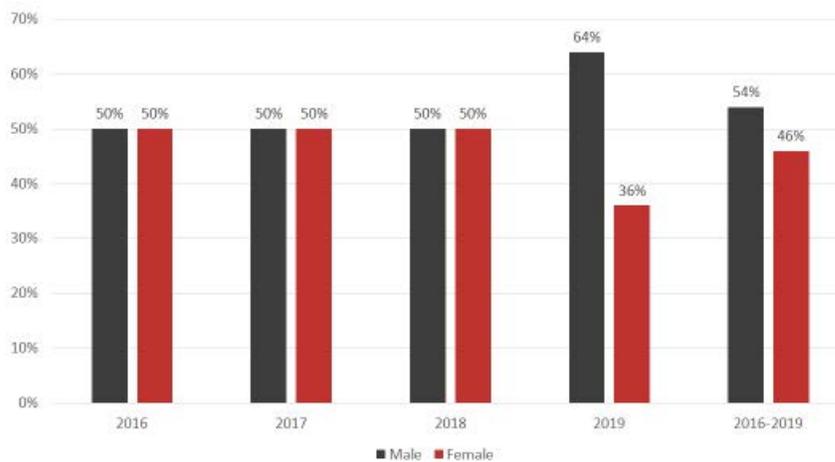




## Gender – Duke speakers



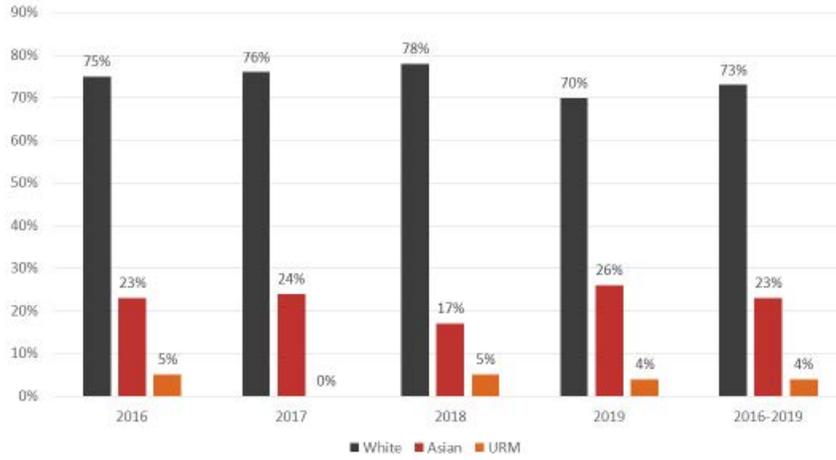
## Gender – Guest speakers



The gender distribution of grand rounds speakers, both overall and within Duke-based speakers, roughly matches the gender balance in the department. With the exception of 2019, men and women are generally invited from outside Duke to speak at similar frequencies.

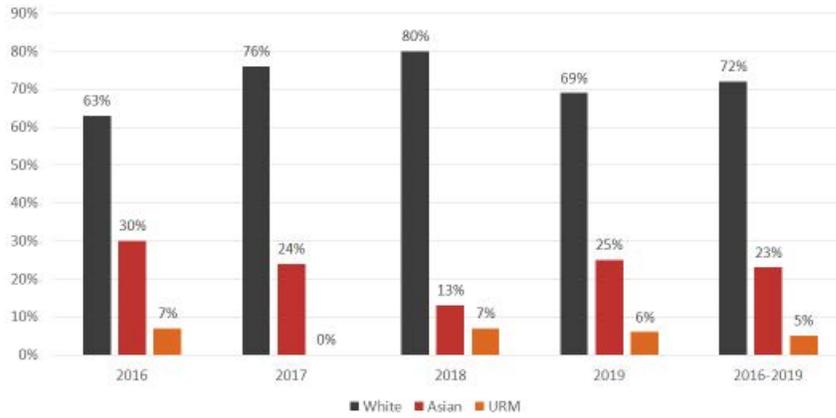


## Race – Overall



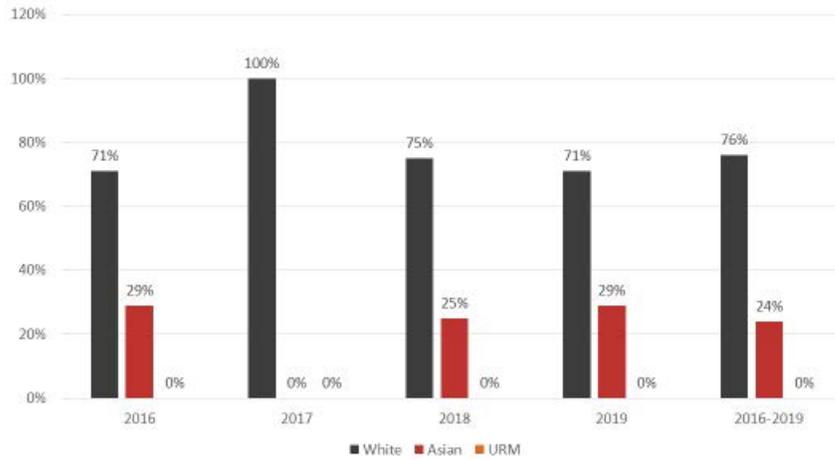
## Race – Duke speakers

Chart Title





## Race – Guest speakers



The racial distribution of grand rounds speakers, both overall and within Duke-based speakers, roughly matches the racial balance in the department. However, between 2016-2019, no speakers from outside Duke who were identifiable as being a member of an underrepresented racial group were invited to present at Duke Neurology Grand Rounds.

## Residency Recruitment

In 2017, Duke Neurology Residency Program redesigned the process by which it selected applicants for interviews based on 2016 data indicating that a heavy reliance on USMLE Step 1 scores was biasing our interview pool in favor of White and Asian applicants. The revision placed more emphasis on grades and letters of recommendation as part of a holistic review of the entire application rather than utilizing a Step 1 minimum cutoff score. The de-emphasis on Step 1 scores was subsequently validated by the USMLE deciding to discontinue numeric scoring of Step 1 in favor of pass/fail results in 2022. The residency continues to track the relative proportion of candidates from underrepresented racial groups that are offered interviews. The absolute percentages vary due to the variability in the number of applications received each year. The residency remains successful in offering interviews to similar proportions of applicants from different racial groups.

2016 (rising PGY-4 class)

20% URM applicants offered interviews

31% non-URM applicants offered interviews

1 candidate from underrepresented racial group matched out of 7 slots.

2017 (rising PGY-3 class)

25% URM applicants offered interviews

28% non-URM applicants offered interviews

0 candidates from underrepresented racial groups matched out of 7 slots.

2018 (rising PGY-2 class)

29% URM applicants offered interviews

28% non-URM applicants offered interviews

1 candidate from underrepresented racial group matched out of 7 slots.

2019 (incoming PGY-1 class)

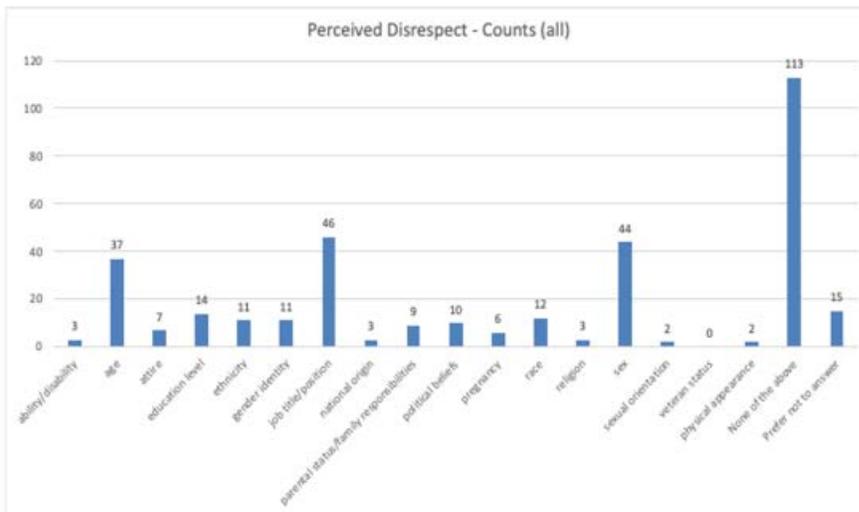
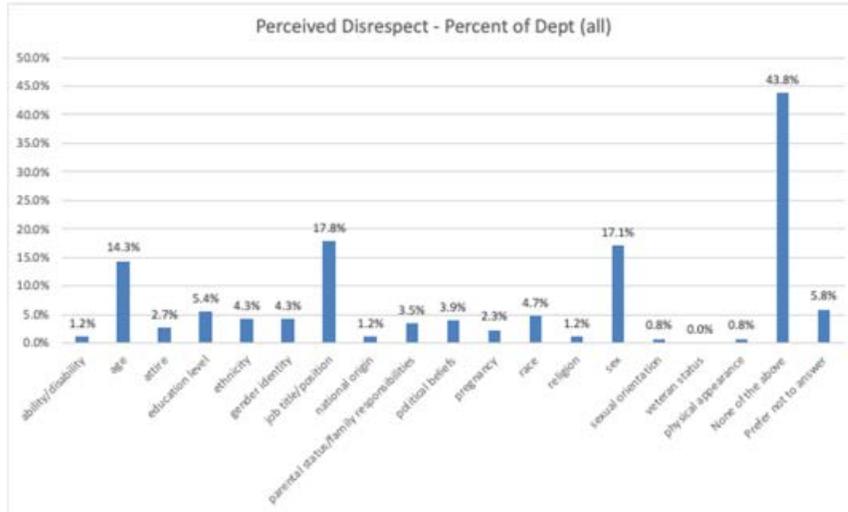
20% URM applicants offered interviews

19% non-URM applicants offered interviews

1 candidate from underrepresented racial group matched out of 7 slots.

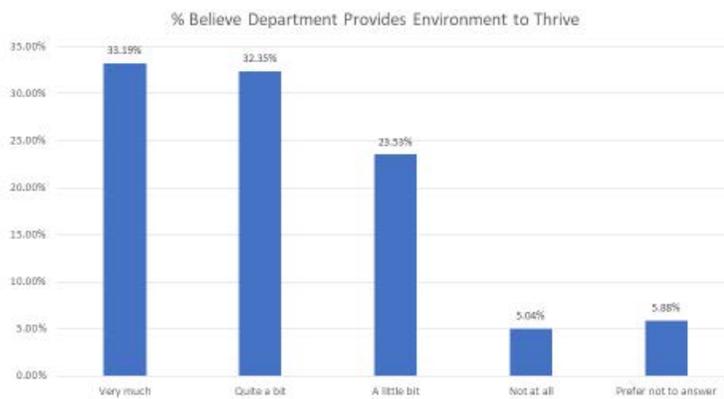
## Diversity and Inclusion Assessment

“Do you feel you are treated with less courtesy or respect at work due to any of the following aspects of your identify?”



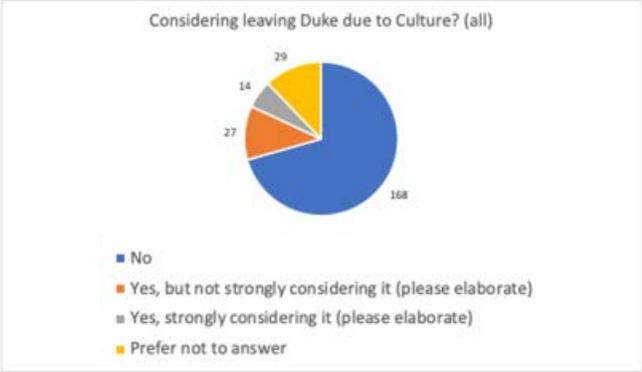
The most common response was “none of the above,” but this was selected by a minority of members. The three most common positive responses were job title/position, sex, and age. The job classes most likely to report disrespect based on their jobs were nursing, APPs, and administration. Women were much more likely than men to report disrespect based on their sex or gender (29% vs 4%). Women were also more likely than men to report disrespect of any type (65% vs 37%). The age groups most likely to report being disrespected due to their age were members in their 30s followed by members in their 20s. The group most likely to report disrespect based of any kind was Native American (100%) followed by Asian (63%). Black and White members were least likely to report being disrespected for any reason (50% and 52%, respectively).

“Is Duke Neurology succeeding in providing a work environment where you and people like you can thrive and advance?”



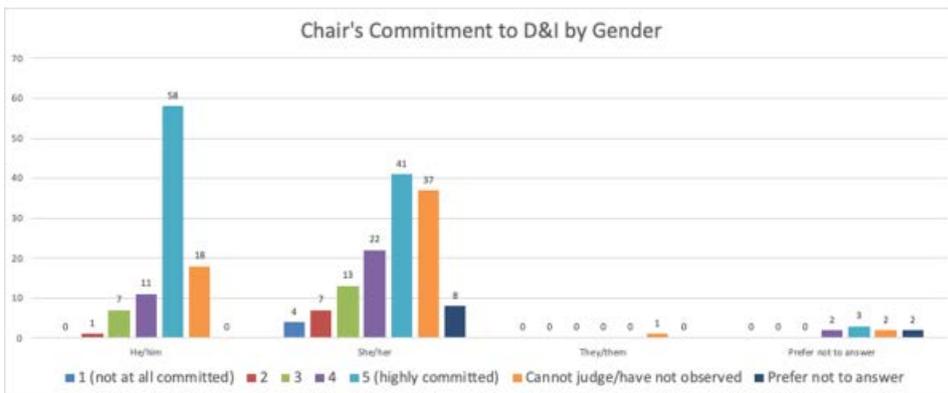
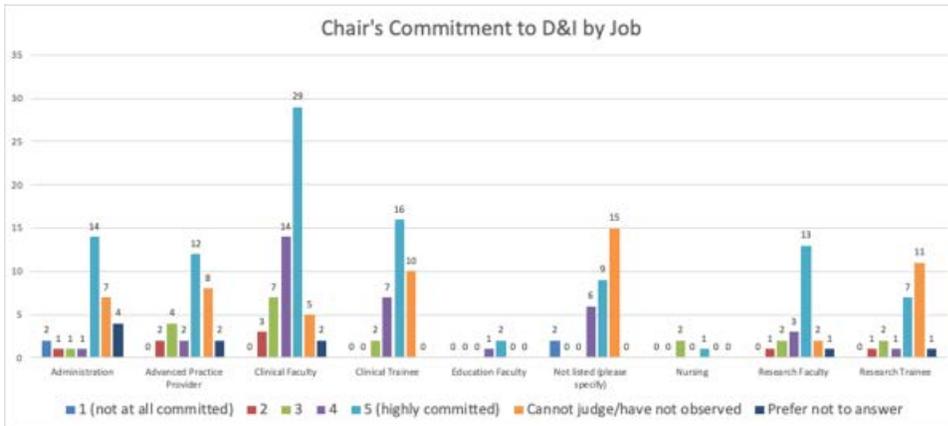
About two thirds of the Department feels that the working environment is one in which they can thrive. Another 24% feels this to a lesser degree. Only 5% report a working environment that does not permit them to thrive and advance. The highest rates of dissatisfaction with the work environment (“a little bit” and “not at all”) are seen in the administration subgroup and the research technicians. Clinical faculty and trainees and research trainees reported the highest rates of satisfaction.

“Are you considering leaving Duke due to any aspect of the culture/work environment?”



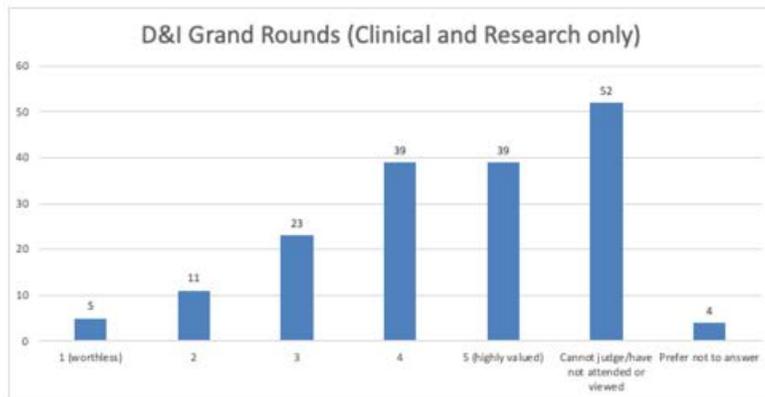
About 70% of the department is not considering leaving Duke due to considerations about the work environment; this rises to 82% when including those who are not strongly considering it. About 6% of the department finds the work environment objectionable enough to strongly consider leaving Duke. The most common job type reporting a strong consideration to leave Duke were clinical trainees. No more than 2 people from any other category were strongly considering leaving for work environment reasons.

“On a scale of 1 (not at all) to 5 (highly committed), how committed to diversity and inclusion have you found the department chair?”



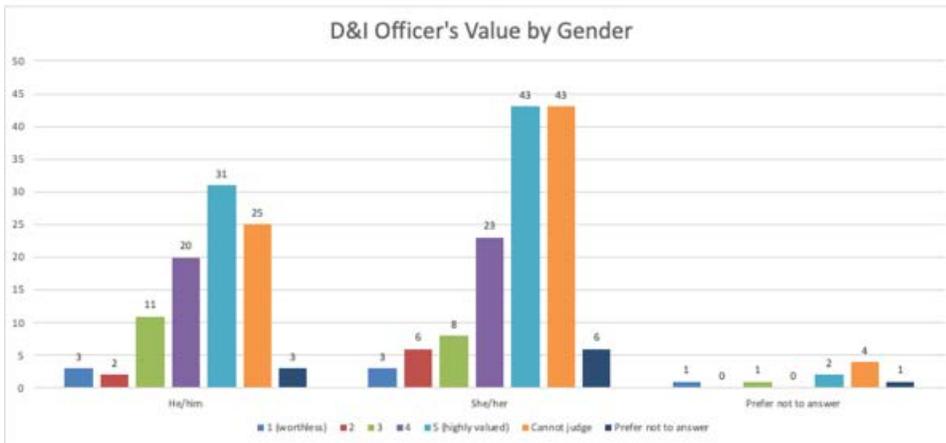
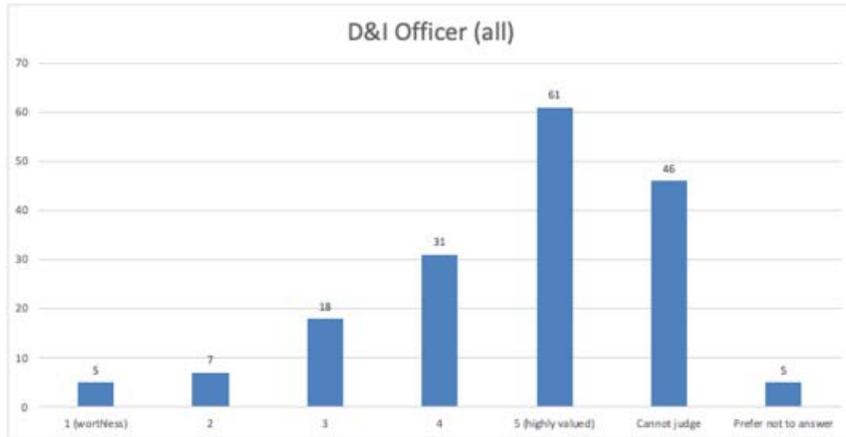
The Department Chair generally receives high marks across all job types for his commitment to diversity and inclusion. Subgroup analysis showed that men rate his commitment more highly than women, though women still rate him highly overall.

“On a scale of 1 (worthless) to 5 (highly valued), how valuable have you found the diversity and inclusion grand rounds series?”



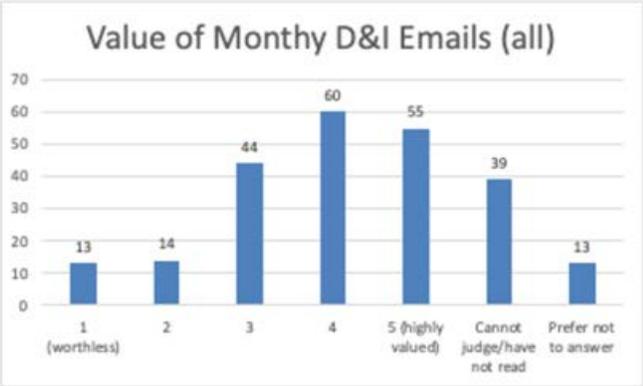
Respondents for this question were limited to clinical and research faculty and trainees. Overall, the D&I Grand Rounds series was rated highly by those who were able to render an opinion.

“On a scale of 1 (worthless) to 5 (highly valued), how valuable have you found having a department-level designated diversity and inclusion officer?”



Overall, respondents indicated that having a D&I officer in the department was valuable. Women tended to report more value in having a D&I officer than men, but also more women were unable to offer an opinion.

“On a scale of 1 (worthless) to 5 (highly valued), how valuable have you found the monthly diversity and inclusion update emails?”



Overall, respondents felt the monthly D&I emails were of moderate to high value.