Hello,

As the chair of the UF-Faculty Senate Research and Scholarship Council (SCORS), and since you are the chair of your College Faculty Council, I welcome comments about this Proposal, if possible, by October 21 (See attached doc). We understand that you may not have a scheduled meeting during that time period, but we are confident that, as the chair, you would be most representative. The goal is to review this proposal and submit it to the Provost Office in a timely manner.

You should know that the SCORS Council has been working on this Proposal for "University of Florida Promotion and Tenure Policy and Procedures Regarding Team Science/Scholarship" since January 16, 2018, while a Task Force was working on it for about one year prior. It was presented and reviewed twice within our council and we invited key stakeholders to provide suggestions/recommendations, which have been incorporated in this updated proposal and accepted unanimously in our last council.

In summary, the proposal highlights the benefits of UF adopting P&T criteria to recognize individual faculty while also recognizing their contributions to, and support of, team science and academic efforts. Similar examples from other institutions were also presented and discussed, along with feedback received from Deans, etc. We believe this would help for the recruitment and retention of most indispensable faculty candidates. All these documents can also be found in SCORS webpage.

We appreciate your diligent collaboration in this effort as we believe it can only help the Faculty members in this unique situation and consequently help all their team members.

Sylvain

(Note: I have CC Laurie Bialosky, as she keeps track of all exchanges related to the Faculty Senate.)

Alice Rhoton-Vlasak,MD University of Florida Department of OB/GYN

October 12, 2018

I at least read this today, and it makes a lot of sense to me. I have no edits, but the only concern is whether a chair, or anyone not involved in the project, will be able to certify efforts other than by the word of the faculty or PI of the team. I know I have many projects, that chair could not say much about. It looks like though, despite this minor limitation, it has worked at other places very well and team science is involved. We are still awaiting the comments and input from other FC officers.

Thank you for doing this

October 14, 2018

I think this would fill a significant hole for those of us who support other people's research on our patients. We often don't get any effort support but it does take time and is part of the academic mission.

Caryn E. Plummer, DVM, DACVO Associate Professor, Comparative Ophthalmology College of Veterinary Medicine

October 10, 2018

I have brought this proposal to my FC and to my college faculty and everyone is overwhelmingly supportive of it. The main concerns that were raised repeatedly involve the language: "Up to three letters of evaluation should be solicited from collaborators (internal or external) who will describe the activities and impact of the individual faculty member on the project(s) and results produced by the research/scholarship team(s). These letters would be in addition to the required letters of evaluation."

Comments included:

"Is it realistic to expect this many letters?"

"In my experience, it does not seem that a department chair would be able to speak to a faculty member's contributions to the overall success of the research/scholarship team unless they are a team member? It seems like the letters from collaborators would potentially be of more value as long as collaborators maintain professionalism and collegiality."

"I would be very supportive of this approach and it would be critical to encouraging clinical translational work. I was a little concerned about the following language. It would seem to require three letters for each co-authored paper. This could be a considerable administrative burden it is not entirely clear why the self-description of role which is standard - is not sufficient."

"What about minimum? I would suggest one letter from an investigator and one from a chair is good enough."

I thank you for the opportunity to participate in this process and to provide feedback. The faculty of Vet Med applaud your work and efforts on our behalf. This is particularly important for us given the very large number clinical faculty we have. One of our college wide goals is to enhance and increase interactions and collaborations between clinical and basic science faculty and this proposal supports and bolsters the benefits of such collaborations. I have extended additional queries regarding this proposal to my faculty colleagues. I will let you know if additional comments or concerns come forth. Please let me know if I can assist your efforts in any way.

Charlene A. Krueger, PhD, ARNP Associate Professor, College of Nursing Co-Director of the BSN Program

October 9, 2018

Thank you, Dore. I will share with our Faculty Executive Committee and members on our Appointment, Promotion, and Tenure Committee. I appreciate the volume of work that must have gone into bringing these documents this far.

Mohammed Nadimul Islam, D.D.S., B.D.S. Clinical Professor, College of Dentistry

October 19, 2018 Hi Sylvain, Finally I could give the whole thing a read over and I think it is appropriate! Really it is a very well done document.

David Blackburn, Ph.D. Associate Curator of Amphibians and Reptiles Florida Museum of Natural History October 23, 2018

I have brought this before our Natural History Advisory Council, which functions as the equivalent of the College Faculty Council within the Florida Museum of Natural History.

We are in support of this effort. We believe this reflects what is already a strong value placed upon collaborative work by faculty in the Department of Natural History, the sole department in our college.

One concern raised was that we still also place a strong value on encouraging our students and postdoctoral researchers to pursue leadership roles in research projects. To develop competitive portfolios for academic positions, we do not feel that early career scientists can afford to take only a collaborative or team (i.e., middle-author) role on research publications.

Thank you for allowing us to provide feedback on this important step in the T&P process

Yong Jae Ko, Ph.D.
Professor
Tourism, Recreation, and Sport Management

October 9, 2018

Thanks for the opportunity to read the document.
I have some minor suggestions for clarification:

From: Alteri,Suzan

Sent: Monday, November 19, 2018 5:36 PM

To: Dore,Sylvain **Cc:** Bialosky,Laurie A

Subject: Welfare Council Feedback for SCORS Team Science/Collaborative Scholarship

Hi Sylvain,

Below is a summary of the discussion the Welfare Council had at our meeting today. We discussed the proposal in-depth and some of the feedback will reflect that. Also, Chris Hass (Associate Provost for Academic Affairs) attended the meeting. Dr. Hass is available to meet with you to further discuss the proposal.

The Welfare Council wholeheartedly agrees that collaborative scholarship is important and the value of these contributions should be reflected in the T&P guidelines. However, the terminology of Team Science would need to be changed to something more broad (such as collaborative scholarship) since many colleges at UF are involved in collaborations that produce discoveries and advancement of knowledge. The council recognizes that there is a history in the sciences and health sciences for the terminology, but UF would need to use terminology that fits in within the overall T&P Guidelines for the entire university.

The council also agrees that there needs to be a UF Statement of Value to set the tone for the rest of campus.

Much of our discussion focused on page 2 and 3 of the proposal. The Council recommends altering the language to reflect that you are recommending what and how significant contributions are documented in the T&P packet. This is because some of the T&P Guidelines are part of the university's Collective Bargaining Agreement and any changes that would affect those areas would need to be negotiated with United Faculty of Florida. The proposal might also want to address the amount of work involved for chairs, the Academic Personnel Board, and Academic Affairs and how UF's current systems could be aligned.

In particular the Council has the following questions:

- 1. Has SCORS looked at the entire T&P packet and sections to determine where it would best fit to change language and directions that come from the university?
- 2. Can these contributions be more effectively codified in annual evaluations so that what is included in the packet is more of a summary?
- 3. For publications, what roles would you want to include? The council was unsure if you wanted candidates to provide a written statement for every publication or not. If not, how will contributions other than Lead or Second other be documented without undue burden for candidates, the APB, etc.?

Concerns were also raised about the letters of evaluation. The Council thinks that the letters should be different from letters of evaluation that are used in the T&P packet. Perhaps the letters could confirm the role the candidate had in grants, etc., but should not give a statement as to whether the candidate should receive tenure.

Other ideas discussed:

Making collaborative scholarship (including Team Science) a separate section in the T&P Packet Piloting the change with a few colleges and/or departments

Summary:

Consider drafting top-level language for UF's Tenure and Promotion Guidelines as seen from other institutions in your PowerPoint this year and then work on logistics of how to implement and integrate with the CBA, Colleges, etc. the following year (2019-2020). Consideration from SCORS should be given to harmonizing the CBA, the current T&P Guidelines, and the T&P Packet with the SCORS proposal.

Thank you, Suzan Chair, Welfare Council

Suzan Alteri
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Recognizing and Rewarding Contributions to Eam 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); <u>and/or a</u> <u>team/collaborative scientist (2)</u>
 - 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.
 - 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 <u>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 <u>leadership to large collaborative treatment or clinical trials groups</u>. 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).</u>

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 <u>variety of styles of scholarship</u>, <u>both</u> <u>independent and collaborative</u>.

USC

- The University <u>supports both independent and collaborative work</u>. 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 <u>candidate's research is collaborative</u>, one way that the nature of the candidate's independent contribution <u>is</u> <u>assessed is through confidential letters from collaborators.</u> The <u>candidate's personal statement can also play an important role in identifying the nature of the candidate's independent contribution to joint work.</u> 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 <u>investigator responsible</u> <u>for a separately scored</u> <u>portion of a large grant is typically credited with that portion</u>.

USC

For collaborative work in multidisciplinary teams, a candidate should <u>demonstrate evidence of his or her unique and original contribution</u> <u>to multidisciplinary teams</u>. 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." <u>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.</u>

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.

- (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

Proposal for University of Florida Promotion and Tenure Policy and Procedures Regarding Team Science/Scholarship (October 5, 2018)

Introduction

Collaborative research has been the dominant mode for scientific inquiry and discovery for several decades. The percent of science and engineering publications written by two or more authors rose from 50-60% of publications in the 1960's to 80% in 2000. In 2013, 90% of all papers were authored by at least two individuals. The National Academy of Science (NAS) defines team science as, "Scientific collaboration, e.g. research conducted by more than one individual in an interdependent fashion, including research conducted by small teams and larger groups." An effective science team achieves goals and objectives that lead to new research findings or methods or to translational applications of the research. The benefits of conducting research or scholarly activities with teams include greater ability to approach more complex problems with contributions from individuals with specific expertise in different areas bringing new skills and insights to projects. However, challenges have emerged that may impact the willingness of individuals to participate in team science or team scholarly activities, including

difficulty advancing through academic institutions. Traditionally, university policies, including at the University of Florida (UF), emphasize accomplishments of individuals and have not articulated criteria for evaluating individual contributions to team-based research and scholarship. The NAS Team Science Report specifically recommends that universities should proactively develop and evaluate broad principles and more specific criteria for allocating credit for team-based work to assist promotion and tenure committees in reviewing candidates.

A UF Health Science Task Force was convened at the request of the UF Clinical and Translational Science Institute, to provide recommendations that would offer specific criteria for allocating credit for teambased work, inform faculty of the accomplishments that would generate such credit, and assure appropriate academic advancement for faculty participants in effective team science/scholarship programs.

To affirm that the University of Florida supports and values participation in team science/scholarship and to establish measureable criteria for promotion and tenure, we propose the following:

- An explicit statement by the University stating the importance and value of contributions to team science should be included in the tenure and promotion guidelines. E.g.:
 - The University of Florida recognizes that teams of investigators are responsible for many new discoveries and advancements of knowledge. Therefore, documentation of an individual faculty member's significant contributions to effective teams will be considered as evidence for distinction in research/scholarship.
 - Because participation in collaborative, multidisciplinary research teams is highly valued, authorship other than listed as first or last author will be recognized as significant as long as the faculty member's unique contribution can be discerned by descriptions from the faculty member, chair, and collaborators.
- Mutually beneficial collaborations underpin the effectiveness of multidisciplinary teams, so that the expertise of one individual complements the expertise of others and results in innovation. Demonstration of significant contributions to effective teams will be documented in the promotion packet by:
 - Description by the faculty member of scholarly/scientific contributions to each team of
 investigators he/she is engaged with, including design, performance, analysis,
 presentation and publication of research, and preparation and submission of research
 grants. Such information should be summarized in the narrative describing
 contributions to the discipline and noted in a description of each listed publication and
 research grant.
 - The Chair's letter must describe the contribution of the individual faculty member to the overall success of the research/scholarship team(s).
 - Up to three letters of evaluation should be solicited from collaborators (internal or external) who will describe the activities and impact of the individual faculty member on the project(s) and results produced by the research/scholarship team(s). These letters would be in addition to the required letters of evaluation.
 - A faculty member may, as an option, include a network analysis of the extent and impact of their collaborations with investigator and investigative teams.

- ➤ Each College should delineate which activities it considers major, moderate and minor contributions to the impact of an investigative team. As examples only:
 - For grant preparation:
 - Major contribution = substantive input into the overall research design with inclusion of pilot or preliminary findings from the faculty member's work
 - Major contribution = responsibility for writing the overall grant
 - Moderate contribution = writing one or more sections
 - Minor contribution = overall critical review of the proposal without substantive changes
 - For research activities:
 - Major contribution = regular participation in one or more of the protocol activities and regular participation in investigator meetings
 - Moderate contribution = participation in data collection, participant recruitment, data management, or quality control activities
 - Minor contribution = serving as an advisor or consultant for protocol activities
 - For analytic activities:
 - Major contribution = planning, directing and performing the analyses; developing the results tables and descriptions; partnering in the interpretation of findings; substantive input into the overall organization and writing of a manuscript
 - Moderate contribution = preparing and writing the analytic section
 - Minor contribution = performing selected portions of the analyses or the written manuscript
- ➤ College Deans and Promotion and Tenure Committees should be provided with educational modules on team science/scholarship and assistance with the implementation of the Policy and Procedures Regarding Team Science/Scholarship.

UF Health Science Center Task Force for Team Science Promotion.

Henry Baker, PhD, Professor and Chair, Molecular Genetics and Microbiology, College of Medicine; Reginald Frye, PharmD, PhD, Professor and Chair, Pharmacotherapy and Translational Research, College of Pharmacy;

Marcio Guelmann, DDS, Professor and Chair, Department of Pediatric Dentistry, College of Dentistry; Gail Keenan, PhD, RN, Annabel Davis Jenks Endowed Professor for Teaching and Research in Clinical Nursing Excellence, College of Nursing;

Marian Limacher, MD, Senior Associate Dean for Faculty Affairs and Professional Development and Professor of Medicine, Division of Cardiovascular Medicine, College of Medicine, Task Force Chair; Chris McCarty, PhD, Professor of Anthropology, Director, Bureau of Economic and Business Research, College of Liberal Arts and Sciences;

Rowan Milner, MVSc, PhD, Hill's Associate Professor of Oncology and Chair, Department of Small Animal Clinical Sciences, College of Veterinary Medicine;

Mattia Prosperi, MEng, PhD, Associate Professor, Department of Epidemiology, College of Medicine and College of Public Health and Health Professions;

Glenn Smith, PhD, Professor and Chair, Clinical Health Psychology, College of Public Health and Health Professions.

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Additional resources:

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^{II} Nancy J. Cooke and Margaret L. Hilton, Editors; Committee on the Science of Team Science; Board on Behavioral, Cognitive, and Sensory Sciences; Division of Behavioral and Social Sciences and Education; National Research Council. The National Academies Press, 2015. Pp 2-11.