January 2010

Excellence in Research in the School of Information, UT Austin

Purpose: This document supplements the material found in the School’s strategic plan (revised 2008). The purpose is to offer guidelines to faculty members for achieving excellence in their research activities, and to be used in evaluating faculty on their research record. This document is not intended to slight teaching or service contributions, and it is hoped that excellence in these areas will be spelled out in future documents prepared by the School of Information GSC.

Principles: Given the wide range of research topics and methods used in information studies, it is practically impossible to spell out the specifics for each kind of research, and we do not try to do so in this document. Instead, we list a small number of observations and principles that apply widely across the range of information studies research.

Information studies: Ours is a multidisciplinary and sometimes interdisciplinary field. Methodological approaches and topics are drawn from many different disciplines – all with a focus on studying issues about information or information technologies and the contexts in which they are embodied. Because information is a concept important to many academic disciplines and other aspects of life, and because information technologies tend to be universal tools with a panoply of applications, there are many opportunities for our faculty to apply methods and knowledge from information studies to a variety of problems outside our discipline. Our School adopts a “big tent” approach to the methods and problems addressed by our faculty, so long as they are either studying information/information technology or using intellectual capital (findings/methods/theories) from our field in application to other problems of social or intellectual importance. Some types of research require teams of researchers, often from several different disciplines; other types of research may involve a single investigator using one particular body of scholarship. It is counterproductive to impose a preferred style of research; each problem dictates its own research approach and environment.

Methodological rigor: This does not mean, however, that anything goes. Excellence entails scholarship (research, concepts, applications) that develops Information Studies (in any of its subfields) through the production of highly regarded, conceptually developed, theory-generative contributions. The expectation is that the work is methodologically rigorous and similar in quality to the work produced in the other top-ranked information studies programs around the United States.
**Demonstrating excellence:** Explicating one’s research excellence to colleagues and external reviewers is fundamentally a qualitative process that is supported in part by quantitative data. As a junior faculty member, striving for tenure and promotion to associate professor, the research narrative needs to make a coherent and compelling case that you are participating in a field of research at the national level and can demonstrate a trajectory of scholarship that will place you over time in a leadership position in this field of research. You should be able in your narrative to demonstrate your intervention into this field of research, by giving good examples of how you have raised new questions, introduced new methods, resolved some standing problem, posed a new context, or developed an important new application. Numbers of publications and the quality of the venue in which they appear (including statements about acceptance rates) should be adduced as corroborating evidence, but they are not sufficient in and of themselves. Faculty members seeking to advance from associate to full professor need in a similar way to be able to demonstrate their leadership in the national and international communities.

**Venue essentials:** Given the wide array of acceptable methods and topics in information studies, it is not possible (as they do in some other academic fields) to enumerate the set of acceptable journals, conferences, and book publishers. Instead, our faculty’s research should appear in a place where it will have high impact. Publications that aim to advance a core idea in information studies should appear in a top-ranked, peer-reviewed information studies journal or conference proceeding. Such a forum should contribute to high-level discussions with your scholarly peers. Research that applies information studies methods of some other academic or social community should appear in a top-ranked venue of that community. Quality of the ideas and their impact are the ultimate measures of excellence.

**Commonly valued venues:** There are many possible venues for disseminating one’s research results. Peer-reviewed top-rated book publishers, conference proceedings, and journals are the gold standard for recognition, and these are the places in which most but not all research will typically appear. These are the most likely publications for an external reviewer to refer to when evaluating a faculty member’s credentials on the basis of methodological rigor, contributions to the field, and external recognition. However, the problems with the refereeing process for all of these media are well known, and the candidate should not expect numbers of publications or acceptance rates of publication venues to carry the argument by themselves. Instead, the faculty member must explain why the places of publication are the most appropriate places in order to have maximum impact of their work (e.g., reaching the right target audience, or publishing where the best scholars are publishing or where the discussion of ideas is most fertile). A consistent pattern over time of publishing important contributions in top venues is a strong indicator of research excellence.

**Artifact venues:** Increasingly, information studies faculty members are building artifacts (e.g., digital libraries, computer programs). Our field has some experience with evaluating these kinds of intellectual products (for example in the areas of
digital libraries and usability), but as the number and types of artifacts that we build grows, we will have to develop more effective means for evaluation. The practical impact is that faculty members who are establishing their research excellence partly or wholly through artifact construction will need to demonstrate the intellectual contribution made by this work in their narratives.

There are several ways in which these artifacts may be a contribution. They may provide an archival or organizational scheme for categorizing, understanding, communicating, and preserving knowledge. They may meet the needs of a particular community of users. They may embody some key concepts or applications of information studies. They may be a work that solves some key engineering problem about how to solve a kind of problem (e.g. a programming architecture or method that solves a particular class of problems). The narrative should provide an explanation of the ways in which this artifact makes contributions and give some objective evidence that it has done so.

Demonstrating the importance of an artifact to one’s research portfolio requires the same rigor of outside analysis as any other form of research outcome. Perhaps the most important way is to publish peer-reviewed articles that discuss the artifact and its contributions. Patents are another means. Formal evaluation is a means for examining whether a particular artifact has met user needs or design objectives. In other cases, a different evaluation procedure might be more appropriate, e.g. one that judges how well the artifact embodies some cognitive process as revealed by the theories of information studies. In many cases it is possible to introduce the results of these formal evaluations and other evaluation procedures into a publication that demonstrates how the artifact advances theory, tests hypotheses, or contributes to the information studies field in some other meaningful way. In some cases, external letters of evaluation will be more appropriate than formal evaluation. In general, the number of visitors to a web site, the number of lines of code in a program, or the amount of effort are not good measures of the research value of the artifact.

**Translational venues:** Because information studies is a field that relates to social practice, there is an important place for translational studies. As part of scholarly work, these works’ impact comes in the degree to which they change practice. We value not only research that advances the core of our field but also research that applies our research methods or translates our results to other areas. Thus we value, for example, work that translates our core results to library practitioners or that helps a scientific discipline to resolve some of its research or educational issues. As with all research, this work must have a strong foundation in the theories, methods, and results of our field. Building from, demonstrating the application of, and even raising questions about theories and models in IS, these works may also expand research methods by contributing to the application of research in the practical contexts for which the theories are intended. There must be a research element to this work – otherwise it is merely service – for example, creating the boundary objects that enable research results in the information studies field to be
applied effectively in the field of application. This theoretical foundation is what sets us apart from, say, journalists.

When faculty members are applying information studies research to other domains, it may be highly appropriate to publish in the place where they reach the practitioners who are the intended audience. It could be that the publication is not peer reviewed; in some cases perhaps, a magazine, consultant report, best practice sheets, or other non-refereed publication might be the most appropriate venue to get the word out. It might even be something other than a written document: for example a workshop translating social science methods and results to a non-social-science audience, or a program established in a community for a scholar of community informatics. What is critical in these cases is that the faculty members can document the theories, methods, and results from information studies that provided the foundation for this work in their narratives to provide an explanation of why this was the appropriate venue for disseminating these results and to give some sense of its impact.

**External funding** is welcomed in the school, provided that it does not have problematic strings attached and is consonant with the goals and priorities of the school. Some external funding is better seen as a teaching (e.g. supporting students) or service (enables new programs or management and programmatic flexibility) contribution rather than a research contribution. When viewed from the perspective of evaluating research excellence of faculty members, external funding is not an inherent good but rather one of many things that might be helpful in establishing a richer environment within which to achieve their research goals. Some research projects require capital equipment, large teams, or extended travel and cannot be carried out without external funding. Other projects may have none of these infrastructure requirements. Some scholarly areas (e.g. information security) have readily available external funding; some areas (e.g. libraries, archives) channel most of the funding to practitioners rather than researchers; some areas (e.g. humanities scholarship) have little external funding available. Thus it is unfair and unwise to evaluate a faculty member’s research excellence on the amount of external funding raised. Indeed, in some cases it is counterproductive for faculty members to devote large amounts of time chasing funding that is likely to be elusive or not materially improve their research.

A better way of evaluating the value of external funding to an individual’s research excellence is to consider a variety of things that an individual faculty member might do to create a productive environment for their research. These might include external funding, but they might also include establishing ties with the right set of scholars at this university or elsewhere to carry out multidisciplinary research, working with outside organizations and individuals to gain appropriate access to research materials, or developing an effective curricular infrastructure to attract and train students to work effectively on the research program. The faculty member should make the argument in the narrative that a particular research environment
is needed to carry out the particular research agenda, and that the faculty member has carried out an appropriate set of activities to establish that environment.

**Workshops and panels:** As noted above, presentations must be rooted in research and/or demonstrate substantive impact. Invited and peer-reviewed research presentations certainly provide a greater statement of excellence than do those that lack full preparation and a research focus. The resulting publications, however, that may be rooted in such presentations can certainly be placed in any of the supported venues explained above.

**Unacceptable venues:** There are some venues that are generally not acceptable for the purposes of demonstrating one’s research excellence. Blogs, discussion lists, and other similar social networking communication channels seldom have a quality control mechanism. Presentations for which peer review and publication of the full paper were not provided, for example participation in a panel session at a conference, also do not provide evidence of quality (even if they are of quality). Posters, abstracts, and short papers do not generally have enough substance. Participating in the scholarly review process (e.g., panel work for NSF, reviewing for JASIST, or reviewing a tenure application for another scholar) are valuable service contributions to the research community (and should be reported as such) but do not demonstrate one’s own research. Funding proposals, even if successful, are promises, not results of research efforts. It may be very appropriate for a faculty member to undertake all of the activities mentioned in this paragraph, but these should not be the only kinds of research outputs that a faculty member should be undertaking; there must also be research outputs that are lengthy enough to show the substance of one’s work and that have been reviewed for quality and significance by the research community.

**Tenure support**

In support of meeting the standard School and University requirements for tenure, the following explanations are intended to help all faculty members demonstrate the excellence of their scholarly output. (Teaching and service excellence are not addressed here and require other resources.) The standard “statement” should be informed by and should incorporate the material herein although the actual format is entirely at the discretion of each faculty member. There are separate guidelines for preparing one’s tenure dossier, but the considerations stated in this document should inform the preparation of the third-year review dossier and the tenure dossier.

A self-reflective, purposeful explication of one’s research excellence should develop a shared understanding with one’s colleagues. The research narrative is a tool for this effort so it has no pre-set format, length, or structure. Faculty members are to write whatever best presents their case.
**Annual review:** Many of the research projects undertaken by faculty members will require multiple years for completion. It is not considered padding of one’s annual reports or promotion dossier to talk about projects in multiple years, provided they have moved from one stage to the next in the research process. However, it is important to identify the stage at which the research resides and to demonstrate progression through these stages over time. In fact, it is a valuable exercise at least once each year for a faculty member to reflect in writing on the progression, outcomes, and trajectory of one’s work. This should be done not only in the research narrative for tenure and promotion but also in the annual faculty review. Some examples of these stages are as follows:

- Funding proposal written or submitted
- Research in progress
- Writing in progress
- Publications/presentations under review
- Publications/presentations accepted
- Publications available

Every year, faculty members should practice putting their research narrative into words in the annual review document. While that annual review document should be focused primarily on what has happened during the past year – not throughout the entire career – the annual report should discuss how the activities of that past year fit into the faculty member’s longer term research goals and trajectory. This means not only mentioning the number and venues of publication, but also explaining the questions your research tries to answer and how well you answer these questions, the significance of this research, what these papers contribute to one’s overall research goals, how these publications contribute to the larger body of information studies scholarship and its important applications to other fields and society, and why these particular publications and publication venues were appropriate ways in which to advance one’s personal research agenda.

**Third-year review:** The third-year review statement, which reflects on the course of research during the first three years, should become more straightforward to write if it is built on the collection of annual reviews that each reflect on the trajectory of research over the past year. A strong narrative that correlates actual implementation with planned development should be a substantial element in the review packet.

**Tenure support:** When preparing for tenure and promotion, striving for excellence in one’s research career depends on neither the amount of publication nor the venues of publication so much as it is the significance of the totality of the research. We want our faculty to be leading scholars in their profession, contributing to the advancement of their field and to its productive application to other disciplines and society. Thus, the most important two elements of a tenure dossier are the faculty member’s narrative and, particularly in light of University standards, the external letters. Narratives should present a compelling case, accessible to non-specialists as well as specialists, as to the research goals of the faculty member, the progress made toward achieving those goals, and the reasons for going about it in the way
they did (e.g. why define the boundaries of the problem as they did, why use a particular method, why publish in a particular venue). Traditional markers of research excellence, such as numbers and venues of publications, should be made a fundamental part of the narrative, but they should not be assumed to be ends in themselves. The external letters provide an independent evaluation of the significance and impact of the faculty member’s research. These external evaluations need to be informed by a coherent narrative from the faculty member and an awareness of the guidelines by which our school judges excellence (e.g., by making sure that this document is enclosed in all review packets and mentioned in the instructions to external reviewers).

**Full professor promotion support:** All of the preceding post-tenure support input applies fully to Associate Professors as they apply for and reach the Full Professor rank. In addition, their nationally renowned scholarship must be clearly demonstrated to move well beyond that of an established Associate Professor.

**Post-tenure support:** All of the preceding input applies fully to tenured faculty and must be demonstrated in their post-tenure review packets. In addition, their professional growth in each aspect of scholarly excellence must be appropriate to their increasing length of professional service in that it demonstrates their growing strength as leading scholars.

**Evaluation rubrics:** The chart below may be useful to all faculty members. The information therein is intended to be consistent with the discussion above. In many cases, research directions to take and present results require mature judgment; faculty members should consult the dean, their official faculty mentor, and other knowledgeable members of the faculty about these matters. It is not heroic to go it alone.

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<th>Criteria</th>
<th>Denotations</th>
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<tr>
<td>Research currently adds substantively to IS</td>
<td>Narrative that explicates the [empirical, naturalistic, theoretical, or tool developing] research results in relationship to similar work; narrative that identifies contextualized contributions that the research makes to IS</td>
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<td>Research makes translational Contribution to another field</td>
<td>Narrative identifies contribution to other field; shows appropriateness of venue in which the contribution is made; has a strong foundation in the theories, methods, and results of IS; involves significant intellectual work in doing the intellectual translation (boundary work)</td>
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<tr>
<td>Research contributions</td>
<td>For team projects: (1) a narrative should clearly</td>
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<td>by individuals</td>
<td>identify the individual contributions made by the individual, (2) other team members should report their own contributions as well as their analysis of the individual’s contributions, and (3) contributions should be more conceptual and original than managerial</td>
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<tr>
<td>Research highly regarded in IS or sister disciplines</td>
<td>External peer review should be publicly available; could address the conceptual and methodological contributions; could explain how the work furthers IS or how the application of IS advances some other domain; books should be published in scholarly presses with a track record of strong authors, excellent reviews, and/or well established editors</td>
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<tr>
<td>Research is fully documented in a widely-available, scholarly venue</td>
<td>Could be: in the canonical venues such as top tier scholarly journals in IS or sister disciplines; conference proceedings in which the peer review is completed on the full paper</td>
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<td>Research develops the future of IS by meeting a need, solving a problem, developing theory, or generating new fields of inquiry -- or moving towards that goal</td>
<td>Narrative places the research in a context of social, intellectual, or industry trajectories to explain how it could extend, refocus, or close down theoretical pathways in IS</td>
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<tr>
<td>Research addresses significant and substantive research problems in IS</td>
<td>Narrative places the research questions in the context of related, broader, and more limited research issues in IS</td>
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<tr>
<td>Translational studies</td>
<td>Narrative explicates either (a) impact on a field or (b) development of questions that lead towards that impact</td>
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