

Roles, Scope, Criteria, Standards and Procedures

of the

PLANT SCIENCES + PLANT PATHOLOGY.

(Name of Department/School/College)

Effective Date: 5/3/2019

APPROVALS

SIGNATURE

DATE

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Role and Scope Document for Department of Plant Sciences and Plant Pathology

Article I. Role and Scope of Unit

The Department of Plant Sciences and Plant Pathology at Montana State University-Bozeman has three missions: (i) scholarship activity, (ii) science-based undergraduate, graduate and Extension education, and (iii) outreach/service. Departmental programs develop and promote an understanding of the biology of plants, insects and associated microbes from the molecular to the population level, and of the processes and interactions involved in plant- and/or insect- based biological systems and their relationship with the built environment. These programs include the investigation of plant, insect, and microbial function, genetics, and adaptation; the development and dissemination of management principles relating to the control of plant pests and diseases; management and health of beneficial insects; the production of food, fiber, and ornamental plants; and the planning, design and management of built and natural environments.

Research

The scholarship activity mission of the Department of Plant Sciences and Plant Pathology is to enhance basic and applied knowledge of plant, insect, and associated microbial systems, and their use and management in built and natural environments. Research projects funded through the Montana Agricultural Experiment Station (MAES) focus on improving competitiveness, profitability and sustainability of Montana's agronomic and horticultural industries and natural resources. Research and scholarly activities that are useful in their applications to problems and choices facing the citizens of Montana are emphasized, but impacts are often extended in a wider world. In addition, grants and contracts are solicited from sources outside MAES to support basic and applied research and scholarly creative activities. Local, regional, national, and international issues and interests are addressed using a broad spectrum of approaches ranging from use of model laboratory systems to field research as well as application of traditional, biotechnological and molecular techniques to traditional plant protection and improvement strategies and biodiversity studies. Critical to the scholarship activity mission is the dissemination of experimental results or creative activities to increase the positive scientific, social, environmental, and economic impacts of the department. Faculty and students cooperate with faculty at the seven Research Centers, farmers, ranchers, participants in private industries and state and federal agencies located in various parts of the state and other academic departments at MSU-Bozeman. Cooperative and collaborative projects extend to researchers and land managers in other states and countries.

Teaching

The education mission of the department includes on-campus instruction providing undergraduate and graduate programs of study that impart an understanding of fundamental concepts in plant and insect biology, and systems in natural, agricultural, and urban ecosystems. The primary focus is to prepare students to apply scientific knowledge to plant, insect, and associated microbial systems related to agronomic and horticultural plant production, planning and managing designed landscapes, and understanding biodiverse systems.

The Department offers the following degree programs:

- B.S. in Plant Science (Options in Crop Science and Plant Biology)
- B.S. in Environmental Horticulture (Options in Environmental Horticulture Science and Landscape Design)
- M.S. in Plant Sciences
- M.S. in Plant Pathology
- Ph.D. in Plant Sciences (Options in Plant Pathology and Plant Genetics)

These programs prepare students for careers in agriculture, horticulture, landscape design, biotechnology, entomology and research. Montana State University has the sole responsibility in the state for graduate training in plant pathology, entomology, and breeding of agronomic crops, and for undergraduate training in entomology and landscape design. The department participates in the interdisciplinary Sustainable Food and Bioenergy Systems degree program and offers a BS degree program in Sustainable Crop Production through that program. Extension instructional programs provide research-based information, technological developments, and basic education to participants in Montana's agricultural and horticultural industries, landowners, and natural resource professionals.

Service

All Department of Plant Sciences and Plant Pathology faculty participate in outreach/service activities of use to the general public, agricultural and natural resource land users, federal, state and local agencies, and professional organizations. Faculty service also includes activities involving departmental, college, and university committees or other assigned activities. All functions of the department provide service to local, state, national and international clientele.

Faculty appointments in the Department of Plant Sciences and Plant Pathology are funded from three primary sources: Montana Agricultural Experiment Station (MAES), Montana State University College of Agriculture, and Montana Extension Service. Some positions are funded partly from extramural sources. Regardless of appointment or funding source every faculty member will contribute to the teaching (academic and/or outreach), scholarship activity, and service efforts of the Department at a magnitude consistent with their her/his appointment

The Department of Plant Sciences and Plant Pathology also houses the Montana State University Herbarium and the Montana Entomology Collection. These resources have Plant Sciences and Plant Pathology faculty members whose responsibilities include their curation and growth, and serve research, education and extension programs in the department and beyond.

Article II. Appointment and Advancement of Research Faculty

Section 2.01 Appointment and Evaluation

Research faculty are non-tenurable faculty whose assignment principally involves time and effort on research projects funded by university grants and contracts. Research faculty are appointed on letters of appointment and their appointments are subject to all guidelines in Sec. 6 of Appointment and Employment of Faculty in the Faculty Handbook (7/1/2017). The initial level of appointment of a research faculty member is consistent with the standards and expectations for scholarship found in Articles 8, 9 and 11, and may be as Assistant Research Professor, Associate Research Professor, or Research Professor. For a research faculty member to be appointed, there must be funding available to

support the appointment through grants, either their own or those of a tenurable faculty member within the Department. Appointment is also based on evidence that the research faculty member's work contributes to the furtherance of the Department's goals in scholarly productivity. Research faculty are reviewed for initial appointment and advancement internally, by the Department Head and by a vote of the tenure-track faculty.

Research faculty appointees are to be evaluated annually by the Department Head, and the evaluation is to be conducted in accordance with the timetable for NTT faculty evaluations.

Section 2.02 Advancement

Since the primary responsibilities of a research faculty member are in the area of scholarship, a candidate for advancement is evaluated using the standards and expectations set forth by the Department for evaluating scholarship of a tenurable faculty member at the comparable level of appointment. Advancement in title creates no right to reappointment from term to term. Advancement is subject to review by the Primary Review Administrator following review by all tenure-track faculty.

- The candidate's dossier contains the review materials listed in Article VI, Section 6.01 that pertain to scholarship.
- There are two levels of review of research faculty members:
 - Department Head
 - Vote by all tenure-track faculty

Section 2.03 Timing of Advancement to Associate Research Professor Review

The timeline for an advancement review is the same as that of NTT promotion within the Department. Reviews for advancement to Associate Research Professor typically occur in the research faculty member's sixth year of service or later. Any years of credit towards advancement awarded at time of hire will move the review forward.

Section 2.04 Advancement to Associate Research Professor Review

The Departmental standard for advancement to the title of Associate Research Professor is:

- *Accomplishment* in scholarship as defined in the University Faculty Handbook document entitled "Retention, Tenure & Promotion Review Definitions."

The performance indicators and weighting of indicators for the standard of accomplishment in scholarship are given in Section 9.03 of this document. The quantitative and qualitative expectations for the standard of accomplishment in scholarship are given in Section 9.04 of this document. The evidence of performance indicators for the standard of accomplishment in scholarship are given in Section 9.05 of this document.

Section 2.05 Advancement to Research Professor Review

Normally, research faculty are reviewed for advancement after the completion of five (5) years of

service in the current rank, however, research faculty may seek promotion earlier if they can establish that they meet the same standard of excellence in scholarship used in evaluating candidates after five (5) years in rank. An in-depth assessment of performance of the candidate's research is required. External reviews are required as part of the in-depth assessment.

The Departmental standard for advancement to the title of Research Professor is:

- *Excellence* in scholarship as defined in the Faculty Handbook document entitled "Retention, Tenure and Promotion Review: Definitions."

The performance indicators and weighting for the standard of excellence in scholarship are given in Section 11.03 of this document. The quantitative and qualitative expectations for excellence in scholarship are given in Section 11.04 of this document. The evidence of performance indicators for excellence in scholarship are given in Section 11.05 of this document.

Article III. Annual Review Process

PURPOSE OF ANNUAL REVIEW

Annual review assesses the faculty member's performance over the preceding calendar year and is based upon the faculty member's letter of hire, role statements, annual assignments, self-assessment, and the primary administrative reviewer's evaluation of the individual's performance. Reviews must be completed by April 10 or the date specified by the Provost and Vice President for Academic Affairs.

LETTER OF HIRE/FACULTY ROLE STATEMENT

The letter of hire identifies the instructional or professional practice expectations of the faculty member's appointment. The faculty member and the primary administrative reviewer are responsible for developing, and updating as necessary, the Role Statement which identifies the broad responsibilities each faculty member is expected to perform. Any substantive changes in the expectations and/or the role of the faculty within the department must be approved by the Dean, primary administrative reviewer and the Provost and Vice President for Academic Affairs, after negotiation with the faculty member.

Annual reviews evaluate the faculty member's success in meeting expectations identified in the letter of hire and the role statement.

Faculty may request a change in their departmental role in conjunction with their goals statement and annual review procedure during the annual review process during the spring semester. A change in faculty role must be consistent with the department, college and university mission. Any substantial change in a faculty member's role must be approved by the primary administrative reviewer, Dean of the College of Agriculture, Director of Extension (for faculty with Extension appointments), the Provost and the President.

PROCEDURES FOR CONDUCTING ANNUAL REVIEWS

The following procedures should be used in conducting annual reviews:

1. The faculty member and primary administrative reviewer annually review the faculty member's performance relative to the faculty member's role and responsibilities. Evaluations are expected to recognize the requirements and expectations of the position and the proportionate time and resources officially allocated to particular activities.
2. The primary administrative reviewer rates the performance of each faculty member and submits the rating card to the college dean and Director of Extension (for faculty with Extension appointments) using the rating system prescribed by the Salary Review Committee (SRC).
3. The faculty member must sign the card on which the rating is communicated to the SRC. The signature of a faculty member does not indicate concurrence with the rating; rather it signifies that he or she has seen the rating. If the faculty member refuses to sign the card, the card shall be forwarded with the notation that the faculty member refused to sign it.
4. Copies of all annual reviews and the performance ratings of each faculty member shall be maintained in the faculty member's file in the department. These files shall be kept confidential and maintained as outlined in the Faculty Personnel Files policy (July 1, 2017).

Article IV. Primary Review Committee and Administrator

Section 4.01 Primary Review Committee-Composition and Appointment

The PSPP Department's Retention, Tenure and Promotion (RTP) Committee will evaluate all cases of retention, tenure, and promotion occurring within a given academic year. Only tenured faculty members are eligible to serve on the RTP Committee. Normally, at least one-half of the members will have attained the rank of professor. The unit may request approval from the University Retention, Promotion and Tenure Committee (URPTC) Chair to make an alternate tenured faculty appointment. Emeritus faculty members are ineligible to serve. Before conducting a review, committee members will attend the orientation regarding retention, tenure, and promotion offered by the provost's office for the review cycle.

The committee is composed of five members and one alternate. The alternate will serve if one of the five members is unable to fulfill their duties for any reason. Committee members are elected by simple departmental majority of all tenured faculty for a three-year term, with one third of the committee elected annually. The university encourages diversity in the composition of all review committees. In electing the members, faculty are encouraged to promote a committee which is inclusive of the categories protected by the university Non-Discrimination Policy (Non-Discrimination Policies and Discrimination Grievance Procedures -Interim Policy, August 24, 2012).

Committee members and administrative reviewers will take orientation sessions that promote bias-literacy in retention, tenure, and promotion reviews. Before conducting a review, they will attend the bias-literacy training offered by the university for the review cycle.

Committees will be available for service throughout the academic year. Faculty on leave will be ineligible for service. Committees will be constituted and their membership reported to the provost's office by the date established by the provost.

Primary Review Administrator

Section 4.02 Primary Review Administrator

The Primary Review Administrator is the current Head of the Department of Plant Sciences and Plant Pathology. Should the Primary Review Administrator have a conflict of interest with a candidate under review, the COA Dean will identify an individual to serve as Primary Review Administrator for the case under review.

Section 4.03 Identification of responsible entities

(a) Establish the Primary Review Committee either by facilitating the election or appointment of the members as described.

Department Head

(b) Select external reviewers and solicit review letters.

Department Head

(c) If internal Reviews are part of the unit's review process, selecting and soliciting Internal Reviews.

Department Head

(d) Assuring the following materials are included in the Dossier:

(i) Internal and external reviewer letters of solicitation, letters from the reviewers and, in the case of external reviewers, a short bio-sketch of the reviewer should be included in the Dossier.

Department Head

(ii) Applicable Role and Scope Document.

Department Head

(iii) Letter of hire, any Percentages of Effort changes, all annual reviews, and all Evaluation Letters from prior retention, tenure, and promotion reviews at MSU.

Department Head

(iv) Candidate's teaching evaluations from the review period. If the evaluations are not in electronic format, the unit will provide evaluation summaries. Upon request by review committees and review administrators, the unit will provide access to the original evaluations to review committees and administrators during the review.

Department Head

- (e) Maintaining copies of all review committee Evaluation Letters and internal, (if applicable), and external review letters after the review.
Department Head

Section 4.04 Next Review Level

College of Agriculture Retention, Promotion, and Tenure Committee

Article V. Intermediate Review Committee and Administrator

Section 5.01 Intermediate Review Committee - Composition and Appointment

The Intermediate Review Committee is the College of Agriculture Retention, Promotion, and Tenure Committee, with composition and appointment as described in the COA Role and Scope.

Section 5.02 Intermediate Review Administrator

Dean of the College of Agriculture

Section 5.03 Level of Review following Intermediate Review Administrator

University Retention, Promotion, and Tenure Committee

Article VI. Review Materials

Section 6.01 Materials submitted by Candidate

Materials for external review must include:

- i. A comprehensive curriculum vitae (CV) with teaching, scholarship, and service activities of the candidate.
- ii. A brief statement that identifies the candidate's area of scholarship.
- iii. Selected articles, publications, creative endeavors, or other evidence from the review period that, in the candidate's judgment, best represents their scholarship.

Materials for dossier must include:

1. The "Cover Sheet", obtained from the Provost's office.
2. A comprehensive CV with teaching, scholarship, and service activities of the candidate.

If included in the CV, the candidate should separate the following categories:

- Refereed journal articles
- Refereed books or book chapters

- Invited book chapters or articles
- Invited conference presentations
- Juried design presentations and/or built design projects
- Refereed exhibitions in design and/or visual arts
- Grant proposals submitted and grants funded
- Contributed conference presentations
- Seminars and/or colloquia
- Non-refereed publications

3. A Personal Statement that includes a description of the candidate's area of scholarship and provides a concise but explicit summary of how the candidate has met the expectations for retention, tenure, or promotion. This must include separate self-evaluations for teaching, scholarship, service, and integration describing the evidence demonstrating that the candidate meets the applicable standards. Each self-evaluation shall include a summary of activities, selected products or accomplishments, and evidence of recognition itemized by year over the relevant review period.

Section 6.02 Documentation of Collaborative Scholarly Contributions

Candidates are expected to establish independent lines of scholarship appropriate to their appointment. For that reason, the autonomous role played by the candidate in collaborative publications, creative works and grant proposals should be described. For each scholarly activity or product that involves collaboration, the candidate will briefly specify their contribution to the activity or product. Interdisciplinary/interinstitutional collaborations and work with the candidate's graduate students and post-doctorates as co-authors will be considered of greater impact than collaboration with the candidate's graduate or postdoctoral supervisor. These guidelines regarding delineation of contribution also apply to sponsored research proposals and awards.

Section 6.03 Peer Review Solicitation Procedure

External reviews from at least **four (4)** respected authorities appropriate to the candidate's area of scholarship who will provide an independent and objective evaluation of the candidate's scholarship are required for reviews for tenure and/or promotion. External references are to be experts in the specific discipline, from other universities or appropriate institutions, and familiar with expectations of faculty performance. External references should have significant knowledge of the candidate's program and accomplishments, however selection of mentors, former colleagues, collaborators or close friends as references is not permitted. The soliciting entity may invite recommendations from the candidate, but at least one half of the external reviewers should be persons other than the reviewers recommended by the candidate.

In conformance with the deadlines given in the Faculty Handbook, the candidate will submit a list of four potential external references to the primary review administrator. This list will include

contact information including telephone numbers, physical addresses, and email addresses. The primary review administrator will select at least four external reviewers; at least one half of the external reviewers should be persons other than the reviewers recommended by the candidate. Candidates should not be informed of the identity of external reviewers in order to protect the confidentiality of the review process.

The primary administrative reviewer shall send the four (4) selected reviewers the following materials:

- I. Letter soliciting the external reviewer
- II. Comprehensive CV with teaching, scholarship, and service activities of the candidate
- III. Brief statement that identifies the candidate's area of scholarship
- IV. Selected articles, publications, creative endeavors or other evidence that best represents their scholarship
- V. Departmental Role and Scope Document

A copy of the letter soliciting outside reviewers and a biosketch for each external reviewer must be included in the candidate's file. Reviewers should state their relationship to and knowledge of the candidate. Letters of review will address the candidate's professional potential and accomplishments in scholarship. The written reviews shall be addressed and mailed to the primary administrative reviewer who will see that they are inserted into the review dossier prior to transmitting the dossier to the primary review committee chair.

Article VII. Applicable Role and Scope Documents

Section 7.01 Retention Review – Candidates for retention are reviewed under the standards and indicators in the Role and Scope Documents in effect on the first day of employment in a tenurable position.

Section 7.02 Tenure and Promotion to Associate Professor Review – Candidates for tenure are reviewed under the standards and indicators in the Role and Scope Documents in effect on the first day of employment in a tenurable position. Candidates may select a more recent, approved Role and Scope Document by notifying the primary review committee

Section 7.03 Promotion to Professor Review – The faculty member will be reviewed using standards and indicators in the Role and Scope Documents in effect two (2) years prior to the deadline for notification of intent to apply for promotion.

Article VIII. Retention Reviews

Section 8.01 **Timing of Retention Review.** Faculty are reviewed for retention in the academic year specified in their Letter of Hire, unless extended under the Extending Tenure Review Period policy.

Section 8.02 University Standard. The standards for the retention of probationary faculty members are:

- (a) effectiveness in teaching, scholarship, and service during the review period;
- (b) integration of no less than two of the following during the review period: teaching, scholarship, and service; and
- (c) satisfactory progress towards meeting the standards for tenure by the candidate's tenure review year.

Section 8.03 Performance Indicators and Weighting

Performance indicators and weighting are defined in Section 9.03. The same indicators and weights that are used in tenure review are used in retention review.

Section 8.04 Quantitative and Qualitative Expectations

Effectiveness in scholarship is judged primarily by the quantity and quality of published or juried scholarly works, with refereed articles being the most commonly used performance indicator for faculty with significant research appointments. Effectiveness includes, but is not limited to, establishing a research specialty in the candidate's discipline, evidenced by the creation of scholarly products (see Section 9.03) throughout the review period.

It is expected that scholarship be of high quality, be ongoing throughout the review period, be commensurate with the associated discipline, and result in a record of scholarly products at the time of retention. These products shall represent both Group I and Group II indicators, and publications may be submitted, accepted, in press, or published at the time of review. The record must be substantive enough that it is reasonable to expect the candidate to achieve the standards for tenure at the time of tenure review (see Section 9.04-9.05). For scholarly works that are collaborative, the candidate is expected to identify the level and extent of their own contribution (see Section 6.02).

Effectiveness in Teaching is as described in Section 9.04.

Effectiveness in Service is as described in Section 9.04, except that there is no requirement that service include assignment to a Department, College, or University committee at MSU at the time of retention review.

Integration: The Primary Review Committee and Department Head will judge the quantity and quality of the creation of synergistic relationships among teaching, scholarship, and service. Integration of at least two of the three mission activities of teaching, scholarship, and service is required (Sections 9.02 and 9.03).

Section 8.05 Evidence of Performance Indicators

Evidence of performance indicators are listed in Section 9.05. The same performance indicators and evidence that are used in tenure review are used in retention review, with the addition that submitted products are to be documented with a copy of the submitted work along with verification of submission.

Section 8.06 Status of Scholarly Products

For retention review, scholarly products that are submitted, accepted, in press, or published at the time of review will be considered if they are included in the dossier and are appropriately documented according to Section 9.05.

Article IX. Tenure Review

Section 9.01 Timing of Tenure Review

Faculty are normally reviewed for tenure in the academic year specified in their Letter of Hire, unless extended under the Extending Tenure Review Period policy

Section 9.02 University Standard

The University standards for the award of tenure are:

- (a) sustained effectiveness in teaching and service during the review period, and
- (b) integration of no less than two of the following during the review period: teaching, scholarship, and service, and
- (c) accomplishment in scholarship.

Section 9.03 Performance Indicators and Weighting

The following performance indicators are considered in the review to determine if the standards in the section under consideration are satisfied. The faculty in the Department of Plant Sciences and Plant Pathology is comprised of individuals with expectations that differ depending on their appointment in the COA. Therefore, although the following performance indicators apply to all Department faculty, the *weighting* of each indicator may vary across and within the groups. Additional indicators will be considered if deemed appropriate and consistent with the definition of indicators stated in the Faculty Handbook.

Performance indicators in scholarship

The following is a list of performance indicators applicable to scholarship. The indicators listed in Group I are considered the primary activities by which performance in scholarship is evaluated. Those from Group II also contribute to performance but carry less weight. All items from Groups I and II are referred to as “scholarly products.”

Group I

- Refereed journal articles, monographs, book chapters, and textbooks in the core areas of plant sciences, plant pathology, entomology, and/or horticulture.

- Refereed journal articles, monographs, book chapters and textbooks in disciplines outside of the core areas that result from multidisciplinary research
- External grants funded
- Invited major talks (e.g., plenary or keynote talks at professional conferences)
- Patents, PVP applications, licensed technology, or variety releases
- Juried design presentations and/or built design projects; design projects awarded or accepted
- Refereed exhibitions in design and/or visual arts
- Invited high-profile seminars or colloquia (e.g., at prestigious institutions or venues)*
- Refereed proceedings published in connection with professional meetings*

Group II

- Refereed proceedings published in connection with professional meetings*
- Invited papers or presentations given at professional meetings
- Contributed papers or presentations given at professional meetings
- Grant proposals submitted (external and internal)
- Internal grants funded
- Invited seminars and/or colloquia*
- Non-refereed publications (e.g., non-refereed proceedings and technical reports)
- Non-refereed publications (e.g., non-refereed proceedings and technical reports)
- Non-juried design presentations and/or built design projects
- Non-refereed exhibitions in design and/or visual arts
- Development and publication of scholarly products (e.g., software, digital video media, radio and television broadcasts, or curriculum materials)

This list is representative but not exhaustive. As additional evidence of performance in scholarship, the candidate may include other relevant and appropriate indicators not listed here. The Department RTP Committee will determine the weight of such indicators and will describe this determination in their evaluation letter. In addition, the weight of indicators marked (*) will be determined and described by the RTP Committee, based on varying disciplinary norms for research publications and presentations. For example, an invited talk or seminar at a prestigious institution or national or international conference would normally be weighted as a Group I indicator, while an invited talk at a seminar in another department on campus would normally be weighted as a Group II indicator.

Performance indicators in teaching

The following is a list of performance indicators applicable to teaching. All indicators listed are considered the primary activities by which performance in teaching is evaluated.

- Delivering quality instruction in support of the Department's teaching or Extension's educational mission (as documented by faculty peer review of teaching)
- Development and implementation of new pedagogical methods and/or curriculum materials (note that publications resulting from such activities are performance indicators of scholarship)
- Mentorship of graduate students (e.g., supervising or substantially contributing to graduate student research)

- Design and facilitation of instructional programs, e.g. establishment of new courses or programs, graduate teaching assistant training (note that publications resulting from such activities are performance indicators of scholarship)
- Mentorship of undergraduate students (e.g., supervising undergraduate research or independent study projects)
- Student evaluations of instruction via University-approved instruments
- Development of new formal extension presentations in response to stakeholder-identified needs
- Formal information and technology transfer programs (short courses, compliance certification programs, data collection programs, records programs, etc.) developed and/or implemented
- Topic, variety, and number of participants in formal extension presentations
- Presentations/Extension programs utilizing innovative teaching technologies or methods
- Production of outreach publications and instructional aids
- Documented change in knowledge and/or behavior among stakeholders as a result of outreach efforts

This list is representative but not exhaustive. As additional evidence of performance in teaching, the candidate may include other relevant and appropriate indicators not listed here. The Department RTP Committee will determine the weight of such indicators and will describe this determination in their evaluation letter.

For candidates with teaching or Extension appointments, an in-depth assessment of teaching will be performed as part of the review for tenure and promotion to Associate and Professor ranks. This will include written peer and ad-hoc reviews. The primary review committee will evaluate the candidate's instructional preparation and performance. For Extension appointments, the candidate's formal presentation evaluations and the breadth, depth and geographical extent of the candidate's programs should also be assessed. Peer reviewers shall submit their findings in writing to accompany the candidate's review package. Faculty with Extension appointments will also have a review from the Director of Extension.

Student evaluations are vulnerable to various forms of bias (e.g., evaluations may be based on criteria other than quality of instruction). Therefore, evaluation scores and averages should be applied with caution as a measure of teaching effectiveness and supplemented by other evidence. Written student comments may be viewed as formative feedback to be used for instructor improvement but are not considered a form of evaluation.

Performance indicators in service

The following is a list of performance indicators applicable to service. All indicators listed are considered the primary activities by which performance in service is evaluated.

- Membership and offices held on Department, College, and University committees
- Professional service in local, state, national, or international organizations in the plant sciences, plant pathology, entomology, or horticulture
- Outreach and service/learning engagement activities in the plant sciences or landscape design to local, state, national, or international communities
- Active supervision of multi-section courses
- Service as a reviewer or editor for a professional journal, monograph, or book
- Service on grant and proposal review panels

- Contributions to administration for degree/program accreditation or evaluation
- Delivery of knowledge and/or technologies to constituent groups, stakeholders, and the public

This list is representative but not exhaustive. As additional evidence of performance in service, the candidate may choose to include other relevant and appropriate indicators not listed here. The Department RTP committee will determine the weight of such indicators.

Performance Indicators in Integration

As indicated in Section 9.02, candidates are expected to demonstrate integration across at least two of the categories of scholarship, teaching, and service. The nature and extent of integrated activities will vary depending on the candidate's discipline and areas of specialization. The following list offers examples of potential indicators of integration, with the understanding that integration can take many forms. The candidate must clearly define and describe how integration is achieved in the dossier. For faculty with extension appointments, the recipients of extension programs may be considered students.

- Integration of scholarship and teaching: implementing a research/creative activity within a course or extension program
- Integration of scholarship and teaching: offering seminars to introduce students to the process of conducting research
- Integration of scholarship and teaching: collaborating in research, publication, and/or creative activity with a student
- Integrating of scholarship and service: lending research expertise through service on review panels or editorial boards, uncompensated consulting
- Integration of scholarship and service: implementing research/creative activity results in a community setting
- Integration of teaching and service: designing and/or delivering professional development for K-12 teachers or special programs for K-12 students

Section 9.04 Quantitative and Qualitative Expectations

Scholarship Expectations

The Department values intellectual discovery and the generation of new knowledge above all other measures of scholarship. *Accomplishment in scholarship* is judged primarily by the quality of published scholarly works and/or creative work, with refereed articles/projects being the most commonly used performance indicator. With respect to publication/project quality, the Department RTP Committee will assess accomplishment based on the experience of the committee members and the evidence provided by External Reviewers. *Accomplishment* includes, but is not limited to, an ongoing record of independent research/creative activity that has led to a regular record of publication in refereed journals or exhibition of creative work. It is expected that the results of these publications will be presented at conferences and professional meetings. A record of seeking extramural funds to support research/creative activities is also expected.

It is expected that scholarship be of high quality, be ongoing throughout the tenure review period, be commensurate with the associated discipline, and result in a substantive record of peer-reviewed products at the time of tenure. The usual Departmental expectation for scholarly productivity is that tenure candidates average at least 1 to 2 scholarly products per year during the review period and, through these products, show evidence of having made a significant contribution to their field of study.

These products may represent both Group I and Group II indicators, and publications may be accepted, in press, or published at the time of review. At the time of tenure, it is expected that multiple items from Group I will appear in the candidate's body of work. Due to the diverse nature of scholarship within the Department, expectations will vary across disciplines.

Regardless of quantity of products, the quality of the candidate's scholarly body of work as documented by External Reviewers is of primary importance. In particular, the quality and reputation of journals and other scholarly venues, as documented by External Reviewers and disciplinary norms, is considered very important in the review process. Publication impact factors or h-indices are useful metrics and may be included with the description of the candidate's publications but they cannot be used as a sole measure of scholarly accomplishment.

In some cases, a relatively small number of products with high impact may be acceptable for satisfying scholarship expectations, while in other cases a large number of products may not be sufficient. If the number of products is near the average of 1-2 scholarly products per year, and one or more of the products are evaluated by the External Reviewers or the RPT Committee as having little to no impact in the discipline, scholarship expectations may not be satisfied. Also, if the candidate's contribution to one or more products is documented as minimal, it is expected that the number of scholarly products would need to sufficiently exceed the average to offset the candidate's limited contributions.

Collaborative work is highly valued in the Department of Plant Sciences and Plant Pathology. In the biological sciences, first authors of manuscripts are frequently graduate students or post-doctoral research associates and the last author is the principle investigator of the research group. Therefore, inferences about the level of contribution should not be made based solely on author order. The candidate is expected to identify the level of individual contribution to scholarly works [see Section 6.02].

A record of seeking and obtaining extramural funds to support research activities is also expected. The scope of the grant work and the reputation of the granting agency are qualitative factors that will influence the quantitative expectation for number of peer-reviewed papers and other Group I products.

Teaching Expectations

Effectiveness in teaching is achieved through the candidate's positive contributions to the design, delivery, and instruction of courses and labs, both in the Department and in other venues. Effectiveness is judged primarily from multiple peer reviews conducted by Departmental faculty who observe the candidate in the classroom or lab during the review period. Written reports from peer reviewers document the candidate's teaching performance and serve as evidence to evaluate effectiveness.

Graduate student advising is integral to the Department, and faculty with significant research appointments are expected to contribute to graduate education. Evidence for this may include chairing or serving on graduate committees but can also be exhibited through other types of graduate student interactions. Faculty with majority research appointments are expected to demonstrate effective mentoring of Ph.D. students. For faculty positions in scholarly areas that do not have applicable graduate programs in this Department, it is expected that there will be evidence of development and completion, beyond scheduled teaching, of independent learning experiences, internships, and/or research projects for undergraduate students. At the time of the tenure review, a candidate is

expected to demonstrate evidence of ability to effectively mentor graduate/undergraduate students.

Course evaluations serve to provide a measure of student satisfaction. The Department expectation is that normally, for each course taught, the overall mean score from the student evaluation instrument is not less than the indicator for “Average.” For example, 3.0 is the “average” evaluation score for “Overall Effectiveness” on an instrument with 5 categories (1=Poor, 2=Below Average, 3=Average, 4=Above Average, and 5 = Excellent). It is expected that a history of mean overall scores significantly below “Average” for a course will be addressed by the candidate. Similarly, any issues related to teaching noted in the retention review should be addressed by the candidate prior to tenure review.

Service Expectations

Effectiveness in service will be achieved if the candidate demonstrates active participation and competent execution of tasks in any of the areas of service described by the performance indicators. Service is expected to include at least one assignment to a Department, College, or University committee at MSU. Participation in other activities that contribute to the candidate’s discipline or profession (e.g., task forces or special programs) is also valued, especially when such participation raises the stature and reputation of the Department or the University in the state, the nation, or internationally.

Section 9.05 Evidence of Performance Indicators

Applicable performance indicators, and evidence supporting the candidate’s performance for each indicator, will be assessed using the contents of the candidate’s dossier.

In addition to the listed evidence of performance indicators, properly documented nominations for and receptions of competitive awards for scholarship, teaching, or service will be considered as evidence of peer recognition.

Evidence of performance indicators in scholarship

The list of evidence presented in Tables 1 and 2 is not exhaustive. Other evidence supplied by the candidate that is related to the performance indicators for scholarship will be considered in the review. The weight category (Group I or Group II) of indicators marked (*) will be determined based on varying disciplinary norms for research publications and presentations.

Only scholarly products that have been accepted for publication, performance, or exhibition within the tenure review period will be considered. For works published in a journal not readily available through University databases, the candidate must include a digital copy of the accepted work in the dossier. For works accepted for publication but not yet published, the candidate must include a digital copy of the accepted work accompanied by an official letter or email indicating acceptance.

Group I: Performance Indicator	Typical Evidence
Refereed journal articles, monographs, book chapters, and textbooks:	Full citation for the scholarly work, and either: (1) a URL linking to an online version of the work in published form; (2) a digital copy of the work in published form; or (3) a copy of the accepted but unpublished work with verification of acceptance.
External grants funded:	Grant number or code with URL or other contact where more information can be found. Brief description (title,

	funding agency and level, primary goals, length, collaborators if any).
Juried design presentations and/or built design projects, refereed exhibitions in design and/or visual arts:	A record of either (1) community design project presentations or approvals; (2) exhibited work; or (3) built design projects.
Invited major talks (e.g., plenary or keynote):	Letter of invitation, copy of program, or full citation.
Patents, PVP applications, licensed technology, or variety releases:	Full citation or description
Invited high-profile seminars or colloquia (e.g., at prestigious venues):*	Full citation, including the title, venue, date, and level (Department, University, community, etc.).
Refereed proceedings published in connection with professional meetings:*	Full citation for the proceedings, and either: (1) a URL linking to an online version of the work in published form; (2) a digital copy of the work in published form; or (3) a copy of the accepted but unpublished work with verification of acceptance.
Research awards*:	Award title, awarding authority, date.

Table 1. Group I Performance Indicators in Scholarship and Typical Evidence

Group II: Performance Indicator	Typical Evidence
Invited papers or presentations given at professional meetings:	Full citation including the title, co-presenters, organization, location, and date.
Contributed papers or presentations given at professional meetings:	Full citation including the title, co-presenters, organization, location, and date.
Grant proposals submitted (external and internal):	Brief description (title, funding agency and level, primary goals, collaborators if any).
Internal grants funded:	Brief description (title, source of funding, primary goals, length, collaborators if any).
Invited seminars and/or colloquia:*	Full citation, including the title, venue, date, and level (Department, University, community, etc.).
Non-refereed publications (e.g., non-refereed proceedings and technical reports):	Full citation for the publication or report, and either: (1) a URL linking to an online version of the work in published form; (2) a digital copy of the work in published form; or (3) a copy of the accepted but unpublished work with verification of acceptance.
Development and publication of scholarly products (e.g., software, extension publications, digital video media, radio and television broadcasts, or curriculum materials)	Brief description of the product including an overview of content and format, intended use, potential audience, and location where it is publicly available.
Non-juried design presentations and/or built design projects, non-refereed exhibitions in design and/or visual arts	A record of either (1) community design project presentations or approvals; (2) exhibited work; or (3) built design projects.)

Table 2. Group II Performance Indicators in Scholarship and Typical Evidence

Evidence of performance indicators in teaching

The list of evidence presented in Table 3 is not exhaustive. Other evidence supplied by the candidate that is related to performance indicators for teaching will be considered in the review.

Performance Indicator	Typical Evidence
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Delivering quality instruction in support of the Department's teaching or Extension's educational mission (as documented by faculty peer review of teaching):	Written report or letter from peer observer, submitted directly by the observer to the Department Head and maintained in Department files. The Department Head may serve as a peer observer.
Development and implementation of new pedagogical methods and/or curriculum materials:	Syllabus or other documentation of new methods or materials with evidence supporting innovation. Brief description of the implementation process, audience, and outcomes.
Design and facilitation of instructional programs (e.g., graduate teaching assistant training):	Agenda or other documentation of instructional program's goals and major components. Brief description of audience and outcomes.
Mentorship of graduate students (e.g., supervising or substantially contributing to graduate student research):	Brief description including graduate student name, research question/focus, funding (if any), and progress to date.
Mentorship of undergraduate students (e.g., supervising undergraduate research or projects):	Brief description including undergraduate student name, research question/focus, funding (if any), and progress to date.
Student evaluations of instruction via University-approved instruments:	Student evaluation scores for all courses taught during the review period. Brief, overarching analysis of student comments (summary, selected quotes, or full list of comments). If appropriate, include a broad description of changes made in response to student feedback.
Development of new formal extension presentations in response to stakeholder identified needs	Surveys or other evidence such as publications from stakeholder groups, local, regional or national organizations indicating stakeholder need
Documented change in knowledge and/or behavior among stakeholders as a result of teaching, extension, or outreach efforts:	Pre/post surveys of stakeholders or students, interviews, data collected from stakeholders or students by independent organizations
Teaching awards:	Award title, awarding authority, date.

Table 3. Performance Indicators in Teaching and Typical Evidence

Evidence of performance indicators in service

The list of evidence in Table 4 is not exhaustive. Other evidence supplied by the candidate that is related to performance indicators for service will be considered in the review.

Performance Indicator	Typical Evidence
Membership and offices held on Department, College, and University committees:	Name and level of each committee and dates of service.
Professional service in local, state, national, or international organizations in the plant sciences:	Name of each organization (with description as needed), offices or roles held, dates of service, and notable accomplishments.
Outreach in the plant and agricultural sciences/design and planning to local, state, national, or international communities:	Brief description of outreach activities, audience, and outcomes.
Active supervision of multi-section courses:	Course title, number of instructors, dates of supervision, and notable accomplishments.
Service as a reviewer or editor for a professional journal, monograph, or book:	Citations including name of journal, editorial role, dates of service, and workload.

Professional consultations that may or may not result in a co-authored publication:	Brief description of consulting activities, audience, and outcomes.
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Table 4. Performance Indicators in Service and Typical Evidence

Article X. Promotion to Rank of Associate Professor

Section 10.01 University Standards

The University standards for promotion to the rank of Associate Professor are the standards for the award of tenure. Appointment at the rank of Associate Professor or Professor does not demonstrate, in and of itself, that standards for tenure have been met.

Article XI. Promotion to Rank of Professor

Section 11.01 Timing of Review.

Normally, faculty are reviewed for promotion after the completion of five (5) years of service in the current rank, however, faculty may seek promotion earlier if they can establish that they “meet the same standards of effectiveness and accomplishment or excellence used in evaluating candidates after five (5) years in rank.”

Section 11.02 University Standard

The University standards for promotion to the rank of Professor are:

- (a) sustained effectiveness in teaching and service during the review period, and
- (b) sustained integration of no less than two of the following areas during the review period: teaching, scholarship, and service, and
- (c) excellence in scholarship.

Section 11.03 Performance Indicators and Weighting

Excellence in Scholarship

Performance in scholarship must be judged excellent based upon the departmental standards (Section 9.03)

Section 11.04 Quantitative and Qualitative Expectations

See Section 9.04.

Section 11.05 Evidence of Performance Indicators

See Section 9.05.

Article XII. Procedures for Update and Revision of the Unit Role and Scope Document

Faculty members are entitled to propose changes to the PSPP Role and Scope Document. Review committee members or administrators that identify a need for improvement, clarification, or other revision to the Department's Role and Scope Documents may submit the request for changes to the Chair of URPTC. The UPTC Chair will forward the recommendations to the Department. Submission to the URPTC Chair should occur after the review committee or administrator completes all reviews for the year.

Plant Sciences and Plant Pathology will act on any proposed changes received from the URPTC Chair on an annual basis and will undertake a full review of their Document no less than every three years.

Article XIII. Approval Process

Section 13.01 Primary Academic Unit Role and Scope Document

- (a) tenurable faculty and administrator of the primary academic unit;
- (b) promotion and tenure review committee and administrator of all associated intermediate units (usually colleges);
- (c) University Retention Tenure and Promotion Committee (URPTC); and
- (d) provost.

Section 13.02 Intermediate Academic Unit Role and Scope Document

- (a) promotion and tenure review committee and administrator of the intermediate unit;
- (b) University Retention Tenure and Promotion Committee (URPTC); and
- (c) provost.

Section 13.03 University Role and Scope Document

- (a) University Retention Tenure and Promotion Committee (URPTC);
- (b) Faculty Senate;
- (c) Deans' Council; and
- (d) provost.