ADVANCE: Institutional Transformations for the Future of the Faculty Annual Report
June 2007-June 2008

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## 1. Introduction

The ADVANCE Institutional Transformation Project was designed to address the specific needs of gender equity at the University of North Carolina at Charlotte. The aims of the grant are to increase the recruitment, retention and promotion of women in the STEM disciplines, notably science, technology, engineering and mathematics.

We report here on project activities occurring since our last annual report, June $1^{\text {st }} 2007$, which includes the last quarter of project Year One and three quarters of project Year Two.

During Year 2 of the University of North Carolina Charlotte's NSF ADVANCE Institutional Transformation for the Future of the Faculty Award, we have made significant strides in the recruitment, retention and advancement of women in the STEM disciplines.

In the fall of 2006, (the inception of the grant), 27.7\% of the Assistant Professors and $33 \%$ of the Associate Professors hired were women, for a total of six new STEM women faculty. In 2007, five additional women were hired. They constituted 18.8\% of the Assistant Professors and 40\% of the Associates hired in STEM. For 2008-2009, 40\% of new tenured/tenure-track positions in STEM were women ( 6 males and 4 women).

In 2006 all four women who were eligible for tenure and promotion were successful. This number includes one women in the Social and Behavioral Sciences. In 2007, 5 women were eligible and received tenure. While these nine women have added to the diversity of their departments, 22 men were promoted and tenured during the same period. In 2006-2007 one male and one female were promoted to Full Professor. In 2007-2008, 10 STEM men and women applied for promotion to Full professor. One woman was promoted and a second was denied.

The data on recruitment and promotion and tenure indicate the need for the broad based approach to institutional transformation that we are engaged in with the help of the ADVANCE Program. At this point, our proposed initiatives are in place and we are evaluating their effectiveness. For example, we have
conducted recruitment workshops for search committees to emphasize best practices and ways to avoid cognitive biases. This summer we are undertaking a study of the recruitment process to begin to track the use of some of these practices and strategies for recruitment. More details on evaluation are presented below.

The ADVANCE Leadership Team has met monthly to discuss progress and policies. In addition, this committee has guided and implemented the project's initiatives. As of writing this report all of our initiatives are in place and are reaching their target audience.

The external examiners, Dr. Betsy Brown from North Carolina State University, and Alice Hogan, former program director for ADVANCE, traveled to UNC Charlotte in late January to assess our program. They met with the ADVANCE Leadership Team, the Chancellor, Leadership UNC Charlotte, the participants in the Competitive Awards program, the Dean of the College of Engineering, the Chairs of STEM departments, and members of the Women's Academy. They also attended a meeting of the Committee on the Future of the Faculty. The internal evaluation team presented much of the material that they have collected to the external examiners. We have appended the external evaluation report to this annual report. The observations of the external evaluators have guided our approach to Year 3.

## 2. Recruitment and Retention.

Policy and recruitment continues its focus in two major areas. A) Faculty recruitment seminars of which focus on unconscious bias, university diversity goals, places to seek underrepresented candidates, how to conduct interviews that facilitate gender equity and the hiring process itself. In 2007-2008 we held three such workshops for search committee members and department chairs. B) The continued efforts of the Committee on the Future of the Faculty.

## Policy Changes

## A). Recruitment

The Committee on the Future of the Faculty's purpose is to review policies, processes and practices at UNC Charlotte that might impede the recruitment, retention and full professional development of women faculty members, especially those in the STEM disciplines.

The committee strongly recommends the creation and maintenance of a dual career program. The members also argue for the appointment of an ombudsperson and coordinator of equity issues, which would be associated with the ADVANCE office. The responsibilities of this position would include the
coordination (training, monitoring) of a board of faculty equity advisors. They have focused on issues such as best practices in conducting equitable searches and reviews, and methods to increase the diversity of the applicant pool. The have considered ways to conduct unbiased reviews of applications and RPT portfolios. In addition they have formulated procedures which would improve the ways in which diverse applicants on campus may be interviewed. They have suggested methods which would ensure that unbiased discussions are conducted to formulate hiring and RPT recommendations. Chairs would be responsible to communicate to search committees the university's diversity goals in relation to the hiring and recruiting process. The committee also recommends the creation of flexibility in faculty appointment structures as well as instituting extensions for tenure and review periods.

Such recommendations demand oversight and evaluation. Deans and academic department chairs and directors would be accountable for increasing the representation of traditionally underrepresented groups in faculty and administrative positions. Further, incentives would be provided to units that succeed in diversifying their faculty at all ranks.

## B). Retention

The Future of the Faculty committee recommends the establishment of a midcareer mentoring program. In addition the committee proposes that more options and tracks be developed such as a research-intense track; a service-intense track; a teaching intense track. There should be clear expectation and evaluation criterion for each track. In order to facilitate retention, climate needs to be assessed and improved to encourage a more inclusive culture and community. There needs to be a specific articulation of the benefits of promotion from Associate Professor to Full Professor. The committee recommends that salary compression be reassessed. Moreover, it is recommended that for each successful transition in rank that to a specific salary increase be instituted.

These specific policies and procedures related to recruitment and retention have been sent to Dr. Joan Lorden, the Provost and Vice Chancellor for Academic Affairs, for her consideration. In turn, she has distributed these recommendations to the deans, chairs and the faculty governance committee charged with issues of faculty employment. The first report on increasing flexibility in the pre- tenure period has been reviewed by the Faculty Employment Status Committee (FESC) of the Faculty Council. Recommendations from the FESC for modifications of the Committee on the Future of the Faculty proposals have been returned to the CFF for consideration. Overall, however, the FESC had a positive response to the proposed changes. The second report has now been given to the FESC for review.

Although further review is required prior to approval and implementation, the FESC and other groups who have received these recommendations have
increased their knowledge about optimal practices related to recruitment, retention and promotion. We have also added the chair of the FESC to the Committee on the Future of the Faculty, to increase the connection between ADVANCE and the faculty governance structure. We anticipate that the CFF's recommendations will be acted on by the Faculty Council in 2008-09.

One of the recommendations that arose out of the Committee on the Future of the Faculty was the development of a negotiations tool to reduce the advantage of particularly effective negotiators (who are not usually women candidates) and to ensure that important information is covered. The tool prompts the candidate and hiring official (usually the chair) to cover a broad range of topics, including salary, start-up, teaching load, space, service expectations, annual and periodic review processes.

## 3. Faculty Development

There are four major components of the faculty development program. A) The Mentoring Program. B) The Women's Academy. C) Bonnie Cone Fellowships and Solution Team Awards. D) Leadership UNC Charlotte.

## A). Mentoring

This university-wide initiative is open to all men and women entering the faculty across all disciplines. Any faculty in the STEM disciplines who are not in the College of Arts and Science are accepted if they have been at UNC Charlotte for less than 3 years. At present we have 46 mentor/mentee pairs.

At the recommendation of our external examiners, we are in the process of establishing a mentoring program that caters to mid-career women faculty. UNC Charlotte ADVANCE has conducted a study of all STEM women who hold the rank of Associate Professor. Our goal was to identify barriers women face in moving from associate to full professor and to identify strategies that might help remove these barriers and thus increase the promotion rates for women in STEM. Our research methodology consisted of focus groups and surveys. There are currently 37 women associate professors in the 10 STEM departments on campus and all were invited to attend one of eight focus groups led by two ADVANCE faculty members and to complete a survey. Both the focus groups and surveys asked participants about perceived barriers to their advancement, as well as the types of resources and strategies that might assist them with their advancement. The purpose was to guide the development of a mid-career mentoring program that would fit the diverse needs of the targeted women. Results showed that $40 \%$ of associate professors in STEM did not understand the criteria for promotion to full professor used by their department or college; $50 \%$ have not received regular feedback/guidance from their Chair on their progress toward full; 25\% feel that there are gender disparities in service and/or teaching demands placed on faculty; and half indicated they would not be able to
devise an effective plan for promotion. We are currently using these results to develop a customized mid-career mentoring program that we intend to implement in the fall. This will entail working with the Colleges and departments on the criteria and standards for promotion.

In 2008-09, Dr. Kelly Zellars from the Department of Management will join the project to study the mentoring program. This is Dr. Zellars' research area and she is interested in understanding the factors that lead to satisfaction of mentors and mentees and program effectiveness.

## B). The Women's Academy

The Women's Academy met its aims for the year. It fostered academic dialogue in the form of two Speaker's Series. The first one, the Women in Science Speakers Series, is department based. This matching program allows departments to request funding for leading female scientists in their academic fields. The second component is a STEM and University wide speaker's series, where experts in gender issues speak to target and campus wide audiences. This has encouraged discussion on gender issues. In collaboration with the Center for Professional and Applied Ethics, the Women's Academy and the ADVANCE Program hosted Dr Anne Fausto-Sterling (Brown University). Dr. Anne Fausto-Sterling was also the keynote speaker for the Southeastern Women's Studies Association meeting (SEWSA), which was held at UNC Charlotte. The work of the ADVANCE program was publicized through this partnership. The Women's Academy has provided skill set workshops and seminars, for example on negotiation and strategies for increasing women's influence in the workplace. The Women's Academy has introduced measures to reduce the isolation of women in STEM departments and of incoming faculty, for example, by hosting a brunch where incoming faculty met with their cohort and were introduced to more senior STEM faculty.

## c). Bonnie Cone Fellowships and Solutions Team Awards

The Bonnie Cone Fellowship is awarded to individual applicants. This year we received 15 submissions, of which seven were successful. Awards requested included summer salary, childcare costs, conference attendance, travel to facilities which would allow researchers to analyze data or receive mentoring, graduate student support and technical assistance. These fellowships have two purposes. First, we want to provide flexible support to young women to help them overcome the work/life stresses that we detect in our surveys of faculty. Second, by letting women self-select the kinds of support they need, we will be gathering data on the kinds of interventions they consider most important and that lead to positive outcomes in promotion and tenure.

Our external reviewers were impressed with the impact of the Bonnie Cone awards and recommended extending them to mid-career women to help them
make the transition to full professor. The Mid-career Bonnie Cone Fellowship will allow women to develop new avenues of research or build on existing research.

The departments and units who were awarded Solutions Team Grants in the 2006-2007 academic year spent their awards in 2007-2008. These departments have engaged in a variety of activities to promote and retain female faculty. Engineering Technology, for example, ran a speaker's series in which leading female engineers were invited to showcase their work and meet with women and men in the department at UNC Charlotte. The College of Computing and Informatics provided funds for female faculty to attend conferences where they presented papers and met with leading scientists in their fields of expertise. CCl also sponsored a table at the Grace Hopper Celebration of Women and Computing Conference.

The Department of Psychology was the only recipient of a Solutions Team Award this year. They have contracted with the Kirby Resource Group to evaluate the climate and culture of the Psychology department. These results of this survey will be used to guide the department as it seeks to improve the climate for women and the outcomes of recruitment and retention initiatives for women and women faculty of color.

## D). Leadership UNC Charlotte

UNC Charlotte has made significant strides in increasing the presence of women in senior administrative positions. For example, 1 female was listed as a Provost/ Associate and Assistant Provost in 2005-2006, but by 2006-2007 the number had increased to 2 , while the number of men remained constant at 3 . In 2005-2006, only 6 women were Deans or Associate or Assistant Deans. In 2007-2008 the number had increased to 10, while the number of men remained constant at 13. There has been fluctuation in the number of women department chairs. In 2005-2006 the number of female chairs was 11. This number declined to nine by 2007-2008. The number of male department chairs increased from 32 to 33 over the same period. UNC Charlotte has actively recruited female chairs for 2008-2009. In terms of the Directors of Centers, the numbers of females have remained constant at 3 from 2005-2006 through 2007-2008 as have men Directors, of which there are 7.

In order to facilitate dynamic leadership, UNC Charlotte has run a monthly workshop (8 sessions) for department chairs and emerging leaders. This workshop was not restricted to the STEM disciplines but open to all departments at UNC Charlotte. Not only has this workshop fostered a sense a community amongst leaders, it has facilitated a dialogue over many aspects of leadership. Ultimately this will help to establish and enhance connections between faculty and administrators and create and sustain a positive climate that will facilitate the
recruitment, retention and advancement of women in STEM disciplines and other disciplines on campus. The format emphasized case studies and discussion. Topics included recruitment, evaluation, leadership and planning, mentoring, communication, managing staff, and negotiation. A mix of internal and external facilitators led discussions. The response of participants was positive. We will evaluate the program in more detail over the next several months, but based on feedback from the first leadership class, we will recruit a second cohort and plan "reunion" opportunities for the first cohort.

Chairs of departments have also been included in numerous other activities, for example, when diversity and mentoring specialist JoAnn Moody was invited to UNC Charlotte she ran special workshops for all chairs of departments. Chairs and Departmental Diversity Officers were also invited to a roundtable discussion lunch with featured speaker Dr. Anne Fausto-Sterling of Brown University. We have made a concerted effort in the past year to increase the participation of men in ADVANCE sponsored events. Two male department chairs were included as panelists with Dr. Fausto-Sterling and approximately equal numbers of men and women participated in the Leadership program.

## 4. Outreach Activities

Outreach activities have been numerous and varied. ADVANCE has supported workshops on Ethics in Scholarly Publications and advanced topics in NIH grant submissions. These have been open to all faculty and attended by both men and women. ADVANCE has also hosted Plagiarism 101, an audio conference.

We have hosted speakers and workshop facilitators such as Anne FaustoSterling, a leading biologist who has written on gender and biology; JoAnn Moody, diversity and mentoring facilitator; Lisa Rashotte, a gender specialist; and Sarah Laschever, who has written extensively on women and negotiation. These programs have engaged broad institutional audiences.

We have published two newsletters with a campus wide distribution. There have also been three articles placed in the Campus News on ADVANCE initiatives and the goals of ADVANCE. We have printed and distributed mentoring brochures for incoming faculty.

Dr. Lorden, the PI of the ADVANCE Grant, was interviewed along with Dr. Jan Cluny of NSF, and Dr. Teresa Dahlberg, the PI for the STARS Alliance and a member of the ADVANCE Leadership Team, for our local NPR affiliate, WFAE. The issues discussed pertained to the position of women in relation to science and education.

Dean Karen Schmaling, the Chair of the Committee on the Future of the Faculty and a member of the ADVANCE Leadership Team, and Dr. Yvette Huet-Hudson, a member of the ADVANCE Leadership Team, attended the LEAD National

Workshop (Leadership Excellence for Academic Diversity) in 2007 at the University of Washington.

The Department of Communications has collaborated with ADVANCE through both their undergraduate and graduate programs. An undergraduate laboratory class has developed a "Women in Science" series, which will be featured on our website. The graduate class has completed a communications plan for the ADVANCE program, much of which will be implemented in the coming year.

## 5 Grants Subsequently Awarded

Best, Jennifer. Duke University Sub-contract Award (\$10,300): EMPOWER: Engaging Motivation for the Prevention of Weight Regain (Research Associate)

## 6. Evaluation Activities

The Evaluation Team, consisting of Dr. Roslyn Mickelson, Dr Arnie Cann, and graduate student Stephanie Southworth, have been engaged in four major data collection and analysis activities during the reporting period. First, they have collected data and prepared tables 1-11 of the ADVANCE toolkit. Second, UNC Charlotte has participated in several national surveys of faculty, including the UCLA Higher Education Research Institute (HERI) survey. Since we have data from three successive administrations of this survey, the Evaluation Team has done a longitudinal analysis of questions relevant to climate and experience for the STEM faculty. Third, the Evaluation Team has interviewed all of UNC Charlotte's Deans and the Provost regarding their perceptions of the status of gender equity on campus prior to the ADVANCE grant, analyzed the interviews and produced a written a report on the findings. Prior to the start of the ADVANCE grant, UNC Charlotte participated in the COACHe Survey of Early Career faculty. This survey, which asks about the important issues of the clarity of tenure policies, criteria, and standards, as well as issues of climate, will be repeated in the coming year.

## A. The HERI Data Report

The data show that UNC Charlotte, like many universities, has a small percentage of women in STEM disciplines, especially those non-SBS STEM departments. The low numbers become even more evident in the higher ranks (associate and full professors). The trend over the past three years is relatively flat, with the percentages of women at all levels increasing slightly. Over the three years examined, the changes in the percentage of women at each rank in non-SBS STEM disciplines were: assistant professors (+1.6\%), associate professor (+3.7\%), full professors (+2.6\%). In the SBS STEM areas, the
changes are comparable, except at the assistant level: assistant professors (+6.8\%), associate professor (+2.6\%), full professors (+3.2\%).

The absence of more senior women does not appear to be due to a differential impact of the tenure process or voluntary attrition. Women were not less likely to be promoted either to the associate or the professor levels (years 2002-03 through 2006-07). Similarly, data on voluntary, non-retirement attrition show no evidence of higher attrition among women (2003-04 through 2006-07).

In the last four years, there has been an increase in the rate of hiring of women at the associate level that exceeds the current percentages of women at that level in the non-SBS STEM areas. The numbers are still small (3 new associate level women), but, relative to the number of men hired at that level, it does suggest efforts to increase the relative numbers of senior women.

Bearing in mind that there are low numbers of women at the associate and full professor levels, there is no indication that women spend a longer period of time at the associate level than do men. Thus, it is possible that the associate level women are moving toward promotion to full professor, but lack the time to reach this transition. Women at the full professor level are, for the most part, recent additions to this group. Except for one area (Engineering), where the numbers or quite small, women have fewer years at that rank than do men.

In the STEM fields, the absence of senior women is reflected in the fact that there is only one woman who holds a Distinguished or Titled Chair. The number of women in administrative positions has remained essentially even over the last three years. It does appear that new positions at the Dean/Associate/Assistant Dean level are being filled by women, since the number of women has increased from 6 to 10, even as the number of men in these positions has remained stable (13).

The data on salaries are difficult to evaluate without considering variables like time at rank, department, and actual performance. A detailed analysis of salaries was conducted by the Office of Institutional Research during the past year. These data were provided to the deans at the time that salary adjustments were recommended and adjustments were made for a number of faculty. The final analyses of these data to determine the impact on female faculty has not been completed.

Finally, the data on support for faculty do not indicate any bias based upon gender. There are no clear differences in office space, research space, or funding of research start-up packages associated with gender. The small numbers of women in some categories, and the potential variability in space or funds needed across different research areas, make it difficult to group the data to make comparisons based on larger samples.

Overall, the data based on objective indicators do not reveal any clear evidence of bias in the careers of women in the STEM disciplines at UNC Charlotte. This does not mean that there are not more subtle factors operating to make the experiences of men and women different. The self reports of women, as reflected in the data collected in the HERI surveys, suggest that they do feel greater pressures from demands outside the workplace, and that they experience gender discrimination at work more than do men. Although ultimately it will be important to change the objective indicators (higher percentages of women at all levels, and across faculty and administrative positions), there must be attention to the subjective experiences of women to insure that success can be readily achieved.

## B). NSF Toolkit Evaluation <br> Summary of Baseline Data for ADVANCE Evaluation

The attached Tables contain the data that are recommended for evaluations according to the "Toolkit for Reporting Progress Toward NSF ADVANCE Institutional Transformation Goals" (January, 2005). Tables 1 through 8 are numbered to be consistent with the Toolkit examples, and the additional Tables, not specified in the Toolkit, are numbered consecutively beginning with Table 9. The data represent a baseline period of at least 3 years, and in some cases up to 5 years.

## Interpretation

The data suggest that UNC Charlotte, like many universities, has a small percentage of women in STEM disciplines, especially those non-SBS STEM departments. The low numbers become even more evident in the higher ranks (associate and full professors). Table 1 suggests that the trend over the past three years is relatively flat, with the percentages of women at all levels remaining essentially the same. Over the three years examined, the changes in the percentage of women at each rank in non-SBS STEM disciplines were: assistant professors (+1.6\%), associate professor (+3.7\%), full professors (+2.6\%). In the SBS STEM areas, the changes are comparable, except at the assistant level: assistant professors (+6.8\%), associate professor (+2.6\%), full professors (+3.2\%). The data for the most recent year (2006-2007) are presented separately in Table 2.

The absence of more senior women does not appear to be due to a differential impact of the tenure process or voluntary attrition. Table 3/4 (combining information from Toolkit Tables 3 and 4) does not indicate women were less likely to be promoted either to the associate or the professor levels (years 200203 through 2006-07). Similarly, Table 6 shows no evidence of higher attrition among women (2003-04 through 2006-07).

The new hires (Table 7) over the last 4 years show that in the non-SBS STEM areas there has been a rate of hiring women at the associate level that exceeds the current percentages of women at that level. The numbers are still small (3 new associate level women), but, relative to the number of men hired at that level, it does suggest efforts to increase the relative numbers of senior women.

Examining years in rank (Table 5), one must be very cautious about drawing conclusions due to the low numbers of women at the associate and full professor levels. With this in mind, however, Table 5.2 does indicate that in most areas women have not spent more time in rank at the associate level than have men. Thus, it is possible that the associate level women are moving toward promotion to full professor, but lack the time to reach this transition. Table 5.4 shows clearly that the women at the full professor level are, for the most part, recent additions to this group. Except for one area (engineering), where the numbers are quite small, women have fewer years at that rank than do men.

The data in Tables 8 and 8.1 parallel the findings from other areas. In the STEM fields, the absence of senior women is reflected in the fact that there is only 1 woman who holds a Distinguished or Titled Chair. The number of women is administrative positions (Table 8) has remained essentially flat over the last three years. It does appear that new positions at the Dean/Associate/Assistant Dean level are being filled by women, since the number of women has increased from 6 to 10, even as the number of men in these positions has remained stable (13).

The data on salaries (Table 9) are difficult to evaluate without considering variables like time at rank, department, and actual performance. A detailed analysis of salaries will be conducted at some point during the grant period, but none has been attempted at this point.

Finally, the data on support for faculty do not indicate any bias based upon gender. Tables 10.1, 10.2, and 11 do not reveal clear differences in office space, research space, or funding of research start-up packages associated with gender. The small numbers of women in some categories, and the potential variability in space or funds needed across different research areas, make it difficult to group the data to make comparisons based on larger samples.

Overall, the data based on objective indicators do not reveal any clear evidence of bias in the careers of women in the STEM disciplines at UNC Charlotte. This does not mean that there are not more subtle factors operating to make the experiences of men and women different. The self reports of women, as reflected in the data collected by HERI, suggest that they do feel greater pressures from demands outside the workplace, and that they experience gender discrimination at work more than do men. Although ultimately it is the objective indicators (higher percentages of women at all levels, and across faculty and administrative positions) that will be important to change, there must be attention
to the subjective experiences of women to insure that success can be readily achieved.

Appendix A

# External Evaluation of UNC Charlotte NSF ADVANCE Institutional Transformation Award 

Alice Hogan, Chief Administrative Officer<br>Asian University for Women Support Foundation

Betsy E. Brown, Special Assistant to the Provost<br>North Carolina State University

January 24-25, 2008
The external evaluators met with representatives of key UNCC ADVANCE initiatives as well as related administrative and faculty representatives and senior University leadership. (See attached schedule.) On the whole, the evaluators found that UNC Charlotte has made progress in implementing the programs proposed in its ADVANCE application. The evaluators made several recommendations for strengthening administrative effectiveness and budget management of the grant, and for engaging a wider group of faculty as allies of the project.

Goals of the grant:

1) increasing the number of women faculty interviewed and hired in STEM disciplines.
2) increasing the number of women faculty retained and promoted in STEM disciplines
3) ensuring equity in climate, salary, workload, and other areas
4) increasing the number of women in leadership positions
5) monitoring institutional transformation
I. Progress in Program Development:

Committee on the Future of the Faculty
The evaluators found the organization and activities of the Committee on the Future of the Faculty effective. The Committee had studied existing policies, procedures, and structures in order to determine how they might be more effective in helping UNC Charlotte achieve its ADVANCE goals. The evaluators found the Committee members to be broadly representative of the University's faculty and administration and both thoughtful and pragmatic in their recommendations.

The Committee has sent two memoranda (September 6 and November 16, 2007) to the Provost outlining recommended actions to strengthen recruitment of women faculty and promote successful and inclusive faculty searches. At the time of the evaluation, approval and implementation of the Committee's recommendations were pending. The evaluators believe that implementation of the Committee's recommendations will ensure an infrastructure for achieving the grant's goals, including recommendations for providing support for dual career couples, establishing an ombudsperson/coordinator of
equity issues and faculty equity advisors in each college, strengthening the policy on extending the tenure clock for faculty, creating flexibility in tenured appointments to allow part-time and shared appointments and related evaluation processes, strengthening search and hiring and start-up practices, and documenting and evaluating the efforts and progress of colleges and departments in achieving a more diverse faculty. The "negotiating guide" for department chair use in hiring faculty developed by the Committee is a particularly useful document.

The Committee on the Future of the Faculty is a good model for establishing policies and assuring institutional accountability for oversight of equity issues in recruiting, hiring, and retaining faculty that can be sustained beyond the term of the ADVANCE grant. Issues that the Committee still needs to address are faculty needs for improved childcare, improved benefits for faculty, policies and practices to encourage women faculty to apply for promotion to professor (including salary increases associated with promotion), and ensuring that the faculty evaluation system rewards activities in support of the university's equity goals, including involvement in programs established through the ADVANCE grant.

The involvement of a representative of the Faculty Council (the faculty governance organization) to the Committee would ensure effective communication of the Committee's recommendations, particularly those requiring Faculty Council approval. The Future of the Faculty Committee's recommendations have been referred to a Faculty Council committee which is studying them before discussion by the entire Council.

The evaluators met with the Executive Committee of the Faculty Council, some of whom were not familiar with the ADVANCE program's and the Committee's activities. However, they identified many of the same problems for faculty recruitment and retention identified by the Future of the Faculty Committee: daycare needs, policies to modify the tenure clock and the effects of time away from the job on tenure decisions, and the need for fair working conditions and salaries for non-tenure-track faculty members.

## Leadership UNC Charlotte

The evaluators met with participants in Leadership UNC Charlotte, including department chairs and emerging faculty leaders. The representatives were enthusiastic about the value of the program for their own leadership development and articulated a number of ways in which the program supports the ADVANCE goals: institutionalizing the values of the grant, recognizing that what is good for women faculty members is good for all faculty members, and commitment to the development of faculty as well as administrators. They appreciated the fact that the sessions (which are held four times a semester) combine learning from both peers and experts. They found the workshops on recruitment of faculty and on tenure and promotion particularly valuable.

The participants look forward to helping the program coordinators evaluate the topics and ways to ensure the program is fresh and provide continuous development. Most thought
the number of sessions should be reduced given the other commitments of participants, particularly department chairs.

## Competitive Awards Program

The Competitive Awards program has two tiers, the Bonnie Cone awards to individual faculty members and the Solutions awards to departments and colleges. Recipients of the Bonnie Cone competitive grants with whom the evaluators met (junior STEM female faculty) were enthusiastic about the value of the grants for their work. They have been able to use the grants for course release and summer support, assistance in recruiting graduate students, and other support for their research programs. Recipients of these awards also reported that the awards were appreciated within their departments. Recipients identified the importance of released time and rewards for those working on the ADVANCE grant projects and the need for improved university infrastructure for post-award support for large research grants as related areas that need to be addressed. The first of these issues, recognition and rewards for participation in the ADVANCE project, was also identified by the ADVANCE Team members and individual participants as crucial to the success of the project in achieving its goals.

The Solutions awards process has been revamped in each of the first two years of its administration. Fewer departments than expected have applied for the grants, and some proposals have not been feasible or appropriate to the goals of the program. The use of reviewers external to the ADVANCE project coordinators is perceived to have been of mixed value in achieving the project's goals. Everyone associated with the program believes the Solutions grant program needs to be revised to encourage more applications appropriate to its goals. Possible considerations to be included in determining the future of the program should include clearer identification of the issues to be addressed by Solutions grants, requests for self-studies from departments and colleges accompanying their applications, identification and promotion of best practices from other ADVANCE sites, and clearer accountability requirements for grant recipients.

## Women's Academy

The Women's Academy has served as a means for involving more senior women faculty in ADVANCE efforts. Using ADVANCE and other funds provided by the Provost, the Women's Academy has sponsored valuable programs including a recruitment workshop led by Virginia Valian, a breakfast for at which new women STEM faculty met experienced women faculty in their disciplines, a workshop for women faculty on negotiating, and grants to department to sponsor presentations by distinguished women in science. The Academy appears to be well funded and should be sustainable beyond the grant period with support from the university administration.

## Project Evaluation

Two senior faculty with expertise in program evaluation are responsible for collecting baseline data in a number of areas related to the grant and to the campus climate for women in STEM disciplines. They have collected a range of data on women and all faculty at UNC Charlotte and administered a survey of STEM faculty hired in the past five years. The survey included questions about salary and start-up funding, department
climate, space allocation, mentoring, teaching load, the hiring and negotiation process, and work-life balance. They will also monitor evaluations of participants’ satisfaction with programming supported by ADVANCE. A particularly useful evaluation component is a survey of department chairs to obtain data on space and start-up packages for new faculty hires.

Broad dissemination of survey results and other data to those involved with ADVANCE and to the campus, including the chancellor and other administrators and faculty governance groups as well as the faculty at large, should help build support for the goals of the grant and ensure sustained attention to equity and climate issues beyond the grant period.

## Mentoring Program

The ADVANCE project has expanded a successful mentoring program originally established in the College of Arts and Sciences to all new female assistant professors. In 2007-08, 45 new faculty members have participated in the program, which matches junior and senior faculty members and conducts a reception for participants and a mentoring workshop for mentors and new faculty members. After the workshop, pairs establish their own plans for the mentoring and receive information updates and suggestions from the program staff. The program coordinator will develop an assessment of the program at the end of the first year and regularly thereafter to evaluate the effectiveness of the program.

The program is also developing plans for a mentoring program for mid-career women faculty, a need which emerged from several groups involved in the ADVANCE project; they have found that some women are reluctant to apply for promotion to professor because of the uncertainties of review by a series of committees and administrators and a lack of salary increases at the time of promotion. Support by the deans for activities to retain or reengage mid-career faculty may also be sought.

The Mentoring Program is a promising model for assisting new faculty in their transition to the university and supporting new and mid-career women faculty. The program has only a small staff (one faculty director and a graduate/administrative assistant). Increased staff may be needed to expand mentoring support to mid-career women and to sustain the program beyond the grant period.
II. Administration and Budget

Administration:
ADVANCE Project staff and faculty leaders need a mechanism for more frequent consultation and discussion of progress and obstacles. The PI, Provost Joan Lorden, cannot reasonably attend to daily activities of the project, but can provide strategic direction and guidance. UNCC should consider establishing an ADVANCE Steering Committee made up of the deans of Arts and Sciences, Health and Human Services, and Computing and Informatics and the project coordinators. The Steering Committee would review project activities, provide feedback to the coordinators, and deal with personnel issues. This would reduce the number of A Team meetings, which should become less
focused on updates and more on issues. In addition, the proposed Steering Committee would ensure that issues related to the grant are addressed in a timely manner, when the Provost is likely to be unavailable for consultation.

UNCC ADVANCE should more fully engage the Chancellor, who initiated several initiatives to ensure gender equity when he served as Provost to ensure he is aware of the analysis of data and issues related to the goals of the grant. The Chancellor could be enlisted in activities to recognize and celebrate accomplishments of the program and of individuals involved in the program.

## Budget:

The evaluators made several recommendations related to the ADVANCE budget:

- Consider changes to allocation of budget. It is not clear that the large Solutions Team grants are productive for the goals of the award. Funds could be reallocated among the Bonnie Cone fellowships for early career fellows (\$50K), more focused Solution Team grants (\$50K), and a new midcareer Bonnie Cone fellowship program (separate competition, \$50K).
- Solution Team awards should require a self-study and defined accountability metrics for outcomes.
- Act quickly when personnel leave the ADVANCE initiative. Changes in personnel and levels of involvement in the project can derail progress. When someone leaves the project, the PI and leadership team should evaluate how best to get the work done and how existing funding can support necessary staffing.
- Reconsider distribution of released time and summer support to avoid burn-out among project leaders and coordinators.
- Funding for speakers through the Women's Academy might be used more strategically. Consider inviting speakers who can serve dual purposes; e.g., other ADVANCE PIs or project coordinators who can serve as featured speakers and also consult with UNCC ADVANCE project personnel.
- Develop a plan for sustainability after the grant period.
III. Recommendations of the External Evaluators

1. Engage more male champions for the project at all levels. Encourage participation of particularly effective male department chairs in sharing approaches to best practices for recruitment and retention. The likelihood that current efforts will result in transforming the environment will increase significantly if a wider array of faculty and deans are actively involved and knowledgeable about the project.
2. Enhance PR/communications about the project, including the work of the Future of the Faculty Committee, the competitive grants, and accomplishments to date. Consider how to replace the communications coordinator, who has left the ADVANCE Team due to illness.
3. Find ways for participants to get credit for their service, particularly ADVANCE Team members.
a. In evaluations, ADVANCE activities should be linked to expectations for leadership, not defined solely as institutional service. Project coordinators (e.g., the Mentoring Program coordinator) should have an explicit link to the Provost's office and recognition for campus leadership.
b. Deans and department chairs should be more involved in recognizing and celebrating the leadership provided by the faculty involved in the project. The PI should provide clear direction in this area.
c. The institution needs to have a broader conversation about leadership and service, including how these activities link to the goals of the UNC system's UNC Tomorrow recommendations.
4. The Evaluation Team is collecting useful data for the project and the campus. But project leaders need to make sure the findings are broadly disseminated to the project participants and the campus as appropriate; a sub-committee of the ADVANCE team could decide how best to present the data for a variety of audiences.
5. Leadership UNC appears to be working effectively. Project coordinators should get advice from participants on the most useful topics, reduce number of sessions/semester, and enhance opportunities for peer-learning. This program might benefit from consultation with similar efforts at other ADVANCE sites (University of Washington, University of Wisconsin).
6. The Future Faculty Committee activities to date have been very promising. They need to be linked more directly to faculty governance and a plan developed for continuation of its activities after the grant period.
7. ADVANCE should become part of the solution for important campus issues:
a. Childcare (urge action, articulate its importance, propose solutions)
b. Reward system for faculty involved in campus service/leadership
c. Incentives for promotion including salary bump, celebration and recognition and other incentives, and improved processes among collegelevel committees
8. The project needs to involve/address needs of female faculty of color more directly.
9. The ADVANCE Team and other groups related to the grant's initiatives should use the conference room near the ADVANCE Office more frequently to show that the project has a campus "home."
10. The ADVANCE team should consider ways to involve the colleges and deans outside STEM disciplines (education, architecture, and business). ADVANCE activities benefit their faculty; they should articulate their support of the project as a campus-wide activity.

# Analysis of Dean Interviews 

Arnie Cann, Ph.D. Roslyn Arlin Mickelson, Ph.D.

ADVANCE Evaluators

October 24, 2007

An essential component of the ADVANCE grant is holding administrators accountable for meeting the ADVANCE program's goals. The accountability component places Deans in pivotal roles as change agents in the transformation of UNC Charlotte. To increase their knowledge of the current UNC Charlotte climate, the Evaluation Team wished to ascertain what Deans believed to be the situation with respect to gender equity in their colleges. This information will enable the Evaluation team to establish a baseline, albeit impressionistic, of the gender equity climate of various colleges. Then, over the course of the five years of implementation, we can assess, in conjunction with the empirical measures of climate and gender equity we have collected from faculty, chairs, and other administrators during the grant’s baseline year, 2006-2007, the degree of change in academic climate over time

Between the spring and fall semesters of 2007, Professors Arnie Cann and Roslyn Mickelson interviewed the Deans of all UNC Charlotte colleges: Mary Lynne Calhoun (Education), Nancy Gutierrez (Arts and Sciences), Mirsad Hadzikadic (Computing and Informatics), Robert Johnson (Engineering), Ken Lambla (Architecture), Claude Lilly (Business), and Karen Schmaling (Health and Human Services). We also interviewed Provost Joan Lorden. We interviewed Deans of all the colleges because the goal of this set of interviews was to capture as complete a picture as possible of UNC Charlotte's overall gender equity climate at the time that the ADVANCE grant commenced. Thus, even though the Colleges of Architecture and Education have no STEM faculty, and despite the fact that Dean of the College of Business had resigned, we included them in our interview plans.

We developed an interview protocol with open-ended questions (which appear in bold face in this document). Both Evaluators conducted the interviews. We sought to minimize any possible discomfort on the part of the subject by matching the gender of the lead interviewer with the gender of the respondent. The remaining evaluator had the responsibility of taking notes or, if necessary, probing an answer. Interviews lasted
between 45 minutes and 90 minutes. They took place in the Dean's office or at another campus location. The notes were transcribed and analyzed by both Evaluators.

This narrative proceeds as follows. We present each question in bold type and then summarize the key findings from the answers given. We illustrate findings with paraphrases or direct quotations from Deans' comments without attributions in order to ensure the confidentiality of the respondents. We conclude this report with the Deans' and the Provost's general observations about the status of gender equity at UNC Charlotte about the time the ADVANCE grant was initially implemented.

## When you became Dean, did you perceive barriers to gender equity?

In general, Deans did not find serious, blatant barriers to gender equity in their college. However, the Dean of one college observed, "the faculty do not think it [gender equity] is a real problem." Several Deans recognized that "there is a problem" but attributed what they encountered to a local manifestation of larger national trends.
"[Gender inequity] is not a serious issue in the College because of the history of gendered fields [within the discipline]."
"The main problem is that women faculty go on maternity leave and that shortens their tenure clock."
"There are no senior women who can serve as mentors ... ."
Two Deans initially failed to see the problem as a serious issue when they first assumed their positions. They suggested that they were educated about the problems of gender equity when they were forced to examine the issues more closely. They now appreciate their college's challenges in achieving gender equity. In retrospect, they attributed their first impression to their own then-limited perspective:
"I knew of the numbers and the disparities but I didn’t define it as a problem."
"Honestly, gender barriers were not on my radar screen. I thought 'that's just the way things are.' "

## Do you perceive gender-based obstacles or advantages that manifest at recruitment, hiring, tenure, and promotion?

None of the Deans mentioned gender-based advantages that facilitated hiring in her or his college. This may be because the concept of gender seems to be understood as "women's issues" rather than a concept embracing both men and women. A minority of Deans also
found no gender-based obstacles to their college's recruitment, hiring, tenure, and promotion processes.
"Recruitment problems don't have to do with gender; they have to do with money. UNCC cannot compete with the kinds of salaries and start-up research bonuses other schools offer."
"Generally no [gender-based obstacles]; our disciplines are used to inclusiveness so it carries over into these processes."

However, the majority of Deans identified certain gender-based obstacles to these processes, again with gender connoting women's issues. The salient point though is that these key administrators identified certain internal obstacles included in the culture of their colleges:
"We’ve won the battle of 'here's why it [gender] is important.' It took some explaining to the faculty. Now there's a better understanding. The biggest obstacle was in turning these efforts into part of the culture [of the college]."
"In recruiting, departments often believe excellence is what they see in the mirror. 'If I did it that way, that is the right way.' There is often rigidity in seeing alternative models."
"There's a lack of understanding of what it takes to get a truly diverse pool of applicants-the extra effort that may be required is not seen as necessary by departments."
"There are underlying tensions in the college because of the belief that 'recruitment and outreach undermine merit'."

Other Deans also described obstacles particularly salient to academic women. The barriers include UNC Charlotte's lack of childcare, adult care, dual career options, and competitive salaries. UNC Charlotte's relatively limited resources that restrict the institution's competitiveness in hiring and/or promoting talented faculty women exacerbate these generic obstacles:
"The effects of issues related to dual career couples have been huge."
"Salaries at UNC Charlotte are not great for competitive hiring."
"Anyone with child/adult care issues has problems meeting the 6-7 year tenure clock."
"Currently, for promotion, the lack of effective senior women serving as research mentors has caused some problems in developing records for promotion."

The prevailing cultural climate in some colleges continues to pose serious barriers to gender equity. Several Deans observed that their college's culture must be changed to delegitimize attitudes still held by some male faculty who experience discomfort working with female faculty as full colleagues or with female graduate students as the latter's mentor. The cultures of these colleges also must be changed so that they no longer sanction male graduate students who eschew working with female professors.

## Have you initiated any actions, directives, or policies designed to foster gender equity?

Some Deans who consider gender to be part of their more general focus on diversity have not developed specific policies on gender. A large majority of UNC Charlotte's Deans have instituted policies to foster gender equity. One Dean defined "gender equity as a goal" and asserted that "doing nothing is an obstacle to gender equity." Other Deans have taken actions to foster gender equity such as:

- obtaining HR data on underutilization of women [and underrepresented minorities].
- requiring departments to provide a long short list of candidates for the Dean's approval before inviting the final pool of candidates.
- requiring chairs to provide a list of six outside referees for promotion and tenure decisions to ensure that, when possible, women will be included on the list of referees.
- providing more money, balanced course loads, and monitoring courses for inclusiveness.
- offering programs on gender diversity and equity for administrators, chairs, and faculty.
- instituting a committee for inclusiveness designed to help people succeed.
- bringing in [community] leaders who talk with faculty about what gender barriers their organization has to deal with.
- reviewing all offers made to new hires to insure they are equitable.
- reviewing how chairs evaluate their faculties.
- scrutinizing applicant pools to insure that underrepresented groups [women and people of color] are included.

If you had unlimited powers and could waive a magic wand, what changes would you make at the institutional level to foster gender equity at UNC Charlotte?

Deans were asked to identify transformations they would make if they had unlimited powers to effect changes at the institutional level. Not surprisingly, their wish lists included responses to the problems or obstacles they identified earlier. Like many second tier institutions, UNC Charlotte has difficulties matching the salary and starting packages that flagship state or private institutions can offer. However, some problems could be addressed by more family friendly policies. Four areas emerged as focal points of their wish lists: money and resources, the tenure clock, recruitment issues, and UNC Charlotte's institutional culture.
A. Money and resources were mentioned by most Deans as an item on their wish lists.
"Nothing works like money."
"Money to help in recruiting-for example, to attend conferences and network with future applicants to identify them and encourage them to apply."
"Day care"
"I would like resources to hire more senior women."
B. Several Deans would alter the tenure clock if they could. These leaders identified the difficulties in meeting tenure deadlines faced by faculty who are parents of young children. This is especially true for women faculty:
"I want to extend the tenure clock to nine years."
"We need increased flexibility in 'stopping' the tenure clock."
C. Identification of suitable candidates and recruitment issues are problems faced by several Deans. They mentioned a number of potential solutions to the problems they identified:
"We need to go beyond the usual search, maybe we need a head hunter approach."
"We need help in recruiting faculty to the Charlotte area in general, male and female."
"Require training in 'how to read a CV' perhaps using an outside consultant-so nontraditional applicants can be appreciated and identified better."
"We need better data available so we can track the actual applicant pools."
D. Some Deans returned to the issue of the overall climate for women at UNC Charlotte. If they could, they would change the university's culture.
"Senior women are still seen as an oddity—and there is still a climate of subtle gender discrimination. It is not easy for women to get into the power network."
"We need a well-articulated vision for diversity as a goal that facilitates [these] desirable outcomes.

## What do you see as your role in fostering equity?

Deans lead by example. Some model gender equity in their own hiring. Another strategy Deans use to foster gender equity is to help spouses of new faculty get jobs. The interviews suggest that the majority of Deans engage in education first and intervention second. Their focus tends to be chairs and recruitment committees. For instance, they may distribute educational materials or run search committee workshops focused on diversity and gender equity. But if they feel it is necessary, they will intervene in certain processes (like providing guidance to search committee deliberations) in order to ensure greater gender equity.
"I keep my eye on the faculty. I distribute educational materials and other resources to help them understand issues and to be sensitive to these issues."
"[I monitor] chair-level decisions to be sure they are doing what is necessary to recruit, hire, mentor, and provide resources to ensure equity."

However, several Deans noted that they have experienced resistance to their efforts. One Dean observed that
"It is a balancing act; communications are a problem. Women think men are treated better and men think women are given advantages.
"Among [faculty] who have made it, they ask 'why worry about gender?’"

## Has ADVANCE changed you or your plans?

We asked the Deans if the ADVANCE program has affected them or any of the actions, policies, or plans they had for their college. Their answers were fairly evenly divided amongst those who described themselves as having greater awareness of key gender
equity issues and those who felt they were already fairly enlightened in this area. Deans who have gained from ADVANCE commented:
"I gained awareness of different sets of issues, such as day care."
"[ADVANCE] has provided me with a deeper understanding of how much this [gender equity] is an issue in other units on campus."
"Valian's information raised awareness of some of the subtleties involved."
"I'm more sensitized to the issues, already more active in reading relevant materials."
"Because diversity is a UNCC goal, it became my goal, too. As an administrator, I had to align my beliefs because if I'm not convinced, how can I lead? I shifted my own culture."

## Is there anything else you'd like to say that we didn't ask?

We ended the interview by asking Deans if there were any issues relevant to the broader topic of gender equity they would like to discuss but were not asked. Their answers varied widely. A number of Deans reiterated points they made earlier, such as the need for day care and spousal hires, while others questioned whether these policies-such as flexible tenure clocks - were likely to effect the changes needed for gender equity. There appears to be unanimity about the value of spousal hires for attracting desirable faculty. Several Deans indicated they would like more information readily available to help them in their efforts to push their colleges forward on issues of gender equity. Several Deans pointed to dynamics beyond the campus as resources for ADVANCE's goals, such as pressure for gender equity from the business community where "it's an accepted doctrine." [whether this last point is hypothetical or actually true is not relevant to the import of Dean's comment].

## Conclusions

The interviews with Deans indicated awareness of, modest enthusiasm for, and a lot of activity aimed at achieving greater gender equity at UNC Charlotte. Deans appear to be cautiously receptive to ADVANCE efforts, and they acknowledge that there remains a great deal yet to do before the ADVANCE project's goals are realized. The comments of one Dean summed up this feeling:
" We are moving in the right direction but there are larger climate issues that still need to change."

The Dean interviews also suggested that UNC Charlotte still needs to make the case for WHY diversity was important beyond the issue of fairness. Several Deans mentioned that they appreciated how the process of research and knowledge building benefited from the multiple perspectives that can only be gained through a diverse faculty, that
"...only diverse knowledge gives better solutions, the ability to learn and adapt."
Several Deans intimated that the overall culture at UNC Charlotte might be more receptive to increasing diversity [gender equity] if the goal were conceptualized as improving the outcomes of the University's activities, rather than as an effort to match numbers of faculty with population demographics of the labor pools within disciplines. The latter vision, held by more than a few people, seems more of an arbitrary goal rather than essentially connected to what the University has as its core mission.
"We need to explain better why diversity is a worthy goal - what it brings other than a different composition of the faculty. We need a well articulated vision for diversity as a goal that facilitates some other desirable outcomes."

The Provost concisely summarized the necessary next steps UNC Charlotte needs to take:
"The campus probably needs to have a broader discussion of what we mean by inclusiveness and why it is a worthy goal to try to achieve. We can talk the talk, but we have not internalized the philosophy. Until we live these values, not just talk about them as goals, we will probably not be completely successful."

## Appendix C

Table 1. Number and Percentage of Women and Men Tenured and Tenure Track Faculty by Rank and Department, 2004-2007

Department


Table 1 (cont). Percentage of Women and Men Tenured and Tenure Track Faculty by Rank and Department, 2004-2007

| Department | N Males 2004 |  | Males 2005 |  | Males 2006 |  | Males 2007 |  | N Females 2004 |  | Females 2005 |  | Females 2006 |  | Females 2007 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | N |  | $N$ |  | $N$ |  |  |  | N |  | N |  | N |  |
| LIFE SCIENCES |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Biology |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Assistant | 3 | 50.0\% | 2 | 40.0\% | 5 | 55.6\% | 5 | 62.5\% | 3 | 50.0\% | 3 | 60.0\% | 4 | 44.4\% | 3 | 37.5\% |
| Associate | 6 | 85.7\% | 5 | 83.3\% | 5 | 71.4\% | 5 | 62.5\% | 1 | 14.3\% | 1 | 16.6\% | 2 | 28.6\% | 3 | 37.5\% |
| Professor | 9 | 100.0\% | 8 | 88.9\% | 8 | 88.9\% | 8 | 88.9\% | 0 | 0.0\% | 1 | 11.1\% | 1 | 11.1\% | 1 | 11.1\% |
| Bioinformatics |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Assistant |  | na |  | na | 2 | 100.0\% | 2 | 100.0\% |  | na |  | na | 0 | 0.0\% | 0 | 0.0\% |
| Associate |  | na |  | na | 1 | 50.0\% | 1 | 50.0\% |  | na |  | na | 1 | 50.0\% | 1 | 50.0\% |
| Professor |  | na |  | na | 1 | 100.0\% | 1 | 100.0\% |  | na |  | na | 0 | 0.0\% | 0 | 0.0\% |
| PSYCHOLOGY |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Assistant | 4 | 57.1\% | 3 | 42.9\% | 2 | 28.6\% | 1 | 14.3\% | 3 | 42.9\% | 4 | 57.1\% | 5 | 71.4\% | 6 | 85.7\% |
| Associate | 6 | 54.5\% | 9 | 60.0\% | 7 | 53.8\% | 9 | 60.0\% | 5 | 55.5\% | 6 | 40.0\% | 6 | 46.2\% | 6 | 40.0\% |
| Professor | 8 | 88.9\% | 7 | 87.5\% | 8 | 88.9\% | 8 | 88.9\% | 1 | 11.1\% | 1 | 12.5\% | 1 | 11.1\% | 1 | 11.1\% |
| SOCIAL SCIENCES |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Criminal Justice |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Assistant | 3 | 75.0\% | 4 | 66.6\% | 3 | 60.0\% | 1 | 33.3\% | 1 | 25.0\% | 3 | 33.3\% | 2 | 40.0\% | 2 | 66.7\% |
| Associate | 0 | 0.0\% | 0 | 0.0\% | 1 | 33.3\% | 3 | 75.0\% | 3 | 100.0\% | 2 | 100.0\% | 2 | 66.7\% | 1 | 25.0\% |
| Professor | 3 | 100.0\% | 2 | 100.0\% | 2 | 66.7\% | 3 | 75.0\% | 0 | 0.0\% | 0 | 0.0\% | 1 | 33.3\% | 1 | 25.0\% |
| Economics |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Assistant | 1 | 33.3\% | 1 | 50.0\% | 3 | 75.0\% | 3 | 75.0\% | 2 | 66.7\% | 1 | 50.0\% | 1 | 25.0\% | 1 | 25.0\% |
| Associate | 5 | 83.3\% | 4 | 66.6\% | 3 | 60.0\% | 4 | 66.7\% | 1 | 16.7\% | 2 | 33.3\% | 2 | 40.0\% | 2 | 33.3\% |
| Professor | 6 | 100.0\% | 7 | 100.0\% | 8 | 88.9\% | 8 | 100.0\% | 0 | 0.0\% | 0 | 0.0\% | 1 | 11.1\% | 0 | 0.0\% |
| Geography |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Assistant | 5 | 31.5\% | 5 | 71.4\% | 5 | 83.4\% | 2 | 50.0\% | 2 | 68.5\% | 2 | 28.6\% | 1 | 16.6\% | 2 | 50.0\% |
| Associate | 3 | 100.0\% | 2 | 100.0\% | 2 | 66.7\% | 3 | 60.0\% | 0 | 0.0\% | 0 | 0.0\% | 1 | 33.3\% | 2 | 40.0\% |
| Professor | 4 | 100.0\% | 4 | 100.0\% | 5 | 100.0\% | 5 | 100.0\% | 0 | 0.0\% | 0 | 0.0\% | 0 | 0.0\% | 0 | 0.0\% |
| Political Science |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Assistant | 5 | 55.6\% | 3 | 42.8\% | 3 | 42.9\% | 3 | 42.9\% | 4 | 44.4\% | 4 | 57.2\% | 4 | 57.1\% | 4 | 57.1\% |
| Associate | 5 | 83.3\% | 6 | 85.7\% | 6 | 75.0\% | 6 | 75.0\% | 1 | 16.7\% | 1 | 14.3\% | 2 | 25.0\% | 2 | 25.0\% |
| Professor | 5 | 83.3\% | 6 | 85.7\% | 5 | 83.3\% | 7 | 77.8\% | 1 | 16.7\% | 1 | 14.3\% | 1 | 16.7\% | 2 | 22.2\% |
| Sociology and Anthropology |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Assistant | 3 | 42.9\% | 3 | 33.3\% | 3 | 33.3\% | 3 | 50.0\% | 4 | 57.1\% | 6 | 66.7\% | 6 | 66.7\% | 3 | 50.0\% |
| Associate | 3 | 30.0\% | 2 | 22.2\% | 2 | 28.6\% | 1 | 25.0\% | 7 | 70.0\% | 7 | 87.8\% | 5 | 71.4\% | 3 | 75.0\% |
| Professor | 3 | 50.0\% | 4 | 66.7\% | 4 | 57.1\% | 3 | 50.0\% | 3 | 50.0\% | 2 | 33.3\% | 3 | 42.9\% | 3 | 50.0\% |
| Anthropology** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Assistant | NA | NA | NA | NA | NA | NA | 1 | 33.3\% | NA | NA | NA | NA | NA | NA | 2 | 66.7\% |
| Associate | NA | NA | NA | NA | NA | NA | 1 | 25.0\% | NA | NA | NA | NA | NA | NA | 3 | 75.0\% |
| Professor | NA | NA | NA | NA | NA | NA | 1 | 50.0\% | NA | NA | NA | NA | NA | NA | 1 | 50.0\% |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| TOTAL for STEM - Engineering, Physical, Earth, Life, and Computer Sciences, and Mathematics |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Assistant | 48 | 72.7\% | 59 | 72.0\% | 64 | 71.1\% | 67 | 72.8\% | 18 | 27.3\% | 23 | 28.0\% | 26 | 28.9\% | 25 | 27.2\% |
| Associate | 63 | 87.5\% | 58 | 85.3\% | 57 | 83.8\% | 68 | 81.9\% | 9 | 12.5\% | 10 | 14.7\% | 11 | 16.2\% | 15 | 18.1\% |
| Professor | 77 | 96.3\% | 75 | 93.8\% | 73 | 93.6\% | 72 | 92.3\% | 3 | 3.8\% | 5 | 6.3\% | 5 | 6.4\% | 6 | 7.7\% |
| TOTAL for SBS - Psychology and Social Sciences |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Assistant | 21 | 56.8\% | 19 | 48.7\% | 19 | 50.0\% | 14 | 43.8\% | 16 | 43.2\% | 20 | 51.3\% | 19 | 50.0\% | 18 | 56.3\% |
| Associate | 22 | 56.4\% | 23 | 56.1\% | 21 | 53.8\% | 27 | 62.8\% | 17 | 43.6\% | 18 | 43.9\% | 18 | 46.2\% | 16 | 37.2\% |
| Professor | 29 | 85.3\% | 30 | 88.2\% | 32 | 82.1\% | 35 | 83.3\% | 5 | 14.7\% | 4 | 11.8\% | 7 | 17.9\% | 7 | 16.7\% |

*Source: UNC Charlotte Office of Institutional Research Faculty data file, 2004-2007
Data includes all faculty listed as "Currently Employed" in 2004-2007 Faculty file updated April 2008
Source: UNC Charlotte Faculty database, 2006
Updated November 2007

2007
Table 2. UNC Charlotte, Number and Percent of Women Tenured and Tenure Track Faculty in Science and Engineering by Rank and Department. 2006-



Table 5. Years at UNC Charlotte and Years at Rank by Gender and Rank, 2007

| Department | Males |  |  | Females |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | N | Mean Time at UNCC | Mean Time in Rank | N | Mean Time at UNCC | Mean Time in Rank |
| ENGINEERING |  |  |  |  |  |  |
| Engineering Technology |  |  |  |  |  |  |
| Assistant | 6 | 3 | 3.00 | <3 | 1.00 | 1 |
| Associate | 10 | 12.9 | 9.70 | <3 | 4.00 | 1 |
| Professor | 3 | 9.333 | 5.00 | <3 | 15.00 | 15 |
| Electrical and Computer Engineeering |  |  |  |  |  |  |
| Assistant | 6 | 3.33 | 3.33 | <3 | 4.00 | 4 |
| Associate | 9 | 9.11 | 6.33 | na | na | na |
| Professor | 8 | 11.12 | 14.50 | na | na | na |
| Mechanical Engineering |  |  |  |  |  |  |
| Assistant | 6 | 1.833 | 1.67 | 3 | 4.00 | 4 |
| Associate | 9 | 10.444 | 6.78 | 0 | na | na |
| Professor | 6 | 16 | 9.17 | <3 | 12.00 | 1 |
| Civil Engineering |  |  |  |  |  |  |
| Assistant | 8 | 4.33 | 4.16 | <3 | 3.00 | 3 |
| Associate | 5 | 10 | 3.60 | <3 | 15.00 | 4 |
| Professor | 4 | 25.75 | 10.25 | 0 | 0.00 | 0 |
| PHYSICAL SCIENCES |  |  |  |  |  |  |
| Chemistry |  |  |  |  |  |  |
| Assistant | <3 | 4.5 | 4.50 | <3 | 3.00 | 3 |
| Associate | 4 | 18.5 | 12.25 | <3 | 14.50 | 7.5 |
| Professor | 6 | 23.5 | 14.17 | <3 | 16.00 | 5 |
| Physics and Optical Science |  |  |  |  |  |  |
| Assistant | 6 | 3.2 | 3.20 | <3 | 4.00 | 4 |
| Associate | 5 | 14.66 | 10.00 | <3 | 8.50 | 2.5 |
| Professor | 5 | 15.6 | 7.40 | 0 | na | na |
| EARTH SCIENCE |  |  |  |  |  |  |
| Assistant | 3 | 3.33 | 3.33 | <3 | 4.00 | 4 |
| Associate | 4 | 19.5 | 9.00 | 0 | na | na |
| Professor | <3 | 26 | 16.00 | 0 | na | na |
| MATHEMATICS AND STATISTICS |  |  |  |  |  |  |
| Assistant | 11 | 2.45 | 2.45 | 3 | 4.67 | $4 . .666$ |
| Associate | 9 | 17.333 | 13.56 | <3 | 18.50 | 12 |
| Professor | 22 | 23.27 | 13.59 | <3 | 14.00 | 3 |
| COMPUTER SCIENCES |  |  |  |  |  |  |
| Computer Science |  |  |  |  |  |  |
| Assistant | 8 | 3.87 | 3.50 | 5 | 2.80 | 2.8 |
| Associate | 4 | 12.75 | 6.50 | <3 | 7.00 | 3 |
| Professor | 6 | 20.33 | 12.00 | <3 | 18.00 | 6 |
| Software and Information Systems |  |  |  |  |  |  |
| Assistant | 7 | 4 | 4.00 | 3 | 3.33 | 3.33 |
| Associate | <3 | 10 | 4.50 | 0 | na | na |
| Professor | $<3$ | 8 | 13.50 | 0 | na | na |

Table 5. (cont.) Years at UNC Charlotte and Years at Rank by Gender and Rank, 2007

| Department | Males |  |  | Females |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | N | Mean Time at UNCC | Mean Time in Rank | N | Mean Time at UNCC | Mean Time in Rank |
| LIFE SCIENCES |  |  |  |  |  |  |
| Biology |  |  |  |  |  |  |
| Assistant | 5 | 3 | 2.80 | 3 | 4.00 | 4 |
| Associate | 5 | 11 | 6.00 | 3 | 12.66 | 8.33 |
| Professor | 8 | 22.875 | 14.13 | $<3$ | 17.00 | 3 |
| Bioinformatics |  |  |  |  |  |  |
| Assistant | <3 | 2.5 | 2.00 | $<3$ | na | na |
| Associate | <3 | 2 | 2.00 | $<3$ | 3.00 | 3 |
| Professor | <3 | 4 | 4.00 | $<3$ | na | na |
| PSYCHOLOGY |  |  |  |  |  |  |
| Assistant | <3 | 3 | 3.00 | 6 | 3.83 | 3.83 |
| Associate | 7 | 14.888 | 11.00 | 6 | 16.50 | 10.66 |
| Professor | 8 | 24.75 | 17.25 | $<3$ | 34.00 | 23 |
| SOCIAL SCIENCES |  |  |  |  |  |  |
| Criminal Justice |  |  |  |  |  |  |
| Assistant | 3 | 5.33 | 5.00 | $<3$ | 4.50 | 4.5 |
| Associate | <3 | 6 | 2.00 | $<3$ | 16.00 | 9.5 |
| Professor | <3 | 8 | 8.00 | $<3$ | 14.00 | 2 |
| Economics |  |  |  |  |  |  |
| Assistant | 3 | 3.33 | 3.33 | $<3$ | 26.00 | 24 |
| Associate | 3 | 17.25 | 11.75 | <3 | 14.50 | 8.5 |
| Professor | 8 | 30.125 | 15.38 | $<3$ | 0.00 | 0 |
| Geography |  |  |  |  |  |  |
| Assistant | 4 | 2.5 | 2.50 | $<3$ | 2.00 | 2 |
| Associate | 3 | 7.66 | 3.33 | $<3$ | 20.00 | 13 |
| Professor | 5 | 20 | 10.20 | 0 | na | na |
| Political Science |  |  |  |  |  |  |
| Assistant | 3 | 4 | 4.00 | 4 | 4.25 | 3.75 |
| Associate | 6 | 10 | 5.00 | $<3$ | 16.50 | 10 |
| Professor | 5 | 24.142 | 16.86 | $<3$ | 10.50 | 3.5 |
| Sociology |  |  |  |  |  |  |
| Assistant | 3 | 4.67 | 4.67 | 3 | 4.00 | 4 |
| Associate | <3 | 38 | 32.00 | 3 | 15.33 | 8.66 |
| Professor | 3 | 12.33 | 4.62 | 3 | 15.66 | 5.66 |
| Anthropology |  |  |  |  |  |  |
| Assistant | <3 | 1 | 1.00 | $<3$ | 4.00 | 4 |
| Associate | <3 | 16 | 10.00 | 3 | 14.00 | 9 |
| Professor | <3 | 8 | 3.00 | $<3$ | 17.00 | 17 |

*Source: UNC Charlotte Office of Institutional Research Faculty data file, 2007
Data includes all faculty listed as "Currently Employed" in 2008 Faculty file

FIgure 5.1. UNC Charlotte Associate Professors, Mean Years Employed by Gender, 2006

Mean Years in Rank




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| :---: |
|  |  |



Table 6. UNC Charlotte, 2003-2006 Voluntary, Non-Retirement Attrition, by Rank and Gender

|  | 2003 |  | 2004 |  | 2005 |  | 2006 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Male | Female | Male | Female | Male | Female | Male | Female |
| Engineering |  |  |  |  |  |  |  |  |
| Assistant | 0 | 0 | 2 | 0 | 1 | 0 | 1 | 0 |
| Associate | 0 | 0 | 0 | 0 | 2 | 0 | 1 | 0 |
| Full | 2 | 0 | 0 | 0 | 0 | 0 | 2 | 0 |
| Physical Sciences |  |  |  |  |  |  |  |  |
| Assistant | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Associate | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Full | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Mathematical and Computer Sciences |  |  |  |  |  |  |  |  |
| Assistant | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 1 |
| Associate | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 |
| Full | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 0 |
| Biological Sciences |  |  |  |  |  |  |  |  |
| Assistant | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 0 |
| Associate | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 |
| Full | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total | 5 | 0 | 6 | 0 | 6 | 0 | 4 | 1 |
| Psychology |  |  |  |  |  |  |  |  |
| Assistant | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Associate | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Full | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Social Sciences |  |  |  |  |  |  |  |  |
| Assistant | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 |
| Associate | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 0 |
| Full | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total | 0 | 0 | 0 | 2 | 0 | 0 | 3 | 0 |

Source: UNC Charlotte Institutional Research Faculty Data File 2002-2006 Updated 8/2007

Table 7. New Hires in Tenure Track Positions in STEM and SBS by Department by Gender, 2004-2007


Table 7. New Hires in Tenure Track Positions in STEM and SBS by Department by Gender, 2004-2007

|  | Men 2004 | Men 2005 | Men 2006 | Men 2007 | Women 2004 | Women 2005 | Women 2006 | Women 2007 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | N | N | N | N | N | N | N | N |
| PSYCHOLOGY |  |  |  |  |  |  |  |  |
| Assistant |  | 1 |  |  |  | 1 |  | 2 |
| Associate | 1 | 1 |  |  |  | 1 |  |  |
| Professor |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
| SOCIAL SCIENCES |  |  |  |  |  |  |  |  |
| Criminal Justice |  |  |  |  |  |  |  |  |
| Assistant | 1 | 1 |  |  |  | 1 |  |  |
| Associate |  |  |  |  |  |  |  |  |
| Professor |  |  |  | 1 |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
| Economics |  |  |  |  |  |  |  |  |
| Assistant |  |  | 2 |  |  |  |  |  |
| Associate |  |  |  | 1 |  |  |  |  |
| Professor |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
| Geography |  |  |  |  |  |  |  |  |
| Assistant | 1 |  |  | 1 |  | 1 |  | 1 |
| Associate |  | 1 |  |  |  |  |  |  |
| Professor |  |  | 1 |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
| Political Science |  |  |  |  |  |  |  |  |
| Assistant |  |  |  |  |  |  |  |  |
| Associate |  |  |  |  |  |  |  |  |
| Professor |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
| Sociology |  |  |  |  |  |  |  |  |
| Assistant |  |  |  |  | 1 | 1 |  |  |
| Associate |  |  |  |  |  |  |  |  |
| Professor |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
| Anthropology |  |  |  |  |  |  |  |  |
| Assistant |  |  |  | 1 | 0 |  |  |  |
| Associate |  |  |  |  | 1 |  |  |  |
| Professor |  |  |  |  |  |  |  |  |


|  | Men 2004 | Men 2005 | Men 2006 | Men 2007 |  | Women 2004 | Women 2005 | Women 2006 | Women 2007 |  | \% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | N | N | N | N | Total | N | N | N | N | Total | women |
| Assistant | 6 | 16 | 13 | 13 | 48 | 7 | 4 | 5 | 3 | 19 | 28\% |
| Associate | 0 | 0 | 2 | 3 | 5 | 0 | 0 | 1 | 2 | 3 | 38\% |
| Professor | 2 | 0 | 1 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0\% |



[^0]

## Table 8. Faculty in Administrative Positions 2005-2008 by Gender

| Provost/Assoc and Asst Provosts | 2005-2006 |  | 2006-2007 |  | 2007-2008 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Females | Males | Females | Males | Females | Males |
|  | 1 | 3 | 2 | 3 | 2 | 3 |
| Deans/Assoc and Asst Deans | 6 | 13 | 9 | 13 | 10 | 13 |
| Chairs | 11 | 32 | 8 | 33 | 9 | 33 |
| Directors of Centers | 3 | 7 | 3 | 7 | 3 | 7 |
| Total | 21 | 55 | 22 | 56 | 24 | 56 |




Table 9. 1 UNC Charlotte Mean Salaries by Gender, Rank and Year 2004-2006

| Year Department | 2004 |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Male |  |  | Female |  |  |
| Engineering | N | Range | Mean | N | Range | Mean |
| Civil Engineering |  |  |  |  |  |  |
| Assistant | 5 | 2156.00 | 67404.80 | na | na | na |
| Associate | 3 | 5813.00 | 75450.33 | <3 | 0.00 | 72201.00 |
| Full | 6 | 82090.00 | 81985.50 | na | na | na |
| Electrical and Comp. |  |  |  |  |  |  |
| Assistant | 4 | 21525.00 | 68606.25 | <3 | 0.00 | 71000.00 |
| Associate | 8 | 14300.00 | 80604.13 | na | na | na |
| Full | 10 | 62559.00 | 104424.80 | na | na | na |
| Engineering Technology |  |  |  |  |  |  |
| Assistant | 8 | 19500.00 | 65184.38 | <3 | 0.00 | 60375.00 |
| Associate | 10 | 54512.00 | 66826.30 | na | na | na |
| Full | 3 | 82340.00 | 85553.33 | <3 | 0.00 | 80675.00 |
| Mechanical Engineering |  |  |  |  |  |  |
| Assistant | 3 | 29000.00 | 61333.33 | 3 | 0.00 | 70000.00 |
| Associate | 9 | 21689.00 | 78451.56 | <3 | 0.00 | 84000.00 |
| Full | 8 | 99489.00 | 102794.25 | na | na | na |
| Physical Sciences |  |  |  |  |  |  |
| Chemistry |  |  |  |  |  |  |
| Assistant | <3 | 2951.00 | 52181.50 | <3 | 2364.00 | 51887.00 |
| Associate | 6 | 4541.00 | 59678.50 | <3 | 0.00 | 57015.00 |
| Full | 5 | 46243.00 | 82756.60 | <3 | 0.00 | 91085.00 |
| Physics and Optical Science |  |  |  |  |  |  |
| Assistant | 5 | 10385.00 | 64359.20 | <3 | 17550.00 | 60775.00 |
| Associate | 6 | 50243.00 | 62652.33 | <3 | 0.00 | 60002.00 |
| Full | 4 | 63973.00 | 102403.75 | na | na | na |
| Mathematics and Statistics |  |  |  |  |  |  |
| Assistant | 11 | 25275.00 | 47136.82 | 3 | 5479.00 | 52700.33 |
| Associate | 10 | 36970.00 | 64791.50 | 3 | 8557.00 | 65639.67 |
| Full | 25 | 84175.00 | 80416.52 | na | na | na |
| Computer Sciences |  |  |  |  |  |  |
| Computer Science |  |  |  |  |  |  |
| Assistant | 6 | 1175.00 | 79234.00 | <3 | 0.00 | 80000.00 |
| Associate | <3 | 500.00 | 79813.00 | <3 | 0.00 | 105163.00 |
| Full | 8 | 64260.00 | 114932.25 | <3 | 0.00 | 93093.00 |
| Software and Information Systems |  |  |  |  |  |  |
| Assistant | 6 | 14231.00 | 83363.50 | <3 | 0.00 | 80950.00 |
| Associate | <3 | 0.00 | 103914.00 | na | na | na |
| Full | <3 | 13215.00 | 133870.50 | na | na | na |
| Life Sciences |  |  |  |  |  |  |
| Biology |  |  |  |  |  |  |
| Assistant | 3 | 4699.00 | 54074.33 | 3 | 4825.00 | 51555.67 |
| Associate | 6 | 14889.00 | 56162.67 | <3 | 6437.00 | 61210.50 |
| Full | 9 | 88109.00 | 82955.22 | na | na | na |
| Bioinformatics |  |  |  |  |  |  |
| Assistant |  |  |  |  |  |  |
| Associate |  |  |  |  |  |  |
| Full |  |  |  |  |  |  |
| Earth Science |  |  |  |  |  |  |
| Assistant | <3 | 2845.00 | 51427.00 | <3 | 0.00 | 52850.00 |
| Associate | 4 | 4418.00 | 57965.00 | na | na | na |
| Full | <3 | 0.00 | 88003.00 | na | na | na |
| Psychology |  |  |  |  |  |  |
| Assistant | 4 | 5400.00 | 53128.25 | 4 | 4826.00 | 49350.50 |
| Associate | 6 | 61469.00 | 62679.83 | 5 | 11656.00 | 55754.20 |
| Full | 8 | 36450.00 | 81026.75 | <3 | 0.00 | 78907.00 |
| SOCIAL SCIENCES |  |  |  |  |  |  |
| Criminal Justice |  |  |  |  |  |  |
| Assistant | 3 | 4608.00 | 50572.33 | <3 | 5989.00 | 49005.50 |
| Associate | na | na | na | 3 | 19590.00 | 64992.33 |
| Full | 3 | 56607.00 | 72050.67 | na | na | na |
| Economics |  |  |  |  |  |  |
| Assistant | <3 | 0.00 | 72106.00 | <3 | 19007.00 | 71149.50 |
| Associate | 5 | 24148.00 | 68556.80 | <3 | 0.00 | 55637.00 |
| Full | 6 | 14592.00 | 89427.33 | na | na | na |
| Political Science |  |  |  |  |  |  |
| Assistant | 5 | 3571.00 | 47877.60 | 4 | 6827.00 | 49012.75 |
| Associate | 5 | 43127.00 | 63355.80 | <3 | 0.00 | 55928.00 |
| Full | 5 | 37550.00 | 102352.20 | <3 | 0.00 | 75654.00 |
| Sociology and Anthropology |  |  |  |  |  |  |
| Assistant | 3 | 3500.00 | 49000.00 | 4 | 3500.00 | 47000.00 |
| Associate | 4 | 3775.00 | 58437.50 | 7 | 12000.00 | 54758.71 |
| Full | 3 | 40785.00 | 79938.33 | 3 | 39483.00 | 70347.67 |
| Geography |  |  |  |  |  |  |
| Assistant | 5 | 11070.00 | 51531.00 | <3 | 2492.00 | 51246.00 |
| Associate | 3 | 21005.00 | 56347.00 | na | na | na |
| Full | 4 | 73394.00 | 73577.00 | na | na | na |

Table 9. 1 cont. UNC Charlotte Mean Salaries by Gender, Rank and Year 2004-2006

| Year Department | 2005 |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Male |  |  | Female |  |  |
| Engineering | N | Range | Mean | N | Range | Mean |
| Civil Engineering |  |  |  |  |  |  |
| Assistant | 8 | 5000.00 | 71904.88 | <3 | 0.00 | 72000.00 |
| Associate | 3 | 3781.00 | 78740.33 | <3 | 0.00 | 76615.00 |
| Full | 5 | 91665.00 | 92815.60 | na | na | na |
| Electrical and Comp. |  |  |  |  |  |  |
| Assistant | 5 | 3031.00 | 76036.00 | <3 | 0.00 | 73474.00 |
| Associate | 7 | 11622.00 | 83708.57 | na | na | na |
| Full | 9 | 65468.00 | 107850.33 | na | na | na |
| Engineering Technology |  |  |  |  |  |  |
| Assistant | 7 | 20343.00 | 67943.86 | <3 | 17000.00 | 58500.00 |
| Associate | 10 | 54937.00 | 67826.30 | na | na | na |
| Full | 3 | 66365.00 | 103145.00 | <3 | 0.00 | 86000.00 |
| Mechanical Engineering |  |  |  |  |  |  |
| Assistant | <3 | 12000.00 | 66000.00 | 3 | 0.00 | 72350.00 |
| Associate | 9 | 28500.00 | 82468.22 | <3 | 0.00 | 99000.00 |
| Full | 7 | 91433.00 | 116205.00 | na | na | na |
| Physical Sciences |  |  |  |  |  |  |
| Chemistry |  |  |  |  |  |  |
| Assistant | 3 | 5457.00 | 52721.00 | <3 | 0.00 | 52755.00 |
| Associate | 5 | 5641.00 | 61745.40 | <3 | 1654.00 | 57996.00 |
| Full | 5 | 47700.00 | 85734.40 | <3 | 0.00 | 96245.00 |
| Physics and Optical Science |  |  |  |  |  |  |
| Assistant | 6 | 10987.00 | 65923.00 | <3 | 19279.00 | 62989.50 |
| Associate | 4 | 53369.00 | 61632.00 | $<3$ | 0.00 | 61892.00 |
| Full | 4 | 65964.00 | 107879.25 | na | na | na |
| Mathematics and Statistics |  |  |  |  |  |  |
| Assistant | 11 | 25319.00 | 53043.73 | 4 | 20488.00 | 49639.25 |
| Associate | 8 | 28929.00 | 65416.75 | <3 | 8432.00 | 66804.00 |
| Full | 23 | 80829.00 | 85704.22 | $<3$ | 0.00 | 75936.00 |
| Computer Sciences |  |  |  |  |  |  |
| Computer Science |  |  |  |  |  |  |
| Assistant | 7 | 2400.00 | 81159.57 | 3 | 2400.00 | 80800.00 |
| Associate | <3 | 194.00 | 81711.00 | <3 | 30829.00 | 105414.50 |
| Full | 7 | 67882.00 | 122653.86 | $<3$ | 0.00 | 105660.00 |
| Software and Information Systems |  |  |  |  |  |  |
| Assistant | 5 | 4993.00 | 84126.80 | <3 | 5259.00 | 82629.50 |
| Associate | <3 | 10911.00 | 106611.50 | na | na | na |
| Full | <3 | 14343.00 | 138252.50 | na | na | na |
| Life Sciences |  |  |  |  |  |  |
| Biology |  |  |  |  |  |  |
| Assistant | <3 | 1750.00 | 54202.00 | 3 | 359.00 | 54720.67 |
| Associate | 5 | 7890.00 | 59911.00 | <3 | 0.00 | 59289.00 |
| Full | 9 | 91805.00 | 86897.33 | $<3$ | 0.00 | 70504.00 |
| Bioinformatics |  |  |  |  |  |  |
| Assistant |  |  |  |  |  |  |
| Associate |  |  |  |  |  |  |
| Full |  |  |  |  |  |  |
| Earth Science |  |  |  |  |  |  |
| Assistant | 3 | 4700.00 | 52901.67 | <1 | 0.00 | 57447.00 |
| Associate | 3 | 5212.00 | 60501.00 | na | na | na |
| Full | <3 | 30078.00 | 75499.00 | na | na | na |
| Psychology |  |  |  |  |  |  |
| Assistant | 3 | 7257.00 | 57379.67 | 4 | 7043.00 | 51759.00 |
| Associate | 9 | 69605.00 | 62870.11 | 6 | 13112.00 | 58907.17 |
| Full | 7 | 36804.00 | 85277.86 | $<3$ | 0.00 | 81274.00 |
| SOCIAL SCIENCES |  |  |  |  |  |  |
| Criminal Justice |  |  |  |  |  |  |
| Assistant | 4 | 11800.00 | 51929.25 | <3 | 6600.00 | 50300.00 |
| Associate | na | na |  | 3 | 27007.00 | 67454.33 |
| Full | <3 | 6388.00 | 93805.00 | na | na | na |
| Economics |  |  |  |  |  |  |
| Assistant | <3 | 0.00 | 74834.00 | <3 | 0.00 | 63126.00 |
| Associate | 4 | 31380.00 | 72137.50 | <3 | 30595.00 | 72784.50 |
| Full | 7 | 60736.00 | 94812.00 | na | na | na |
| Political Science |  |  |  |  |  |  |
| Assistant | 3 | 5078.00 | 49777.67 | 4 | 7225.00 | 50157.25 |
| Associate | 6 | 38615.00 | 63323.00 | <3 | 0.00 | 58284.00 |
| Full | 6 | 38827.00 | 102806.67 | <3 | 0.00 | 78226.00 |
| Sociology and Anthropology |  |  |  |  |  |  |
| Assistant | 3 | 3580.00 | 50226.67 | 6 | 4200.00 | 48080.00 |
| Associate | <3 | 588.00 | 60144.00 | 7 | 12060.00 | 57713.43 |
| Full | 4 | 42300.00 | 80125.00 | $<3$ | 9105.00 | 85210.50 |
| Geography |  |  |  |  |  |  |
| Assistant | 5 | 11858.00 | 53682.00 | <3 | 7112.00 | 53558.50 |
| Associate | 2 | 15393.00 | 64303.00 | na | na | na |
| Full | 4 | 81851.00 | 73447.75 | na | na | na |

Table 9. 1 cont. UNC Charlotte Mean Salaries by Gender, Rank and Year 2004-2006

| Year Department | 2006 |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Male |  |  | Female |  |  |
| Engineering | N | Range | Mean | N | Range | Mean |
| Civil Engineering |  |  |  |  |  |  |
| Assistant | 8 | 4875.00 | 75984.87 | <3 | 0.00 | 75240.00 |
| Associate | 3 | 4435.00 | 83860.33 | <3 | 0.00 | 82744.00 |
| Full | 4 | 74000.00 | 114070.75 | na | na | na |
| Electrical and Comp. |  |  |  |  |  |  |
| Assistant | 5 | 3304.00 | 79246.20 | <3 | 0.00 | 78999.00 |
| Associate | 9 | 15464.00 | 87861.89 | na | na | na |
| Full | 8 | 106441.00 | 107434.88 | na | na | na |
| Engineering Technology |  |  |  |  |  |  |
| Assistant | 5 | 10500.00 | 73050.00 | <3 | 0.00 | 74000.00 |
| Associate | 7 | 22819.00 | 75002.71 | na | na | na |
| Full | 3 | 67365.00 | 110811.67 | <3 | 0.00 | 92000.00 |
| Mechanical Engineering |  |  |  |  |  |  |
| Assistant | 3 | 3000.00 | 75666.67 | 3 | 525.00 | 76350.00 |
| Associate | 8 | 32589.00 | 101089.00 | <3 | 0.00 | 105500.00 |
| Full | 6 | 97833.00 | 119684.83 | na | na | na |
| Physical Sciences |  |  |  |  |  |  |
| Chemistry |  |  |  |  |  |  |
| Assistant | <3 | 2914.00 | 54057.00 | <3 | 0.00 | 55565.00 |
| Associate | 4 | 5027.00 | 64748.50 | <3 | 395.00 | 61478.50 |
| Full | 6 | 49058.00 | 86687.50 | <3 | 0.00 | 100993.00 |
| Physics and Optical Science |  |  |  |  |  |  |
| Assistant | 6 | 9451.00 | 68441.83 | <3 | 22379.00 | 66239.50 |
| Associate | 5 | 53269.00 | 67445.80 | <3 | 0.00 | 67892.00 |
| Full | 5 | 64164.00 | 118679.80 | na | na | na |
| Mathematics and Statistics |  |  |  |  |  |  |
| Assistant | 10 | 25510.00 | 54267.30 | 4 | 23735.00 | 50783.00 |
| Associate | 8 | 32707.00 | 67570.25 | <3 | 6884.00 | 69100.00 |
| Full | 22 | 62488.00 | 92747.73 | <3 | 0.00 | 87251.00 |
| Computer Sciences |  |  |  |  |  |  |
| Computer Science |  |  |  |  |  |  |
| Assistant | 9 | 6661.00 | 85064.56 | 5 | 5495.00 | 83289.40 |
| Associate | <3 | 818.00 | 87835.00 | <3 | 0.00 | 115669.00 |
| Full | 6 | 119281.00 | 118489.17 | <3 | 0.00 | 127633.00 |
| Software and Information Systems |  |  |  |  |  |  |
| Assistant | 5 | 5843.00 | 88717.40 | 3 | 10545.00 | 85507.33 |
| Associate | <3 | 12389.00 | 114812.50 | na | na | na |
| Full | <3 | 17043.00 | 146132.50 | na | na | na |
| Life Sciences |  |  |  |  |  |  |
| Biology |  |  |  |  |  |  |
| Assistant | 5 | 7082.00 | 55681.80 | 4 | 29083.00 | 52098.00 |
| Associate | 5 | 10590.00 | 64111.00 | <3 | 111.00 | 62044.50 |
| Full | 8 | 56453.00 | 100447.75 | <3 | 0.00 | 76209.00 |
| Bioinformatics |  |  |  |  |  |  |
| Assistant | <3 | 1024.00 | 84488.00 | na | na | na |
| Associate | <3 | 0.00 | 93000.00 | <3 | 0.00 | 95195.00 |
| Full | <3 | 0.00 | 137397.00 | na | na | na |
| Earth Science |  |  |  |  |  |  |
| Assistant | 4 | 6100.00 | 56588.75 | $<3$ | 0.00 | 57447.00 |
| Associate | 3 | 15372.00 | 65914.32 | na | na | na |
| Full | <3 | 30578.00 | 78749.00 | na | na | na |
| Psychology |  |  |  |  |  |  |
| Assistant | <3 | 2860.00 | 62910.00 | 5 | 10536.00 | 55469.20 |
| Associate | 7 | 47906.00 | 67856.29 | 6 | 54475.00 | 61899.83 |
| Full | 8 | 47296.00 | 92942.38 | <3 | 0.00 | 90931.00 |
| SOCIAL SCIENCES |  |  |  |  |  |  |
| Criminal Justice |  |  |  |  |  |  |
| Assistant | 3 | 5276.00 | 52121.00 | <3 | 6930.00 | 52815.00 |
| Associate | <3 | 0.00 | 65410.00 | <3 | 4359.00 | 61720.50 |
| Full | <3 | 6833.00 | 99920.50 | <3 | 0.00 | 93044.00 |
| Economics |  |  |  |  |  |  |
| Assistant | 3 | 8428.00 | 89190.67 | <3 | 0.00 | 63126.00 |
| Associate | 3 | 17388.00 | 69362.33 | <3 | 38961.00 | 79077.50 |
| Full | 8 | 66102.00 | 100643.00 | <3 | 0.00 | 70000.00 |
| Political Science |  |  |  |  |  |  |
| Assistant | 3 | 16678.00 | 50430.00 | 4 | 8176.00 | 52468.00 |
| Associate | 6 | 38512.00 | 72471.00 | <3 | 4864.00 | 63328.00 |
| Full | 5 | 40637.00 | 107072.20 | <3 | 0.00 | 82226.00 |
| Sociology and Anthropology |  |  |  |  |  |  |
| Assistant | 3 | 3700.00 | 52242.67 | 6 | 5468.00 | 49968.33 |
| Associate | <3 | 1544.00 | 62627.00 | 5 | 12657.00 | 62061.80 |
| Full | 4 | 41162.00 | 86925.75 | 3 | 31577.00 | 82435.00 |
| Geography |  |  |  |  |  |  |
| Assistant | 5 | 15354.00 | 56132.80 | <3 | 0.00 | 52700.00 |
| Associate | 2 | 18943.00 | 68628.50 | <3 | 0.00 | 78117.00 |
| Full | 5 | 87360.00 | 86693.60 | na | na | na |



 Mathmatics \＆Computer Science－－－Mathematics and Statistics，Computer Science，Software \＆Information Systems Departments included in following categories：
Engineering－Mechanical Engineering，Engine

Source：Faculty Surveys，Spring 2007

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Source: Faculty Surveys, Spring 2007

Table 10.2 UNC Charlotte Office Space (square feet) by Rank and Gender, 2007

Table 11. UNC Charlotte, Median Start-Up Funding for Faculty Hired at Assistant Level by Gender 2001-2006

|  | Median Start-Up Funding |  |
| :---: | :---: | :---: |
|  | Male | Female |
| Engineering | $\begin{gathered} \$ 54,187.00 \\ (\mathrm{~N}=19) \end{gathered}$ | $\begin{gathered} \$ 65,963.50 \\ (\mathrm{~N}=6) \end{gathered}$ |
| Physical Sciences | $\begin{gathered} \$ 130,000.00 \\ (N=8) \end{gathered}$ | $\begin{gathered} \$ 95,500.00 \\ (\mathrm{~N}<3) \end{gathered}$ |
| Earth Sciences | $\begin{gathered} \$ 20,000.00 \\ (\mathrm{~N}=3) \end{gathered}$ | $\begin{aligned} & \text { NA } \\ & \text { NA } \end{aligned}$ |
| Mathematical and Computer Sciences | $\begin{gathered} \$ 6,000.00 \\ (\mathrm{~N}=22) \end{gathered}$ | $\begin{gathered} \$ 50,061.50 \\ (\mathrm{~N}=10) \end{gathered}$ |
| Biological Sciences | $\begin{gathered} \$ 185,000.00 \\ (N=5) \end{gathered}$ | $\begin{gathered} \$ 138,750.00 \\ (N<3) \end{gathered}$ |
| Psychology | $\begin{gathered} \$ 3,350.00 \\ (N<3) \end{gathered}$ | $\begin{gathered} \$ 16,903.50 \\ (\mathrm{~N}<3) \end{gathered}$ |
| Social Sciences | $\begin{gathered} \$ 4,550.00 \\ (\mathrm{~N}=12) \end{gathered}$ | $\begin{gathered} \$ 5,250.00 \\ (\mathrm{~N}=16) \end{gathered}$ |

Source: Faculty Resource Survey conducted in Spring 2007
**Data includes the combined total of each faculty member's start-up equipment, research and travel funds as reported on the faculty resource survey conducted by the ADVANCE Evaluation team.
**Data is reported for faculty members who began their position from fall 2001 through fall 2006 and were hired at the ASSISTANT level. Faculty starting in fall 2007 will be included in future reports


[^0]:    *Source: UNC Charlotte Office of Institutional Research Faculty data file, 2004-2006
    Data includes all faculty listed as "Currently Employed" in 2004-2006 Faculty file
    updated September 102007

