CRITERIA FOR PROMOTION AND TENURE

Department of Biomedical Engineering
University of North Texas

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This document presents departmental guidelines for the tenure and promotion process in a manner consistent with the policies outlined in the UNT Policy 06.004 titled "Faculty Reappointment, Tenure and Promotion" (https://policy.unt.edu/sites/default/files/06.004_FacultyReappointmentTenurePromotion_2017.pdf).

I. Introduction

UNT Policy 06.004 describes the University policy on the granting of tenure and academic promotions. Tenure is the only substantive protection afforded for academic freedom and is perhaps the most critical decision involved in faculty development. Granting of tenure is a selective process that recognizes the individual as a continuing member of the faculty based on performance during a trial period. The importance of this decision to the university dictates that positive action in awarding tenure be taken only when there is no reasonable doubt of the individual's ability to make a long-term contribution to the goals of the university.

Recommendations for tenure are based on critical review of explicit evidence accumulated during a probationary period concerning the faculty member's performance in the functions of teaching, research or other scholarly or creative activities, and service.

Granting of tenure requires excellence in the functions of teaching, scholarly activities, and professional service. Contributions in one or two areas alone will not qualify an individual for tenure. There must be sufficient contributions in all three areas.

II. Tenure Process

It is the view of the Department of Biomedical Engineering (BMEN) that the careful selection and hiring of faculty are the most critical steps in the tenure process. New faculty members are believed to have the potential and motivation to become successful contributors to the BMEN department and to navigate the tenure process successfully. All faculty will be made aware of department, college and university requirements regarding promotion and tenure upon hire.

The Department of Biomedical Engineering is committed to providing an environment in which tenure-track faculty can succeed. A tenured BMEN and/or another department faculty member will be assigned to mentor each tenure-track faculty member upon the faculty member's arrival and throughout the faculty member's tenure process. Incoming faculty members are responsible

for the appropriate use of available resources to achieve the university, college, department, and personal goals necessary for tenure.

Criteria for the tenure and promotion evaluation process are listed below. Because this list is not intended to be definitive, professional judgment is required to inform the evaluation process.

The department Promotion Reappointment and Tenure Committee (PRTC) and the department chair have the responsibility of making the judgment of the individual contributions of faculty members.

Promotion Reappointment and Tenure Committee (PRTC)

Introduction

The Promotion Reappointment and Tenure Committee of the department of Biomedical Engineering will comprise five members. Each member will be a tenured faculty in the department of biomedical engineering. In the event that the department does not have adequate number of tenured faculty to participate in the committee, then the biomedical engineering department chair will appoint an ad hoc committee of faculty peers from other departments in the College of Engineering, after consultation with the requested faculty and their department chairs. Thus, the PRTC of the department of biomedical engineering will be formed to look into matters of promotion, reappointment and tenure of faculty members in the department of biomedical engineering. The PRTC will make its recommendations to the chair of the biomedical engineering department.

Committee Procedures

1. The PRTC will use their first meeting to elect a Chair of the PRTC and a secretary. The chair of the PRTC will be a member of the biomedical engineering faculty.
2. The Chair of the Committee calls meetings, chairs the meetings, and reports to the biomedical engineering department chair.
3. The Secretary of the Committee keeps the minutes of the meeting (which are subsequently circulated by e-mail to all eligible committee members), including attendance records and the results of any committee votes. The Secretary also serves as the Chair when the Chair is absent.
4. The Chair of PRTC obtains the dossiers for all candidates for promotion and/or tenure from FIS workflow or other official means.
5. During the Fall and Spring semesters of the academic year, a quorum is defined by the presence, either physically or by teleconference, of all the Committee members eligible to vote on a particular candidate. If a candidate for promotion and/or tenure must be considered during the summer months, every effort will be made to ensure a quorum of the committee is present, either physically, by teleconference, or by electronic mail. The Committee may accept electronic voting if there is not a quorum of members eligible to vote who are present physically or by teleconference.
6. The Committee meets to receive the candidate's package from FIS, discuss the case, and vote. All votes cast by each member of PRTC need to be justified with an individually written note, both for assent as well as dissent. Any member of the Committee from the candidate's department, or who otherwise has a conflict of interest, is recused from participation in the evaluation of that candidate. More specifically, recused members do not receive copies of the

candidate's file or supplementary materials, do not vote, do not receive any committee correspondence concerning the case, and are not consulted on the final wording of the Committee letter.

7. Although during the academic year the eligible Committee members should be present physically or by teleconference in order to vote, an eligible member may vote electronically if all discussion of the case is concluded and the only remaining business is to vote.
8. The final recommendation of the Committee to the Department Chair will state the recommendation of the PRTC.

III. Guidelines for Tenure and Promotion to Associate Professor

The granting of tenure to an assistant professor will result in promotion to the rank of associate professor. The rank of associate professor may also be granted upon hiring by the department, college and university. In the case of faculty members who entered as associate professors without tenure, tenure may be awarded with or without promotion to full professor.

A. Teaching

1. Criteria

Effective teaching is a minimum expectation for the granting of tenure, and no recommendation for tenure should be made in case of any reasonable doubt. Therefore, it is expected that faculty members seeking tenure should demonstrate effective teaching of undergraduate and graduate courses. Faculty members being considered for tenure are expected to mentor graduate students as major professor and undergraduate students in senior design projects. In addition, the faculty member's dossier for tenure should include the candidate's contributions to the department's teaching mission and program accreditation.

Candidates are typically expected to meet the following minimum criteria over the probationary period:

- Have taught at least one undergraduate course and one graduate course as a demonstration of broad teaching ability.
- Have received an overall teaching evaluation score at least 3.5 (on a 5-point scale) or above average of the College of Engineering teaching evaluations for tenured/tenure-track faculty, or have obtained positive evaluations from senior faculty member(s) over the last 3 probationary years to demonstrate improvements in teaching before tenure application.
- Be actively advising at least two graduate students (including at least one PhD student) as major professor at the time of application for promotion and/or tenure.
- Have served as faculty advisor for an average of at least one undergraduate student per year, including senior design, TAMS, REU, SUPER, and McNair students.

2. Evidence

A faculty member may choose from the following list of teaching activities and include relevant documentation to demonstrate his/her teaching effectiveness.

- Student evaluations

- Peer evaluations
- Course syllabi and materials for which the faculty member is responsible throughout his or her employment at the university
- A record of new course development
- Funded educational grants
- Supervision of undergraduate students (such as senior design projects, TAMS, REUs, SUPER, and McNair students), graduate students, and other professionals
- Membership on master's thesis and doctoral dissertation committees
- Graduation of Master and Ph.D. students as major professor
- Participation in activities related to improving effective classroom teaching
- Teaching awards
- Other evidence to demonstrate excellent teaching

B. Research and Scholarly Activities

Scholarly activity is defined as the intellectual contribution of the department's faculty for the creation of new knowledge and the application, transfer, and interpretation of knowledge to the improvement of science and technology of the type that would lead to a favorable external peer review. The desired outcomes of the scholarly process includes peer-reviewed publications, presentations (conference and seminars), patents, book chapters, books, and other products of scholarly pursuits. Externally funded research is a major expectation. Amounts listed on the Promotion and Tenure (P&T) documents shall be identical to those on record in the Office of Research and Innovation (ORI).

1. Criteria

Faculty must show continuous growth and development through research, publishing, or other creative activities. A recommendation for tenure must be based on a record of high quality performance in this area and, so far as is possible, some indication of long-term motivation, sustainability and interest. It is expected that faculty members seeking tenure will have externally supported grants that cover research expenditures, e.g., graduate students and postdocs support, travel, lab equipment, summer faculty salaries, and course buyouts.

Candidates are typically expected to meet the following minimum criteria for consideration of tenure during their time at UNT:

Grantsmanship: Achieving tenure requires the faculty member to demonstrate sustained ability to secure externally funded grants or contracts to support graduate students and/or post-doctoral researchers. External funding can be from Federal, State, Foundation, or Industrial sources. Total amounts are based on percentage recognition listed with ORI. Achieving tenure requires securing as a PI *at least* one *multi-yea*r grant that generates indirect costs. As part of adding value to the university, college and the department, the total external competitive funding secured through all these grants is expected to be at least [higher amount of $400,000 or 1.5 x the total startup funding (equipment, laboratory usage/renovation costs, etc.)]. The department chair will determine the amount to be used and convey the information to the PRTC. One of the successful grants may be from a non-traditional research grant, such as REU, RET, or MRI; however, these will be capped at a total of $100,000. The proposal writing effort

should be more than or equal to 10 proposals submitted with more than 5 as PI; this ensures collaborative efforts within and outside the department.

Products: Have published at least 12 peer-reviewed research publications in journals/books/book chapters, and of these, at least 6 with students advised, and at least 6 as a corresponding author. The journal publications can also be in the status of accepted/in press. Quality of scholarly work will be evaluated based on factors such as acceptance rates, impact factor, H-index or other appropriate measures. It is the faculty member's responsibility to provide evidence of the quality of scholarship. Evaluation of scholarly work will use the same criteria whether works are published in digital or print formats and whether they are made accessible online to the public at no cost or are accessible only through individual or institutional purchase. Products may also include awarded patents. Licensing of a patent is an important impact of invention.

Presentations: have made more than 5 presentations at professional conferences or as invited speaker at any research institutes.

2. Evidence

There are many ways that a faculty member may demonstrate their accomplishments in research and scholarly activities such as the following:

- Peer-reviewed journal articles and conference papers, books, book chapters, and patents.
- Citation of research publications by others
- Funded research grants and research grant proposal submissions
- Presentations in workshops and seminars
- Technical reports or other internal documented research
- Professional activities of a substantive academic or research nature
- Publication awards
- Other evidence to demonstrate excellent research

C. Service and Professional Accomplishment

Service includes internal activities (committees at the department, college and university levels) and external activities (professional society, editing, panel/proposal reviews, and community). These service activities are also of importance for the granting of tenure.

1. Criteria

An adequate involvement in professional societies and service related to the mission of the university likewise serves as one criterion for recommendation of tenure. However, service related assignments are typically reduced during the probationary period for Assistant Professors.

Candidates are typically expected to meet the following minimum criteria over the probationary period:

- Have served on at least one committee per year in the Department, or the College, or the University;
- Have participated in at least one technical committee of a Professional Society or conference;
- Have served as a reviewer for at least one professional journal per year on average

2. Evidence

Faculty members may document any of the following service activities:

a. University Service

- Contributions to the department and program
- Inter-departmental collaborations
- Committee assignments
- Advising student organizations
- Student recruitment
- Outreach

b. Professional Service

- Offices held in international, national and regional academic and professional organizations
- Major committee assignments in the above organizations
- Editorial activities
- Organization of conferences
- Reviewer for journals and conference proceedings
- Reviewer for grant proposals

D. Integrity and Ethics

The granting of tenure with promotion to Associate Professor is the beginning of a long-term professional association with the University. The recommendation must carry with it the assurance, so far as can be determined, that the individual practices professional integrity; that he or she adheres to high standards of professional ethics; that he or she understands the nature of membership in a community of scholars and has the ability and desire to work as a member of a group while retaining all rights of individual expression; and that he or she feels a sense of responsibility for the well-being of the University and a commitment to work for the accomplishment of its goals.

IV. Guidelines for Promotion to Professor

The demonstration of strong, sustained performance applies to the faculty member's time at UNT Department of Biomedical Engineering.

A. Scholarship

a. Published an average of three refereed publications per year. Published an average of 2 research papers per year as corresponding author, with UNT students as co-authors.

b. The journal publications can also be in the status of accepted/in press. Quality of scholarly work will be evaluated based on factors such as acceptance rates, impact factor, H-index or other appropriate measures. It is the faculty member's responsibility to provide evidence of the quality of scholarship. Evaluation of scholarly work will use the same criteria whether works are published in digital or print formats and whether they are made accessible online to the public at no cost or are accessible only through individual or institutional purchase. Products may also include awarded patents. Licensing of a patent is an important impact of invention.

c. The faculty member needs to demonstrate sustained ability to secure externally funded grants or contracts to support graduate students and/or post-doctoral researchers. External funding can be from Federal, State, Foundation, or Industrial sources. Total amounts are based on percentage recognition listed with ORI. As part of adding value to the university, college and the department, the total external competitive funding secured through all these grants is expected to be at least [higher amount of $600,000 or 2.0 x the total startup funding (equipment, laboratory usage/renovation costs, etc.)] over the post-tenure period at UNT. The department chair will determine the amount to be used and convey the information to the PRTC. One of the successful grants may be from a non-traditional research grant, such as REU, RET, or MRI; however, these will be capped at a total of $100,000. The proposal writing effort should be more than or equal to 10 proposals submitted with more than 5 as PI; this ensures collaborative efforts within and outside the department.

d. Had a cumulative of eight in any combination of patents, scholarly presentations, scholarship-related awards for them or their students.

B. Teaching

a. Received an overall teaching evaluation result that is at least 3.5 or above average (on a 5-point scale) of the College of Engineering teaching evaluations for tenured/tenure-track faculty;

b. Taught at least one undergraduate course and one graduate course as a demonstration of broad teaching ability.

c. Graduated at least an average of 2 Master's students for every three years and/or 1 Ph.D. student every five years with at least three students supported by external sources of funding. Graduation of a Ph.D. student in lieu of a Master's student is encouraged.

d. Served as a faculty advisor for at least one undergraduate student per year on average, including senior design, TAMS, REU, SUPER, and McNair students.

C. <u>Service</u>

a. Serving on at least two departmental committees as an active member, and at least one committee chair with significant contributions to the tasks of the committees.

b. Serving on at least one college committee as an active member, and having at least one leadership role with significant contributions to the tasks of the committees.

c. Being a senior member of at least one professional society related to biomedical engineering.

d. Being a chair in at least one technical committee of a professional society.

e. Serving on an editorial board or as an associate editor of at least one technical journal related to biomedical engineering.

V. Guidelines for Promotion of Lecturers

1. Promotion to Senior Lecturer

A Lecturer will be eligible for promotion to the rank of Senior Lecturer if the individual has completed as a Lecturer at least three years (six semesters) of full time college level teaching at UNT's College of Engineering, and has a very good or excellent record of teaching for the past three years.

A. Teaching

A record of teaching at the undergraduate and graduate (if applicable) levels that reveal:

- Success in receiving improved approval from students and/or peers in course organization, clarity of presentations, and overall instructional efficacy. Received an overall teaching evaluation result that is at least 4.0 on a 5-point scale.
- Initiative and creativity in new course and curriculum development and existing course/program upgrades.
- Initiative and active participation in continuous improvement of laboratory equipment/experiments.
- Recognition of effective teaching and student mentoring.
- Advising/facilitation of student organizations.
- Interest and demonstrated collegial participation in maintaining program accreditation.
- Participation in departmental grant activities for curriculum development and laboratory improvement.

B. Service

- Adequate involvement in professional contributions to the department, the college, the university, the professional societies, and the community.
- Continuous involvement in professional growth and developmental activities.
- Other special assignments including, but not limited to, outreach activities for industry or international relations for student educational opportunities.
- Research and scholarly activities such as pedagogical works published in educational conferences or refereed journals appropriate in the candidate's professional field are highly encouraged but not required.
- Active participation in activities such as student advising, alumni relations and recruiting.

Evidence

The same list of activities as outlined in the teaching category of the criteria for tenure and promotion shall apply.

2. Promotion to Principal Lecturer

A lecturer who has been promoted to Senior Lecturer, will be eligible for promotion to the rank of Principal Lecturer if the individual has at least five consecutive years of college-level

teaching experience including at least three years (six semesters) of full time college level teaching at UNT's College of Engineering, has a very good or excellent record of teaching for the past three years, has a demonstrated very good or excellent record of service to the department's educational activities, and has a demonstrated record of continuous professional development.

In general, the criteria and guidelines stipulated in Section V.A "Promotion to Senior Lecturer" will be followed with considerably higher expectations of the candidates considered to the rank of Principal Lecturer. Successful candidates will exhibit a substantial record of achievements in teaching and service activities.

VI. Guidelines for Promotion of Clinical Faculty

A faculty candidate with a terminal degree (Ph.D. or D.E.) in biomedical engineering or closely related discipline, with any one or more of: post-doctoral research or industry or clinical (hospital) experience/s may be appointed as a Clinical Assistant Professor.

1. Promotion from Clinical Assistant Professor to Clinical Associate Professor

A Clinical Assistant Professor will be responsible for teaching at 80% of the workload. The remaining 20% of the workload can be a combination of research and service or either one of these activities. A Clinical Assistant Professor eligible for promotion to the rank of Clinical Associate Professor if the individual has completed as a Clinical Assistant Professor at least five years (ten semesters) of full-time college level teaching in the department and has a very good or excellent record of teaching; service and/or research for the past five years.

A. Teaching

A record of teaching at the undergraduate and graduate (if applicable) levels that reveal:

- Success in receiving improved approval from students and/or peers in course organization, clarity of presentations, and overall instructional efficacy. Received an overall teaching evaluation result that is at least 4.0 on a 5-point scale.
- Initiative and creativity in new course and curriculum development and existing course/program upgrades.
- Initiative and active participation in continuous improvement of laboratory equipment/experiments.
- Recognition of effective teaching and student mentoring.
- Advising/facilitation of student organizations.
- Interest and demonstrated collegial participation in maintaining program accreditation.
- Participation in departmental grant activities for curriculum development and laboratory improvement.

B. Service

- Adequate involvement in professional contributions to the department, the college, the university, the professional societies, and the community.
- Continuous involvement in professional growth and developmental activities.
- Other special assignments including, but not limited to, outreach activities for industry or international relations for student educational opportunities.
- Research and scholarly activities such as pedagogical works published in educational conferences or refereed journals appropriate in the candidate’s professional field are highly encouraged but not required.
- Active participation in activities such as student advising, alumni relations and recruiting.

C. Research

- Publication of journal papers or conference papers in chosen area of research or educational journals.
- Participation in writing proposals for funded research from federal, state and private agencies
- Mentoring undergraduate and/or graduate students in research activities.
- Research and scholarly activities such as pedagogical works published in educational conferences or refereed journals appropriate in the candidate's professional field are highly encouraged but not required.

Evidence

The same list of activities as outlined in the teaching category of the criteria for tenure and promotion shall apply.

2. Promotion to Clinical Professor

A Clinical Assistant Professor who has been promoted to Clinical Associate Professor, will be eligible for promotion to the rank of Clinical Professor if the individual has at least five consecutive years of college-level teaching experience at the Clinical Associate Professor level in the College of Engineering; has a very good or excellent record of teaching for the past five years, has a demonstrated very good or excellent record of service to the department's educational activities, and has a demonstrated record of continuous scholarly and professional development.

In general, the criteria and guidelines stipulated in Section VI.A "Promotion to Clinical Assistant Professor" will be followed with considerably higher expectations of the candidates considered to the rank of Clinical Professor. Successful candidates will exhibit a substantial record of achievements in teaching; research and/or service activities.

FACULTY IN THE RESEARCH PROFESSOR SERIES: CRITERIA FOR PROMOTION

A faculty candidate with a terminal degree (Ph.D. or D.E.) in biomedical engineering or closely related discipline, may be appointed as a Research Assistant Professor.

Faculty members whose duties are to conduct research may be given titles in the Research Professor series, as follows: Research Assistant Professor; Research Associate Professor; Research Professor. Faculty in the Research Professor series may be independent or collaborative investigators. Faculty members appointed in this series will have limited involvement in instructional programs.

Faculty appointed or promoted to the ranks of Associate Research Professor or Research Professor may be serving as senior investigators with independent funding, scientists reporting to regular faculty principal investigators, co-principal investigators, or directors or co-directors of core scientific facilities. Faculty in this series are expected to demonstrate evidence of excellence in research.

The following is a list of accomplishments in research and scholarship that will be used to guide the appointment and promotion of faculty in the Research Professor series. The promotion process is meant to describe and reward continued professional growth and achievement. Research Professor series faculty should demonstrate excellence in research by meeting a number of these criteria. A Research Assistant Professor seeking promotion to a Research Associate Professors will have met the following criteria:

- Record of authorship or co-authorship of papers in peer-reviewed journals that demonstrate the ability to initiate and design scientific investigations; candidate played the major role in analyzing the data and writing up the results.
- Co-investigator on grants or recipient of a career-development award.
- Leader or principal manager of an externally funded research program.
- Coordinator of research programs at a college/university-wide, regional or national level.
- Patents or other research discoveries.
- Invited to present research seminars at this and other institutions.
- Demonstrated evidence of originality as an investigator.
- A consistent level of peer-reviewed research funding over a period of time.
- An ongoing, peer-reviewed publication record with senior or first-author publications.
- Multiple publications in an area of expertise, representing a recognizable body of work.
- Must have completed at least 5 years of activities described in 1-10.

Faculty appointed to the rank of Research Professor must have completed at least 5 years as Research Associate Professor and must demonstrate skill as an investigator, originality and creativity, outstanding contributions to the research programs of the department of Biomedical Engineering, the College of Engineering, UNT, and a national reputation. Creativity and originality imply that the faculty member has contributed to new concepts/techniques/interpretations in his or her field of scholarly endeavor as described in points 1- 10 earlier in the document. Evidence of a national or international reputation may include letters from external referees, service on scientific review panels or study sections, invited scientific

presentations or other evidence of national standing. Research professors will usually have a record of funding as a principal investigator and will have published high-quality first- or senior-author scientific papers in peer-reviewed journals.