Biochemistry at the University of Missouri resides both in the College of Agriculture, Food and Natural Resources (CAFNR) and in the School of Medicine (SOM). It is a single unit called the Division of Biochemistry in CAFNR and the Department of Biochemistry in the SOM. In this document, the terms "Biochemistry," "Department," and "departmental" shall refer to the entire unit. The intent of this document is to align with campus norms while providing more specific criteria.

**Expectations and Assigned Responsibilities:** To be considered for promotion and/or tenure, a faculty member should have demonstrated professional excellence in the areas of assigned responsibility. Main areas of consideration are research, teaching, service, and/or extension. Candidates and Division Directors must specify the percentage of responsibility assigned to each area of consideration. There should be no discrepancies in the percent of responsibility identified by the candidate and Division (e.g., in the appointment history form).

Expectations with respect to the depth of a candidate’s productivity (e.g., number of peer reviewed papers published each year, grant dollars, number of courses taught, etc.) should be adjusted according to the percentage of responsibility assigned to research, teaching, service, and/or extension. For example, a candidate with a 60 percent research appointment is expected to be more productive in publishing articles and securing research grants than a candidate with a 30 percent research appointment. Candidates should also meet all Divisional workload standards for research, teaching, service and/or extension, where appropriate. Any deviations from Divisional workload standards by the candidate should be explained clearly in the Division Director’s letter to the Dean.

This document describes guidelines for promotion and tenure in Biochemistry and applies to all faculty members, whether their primary appointment is through CAFNR or SOM, with the exception of those faculty members with an appointment and/or salary source divided between Biochemistry and at least one other department, for whom a written agreement between participating departments identifies alternative guidelines. Tenure-track faculty members have responsibilities in research, teaching, and service. Professional-track faculty members have responsibilities only in research or teaching and the supporting service for each area.

An addendum reiterates the definitions and processes described in the Biochemistry Department Bylaws and provides website addresses to information provided by CAFNR, SOM, and the Provost.

**1.0 Tenure-Track Faculty: Promotion from Assistant Professor to Associate Professor with Tenure**

The basic criteria are whether the candidate will contribute positively to the overall quality of the department, SOM, CAFNR, and/or University; and whether the candidate is likely to maintain or improve his/her contributions over the course of his/her career. Therefore, a successful candidate will demonstrate excellence in research, teaching, and service. The candidate should be self-motivated and demonstrate leadership and creative ability.
1.1 Research:

Assistant Professors just beginning their independent research careers will require a “start-up phase” to establish an independent laboratory and to recruit students and technical staff before federal funding and independent publications can be expected. Subsequently, the expectations for promotion are:

- Successful candidates will demonstrate a thriving research program and show promise for continued growth.
- Successful candidates will demonstrate a sustained record of impactful publications as corresponding or co-corresponding author. Success reflects a balance between demonstrating impact in the candidate’s discipline and the number of publications. The review criteria will be based on the number of publications (as independent investigator), weighted by the journal impact factor, and the contribution of the candidate’s group if a collaborative effort. This total should exceed 12. For example, three publications in the Journal of Biological Chemistry (a top-tier professional journal with current impact factor of 4.1) solely from the candidate’s group could meet the criteria. Contributions to multi-investigator work is encouraged, but needs to be balanced with (co-)corresponding authored manuscripts to demonstrate independent research.
- Funding: Biochemistry is a research-intensive department with an expectation that a faculty member has shared responsibility for the support of creative activities through extramural funding. The costs of these activities include not only research supplies, but the support of personnel (stipends and tuition for trainees, as well as partial salary support of the faculty member), as well as indirect costs for needed infrastructure. Candidates for tenure must demonstrate that their continued success in creative activities will not place an excessive financial burden on the department or implicitly upon their colleagues. Minimal standards include a demonstrated ability to generate extramural support. Extramural support of faculty effort should be at a minimum of three months per year if permitted by granting agency, and should, in all circumstances, be at least one month of faculty salary & benefits. In addition, the minimum standards include sufficient funding to support the trainees / personnel minimally required for a program of national recognition, judged according to the prevalent standards in the sub-field of Biochemistry. It is also recognized that some in the department may have roles that, by written agreement with the chair, are less research-intensive (research assignment < 25%). In these circumstances, the candidate is more appropriately evaluated by multi-year exceptional contributions to education and/or service.
- Successful candidates will show evidence of substantial and growing national recognition. Examples of activities demonstrating recognition include: invited research presentations; invitations to review manuscripts and/or grant applications; society committee membership; and/or organization of symposia. Appointments to editorial boards and grant review panels, while not required, would be considered as additional, substantial evidence of national recognition.
- Membership, active participation, and leadership in professional societies are highly desirable.
1.2 Teaching and Advising:

Biochemistry faculty members are expected to enthusiastically embrace the Department’s educational missions. Successful candidates will perform their assigned teaching responsibilities in the undergraduate, medical, and/or graduate curricula to high professional standards. An effective educator communicates, stimulates, innovates, and inspires.

- Successful candidates will show evidence for teaching excellence which may include:
  - Favorable student evaluations
  - Favorable peer evaluations
  - Effective undergraduate advising
  - Participation in teaching development activities
  - Development of new curricula
  - College, campus, state, or national teaching awards

- Successful candidates will actively participate in the graduate curriculum through:
  - Graduate student mentoring
  - Membership on the doctoral faculty
  - Membership on graduate student dissertation committees

- Successful candidates will train researchers at the undergraduate, graduate, and postdoctoral levels. Evidence of success in these areas may include:
  - Mentoring undergraduate research (which should be minimally substantiated by student poster presentations, but possibly leading to co-authoring manuscripts)
  - Effective mentoring of graduate students to complete their degrees and publish their work.
  - Effective mentoring of postdoctoral researchers to publish their research.

- Although not sufficient by itself for promotion and tenure, Biochemistry faculty may also demonstrate teaching excellence and, thus, enhance their applications by participating in team-taught graduate courses and curricula offered through other units.

1.3 Service:

- Excellence in research and teaching are the primary considerations for promotion and tenure. Nevertheless, successful candidates will be actively engaged in the life of the Department and the University. Service as assigned on Departmental, CAFNR, SOM, and University committees must be performed to a high standard.

- Successful candidates will demonstrate professional service that enhances the stature of the candidate, the Department, and the University, including contributions to local and national communities. Examples that are encouraged include service to national or international professional organizations, organizing local or national symposia, and reviewing grants and/or manuscripts.

2.0 Tenure-Track Faculty: Promotion from Associate Professor to Full Professor

There is no set time line for promotion to Full Professor. Impact, stature, and maturity are the key criteria for promotion to the highest-level academic rank. Although candidates are expected to maintain a strong and sustained contribution to the Department and University, the emphasis when evaluating applicants for Full Professor is on stature and impact at the national and international levels.
2.1 Research:
Successful candidates will present evidence of strong, sustained research productivity with a meaningful impact in their discipline. The research program must be mature and have good prospects for continued productivity. Typically, the evidence includes:

- A sustained publication record as primary or senior author on work conducted while on faculty at MU in peer-reviewed journals with high editorial standards. Documented, essential contributions to multi-investigator work (e.g., with Programs, Centers, or national initiatives) may be regarded as equivalent to senior authorship. Although frequent publication is important, impact in the discipline is the overriding consideration.
- Continuous, substantial funding, generally as PI, from a national agency (NIH, NSF, or equivalent agency).
- National/international recognition for research. Examples include:
  - invited reviews/book chapters
  - postdoctoral fellow supervision
  - invited presentations of research (symposia, seminars)
  - appointment to editorial boards or as editor, co-editor, associate editor of scientific journals or books
  - service on grant review panels as an ad hoc member
  - appointment to grant review panels (regular member)
  - evidence of research commercialization (e.g., licensing, patents)
  - elected office/committee appointment in professional societies and/or scientific organizations
  - appointments or receipt of awards that require evaluation of professional competence
  - evidence of leadership in the field of research and significant scientific impact
  - requests from faculty at other universities to visit the research laboratory for sabbatical

2.2 Teaching and Advising:
Successful candidates for Full Professor will be mature teachers and show sustained evidence of pursuing excellence. Assigned teaching responsibilities in the undergraduate, graduate, or PBL curricula must consistently be carried out at the highest standards. Course materials and approaches must be current. Candidates should have effectively advised graduate and/or postdoctoral students. Candidates should have consistently excellent reviews by students and peers. Successful candidates will have advanced beyond the level of Associate Professor by demonstrating sustained effort to create effective and innovative curricula (i.e., not just more, but better, teaching). Additional teaching related activities that may enhance the application include:

- innovative content and delivery in existing courses
- service as PBL block leader or course director
- developing and offering new courses
- active initiatives to enrich departmental teaching
- review of textbook/journal articles
- publications related to teaching
- educational outreach activities
2.3 Service:
Continuous service at the Departmental, College/School, and University level is expected of candidates for promotion to Full Professor (e.g., one or two major committees). Evidence of effective service expected for advancement to Full Professor may include leadership on campus committees that impact academic policies or procedures, service on faculty search committees, service on committees described in the Biochemistry Department Bylaws, and mentoring early-career faculty. Professional service at the national or international levels is also expected. This service should enhance the stature of the candidate, the Department, and the University and contribute to the local and national communities. Frequently cited examples include service to national or international professional organizations, organizing local or national symposia, and reviewing grants and manuscripts.

3.0 Joint Faculty
A faculty member with an academic appointment and salary line entirely in another department at the University of Missouri can be appointed as a Joint Faculty member in the Department. Joint Faculty members in Biochemistry will be evaluated for tenure and promotion by the Biochemistry P&T Committee and Departmental faculty as required by University guidelines and Article VIII of the Biochemistry Department Bylaws.

4.0 Professional-Track Faculty
Biochemistry has two types of full-time Professional-Track faculty: teaching and research. This Department does not have Professional-Track faculty with primary appointments whose work is categorized in the areas of clinical/professional practice or extension activities. Appointments to Professional-Track titles are described in Article V Section C of the Biochemistry Department Bylaws. Professional-track faculty members have responsibility in one specific area of activity, either research or instruction. They must demonstrate excellence in their respective area to be considered for promotion. All Professional-Track faculty are expected to be continuously involved in the life of the Department and should attend seminars, faculty meetings, etc.

4.1 Research Faculty
Research faculty members are primarily, if not exclusively, appointed in response to needs and resources in laboratories run by sponsoring tenure-track faculty (Bylaws Article V Section C).

4.1.1 Promotion from Research Assistant Professor to Research Associate Professor
Successful candidates for promotion to Research Associate Professor will provide evidence of research excellence that contributes to the stature of the candidate, the Department, and the University. Examples include:

- evidence of a consistent publication record- an average publication record of one or more papers per year (as primary or senior author on work conducted at MU) in peer-reviewed journals with high editorial standards
- active funding as principal or co-principal investigator of at least one major NIH (RO1, PO1 project leader, RFA), NSF, or equivalent grant
- membership in professional societies
o evidence of national recognition (invited presentations of research at seminars, symposia; invitations to review manuscripts and/or grant applications; society committee membership; organization of symposia)

o effective service on departmental and University committees related to research

o Professional service on, for example, editorial boards or grant review panels will enhance the application.

4.1.2 Promotion from Research Associate Professor to Full Research Professor

Promotion to Full Research Professor is similar to the tenure track, but candidates are evaluated only in research and appropriate professional service. Successful candidates must demonstrate evidence of strong, sustained research productivity with a meaningful impact in the discipline. The research program must be mature and have good prospects for continued productivity. Typically, the evidence includes:

o average publication record of 2 or more papers per year (as primary or senior author on work conducted while on faculty at MU) in peer-reviewed journals with high editorial standards. Documented, essential, contributions to multi-investigator work (e.g., with Programs, Centers, or national initiatives) may be regarded as equivalent to senior authorship.

o continuous, substantial funding as PI from a national agency (NIH, NSF, or equivalent)

o active professional service in reviewing grants and manuscripts

o service on editorial boards or grant review panels will enhance the application

Evidence of national/international recognition for research is essential. Examples include:

• invited reviews/book chapters
• postdoctoral fellow supervision
• invited presentations of research (symposia, seminars)
• appointment to editorial boards or as editor, co-editor, and/or associate editor of scientific journals or books
• service on grant review panels as an ad hoc member
• appointment to grant review panels (regular member)
• evidence of research commercialization (e.g., licensing, patents)
• elected office/committee appointment in professional societies and/or scientific organizations
• appointments or receipt of awards that require evaluation of professional competence
• evidence of leadership in field of research and significant scientific impact of work
• effective professional service

4.2 Teaching Faculty

Teaching faculty members are appointed to meet the instructional needs of the Department. An entry-level appointment may be made at the level of Instructor or Assistant Teaching Professor. Appointees are expected to enthusiastically embrace the Department’s instructional missions.
4.2.1 Promotion from Instructor to Assistant Teaching Professor

An effective teacher communicates, stimulates, innovates, and inspires. Successful candidates for Assistant Teaching Professor will hold a doctoral degree and be engaged in designing instructional practices to benefit students. The Biochemistry Department accepts the characteristics described in the CAFNR guidelines for promotion of teaching faculty (http://mycafnr.missouri.edu/faculty/professional-track.php). For promotion to the Assistant Teaching Professor level, emphasis is placed on presenting evidence of potential and the potential for growth in areas relevant to instruction. Examples include:

- clear communication
- producing effective learning support materials
- use of appropriate state-of-the-art delivery systems
- advisement
- effective service on departmental and university committees related to education, if assigned
- contribution to teaching effectiveness of other faculty

4.2.2 Promotion from Assistant Teaching Professor to Associate Teaching Professor

Successful candidates for Associate Teaching Professor will consistently demonstrate teaching excellence and be engaged in the scholarship of teaching. They will perform their assigned teaching and advising responsibilities in the undergraduate, PBL, or graduate curricula to high professional standards. Examples of evidence for teaching excellence normally include:

- favorable student evaluations
- favorable peer evaluations
- an excellent record of very active student advisement
- participation in teaching development activities
- developing new curricula
- effective service on departmental and university committees related to education, as assigned

A successful candidate for promotion to Associate Teaching Professor will be engaged in the scholarship of teaching that supports the Department’s instructional missions. This may take the form of educational research, grant-funded activities to develop innovative curricula, developing course materials suitable for distribution outside the University, writing or editing textbooks, publication in nationally recognized education-related journals, or participation in local or national meetings.

4.2.3 Promotion from Associate Teaching Professor to Full Teaching Professor

A record of sustained teaching and advising excellence and national recognition for contributions to teaching are required for promotion to Full Teaching Professor. Sustained excellence in all the areas described for Associate Teaching Professor is also expected. Examples of evidence for national recognition may include:

- wide adoption of a text written by the candidate
- wide dissemination and adoption of curricula designed by the candidate
- sustained grant funding for curriculum development
- frequent publication of educational research
- participation in national meetings
- establishing national networks that engage students in national curricula
- awards recognizing excellence in teaching
- national-level service in reviewing education grants and manuscripts
- effective leadership on departmental and University committees related to education, as assigned
ADDENDUM
Definitions and Internal Process

Biochemistry Department Bylaws state:

*The Faculty shall consist of:*

- professors, associate professors, assistant professors, and instructors who hold ranked tenured/tenure-track or professional track appointments in the Department and have associated salary lines in the Department for at least 40% of their salary.

The departmental process for considering promotion and tenure decisions for tenure-track faculty is outlined in Article VIII of the Bylaws from which the following is adapted.

- The departmental process will follow the relevant institutional guidelines; i.e., the college or school of the primary salary line of the faculty member and the Campus guidelines appearing on the Provost’s website.
- The P&T Committee and its chair will coordinate the process of collecting required and relevant information about the candidate and making this information available as required and appropriate to the relevant faculty members. This includes:
  - insuring that the candidate’s dossier is prepared in a timely manner
  - identifying appropriate individuals to be outside reviewers and insuring that they receive appropriate information in time for the preparation of an evaluation letter to be included in the dossier.
  - scheduling a research seminar by the candidate, ideally during the regular Departmental Seminar Series, which all members of the Department will be encouraged to attend.
  - inviting non-voting and adjunct faculty to submit written statements evaluating the candidate. These comments will be provided to the voting faculty.
  - distributing and collecting a ballot indicating “Approve” or “Deny” from all faculty qualified to vote on the application for promotion and/or tenure. Written comments are encouraged for all votes and votes of “Deny” must be accompanied by a written statement detailing the basis for the vote. This vote and accompanying comments will be made available to the Committee and the Department Chair.

Candidates for promotion or consideration for tenure should carefully read the Provost’s Call Document, which is typically updated in February of each year to reflect any modifications relevant to decisions taking effect in September. The Provost’s website has links to relevant Academic Tenure Regulations from UM’s Collected Rules and Regulations as well as current copies of the required forms and specifications for preparing dossiers. As these documents reflect the highest level of review, they guide policies and procedures employed in Biochemistry.

Separate websites address tenure track and non-tenure track faculty.

*MU Provost’s Promotion and Tenure Websites*

http://provost.missouri.edu/faculty/tenure.html

http://provost.missouri.edu/faculty/tenure_nonregular.html

CAFNR and SOM maintain websites devoted to promotion and tenure. Candidates are responsible for understanding the philosophies and requirements in place in the college or school relevant to their promotion and tenure.
CAFNR Promotion and Tenure
http://mycafnr.missouri.edu/faculty/tenure-guidelines.php
http://mycafnr.missouri.edu/faculty/professional-track.php

SOM Promotion and Tenure page
http://medicine.missouri.edu/faculty/promotions-and-tenure.php

SOM guidelines are described in their Bylaws.
http://medicine.missouri.edu/faculty/docs/bylaws_rules_regs072709.pdf#appointment

The guidelines are similar and reflect the values articulated by the Provost:

As one of the nation’s leading teaching and research institutions, MU maintains high standards in recruiting, promoting, and awarding tenure to faculty members. While specific criteria for judging the merits of individual faculty may vary among units, there must be no variation in standards. The campus goal in this process is to ensure continuous quality improvement in the academic mission of the University. Satisfaction of minimum criteria at the college, school, or department levels is not sufficient to ensure promotion or continuous appointment. Judgments are based upon evidence of sustained productivity, excellence, and the candidate’s potential future contributions to the University. (Provost’s 2009 P&T call http://provost.missouri.edu/faculty/call-doc.pdf accessed on 1-27-2010)

The SOM recently summarized the expectations in which faculty will excel in their areas of appointment and articulated definitions of these areas. These apply to all Biochemistry faculty.

<table>
<thead>
<tr>
<th>Research, scholarship, and/or creative work</th>
<th>Tenure Track</th>
<th>Professional Track-Research*</th>
<th>Professional Track-Teaching*</th>
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<tbody>
<tr>
<td>Research, scholarship, and/or creative work</td>
<td>Excellence</td>
<td>Excellence</td>
<td>*See below</td>
</tr>
<tr>
<td>Teaching, advising, and serving as a mentor</td>
<td>Excellence</td>
<td>*See below</td>
<td>Excellence</td>
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<tr>
<td>Service</td>
<td>Excellence</td>
<td>As appropriate</td>
<td>As appropriate</td>
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*Evaluation of the candidate’s application for promotion should focus on *the specific area of responsibility and supporting professional activities.