The robust and mutually beneficial relationship that can evolve between an experienced faculty member and a less experienced protégé constitutes a time-honored tradition within academia. Young scholars learn the practices characteristic of their scholarly community, and established scholars help to articulate and contribute to the practices of a field. Recognizing the benefits of mentoring and the process of ongoing learning among all faculty, both to the institution and to individual faculty members, many universities have sought to enhance the impact of mentoring through formal initiatives designed to support and encourage it. These efforts can produce some tension, however, as many of the most successful mentoring relationships can appear to be informal, or even casual.

The questions universities face, then, center on how best to enhance existing cultures of mentorship such that every young scholar has the option of mentorship while at the same time recognizing the wide variety of practices in which mentoring already occurs across any given campus. Universities are also experiencing a sense of urgency. In a world characterized by rapid change, a deluge of information and the demands for greater collaboration as we address complex problems, mentorship becomes increasingly significant. Rather than simply helping to acculturate new members to a campus community and a disciplinary field, mentoring instead serves as a vital component in a university's broader mission to achieve success.

The University Research Committee studied mentoring at USC with the aim of achieving this vision. This report provides the results of the committee’s analysis and deliberations, along with seven recommendations for enhancing mentoring of faculty at USC.

It should be noted that the present report was developed with a primary focus on Tenure Track (TT) faculty. While many of the observations and recommendations will apply equally to non-tenure-track (NTT) research faculty, a more comprehensive study should include participation from such NTT Faculty in the future. The committee observes that it may also be necessary to develop a broader set of mentoring recommendations covering mentoring not only related to research but also in teaching (including in the clinic), and extending the coverage to all faculty both Tenured/Tenure Track and Non-Tenure faculty. But mentoring of NTT teaching and clinical faculty is considered largely beyond the scope of the research committee. For NTT Research Faculty, there are two main groups that should be represented: Research faculty that routinely act as PI on funded projects, and Research Faculty that play more of a supporting (rather than the leadership PI) role. Issues for each group may be different and therefore it is deemed necessary that any follow-on study should include participation from both groups.
A. Survey of Faculty

The committee met and discussed the topic during the fall and spring of the 2013-2014 academic year and fall of 2014, and surveyed the faculty for their input. Three questionnaires were developed based on discussions of the committee: (1) a mentee questionnaire was sent to junior tenure-track faculty, (2) a mentor questionnaire was sent to senior tenured faculty (associate and full professors) throughout the university and (3) a department chair survey was sent to all chairs and all faculty deans. We received 269/1161 responses from the Mentors (23.2% response rate), 136/395 responses from the Mentees (34.4% response rate) and 40/142 (28.2% response rate) responses from chairs/faculty deans.

The questionnaire and the discussion focused upon research mentoring, including its effect on the tenure and promotion process. The committee felt that mentoring is a very complex topic. Several themes and potential solutions did emerge from the survey results and discussion, and we summarize these below.

A.1. Mentor and Mentee Survey Report

Because of the wide range of different schools and departments and differences in mentoring across the campus, statistical analysis of the survey results is not meaningful, and we cannot derive quantitative conclusions. Many of the respondents included free-text comments that reflected their personal experience or their knowledge of their own department. Based on the numerical results, free-text responses, and the committee's subsequent discussion, we identified the following issues from the survey, recognizing that this is a small sample of the total faculty population at USC and represents the opinions of a self-selected group of respondents rather than the actual policies of departments:

a. Successful mentorship can have a profound positive impact on junior faculty careers and promotion. Many respondents strongly encouraged efforts to improve the mentorship process at USC.

b. Research mentorship programs vary by department, with some having senior mentors assigned to all incoming junior faculty, while others have less formal programs or make mentors available to junior faculty who so request. Some junior faculty members stated that they did not know whether formal mentorship programs existed in their departments.

c. Although mentors are often permitted to participate on faculty evaluation and promotion committees, most mentees and mentors did not identify a conflict of interest. However, there were a few cases in which mentees did not feel that they could openly discuss sensitive political or academic issues with mentors.

d. The quality of mentorship varies widely and is dependent on the mentor, mentee, department expectations, and the nature of the particular field.

e. Many mentees stated that they had no role in assignment of their mentor and for political or policy reasons did not feel comfortable to request a different mentor. In contrast, most mentors felt that they would be able to request a different mentee if they desired.
f. The frequency of mentor-mentee meetings varied widely, but the most common preference among mentors and mentees was for monthly meetings.

g. Most departments did not have a formal system for identifying a mentor or co-mentor from outside the home department, although several respondents felt comfortable seeking out mentors or specific advice on an informal basis.

h. Mentors varied widely in their view of the mentorship process, with some expressing a strong belief in the process and emphasizing the importance of mentorship in junior faculty development, while others expressed a belief that the formal mentorship process was ineffective and time-consuming, and faculty should seek out mentors for themselves as needed.

i. Many mentors and mentees said they were not aware of specific goals, standards, or recommendations for the mentoring process within their departments. More than half of mentors and mentees would be willing to participate in a workshop on mentoring.

j. Research mentoring was generally focused on advice about the promotion and tenure process. Mentoring rarely addresses ongoing career success in the global academic community.

k. In some cases, mentees complained that mentoring consisted primarily of criticism and statements designed to create uncertainty and fear of the promotion process.

l. Several women were particularly critical of the lack of mentorship around gender issues for faculty.

m. Department chairs often take on the role of informal mentors, particularly in smaller departments.

n. Faculty who enter at the associate or full professor level are not provided with mentors. Some felt that mentorship would have been useful for the associate to full professor transition, while others felt that mentorship beyond the junior faculty level would be demeaning.

o. There does not appear to be a formal system for evaluation of mentors and feedback to mentors or department chairs about the quality and success of mentorship.

p. Mentors are not always given credit for time spent mentoring, and this may decrease willingness to take on a mentoring role.

The committee performed a non-exhaustive search of the USC websites, and found that most USC schools that were checked do in fact have a formal mentorship policy, and in some cases individual departments have mentorship policies. It was not always easy to find the mentorship policy documents. It was noted that CHLA has a particularly detailed and helpful document on the mentorship process.

A.2 Department Chair Survey Report

The committee noted that the department chair/institute director/division chief plays a key role in mentoring the independent faculty member. This individual provides a role model in the specific discipline, and can mediate faculty relationships within the department, as well as make introductions and provide career support externally. Department chairs may receive informal but important training at their national research discipline groups, and administrative organizations such as AAMC also provide leadership and mentoring training for department chairs and associate deans. We are not aware that USC provides such training, but this could be highly beneficial.
Our survey of department chairs (and deans of Faculty Councils) produced these findings:

a. The majority of respondents said their department has a mentoring program, and that mentoring is a “requirement” for junior faculty; however, they were not aware of their department having written mentoring program guidelines.

b. While no respondents identified “formal” or “official” metrics by which the department evaluates the success of the mentoring program, “research performance” of mentee, including securing tenure, number of top publications and ability to obtain extramural funding, were considered examples of a successful mentoring program.

c. Similarly, more subjective criteria of “particularly successful” mentoring programs included whether junior faculty considered that advice given was “useful,” that the junior faculty felt “well-supported,” and that former mentees showed a “willingness to serve as a mentor soon after their promotion.”

d. The mentor/mentee selection and assignments are typically made by the dean, the department chair, or the faculty affairs committee, in consultation with the mentee and mentor.

e. The need for “overlap in research” interests was a common theme as a basis for mentor/mentee selection, as was research experience and track record of the mentor.

f. “Mutual consent” or “acceptance” by both the mentee and mentor was also a requirement in the selection process.

g. Assessment of whether a mentor/mentee “good fit” had been made is overall informal, with follow-up mostly considered to be the responsibility of the dean or chair.

h. Response to “aspects of the mentoring program that can be improved upon” included the need for more “formal” and “sustained” follow-up, oversight, feedback and assessment, increased monitoring of programs, and the need for clarification of program “desired outcomes.” A majority of respondents also cited the need for formal faculty mentoring guidelines.

i. The need to provide “continued guidance” to mentors was also a common theme, as was the need for “recognition/validation” of the time and energy commitment made by mentors and that such effort should be considered as “service” and formally recognized in the annual review process.

B. **Survey Conclusions and Recommendations**

As a result of the survey results and discussion, the committee identified several possible preliminary strategies to improve mentorship. Mentorship is a very complex issue. For this reason, policies implemented at a campus-wide level needs to take into account the differences between schools and departments, and the particular needs of faculty in each department. However, all departments should be expected to do the following:

**Vision**

**Recommendation 1:** Recognizing the overarching importance of mentoring in furthering the academic mission of USC, each unit or department needs to write its own plan for how mentoring
will help the unit in its mission to achieve excellence by helping its faculty succeed. This vision statement needs to be available to all department faculty, and should be a living document that evolves with time.

**Metrics**

At face value, there are several quantitative and otherwise definitive metrics that may be appropriate for each unit, and can be considered a first-order indication of mentoring success. These could be number of papers and books, research funding amounts, number of students graduated, course evaluation scores, and achieving tenure for junior faculty. However, more fundamentally, there are other indications of success such as sustained academic excellence and recognition. One could argue that a successful mentoring program is one that is self-sustaining, in that there is an ongoing desire to continue the mentor-mentee relationship, there is positive self-assessment, and there is a desire to actively seek out mentoring.

**Recommendation 2:** Each unit or department needs to formulate its own specific programmatic metrics for mentoring to meet its goals as specified under recommendation 1. These standards should be written and available in a brief document that all department faculty can easily access, and should be the basis for the department’s mentoring program. Departments may choose to include participation in their mentoring program as a reporting item in the annual faculty activity reports and therefore part of the annual faculty evaluation process.

**Participation**

Assistant professors and pre-tenure associate professors are those who benefit the most from mentoring, especially in the first three years of their appointment. However, that is not when mentoring ends. Post-tenure associate professors and even full professors could still benefit greatly from mentoring from their peers and senior colleagues. Learning and upward mobility should be perceived as a career-long requirement and desire; in that sense, at every level there is room for receiving mentoring.

**Recommendation 3:** All departments should be required to provide a mentoring program for all of their pre-tenure faculty, and are highly encouraged to provide mentoring programs for their tenured professors. All tenure-track professors should be required to participate in the mentoring program in their first year at USC. Assistant professors beyond their first year, and all associate professors, should be highly encouraged to participate in the program.

As well, it should not only be allowed, but also encouraged, for full professors, especially those interested in technical and organizational leadership positions.

**Mentor Assignment and Procedures**

There is great variance among different units at USC in procedures, and there is no uniform requirement or method. In some cases mentors are assigned by department chairs, in some other cases mentor-mentee pairs are informally formed. The pairing is not always by choice of the mentee or the mentor. The process of mentoring in some cases includes occasional office meetings
or email exchanges, in some cases coffee or meal meetings, in some cases providing feedback on papers and proposals, etc. The frequency of interactions is highly variable as well, and it is not always an assessment of the utility of the relationship for either the mentee or the mentor.

**Recommendation 4:** The process of assignment of mentors to mentees depends on many factors such as unit/department size and resources, the unit’s perceived criteria of faculty success, and availability of a good match between the mentors and mentees. In general, it is recommended that at least two mentors be assigned to each mentee, with one of the mentors from outside the mentee’s immediate group or department. This arms-length mentor would ensure an unbiased and unstrained relationship, where the mentee can voice his/her concerns without reservation, and would receive a complementary set of suggestions and pointers. The mentor-mentee pairing can be done by the department Chair, but ideally by a 2-3 member Mentoring Committee who ensures that there is a good match and sufficient enthusiasm for all mentee/mentor relationships in the department. There should be a periodic (annual or more frequent) opportunity for providing feedback to the department Chair and/or the Committee, as the case might be. The mentee should be provided a chance for a confidential meeting with the Chair and/or Committee, and a chance to request a change or addition of mentors. A mechanism for enabling change of mentors is to convey to the mentee that it is possible to have an annual “rotation” of mentors to benefit from multiple mentoring styles.

**Recommendation 5:** The interactions between the mentors and mentees can take on various forms, and include informal meetings and discussions, coffee or lunch meetings. A mentor should provide tangible help to the mentee, offering to provide constructive feedback on draft papers and proposals, introducing the mentee to funding agency program managers, recommending them to serve on review panels, nominating them for awards, etc. The mentors and mentees should meet in-person at least twice per year. The departments should be encouraged to provide examples of mentoring success stories on their websites and at faculty meetings, to encourage and to set standards, and set expectations for mentors. The Mentoring Committee or the Chair, as the case may be, provides a brief annual assessment of the perceived success of the program to the relevant Dean’s office.

**Recommendation 6:** Departments should carefully manage possible conflicts of interest that may arise between mentors and mentees. Mentors must focus on helping mentees succeed, and should not expect mentees to provide anything in return. Departments should also manage conflicts that may arise in the evaluation process of mentees, such as participation in annual faculty reviews as well as the promotion and tenure decision process. The mentee relationship should not count for, or against, candidates during reviews.

**USC Culture**

For mentoring to become part of the USC culture, the mentor and mentee populations must become convinced of its utility and benefit to both sides. It is not something that can be accomplished in a short period of time, and needs one or two tenure cycles, anywhere from 3 to 10 years, for faculty to buy in to the program. The University has already demonstrated its support for mentoring, for example through successful programs such as the Melon Mentoring Program,
which recognizes excellence in mentoring of students and faculty. Such success is commended and must be leveraged and expanded.

**Recommendation 7:** Start the cultural infusion by requiring the mentoring program of all units within the university, and demonstrating its benefits over a period of 3-5 years. The demonstration can be done by annual surveys and confidential in-person interviews. The program can gain and maintain momentum more effectively if it is incentivized, which should include tracking of mentoring that occurs throughout the department and recognition of mentoring as a service contribution and service assignment. In addition, mentoring costs should be reimbursed, including costs for lunch or dinner gatherings, or costs for innovative mentoring approaches or workshops. Mentoring should be considered as part of faculty annual review. Schools should implement awards to recognize outstanding mentoring as a complement to those that are made at the university level. Importantly, to enable excellence in mentoring, the University should consider building training programs for mentors. Last, provision of an effective mentoring program should be a consideration in dean reviews.