

# Recognizing and Rewarding Contributions to Team Science

May 15, 2018

# CTSI Task Force

- Formed in response to NIH, NCATS (National Center for Advancing Translational Science) evaluation criterion for Clinical and Translational Science Award call for proposals:
  - “To what extent is there a commitment to refinement of the academic reward system toward the recognition of translational researchers and team scientists?”

# Why should UF do anything differently?

- The reality is that most of the best science is developed in teams.
- Promotion and Tenure remains the major reward system for faculty, but rewards individuals for individual accomplishments
- Adaptation of UF P&T criteria will
  - Recognize the value of contribution of an individual to the accomplishments resulting from a team of investigators
  - Allow UF to be competitive for major federal grants (e.g. CTSA) and other collaborations
  - Help UF attract and retain the best faculty who contribute to team science
  - Encourage and support efforts for teams to develop the best science for the best patient outcomes

# Expand criteria for evaluation

- Additionally, new recognition criteria will be needed in the not-too-distant future when publishing disappears altogether
  - As open source sharing of data becomes the mechanism for real discovery and advancement, we will need methods to determine how faculty contribute to those discoveries, inventions and breakthroughs.
  - Move “beyond bibliometrics” – to include social network mapping, dynamic models, heuristics or combinations of approaches that demonstrate short-, middle-, and long-term impacts using newer technology

# What is the proposal?

1. UF P&T Guidelines should make a statement that the University values contributions to team science
2. Explicitly state that authorship other than “first” or “last (senior)” is recognized as significant as long as the individual faculty member describes his/her contribution
3. Provide documentation of contributions by self description, internal letters, and the Chair.
4. Use additional metrics (e.g. network analyses)
5. Allow each College/Department to develop and specify detailed metrics
6. Provide ‘training’ and updates to Chairs, College committees and faculty regarding changes to UF P&T expectations

# How to document?

1. Faculty member describes contributions in research design, analysis, publication and grant writing
2. Chair describes the individual faculty member's contribution
3. Internal letters (from members/leaders of the team) describe the contribution and impact of the individual faculty member – *What would not be possible without this individual's expertise and efforts?*

# Examples from other Institutions

- **University of Virginia**
- **Academic Investigator Track: (tenure-eligible)**
  - Associate Professor
  - Documented excellence in research:
  - Research: Excellence may be achieved as an independent investigator (1); **and/or a team/collaborative scientist (2)**
    1. Independent and original investigation recognized by peers and by external funding as Principal Investigator (PI) or Multiple Principal Investigator (MPI) of investigator-initiated hypothesis-oriented, nationally peer-reviewed research projects funded by federal or national agencies such as NIH-K awards, R01, or R21, AHA, ACS, or NSF grants.
    2. **Substantial and critical contributions in team or collaborative science projects (with funded effort on external grants)**. Development of intellectual property is also recognized.
  - Scholarship: Publication, preferably as first or corresponding author of original substantive work in high-quality, peer-reviewed journals. **For team science, publications as middle author with significant contribution in collaborative projects are also recognized.** Award of patents.
  - Reputation: Leadership in local or regional scientific affairs.

# University of Southern California (cited as a model by NAS)

- **CLINICAL SCHOLARS (non tenure-track)**
- For individuals who have gained high scholarly or artistic distinction in their fields, primarily engaged in clinical, creative, or professional practice, teaching or research, but whose effort profile or type of research or creativity differs from that of tenured faculty. It is a high honor that may be awarded by the President of the University on evidence of leadership and impact in the field after recommendation by a school committee and dean, and the University Committee on Appointments, Promotions and Tenure. It is equal in status and dignity with tenure though without the employment guarantees of tenure.
- A candidate for a Clinical Scholar designation should be ***recognized at the national level and esteemed by experts in his or her field for being an innovator of clinically important research. As an example, Clinical Scholars may have provided substantive intellectual input and leadership to large collaborative treatment or clinical trials groups.*** Candidates for full professor with a Clinical Scholar designation should be recognized not only at the national but also the international level. A candidate for Clinical Scholar should also have demonstrated expertise in a particular area (e.g., a long track record of developing treatments for a particular disease or developing new and novel procedures for specific surgical problems).



# USC

- The University values scholars who have made important and original contributions, who have had an impact on their field, and whose work shows a clear arc of intellectual and creative development.
- The University welcomes innovative approaches to scholarship and encourages faculty members to stay at the cutting edge of their field. It recognizes and supports a **variety of styles of scholarship, both independent and collaborative.**

# USC

- The University **supports both independent and collaborative work**. In some fields collaborative work is the norm. In evaluating a dossier with collaborative work, UCAPT looks to distinguish the intellectual contributions of the candidate.
- If the preponderance of a **candidate's research is collaborative**, one way that the nature of the candidate's independent contribution **is assessed is through confidential letters from collaborators**. The **candidate's personal statement can also play an important role in identifying the nature of the candidate's independent contribution to joint work**. Candidates are encouraged to provide this information in the personal statement if some of their work is collaborative. It is usually assumed on grants that the intellectual leadership is provided by the principal investigator (or, when explicitly recognized by the granting agency, equal co-principal investigators). The **investigator responsible for a separately scored portion of a large grant is typically credited with that portion**.

# USC

- For collaborative work in multidisciplinary teams, a candidate should **demonstrate evidence of his or her unique and original contribution to multidisciplinary teams**. The National Institutes of Health criteria state that participants in team research can demonstrate this evidence through “independent publication of methodological or seminal contributions to the candidate’s specific research area; where possible, explicit in-print acknowledgment of unique creative contributions in multi-author publications and/or selection for presentation of team findings at national and international scientific conferences; members of research teams should demonstrate peer recognition of their specific contributions and some publications should highlight their distinctive research; creative and unique contributions to team productivity should be documented.” **A candidate who conducts collaborative research should make clear in the personal statement and on the CV what his or her specific contributions were to the collaborative work.**

# University of Michigan

- **Instructional (Tenure) Track**

- **Associate Professor:** Appointment to Associate Professor is given only to persons of well-established professional position and demonstrated scholarly or creative ability that positively impacts their field. Those promoted or appointed to this rank must have achieved national recognition for scholarly accomplishment of significance as evidenced by: evaluations from independent national leaders in their field; national lectureships; memberships on editorial boards and peer review committees; significant involvement in peer organizations beyond membership; and scholarship. Scholarly independence **or a strong collaborative contribution to a scientific team effort** is typical for Associate Professors. Usually this is evidenced by peer-reviewed publications published over the previous five years.

# University of North Carolina

- **(Tenure track) distinction in research:**
- **Research.** For candidates being recommended for promotion for excellence in research, documentation of progressive academic productivity and independence in research is required. Specific criteria for faculty members being promoted to associate professor with tenure on the basis of excellence in research include: 1. Documentation from letters of reference that the candidate is an excellent researcher. 2. A record of a substantial number of original, peer-reviewed research papers in widely respected refereed journals, judged on the quality as well as the quantity of research publications, since the faculty member became an assistant professor. Typically 1–2 publications on average per year as first or senior author since the candidate became an assistant professor is expected, although consideration is also given to the type of research, the impact factor of the publications, and *to faculty whose work is primarily part of team research. In this latter instance the candidate may not be the first or senior author on the publications but their contributions should be clearly described.* Authorship of important review articles, chapters, books, and other forms of enduring scholarly work and communication are additional important indicators of research scholarship. The Chair's letter should clearly state the expectations for publication productivity within the candidate's department and discipline and whether the candidate meets these expectations. *Additionally, if the candidate is significantly involved in interdisciplinary research activities, his or her exact role in such activities should be fully documented.*

# Input from UF College Deans

- College of Medicine: supportive
- College of the Arts: “no issues” – consider adding a more general statement about collaboration
- College of Journalism and Communications: “Enthusiastically in support”
- College of Pharmacy: “looks very good” – edits suggested (incorporated)
- College of Dentistry: “nicely thought out”; supported by Assoc Dean
- No response (3 emails): other colleges