

Faculty Diversity Report

Office of Inclusive Excellence

Chineme Enyioha
Lauren Westervelt
Donald Pathman
Paul Godley



EXECUTIVE SUMMARY

The purpose of this report is to describe the current status of faculty diversity at the University of North Carolina School of Medicine (UNC SOM). Where possible, national comparisons are offered to provide context for these data. Following the recent establishment of the Office of Inclusive Excellence, this report will provide a baseline for measuring the impact of future efforts.

Though the overall narrative is one of progress, based on the data provided in this report, it is clear that progress related to faculty diversity metrics has room for improvement, particularly when compared to metrics on UNC's success with student diversity.

According to national data from the past thirty years, the UNC School of Medicine is a leader in producing physicians underrepresented in medicine, and ranks among the top ten US medical schools based on the number of African American graduates. The entering medical student class of 2018 is 14% underrepresented in medicine. A contributor to this success is the UNC Medical Education Development program, now in its fourth decade of providing opportunities for disadvantaged students to explore the possibility of attending medical or dental school.

The SOM graduate student data show similar trends. One quarter of the 2017 entering PhD class are underrepresented in medicine, and this success is, at least in part, due to the Biological and Biomedical Sciences Program which not only increased the number and quality of applicants to the program, but also increased the proportion of underrepresented students in every entering class since the program was first introduced (in 2008). Moreover, the success rates for these students – measured by the percentage of the matriculating class that has graduated with a PhD or is still on track to graduate – are substantially higher than reported national averages.

Faculty data, the focus of this report, also paint a promising picture of increasing diversity, but not to the level of success seen in medical student data and not yet reflecting the demographic data for North Carolina (22.2% African American and 9.2% Hispanic in 2017). Although the School has near-equal numbers of male and female faculty overall, female numbers fall short in the basic science departments, among those at the rank of professor, and among those achieving tenure. Also encouraging is steady growth in both the absolute number of underrepresented faculty over the past 20 years, as well as an increase in the proportion of these faculty from 3.3% in 1991 to 9.3% in 2016. Clinical departments also outperform basic science departments in their proportion of underrepresented minority faculty, according to current SOM HR data (not shown).

With regard to retention, male, female, Hispanic, White, and Asian faculty are retained at similar rates; African Americans remain on faculty at higher rates than other groups. While it is difficult to pinpoint the reasons for this, efforts such as the Simmons Scholarship Program, which provides longitudinal funding for junior faculty who meet SOM diversity criteria, likely have some influence.

Additional details are provided in the pages that follow.

Introduction

The UNC School of Medicine (SOM) is an established national leader in producing physicians underrepresented in medicine (URMs). Underrepresented in medicine is defined by the AAMC as "...those racial and ethnic populations that are underrepresented in the medical profession relative to their numbers in the general population." [1] This definition currently includes students who identify as African American and/or Black, Hispanic/Latino, Native American (American Indian, Alaska Native, and Native Hawaiian), Pacific Islander, and mainland Puerto Rican.

This report is limited to describing SOM demographics in terms of race and ethnicity status and gender. Other key areas of diversity, such as religion or LGBTQ status, are more difficult to quantify, but are important to understand as we move towards fostering an inclusive and diverse academic community. Culture and climate issues will be included in a future edition of this report, using data from the recent faculty survey.

As stated in the SOM Diversity Definition & Policy (2011):

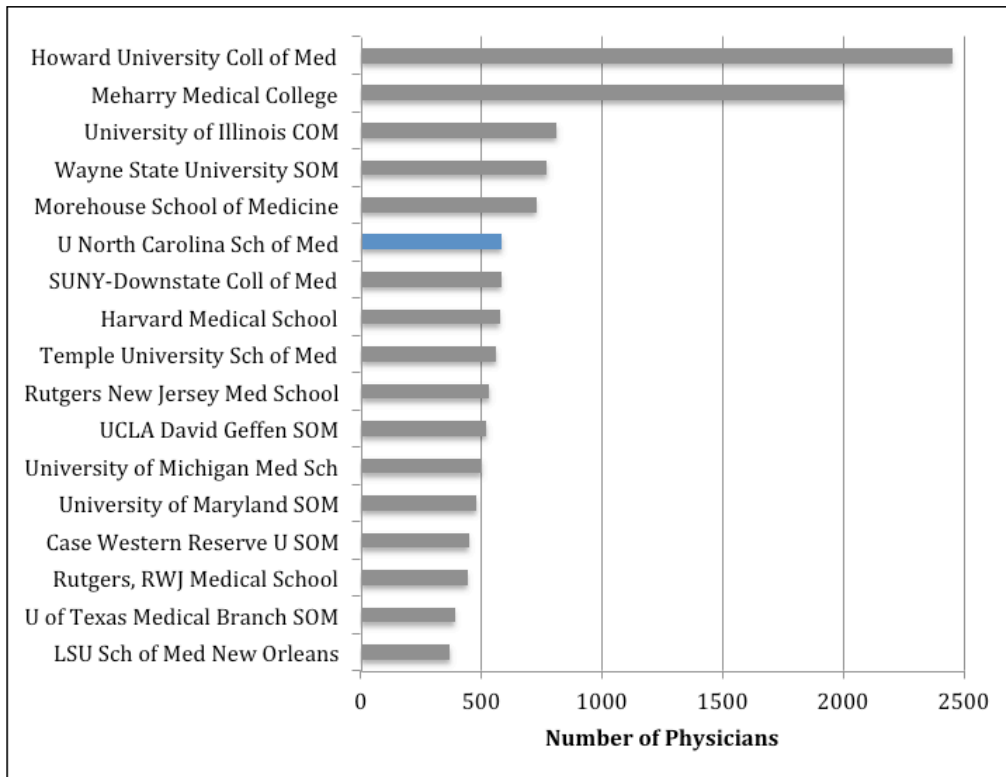
The School of Medicine selects individuals for admission, employment, or appointment on the basis of individual capability and potential for contribution to our mission of teaching, healing, and discovery. In creating a diverse and inclusive community we recognize the importance of age, creed, physical ability, gender identity, gender expression, sexual orientation, language, culture, socio-economic status, spiritual practice, political ideology, national origin, and veteran status but these criteria are not used in distinguishing among applicants, students, residents, staff, or faculty.

Student Diversity

Over a 32-year period ending in 2012, the SOM has produced more black physicians (N=582) than every non-historically black except for two, the University of Illinois in Chicago and Wayne State University in Detroit (Figure 1). (Howard University, Meharry Medical College, and Morehouse School of Medicine are historically black medical schools.)

Figure 1

Black or African-American Physicians Graduating from US Medical Schools, (N) 1980–2012.*

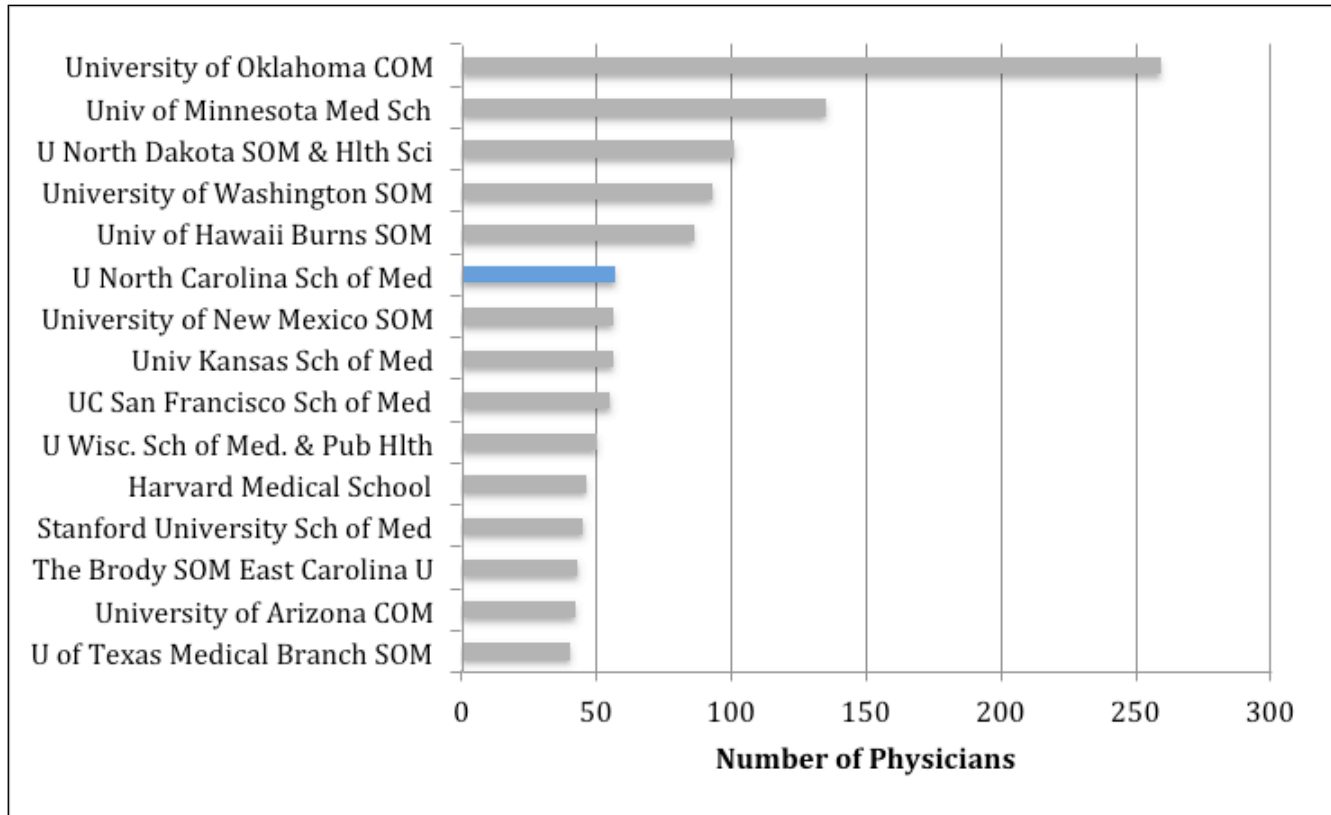


*Source: AAC Data Warehouse: Minority Physician data, AMA Masterfile, and other AAMC data sources, as of 1/22/2014.

Similarly, during the same time period, the SOM has produced more American Indian or Alaska Native physicians (N=57) than any other medical school east of the Mississippi, ranking sixth overall in the number of graduating American Indian physicians (Figure 2).

Figure 2

American Indian or Alaska Native Physicians Graduating from US Medical Schools, (N), 1980–2012.*



*Source: AAC Data Warehouse: Minority Physician data, AMA Masterfile, and other AAMC data sources, as of 1/22/2014.

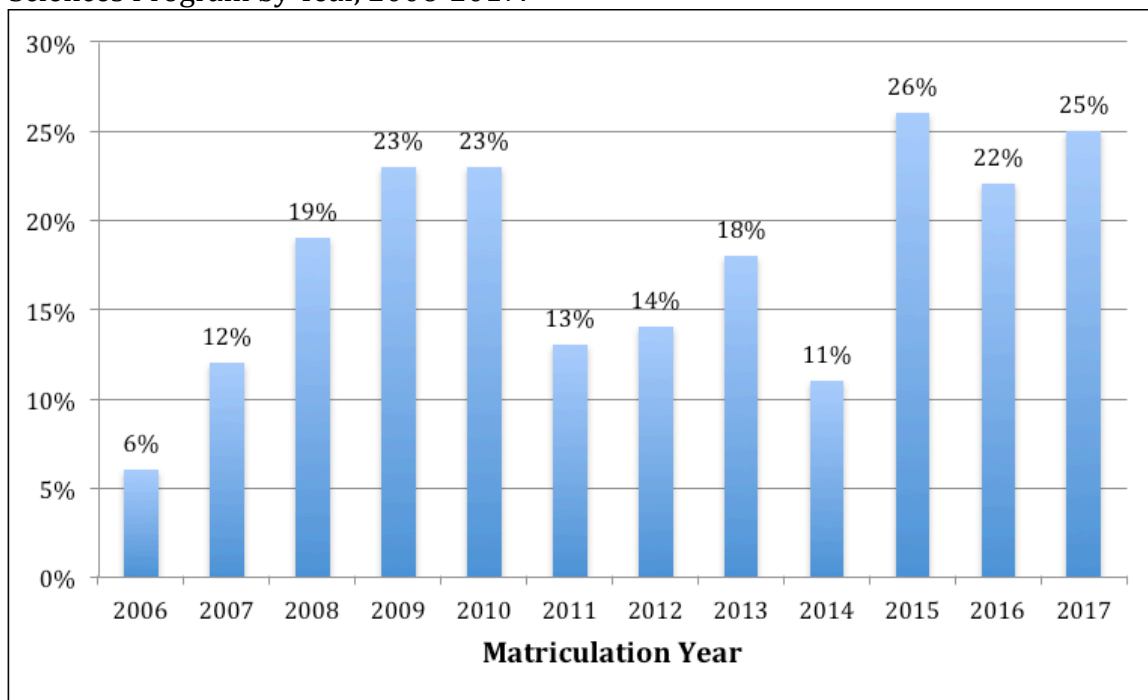
The SOM’s consistent graduation of URM physicians over the last 30 years is this growth is evidence of the school’s overall commitment to diversity expressed through an admissions process that values diversity and the unique ways that individual applicants can contribute to the school, the school’s voiced expectations of faculty and learners, and opportunities and support offered those with disadvantaged backgrounds. It is likely also evidence that UNC is perceived by prospective students to offer a broadly inclusive learning environment. The Medical Education Development program, a UNC SOM-based summer program for disadvantaged, pre-health careers students now entering its 44th year, has established a pipeline of URM students for the Schools of Medicine and Dentistry.

The Biomedical Research Graduate Program in the SOM has also been successful in its recruitment of URM students. Figure 3 illustrates that in recent classes, nearly a quarter of entering students are underrepresented in medicine. A likely contributor to the success of the graduate program is the Biological and Biomedical Sciences Program (BBSP), an umbrella admissions and first-year program that feeds into 14 Ph.D. programs in the School of Medicine, Eshelman School of Pharmacy, Gillings School of Global Public Health, and the College of Arts and Sciences.

Student diversity in the SOM, including graduate students, will be further explored in greater depth in a future report along with Graduate Medical Education programs.

Figure 3

Percent of Matriculating URM Students in the UNC Biological and Biomedical Sciences Program by Year, 2006-2017.



Student diversity in the SOM, including graduate students, will be further explored in a future report along with Graduate Medical Education programs.

In stark contrast to the leadership role played by the SOM in medical student diversity, the SOM has previously lagged substantially behind its peers in faculty diversity. It is only now seeing the results of a culture supporting diversity as well as several pipeline and faculty diversity programs that have led to a faculty as diverse as the national average.

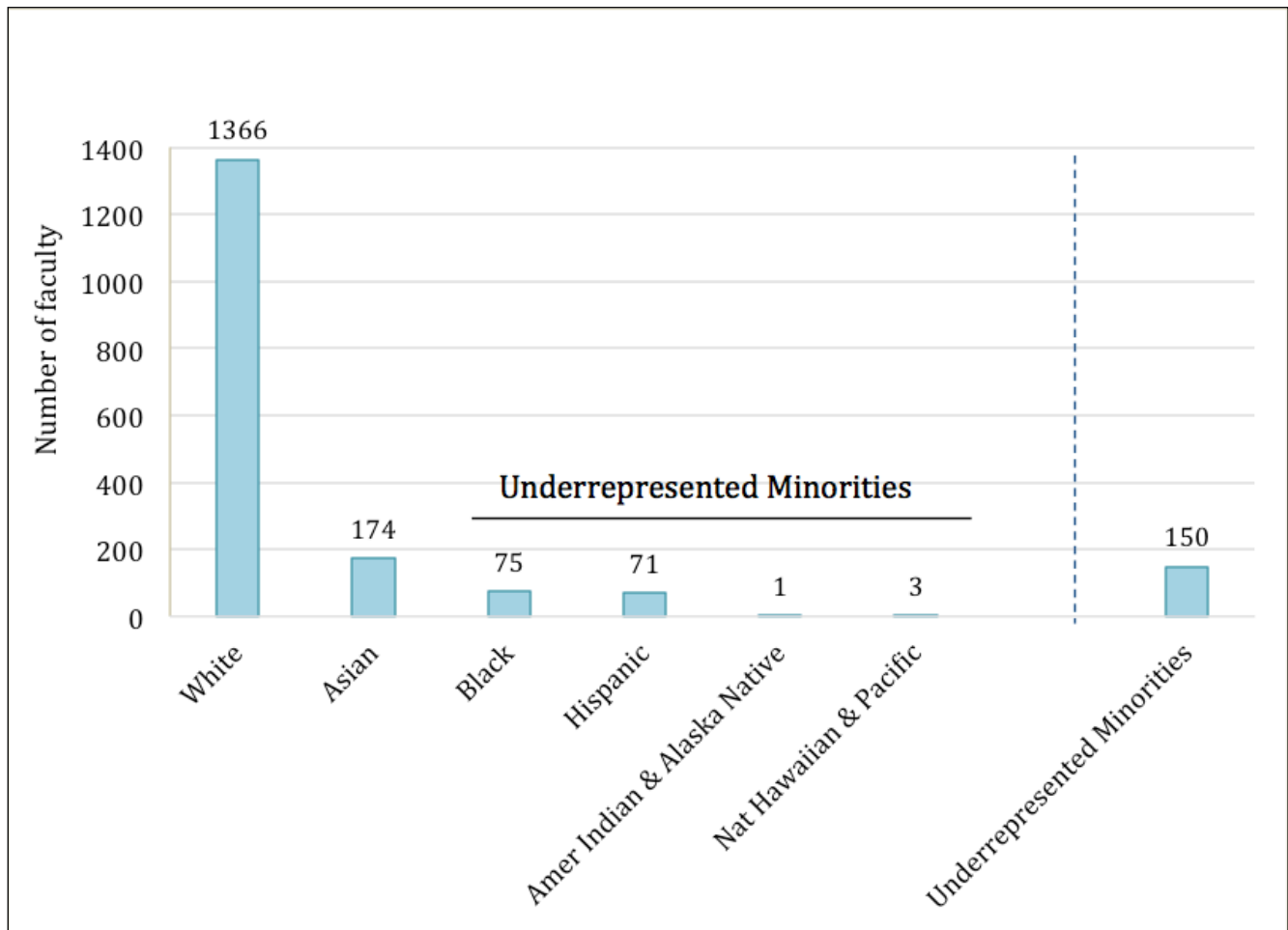
Faculty Diversity

The AAMC (Association of American Medical Colleges) FAMOUS (Faculty Administrative Management Online User System) database was used to generate Figures 4-12.[2]

Figure 4 shows a snapshot of the race and ethnicity distribution of SOM faculty in December of 2017.

Figure 4

Total UNC SOM Faculty by Race/Ethnicity (N). December 2017.



There have been minimal changes in the race and ethnicity of SOM faculty over the last four years of available data (Figure 5). Omitting the White and Asian populations displayed in Figure 5 below, Figure 6 highlights the relatively stable URM faculty numbers over the last four years.

Figure 5

Total UNC SOM Faculty by Race/Ethnicity (N), 2013-2016.

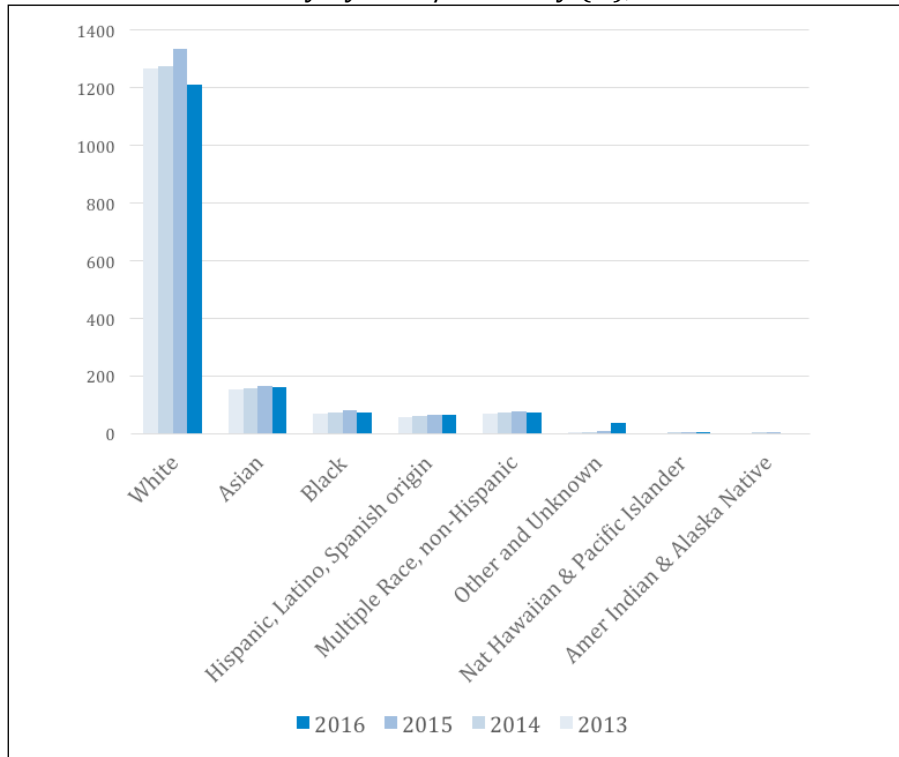
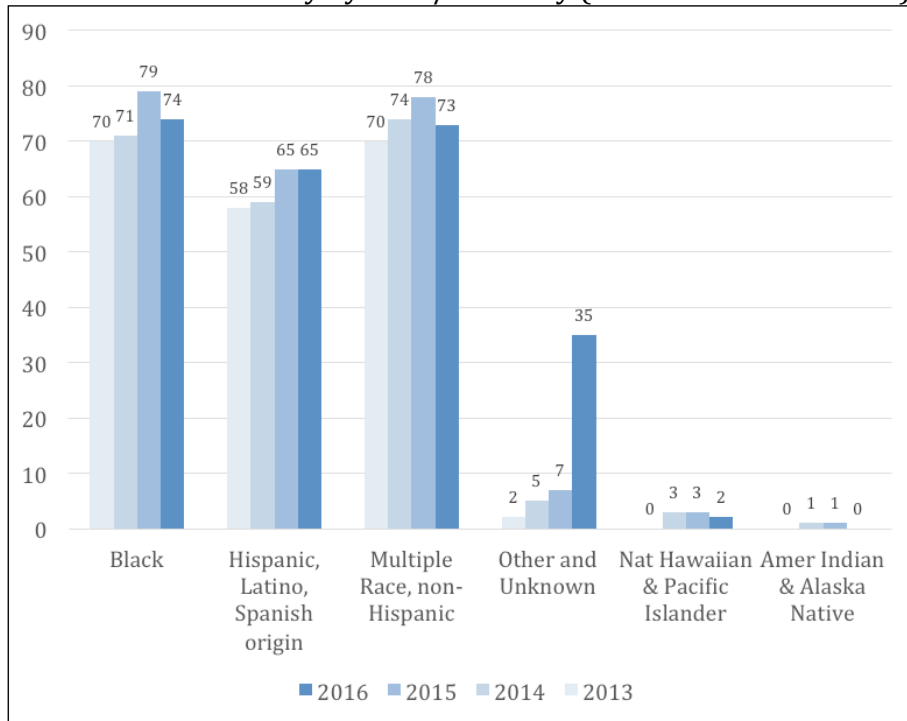


Figure 6

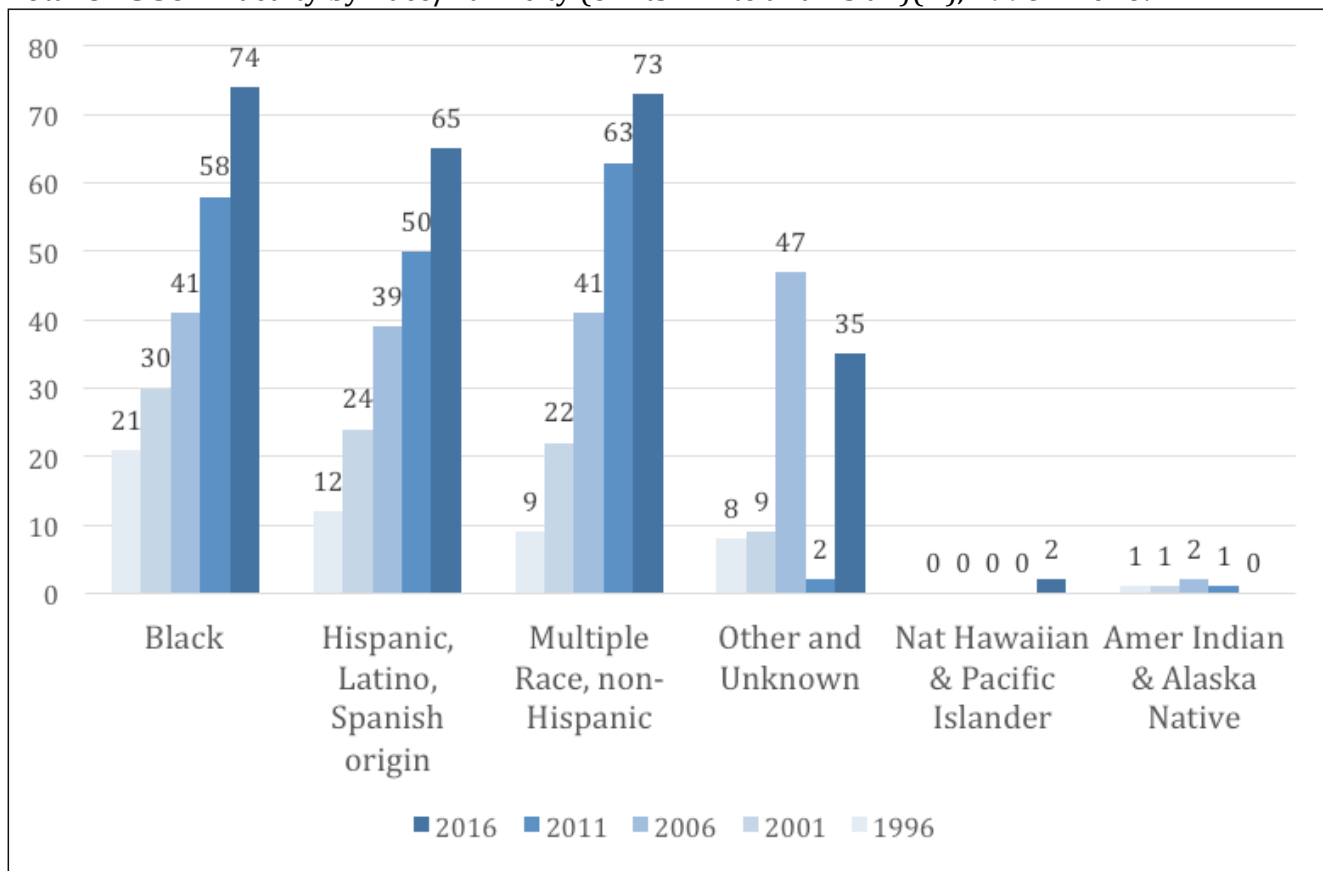
Total UNC SOM Faculty by Race/Ethnicity (omits White and Asian)(N), 2013-2016.



Examining minority faculty numbers over the last 20 years reveals steady progress in recruiting and retaining minority faculty that is not evident when examining shorter periods. Consistent growth in the absolute numbers of minority faculty shown in Figure 7, suggests that ongoing diversity efforts have been successful.

Figure 7

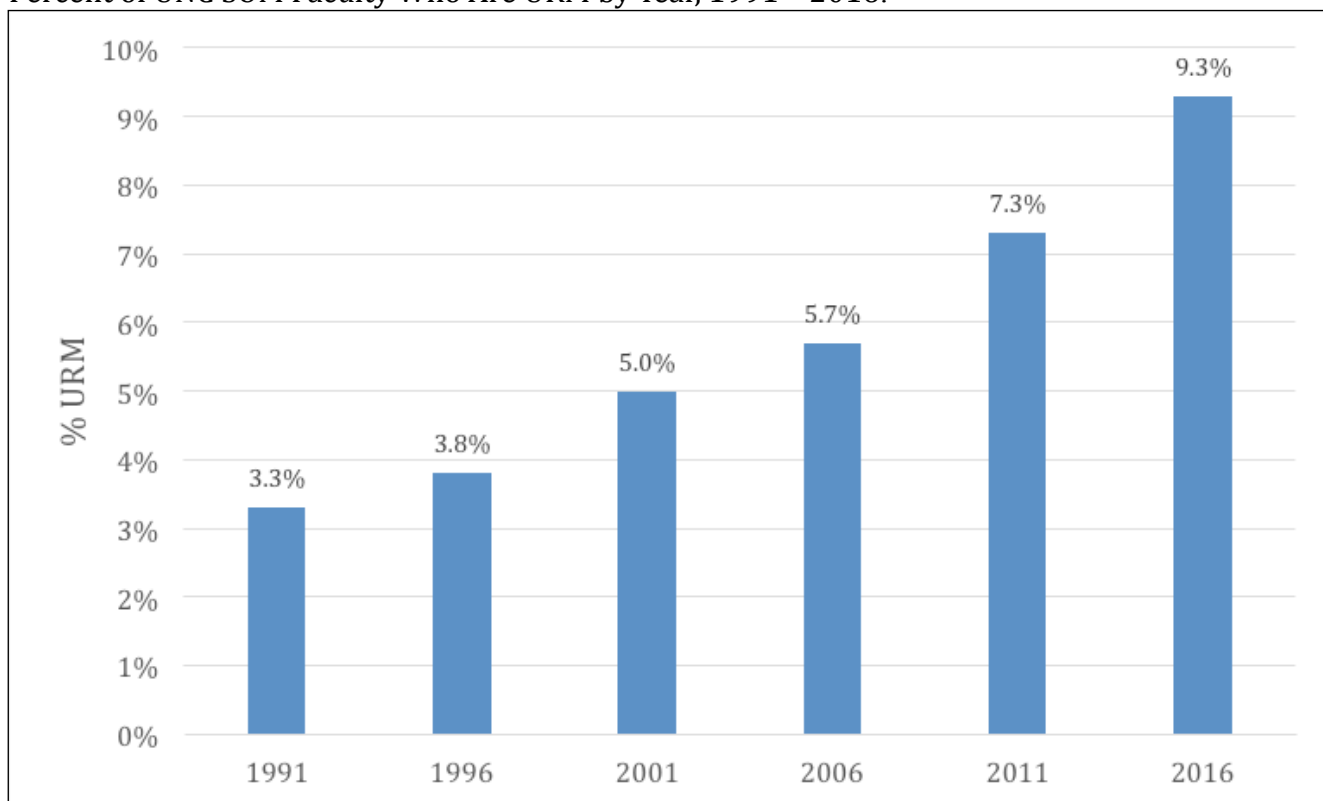
Total UNC SOM Faculty by Race/Ethnicity (omits White and Asian)(N), 1996 – 2016.



The steady growth in the absolute number of URM faculty over the past 20 years is similarly reflected in the consistent growth of the proportion of URM faculty, shown in Figure 8. Since the overall faculty has experienced substantial growth during the past 20 years, the increase in the proportion of URM faculty indicates the growth in minority faculty outpaced that of majority faculty. As a benchmark, the U.S. Census estimated in 2017 that the racial distribution of North Carolina's population was 63.5% Non-Hispanic White American, 22.2% African American, 1.6% American Indian, 2.9% Asian, and 9.2% Hispanic or Latino.[3]

Figure 8

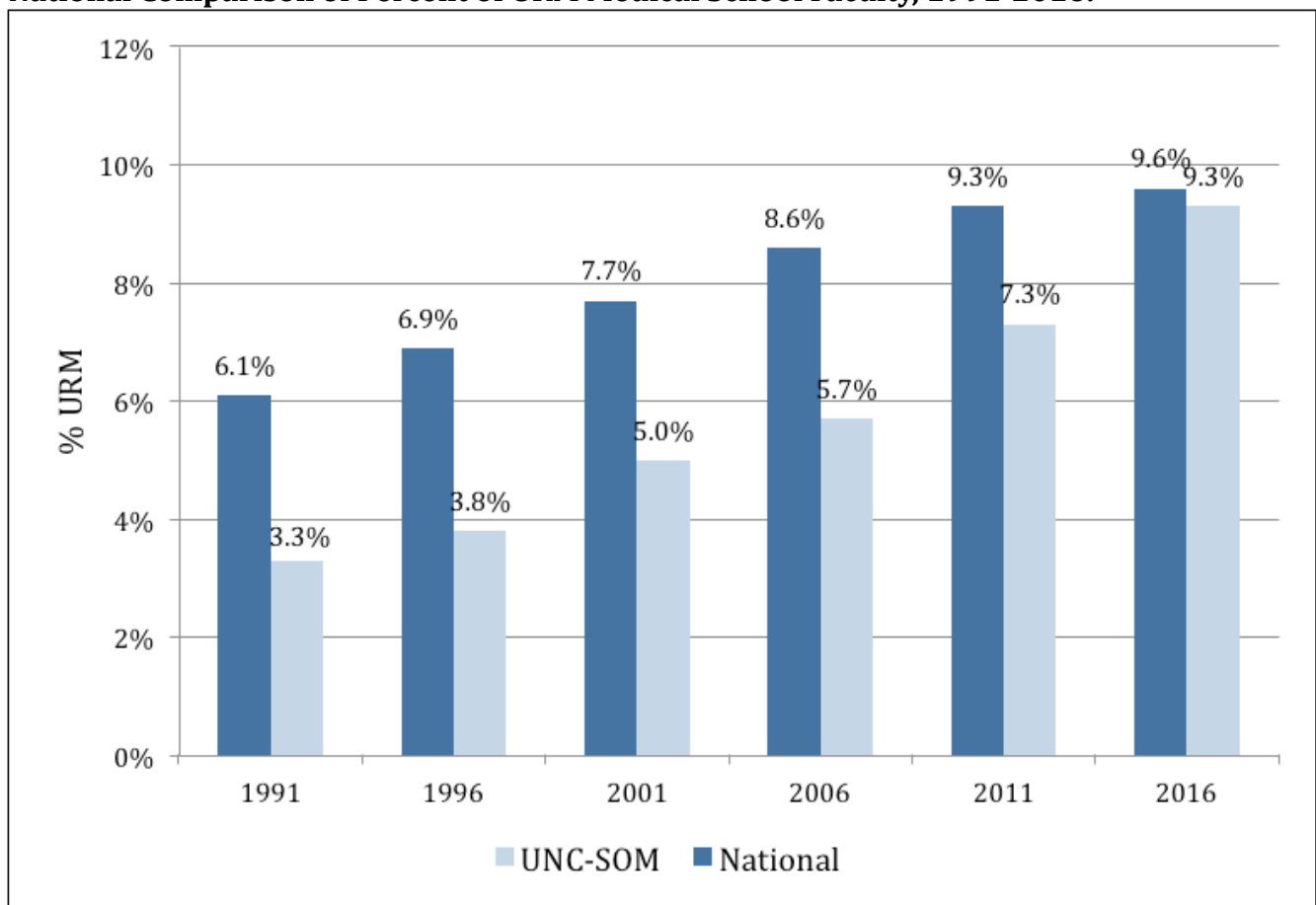
Percent of UNC SOM Faculty Who Are URM by Year, 1991 – 2016.*



* URM = Underrepresented in medicine: Black and African American, Hispanic, Latino and Spanish origin, multiple race including Hispanic, American Indian and Alaskan Native, and Native Hawaiian & Pacific Islander (omits multiple race non-Hispanic, other, and unknown)

There has been steady growth in faculty diversity in schools of medicine over time, however, the rate of growth in the proportion of URM faculty at UNC SOM has outpaced that of medical schools nationally, bringing the 2016 percentages close to that of national averages (Figure 9). This growth can be attributed to UNC’s commitment to diversity through support of diversity initiatives. Publicly available URM faculty data from peer medical schools shows UNC in 2011 trailing 2012 data from UCLA and at parity with Duke, and in 2016 outperforming UVa and UCLA 2015 data and at parity with UCSF. Despite substantial progress and favorable peer comparisons, UNC started substantially below and is still below the national average of URM medical school faculty.

Figure 9
National Comparison of Percent of URM Medical School Faculty, 1991-2016.*

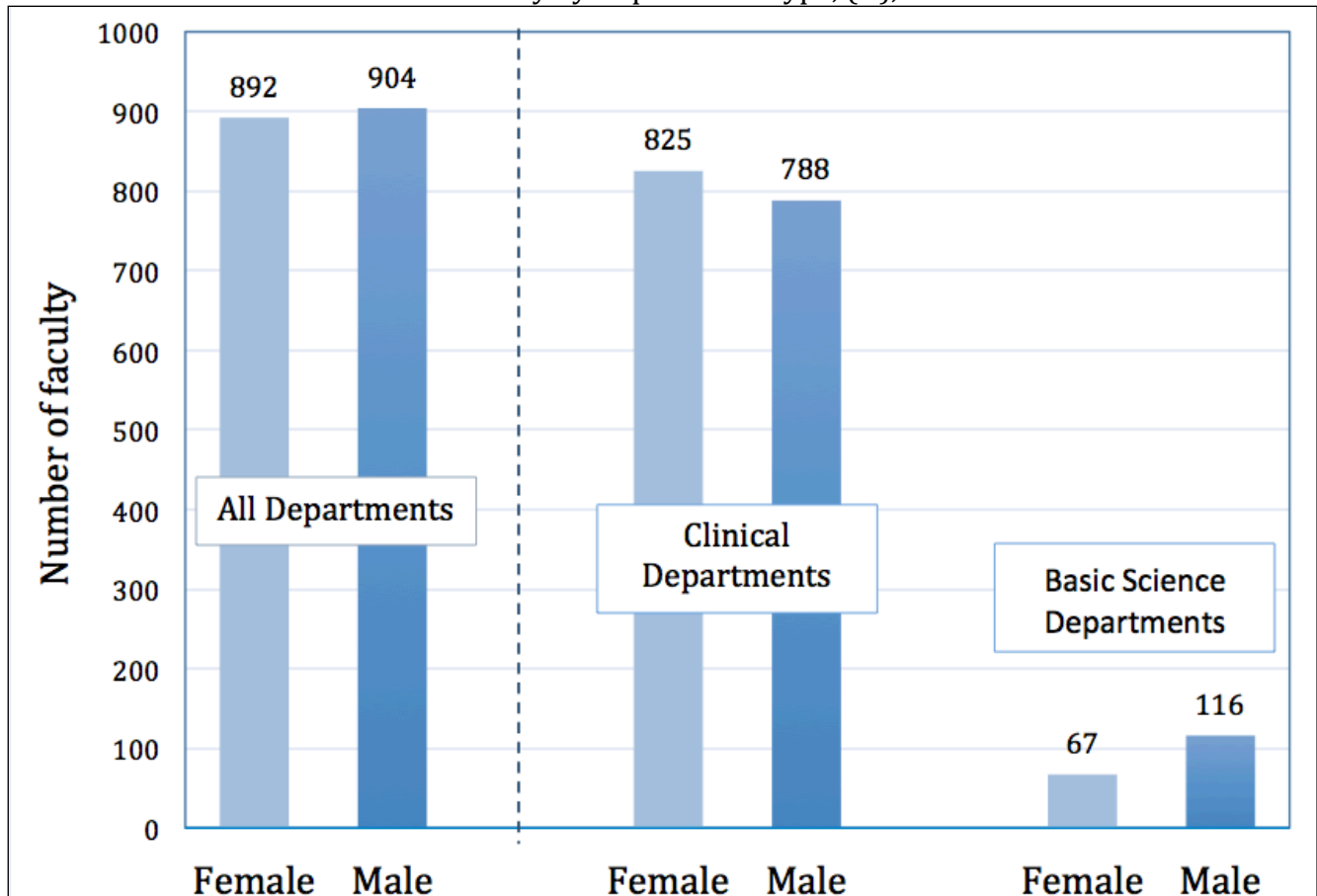


* URM = Underrepresented in medicine: Black and African American, Hispanic, Latino and Spanish origin, multiple race including Hispanic, American Indian and Alaskan Native, and Native Hawaiian & Pacific Islander (omits multiple race non-Hispanic, other, and unknown)

Female and male medical school faculty are almost equally represented in the SOM (Figure 10), although more so in clinical departments. Basic science departments continue to have substantially fewer female faculty—about half the number of male faculty.

Figure 10

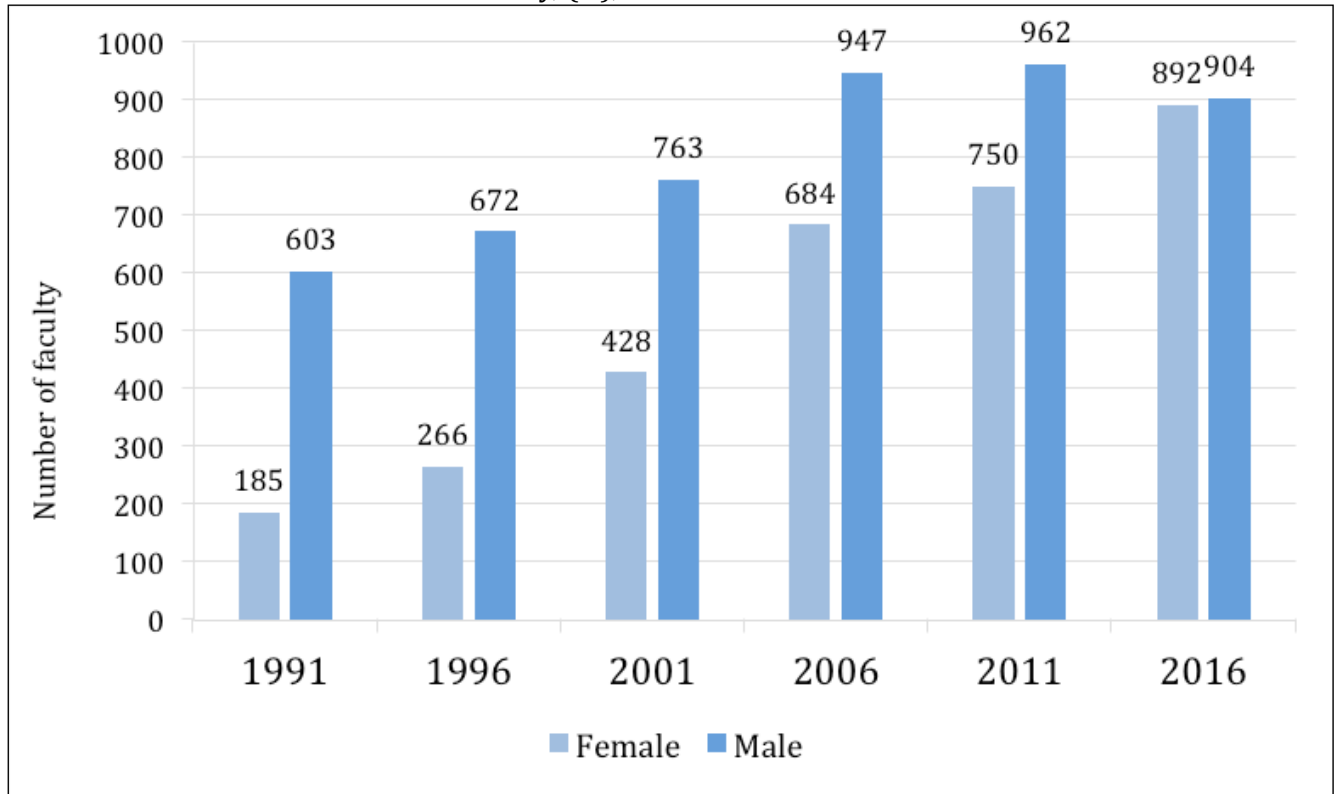
Female and Male Medical School Faculty by Department Type, (N), December 2017



Consistent growth in the absolute numbers of female faculty since at least 1991, shown in Figure 9, suggests that ongoing diversity efforts have been similarly successful for female faculty as it has been for URM faculty. The number of female faculty lagged that of male faculty until 2016, where the numbers have reached near-parity indicating that over the past 20 years the growth in female faculty outpaced that of male faculty.

Figure 11

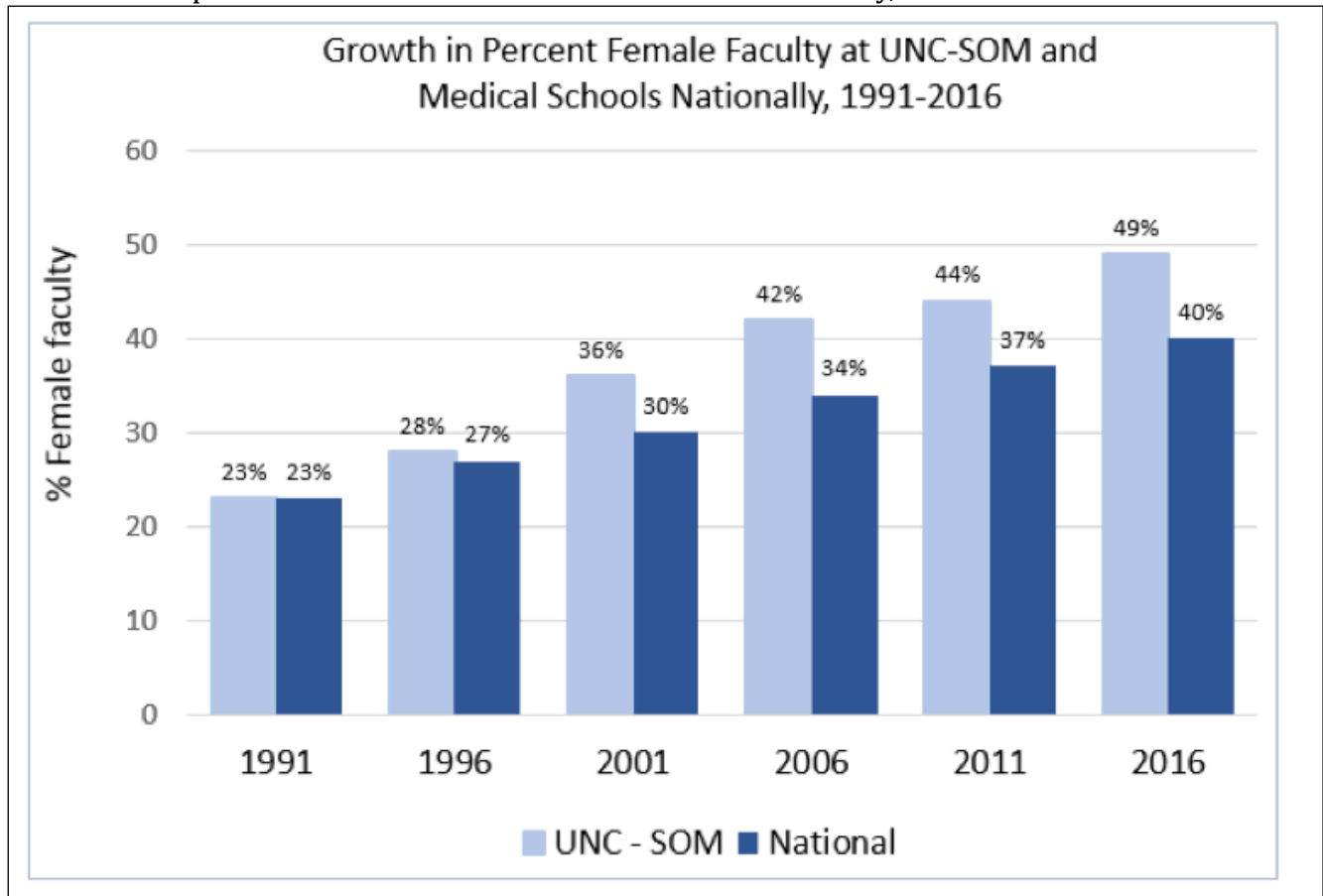
Female and Male Medical School Faculty, (N), 1991-2016.



There has been steady growth in faculty gender diversity in schools of medicine over time, however, the rate of growth in the proportion of female faculty at the SOM has consistently exceeded that of medical schools nationally over the last 15 years, suggesting that gender equity is an ongoing institutional priority (Figure 12).

Figure 12

National Comparison of Percent of Female Medical School Faculty, 1991-2016.



UNC SOM Faculty Pipeline Programs

The progress in diversity in the UNC SOM is due to a strong foundation of pipeline efforts with demonstrated successful outcomes. Much of the school's student diversity comes from the previously mentioned *Medical Education Development (MED)* pre-medical pipeline program [4]. The *MED* program provides disadvantaged students academic enhancement, role modeling, professional mentoring, shadowing opportunities, and a stipend to cover summer participation.

The 2012 UNC SOM strategic plan supported the creation of several diversity initiatives. The initiatives included pipeline programs designed to improve recruitment of URM residents and improve the climate for trainees from underrepresented groups such as the [*Larry D. Keith Visiting Student Electives Scholarship*](#) for residency applicants from URM backgrounds, and a resident recruiting event entitled [*Carolina First Look*](#). Over the past four years, the Carolina First Look program has brought over 250 URM medical students to the UNC campus to learn about our Graduate Medical Education specialty training programs. This UNC School of Medicine Faculty Pipeline Initiative has made a direct impact on increasing the pool of URM candidates that apply, interview, and train as residents here at the UNC Medical Center, and then potentially stay on as faculty.

Across departments there is sharing of resources through the [*Resident Diversity Initiatives*](#) program. The Resident Diversity Initiative strives to improve the diversity of GME programs at UNC. As part of this program UNC residents spend 3 days at the annual Student National Medical Association conference helping URM students learn about training opportunities at UNC. Several departments that were struggling with attracting a diverse pool of residency applicants have successfully used these programs to attract outstanding URM residents.

A recruiting effort implemented in response to the 2012 UNC SOM strategic plan is the ***Back to Carolina Program***, which aims to take advantage of UNC's success in recruiting and graduating a diverse student body by reaching out to our URM graduates. The Program reconnects the SOM with over 900 URM SOM alumni, who can ultimately be targeted for future recruitment into faculty positions at UNC. This is a component of the Faculty Pipeline Initiative that was created to address the need to diversify residents, post-docs, faculty, and leadership. ***Back to Carolina*** hosts an annual event designed to provide underrepresented

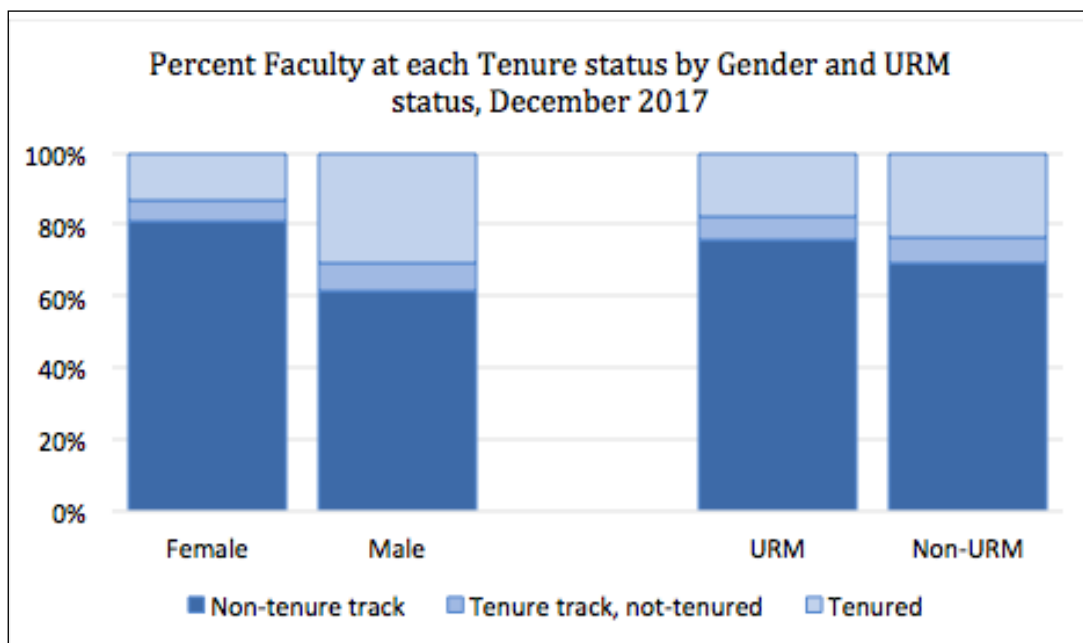
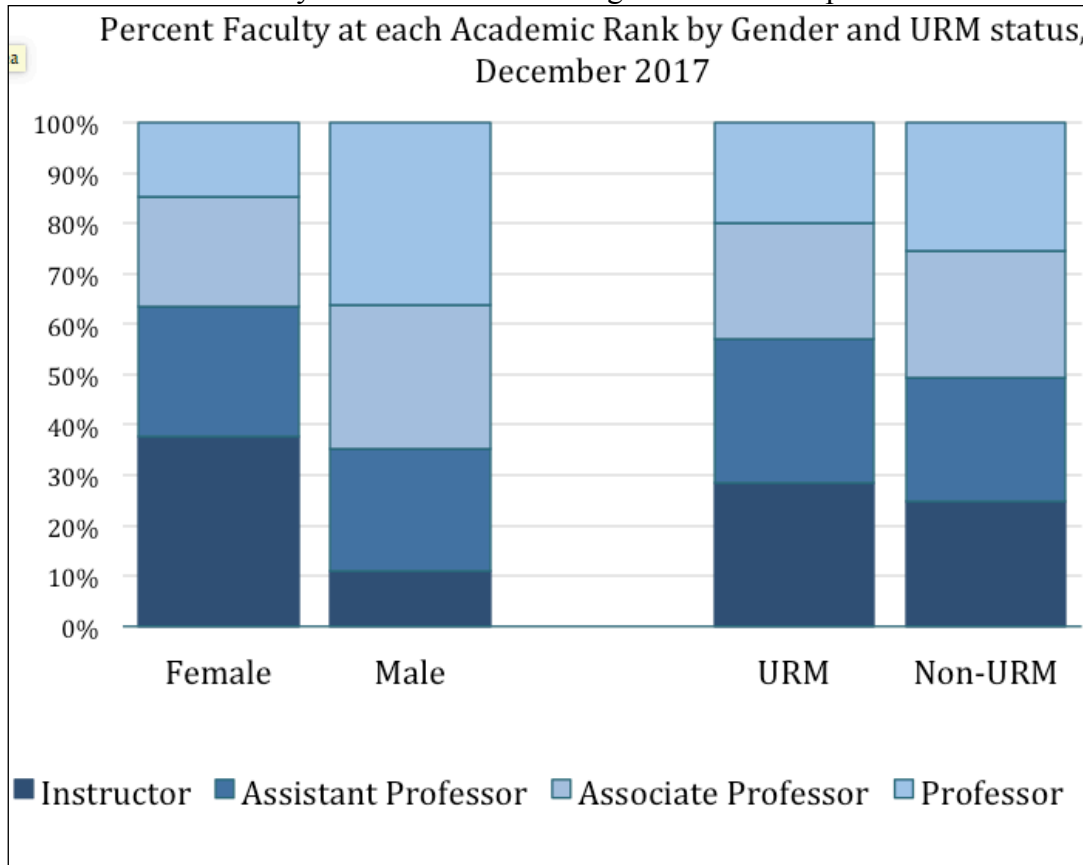
minority faculty an opportunity to network with one another and with leadership regarding opportunities to progress at or return to Carolina.

Another byproduct of the strategic plan was the ACademic Career Leadership Academy In Medicine (ACCLAIM) program focusing on recruiting and retaining junior faculty, particularly those who are underrepresented in medicine. Over the first 4 years of the program, half of the faculty participants have been female and a quarter have been URMs. Most of the ACCLAIM scholars took on additional or advanced leadership positions after finishing the yearlong program, and 2 have since assumed positions as Department Chair and Division Chief. Our AOA/ACCLAIM Leadership workshop for fellows, residents and senior medical students is associated with the ACCLAIM program. Our most successful majority and minority medical students are able to participate in leadership exercises along with ACCLAIM scholars and senior medical school faculty during a 3-day workshop experience.

More detailed figures follow that examine UNC SOM Faculty demographics by tenure status and academic rank.

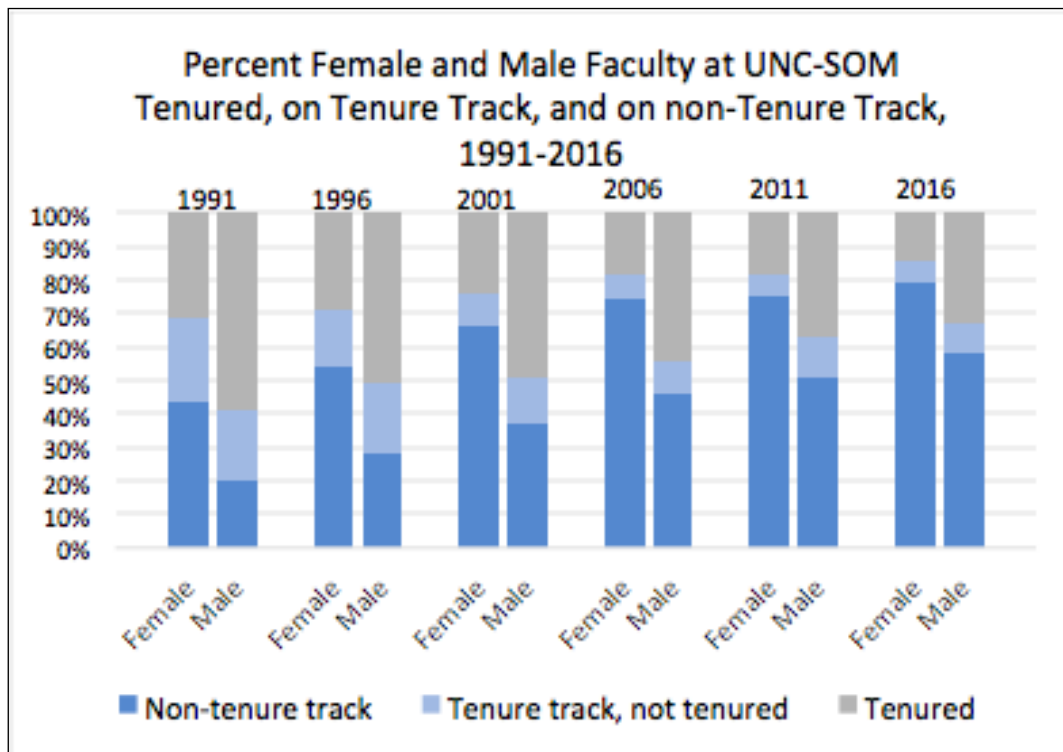
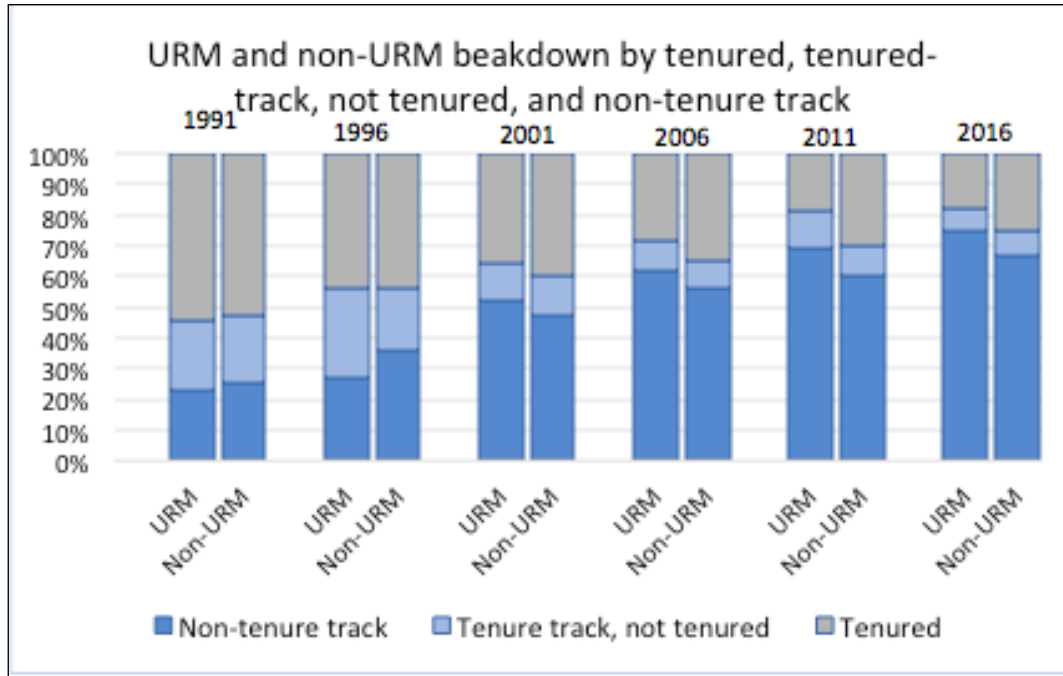
UNC SOM Faculty by Academic Rank and Tenure Status - Figures 13 and 14

URM SOM faculty trail non-URM faculty in attaining tenure and full professor status. Women lag even more substantially behind men in attaining tenure and full professor status.



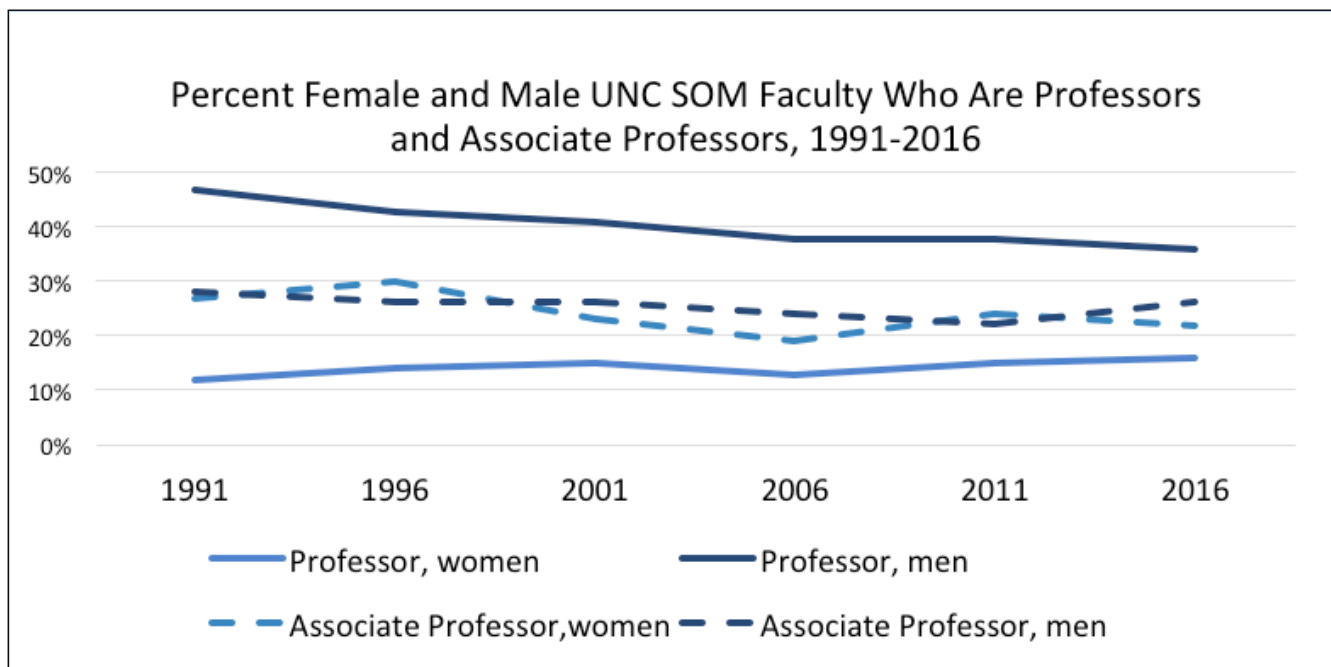
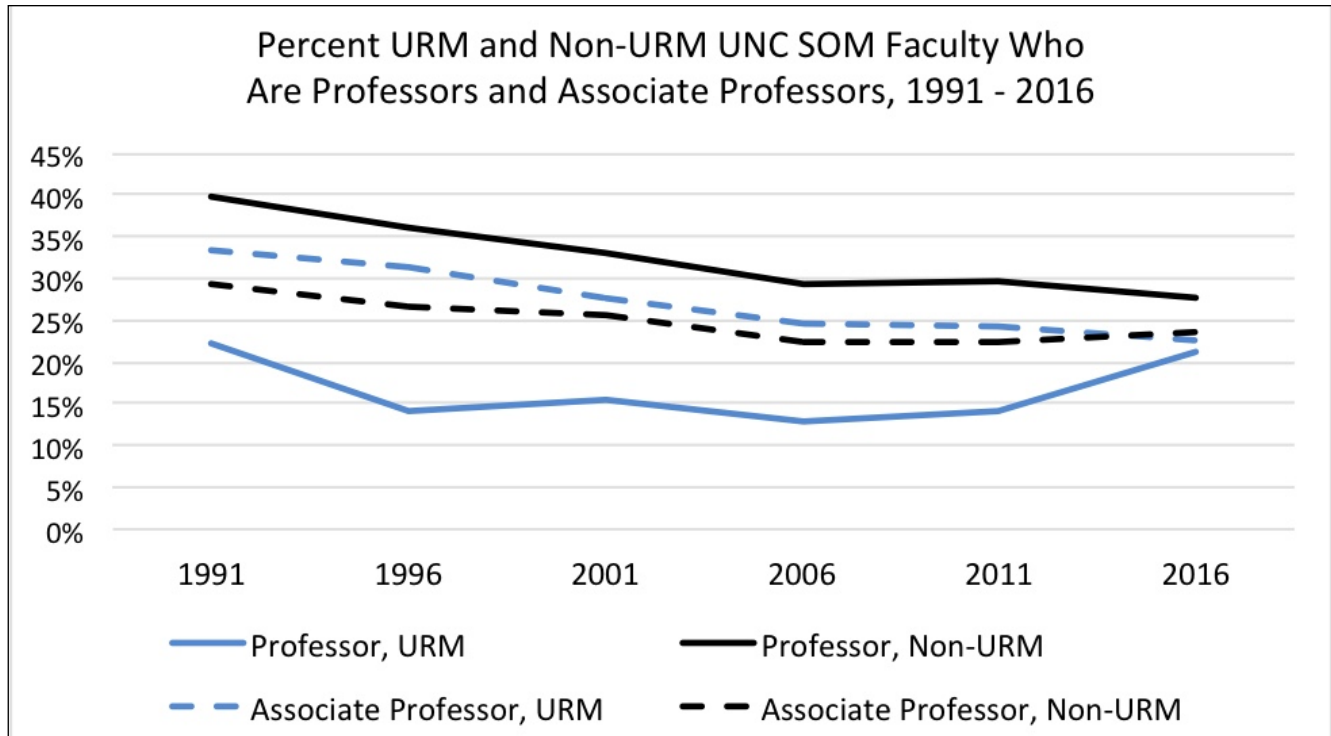
UNC SOM Faculty Tenure Status Trends - Figures 15 and 16

The gap between tenured and non-tenure track has narrowed since 2001 for URM faculty. Women faculty attain tenure at substantially lower rates than men, although there has been improvement. Note that the decreasing proportion of tenure-track and tenured faculty follows a national trend.[5]



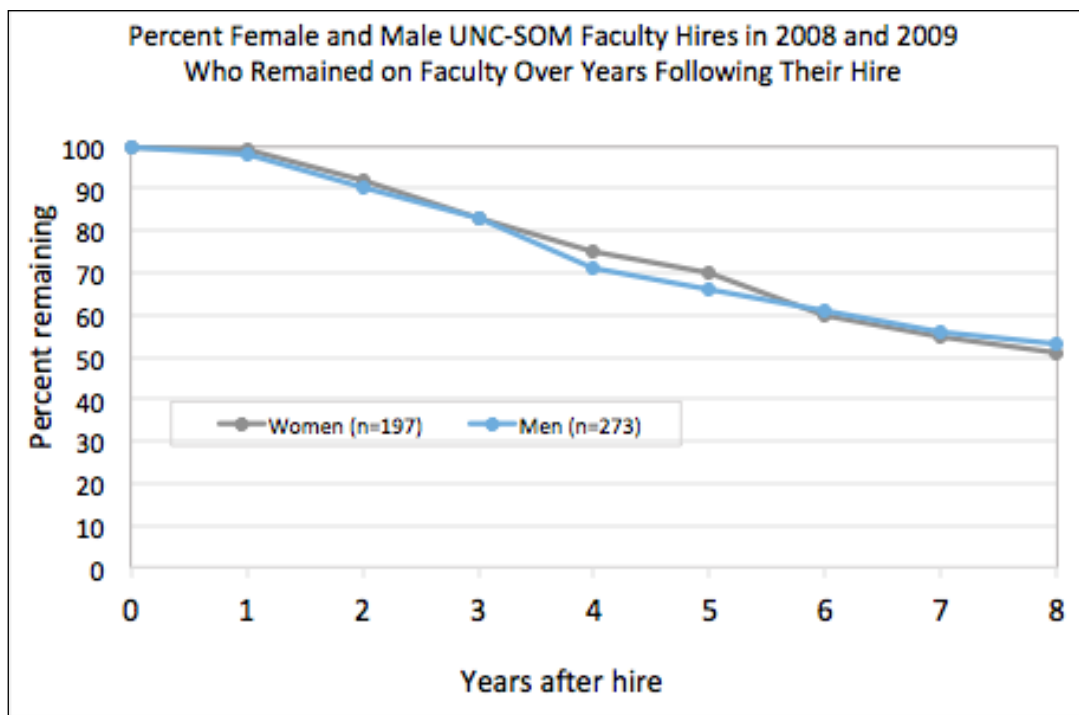
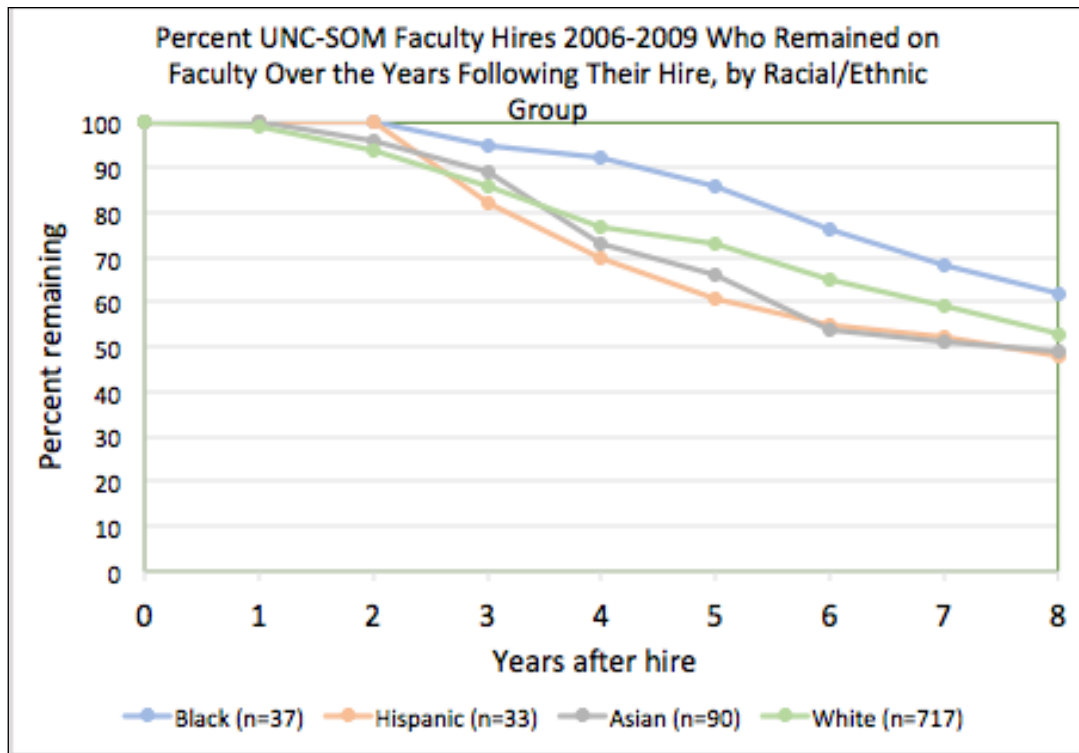
UNC SOM Faculty Promotion Trends - Figures 17 and 18

The difference in the proportion of URM and non-URM faculty attaining the rank of Professor has narrowed since 1991, while the difference between female and male faculty in attaining the rank of Professor has remained relatively stable since 1991. Both URM and female faculty tend to be more recently hired with less time-in-rank towards promotion, so the figures may reflect this experience gap.



UNC SOM Faculty Retention Trends - Figures 19 and 20

Female and male faculty as well as Hispanic, Asian and White faculty are retained at similar rates. Black faculty are retained at higher rates than other groups.



Conclusions

The 25-years of longitudinal data provided by the AAMC on faculty demographics was extremely helpful in identifying trends that would have been obscured by data covering shorter time periods. Overall, with the benefit of this extended retrospective, the narrative of this report is one of consistent progress in recruiting and retaining female and URM faculty. This is likely due to changes in culture (toward greater acceptance of diversity) and targeted efforts aimed toward increasing diversity. UNC SOM, however, still underperforms national averages in the proportion of URM faculty.

Despite substantial progress, challenges remain in creating a SOM faculty that reflects the diversity of North Carolina. Our student diversity metrics far surpass that of SOM faculty indicating those losses in the pipeline as an area requiring additional resources. Our basic science departments have unique barriers to building a diverse faculty and have substantially lagged behind clinical departments in hiring both female faculty and URM faculty.

Vigilance in data tracking, and in drawing lessons from previous successful interventions, will be necessary to drive continued progress. It will also be important to benchmark the UNC School of Medicine against selected peer institutions, in addition to national benchmarks, as our peers may provide a more precise barometer for our success. Future reports from this Office will include a deeper exploration of student (both medical and graduate), resident, and school leadership data. A recent report investigating pay practices for SOM found no disparity in URM faculty pay, and a small gender pay differential among clinical faculty only when incentive pay was taken into account.

The data in this report present substantial challenges for the SOM. There is a need for systematic evaluation of the reasons for modest URM faculty recruitment, particularly in an institution that produces a large number of URM physicians and scientists, and could potentially have a pipeline of students, residents and fellows leading to faculty positions. The recent SOM pipeline programs described in a previous section almost certainly have not had enough time in place to see an effect on faculty diversity, so further progress should be expected. Also needed is a deep dive into reasons and potential interventions for the gender tenure/professorship gap. It would be particularly important to investigate solutions from our peer institutions.

The success of our longstanding student diversity programs suggests that additional initiatives focused specifically on faculty would be necessary to make similar diversity gains. The Office of Inclusive Excellence supports the new Faculty Diversity Council that seeks to facilitate faculty input into diversity and climate issues within the SOM. The Office also supports a Diversity Consultant, who will work with faculty search committees in the SOM to assist them in identifying diverse applicant pools. In addition, the Office of Inclusive Excellence has provided Implicit Bias training to SOM and UNC Health Care leadership as well as to department chair search committees, the SOM admission committee, and to supervisors and directors in UNC Health Care. The Office will make Implicit Bias training available to all units within the SOM and UNC Health Care with a goal of creating an institution-wide shared understanding of how the SOM and UNC Health Care are addressing bias.

REFERENCES

1. AAMC. *Underrepresented in Medicine Definition*. 2/21/2018]; Available from: <https://www.aamc.org/initiatives/urm/>.
2. AAMC. *Faculty Roster*. February 2018]; FAMOUS (Faculty Administrative Management Online User System)]. Available from: <https://www.aamc.org/data/facultyroster/>.
3. US Census Bureau. Quick Facts North Carolina. <https://www.census.gov/quickfacts/table/PST045215/37>
4. Keith, L. and D. Hollar, *A social and academic enrichment program promotes medical school matriculation and graduation for disadvantaged students*. *Educ Health (Abingdon)*, 2012. **25**(1): p. 55-63.
5. Bunton SA and Sloane, RA . *The Redistribution of Tenure Tracks for U.S. Medical School Faculty: Basic Science PhD Faculty (Part II)*. *Analysis in Brief*. 2015:15(6);1-2

Report Data

Information in this report is from the Association of the American Medical College's Faculty Administrative Management Online User System (AAMC's FAMOUS). The AAMC gathers data each year for FAMOUS from all 149 U.S. medical schools, with faculty data collection dating back to 1966. All data are reported by schools based on individuals' employment information, typically by human resource office staff. The faculty roster data currently includes information from more than 170,000 active, full-time faculty.

School-specific data are accessible on-line to authorized representatives of each medical school. Data are available through a range of static tables and other tables for which various parameters can be specified, like faculty rank, tenure status and hire date. Available tables do not allow for all desired data combinations and analyses, like racial/ethnic groups for basic science vs. clinical departments.

This report presents data for all faculty of the UNC-SOM, which includes full-time, part-time, and emeritus faculty. As of 2017, 1629 of 1804 (90.3%) listed UNC-SOM faculty are full-time. Some graphs also include comparison data for medical schools nationally.

Race Classification. Schools report each faculty member's race to the AAMC as one of the following non-overlapping categories: White; Asian; Black or African American; American Indian or Alaskan Native; Native Hawaiian or Other Pacific Islander; Multiple Race – Non-Hispanic; Multiple Race – Hispanic; Hispanic, Latino or of Spanish Origin; Other; Unknown. This report combines "Hispanic, Latino or of Spanish Origin" and "Multiple Race – Hispanic" into a single Hispanic group.

This report classifies the following groups as Underrepresented Minorities (URM), i.e., racial-ethnic groups that are underrepresented among physicians: Black or African American; Hispanic, Latino or of Spanish Origin; Multiple Race – Hispanic; American Indian or Alaskan Native; Native Hawaiian or Other Pacific Islander.

Gender Classification. By the AAMC's data input fields, gender for each faculty member is reported only as Male, Female or Unknown.

This report presents data on only Male and Female faculty. As of December 2017, less than 0.5% of UNC-SOM faculty have "unknown" gender listings.

Instructor Classification. Half of all Instructors at the UNC-SOM are in Psychiatry (n=139; 48% of their faculty). Further, 205 of the 290 faculty are female (71%). They may be predominantly Licensed Clinical Social Workers, Nurse Practitioners and Psychologists, regardless, they can't be excluded from AAMC's FAMOUS data and they are skewing SOM gender data.

Authors

Chineme Enyioha, MD
Primary Care Research Fellow
Cecil G. Sheps Center for Health Services Research
UNC School of Medicine

Lauren Westervelt, MPH
Assistant Director, Office of Faculty Affairs and Leadership Development
UNC School of Medicine

Donald Pathman, MD MPH
Professor, Department of Family Medicine
Director, Program on Primary Care, Cecil G. Sheps Center for Health Services Research
Director of Curriculum Evaluation, School of Medicine
University of North Carolina at Chapel Hill

Paul Godley, MD, PhD, MPP
Vice Dean for Diversity and Inclusion
Dickson Distinguished Professor of Medicine,
Hematology/Oncology
UNC School of Medicine