1. Introduction

The Department of Nanoscience promotion and tenure guidelines falls under guidelines established by the Joint School of Nanoscience and Nanoengineering (JSNN), as well as those of the University of North Carolina at Greensboro (UNCG). This document outlines the aspects of the promotion and tenure requirements/expectations and procedures that are unique to the Department. The academic and professional values and philosophy underlying these guidelines are stated in the JSNN college-wide P&T guidelines and will not be duplicated here. For a summary of relevant best practices that provides a framework for the Departmental guidelines, please refer to the following document:


This document is supplementary to the following official University and College documents:

The Code of the Board of Governors of the University of North Carolina, Chapter 6: Academic Freedom and Tenure (hereafter referred to as “the UNC Code”)

Promotion, Tenure, Academic Freedom, and Due Process Regulations, University of North Carolina at Greensboro (“UNCG Regulations”)

University-Wide Evaluation Guidelines for Promotions and Tenure, University of North Carolina at Greensboro (“UNCG Guidelines”)

Regulations on Reappointment, Tenure, & Promotion, College of Arts & Sciences (“College of A&S Regulations”)

Guidelines on Reappointment, Tenure, & Promotion, College of Arts & Sciences (“College of A&S Guidelines”)

Reappointment Review Guidelines, College of Arts & Sciences (“Reappointment Guidelines”)

Policy on Annual and Post-Tenure Review, University of North Carolina at Greensboro (“UNCG Annual/PTR Policy”)

Policy on Annual and Post-Tenure Review, College of Arts & Sciences (“College of A&S Annual/PTR Policy”)

The Departmental review process must conform to these UNC and UNCG documents. Current versions of all these documents may be accessed through links on the UNCG Provost’s web site at: http://provost.uncg.edu/publications/personnel/pt.asp
Where appropriate, material from the above documents may be included or referenced herein.

2.  Expectations

2.1  General expectations:

2.1.1.  Associate Professor level: For promotion to Associate Professor with tenure, or for tenure as Associate Professor for a person whose initial appointment was at that rank, the candidate’s record must demonstrate substantial commitment to and effectiveness in teaching, evidence of scholarly and creative accomplishments, a commitment to university and professional citizenship, and a promise of achieving a level of distinction that will lead to promotion to the rank of Professor. Thus, the Department’s expectation is that the candidate will have:

- Competence as a teacher, as demonstrated by JSNN courses developed, taught, student feedback, and peer reviews;
- Established a program of research that is productive, and well regarded by his/her peers, as demonstrated by publications and citations;
- Made efforts towards significant innovation and, ideally, industry engagement, as demonstrated by inventions, spin outs, collaborative work with industrial colleagues, and non-traditional forms of publication;
- Attracted external funding, with clear prospects for attracting more in the future. By the time of promotion to Associate, candidates should have secured funding equivalent to a major federal new or independent investigator award in their field, with the ability to support a mix of post- and predoctoral trainees in their lab going forward post-promotion;
- Ability to effectively mentor students in research, as demonstrated by the number of assigned students showing appropriate progress in their degree programs;
- Evidence of service to the department and a willingness and ability to assume additional service responsibilities (e.g. to the university and the profession) following the award of tenure, as demonstrated by contributions to developing the JSNN processes, resources, and infrastructure, as well as contributions to UNCG committees and related activities.

2.1.2.  Full Professor level: Promotion to the rank of Professor is based upon achievement, distinction, and the impact of one’s contributions, not duration of employment. Thus, the time interval between the first and second promotions may vary considerably between individuals.

Sustained competence in classroom teaching and success in the mentoring of graduate students are expected. In the research and service categories, evidence of recognition as a nationally or internationally recognized expert or member of the profession, along with other “eminence measures”, must be documented. For an individual seeking promotion to the rank of Professor, sustained productivity in terms of research publications is expected, along with a history showing the ability to attract sustained major funding, as evident through long-term continual funding, the renewal of funded primary project grants (i.e. the renewal of a NIH R01 or a NSF project grant), and/or the acquisition of funding to support a center level effort.

As faculty achieve seniority, they may periodically reexamine the ways in which they contribute to the Department’s overall mission. However, in accordance with expectations of the University and JSNN, all senior faculty are expected to involve students in an active and
productive program of research and scholarship, to continue reasonable efforts to secure external funding, and to accept a greater range and amount of service obligations at the Department, School and University levels.

2.2. Specific expectations in teaching, research and service

2.2.1. Teaching

As directed by the UNCG General Administration, teaching is the primary mission of all campuses in the UNCG system, and the Department of Nanoscience expects from all faculty a serious commitment to effective teaching. Accordingly, faculty cannot expect reappointment, promotion or tenure if their teaching, as assessed by the Department’s procedure for teaching evaluation, is consistently found to be inadequate. No level of research productivity or service contributions will outweigh an overall assessment of inadequate teaching in such personnel decisions. However, since the JSNN programs are exclusively at the graduate level, the supervision of student research is an unusually important component of faculty teaching activity.

Teaching includes any activity designed to ensure effective instruction at the undergraduate or the graduate level. Most teaching is undertaken in the Department of Nanoscience, but teaching in other University programs, if approved by the Department Head, will be included in this category. Teaching activities include, but are not limited to, the following:

- Classroom instruction (lecture, seminar, discussion or laboratory)
- Supervision and mentoring of students in research settings
- Supervision and mentoring of students in internship or visiting scholar settings, as well as for post program placements
- Overseeing student-directed creative presentations
- Supervising students in independent study
- Advising students, especially in ways that go beyond helping them to select appropriate courses twice a year, such as writing recommendation letters
- Serving on thesis and dissertation committees
- Preparing new courses, revising existing courses, helping with curriculum revisions; designing laboratory activities; preparing laboratory or other manuals
- Creating multimedia enhancements to the curriculum
- Creating and delivering online courses
- Publishing textbooks, study guides, or other instructional materials
- Submitting proposals for instructional grants (internal or external).
2.2.2. Research

Research includes any activity designed to generate, synthesize, interpret, or apply scientific knowledge and understanding. The outcomes of research activities include, but are not limited to, the following:

- Publishing papers in peer-reviewed professional journals
- Publishing or editing scholarly books or monographs
- Publishing chapters in edited books
- Developing high impact foundational programs and/or software
- Presenting papers or posters at conferences and invited research colloquia
- Securing significant steady state external support, as specified in section 2.1
- Entrepreneurial activity, including the creation of intellectual property, partnerships with industry, and evidence of job placement and business creation, may be presented as a type of research (UNCG Guidelines, Section II.B.1.e)

Measurement of research productivity is more than defining a number of publications and grants. Scientific works of all kinds carry with them a quality that relates to their significance to the field, the magnitude of the product of the work, demonstrated impact on the community and society, the depth of intellectual challenge and accomplishment involved. Additionally, one of JSNN’s unique roles within the UNCG is to serve as an innovation engine for the community, the region, and North Carolina. As such, key and measurable aspects of a successful research program include the effort and progress that results in production of equipment, materials, theory, and knowledge that advances the scientific understanding in a given field, quantified through metrics such as, but not limited to, secured funding, Faculty Scholarly Productivity Index (FSPI), citations per year, technology transfer and translational activities, spin offs, etc.

Research funding can be public or private, and technology transfer activities, such as a licensed intellectual property, collaborative research agreements with industrial partners, start-ups, and job creation shall be given equal weight to a major research publication.

To achieve promotion to Associate Professor, a candidate must exhibit an adequate record of accomplishment and success in research involving a combination of effort, progress, publication, and grantsmanship.

*For promotion to Associate Professor,* an adequate record of publication should establish that individual as a productive member of their field of research. Evidence of this can also be made apparent through other means such as invited talks, evaluation and comments of the external reviewers’ comments, and/or through independent means, such as citation records or commentaries in journals or review articles.

*For promotion to Professor,* an adequate record of publication should demonstrate that faculty member to be an established and valued member of a research field. Again, evidence of this can be made through the comments and opinions of the external reviewers and may be indicated by a series of published manuscripts or a key, seminal work that has offered a paradigm shift in their
field of research. Other indications may include an invited review of their research field, invitation for a plenary session at a national meeting, or election to a committee or study section.

Although a certain frequency of publication is generally necessary for effective communication of research results, sheer number of publications is neither the only nor the most important index of research productivity. Faculty are expected to achieve a record of publications that has a significant impact, either in quantity or quality, or both. Success in securing external research funding is expected of all faculty. Efforts to secure external research funding are expected of all faculty and both the quality and the success of grant proposals will be considered. Collaborative and interdisciplinary work is valued as part of a faculty member’s activities.

“The mission of the Joint School of Nanoscience and Nanoengineering (JSNN) is to prepare students from a variety of disciplinary backgrounds to conduct basic and advanced research in Nanoscience and Nanoengineering in industrial, governmental or academic settings.” This mission includes community engaged scholarship, i.e. scholarship that is undertaken in collaboration with community and corporate partners, which is valued by the Department of Nanoscience. Examples of community engaged scholarship could include, but is not limited to, the nurturing of strategic relationships, research collaborations and engagement with local industries, community organizations, local schools, or community colleges. Community engaged scholarship is expected to result in the same types of measurable outputs, i.e. publications, patents, industrial support and internships, etc., as other types of research and, as such, would be recognized as a valued contribution to a promotion and tenure dossier.

2.2.3. Service

All faculty are expected to provide service to the UNCG community, including the JSNN and other contributions to related professional areas. Assistant Professors in their first term of appointment are expected to provide assigned institutional service at the Department, College, and UNCG levels. A proactive increase in the level of College or University service during the second term of appointment is generally an asset for promotion to Associate Professor. As a faculty member’s career progresses, additional service is expected, at the Department and at the College and University levels. Institutional service may include serving on committees or task forces, writing reports and other internal documents, mentoring junior faculty, and accepting major administrative assignments inside or outside the Department. Service to the profession may include reviewing manuscripts and grant proposals, serving in an official capacity within a professional organization, serving as an editor or member of an editorial board, and serving as an external reviewer for another institution. Faculty are also encouraged to provide professional service to the community, for example by serving on community boards or task forces, by consulting to public and private organizations, by serving as a communicator of research and bridge for ‘outreach to external communities and constituencies’, and by providing training or professional enhancement for members of the community. To be considered part of a faculty member’s professional performance, community service should involve the application of professional expertise, not simply the contribution of time and effort.
2.2.4. Directed Professional Activity

In addition to the 3 traditional areas of teaching, research and service, the UNCG Guidelines recognize an optional fourth category, Directed Professional Activity. This category is intended to capture activities “whose contribution is sufficiently distinctive that their significance is diminished when embedded in any of the three (traditional) categories”. In their P&T guidelines, both the JSNN and the Nanoscience Department have chosen not to utilize this category, as most of the examples given can be subsumed under a broad definition of service activities. This seems preferable to diluting service activities by placing some of them into a different category.

2.2.5. Balance of Teaching, Research, and Service

An individual’s record should represent a unique balance and combination of teaching, scholarship/creative activity, and service. The individual is expected to have substantial and sustained achievement in each area, but may have their greatest strength in only one or two of the three. Thus, an overall outstanding record of achievement may be accomplished primarily by the record of contributions in only one or two areas, or by a more balanced aggregate of contributions across the three areas.

3. Evaluation Materials for Promotion and Tenure Dossiers

Documentation of achievements showing that expectations have been met is most convincingly communicated via a brief narrative for each category, highlighting key accomplishments, and why they are important (if that is not obvious). The narrative should be accompanied by appropriate documentation, examples of which are listed below.

3.1. Teaching

Documentation of teaching effectiveness will take the form of a teaching portfolio that includes, minimally, syllabi of courses taught, results of student evaluations, records of classroom observation by peers, possibly illustrations/demonstrations of novel instructional materials that have been developed, and other documents produced as a result of teaching efforts. It is the responsibility of each faculty member to maintain his or her portfolio, with the advice of the Department Head and other colleagues.

Examples of the scope of teaching are outlined in UNCG Guidelines, Section II.A.1. Examples for documentation of the effectiveness and outcomes of teaching are outlined in UNCG Guidelines, Section II.A.2.

3.2. Research

Documentation of research productivity will be provided minimally in the form of a list of publications, presentations, and grant proposals submitted and obtained, as well as industrial collaborations and intellectual property created, secured, and transferred. Faculty are also encouraged to provide other documents that will allow reviewers to assess the quality as well as
the quantity of work completed in this category. These might take the form of reprints, proposals, letters from editors or reviewers, grant review summary sheets, published reviews of books, etc.

An appropriate narrative for this section could include a personal statement that places the work in the context of the individual’s overall program of research as well as the broader field of that research area. Rather than trying to be all inclusive, and throw everything into the dossier (which could discourage reviewers), it is advisable to select a subset of key accomplishments as exhibits (a minimum of 5 is suggested), and include or represent those and provide brief narratives as to their significance. For research, these exhibits most likely would include publications and funding secured, as well as industrial collaborations and intellectual property created, secured, and transferred. It is possible to choose a broader topic as an exhibit item, e.g. a discovery or breakthrough developed in a series of papers, and additionally to identify a representative publication for inclusion, and list the rest.

Evidence of recognition of research impact can also include FSPI and media coverage, particularly if in a professional periodical or a leading science journal (e.g., “News and Views” type of highlighting in a major journal). Impact measures such as citation data can also be useful for documenting impact, but a low citation index should not be used to disallow a promotion, especially if it can be argued that the research challenges a ruling paradigm.

Although a candidate’s research may initially emphasize a single academic discipline, a multidisciplinary or interdisciplinary approach is increasingly used in many fields of inquiry and may be integral to some. Similarly, while research is often pursued by an individual working alone on a given project, it is also often collaborative, sometimes pursued with one or a few colleagues and sometimes with larger groups or networks. The JSNN recognizes the value of such approaches and will give full consideration to multidisciplinary and interdisciplinary work, whether undertaken individually or as a well-documented collaboration.

Examples of the scope of research are outlined in UNCG Guidelines, Section II.B.1. Examples for documentation of the effectiveness and impact of research are outlined in UNCG Guidelines, Section II.B.2.

3.3. Service

In general, service contributions may be documented by a list of activities undertaken during the years under review. Where a faculty member wishes service to be given special weight, or where the review committee or the Department Head believes that special recognition should be given to a particular service activity, additional documentation, such as letters or copies of reports, should be provided.

Examples of the scope of service are outlined in UNCG Guidelines, Section II.C.1. Examples for documentation of the effectiveness and impact of service are outlined in UNCG Guidelines, Section II.C.2.
4. Evaluation Procedures

4.1. Annual Evaluations

Annual faculty evaluation in the Department of Nanoscience occurs at the end of the Spring semester, based upon faculty annual reports for the academic year (July through June).

For each junior faculty member, the annual review is conducted in June. It covers the review period from July 1\textsuperscript{st} of the previous year through June of the current year. The review document includes the following information: 1) Review period; 2) faculty name; 3) review date; 4) current position; 5) Brief job description, including objectives and checkpoints; 6) Performance assessment on each of the major areas, i.e. Teaching, research, and service; 7) References to additional supporting documentation; 8) Summary of employee’s strengths; and 9) Areas for improvement or development. The teaching area includes an assessment of courses taught, based on Class Climate and peer feedback, as well as additional UNCG faculty workload activities, which include advising, training, and new course development. The research assessment section covers grants-man-ship, research publications and presentations, patents and collaborations. The service section provides an assessment of contributions to the profession and the community, i.e. service to UNCG, to the profession, and to K-12, and the community.

Currently, the following materials serve as inputs for the annual review: 1) The faculty member’s current annual report, Class Climate surveys, peer feedback, and additional review materials, as appropriate. The time-line for developing this year’s annual reports, which support the annual review process, is summarized below:

- April 12: The Dean e-mails instructions to the JSNN faculty, with respect to the time-line and desired format of the JSNN's Annual Report for the period of July 1 to June 30.
- May 1-8\textsuperscript{th}: The faculty sections of the annual report, which include faculty accomplishments, are due to the Chairs.
- May 22\textsuperscript{nd}: The Chairs' integrated annual reports are due to the Dean.
- June 1\textsuperscript{st}: The annual report is due.

4.2. Reappointment

All tenure track faculty will be reviewed for reappointment as defined by section 3 of the UNCG Regulations. In all cases Assistant Professors shall be appointed to initial probationary terms of four years. At least twelve months before the initial four-year term of appointment as an Assistant Professor expires, the candidate shall be reviewed for reappointment to an additional three-year term (if not prohibited by the term limits specified in section 3.C., above), and a decision rendered. An Associate Professor hired at that rank from outside the institution may be appointed to a probationary term of up to five years, or, with justification, may be appointed with tenure. If hired for a probationary term, before the end of the penultimate year of that term, the Associate Professor shall be reviewed for tenure and/or promotion, and a decision rendered.

According to Section 4.B.i.a.: “In all instances where a candidate is reviewed for reappointment, promotion and/or tenure, the candidate’s department head, after assembling and consulting with the tenured members of the department faculty senior to the candidate in rank and receiving a summary of their independent deliberation and vote, shall notify the candidate of the
department’s recommendation.” “In the case of Professors appointed to probationary terms, the faculty members eligible to vote are tenured Professors.”

By the time of third year review, tenure track faculty are expected to have:

- Submitted and secured significant external research grants
- Published papers in peer reviewed journals
- Made progress towards creating significant intellectual property
- Demonstrated success in classroom teaching and student mentorship
- Been involved in service at the department level
- Demonstrated significant industrial engagement (this latter expectation is highly desirable, but not mandatory)

4.3. Promotion and Tenure Procedures

4.3.1. Committee composition
According to Section 4.B.i.f: “In cases where the dean believes there are so few faculty of the appropriate rank in the candidate’s department that an adequate departmental review cannot be conducted, the dean will consult with the department head and the candidate in the selection of the review committee. A minimum of three faculty senior to the candidate are normally necessary to assure adequate review. If agreement between these parties is reached, a memorandum of agreement signed by all parties will specify the composition of the review committee. If, following the consultation specified above, the dean determines that agreement cannot be reached, the dean, with the approval of the provost, will specify the composition of the committee.”

4.3.2. Preliminary review to obtain permission of department to submit full application.
This is a procedure used by many academic departments (e.g., UNCG Chemistry and Biochemistry) to ensure that a candidate is not going up for promotion prematurely. At the end of the Spring Semester prior to the fall that the Promotion and/or Tenure Document is to be forwarded to the Dean, the candidate will prepare a preliminary document for the Departmental review committee. The preliminary document is typically an extended curriculum vitae that comprehensively represents the candidate’s experience in the areas of teaching, research, and service. In addition, the candidate should provide a list of grants both funded and applied for (if not part of the extended CV) and copies of publications since appointment to the University.

By June of the given year, the Review Committee will meet to review and discuss the preliminary Promotion and Tenure Document, and vote upon whether the faculty member should proceed with the P&T application in the coming year. This will be a customary procedure in the cases of early promotion applications, or applications for promotion to full professor. If the individual’s “tenure clock” dictates that this will be their last chance to apply for promotion and tenure, then, even in the face of a negative preliminary faculty vote, they shall still be allowed to proceed to develop a full dossier and apply in the coming fall, in the hope that new achievements may emerge in the intervening months. This opportunity to provide an updated dossier, which
includes current external review letters, enables the candidate to establish and document the best case for making a favorable decision.

4.3.3. Preparation of P&T Dossier, and procedure for soliciting external peer review letters.

Presuming that the application is allowed to go forward, the Department Head will then work with the candidate to expand the document into a full Promotion and Tenure Dossier, by compiling and updating teaching, research, and service information and documentation and by obtaining external reviews of the candidate’s record, which will have a special focus on the research. The dossier, other than the external review letters, should be completed by the end of October.

At the same time, or preferably somewhat earlier, the candidate may submit a list of up to 4 potential external reviewers. External reviewers cannot be close friends, colleagues, collaborators or mentors of the candidate, or other relationship that would be deemed a conflict of interest. People known through meetings, study sections and other professional contacts are acceptable, but they must be free of conflicts of interest. Working with the candidate or other faculty, the Department Head will assemble a list of at least 4 additional names. The Dean will then select at least 2 names from each list, and the Department Head will contact them with a request to review the dossier. If they decline, other names are chosen, aiming for equal representation from the lists of the candidate and the department. All review letters that are received MUST be included in the dossier. A minimum of 4 letters shall be considered standard, but in case of extreme difficulty in obtaining responses, or if the letters show a significant consensus of opinion, three letters only will be deemed acceptable. The letters should all be received by early January of the following year. The final dossier should also include a brief summary of the credentials of each external reviewer, in the reviewer response, and any possible relationship to the candidate (i.e., if and how they are known by the candidate).

4.3.4. Evaluation of P&T Dossier, and procedure for vote by Departmental Review Committee.

In January, the Departmental Review Committee will meet to discuss and evaluate the Promotion and/or Tenure Dossier. A chair, other than the Department Head, will be elected from the faculty qualified to vote on the candidate’s promotion. A preliminary summary of evaluation comments will be prepared, covering all three areas of teaching, research and service.

The Department Head will then meet with the voting faculty to discuss the document. Once discussions are completed, the voting faculty will meet in the absence of the Head to finalize discussion and each will vote, anonymously, for or against the candidate’s tenure and/or promotion, which will be voted on separately, i.e., tenure without promotion is possible. After the Committee votes, a summary of the Committee’s vote and justification is forwarded to the Department Chair. The Department Head then votes, and prepares an independent summary statement that includes his/her vote and opinion, regarding the tenure and/or promotion, and also includes the Committee’s vote and justification statement. Both summary statements will be included in the candidate’s Promotion and/or Tenure Document, along with the signature page and the record of the vote.
The Promotion and/or Tenure Document will be forwarded to the Dean of JSNN, regardless of whether the votes of the faculty and the Department Head are favorable. The Dean may add a cover letter to the document, supporting or expression dissention with the Departmental vote, as he or she sees fit. It should also be noted that the candidate may withdraw the application for Promotion and/or Tenure at that or any other time before it reaches the Chancellor, via the Provost.

Withdrawal of a candidate’s portfolio during a review for promotion that does not involve tenure, has no adverse consequences for the candidate. However, if a candidate withdraws the portfolio during the penultimate year of the probationary term (mandatory review year), his/her employment will end at the conclusion of that term. [Recommended language from A. Whitley (08/27/13)]

Per section VIII.E.iii (Timetable) of the UNCG Promotion and Tenure Regulations, “The meeting(s) of the faculty must be completed in time for the chair of the meeting to deliver the written summary and the results of the vote to the department head (and to the candidate) at least ten days prior to the date when all materials are due to be forwarded to the Dean of the College.” “The candidate must be allowed at least three full business days to complete and forward his/her written comments to the head.”

5. Appendix.

The document entitled, “Best Practices in Tenure and Promotion (2013)”, established by the University of North Carolina at Greensboro College of Arts & Sciences and released on April 29, 2013, provides an excellent framework for refining the Nanoscience Department’s Promotion and tenure Guidelines.

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<th>General Topics</th>
<th>Specific Best Practices</th>
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| Best Practices in the Years Prior to Mandatory Review for Untenured Faculty | ▪ Expectations of candidates for promotion and tenure  
▪ Feedback during annual reviews  
▪ Reappointment review  
▪ Extensions of the probationary period (“stopping the tenure clock”)  
▪ Early decisions on tenure and promotion  
▪ Full reviews for tenure are required in all cases |
| Preparation of Associate Professors for Promotion to Professor | ▪ Recommendations for promotion to Professor originate with the department head or with a majority of the Professors.  
▪ In addition, an Associate Professor has the right to a full review for promotion at specified intervals (UNCG Regulations, Section 3.E.iii).  
▪ The UNCG Annual/PTR Policy requires all tenured Associate Professors to be given feedback on their progress towards promotion as part of their annual review.  
▪ A decision to solicit outside letters for a candidate for promotion to Professor commits the department to submit the dossier for review at the College and University levels, even if the
The following topics are considered in other UNCG documents, and could be discussed in future versions of this document: Post tenure reviews, the appeals process, and the grievance process.