Task Force Report:

Center for Excellence

in Research and Scholarship
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Preface

Our aspiration has been to provide a comprehensive framework for undertaking the systematic improvement of the quality, quantity, and visibility of research, scholarship, and artistic accomplishments at the University of San Francisco. We recognize that constraints of time, money, and interest will preclude pursuing some of these proposals. Nevertheless, it is our collective belief that the ideas in this document reflect a broad range of mechanisms by which USF could bring about a fundamental re-ordering of the caliber, quantity, and visibility of scholarly work produced at the university.

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Executive Summary

USF has historically been a teaching institution, but in recent years has invested in research via paid sabbaticals, enhanced faculty development funds, and other initiatives. Now is the time to take research to the next level and, in turn, improve the national and international academic reputation of the University. Several questions need to be addressed. How can research investments be connected to the University’s mission and goals? How might research, teaching, and educational programs be combined into a system that actively engages with San Francisco area employers? How can our community think about research differently? What steps should be taken? What level of resources is appropriate? How should limited resources be directed and focused?

It is premature to provide answers to these questions. What the task force has done is to identify a range of possible initiatives. We provide a large “palette” of actions that could be taken to enhance the quality, quantity, and impact of research at the University of San Francisco. We present 27 possible initiatives, organized into five themes:

1. Increase in resources and services to support research and other scholarly activities
2. Provide time/workload flexibility so that faculty can be efficient and most productive in their research efforts
3. Implement administrative changes to provide research management and leadership at the highest level of University officers, along with specialized administrative units for each school and college
4. Promote research and other scholarly activities to professional and public audiences beyond USF
5. Establish criteria for evaluation of research and other scholarly activities

This is a daunting list, and the reader will undoubtedly want to know the task force’s opinion on the key question of “where do we start?” On the next page, we provide a prioritization grouped into three categories. The first category is Priority One, focusing on the need for senior leadership at the university and school level and for a strategic planning process that will allow us to connect wisely our resources, goals, and actions. The second is Quick Wins, that suggest low-resource actions that could be implemented immediately and lead to rapid tangible benefits. The third category, Get Started, provides particularly important reforms that should be started soon, but whose implementation will require thought, dialog, resources, and time.
Priorities

Priority One – Leadership and Strategic Planning

The most important priority is to establish senior research leadership, then engage in a strategic planning and visioning process. We need people with the right experience whose job it is to think carefully about research, how we can invest intelligently in research and faculty to advance the university’s mission, goals, and reputation, and how research success can be used to enhance the effectiveness and marketability of educational programs. Without leadership and a plan, there is a high risk that we will have stop-and-go, piecemeal initiatives that will not make best use of limited resources, and could justify the cynicism that is sometimes heard among faculty about the prospects for meaningful, sustained change at USF.

The key is leadership. Success requires a new research leadership position at the university level (section 1, item 1), and a research coordinator position in each school (section 1, item 2). The university position should be at the level of Vice Provost or Vice President. The school positions should be at levels ranging from Director to Associate Dean as appropriate for each school.

The research leadership should quickly embark on a broad strategic planning exercise (section 1, item 3) that will facilitate dialog, help our community think clearly about research, prioritize the many activities in the task force report, and lay the groundwork for intelligent investments; we must avoid the pathology of “ready, fire, aim”.

Quick Wins – Policies and Programs that Should Be Implemented Now and Will Show Immediate Returns

- Clarify and standardize school and college policies for faculty workload flexibility (e.g., course banking—section 2, item a), release time for research-related activities (section 2, item e), and workload stability (e.g., decrease number of new course preparations—section 2, item d)
- Establish a statistical consulting service (section 1, item d)
- Provide an ITS-supported/managed statistics package (section 1, item e)
- Provide research support services (i.e., research assistants (RAs), transcription services, classes in research methods and data analysis, training in statistical data analysis packages, editorial, and indexing services) (section 1, item f)
- Increase technical support staff in the sciences for maintenance, operation and repair of scientific equipment (section 1, item g).

Get Started – Take Tangible Steps to Initiate and Enable Selected Complex Reforms

- Create an external advisory board (section 5, item c.)
- Increase funding to the Libraries to support faculty research and scholarship (section 1, item h)
- Review the incentives for faculty to engage in research (section 3, item c)
- Engage meaningfully with the issues of updating research laboratory facilities (section 1, item c)
• Provide at least one sizable resource increment for research (section 2), for example, several USF professorships (section 2, item h) and/or a visiting scholars program (section 4, item d).
• Explore options for targeted research clusters that will enhance faculty research and provide USF with recognized excellence in specific issues (section 3, item e)
Table 1. Matrix of recommendations based on cost estimates and ease of implementation
(1 = easy, 2 = requires some effort, 3 = requires significant effort)

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<td>b. Mentoring</td>
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<td>c. Framework for a Center</td>
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<td>f. Research Support Services</td>
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<td>g. Technical Support</td>
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<td>h. Library</td>
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<td>i. Internal Grants</td>
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| **2. Time/Workload Flexibility** | | | |
| a. Course Banking               | 1        |               |           |
| b. Research Day                 | 1        |               |           |
| c. Remove Barriers              | 1        |               |           |
| d. Course Stability             | 1        |               |           |
| e. Reduce Teaching Load for Research-Active Faculty | 1 |
| f. Clarification of Buy-Out Time | 1   |               |           |
| g. Workload Compensation for Training Students Outside of Courses | 1 |
| h. Research Professorships      | 2        |               |           |

| **3. Research Management and Leadership** | | | |
| a. University Administration    | 2        |               |           |
| b. School/College Leadership    | 2        |               |           |
| c. Incentives                   | 1        |               |           |
| d. Support Policies             | 1        |               |           |
| e. Research Clusters            | 3        |               |           |
| f. Targets                      | 1        |               |           |
| g. Celebrate                    | 1        |               |           |

<p>| <strong>4. External Visibility</strong>      | | | |
| a. Branding                     | 1        |               |           |
| b. Website                      | 1        |               |           |
| c. The Press                    | 1        |               |           |
| d. Visiting Scholars            | 2        |               |           |
| e. Other Academic Institutions  | 1        |               |           |
| f. U.S. News and Other Rankings | 1        |               |           |
| g. Popularizing                 | 1        |               |           |</p>
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<td>d. Broader Impacts – Students</td>
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Introduction: Changing the culture

For many faculty members at USF, research has often been what you do after completing teaching, committee work (and other service) and advising duties. (As we use the term, research is shorthand for a range of scholarly endeavors, including experimental studies, conceptual inquiries, interpretive studies, artistic production, and other familiar forms of intellectual and aesthetically significant productivity.) The tertiary—or worse—status of research at USF has meant that for some faculty it has been a challenge to have productive careers in scholarship. If USF is to increase the quality, quantity, and visibility of its scholarly products, this will require some systematic changes to institutional culture.

There are, of course, faculty members with active research programs at USF. This has led to some notable inequalities. With rare exceptions, all faculty receive the same three units of research release time, regardless of research productivity. If USF is to increase the quality, quantity, and visibility of research at USF, there are several distinct challenges, including: (1) enhancing the effectiveness of high-impact researchers, (2) finding new ways to incentivize research for those who would like to have active research programs but struggle to do so, and (3) providing enhanced resources and support to all faculty who pursue research at USF.

There are obviously serious constraints on the resources available to USF to enhance its research profile. Some significant changes will require money and other resources. Other changes need not.

One way to begin changing the culture is to recognize research accomplishment when attained by faculty. Faculty report frequent ignorance about the scholarship activities of their peers, and tellingly, there is widespread ignorance about who among USF scholars has a national or international reputation. This oversight can be solved. For example, the Law School at USF has instituted a popular Dean’s Scholar Program that rewards a selective number of productive faculty members with the title of Dean’s Scholar. This program has helped to create a culture of respect for faculty research in the Law School. Similar programs across the university or its various constituent schools could also be successful. In a different vein, forums where faculty could present their research/scholarship might encourage faculty to present, get feedback and enter into interdisciplinary collaborations with colleagues across departments or schools/colleges. Some of this is already happening at the grassroots level—for example, faculty have organized such events in the College of Arts and Sciences.

Some changes will require more resources. Providing more internal grants, creating research professorships, funding shared RA pools, housing and hiring services such as proofreading, editorial advising, statistical consulting, and so on are not inexpensive. The upside for researchers, however, would be considerable. Some changes might not be expensive, but would require institutional support in ways that have their own costs.

We believe that USF can and should improve its culture of research. The proposals we offer are intended to provide a roadmap for just that sort of transformation.
Outline of Proposed Actions to Enhance Research and Scholarship at USF

Details on each topic can be found in Appendix A

1. Resources/Services

   a. Lab Facilities: Renovate and modernize existing laboratory facilities to support scientific research
   b. Mentoring: Provide mentoring and dedicated office space for mentoring
   c. Framework for a Center: Address issues related to the Center, including physical location
   d. Statistical Support: Provide a Statistical Consulting Service
   e. Statistical Software Program: Provide ITS-supported/managed statistics package
   f. Research Support Services: Provide research assistants (RAs), transcription services, classes in research methods and data analysis, training in statistical data analysis packages, editorial, and indexing services
   g. Technical Support: Create new staff positions for technical support of scientific instruments
   h. Library: Increase funding for the library to support faculty research and scholarship
   i. Internal Grants: Increase the number and variety of internal monetary awards/grants for research, scholarship, and artistic production

2. Time/Workload Flexibility

   a. Course Banking: Offer course banking across a 2-year period for faculty with active research programs
   b. Research Day: Institute one day per week as a “Research/Scholarship Day” for faculty members doing research/scholarship
   c. Remove Barriers: Identify barriers to faculty research/scholarship on a regular basis and develop strategies to remove those barriers
   d. Course Stability: Set a limit on courses being taught by faculty members for the first time within a 2-year period
   e. Reduce Teaching Load for Research-Active Faculty: Eliminate the “third course” for faculty members with high research productivity/output
   f. Clarification of Buy-Out Time: Clarify the formula used for faculty to buy-out their time to do research/scholarship
   g. Workload Compensation for Training Students Outside of Courses: Create and disseminate a standard policy for awarding compensation for involving undergraduate and graduate students in research and scholarship
   h. Research Professorships: Establish professorships to enable selected faculty to focus on research
3.  **Research Management and Leadership**
   a. **University Administration**: Establish a university-level research leadership position
   b. **School/College Leadership**: Establish in each school a formal research leadership role
   c. **Incentives**: Review the incentives for faculty to engage in research
   d. **Support Policies**: Establish and disseminate policies for research support
   e. **Research Clusters**: Develop targeted research clusters
   f. **Targets**: Establish targets for increases in external grant money
   g. **Celebrate**: Celebrate and recognize notable accomplishments in research, scholarship or artistic accomplishment across the university and school levels

4.  **External Visibility**
   a. **Branding**: Develop a brand by focusing on particular projects, issues, subject areas, or disciplines
   b. **Website**: Improve website to enhance reputation for scholarship
   c. **The Press**: Improve relationship with popular and professional press regarding scholarship.
   d. **Visiting Scholars**: Invite scholars to visit USF, perhaps in exchange for a visit from a faculty member at USF
   e. **Other Academic Institutions**: Foster interactions with scholars at other institutions.
   f. **U.S. News and Other Rankings**: Take measures to improve our U.S. News and other rankings
   g. **Popularizing**: Popularize our scholarship

5.  **Assessment**
   a. **External Funding**: Evaluation of research and scholarly activity through quantification of external funding
   b. **Productivity**: Evaluation of research and scholarly activity through quantification of research publications and other scholarly activities
   c. **Advisory Board**: Establishment of an External Advisory Board for evaluation of research and scholarship excellence at USF
   d. **Broader Impacts – Students**: Evaluation of broader impacts of Research and Scholarship Excellence at USF: training of graduate and undergraduate students
   e. **Broader Impacts – The Public**: Evaluation of broader impacts of research and scholarship excellence at USF: public outreach
Appendix A: Brief Papers for Proposed Actions
1. **Resources/Services**
   
a. **Lab Facilities**: Renovate and modernize existing laboratory facilities to support scientific research
b. **Mentoring**: Provide mentoring and dedicated office space for mentoring
c. **Framework for a Center**: Address issues related to the center, including physical location
d. **Statistical Support**: Provide a statistical consulting service
e. **Statistical Software Program**: Provide ITS-supported/managed statistics package
f. **Research Support Services**: Provide research assistants (RAs), transcription services, classes in research methods and data analysis, training in statistical data packages, editorial, and indexing services
g. **Technical Support**: Create new staff positions for technical support of scientific instruments
h. **Library**: Increase funding for the library to support faculty research and scholarship
i. **Internal Grants**: Increase the number and variety of internal monetary awards/grants for research, scholarship, and artistic production
1.a. **Lab Facilities: Renovate and modernize existing laboratory facilities to support scientific research**

**Description**
The present laboratory facilities that support faculty research in the sciences desperately need updating. The condition of the existing research facilities are negatively impacting the School of Arts and Sciences current research programs; as well as creating a serious impediment to recruitment and retention of new and promising science faculty, attracting undergraduate students, and increasing the number of applications for highly qualified graduate students. Upgraded and modernized facilities in the Harney Science Center are essential for USF to increase its potential in scientific research and allow faculty to be more competitive in securing external grants.

**Background**
While the planned John Lo Schiavo, S.J. Center for Science and Innovation (CSI) will address the need for state of the art classroom laboratories; there is no apparent plan for the renovation or reallocation of research space in the Harney Science Center. Current research laboratory facilities are located in a building constructed in the 1960s, and in the past 50 years there has been no major (and very little minor) renovation of research laboratories. Repairs (e.g., leaks in roof and walls, renovation of fume hood exhaust system) seem to be made on an emergency basis with little general planned maintenance occurring. Major maintenance issues are continually deferred, lab furniture and other infrastructure (e.g., benches, cabinets) are pretty much the original 1960s vintage, and research lab space is unavailable to some tenured faculty and consequently to new faculty hires. Research and teaching facilities in Harney are basically run down and do not give the impression of supporting any significant research efforts. While USF science faculty have active successful research programs and the university has supported the purchase of state of the art instruments and equipment, the physical appearance and functionality of lab spaces is impeding full faculty research potential and the recruitment of new faculty into science departments (e.g., some science departments have had to convert tenure-track lines to term positions because of lack of office and research space to support probationary faculty).

The new CSI building is dedicated to 100% lecture rooms and classroom laboratories. These are not spaces that can be easily shared with faculty research activities. Moreover, the addition of teaching space in the new building will not result in creation of much new research space in Harney. For many departments, the new CSI building will alleviate current course overflow, but existing teaching labs in Harney will continue to be needed for classes.

**Implementation issues**
The major obstacle to upgrading research labs in Harney is money. In addition, science departments need to be consulted in order to determine the most efficient use of space.
1.b. Mentoring: Provide mentoring and dedicated office space for mentoring

Description
Newly hired faculty benefit from the mentoring programs established by the university, school or college, and department. Models already in place at other institutions clearly delineate the responsibilities of the department chair, the mentor and the new faculty member. Good practices include accessibility of the mentor, networking, and helping the mentee to establish priorities and a workable balance between teaching, research, and service. While not essential to successful mentoring, having a physical place to meet comfortably is important.

Background
Questions—what is the history of mentoring at USF? Does it vary across departments? Across Schools and Colleges? Are new faculty routinely assigned mentors? Is the mentoring targeted, e.g. writing for publication? Do we need to establish a formalized mentoring program with a focus on achieving tenure at USF? Do we need dedicated space for mentors and mentees to connect/network?

Implementation issues
More questions--How to establish a formal program that meets the needs of all faculty members? Should there be a formal training for faculty mentors? Should this be a requirement for all newly hired faculty? Should all USF faculty have a responsibility to mentor new tenure track faculty? Should term faculty and adjuncts receive mentoring? Role of department chairs and deans? USFFA contractual issues? Is a dedicated space needed? Resources to support?
1.c. Framework and space for a Center for Excellence in Research and Scholarship: Address issues related to the Center, including physical location

Description
Scholarship and research support centers are in place at institutions around the country. Their programs/services to support faculty vary and many of them have dedicated space and staff.

Background
It is presently not clear whether the Center for Excellence in Research and Scholarship will have or need dedicated space or staff. One thought is to provide space for the Center in the University Library Learning Commons once that space is established. Will the Center have dedicated staff and what will be their role in supporting research excellence? What skill levels will be needed to support faculty research? Is there synergy with the Office of Sponsored Research? The University Library’s institutional repository can assist in improving the faculty research profile and accessibility for scholars globally.

Implementation issues
Whether and how a Center is established will presumably depend on how university-wide leadership on research is instituted, and whether such an office would have independent funding, and where it is located. See recommendation 3a for more information.

The Provost will need to make the decision as to what defines the Center for Excellence in Research and Scholarship. Will it be a virtual or physical space? Will the center have a director and supporting staff? How will this office be distinguished from the Center for Instruction Technology? Budget? Space? How can the Center best support faculty doing research and scholarship in each school and college?
1.d. **Statistical Support: Establish a Statistical Consulting Service**

**Description**
Establish a statistical consulting service to offer support and guidance on all aspects of research that relies upon data analysis. Serve as the focal point for the community of data-driven researchers at USF. Provide statistical advice and direction. Deliver software training and support. Provide guidance for research and measurement design, as well as data collection, analysis, interpretation, and write-up. Such a service could be used by faculty from all schools and colleges and would greatly promote faculty research competence and productivity. It would also decrease the needless duplication and expense of having each faculty member hire his or her own statistical consultant.

**Background**
Faculty members who conduct, or are interested in conducting quantitative research are often limited methodologically by their own level of statistical competence. For faculty who are tenure-track or promotion eligible, limited statistical knowledge may impede their ability to engage in sophisticated, new, or innovative research studies.

Some faculty spend considerable time looking for an experienced statistician to assist in their research program. Once a statistician is found, faculty then have to independently try to figure out how to hire them and pay them. So faculty members often apply for Faculty Development Funds for a grant that includes statistical consultation. This can be a long process and can delay faculty research.

**Implementation issues**
The biggest issue would be hiring a statistician who could provide consultation to faculty from all of the Schools and Colleges that represent a wide range of research methodologies. It is possible that a statistician could be written into a number of grants to help pay his/her salary. This is done at UCSF where there is a team of statisticians who provide support for School of Nursing Faculty.
1.e. **Statistical Software Package:** Provide ITS-supported/managed statistics package

Provide a standard statistics package to all faculty who request it. ITS should manage the installation, licenses, updates, and so on, so that no action is required by faculty. The package should work on both PC and Mac.

There should be a campus-wide standard statistics package, for three reasons. First, it would prohibitively expensive for ITS to support multiple statistics packages. Second, the most effective software support is the person in the next office; by standardizing on a single statistics package colleagues will more easily be able to assist each other. Third, the statistical consulting service will be much more efficient when its people need master only a single statistics package.

Individual faculty should be free to choose to use the standard statistics package (at no or minimal cost, with full ITS support, and access to software support from statistical consulting services), or another statistics package of their choice (with no support). The university should establish no artificial barriers for faculty who choose to use a non-standard package. However, such faculty should know that they are on their own (as is the case now for all faculty).

**Background**

A campus-wide standard statistics package is an essential part of research infrastructure. Most universities provide and support statistical software packages for both PC and Mac users. This is a glaring absence and should be rectified quickly.

Currently there is no USF-standard statistics software, and therefore ITS provides only bare-bones support for faculty requiring such software. Thus, individual faculty must (with modest guidance and help from ITS and the bookstore) to select, purchase, and install software; manage vexing software lease/renewal processes; learn the details of making the software work; install and learn new releases of the software.

**Implementation issues**

ITS would need to install an ITS-supported statistics package on both PCs and Macs before they are delivered to faculty, or make provision for easy installation and/or license code provision upon request. Appropriate training and support should be provided either by ITS or more likely by the statistical consulting service.

The statistics space is large and diverse. It is important that there be a process to engage with faculty to select an appropriate statistical software package. Criteria should include cost; functionality; ability to handle diversity in size, scope and complexity of analysis; and the ability to engage robustly with external data sources for the very large data sets that are available in today’s world. The benefits of a common platform will greatly outweigh the transition costs for any faculty who will need to re-tool on the new package.

Of course faculty are welcome to use any statistical package that they choose: non-standard package choices will not be supported by ITS—as is the case now.
1.f. Research support services: Provide research assistants (RAs), transcription services, classes in research methods and data analysis, training in use of statistical data analysis packages, editorial, and indexing services

Description
USF does not presently provide the range of support services that would help faculty be more productive in research and scholarship. For example research and teaching assistantships at USF are limited, and oftentimes require considerable oversight from faculty. In contrast, a pool of research assistants with a wide range of basic research skills could be managed external to any department and called upon by faculty across a wide range of disciplines for limited projects that would benefit from RA help, but without requiring the usual application to the FDF, and the usual RA hiring, training, and management by the faculty member.

Moreover, program and office assistants are assigned to large numbers of faculty and do not always have the necessary skills or availability to facilitate faculty research.

Other services would be helpful as well. For example, it would be helpful to have classes for faculty in research methods and data analysis as well as training in the use of statistical data analysis packages frequently used by faculty. Additionally, editorial and indexing assistance would support faculty-publishing efforts.

Background
Support in this area has traditionally been almost non-existent or not systematically organized or publicized. For example, USF subscribes to the Center for the Advancement of Research Methods and Analysis (CARMA) that is sponsored by Wayne State University, School of Business Administration. CARMA provides an extensive website with free access to both online classes on research methods and analysis and to an extensive video library that are free to subscribers. There is a nominal fee for classes that are taught at conferences around the world ($375-$400) but online offerings and access to the video library is free.

Implementation issues
Budget and space are the obvious issues. However, some things like publicizing existing resources would require very little time or money.
1. Technical Support: Create new staff positions for technical support of scientific instruments

Description
There is insufficient technical support for scientific instrumentation at USF. Science faculty currently spend inordinate amounts of time setting up, maintaining and trouble-shooting instruments and equipment for both research and teaching labs. Additional trained technical staff are required to support the type and amount of equipment and instrumentation needed for 21st century science activities.

Background
Scientific research requires the use of a variety of tools, including beakers and test tubes, along with complex instruments. USF owns many different types of science equipment to support faculty research and teaching in a wide array of disciplines. The University owns more than several very expensive (over $50,000-100,000 value per item) pieces of scientific instrumentation (e.g., flow cytometer, mass spectrometer, fluorescence microscopes, automated nutrient analyzers, telescopes, etc.) that require specialized trained expertise for operation, maintenance and repair. Most scientific instruments today are sophisticated electronic machines, usually operated through a computer interface that also collects the data. There are numerous hardware and software components that make maintenance and upkeep a significant issue. While faculty may know how to use a specific piece of equipment, they cannot be expected to know how or have the time to service all of these instruments that are used for research and teaching. The situation is analogous to driving an automobile. Although many people know how to drive, drivers do not generally maintain and repair their car's engine. We know how to add gasoline and maybe check the oil level. The rest is left to experts.

At most other institutions, technical support for science research and teaching activities are handled by a higher ratio of experienced and trained technical staff. For example, Santa Clara University has four science departments and seven full time technical staff positions. USF has seven science departments and also seven full time technical staff positions (and not one technician per department). Much of the equipment and instruments used for research at USF are also used in teaching, so proper care and maintenance is critical. Relying on faculty to perform maintenance and repair services has become problematic as equipment gets more and more sophisticated, and more and more time is required.

Implementation issues
USF needs to hire sufficient qualified technical staff to provide support for instruments and equipment including service, maintenance, and training of faculty and students. This requires approval of funds to support new staff positions. However, even a general science technician cannot be an expert in all instruments. Ideally, the University should also provide direct funding to departments for purchase of professional service contracts on existing equipment. This sort of investment will provide adequate technical service and support for instrument operation, timely replacement of worn parts, authorized factory repair, and extend the lifetime of science instruments.
1.h. **Library**: Increase funding for the library to support faculty research and scholarship

**Description**
Faculty engaged in research need research level collections to support their research agenda. This requires considerable more budgetary support for resources in identified subject areas.

**Background**
The USF libraries have made a great effort to maintain student and faculty access to library resources. However, research level collections in many subject areas are comparatively thin, and faculty must go elsewhere or do without for some of their research needs. There are, of course, various resources at USF (including interlibrary loan (ILL)) that give our collections bigger reach than they would otherwise have, but this is an imperfect solution at best, as ILL can be slow and uncertain. In short, if USF wishes to grow its research profile over the long run, some significant improvement in library resources will be necessary.

**Implementation issues**
It is understood that the library, given the overall mission of the university, will not acquire collections similar to major research 1 institutions nor will it be eligible for membership in the Association of Research Libraries (ARL). Faculty, however, would like to see an increase particularly in the scope of electronic resources. There are several possible options to enhance library collections beyond the obvious major increase to library’s collections budget.

First, the university might pursue a college or department (subject) specific enhancement of collections addressing research needs of specific units. The subject areas selected (librarians in collaboration with faculty) would be correlated with the research and teaching needs of the faculty and students.

Second, areas could be identified that would be in conjunction with a university-wide strategy for research clusters or targeted areas (e.g. EdD and DNP programs) where the university is interested in raising its research profile. (For more on research clusters, see section 3e.)

Collections would grow in response to the research and format needs of the faculty.
1.1. Internal Grants: Increase the number, variety, and visibility of internal monetary awards/grants for research, scholarship, and artistic production

Description
Make small awards in recognition of notable research, scholarship, or artistic accomplishments, decided on by clear criteria and awarded in a limited but not overly-rare fashion and, crucially, ensure that they are publicized in visible ways.

Background
There is a comparatively limited culture of research and celebration of research accomplishment at USF. One way to change this is to provide small and diverse monetary incentives for especially significant or exceptional research, artistic, or scholarship accomplishment (including, but not limited to, notable experimental results, artistic creation, book publication, or elite journal publication). In most Colleges across USF, there are relatively few monetary awards given in recognition of research accomplishment. Providing more visible monetary awards, even small ones ($500-$1000) can help shift attitudes about USF’s commitment to research.

Implementation issues
Awards recognizing research/scholarship/artistic accomplishment run the risk of sowing dissent and dissatisfaction about how such awards are distributed. So, transparency and judiciousness may be especially important in any system of awards. Indeed, the definition of a significant research accomplishment is perhaps best set at a disciplinary level, even if award selection is done by a committee at the college or university level.

It is important that the awarding of such recognition not be so limited as to be regarded as unattainable or capricious, otherwise such awards will make little impact on changing USF culture. It is also important that such awards not be so ubiquitous as to be automatically or easily earned. Finally, the criteria should involve standards that reflect the diversity of modes in which research occurs: for example, there should not be a presumption that undergraduate researchers are involved (in some disciplines this is virtually impossible, in others it is comparatively common), that elite publication involves books (in some disciplines journal publications are the primary mode of high-profile research; in others, artistic accomplishment is recognized in galleries or awards).

Application of such awards should not be especially burdensome, for this is a deterrent for widespread participation. One approach might be to have recommendations come from associate deans or deans, in light of contact with faculty members over the course of the year. Another might be to get nominees from departments.

The involved amounts of money can be comparatively small and the total cost to the University or Colleges could be comparatively minimal. For example, three awards of $1000 each per college amounts to $3000 awards a year. Depending on the particulars of the college, award categories might include, for example, “outstanding journal publication” “outstanding book publication” and “outstanding public display of artistic or scholarly achievement.”
Increased monetary awards can also be coupled with other benefits, including teaching reductions, awards ceremonies, honorific titles, and various other attractive benefits (e.g.: free parking for a year; an individual research fund; some token item such as a gift certificate, dinner, or other nominal prize).
2. **Time/Workload Flexibility**

   a. **Course Banking**: Offer course banking across a 2-year period for faculty with active research programs

   b. **Research Day**: Institute one day per week as a “Research/Scholarship Day” for faculty members doing research/scholarship

   c. **Remove Barriers**: Identify barriers to faculty research/scholarship on a regular basis and develop strategies to remove those barriers

   d. **Course Stability**: Set a limit on courses being taught by faculty members for the first time within a 2-year period

   e. **Reduce Teaching Load for Research-Active Faculty**: Eliminate the “third course” for faculty members with high research productivity/output

   f. **Clarification of Buy-Out Time**: Clarify the formula used for faculty to buy-out their time to do research/scholarship

   g. **Workload Compensation for Training Students Outside of Courses**: Create and disseminate a standard policy for awarding compensation for involving undergraduate and graduate students in research and scholarship

   h. **Research Professorships**: Establish professorships to enable selected faculty to focus on research
2.a. **Course Banking:** Offer course banking across a 2-year period for faculty with active research programs

**Description**
Course banking across a 2-year period would promote workload flexibility thus allowing faculty to adjust their teaching schedules to meet their research/scholarship needs. Especially attractive to faculty would be the possibility of counting summer or intersession classes towards course banking.

Course banking would encourage faculty to create blocks of time that they can devote to their research/scholarship.

Some faculty will be more effective in their research/scholarship if they can schedule semesters of heavy teaching followed by semesters of light or no teaching. For example, a faculty member might teach spring and summer (if the faculty member chooses to teach in the summer) and then not teach during the fall when they know they will be submitting a grant application or finishing a manuscript.

Some faculty members need to focus their efforts on time or travel-intensive activities such as complex experiments, field observations, use of scientific facilities at other locations, etc. Allowing such faculty the flexibility to schedule a semester of light or no teaching would greatly aid these faculty members.

**Background**
When we teach graduate students how to do research, we tell them they must have blocks of time in order to increase their chances of successfully completing their thesis, dissertation or doctoral project. Faculty members at a University conducting research/scholarship similarly need blocks of time to conduct their research/scholarship.

If faculty cannot work on their research for long periods of time it becomes “cold” and they can easily lose momentum. Blocks of time increase faculty research productivity.

**Implementation Issues**
Course banking is not implemented in a consistent way across schools and colleges at USF. This creates confusion among faculty regarding the length of time that courses can be banked.

In most cases, course banking over a two-year period could be implemented at no cost. There are some exceptions to this. For example in some schools/colleges, faculty members are allowed to bank over a one-year period. If there is overload (excess units) beyond this one-year period, faculty members are paid at the part-time rate for all excess units.

While having full-time faculty teach overload seems like a good deal for both the University (experienced faculty teaching courses at part-time rates) and faculty members (can earn often needed extra income), it may not always be the best use of resources for the University or faculty if faculty members have no time to work on their research/scholarship. Allowing faculty their
choice to bank over a 2-year period would set a consistent policy and allow those that need blocks of time to schedule their research/scholarship over a two-year time period.
2.b. Research Day: Institute one day per week as a “Research/Scholarship Day” for faculty members doing research/scholarship

Description
Designate a “Research/Scholarship Day” for faculty to work on their research/scholarship. This is one day per week when faculty members do not teach classes or attend meetings. Research days would vary from semester to semester depending on teaching and service schedules but there would be at least one day per week when faculty are expected to work on their research/scholarship.

Background
Historically faculty in the School of Nursing had a “research day” where they were expected to work on their research. Somehow that faded away and faculty in some Schools and Colleges are teaching and doing service 5 days a week allowing no blocks of time to do research. This has recently been reinstituted in the School of Nursing.

Implementation Issues
This recommendation can be implemented at no cost to the University or the Schools and Colleges.

If you look at faculty schedules, there is usually at least one day per week when individual faculty members are not teaching classes or attending meetings. If this day is not protected, it is easy to schedule meetings on that day which does not allow the faculty member to work on their research/scholarship. Having a formal research/scholarship day would help remind faculty that they have weekly protected time to work on their research/scholarship and they are expected to use the time as such.

This recommendation may not work for all faculty members (e.g., Sciences) but it is worth considering for as many faculty members as possible that thinking that having a “research/scholarship day” would make them more productive.
2.c. Remove Barriers: Identify barriers to faculty research/scholarship on a regular basis and develop strategies to remove those barriers

Description
Barriers for faculty to do research/scholarship can vary across schools/colleges, departments, job titles (tenure track and term assistant professors, associate professors, professors), years at USF, and even individual faculty and these barriers can change rapidly. There may be themes of barriers for groups of faculty (e.g., heavy advising load) or even for individuals (e.g., no research space or need for an RA) that if identified on a regular basis, could be addressed, solutions implemented and no longer be barriers to research/scholarship.

For example, during their first year at USF new tenure track faculty often have a difficult time being productive with their research/scholarship. They are learning so much (e.g., new curricula, advising process) as well as teaching at a minimum 2 courses (e.g., for some schools/colleges it could be 4 or more new courses per semester) for the first time. Should they have a reduced teaching load for their first semester or year at USF? An annual survey of new faculty might reveal the most important barriers and potential solutions to overcome these barriers for this group.

Another example: the barriers to research/scholarship for term faculty whose goal it is to be hired onto tenure track positions. These faculty members are better positioned to be competitive in the hiring process if they have a current, active research program. These term faculty are currently teaching 12 units a semester, doing service and trying to maintain an active and productive research program without any of the support that tenure-track faculty enjoy.

Background
Historically two major barriers to faculty research/scholarship at USF have been lack of funding for research and heavy course loads (12 units/semester). Once these issues were assessed and solutions put into place (e.g., the Faculty Development Fund and 3 units of research release time for faculty doing research) these barriers were greatly decreased. Barriers to faculty research need to be assessed on a regular basis.

Implementation Issues
Once a year, all full-time faculty members could be anonymously surveyed to ask them the top 3 barriers to their research and a solution to each barrier. The results of this survey could be shared with everyone so that discussions could take place at all levels (e.g., Provost’s Council, Faculty Association, department meetings) to implement solutions to overcome common and individual research barriers. For example there could be department-level introspection of identified barriers with a focus on how to overcome these barriers. This would provide regular feedback on barriers to faculty research/scholarship and provide frequent opportunities to adjust policies to promote research.
2.d. Course Stability: Set a limit on courses being taught by faculty members for the first time within a 2-year period

Description
Limiting the number of new courses (not always new courses but new to the instructor) taught in a 2-year period (especially for new tenure track faculty) would allow faculty with active research/scholarship programs more time to do their research/scholarship as they would be spending less time preparing to teach their courses. This is especially true if it is a brand new course and the faculty needs to develop all of the course materials (e.g., syllabus, PowerPoint slides, assignment guidelines).

Maintain consistency of courses taught especially for new tenure-track faculty. Faculty on tenure-track positions should have course stability so they can focus on doing their research/scholarship.

Background
Preparing for new classes takes time away from doing research/scholarship. The preparation time that goes into teaching a new course (both new courses and courses new to the instructor) is tremendous. Faculty members that repeatedly teach new courses often have no time to do research/scholarship. If this is repeated semester after semester, research productivity suffers.

Implementation Issues
This is an issue that needs to be discussed and adopted at the department level. There may be the rare exception of a faculty member who likes teaching new courses every semester and their research/scholarship is not hindered by it.

Some students are unhappy when they are taking a course that is being taught by the professor for the first time (one example of this might be a nursing clinical course where it can take years to develop relationships with nurses/preceptors, staff and administrators in an agency) and faculty often spend a large majority of their time preparing for class when they are teaching a course which is new to them.

Faculty need to be able to teach a course a minimum of 3 times in order to get familiar with the course and its requirements and to use student feedback to improve the course. For clinical courses, this can take even longer as it takes a considerable amount of time to become familiar with staff, administrators, agency policy, etc.

This recommendation can be implemented at no cost to the University or Schools and Colleges. Adopting this recommendation could result in more satisfaction among students and also allow faculty more time to be productive with their research/scholarship.
2.e. Reduce Teaching Load for Research-Active Faculty: Eliminate the “third course” for faculty members with high research productivity/output

Description
Make faculty teaching-loads across the two-year cycle 2-2-2-2 rather than 2-2-2-3. Faculty members with different teaching-loads would need analogous unit reductions (e.g., School Nursing tenured and tenure-track faculty teach 9 units/semester, some science departments have to teach on a 10-10-10-6 model). Reducing workloads by one course over two years would allow faculty to maintain a better research rhythm and sustain collaborations with colleagues at research universities.

To provide appropriate incentives, teaching release should not be an across-the board change in teaching load. This release should be awarded via a transparent, competitive process. The number of releases should be sufficient to make a meaningful difference, for example, 10% - 20% of tenure/tenure-track faculty.

Background
With a typical teaching load of 2 courses for three semesters then 3 courses for one semester, some faculty tell us that they cannot maintain a steady level of effort on scholarly activities. This is a testament to the seriousness with which faculty address their teaching obligations.

These faculty members indicate that teaching the third course every two years disrupts their research rhythm, and that their productivity drops or even comes to a full stop for several months. Furthermore, this then necessitates a “start-up” period to re-establish the habits and discipline required for high research productivity.

In addition, some faculty members report that their collaborators at other schools, especially at research-oriented schools (who are particularly valuable collaborators and sometimes mentors for USF faculty) simply abandon them because they cannot wait for the USF faculty member to resurface.

Implementation Issues
Under the Collective Bargaining Agreement, teaching releases can be awarded at the discretion of the administration. To insure transparency and broad faculty support, faculty should be engaged in the design of the award process, and in its implementation. This might be rolled into the Faculty Development Committee of each school.

The competitive aspect requires that we be able to make professional judgments regarding which research programs are to receive extra support. The competition should include a measure of alignment with the university and school research strategies, and a measure of impact. The application process should be designed to not be burdensome on faculty.

It is important that this not be tiny-scale effort. If only one or two releases are made per school, there is too much potential for friction, and the overall benefit will not be worth the effort of administering the program.
2.f. Clarification of Buy-Out Time: Clarify the formula used for faculty to buy-out their time to do research/scholarship

**Description**
Many universities have standardized policies for buying out faculty time. For example, UC Davis, Division of Social Sciences allows faculty to buy out their time in 2 categories:

1) **Internal**—faculty time can be bought out by other departments at a standard lecturer rate only. So the equivalent for this would be the part-time faculty rate.

2) **External**—faculty time can be bought out by external funding and the rate is 1/9 of annual salary plus benefits per course.

Link to UC Davis Course Buy Out Policy
http://www.ls.ucdavis.edu/dss/dean/course-buout.html

**Background**
The buy-out rate for faculty time has been unknown by most faculty members at USF. Thus, faculty have not been clear how to buy-out their time so they can spend more time working on their research/scholarship.

**Implementation Issues**
Faculty should be able to find the faculty buy-out time policy (including formula) on the USF website and easily calculate what it would cost to buy-out their workload for both internally and externally funded projects.

The process of buying-out faculty time should be made easy. A standardized buy-out policy would facilitate that goal. However, it would be important to be flexible with this policy especially when a faculty member is getting their first external grant.

If more tenure track faculty buy out their time, more part-time or term faculty will be needed to teach courses. However, this could be a win-win for both the faculty and the University if it does not cost the University and faculty members have more time to work on their research/scholarship.
2.g. **Workload Compensation for Training Students Outside of Courses:**

Create and disseminate a standard policy for awarding compensation for involving undergraduate and graduate students in research and scholarship

**Description**

It takes a lot of time to mentor students at any level to be researchers or to do scholarship. Currently, faculty members who are teaching and mentoring students outside of formal courses are not being given workload compensation for their time, and are taking time away from their own teaching, research/scholarship, and service to do so. We recommend creating and disseminating a standard policy for awarding compensation (e.g., seed money, course release) for involving undergraduate and graduate students in research and scholarship. Such information should be posted in a central place, for example, a website that lists research incentives and awards at USF.

**Background**

There is a great deal of uncertainty among faculty about what the structure of rewards, incentives, and compensation are for doing research with undergraduate and graduate students.

It is often believed that faculty members who are mentoring students are getting their research/scholarship done by those students. That is very rarely the case. It usually takes more time to mentor/teach someone that it does to do your own research. So the faculty member who is serving as a research mentor is actually spending uncompensated time with that student. That is unless the faculty member is being given teaching units or the student is being compensated as a research assistant and then can be assigned specific tasks to be helpful to the faculty member.

**Implementation Issues**

There is nothing in the CBA to prohibit faculty members from being compensated for doing projects over their standard teaching, research/scholarship, service, advising load; however, workload compensation for mentoring is rarely (if ever?) provided. Some departments have devised various systems to allow faculty to rotate through research-based courses or internship programs in order to provide workload compensation for other mentoring activities, but there is no uniform format for encouraging faculty to mentor students at any level in research.

Part-time faculty members are paid for supervising students enrolled in directed study courses, but full time faculty members are not. Faculty members need to feel fairly compensated for their time spent mentoring students as much as for teaching in the classroom.

Policies will need to be sensitive to the diverse forms of involvement that students can play in research as some disciplines are not suited to involving students in research.
2.h. Research Professorships: Establish professorships to enable selected faculty to focus on research

Description
Create professorships, with three to five year terms, that provide substantial research support to selected faculty with very strong current research records and the potential to take their research to the next level.

Background
These professorships would be significant recognition of research accomplishment, and if there were many of them they would represent a substantial incentive for research.

These are much cheaper than having “Chaired Professors” (which pay for the faculty line as well as the research add-ons) but provide much of the benefit. They should be designed to allow faculty to focus intensively on research activities for multiple years.

Implementation Issues
This plan will only work if there is a university-level person who will oversee research activities at USF and is responsible to administer and lead this effort. There must be a strong commitment to high expectations and accountability.

Each professorship should include release time plus significant research funds, plus perhaps a stipend. The release time will have the most impact if it is on the order of 10 units per year (i.e., teach only two courses per year). The recipient should be given great latitude in scheduling teaching activities to free up periods of time without teaching duties.

The research funding should be unrestricted and large enough to actually do something, at least $4,000 per year probably higher depending on the discipline. There could be a stipend to provide extra pay.

There should also be commitment to limit service expectations during the duration of the professorship.

We should consider targeting these research professorships in areas of strategic importance to the university. We should have several professorships, with staggered terms so that every year at least one professorship is in competition.

Professorships should be awarded competitively. The application should include a written program of research intentions, and a statement that describes the research program’s connection to the university’s research strategy. The application process should include an external evaluation that considers research and publication track record and the research project’s likelihood of success. There should be high expectations for tangible results, including discipline-based peer-reviewed scholarship, not only the writing of a book (although book-writing should be encouraged). At the end of the professorship, faculty should be required to report in writing on what was accomplished.
We must determine whether and how a professorship can be renewed. A professorship could be renewable based on performance, or it could be opened to competition when it ends. If opened to competition, there might be a requirement to wait before applying for another. Given the stage of our university’s research development, we recommend that the professorships should be opened to competition. To ensure strong incentives for performance, the holder of a professorship should be permitted to enter the competition upon expiry, or at most a year or two after expiry.

Cost
Professorships should be “named” and ideally funded externally. There might be different levels of support for different professorships. These could be launched with internal funding and external funding sought as part of the next capital campaign. (Note these are a useful way to deploy endowment funding towards operations.)

There is wide latitude to design the features of these professorships. There are three dimensions of cost: teaching reduction, unrestricted research funds, and stipend. The cost for teaching reduction depends on an accounting choice and can range from about $2,000/unit (PHP adjunct rate) to about $4,000/unit (roughly the external grant buyout rate). The course reduction could be as little as 4 units (cut one course per year) and as high as 10 units (teach 1 course per semester). Thus, the cost for teaching buyout ranges from $8,000 to $20,000 (adjunct pricing) or $16,000 to $40,000 per year (external rate). Research funds could reasonably range from $5,000 to $20,000. Stipend (extra pay) could be none ($0); a fixed sum such as $4,000 or $10,000; or a fraction of salary such as 1/9 or the traditional 2/9 (roughly $15,000 for a step 8 Full Professor).

Total cost varies widely with the attractiveness of the Professorship. Cost sensitive to the charge for teaching release time. The values below assume a release time cost of either $2,000 or $4,000 per unit. To estimate the corresponding endowment funds, a factor of 25x (4% drawdown) is used.

- **“Low-end Professorship”**: one course + $4,000 research funds
  $12,000/year - $20,000/year ~ $300,000 - $500,000 of endowed funds

- **“Middling Professorship”**: two courses + $4,000 research funds + $4,000 stipend
  $24,000/year - $40,000/year ~ $600,000 - $1.00m of endowed funds.

- **“High-Stipend Professorship”**: one course + $5,000 research funds + $15,000 stipend
  $28,000/year - $36,000/year ~ $700,000 - $900,000 of endowed funds.

- **“Free-up-time Professorship”**: 3 courses + $5,000 research funds + $5,000 stipend
  $34,000/year - $58,000 ~ $850,000 - $1.45m of endowed funds.

- **“Gold-plated Professorship”**, with 10 units buyout + $20,000 of research funds + $15,000 stipend
  $55,000/year - $75,000 ~ $1.375m - $1.875m of endowed funds.
3. Research Management and Leadership

a. University Administration: Establish a university-level research leadership position
b. School/College Leadership: Establish in each school a formal research leadership role
c. Incentives: Review the incentives for faculty to engage in research
d. Support Policies: Establish and disseminate policies for research support
e. Research Clusters: Developed targeted research clusters
f. Targets: Establish targets for increases in external grant money
g. Celebrate: Celebrate and recognize notable accomplishments in research, scholarship or artistic accomplishment across the university and school level
3.a. University Administration: Establish a University-Level Research Leadership Position

Description
Establish a position at the senior leadership level of the university to provide vision, leadership and advocacy for research at USF.

Background
There is no clear leader of research activity at USF. We do not systematically use research to advance the goals of the university or invest strategically in research. Faculty with ideas on how to advance research in the university have no one person to go to. We lack visibility into our overall research output, a means to use that output to build the reputation of the university, a sense of where opportunities lie, and how to seize them. At best, we are punching below our weight. These issues will not improve unless there is an individual accountable for them.

Responsibilities
Take the lead in crafting and executing a research strategy that best advances the university’s overall goals, taking into account our mission, heritage, resources, and faculty research accomplishments. Stretch our thinking and challenge old ways of doing things.

Provide guidance and support for strengthening research management and leadership capabilities at the School and Department levels.

Supervise the Office of Sponsored Research to achieve higher grant revenue.
Measure research outcomes. Evaluate impact of research activities on university goals.

Think clearly about the many “blue sky” proposals for advancing research, and prioritize based on connection to university mission, likely impact on university goals, feasibility, faculty strengths, and resource requirements including faculty time.

Lead and facilitate conversations about our research culture. Help our community understand the benefits of focusing our efforts while continuing to cherish curiosity-driven research.
Consider the role of faculty incentives and culture in overall research outcomes.
Think long-term, but create short-term successes.

Implementation Issues
This position should be part of the university leadership team.

What is the right level for this position? Dean of Research; Vice-Provost for Research; Assistant Provost for Research, etc.?
Should this position be part-time or full-time? We recommend that this be a new position, not an add-on to an existing senior administrator.
Should this position be hired internally or externally? We recommend a national search. This is an area where an external perspective could be particularly valuable.
3.b. School/College Leadership: Establish in Each School a Formal Research Leadership Role

Description
Each school needs a faculty member designated to provide leadership, advocacy, coordination, management, and administration for all aspects of research including support, funding, recognition, time, and policy formulation.

Background
Currently, some schools have no person (other than the Dean) to go to discuss research policies, priorities, practices, opportunities, etc. nor is there anyone whose job it is to monitor research efforts, practices and outcomes. We will benefit if each school has a faculty member who is the designated lead on research.

The Law School recently appointed an Associate Dean of Research. This position is a faculty member who is given a one-course release. The law school recently appointed an Associate Dean for Faculty Scholarship. This faculty member was given a one-course release. (Note that it is ordinary practice in law schools when assigning administrative responsibilities to designate a tenured professor as “associate dean” and an untenured administrator as “assistant dean,” and that tenured professors with such a title also remain members of the faculty.)

Implementation Issues
The scope of the role needs to be defined and documented. It may vary across schools. It will undoubtedly evolve over time.

The responsibilities should include tracking research output, supporting researchers, developing and disseminating research policy, recognizing research achievement. The research lead should be able to speak to the research accomplishments and expertise of faculty members. The research leads in each school should meet periodically to discuss best practices, and should work closely with the university-level research leader role.

The scope should indicate the relationship to the Faculty Development Committee that is in the Collective Bargaining Agreement.

The title of the role could vary across schools or it could be standardized. Titles could include Research Director, Research Coordinator, Assistant Dean of Research, Associate Dean of Research. Thought should be given whether the role should take on “administrator” designation under the Collective Bargaining Agreement.

The time and compensation for this role will vary across schools, depending on the number of faculty and the level of research activity. Compensation might be at the level of a single course release but could be much higher depending on scope and number of faculty.
3.c. **Incentives: Review the Incentives for Faculty to Engage in Research**

**Description**
People respond to incentives. We should carefully examine the incentives for faculty to do the hard work of research, and how those incentives change as a faculty member’s career progresses.

**Background**
Research is hard work. It requires sustained effort over a long period of time. It requires both enjoyable intellectual and less enjoyable “project-completion” activities. It is risky business, with no guarantee of a good outcome, or even a satisfactory outcome. Incentives are required for some faculty to achieve sustained high performance.

We have substantial career incentives in place for junior faculty to do research. Assistant professors have the incentive of tenure and promotion; they must do research to keep their jobs. Associate professors have the incentive of promotion; they need to do research to avoid having their salary capped at a modest level.

There is no corresponding career incentive for our 131 Full Professors. Indeed, faculty members regularly remark that full professors have little no incentive to engage in research.

The Collective Bargaining Agreement includes a 6 unit/year teaching release that is meant to be connected to research. We have no data on the utilization of this release. Its connection to research achievement is unclear. Our sense is that it is routinely granted; hence its effect as an incentive may be limited.

There are other, lesser incentives that vary across units. These are neither visible nor documented (see “4. Establish and disseminate policies for research support” below). Cumulatively, their effect is likely beneficial but relatively modest.

**Implementation Issues**
Incentives can require the exercise of judgment to evaluate the performance of individuals. Not everyone should be expected to perform at the same level. This is a delicate issue. Dialog with faculty would be essential. Dialog with the union would be wise even if not mandated by law or contract. Some incentives could be implemented without changes to the union contract, but others might require a change to the contract.

We note that it is entirely possible to retain a strong union and strong union contract while incorporating meaningful research incentives. Other universities have unions, and have found ways to include meaningful incentives for faculty research achievement.

**Description**
The university and each school should develop written policies and programs related to research, disseminate them to faculty, and share them across schools.

**Background**
There seem to be a variety of norms, habits, policies, procedures, and programs, formal and informal, related to research. These include awards, course releases and buyouts, grant-matching, internal research funds, research assistants, and various practices, titles, and forms of recognition available to USF faculty for activity or notable achievement in scholarship. Some are at the university level; some are at the school level. Some are at the discretion of deans, some are at the discretion of the department chair, some are connected to the ACP process, and some are connected to the FDF process.

These policies and programs are not consistently visible and understood. They should be clearly stated and periodically evaluated in light of each school and college’s strategy and the university’s research goals. We should disseminate these policies to faculty and make them easily available for faculty reference. We should share them across schools/colleges within the university to identify new ways of doing things. We should share them across comparable units in other universities to seek ideas for improved practices.

**Implementation Issues**
This effort should be led and coordinated by the university research leader in coordination with the research leader in each school/college.

All policies should be posted on an appropriate website or intranet site for easy reference by faculty.
3.e. Research Clusters: Develop targeted research clusters

Description
Focus limited resources on a few selected “clusters” where USF has an opportunity to have a sizable impact. In each cluster, faculty from multiple departments bring their skills to bear on a common theme, issue, topic, or problem. The university makes a multi-year commitment to provide support for cluster research.

Background
Faculty members have limited time and opportunity to seek out and develop partnerships in research. Faculty often conduct research alone and in individual departments and are not always aware of other potential partners and opportunities for interdisciplinary collaborations inside and outside of USF. Targeted Research Clusters offer avenues for faculty to engage in research and discovery in teams of individuals with a shared interest or vision. Targeted Research Clusters provide opportunities for highly visible interdisciplinary collaboration, outside partnership, and multiple perspectives to solving problems and making discoveries. These clusters will enhance faculty training/development in research and build the reputation of research expertise at USF.

USF has around 300 tenure-line faculty members in a number of different departments. It is challenging to acquire “critical mass” in any one area. By targeting our efforts at a particular theme, we can bring to bear a variety of perspectives, skills and approaches on an issue of broad interest and relevance. By coordinating the efforts of many faculty, we can achieve greater impact than through our currently uncoordinated efforts, and we can build a depth and breadth of expertise that will help us build USF’s reputation.

Clusters can seek to partner with local and national organizations and agencies as appropriate. Goals might include the development of innovative theoretical or empirical insights related to the cluster, evaluating and influencing policy, or guidance to practitioners.

Implementation Issues
A process will be created to determine areas of Targeted Research Clusters and specific criteria. For example, faculty in different areas may propose an area for Targeted Research Cluster or the “Center” may create Targeted Research Centers in critical areas in a particular year.

Target Research Clusters will hold regular research presentations and reports of their work. The media office will insure the visibility of the problem they are tackling. Faculty researchers use collaboration and innovative mixed methods and transformative research design and methods to seek answers and disseminate findings via position papers, research publications, community outreach, and presentations.

Resources needed may include Research Assistants, small grants, technology and library support, opportunities for undergraduates and graduate students to serve as RAs. Leadership and a multi-year commitment will be essential to success.
We emphasize that nothing in this proposal should deter faculty from continuing to choose their own research topics, and the university should continue to provide an array of support to research that is not related to a cluster.

**Potential Challenges**

How long? How many people? Apply? Who determines areas? Incentives? Choice of clusters…a big house but not too big. Many faculty members will have little affinity for any given cluster. How to align cluster with teaching and educational programs?

Note: This is pretty much a description of “create some centers” in the traditional sense of a “center” or “center of excellence” or “institute” at a research university.
3.f. **Targets: Establish targets for increases in external grant money**

**Description**
Announce targets for winning external grant money, e.g., so many $n$ millions in 2012, $n+1$ millions in 2013, etc.

**Background**
One measure of USF improving its research profile turns on the number of external grants we bring in. It is not clear whether USF has established targets for how much grant money we aim to bring in. Establishing those targets in an explicit and visible way would help make clear our aspirations, and would generate one standard by which to measure whether we are making progress towards that goal.

**Implementation Issues**
This may fall in the purview of the One Stop Office for Contracts and Grants (OCG), and may amount to holding of “feet to the fire” of those leading such an office when outcomes are significantly dependent on faculty.
3.g. **Celebrate:** Celebrate and recognize notable accomplishment in research, scholarship, or artistic accomplishment across the university and school level

**Description**
Recognize at a luncheon or dinner, or in the form of temporary titles (e.g., “Provost’s Scholar”), or in other formal ways high quality research in whatever form it occurs.

**Background**
There is already some recognition of those who, for example, publish books or gain external grants. However, those who publish research in elite journals or achieve some especially successful bit of artistic production do not have their work as easily recognized.

**Implementation issues**
Making judgments of differential quality or significance is always a complex matter that invites dissent. So, sensitivity to discipline-specific standards of notable accomplishments will be crucial. This might be established by inviting departments to provide guidelines for especially notable standards to respective deans, a designated committee, or other executive body with the charge of promoting research at USF.

Cost is minimal, and mainly a matter of expanding the scope of practices that are already in place.

See also some of the considerations listed in “Increase the Number and Variety of Internal Monetary Awards.”
4. External Visibility

   a. **Branding**: Develop a brand by focusing on particular projects, issues, subject areas, or disciplines.

   b. **Website**: Improve website to enhance reputation for scholarship.

   c. **The Press**: Improve relationship with popular and professional press regarding scholarship.

   d. **Visiting Scholars**: Invite scholars to visit USF, perhaps in exchange for a visit from a faculty member at USF.

   e. **Other Academic Institutions**: Foster interactions with scholars at other institutions.

   f. **U.S. News and Other Rankings**: Take measures to improve our U.S. News and other rankings.

   g. **Popularizing**: Popularize our scholarship.
4.a. **Branding: Develop a brand by focusing on particular projects, issues, subject areas, or disciplines**

**Description**
A Center for Excellence in Research and Scholarship could bring together scholars with a common focus to achieve a level of recognition that individual scholars may otherwise have difficulty attaining (e.g., Targeted Research Clusters). The focus could be on particular projects or issues, such as combating trafficking of women in the sex trade or contending with climate change. In addition, or alternatively, we could focus on developing our reputation in particular disciplines or intersections of disciplines, such as the science, culture, and politics of environmental change or the intersection of law and philosophy.

**Background**
USF may have better success making a name for itself in discrete areas than by trying to compete in all areas in the same manner and to the same extent.

**Implementation Issues**
Careful thought should be given to potential areas of focus and to issues regarding equity and morale for those who do not fit into an area of focus. The Center could probably support focusing on only one or two areas or issues initially. Recognition should be given that not all scholars, or all disciplines, would fit the projects and those that do not are still highly valued.
4.b. Website: Improve website to enhance reputation for scholarship

Description
Modify the USF Website so that users can readily gain access to areas of faculty expertise, a list of faculty scholarship, and, as feasible, access to the scholarship itself. This ease of access could increase the impact of scholarship, enhance the faculty’s reputation, and create opportunities for faculty members to disseminate their ideas, including through print, internet, and public media. The press could contact faculty members as appropriate, outside scholars could learn about and research our scholarly work, prospective faculty members could receive a favorable impression of our productivity, and current and prospective students could learn about what we do as scholars.

The press and media warrant special attention. We could develop a link for them on our Website, provide a contact person (through the Website, by phone, etc.), create a directory for use by the press organized by department, professor, or both identifying areas of expertise, etc. A link to the Center for Excellence in Research and Scholarship may also make sense. However we organize the website, we want to make it quick and easy for the press/media to contact an appropriate scholar to address a topic in the news.

Background
Our Website does not currently make it easy to gain access to information about faculty scholarship and areas of expertise or to scholarship itself.

Implementation Issues
To implement change, suggestions should come from a committee/task force whose members are informed about web design, how the press, scholars and students search for and evaluate scholarship, and competing goals of the schools and colleges that inform our web design.
4.c. The Press: Improve relationship with popular and professional press regarding scholarship

Description
Appoint a liaison with the press, train professors to interact with news media, and create lists of areas of expertise. Make this information readily available on the Website (see related proposal). We could also hire someone who could serve as a single contact person for matters dealing with the media, who could issue press releases regarding our scholarly work, who could encourage and train professors to promote their work, who could train faculty members for print and video interviews, who could develop mentoring relationships between those faculty members with experience dealing with the media and those who do not, etc.

Background
We have no current systematic strategy to attract press attention to our scholarly efforts. Developing a systematic strategy and investing appropriate resources could significantly raise our profile in the media.

Implementation Issues
To implement change, suggestions should come from a committee/task force whose members are informed about how the press searches for and evaluate experts and about what content makes a favorable impression on academics, the public, students, etc. We have a range of options available from having faculty members and staff undertake the relevant tasks to hiring someone with expertise in planning and executing effective strategies. Hiring someone with expertise in public relations may well be a worthwhile investment. Such a person may prove essential in encouraging faculty members to deal with the press, in teaching them how to do so and in identifying and creating opportunities for faculty members to promote their work.

We also need to consider how best to balance efforts to promote our scholarship with the other commitments of our faculty members, including to scholarship itself, to teaching, to the community, to service, etc.
4.d. Visiting Scholars: Invite scholars to visit USF, perhaps in exchange for a visit from a faculty member at USF

Description
An effective means for USF to enhance its scholarly reputation would be to invite scholars at other institutions to visit us (provided, of course, that we make a favorable impression). We can also benefit from visiting other schools and thereby improving the perception among us by outside scholars.

Background
One of the best ways for scholars at other institutions to come to know us well is for them to spend an extended period of time at USF or with USF faculty members when they visit other institutions.

Implementation Issues
Visiting scholars can be expensive. We could dedicate funds to invite outside scholars to visit us. Instead, or in addition, we could develop an exchange program where a scholar visits us and one of our faculty members visits another institution, perhaps with each institution continuing to pay its own faculty member. Such an exchange might lighten any financial burden and simplify the logistics (it would be particularly easy, for example, to swap professors who teach the same classes). It might make particular sense to develop a regular exchange with one or more Jesuit institutions.
4.e. **Other Academic Institutions:** Foster interactions with scholars at other institutions

**Description**
Host or organize scholarly working groups, host scholarly events to expose outside scholars to USF (symposia, conferences, speaker series), invite scholars to visit USF (see previous proposal), encourage USF professors to present at events at other scholarly institutions.

**Background**
USF could put greater emphasis on and provide greater encouragement to organize scholarly events on our campus and to participate in scholarly events at other institutions.

**Implementation Issues**
Administrative support and funding would be necessary to host events and to some degree to support presentations outside of the school. Issues of equity may arise regarding distribution of support among schools and disciplines.
4.f. **U.S. News and Other Rankings: Take measures to improve our U.S. News and other rankings**

**Description**
U.S. News and other rankings have a powerful—if highly questionable—effect on the reputation of USF, particularly with prospective students and faculty members. In making efforts to improve our scholarly reputation, we should be mindful of the impact on U.S. News and other rankings.

**Background**
U.S. News and other rankings depend on factors that are neither transparent nor intuitive. We may want to undertake an effort—if we have not already done so—to figure out what is inside the black box of U.S. News and other rankings and how we can improve our ranking. (USF’s Law School was able to achieve this result with significant success.)

**Implementation Issues**
We should determine what institutional knowledge we already have about U.S. News and other rankings and how we can find out more (if we choose to do so). We should also remain mindful of our mission and values when we consider steps that might improve our U.S. News and other rankings.
4.g. **Popularizing: Popularize our scholarship**

**Description**
We could facilitate and encourage faculty members to provide versions of their ideas and scholarship that will appeal to a broad audience. Possibilities include blogs, op-eds, summaries of scholarship posted on our website, and an online USF scholarly journal; some or all of this might be done in conjunction of the university library’s institutional repository. Indeed, each school should designate an accountable individual and develop routine processes to insure that all faculty publications are submitted to the university library’s institutional repository. We may want to hire a professional specializing in public relations to facilitate popularizing our scholarship (see related proposal regarding *The Press*).

**Background**
We often undertake research without concerning ourselves with disseminating our ideas, particularly to the public at large (or at least informed amateurs).

**Implementation Issues**
We should consider ways to encourage this effort while recognizing the risk that faculty members might become distracted from their scholarship or other responsibilities.
5. **Assessment**

   a. **External Funding**: Evaluation of research and scholarly activity through quantification of external funding

   b. **Productivity**: Evaluation of research and scholarly activity through quantification of research publications and other scholarly activities

   c. **Advisory Board**: Establishment of an External Advisory Board for evaluation of research and scholarship excellence at USF

   d. **Broader Impacts – Students**: Evaluation of broader impacts of Research and Scholarship Excellence at USF: training of graduate and undergraduate students

   e. **Broader Impacts – The Public**: Evaluation of broader impacts of research and scholarship excellence at USF: public outreach
5.a. **External Funding: Evaluation of Research and Scholarly Activity through Quantification of External Funding**

**Description**
One potential metric to evaluate the current level of research activity and research excellence at USF, and to track improvement in research activity and output over time is to quantify the number and total budget value of external research grants.

**Background**
Traditionally, success with and magnitude of grant funding has been equated to having successful research programs. Evaluation of grant funding can be based on the number of grants and/or the total budgets of grants awarded to the University. Acquisition of external funding from federal, state and local government agencies, or private foundations involves a critical peer-review process. Annual changes in external research funding will include evaluation by experts of the level of past excellence in research performance, and provide a basic measure of the potential for future research programs. Increases in awards of external funding would reflect enhancement of research activities at USF.

**Implementation Issues**
The One Stop Office for Contracts and Grants (OCG) can track quantification of external grants by number and monetary amount. OCG is the University department that provides oversight for submission and processing of proposals, and in the future will also be responsible for post-award administration of grants.

One drawback of utilizing grant success for evaluating research and scholarship activities is that not all disciplines have equal access to sources of external funding, and not all faculty have equal motivation to apply for external funding. Discipline-specific assessment of grant metrics may be needed to accurately evaluate school/college specific research activity.
5.b. Productivity: Evaluation of Research Activity through Quantification of Research Publications and Other Scholarly Activities

Description
Enumerating the number of publications authored by USF faculty, as well as the output of other scholarly works such as theatrical and dance performances, movies and videos, software, art exhibits, etc. can potentially provide a measure of research and scholarship excellence at the University. Quantification of oral presentations at professional meetings and public venues would also contribute to an assessment of research output at USF. The dissemination and display of research products in the public domain indicates scholarly activity and promotes the reputation of USF.

Background
Publication output (i.e., number of articles, book chapters, edited or fully authored books) is a common measure of research output. In some fields, peer-reviewed papers are the norm. In other fields, books are a more common means of disseminating research results. In still other areas, performances, art exhibits/installations, readings, etc. constitute the best measure of scholarly productivity and excellence. Different systems will most likely be needed for the various disciplines represented by USF faculty.

Implementation Issues
Quantity does not equate to quality and judging the relative importance of individual products across or within specific fields is not straightforward. In some disciplines (e.g., sciences) professional publications are annually evaluated for the average number of citations per article published, and subsequently ranked by “impact factor”. The impact factor of the journal in which an article is published can be used to assess research excellence. In this way, the actual number of articles published is not as important as taking into consideration the journals in which individual articles are published.

The Higher Education Funding Council for England reached a similar conclusion in a preliminary study of bibliometrics across several UK universities (http://www.hefce.ac.uk/research/ref/Biblio/). If USF decides to use publication data as a measure of research excellence, a tested model from other institutions should be applied.

For other scholarly works, externally published reviews and critiques might be used for evaluation.

Perhaps the simplest means of collecting aggregate data on research output will typically be through the ACP process or college-specific equivalent. Faculty could provide a separate one-page summary listing annual output of research publications and other scholarly works.
5.c. **Advisory Board: Establishment of an External Advisory/Review Board for Evaluation of Research and Scholarship Excellence at USF**

**Description**
Evaluation of the University’s current status and future progress in research and scholarship can be best accomplished by an unbiased group of external advisors/reviewers, in addition to internal assessment.

**Background**
For the same reasons that external committees are used for program reviews, an external advisory/review board would provide a good mechanism for evaluation of research and other scholarly activity at USF. This board could address specific questions, and provide feedback for specific actions that could boost research output through suggestions on areas such as faculty incentives for conducting research, improvements in facilities used for research, new avenues for research funding, ways to increase student interest in research, etc. An advisory body could also evaluate USF compliance with WASC-related requirements for research and scholarship.

**Implementation Issues**
With the variety of disciplines represented within USF, a single advisory/review board may not be practical. However, with the range of expertise available in the Bay Area, assembling several groups to serve as external evaluators should not be difficult. Using local experts from regional universities, companies, private organizations, and government agencies for one-day meetings would also not be an expensive undertaking.
5.d. Broader Impacts – Students: Evaluation of Broader Impacts of Research and Scholarship Excellence at USF: Training of Graduate and Undergraduate Students

**Description**
Quantification of numbers of students involved in faculty research programs can reflect the quantity, quality and level of effort associated with both research activities and the practical training of students.

**Background**
Research and other scholarly activities undertaken by faculty should incorporate the participation of graduate and undergraduate students. These out-of-class experiences provide training opportunities through which students can gain practical experience in preparation for their future careers. In addition, students working with faculty will improve and enhance the overall research output at USF.

**Implementation Issues**
Currently there is no formal mechanism to compensate faculty for mentoring undergraduates outside of courses, and in most cases such activity is a large commitment in time and resources. If the University intends to foster an atmosphere for increased research and scholarly activity that includes students, then appropriate incentives for both faculty and students need to be available, along with funding to support these extra activities.
5.e. Broader Impacts – The Public: Evaluation of Broader Impacts of Research and Scholarship Excellence at USF: Public Outreach

Description
Quantification of efforts to inform the public about results and conclusions from faculty research and other scholarly work will reflect the quantity, quality and level of effort that are being dedicated to both research activities and public outreach.

Background
Research and other scholarly activities undertaken by faculty should incorporate public dissemination of the resulting output beyond professional circles. Documentation of public outreach efforts on and off campus could perhaps be used as an indicator of research success. Public spotlighting of student and faculty achievements will promote USF’s image and potentially improve the University’s presence on local, national and global scales.

Implementation Issues
Data on public outreach may best be captured in the ACP process. However, it must be noted that media publicity does not equate to excellence in research.

Increasing the visibility of faculty achievements to the public will also require additional efforts from the Office of Public Affairs and Media Relations.
Appendix B: Issues by School/College

In this section we highlight various college- or school-specific concerns as they arose in our investigations.

School of Arts and Sciences
College-wide emails were sent out soliciting thoughts on barriers to research quality and productivity at USF. Also, some meetings were had at departmental levels and in one-on-one contexts. Given the diversity of research models in Arts and Sciences, it will come as no surprise that there is not some uniform set of barriers to research across A&S. Still, there are some recurring concerns among the faculty we polled. Elimination of the "third course" every fourth semester was perhaps the most frequently mentioned item among those surveyed. There was also a strong interest in the possibility of "course banking" (whether across summer or intercession terms, or across regular terms in a two-year block of time), and a frequently mentioned interest in increasing a range of basic support services, such as a floating RA pool available for short-term research projects, statistical consulting, and copy-editing services. In addition, of special interest to many faculty in the sciences is the lack of sufficient (and modern) research space along with a pressing need for specialized technical support staff to oversee maintenance, operation and repair of science equipment and sophisticated instrumentation.

School of Education
USF School of Education (SOE) faculty members were surveyed on the challenges and solutions for increasing the quality and quantity of their research. The largest research barriers in the SOE include lack of: (1) time; (2) lab space; (3) support for new statistical and research training and software; (4) faculty mentors who are experts in research; (5) need for small and large internal and external research grants; (6) support for a research culture (versus a teaching and service culture). Among our 34 full-time faculty members, 40% are untenured and need to conduct and publish research as part of their requirements for tenure and promotion. Faculty also identified many possible solutions which included: (1) more internal grant money and seed money available to conduct research; (2) more money for research assistants; (3) lab space; (4) statistical consulting, training, and software; (5) increased support for grant writing; and (6) course release time or reduced teaching load for productive faculty.

School of Law
The law school has benefited greatly through its participation in the Task Force. I hope and believe that the relationship has been reciprocal. Discussions on the Task Force have suggested new initiatives that I have pursued at the law school, and I believe some of our ideas have contributed to the Task Force’s recommendations. Nevertheless, in many ways the law school acts independently in supporting and promoting scholarship. As a result, few of the Task Force’s proposals would have a direct impact on the law school. The most important exception is that our faculty would greatly benefit from establishing a statistical consulting service. Various members of our faculty have requested assistance in their empirical work, particularly in analyzing data. If the University were to retain experts who could run appropriate statistical analyses, that would greatly benefit members of the law faculty.
**School of Nursing**

The biggest barrier to School of Nursing faculty doing research/scholarship is lack of time due to overloaded schedules and an overwhelming number of responsibilities. There are currently 27 full time faculty members (19 tenure track or tenured and 8 term) serving over 1000 students. We currently offer programs at the undergraduate (BSN), graduate (RN to MSN, MPH, master’s entry option and BSN +1) and doctoral (BSN to DNP, post-master’s DNP, FNP and ELNDNP) plus new programs at the master’s and doctoral level are currently being discussed. We do have a search in progress for 4 new faculty members and are hoping to add 3 term positions that should help when 4 faculty members go on sabbatical next year. Solutions proposed by School of Nursing faculty include “course banking across a 2 year period”, “more research release time for those with a program of research”, “consistency in courses taught”, “having a research day” (recently has been reinstituted), editorial and statistical consultation, pool of RAs, Grants Office that notifies of grant opportunities and supports the entire grants application and administrative processes, public forum to share research and sharing of research interests across Schools/Colleges to increase collaborative research.

**School of Management**

The School of Management (SoM) has in recent years made significant changes to research support that are aligned with this paper. For example, all full-time faculty are eligible through the Faculty Development Committee process to apply for research support based on an evaluation of a forward-looking Research Program Statement and a backward-looking list of publications and accomplishments; support includes a flexible block great and for those faculty who are high-achievers a summer stipend. Faculty workload is flexible across semesters; there are 4-unit and 2-unit courses; summer teaching and executive teaching can be done on load; and course banking is allowed within a 2-year cycle.

The most important issue facing the SoM is faculty time. SoM faculty would particularly benefit from a statistical consulting service to allow do-it-right-the-first-time project design as well as faster analysis; an ITS-supported statistics package to remove the software administration burden; targeted release time for the most productive researchers; professorships that provide visibility and status to leading researchers as well as support; a research director to track and coordinate the activities of 80 full-time faculty and identify ways to enhance their productivity.

In areas where SoM faculty have particularly strong expertise that overlaps or is complementary with the expertise of faculty in other schools there exists significant opportunity to establish and grow an ecosystem that links research, teaching, programs, and industry/employers. There are areas where SoM faculty understand the industry and have close connections to employers as well as research reputation, while faculty in other schools are developing or working with the necessary cutting-edge technology. Examples include biotechnology, and analytics.

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1 Note: The School of Business and Professional Studies becomes the School of Management in summer 2011.