

**Faculty Diversity Initiative Update:
Biannual Report to the Academic Council
Peter Lange, Provost
February 24, 2011**

EXECUTIVE SUMMARY

Duke University reaffirms the value and benefits of an excellent, diverse faculty. Our commitment since the 2003 Faculty Diversity Initiative has: 1) enhanced the intellectual environment for students, staff and colleagues, 2) provided faculty role models for students arriving from backgrounds traditionally less well represented in academic and professional careers, and 3) enabled us to recruit excellent, diverse faculty members, even in the financially challenging times of the worst recession since the Great Depression.

Duke University's history in recruiting faculty of color is worth reviewing. The first black faculty member hired on the tenure track and subsequently the first to be tenured was Samuel DuBois Cook in the 1960s, celebrated through the Cook Society at Duke since the mid-1990s. As the first concerted effort to hire a significant number of black faculty at Duke, the Black Faculty Initiative (BFI) was a five-year plan spanning 1988-93 whose goal was to add one black faculty member in each academic unit at Duke. That initiative failed. The Black Faculty Strategic Initiative (BFSI) stated the goal of doubling the total number of regular rank black faculty members at Duke during the decade 1993-2003, spanning President Nan Keohane's tenure. We hit that target one year early with considerable efforts on the part of faculty and administrative leadership. We continue our efforts and our progress in this area.

With intention, the 2003 Faculty Diversity Initiative (FDI) has guided our efforts related to faculty diversity more broadly than the earlier two initiatives. While continuing our commitment to further increase the presence of black faculty at Duke, we also committed to more broadly expanding faculty of color in areas where they were underrepresented and to the recruitment of women, especially in the STEM (science, technology, engineering, mathematics) fields.

From data in this year's report, you will note that we continue to make steady progress in increasing the number and distribution of black faculty across the university. From 1993 to 2010, the number of regular rank black faculty at Duke has increased from 44 to 142. This includes an increase in the number of tenured/tenure track black faculty from 36 to 80 during that time period. Of all regular rank faculty counted in fall 2010, the percentage of black faculty is 4.5%, Latino/a 2.4%, women 35%. In Arts and Sciences, the largest and most diversified school (excluding Medicine), the percentage of tenured/tenure track black faculty is 6.8%, significantly above that of our peer institutions. Overall, the diversity of our faculty is increasing. We continue to pay attention to areas where more progress is needed.

We have also made some progress during the last ten- and five-year periods in the hiring of women, notably in Nicholas, Sanford and Medicine. In the natural sciences and engineering, we still have work to do. The deans and I are working together to achieve greater success in increasing the number of women in these fields.

The report outlines our efforts and achievements related to my 2003 ten-point plan for faculty diversity <http://www.provost.duke.edu/policies/diversity.htm>.

1. The Provost, with the approval of the Executive Committee of the Academic Council, will form and charge a standing committee composed of faculty and administrators to advise the Provost on issues of faculty diversity, and to review unit efforts to recruit and retain women and minorities. This committee of 8 - 10 members will meet at least twice a year, and a subgroup of the committee will meet more frequently with administrators (Provost, Vice Provost for Academic and Administrative Services, selected Deans). In the first year, this committee will evaluate every unit by using pool data that have already been collected, as well as collecting any additional needed data (e.g., by interviews with department chairs).

2. The Office of Institutional Research will repeat the data collection process outlined in the Women's Faculty Development Task Force Report every other year and combine with data traditionally presented in the yearly Black Faculty Strategic Initiative Report. A report will be issued in alternate years with the salary equity study.
3. Deans of the schools, or their academic dean designees, will conduct exit interviews on all departing faculty (tenure track and POPs), with the exception of retirees. The interview protocol from Johns Hopkins will be used for this purpose. Results will be submitted to the Office of the Provost by June 30th.
4. The Provost's Office and the Standing Committee will review the annual documentation provided by the Deans on the number of women and minorities in the applicant and finalist pools of faculty searches.
5. Each Dean will establish a well thought out and clearly articulated mentoring process for faculty and for graduate, professional, and postdoctoral students with interests in entering the professoriate.
6. The Deans will develop mechanisms to improve recognition of faculty women and minorities as distinguished chairs, and as recipients of awards and honors from professional societies.
7. Through group meetings and one-on-one sessions, the Provost will provide ongoing leadership and encouragement to Deans and Department Chairs regarding diversity goals.
8. The Provost's office and the Standing Committee will collect and publicize examples of successful Duke programs for building pipelines for minorities.
9. Through the provision of funds to support grassroots networking activity of women faculty, the Provost's Office will facilitate the development of their personal and professional connections that cross-departmental boundaries.
10. The Provost's Office will provide central financial support for the new faculty diversity initiative, with up to \$1 Million of funds per year to enhance the strategic hiring of women and minority faculty.*

Two committees (Faculty Diversity Standing Committee, Faculty Diversity Working Group) report directly to me, as do the Vice Provost for Faculty Diversity and Faculty Development and the Associate Vice Provost for Academic Diversity. Along with these committees and individuals, our office oversees faculty climate surveys and exit interviews, promotes mentoring strategies, develops and tracks pipeline programs (Provost's Postdoctoral Program, initiated in 2007), provides funding to the schools for hiring related to our diversity goals, and provides communication about work-life balance and family friendly policies.

Our work continues in the area of faculty diversity as we set forth and assess new strategies to achieve success in these areas. We aim to follow the basic 2003 ten-point plan over the remainder of my term as provost, highlighting certain areas:

1. Continue our emphasis on recruitment and retention of women and faculty of color in areas/fields where they are underrepresented
2. Accelerate faculty diversity in Divinity, Fuqua, Law, Nicholas, Pratt
3. Provide continued support to the Provost's Postdoctoral Program
4. Utilize data from the 2010 Faculty Survey in our efforts to support an optimal working environment for faculty
5. Continue to promote our work-life policies, practices and utilization

* In the 2006 strategic plan *Making a Difference*, we adjusted the pledge to 10M over 5-7 years

Please Note: Although some data for the School of Medicine and Nursing is included in this report, I refer you to the appropriate administrators (deans, vice deans) and faculty committees of those schools for additional information regarding their programs.

REPORT: FACULTY DIVERSITY INITIATIVE UPDATE

Introduction

In the fall of 2003, I made my final report to the Academic Council on the Black Faculty Strategic Initiative (BFSI), and launched the Faculty Diversity Initiative (FDI) to support and enhance diversification of our faculty. To date, I have presented 4 progress reports to the Academic Council on the FDI: January 2005, December 2005, October 2006, and December 2008. I agreed to present biannual reports. The current report provides current faculty data, information on programs, strategies and achievements, and plans and challenges for the future. I am appreciative of the faculty members, deans and members of my administrative teams who have contributed their efforts towards progress in this area.

Appendix A shows the trajectory of progress related to black faculty since the start of the BFSI seventeen years ago up through fall 2010, seven years after the end of the BFSI. We continue to make steady progress on numbers of black faculty, with efforts in both recruitment and retention. As you will see later in this report, some units have achieved greater successes than others. We are encouraged by efforts in the schools, even in light of the economic downturn and challenges posed the past 2-3 years. We continue to support a variety of programs and provide resources for hiring.

2003 Faculty Diversity Initiative, which followed Recommendations of the Diversity Task Force and the Women's Faculty Development Task Force

The main goals of the Provost's 2003 Faculty Diversity Initiative were to:

- continue to increase the number of black faculty at Duke
- increase women faculty in areas where they are underrepresented
- enhance the climate for all faculty members

The FDI resulted from reports of two task forces, one on faculty diversity and the other on women's faculty development, completed and presented to the Academic Council in the spring of 2003. Both task forces recommended the formation of a standing committee on Faculty Diversity to monitor, evaluate and recommend actions on the ten points of the Faculty Diversity Initiative originally presented to this Council in September 2003 and reiterated in my first update on the FDI in January 2005 <http://www.provost.duke.edu/policies/diversity.htm>. These are worth keeping in mind as we assess our work.

Two important goals related to **faculty diversity** as listed on p. 20 of Duke University's 2006 strategic plan *Making a Difference* include:

1. "We must continue to diversify the faculty through the Faculty Diversity Initiative, supporting the expansion and retention of African American and other underrepresented faculty members and assuring the appropriate resources to further this goal."
2. "We must seek opportunities to support disciplinary and interdisciplinary research programs on issues of race, ethnicity, and gender in the sciences, social sciences, humanities and the professions."

Faculty Diversity Standing Committee

The charge to this committee is listed along with the 2010-11 committee membership in **Appendix B**. The faculty representatives come from across the institution, including the medical center. This committee was originally was chaired by Professor April Brown (Pratt/ECE) 2003-05, and since then by

Professor Nancy Allen (Medicine/Rheumatology) who also has served as Vice Provost for Faculty Diversity and Faculty Development since 2006.

Accomplishments of this standing committee include:

1. Formulation, administration and assessment of faculty surveys as a measure of climate for all regular rank faculty at Duke University. The initial survey took place in 2005, and our 2nd survey in 2010, with results to follow soon. We will be able to gauge progress since 2005, and to compare our results to those of four peer institutions (Harvard, MIT, Northwestern and Stanford).
2. Creation in 2006 of *Mentorings of Faculty at Duke: Principles and Practice* http://www.provost.duke.edu/policies/Faculty_Mentoring_Initiative.htm
3. Meetings with individual school deans in 2007 with presentation of best practices to the deans and provost in 2007, and inclusion in my last update on the FDI in December 2008. The committee will interview each of the current school deans this year.
4. Oversight of the Sloan Award for Faculty Career Flexibility 2006-08.
5. Discussions of data from the COACHE (Collaborative on Academic Careers in Higher Education) junior faculty survey and subsequent updates.
6. Discussion of issues pertaining to recruitment, hiring, retention and retirement of faculty.

Faculty Diversity Working Group

As Provost, I chair a working group which operates in a complementary way to the standing committee, and with representation from the standing committee, along with the Dean of Arts and Sciences, and several administrators. The working group functions as a place to discuss individual cases, to strategize about recruitment, retention, and relevant APT issues, and to ensure that we are making and coordinating progress in as many areas as possible. The FDWG is one aspect of the operational arm of our diversity initiatives, along with my guidance and that of the Deans in the various settings in which I and they can move initiatives forward.

Several years ago, I charged Nancy Allen, Vice President for Institutional Equity Ben Reese, Jacqueline Looney and Professor Paula McClain with establishing a diversity website for the whole university. Professor McClain had brought this recommendation to my attention based on the success of such a website at University of Virginia. The resulting website <http://diversity.duke.edu/> highlights our messages about diversity, history, recognitions, events, and people. The site launched in 2007. Realizing that this continues to be a work in progress, we are interested in your suggestions about how to improve the website.

Vice Provost for Faculty Diversity and Faculty Development and Associate Vice Provost for Academic Diversity

I created these two positions of administrative leadership to further progress toward the strategic goals we set for ourselves in the FDI and in *Making a Difference*, the 2006 strategic plan. Professor Nancy Allen (Medicine/Rheumatology) initially served as a Special Assistant to me in 2005-06 after she completed 3 years as chair of Academic Council. Since 2006, she has served as Vice Provost for Faculty Diversity and Faculty Development <http://www.provost.duke.edu/contact/nallen.html>. Jacqueline Looney, also Senior Associate Dean for Graduate Programs in the Graduate School, works with us as Associate Vice Provost for Academic Diversity. Nancy and Jackie have created and carried out a number of the projects we cite in this report. I refer you to the following website for more information: <http://www.provost.duke.edu/units/FacDiversity-Development.html>

Progress in the Schools at the Faculty Level

Appendix C shows the ongoing chart of black faculty data by school, rank and tenure status since we initiated the BFSI in 1993.

Appendix D provides snapshot data as of fall of 2010, showing the number of tenured/tenure track, other regular rank, and totals of all regular rank faculty members at Duke, broken down by rank, gender and race within the schools (and division, in the case of Arts and Sciences). This is a considerable amount of information needing thoughtful review to help understand the *current* status of diversity in each of the schools.

Appendix E and F show the changes in number and percentage of women faculty in the schools in the fall of 2010 compared with the data from 2005 (Appendix E), and over the past 10 years, in the fall of 2005 and 2000 (Appendix F). In five years, we have made small gains in most of the schools, and over the past 10 years we have made substantial gains in a few schools. There is still work to do in the recruitment, hiring and retention of women in the natural sciences.

Appendices G and H show retention rates for regular rank black faculty and women faculty respectively from 1993-2008. Although we count Medicine and Nursing faculty for purposes of our diversity initiatives, we do not have annual data on faculty departures to include in this assessment of comparative retention rates. Overall retention rate of all regular rank black faculty (non-medical) during this 17 year time frame is 61%, lower than the 65% overall retention rate for all regular rank non-black faculty. The retention rate for regular rank faculty women (non-medical) at Duke from 1993 to 2010 was 63%, compared with 66% for men. The lowest retention rates for women were in Fuqua (40%), highest in Sanford (75%).

Appendix I shows information related to Distinguished Professors at Duke University, including gender and race by school and comparison information over the past 10 years. This relates to Point #6 of 10 in the 2003 FDI. These data do not show the term professorships, including the Bass Professorships. Of all term professorships at Duke presently, 30 are held by men, 8 by women.

Recruitment, Retention and Climate Issues

Many of our efforts related to faculty diversity focus on the areas of recruitment, retention and climate for all faculty. I will share with you a summary of our activities since my last report in December 2008.

Faculty Career Flexibility and the 2006 Alfred P. Sloan Award

Duke was one of five research institutions awarded \$250K in fall 2006 by the Alfred P. Sloan Foundation to enhance faculty career flexibility. With this award, we expanded our efforts in recruitment and retention of faculty through education regarding our policies and opportunities to gain better work-life balance as full-time faculty members. The [website](http://provost.duke.edu/faculty/) <http://provost.duke.edu/faculty/> and companion [brochure](#) “Duke’s Advantages for Faculty” provide information for current and prospective faculty. A series of dual career faculty videos highlight the benefits Duke offers to faculty couples. We share these resources with faculty candidates. Additional copies of the brochure are available from our office through gwendolyn.purnell@duke.edu or nancy.allen@duke.edu.

In 2007, the [Flexible Work Arrangements policy](#) (see Faculty Handbook, chapter 4) was put in place after appropriate review and approvals. This policy allows faculty to request adjustments in their responsibilities for six months to 3 years at a time (potentially renewable) for reasons such as returning from parental leave; caring for an ill parent, child or partner; or in the pre-retirement years. This was an

innovative solution to a variety of faculty life-cycle events and needs. The policy is being utilized by a number of individuals across the university.

Since fall 2006 and with funds from the Sloan Award, Nancy Allen and Jacqueline Looney organized a series of search committee sessions for members of search committees, department chairs in departments with active searches, and divisional deans. They share information on Duke's flexibility policies, and support discussion of challenges, strategies and examples of successful recruitment practices. To complement departmental faculty recruitment activities, Looney developed a list of national databases and programs which provide information about potential candidates for faculty appointments. The list includes projects such as the Directory of Ford Foundation Fellows, a listing of the Mellon Mays Undergraduate Fellowship program participants who have completed the PhD, the cohort database of the Meyerhoff Scholarship alumni who have earned the PhD, and the Minority & Women Doctoral Directory. Lists of individuals who have earned Duke PhDs in the past 10-15 years are also available. Nancy and Jackie also meet with individual faculty candidates to answer questions confidentially about work-life issues, dual career matters that the candidate may not yet be ready to raise with the dean or search committee, and other topics. These meetings have proved successful in our recruitment of a number of women and faculty of color in the past several years.

Support for Faculty Hiring Through FDI and Opportunity Funds

Point 10 of the 2003 Faculty Diversity Initiative was a pledge I made to provide funds (1M/year) to the deans for hiring of faculty related to our diversity initiatives. In the 2006 strategic plan *Making a Difference*, we planned to devote 10M over the next 5-7 years. These are "walk-down funds" to the schools. Our actual expenditures over the past 4 years were as follows: 1.81M in 2006-07, 2.08M in 2007-08, 2.34M in 2008-09, and 2.56M in 2009-10. For 2010-11, we anticipate spending a total of 2.22M through FDI and Opportunity Funds (Diversity).

Utilization of Tenure Clock Relief by Junior Faculty

We track the number of faculty by gender, school and reason for requests for tenure clock relief. The policy is found in the Faculty Handbook http://www.provost.duke.edu/pdfs/fhb/FHB_Chap_4.pdf. In 2009-10, 25 pre-tenure/tenure track faculty, including 15 (8 men, 7 women) on the campus and 10 (1 man, 9 women) in medicine/nursing, made these requests. Reasons included: adoption or birth of a child (16), personal illness (3), family illness (4), Flexible Work Arrangements (1), other/government service (1). In 2008-09, 33 faculty members utilized the policy, including 28 women, 5 men; 14 on campus, 19 in medicine/nursing; 29 for reason of adoption or birth of a child, 2 for personal illness, 1 for family illness, 1 other.

Utilization of Flexible Work Arrangements Policy

This is slowly catching on as we educate administrators and faculty about the availability of this policy, also found in the Faculty Handbook http://www.provost.duke.edu/pdfs/fhb/FHB_Chap_4.pdf. This policy is applicable to faculty at a variety of stages in the faculty life-cycle: new hires who desire job flexibility, following a parental leave, during times of personal or family illness or crisis, and in the pre-retirement years.

Faculty Development: Junior Faculty Development Series

In 2007, Jacqueline Looney met with individual black faculty Assistant Professors to learn about their experiences and how Duke could help support their careers better. She has recently repeated these conversations with current junior black faculty. Since 2007, Nancy Allen and Jackie Looney have organized a series of faculty development panels for junior faculty prior to their 3rd year review. Topics include: transition from the PhD or postdoc; mentoring; making a place for oneself at Duke (connections with other faculty, interdisciplinary opportunities, research funding, publications and press issues); planning for the 3rd year review; general APT issues. These sessions will be offered again this Spring.

APT issues

Each year, I meet with new faculty about Duke in general and with junior faculty to provide information and answer questions concerning tenure and promotion. Deans and department chairs have responsibilities in relaying this information as well. In spite of these efforts and the information available in the Faculty Handbook, there continue to be anxieties around the tenure process. Each year, I also provide an update to Academic Council regarding appointments, tenure and promotions, including gender data.

Exit interviews

Since the start of the Faculty Diversity Initiative, I have requested that the deans promote interviews of all tenured/tenure track faculty who have left Duke in the previous year. We have for use a set of questions originally developed at Johns Hopkins, modified for our purposes. In Arts and Sciences, Professor Emeritus Ron Witt has conducted these interviews during recent years. Most requests are honored. We generally find that faculty enjoyed their time at Duke. They leave in order to advance their careers, for family issues, or for opportunities not possible at Duke. Some do express dissatisfaction with levels of mentoring, understanding of the APT process, adequacy of support, and concerns about balancing teaching and research. We incorporate their concerns in our overall assessment and planning as we seek to recruit and support new faculty at Duke. The exit interview information, along with our climate survey data, are helpful to the deans in discussing and managing challenges in their schools.

Women in the Sciences and Engineering - Hertha Sponer Presidential Lectureship

Recommended by the Senior Women in Science, a self-organized group of women faculty in the Natural Sciences, President Brodhead supported the creation of a lectureship to bring prominent female scientists to campus for a public lecture. Professor Margaret Murnane, a prominent physicist from University of Colorado at Boulder, presented the inaugural lecture in November 2007 <http://www.dukenews.duke.edu/2007/11/sponer.html>. Professor Ingrid Daubechies, then at Princeton, was the Sponer lecturer in April 2009 and has recently joined the Duke faculty in Mathematics. The next two speakers are confirmed: Jeanne Altmann, Ecology and Evolutionary Biology, Princeton, in April 2011 and Carolyn Bertozzi, Chemistry, UC Berkeley, in April 2012. Nancy Allen works with SWS group and the President's office to arrange these lectures and invite the speakers.

Other groups

I meet with the Black Faculty Caucus when invited. I attend President's Council on Black Affairs (PCOBA) regularly. I have provided support for programming to the Faculty Women's Network (FWN) although this group has not been as active in the past couple of years. Vice Provost Allen has met with the Senior Women in Science group, along with the dean of Natural Sciences, periodically to discuss issues related to recruitment, retention and satisfaction of women faculty in the natural sciences.

Gender and Leadership

Currently three of Duke University's school deans are women (Nancy Andrews/ Medicine, Catherine Gilliss/Nursing Jo Rae Wright/Graduate School), with a fourth starting in July 2011 (Laurie Patton, Arts and Sciences). There are no women leaders of the University Centers/Institutes at present. Of the Vice Provosts in my office, three are women. I have offered a number of internships and special assistantships in my office over the past 10 years. We need to continue to support leadership training and development among our faculty. Last fall we held a one-day program *Duke Updates for Academic Leaders*.

Provost's Postdoctoral Program

With recognition that we need to pursue a variety of strategies for increasing the number of faculty of color and women in areas where they are underrepresented at Duke, we initiated the Provost's

Postdoctoral Program in 2007. As an undergraduate, Iman Washington (T'07) had recommended that the provost consider starting such a program. A number of peer institutions have similar programs, including Harvard, Chicago and UNC-Chapel Hill, among others, for the purpose of enhancing diversity of faculty at our and peer institutions.

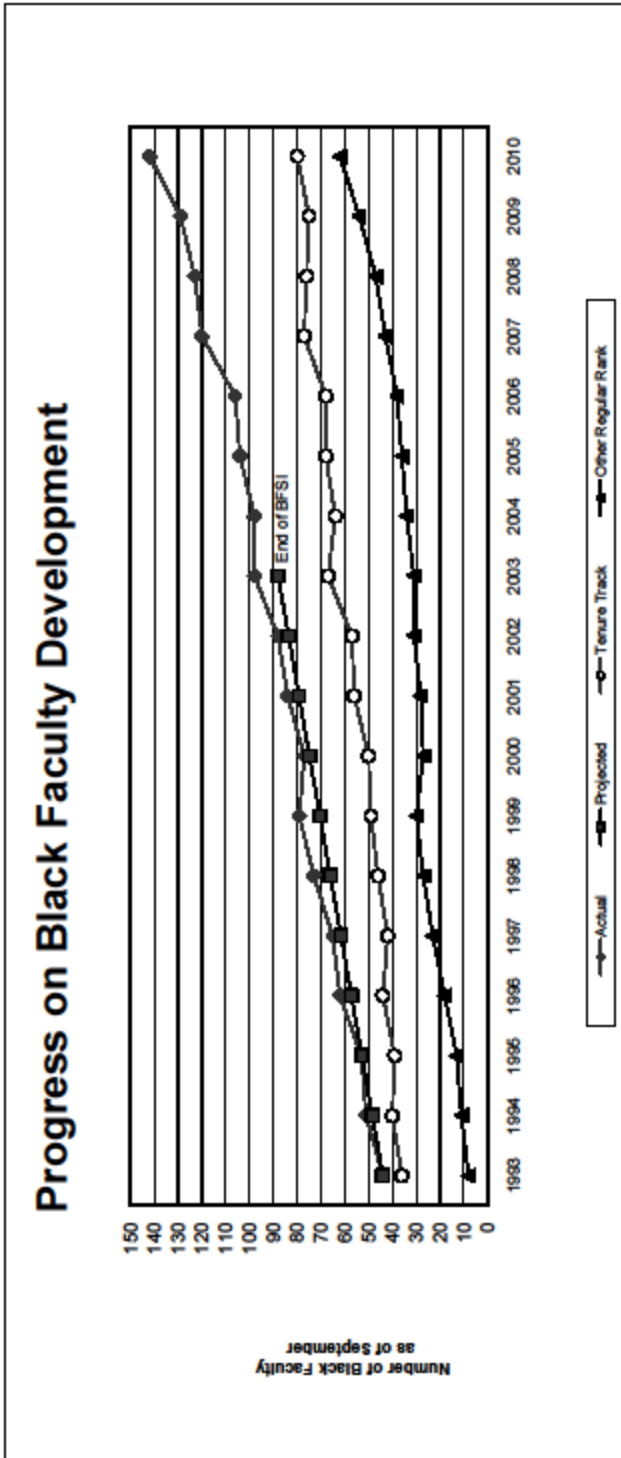
Details and information for applicants to Duke's program can be found on the Office for Postdoctoral Services website <http://postdoc.duke.edu/provost.html>. Currently, we select two individuals annually for a two-year postdoc. Applicants must identify a Duke faculty sponsor, who writes a letter as part of the application package and states support and willingness to mentor the postdoc if selected. Provost's Postdoctoral Program participants to date include:

Gabriela Livas Stein (Psychology/Psychiatry; 2007-09; mentor: John Curry)
Kennetta Hammond Perry (History; 2007-09; Tina Campt)
Criscillia Benford (English; 2008-10; Kathy Psomiades)
John Eason (Sociology; 2008-10; Eduardo Bonilla-Silva)
Carla Norwood (Nicholas; 2009-11; Lisa Campbell)
Kelvin Black (English; 2009-10; 2011-12; Ian Baucom)
Sabrina Pendergrass (Sociology; 2010-12; Linda Burton)
Miles Park Grier (Literature, Women's Studies; 2010-12; Robyn Wiegman)
Lauren Hannah (Statistical Sciences; 2010-12; David Dunson)

Appendices

- A.** Trajectory – Progress on Black Faculty Development (p. 9)
- B.** Faculty Diversity Standing Committee – membership roster 2010-11 (p. 10)
- C.** Black Faculty Strategic Development, Regular Rank Faculty, 1993-2010 (p.11)
- D.** Snapshot – Fall 2010 Faculty Diversity by Gender and Race (pp. 12-15)
- E.** 5-year Change by Gender (p. 16)
- F.** 10-year Change by Gender: snapshots in 2000, 2005 and 2010 (p. 17)
- G.** Black Faculty Retention – Fall 2010 (p. 18)
- H.** Women Faculty Retention – Fall 2010 (p. 19)
- I.** Distinguished Full Professorships – Fall 2010 (p. 20)

Appendix A



	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Actual	44	51	53	62	65	73	79	79	84	88	88	98	104	106	120	123	128	142
Projected	44	48.4	52.8	57.2	61.8	66	70.4	74.8	79.2	83.6	88							
Tenure Track	36	40	44	48.4	57.2	61.8	66	70.4	74.8	79.2	83.6	88	96	104	106	120	123	128
Other Regular Rank	8	11	13	18	23	27	30	27	28	31	31	34	36	38	43	47	54	62

Notes:
 2003 marked the end of the Black Faculty Strategic Initiative
 For this purpose, tenure track includes pre-tenure track lecturers in Arts & Sciences and associates in the Medical Center.

FACULTY DIVERSITY STANDING COMMITTEE 2010-11

This Committee was formed in fall 2003 to aid in the implementation of the Faculty Diversity Initiative, especially related to historically underrepresented groups — faculty of color; women in the sciences, mathematics and engineering. Comprised of faculty and relevant deans/administrators, the Committee reviews relevant data and programs, including faculty recruitment, hiring and retention efforts, exit and climate surveys, work-life balance and mentoring initiatives. The Committee provides feedback to the Provost on progress toward an inclusive faculty work force and areas that deserve attention. Term: three years.

Term ending August 31, 2011

Nancy Allen, Vice Provost for Faculty Diversity & Development; chair
Ana Barros, Pratt School of Engineering
Kenneth Kruezer, Biochemistry
Dorothy Powell, School of Nursing
Martin Smith, Nicholas School of the Environment
Laura Svetkey, Medicine
Ara Wilson, Women's Studies

Term ending August 31, 2012

Srinivas Aravamudan, Dean Humanities
Adriane Lentz-Smith, History

Term ending August 31, 2013

Sara Sun Beale, School of Law
Ann Brown, Endocrinology
Calvin Howell, Physics
Paula McClain, Political Science
Christina Williams, Psychology & Neuroscience

Ex-officio

Dona Chikaraishi, DUMC (through August 2012)
Peter Lange, Provost
Jacqueline Looney, Associate Vice Provost for Academic Diversity
Benjamin Reese, Office for Institutional Equity
Delbert Wigfall, Associate Dean for Medical Education, School of Medicine

Appendix C

**Strategic Plan for Black Faculty Development
Regular Rank Faculty Appointments, Fall Term 1993 to Fall Term 2010**

School	September 1, 1993	September 1, 1994	September 1, 1995	September 1, 1996	September 1, 1997	September 1, 1998	September 1, 1999	September 1, 2000	September 1, 2001	September 1, 2002	September 1, 2003	September 1, 2004	September 1, 2005	September 1, 2006	September 1, 2007	September 1, 2008	Arrivals since 9/1/08	Departures since 9/1/08	September 1, 2009	Arrivals since 9/1/09	Departures since 9/1/09	September 1, 2010	Arrivals since 9/1/09	Departures since 9/1/09	Net Gain Since 9/1/93	
Arts & Sciences																										
Tenure Track	15	19	17	20	20	22	20	23	22	23	28	28	28	27	27	30	2	1	31	4	0	35	43	24	19	
Other Regular Rank	2	2	4	7	7	7	10	8	9	8	7	9	8	7	5	6	1	1	6	0	0	6	15	11	4	
Total Regular Rank	17	21	21	27	27	29	30	31	31	31	35	37	36	34	32	36	3	2	37	4	0	41	58	35	23	
Divinity																										
Tenure Track	1	1	1	1	1	0	2	2	3	3	2	2	1	3	3	3	1	1	3	0	1	2	6	5	1	
Other Regular Rank	2	2	1	1	2	4	4	3	2	2	3	3	3	3	3	3	1	1	3	0	0	3	5	4	1	
Total Regular Rank	3	3	2	2	3	4	6	5	5	5	5	5	4	6	6	4	2	2	6	0	1	5	11	9	2	
Engineering																										
Tenure Track	1	2	2	2	2	1	1	1	1	1	1	2	2	2	2	2	0	0	2	0	0	2	2	1	1	
Other Regular Rank	0	0	0	0	0	1	1	1	1	1	0	1	0	0	0	0	0	0	0	0	0	0	2	2	0	
Total Regular Rank	1	2	2	2	2	2	2	2	2	2	1	3	2	2	2	2	0	0	2	0	0	2	4	3	1	
Environment																										
Tenure Track	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	0	0	1	0	1	0	1	1	0	
Other Regular Rank	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Total Regular Rank	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	0	0	1	0	1	0	1	1	0	
Fuqua																										
Tenure Track	1	1	2	1	1	2	2	1	1	1	2	2	3	2	2	2	0	0	2	0	0	2	4	3	1	
Other Regular Rank	0	0	0	1	1	1	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	1	2	1	1	
Total Regular Rank	1	1	2	2	2	3	2	1	1	1	2	2	3	2	2	3	0	0	3	0	0	3	6	4	2	
Law																										
Tenure Track	2	1	2	3	3	3	2	2	2	2	2	1	1	1	1	1	1	0	2	0	0	2	3	3	0	
Other Regular Rank	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	1	0	0	1	0	0	1	1	0	1	
Total Regular Rank	2	1	2	3	3	3	3	3	3	3	3	2	3	2	2	2	1	0	3	0	0	3	4	3	1	
Sanford																										
Tenure Track	0	0	0	0	0	0	1	1	1	1	2	2	2	2	2	2	0	0	2	0	0	2	2	0	2	
Other Regular Rank	0	0	1	1	1	1	1	2	2	2	2	2	2	2	2	1	0	0	1	0	0	1	2	1	1	
Total Regular Rank	0	0	1	1	1	1	2	3	3	3	4	4	4	4	4	3	0	0	3	0	0	3	4	1	3	
Medicine																										
Tenure Track	16	16	16	17	15	17	20	19	25	24	28	25	27	28	37	34	2	3	33	5	2	36	67	47	20	
Other Regular Rank	4	7	7	7	11	12	12	11	13	17	18	18	22	23	31	33	6	2	37	7	1	43	52	13	39	
Total Regular Rank	20	23	23	24	26	29	32	30	38	41	46	43	49	51	68	40	5	70	12	3	79	119	60	59		
Nursing																										
Tenure Track	0	0	0	0	0	1	1	1	1	2	2	2	2	2	2	2	0	2	0	0	0	0	2	2	0	
Other Regular Rank	0	0	0	1	1	1	1	1	0	0	0	0	0	2	1	1	2	0	3	2	0	5	7	2	5	
Total Regular Rank	0	0	0	1	1	2	2	2	1	2	2	2	2	4	3	3	2	2	3	2	0	5	9	4	5	
UICs																										
Tenure Track	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Other Regular Rank	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	1	0	0	1	1	0	1	
Total Regular Rank	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	1	0	0	1	1	0	1	
Total																										
Tenure Track	36	40	40	44	42	46	49	50	56	57	67	64	67	68	77	77	6	7	76	9	4	81	130	86	44	
Other Regular Rank	8	11	13	18	23	27	30	27	28	31	31	34	36	38	44	47	10	4	53	9	1	61	87	34	53	
Total Regular Rank	44	51	53	62	65	73	79	77	84	88	98	98	104	106	121	124	16	11	129	18	5	142	217	120	97	

Notes:

For this purpose, Tenure Track Includes pre-tenure track lecturers in Arts and Sciences and medical instructors (formerly associates in Medicine) in the Medical Center

Departures include faculty transferring off the tenure track for either non-tenure track regular rank appointments or nonregular rank appointments as well as faculty leaving the University

Arrivals include faculty transferring from either non-tenure track appointments or nonregular rank appointments as well as new appointments from outside the University.

Faculty By Race and Gender - Fall 2010

School/Division	White			Black			Hispanic			Asian			Total		
	M	F	Total	M	F	Total	M	F	Total	M	F	Total	M	F	Total
Arts & Sciences															
Humanities															
Tenured:															
Professor	44	30	74	5	2	7	1		1	4	2	6	54	34	88
Associate	13	12	25	2	5	7	4	2	6	3	2	5	22	21	43
Tenure Track															
Assistant	10	9	19				1	1	2	3	1	4	14	11	25
Total Tenured/Tenure Track	67	51	118	7	7	14	6	3	9	10	5	15	90	66	156
Other Regular Rank	17	32	49	4	2	6	4	2	6	2	10	12	27	46	73
Total All Regular Rank	84	83	167	11	9	20	10	5	15	12	15	27	117	112	229
Social Sciences															
Tenured:															
Professor	70	22	92	6	2	8	3		3	4	1	5	83	25	108
Associate	19	18	37	2	1	3				2	3	5	23	22	45
Tenure Track															
Assistant	16	5	21	1	4	5	1		1	2	1	3	20	10	30
Total Tenured/Tenure Track	105	45	150	9	7	16	4	0	4	8	5	13	126	57	183
Other Regular Rank	15	12	27							1		1	16	12	28
Total All Regular Rank	120	57	177	9	7	16	4	0	4	9	5	14	142	69	211
Natural Sciences															
Tenured															
Professor	70	5	75	2		2				10	5	15	82	10	92
Associate	26	10	36							4		4	30	10	40
Tenure Track															
Assistant	13	3	16	1	1	2	1		1	8	3	11	23	7	30
Total Tenured/Tenure Track	109	18	127	3	1	4	1	0	1	22	8	30	135	27	162
Other Regular Rank	24	14	38	1		1				2	1	3	27	15	42
Total All Regular Rank	133	32	165	4	1	5	1	0	1	24	9	33	162	42	204
Arts & Sciences Total															
Tenured															
Professor	184	57	241	13	4	17	4	0	4	18	8	26	219	69	288
Associate	58	40	98	4	6	10	4	2	6	9	5	14	75	53	128
Tenure Track															
Assistant	39	17	56	2	5	7	3	1	4	13	5	18	57	28	85
Total Tenured/Tenure Track	281	114	395	19	15	34	11	3	14	40	18	58	351	150	501
Other Regular Rank	56	58	114	5	2	7	4	2	6	5	11	16	70	73	143
Total All Regular Rank	337	172	509	24	17	41	15	5	20	45	29	74	421	223	644
Divinity School															
Tenured															
Professor	12	2	14										12	2	14
Associate	3	2	5	3		3							6	2	8
Tenure Track															
Assistant	1	3	4								1	1	1	4	5
Total Tenured/Tenure Track	16	7	23	3	0	3	0	0	0	0	1	1	19	8	27
Other Regular Rank	9	3	12	1	1	2	1		1				11	4	15
Total All Regular Rank	25	10	35	4	1	5	1	0	1	0	1	1	30	12	42

Appendix D-1

Faculty By Race and Gender - Fall 2010

School/Division	White			Black			Hispanic			Asian			Total		
	M	F	Total	M	F	Total	M	F	Total	M	F	Total	M	F	Total
Fuqua School of Business															
Tenured															
Professor	38	6	44							8	2	10	46	8	54
Associate	7	4	11	1	1	2				3		3	11	5	16
Tenure Track															
Associate	9	1	10										9	1	10
Assistant	11	3	14				2		2	2		2	15	3	18
Total Tenured/Tenure Track	65	14	79	1	1	2	2	0	2	13	2	15	81	17	98
Other Regular Rank	8	3	11								1	1	8	5	13
Total All Regular Rank	73	17	90	1	2	3	2	0	2	13	3	16	89	22	111
Nicholas School of the Environment															
Tenured															
Professor	23	4	27										23	4	27
Associate	6	3	9							1	1	2	7	4	11
Tenure Track															
Assistant	4	3	7				1	1	2	1	1	2	6	5	11
Total Tenured/Tenure Track	33	10	43	0	0	0	1	1	2	2	2	4	36	13	49
Other Regular Rank	5	5	10										5	5	10
Total All Regular Rank	38	15	53	0	0	0	1	1	2	2	2	4	41	18	59
Pratt School of Engineering															
Tenured															
Professor	36	5	41				2	1	3	10		10	48	6	54
Associate	17		17	1		1				2	1	3	20	1	21
Tenure Track															
Associate		1	1										0	1	1
Assistant	9	4	13		1	1				7	1	8	16	6	22
Total Tenured/Tenure Track	62	9	71	1	1	2	2	1	3	19	2	21	84	14	98
Other Regular Rank	19	3	22							4	2	6	23	5	28
Total All Regular Rank	81	12	93	1	1	2	2	1	3	23	4	27	107	19	126
Sanford School of Public Policy															
Tenured															
Professor	8	3	11	2		2							10	3	13
Associate	4	3	7							2		2	6	3	9
Tenure Track															
Assistant	4	5	9										4	5	9
Total Tenured/Tenure Track	16	11	27	2	0	2	0	0	0	2	0	2	20	11	31
Other Regular Rank	15	4	17	1		1				2		2	18	4	22
Total All Regular Rank	31	15	44	3	0	3	0	0	0	4	0	4	38	15	53
School of Law															
Tenured															
Professor	30	7	37	1	1	2				1	1	2	32	9	41
Tenure Track															
Assistant	1		1							1		1	2	0	2
Total Tenured/Tenure Track	31	7	38	1	1	2	0	0	0	2	1	3	34	9	43
Other Regular Rank	6	5	11	1		1							7	5	12
Total All Regular Rank	37	12	49	2	1	3	0	0	0	2	1	3	41	14	55

Appendix D-2

Faculty By Race and Gender - Fall 2010

School/Division	White			Black			Hispanic			Asian			Total		
	M	F	Total	M	F	Total	M	F	Total	M	F	Total	M	F	Total
School of Medicine															
Basic Sciences:															
Tenured															
Professor	58	13	71	1		1	2	1	3	2	2	4	63	16	79
Associate	22	3	25	1		1	2	1	3	10	1	11	35	5	40
Tenure Track															
Associate	1		1										1	0	1
Assistant	8	11	19							7	3	10	15	14	29
Total Tenured/Tenure Track	89	27	116	2	0	2	4	2	6	19	6	25	114	35	149
Other Regular Rank	21	23	44	1	1	1	1	1	2	13	4	17	35	29	64
Total All Regular Rank	110	50	160	2	1	3	5	3	8	32	10	42	149	64	213
Clinical Sciences															
Tenured															
Professor	217	96	253	7	3	10	2		2	21	3	24	247	42	289
Associate	97	31	128	1	0	1	2	1	3	10	3	13	110	35	145
Tenure Track															
Associate	47	19	66		2	2	3		3	8	5	13	58	26	84
Assistant	95	71	166	3	4	7	4	4	8	32	16	48	134	95	229
Total Tenured/Tenure Track	456	157	613	11	9	20	11	5	16	71	27	98	549	198	747
Other Regular Rank	421	331	752	27	29	56	11	13	24	99	74	173	558	447	1005
Total All Regular Rank	877	488	1365	38	38	76	22	18	40	170	101	271	1107	645	1752
School of Medicine, Total															
Tenured															
Professor	275	49	324	8	3	11	4	1	5	23	5	28	310	58	368
Associate	119	34	153	2	0	2	4	2	6	20	4	24	145	40	185
Tenure Track															
Associate	48	19	67	0	2	2	3	0	3	8	5	13	59	26	85
Assistant	103	82	185	3	4	7	4	4	8	39	19	58	149	109	258
Total Tenured/Tenure Track	545	184	729	13	9	22	15	7	22	90	33	123	663	233	896
Other Regular Rank	442	354	796	27	30	57	12	14	26	112	78	190	593	476	1069
Total All Regular Rank	987	538	1525	40	39	79	27	21	48	202	111	313	1256	709	1965
School of Nursing															
Tenured															
Professor	1	7	8										1	7	8
Associate	1	3	4										1	3	4
Tenure Track															
Associate	1	3	4							1	1		1	4	5
Assistant		10	10										0	10	10
Total Tenured/Tenure Track	3	23	26	0	0	0	0	0	0	0	1	1	3	24	27
Other Regular Rank	6	22	28		5	5							6	27	33
Total All Regular Rank	9	45	54	0	5	5	0	0	0	0	1	1	9	51	60

Appendix D-3

Faculty By Race and Gender - Fall 2010

School/Division	White			Black			Hispanic			Asian			Total		
	M	F	Total	M	F	Total	M	F	Total	M	F	Total	M	F	Total
University Institutes and Centers															
Other Regular Rank	8	9	17		1	1				4	1	5	12	11	23
Total All Regular Rank	8	9	17	0	1	1	0	0	0	4	1	5	12	11	23
Total Regular rank Faculty															
Tenured															
Professor	607	140	747	24	8	32	10	2	12	60	16	76	701	166	867
Associate	215	89	304	11	7	18	8	4	12	37	11	48	271	111	382
Tenure Track															
Associate	58	24	82	0	2	2	3	0	3	8	6	14	69	32	101
Assistant	172	127	299	5	10	15	10	6	16	63	27	90	250	170	420
Total Tenured/Tenure Track	1052	380	1432	40	27	67	31	12	43	168	60	228	1291	479	1770
Other Regular Rank	574	466	1038	35	40	75	17	16	33	127	93	220	753	615	1368
Total All Regular Rank	1626	846	2470	75	67	142	48	28	76	295	153	448	2044	1094	3138

Appendix D-4

Faculty Gender by School
5 Year Change

I. Fall 2005

School	Tenured/Tenure Track			Other Regular Rank			Total Regular Rank		
	Male	Female	% Female	Male	Female	% Female	Male	Female	% Female
Arts & Sciences Total	323	126	28%	62	50	45%	385	176	31%
Divinity	19	6	24%	10	3	23%	29	9	24%
Pratt	76	17	18%	17	5	23%	93	22	19%
Nicholas	35	7	17%	8	3	27%	43	10	19%
Law	33	10	23%	5	3	38%	38	13	25%
Fuqua	80	16	17%	8	4	33%	88	20	19%
Sanford	15	7	32%	14	2	13%	29	9	24%
Medicine	651	179	22%	446	305	41%	1097	484	31%
Nursing	2	22	92%	2	12	86%	4	34	89%
Total Regular Rank	1234	390	24%	572	387	40%	1806	777	30%

II. Fall 2010

School	Tenured/Tenure Track			Other Regular Rank			Total Regular Rank			Increase Over 2005
	Male	Female	% Female	Male	Female	% Female	Male	Female	% Female	
Arts & Sciences Total	351	150	30%	72	73	50%	423	223	35%	3.1%
Divinity	19	8	30%	11	4	27%	30	12	29%	4.9%
Pratt	84	14	14%	23	5	18%	107	19	15%	-4.1%
Nicholas	36	13	27%	5	5	50%	41	18	31%	11.6%
Law	34	9	21%	7	5	42%	41	14	25%	0.0%
Fuqua	81	17	17%	8	5	38%	89	22	20%	1.3%
Sanford	20	11	35%	16	4	20%	36	15	29%	5.7%
Medicine	663	233	26%	593	476	45%	1256	709	36%	5.5%
Nursing	3	24	89%	6	27	82%	9	51	85%	-4.5%
Total Regular Rank	1291	479	27%	741	604	45%	2032	1083	35%	4.7%

Notes: For this purpose, other regular rank includes Associates in the Medical Center which is consistent with Nomenclature guidelines.

Appendix E

Appendix F

Faculty Gender by School 10 Year Change

I. Fall 2000

School	Tenured/Tenure Track			Other Regular Rank			Total Regular Rank		
	Male	Female	% Female	Male	Female	% Female	Male	Female	% Female
Humanities	81	54	40%	22	31	58%	103	85	45%
Social Sciences	100	37	27%	8	8	50%	108	45	29%
Natural Sciences	135	20	13%	23	9	28%	158	29	16%
Arts & Sciences Total	316	111	25%	53	48	43%	369	159	29%
Divinity	17	7	29%	6	1	14%	23	8	26%
Pratt	64	5	7%	17	9	35%	81	14	15%
Nicholas	30	5	14%	6	2	25%	36	7	16%
Law	29	8	22%	2	0	0%	31	8	21%
Fuqua	56	14	20%	7	7	50%	63	21	25%
Sanford	14	4	22%	12	2	14%	26	6	19%
Medicine	607	133	18%	388	238	38%	995	371	27%
Nursing	1	13	93%	3	11	79%	4	24	86%
Total Regular Rank	1134	300	21%	494	318	39%	1628	618	28%

I. Fall 2005

School	Tenured/Tenure Track			Other Regular Rank			Total Regular Rank		
	Male	Female	% Female	Male	Female	% Female	Male	Female	% Female
Humanities	88	55	38%	21	30	59%	109	85	44%
Social Sciences	100	44	31%	15	7	32%	115	51	31%
Natural Sciences	135	27	17%	28	13	33%	161	40	20%
Arts & Sciences Total	323	126	28%	62	50	45%	385	176	31%
Divinity	19	6	24%	10	3	23%	29	9	24%
Pratt	76	17	18%	17	5	23%	93	22	19%
Nicholas	35	7	17%	8	3	27%	43	10	19%
Law	33	10	23%	5	3	38%	38	13	25%
Fuqua	80	16	17%	8	4	33%	88	20	19%
Sanford	15	7	32%	14	2	13%	29	9	24%
Medicine	651	179	22%	446	305	41%	1097	484	31%
Nursing	2	22	92%	2	12	86%	4	34	89%
Total Regular Rank	1234	390	24%	572	387	40%	1806	777	30%

II. Fall 2010

School	Tenured/Tenure Track			Other Regular Rank			Total Regular Rank		
	Male	Female	% Female	Male	Female	% Female	Male	Female	% Female
Humanities	90	66	42%	27	46	63%	117	112	49%
Social Sciences	126	57	31%	18	12	40%	144	69	32%
Natural Sciences	135	27	17%	27	15	36%	162	42	21%
Arts & Sciences Total	351	150	30%	72	73	50%	423	223	35%
Divinity	19	8	30%	11	4	27%	30	12	29%
Pratt	84	14	14%	23	5	18%	107	19	15%
Nicholas	36	13	27%	5	5	50%	41	18	31%
Law	34	9	21%	7	5	42%	41	14	25%
Fuqua	81	17	17%	8	5	38%	89	22	20%
Sanford	20	11	35%	16	4	20%	36	15	29%
Medicine	663	233	26%	593	476	45%	1256	709	36%
Nursing	3	24	89%	6	27	82%	9	51	85%
Total Regular Rank	1291	479	27%	741	604	45%	2032	1083	35%

Notes: For this purpose, other regular rank includes Associates in the Medical Center which is consistent with Nomenclature guidelines.

Regular Rank Faculty Retention
Black Faculty

School	Total Hired since 9/1/1993	Blacks Hired Since 9/1/1993	Non-Blacks Hired Since 9/1/1993	Total of Hires Since 1993 at Duke in Fall 2010	Blacks Hired Since 1993 at Duke in Fall 2010	Non-Blacks Hired Since 1993 at Duke in Fall 2010	Overall Retention Rate	Black Retention Rate	Non-Black Retention Rate
Arts & Sciences	601	53	548	409	33	376	68%	62%	69%
Divinity	46	8	38	30	3	27	65%	38%	71%
Engineering	151	3	148	91	2	89	60%	67%	60%
Environment	46	1	45	32	0	32	70%	0%	71%
Law	41	3	38	32	3	29	78%	100%	76%
Fuqua	159	5	154	80	3	77	50%	60%	50%
Sanford	49	4	45	33	3	30	67%	75%	67%
Total	1093	77	1016	707	47	660	65%	61%	65%

Notes:

Prior to 2010, the Medical Center maintained a separate faculty database and therefore the data for this purpose for School of Medicine and School of Nursing is not available.
Hires include new regular rank appointments beginning 9/1/93 and exclude any transfers between tenure track and non-tenure track.
Retention data includes faculty transferring from one school to another school.

Appendix G

Regular Rank Faculty Retention
Women Faculty

School	Total Hired since 9/1/1993	Women Hired Since 9/1/1993	Men Hired Since 9/1/1993	Total of Hires Since 1993 at Duke in Fall 2010	Women Hired Since 1993 at Duke in Fall 2010	Men Hired Since 1993 at Duke in Fall 2010	Overall Retention Rate	Women Retention Rate	Men Retention Rate
Arts & Sciences	601	225	376	409	149	260	68%	66%	69%
Divinity	46	14	32	30	9	21	65%	64%	66%
Engineering	151	27	124	91	18	73	60%	67%	59%
Environment	46	16	30	32	10	22	70%	63%	73%
Law	41	9	32	32	6	26	78%	67%	81%
Fuqua	159	42	117	80	17	63	50%	40%	54%
Sanford	49	17	32	41	13	28	84%	76%	88%
Total	1093	350	743	715	222	493	65%	63%	66%

Notes:

Prior to 2010, the Medical Center maintained a separate faculty database and therefore the data for this purpose for School of Medicine and School of Nursing is not available.

Hires include new regular rank appointments beginning 9/1/93 and exclude any transfers between tenure track and non-tenure track.

Retention data includes faculty transferring from one school to another school.

Distinguished Professorships - 2010/11

Division	Male					Female					Total				
	White	Black	Hisp.	Asian	Total	White	Black	Hisp.	Asian	Total	White	Black	Hisp.	Asian	Total
Humanities	17	3		1	21	10	1		1	12	27	4	0	2	33
Social Sciences	19	1		1	21	5	1			6	24	2	0	1	27
Natural Sciences	18	1		2	21	2			1	3	20	1	0	3	24
Divinity	6				6	1				1	7	0	0	0	7
Pratt	11			4	15	3				3	14	0	0	4	18
Nicholas	10			1	11	1				1	11	0	0	1	12
Law	18	1			19	3			1	4	21	1	0	1	23
Fuqua	24			5	29	4			1	5	28	0	0	6	34
Sanford	4	2			6	2				2	6	2	0	0	8
Clinical Sciences	54	3		2	59	5				5	59	3	0	2	64
Basic Sciences	29		1	1	31	5		1		6	34	0	2	1	37
School of Nursing					0	2				2	2	0	0	0	2
Total Full Professorships	210	11	1	17	239	43	2	1	4	50	253	13	2	21	289

Appendix I