Recommendations on Collaboration and Scholarship at USC

Approved by the Joint Provost-Academic Senate University Research Committee 24 November 2010

Preface:

During the 2009-2010 academic year, the University Research Committee considered the question of collaborative research as an emergent, cutting-edge approach across all disciplines, and how well USC promotes a collaborative approach. The committee agreed that, while many disciplines, especially in the natural sciences, have long practiced collaborative approaches, the practice is showing great value in disciplines that do not have such a strong tradition, as in the humanities and many of the social sciences. Further, USC is among the leading centers for interdisciplinary collaborative research, which has raised new questions about promotion and tenure review standards.

For these reasons, the University Research Committee developed this document ,which has two purposes: First, it sets out some general, non-binding recommendations to the Academic Senate that could be adopted as "guiding principles." Second, it makes specific recommendations for slight amendments to the language in the UCAPT manual, and Faculty Handbook to reflect the current value placed on collaborative research, without devaluing traditional, single-scholar research. It must also be borne in mind that there are different and very legitimate cultures of collaboration to be found among different departments, schools, and disciplines. These proposed guidelines are intended to strengthen those cultures, not to supercede them nor to homogenize those cultures.

Note: Collaborative teaching can often be very closely intertwined with collaborative research. Many of the same general principles outlined in this memo may also apply to collaborative teaching, but we do not address teaching in this memo.

Summary of Recommendations:

- #1: Adopt as a general principle that "The USC community supports and encourages collaborative efforts in research and scholarship."
- #2: When assessing research activity, USC should encourage schools and all relevant academic units to determine fair and consistent ways to evaluate collaboration.
- #3: USC should continue to develop and establish internal support for faculty seeking to develop collaborative research programs and grant proposals.
- #4: Revise the UCAPT Manual to Recognize Collaboration (see below for specifics)
- #5 Revise Faculty Handbook to Recognize Collaboration (see below for specifics)

Defining Collaboration in Research

Collaboration takes at least two major forms in the academy. It can be defined as 1) *Inter*disciplinary, a process in which two or more people from different disciplines bring the strengths of their disciplines together to ask and answer new kinds of questions, producing a multiplier effect in originality and impact of their findings. Or, it can be defined as 2) *Intra*disciplinary, in which two or more people within a standard discipline combine strengths in different specializations within that discipline. Combined multiplier effects are also possible in this form of collaboration.

More generally, collaboration is the phenomenon of combining diverse expertise, and working together towards a common intellectual problem or unsolved conundrum of any kind. In ideal situations, these collaborations achieve things that single scholars simply cannot, because even the greatest scholars and researchers can only master a certain range of disciplinary skills.

Collaboration also ideally involves more or less equal partners, to be distinguished from the mentoring relationship of advanced graduate students and post-doctoral fellows. For the most part, this document addresses the collaboration of peers, not collaboration in training. But the basic principles of just collaboration outlined in this document should also apply to the mentor-mentee relationship, in terms of fair attribution of the relative contributions of the partners in collaboration, authoring, etc.

Enduring Value of the Single-Scholar Model

Although these recommendations concern the recognition and encouragement of collaborative research, they are in no way meant to diminish the importance of single-scholar research. On the contrary, we must continue to be attentive to the qualities and values of non-collaborative research, which can be defined as scholarship produced and published by a single scholar. Especially in the humanities and social sciences, most major achievements have been attributed to single scholars, although the practice of collaboration has been increasing rapidly here as well. Thus, there are, and will remain, many scholars whose work is appropriately and effectively conducted without engaging in collaboration and multiple-author publications. Such scholarship should not be discouraged.

Benefits of Collaboration

It is widely perceived that teams working collaboratively often obtain greater resources, scholarly productivity, and recognition, especially when facing tight competition for finite resources. Structured methods of collaboration tend to encourage cross-disciplinary knowledge and communication, and it has become increasingly evident in recent decades that research can, in many fields in which the single-scholar model predominated in the 20th century, benefit greatly from collaborative approaches. From the natural and social sciences to the arts and humanities, teams of interdisciplinary investigators have answered new kinds of research questions and achieved breakthroughs in knowledge and understanding. Such methods should therefore be encouraged in the 21st-century university.

Recommendation #1: "The USC community supports and encourages collaborative efforts in research and teaching."

Evaluating Collaboration at USC

To reflect the value that USC places on collaborative research, the evaluative committees in schools and units will need to develop fair and consistent standards for assessing the quality, volume, extent, and impact of the collaborative activity of a faculty member. Precise criteria will vary between schools and units, but those criteria could include: participation in intra- and inter-disciplinary research grant proposals and research teams; co-authorship of multi-author collaborative publications; "extent" or "disciplinary distance" between a researcher's home specialty and those of her/his collaborators; and external assessments of the productivity and impact of the collaboration.

Recommendation #2: When assessing research activity, USC should encourage schools and all relevant academic units to determine fair and consistent ways to evaluate collaboration.

Support Mechanisms for Collaboration at USC

Fostering and supporting collaborative efforts has become an important goal of internal USC research support. Examples include the *James H. Zumberge Research and Innovation Fund*; the *Borchard Foundation Colloquium Grant*; and the Provost's *Collaboration Fund*.

Recommendation #3: USC should continue to develop and establish internal support for faculty seeking to develop collaborative research programs and grant proposals.

Collaboration Reconsidered in the Promotion and Tenure Process

The USC Promotion and Tenure Committees are tasked with the vital role of evaluating scholarly quality and productivity. A university that supports collaboration should certainly reflect that value at critical points of evaluation, when a scholar is being considered for promotion and tenure.

In the USC Faculty Handbook as well as other policy statements, much of the promotion and tenure review process is oriented toward evaluating the "independent contributions" of faculty to research products. This traditional standard has a solid foundation in a lasting principle.

It should be noted clearly that the opposite of "independence" is not "collaboration," but "dependence." The reason we value independent contributions is that intellectual dependence merely offers derivative contributions. Independence should mean, first of all, that the scholar has achieved independence from her or his mentors. Without this

clarification, "independent contribution" standard could be read to value independent scholarship over collaborative scholarship. The key emphasis should be on identifying original and creative contributions by individuals, whether they are contributing in the single-scholar model or the collaborative model. Because of the ambiguity of "independence" we have replaced it in several places.

It is important appreciate the "multiplier effect" that named above, in which the sum of a collaboration is (ideally) greater than its parts. The synergy and the new, jointly-arrived-at insights would have been impossible were those same scholars to work in isolation on the same problem. Tenure and promotion committees need to know whether any given party to a collaboration was a creative source of the important achievements of that collaboration, in contrast to being merely a "free rider."

These observations led us to make two separate recommendations, #4 and #5:

Recommendation #4: Revise the UCAPT Manual to Recognize Collaboration

Proposed Revisions to Passages Bearing on Collaboration in the UCAPT Manual:

Review of the UCAPT manual revealed a significant number of passages that we believe should be adjusted to fully recognize the value of collaborative research. In general, the UCAPT manual, by emphasizing "independent" research, implicitly devalues collaborative research. We recommend slight revisions in the following passages of the UCAPT manual as last revised on 1 September 2008.

2.1 Gauges of Quality

Current: "Fundamentally, we want to know whether the candidate has made a real contribution, and whether that contribution has made an impact or shows high likelihood of impact on the field, and demonstrates focus and independence."

Proposed: "Fundamentally, we want to know whether the candidate has made a real contribution, and whether that contribution has made an impact or shows high likelihood of impact on the field, and demonstrates focus and originality."

2.2 Expectations for Tenure and Promotion

Current: "A candidate for tenure is expected to have become an independent investigator, whose scholarship has a focus, and to have grown beyond the doctoral and post-doctoral work that led to initial appointment. A sustained scholarly trajectory should be predicted for the candidate."

Proposed: "A candidate for tenure is expected to have demonstrated important and original scholarly contributions, whose scholarship has a focus, and to have grown beyond the doctoral and post-doctoral work that led to initial appointment. A sustained scholarly trajectory should be predicted for the candidate."

Current: "If the candidate for promotion or tenure is a frequent collaborator, his or her own contribution should be distinguishable and important."

Proposed: "The University recognizes and supports a variety of styles of scholarship, both independent and collaborative. In all cases, the University looks to distinguish important and original contributions on the part of the candidate."

2.4 Interdisciplinary Teaching and Research

Current: "Particularly in interdisciplinary work, it is important to devise means to evaluate work as co-P.I. or member of a research team. UCAPT and the Provost's office are available to offer assistance to help departments evaluate interdisciplinary work."

Proposed:

"Particularly in interdisciplinary work, It is always important to evaluate the contributions of candidates toward research and scholarship, whether working independently or collaboratively. UCAPT and the Provost's office are available to offer assistance to help departments evaluate interdisciplinary work."

6. Dossier – Personal Statement

Current: "The candidate can explain the contribution of the body of work, and the trajectory of work done and planned. The candidate's role in collaborative publications should be explained."

Proposed: "Overall, the candidate can explain the contribution of the body of work, and the trajectory of work done and planned. All faculty candidates for promotion or tenure who wish to have their collaborative research considered as part of their evaluation should include in their dossiers a personal "statement of collaboration," explaining the importance and value of collaboration to their research, how it advances the scholarship in the candidates' home disciplinary field or the interdisciplinary fields involved; the kinds of collaboration(s) s/he has undertaken, and an account of their own original and creative contribution to such collaboration(s).

9.3(b) Collaborators

Current: "If much of the candidate's work is co-authored, a few referees should be important co-authors with the candidate (in addition to the five or six independent referees.) We expect letters from these referees to address the significance of the sequence of authors and the contribution of the candidate as a co-author. These topics should also be addressed in the committee report."

Proposed: "The University recognizes the importance of intra- and interdisciplinary collaborative research resulting in co-authored publications. If much of the candidate's work is co-authored, co-created, or otherwise produced collaboratively, then in order to assess the original, creative contribution of the candidate to such works, a few referees

should be important co-authors with the candidate. These co-author referees shall be in addition to the five or six non-collaborating referees. Letters from co-authoring referees should address the significance of the sequence of authors and the original, creative contribution of the candidate as a co-author. These topics should also be addressed in the committee report."

Recommendation #5: Revise the Faculty Handbook to Recognize Collaboration

Proposed Revisions to Section 4-F (1) of the Faculty Handbook: "The Dossier."

Existing:

(p. 13) "Although some of the reviewers may be selected from a list of names provided by the candidate, most should neither be from that list nor have a close personal or professional relation with the candidate."

Proposed:

Although some of the reviewers may be selected from a list of names provided by the candidate, most should not be from that list. Care should be taken to avoid soliciting letters from scholars whose close personal or professional relation with the candidate may predictably bias the scholars' evaluation. However, for scholars who are engaged in collaborative research, care should also be taken to include letters from scholars with whom the candidate has collaborated (and such scholars may necessarily have a close professional relationship to the candidate). These letters from co-authoring referees should address the significance of the collaboration in terms of impact on the disciplinary fields involved, and the creative contributions of the candidate as a research collaborator and/or co-author.