**Crediting Multiple Disciplinary Collaboration**

**Introduction**

The University’s “It Takes a Volunteer” strategic vision calls upon multiple disciplinary collaborations to achieve the outlined goals, objectives, and priorities. Multiple disciplinary collaborations are necessary to address large and complex challenges, and funding entities increasingly expect to see collaborative teams with several investigators representing unique expertise. These types of collaborations also can enhance and enrich undergraduate and graduate education and training. The University’s commitment in supporting multiple disciplinary collaborations is exemplified in the newly announced interdisciplinary clusters. These clusters are designed to recruit teams of researchers, scholars, and creatives who are deeply connected to the organizations and communities in which the impact of their work will be transformative.

In May 2022, a campus-wide Human Health and Wellness (HHW) working group, charged by the Vice Chancellor for Research, Deborah Crawford, released a report regarding the state of human health and wellness academic programing and scholarship at the University of Tennessee Knoxville (UTK), including the Institute of Agriculture (UTIA). This report contained a strategic plan for human health and wellness at UTK and UTIA, and this plan included a landscape assessment; a strengths, opportunities, aspirations, and results analysis; and goals and strategies. Within that landscape assessment, 25 unit bylaws were evaluated to ascertain their support of multiple disciplinary collaboration (called team science in the report). The assessment identified that bylaws lacked identification and guidance regarding recognition of teams with multiple discipline collaborations. As multiple discipline teams are increasingly important for faculty and institutional success (funding, stakeholders, institutional recognition, and prestige), a culture of collaboration will be vital to the recruitment and retention of premier faculty as well as exemplary students and staff.

Based on the changing landscape of funding and support, and supported by the HHW report, there is a pressing need to be proactive in emphasizing the value and desire for faculty to engage in multiple disciplinary collaborations. As a starting point, the Associate Deans of Research across UTK and UTIA came together to develop guidance that units can consider in supporting faculty working in these types of collaborations. This guidance is encouraged to be used to initiate conversations within units about multiple disciplinary collaborations, and assist units in developing guidance regarding these types of collaborations that can be incorporated in bylaws and promotion and tenure documents.

**Multiple Discipline Collaboration**

Collaborating in multiple disciplinary (includes multi-, inter-, and transdisciplinary1) teams to advance teaching; research, scholarship, and creative activity; and service is key in advancing the mission of the University as a R1, land grant University, and the flagship university in the University of Tennessee system. Multiple disciplinary collaborations can be called many things, including team science, interprofessional collaboration, and collaborative research practice. This terminology in general refers to situations when faculty members from multiple disciplines, who may be based in internal and/or external units, have similar leadership responsibilities and effort on a project, particularly focused on their expertise area.

To advance this type of collaboration, faculty participation in multiple disciplinary team approaches to teaching; research, scholarship and creative activity; and service is encouraged, valued, and rewarded in the evaluation and promotion of all faculty (tenure track and non-tenure track). This is particularly important during the tenure evaluation process for tenure-track faculty because of the time-line associated with retention. To achieve this level of support, faculty members, committees, and administrators involved in evaluation, promotion, and tenure of faculty would need to have a process to recognize and support appropriate weighting of these activities when assigning credit/value for faculty engaging in collaborations, especially when engaged in multiple disciplinary teams. This process relies on the faculty member to accurately represent and provide context for their role in these multiple disciplinary teams within their documentation related to evaluation, promotion, and tenure. Department Heads should work with the faculty member to ensure that these multiple disciplinary collaborative team activities are clearly communicated to faculty and promotion and tenure (P&T) committees in the process of review.

**Why is this Important?**

As an academic community we are uniquely positioned to respond to the opportunity before us to promote our disciplines through the recognition and support of multiple disciplinary team efforts. We recognize that each discipline has specific approaches to education and training, creating new knowledge and creative activity, and providing service. Faculty discussion at the unit level will provide the insight to identify specific ways to encourage, recognize and reward multiple disciplinary team efforts. We offer some strategies that can be used to help shape new guidelines for annual evaluation and P&T that can be included in documentation, such as bylaws. Currently, that flexibility is limited within existing bylaws and P&T guidelines. Historically within higher education, faculty efforts have been rewarded when they emphasize individual achievement, as it relates to success in teaching and training; extramural funding; performance of research; mentoring of students and faculty; scholarly outcomes including publications, presentations, and published abstracts, and creative activities such as exhibitions or performances.2,3 As a result, guidelines tend to be heavily weighted towards individual achievement (i.e., principal investigators (PIs), primary authors, mentoring author, corresponding author, presenter, artist of record, etc.). Such perceptions can lead to confusion and/or conflict with faculty in the annual review and P&T process if they are encouraged to engage in multiple disciplinary team collaboration but do not receive appropriate credit for those activities.2,3 Guidance regarding recognition and crediting of multiple disciplinary team efforts will aid review cycles for faculty to be credited with the work they contribute to the team. Faculty engaged in disciplines that, traditionally, expect each faculty member to establish independence, centered around their area of expertise, may be at risk of poor annual evaluations and failing to achieve P&T if they invest too much of their time in multiple disciplinary team endeavors. Tenure initiating units, Department Heads, and the faculty may see themselves at an impasse regarding if or how much they will recognize the contributions of faculty members to multiple discipline team collaborative initiatives.

**What Action Should We Work Towards?**

1. **Express value for multiple disciplinary teams and encourage participation in these teams across the University**.

This action would include, but not be limited to, describing what these teams are with recognition of their work, and stating that independent and team contributions are valued similarly. Achieving this goal will need review and update of the faculty handbook with respect to faculty work expectations and evaluation, college and departmental bylaws, and P&T guidelines to include multiple disciplinary teams as a desirable activity that will be favorably reviewed in retention, promotion, and tenure consideration.

1. **Provide the vision of how participation in a multiple disciplinary team relates to annual review, retention, and promotion and tenure decisions within units.**

This action could include providing a rubric describing how achievements in multiple disciplinary teams should be documented in teaching; research, scholarship, and creative activity; and service. For example, multiple faculty in different disciplines leading independent segments of a project should be recognized as the lead, primary, or mentoring faculty member for their contributions and efforts in the designated portion of the teamwork. If there are multiple faculty working together within the same discipline, then the lead faculty member for those contributions should be identified at the onset of the project so that credit can be assigned and recognized as to the lead, primary, or mentoring faculty member versus collaborating faculty members. This vision could also include describing how other efforts related to multiple disciplinary teams (education/training and service committees, dissemination outlets and venues, and funding) should be documented. Achieving this goal will need review and updates to annual evaluation and dossier templates such that faculty members can document their activities in multiple disciplinary teams and these activities can be credited like independent individual activities during retention, promotion, and tenure consideration.

1. **Provide the vision of what success looks like when participating in multiple disciplinary teams**.

This action would include evaluating multiple disciplinary team endeavors consistently across faculty tracks and rank. Achieving this goal will need review and update for consistency of the value of multiple disciplinary team activities across tenure track and non-tenure track faculty tracks relative to rank progression in the faculty handbook, and college and department bylaws and P&T guidelines.

1. **Create consistent definitions for terms associated with multiple disciplinary team activities across units**.

Offer guidance for multiple disciplinary team effort, where faculty have joint appointments, using memoranda of understanding (MOU). The MOU would establish the division of responsibilities and expectations for promotion and/or tenure of the faculty member with the joint appointment. This MOU is then available to all individuals engaging in the retention, promotion and tenure evaluation process. Achieving this goal will need for faculty participating in multiple disciplinary team activities to document in their annual evaluation and dossier documentation their role in the team regarding their level and amount of contribution to the activity.

**Wording that Might be Helpful for Unit Documents**

Collaborating in multiple disciplinary teams to advance research, teaching, and service is highly desired to advance the mission of the University. Multiple disciplinary (includes multi-, inter-, and transdisciplinary) collaborations can be called many things, including team science, interprofessional collaboration, and collaborative research practice. This terminology in general refers to situations when faculty members from multiple disciplines, who may be based in internal and/or external units, have similar leadership responsibilities and effort on a project, particularly focused in their expertise area. Faculty participation in collaborative approaches to research, scholarship, creative activities and teaching is encouraged, valued, and rewarded as part of the retention and promotion of all faculty (tenure-track and non-tenure-track), and in the tenure evaluation process for tenure-track faculty. Faculty, committees, and administrators involved in the promotion and tenure of faculty should recognize and support appropriate weighting of activities when assigning credit/value for faculty engaging in collaborations, especially when engaged in multiple discipline collaborations. The faculty member should accurately represent their role in the context of their CV and dossier. Department Heads should work with the faculty to ensure that these collaborative activities are clearly communicated to faculty and promotion and tenure committees in the process of review.

**References**

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3. McHale SM, Ranwala D, DiazGranados D, Bagshaw D, Schienke E, Blank AE. Promotion and tenure policies for team science at colleges/schools of medicine. *Journal of Clinical and Translational Science.* 2019;3:245–252.