Facilitating Researcher Success

Addressing Administrative Burdens in Stony Brook’s Research Enterprise

November 2017

Final report
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Facilitating Researcher Success

Addressing Administrative Burdens in Stony Brook’s Research Enterprise

Executive Summary

Stony Brook, like other leading research universities, has benefitted immensely from the outstanding research accomplishments of our faculty and students, earning a reputation for excellence and innovation. The present context for these accomplishments is the rapidly changing landscape of the research enterprise nationally, characterized by greater competition for stagnant funding, constantly changing rules and regulations, and limited resources to keep pace with the growing scope and complexity of research administration today. While embracing an expanding research enterprise, the support units charged with providing research administration and ensuring regulatory compliance have unintentionally introduced hurdles that have redirected the efforts of our investigators away from their research, thereby diminishing researcher effectiveness. This not only threatens growth of Stony Brook’s research, but also undermines our training of students to create the next generation of leaders.

Stony Brook is not alone in recognizing that administrative burdens impede efforts to grow research and secure more external funding. Comprehensive studies by the National Academies¹ (2015-2016) and the National Science Board² (2014) documented the impacts of increasing federal regulations and oversight on university research. Other research universities have undertaken studies of their own support infrastructures to assess self-imposed hurdles that further impact their investigators and also add to administrative costs.

The Facilitating Researcher Success project (FRS) was initiated to identify unnecessary administrative burdens in Stony Brook’s research support environment and to recommend solutions that reduce or eliminate their impact on our investigators. The broader goal is to reinvigorate growth of our sponsored research by relieving investigators of unnecessary tasks, streamlining processes, and providing support for essential functions. The present report from the project’s Steering Committee presents the outcome of a year-long investigation announced by President Samuel L. Stanley, Jr., in September 2016. The FRS project examined the entire spectrum of administrative processes that investigators must navigate—from proposal preparation to the financial management of grants and contracts to the conduct of research. The study engaged hundreds of faculty and support staff across campus, nine separate task forces, and numerous subject matter experts from the support units.

The findings of the study detail a variety of administrative hurdles or pain points and more than 60 recommendations to be implemented. The collective theme of the recommendations can be summarized in three words: invest, streamline, and facilitate. The report identifies more than 20 recommendations that require significant investment of resources, as well as other recommendations that involve changes in procedures, technology adaptations, improved communication, or improved information resources. Among the most urgent needs are investments in new staff to support development of large, complex program proposals; additional seed grant funds to enable teams to compete for large grants; and new staff hires to assist investigators in managing awards, hiring, and facilitating research compliance. Improved maintenance

of core facilities needed for research and a strategic plan for large-scale lab renovations also figure among the most critical needs.

The report also identifies common themes that emerged from survey responses and from task force investigations that require broad overarching strategies to resolve. Finding the widest support is the importance of restoring a positive customer service culture in support units, balanced by greater appreciation of the value that support staff bring to the research enterprise. Improvements in communications and web-based resources for guiding investigators and the need to streamline processes also figure among top concerns from all focus areas. The tenor of these common themes suggests the need to improve, or in some cases rebuild, confidence among investigators in the research operations here at Stony Brook. Although the current resource environment will limit our ability to move forward with all the recommendations requiring significant investments at this time, the Steering Committee has judiciously considered a set of high-priority recommendations that merit immediate action as a spring board in the right direction. Actions have already been taken to begin implementation of nearly 20 recommendations, with several already completed. Other hurdles are being addressed as part of the ongoing Huron Click project, which will streamline functions across six critical areas. The report also outlines preliminary thoughts on implementation strategies and risks. Finally, an important conclusion from the study is the need to continue the project, to allow continuous assessment of progress and to identify additional means for improving our research support infrastructure.

The body of recommendations in this report, once implemented, will reduce the administrative workloads on investigators, allowing them to direct more of their efforts to research and discovery. This outcome, can pave the way to increasing research funding, but will require a sustained commitment across all levels of the University. As we proceed with implementation, it is important to achieve the right balance between easing burdens and ensuring compliance with regulations and safeguarding the university and our faculty, staff, and students.

1. About the Project

In his 2016 State of the University address, President Samuel L. Stanley Jr., MD launched a university-wide effort to examine current practices and procedures, with a goal of minimizing administrative burdens that may impede growth of Stony Brook University’s research enterprise.

This project, Facilitating Researcher Success (FRS), addresses the complete spectrum of administrative activities that investigators must navigate in sponsored research across east and west campus. Project activities and timeline are shown in Figure 1.

Richard Reeder, VP for Research/Operations Manager for the Research Foundation, and Robert Megna, Senior VP for Finance and Administration, were charged by President Stanley to lead this Project 50 Forward (P50F) operational excellence project.
A Steering Committee was formed of the University’s senior leadership (listed in Appendix A), representing all of the major academic areas, to provide strategic guidance. They established nine (9) Task Forces, each with a focus on a particular topic, and each with a Lead (Appendix A). The Task Force members (including faculty and staff) were selected by the Steering Committee based on their experience and knowledge of the respective topic. The Committee also identified Subject Matter Experts (SMEs) to provide technical advice and to share knowledge of current practices. The Task Forces were charged with analyzing comments and suggestions from the research community, conducting interviews with Subject Matter Experts (SMEs), and comparing practices at other universities, with the goal of formulating recommendations to reduce unnecessary hurdles. Nina Maung-Gaona, Associate Vice President for Research, and Mitch Menarchem, Project 50 Forward Program Manager, were tagged to support the entire initiative, including analysis of community comments.

In addition to monthly meetings between the Steering Committee and the Task Force Leads, FRS activities and progress were communicated to the research community. FRS updates were provided in three OVPR Newsletters. A P50F webpage (http://www.stonybrook.edu/commcms/projects/project/facilitating-researcher-success) was created that reported monthly updates, receiving more than 2,000 visits. Project co-Director Reeder held town hall meetings that briefed the Research Advisory Council, and the Chairs from CAS, CEAS, and SOM. He also met with each Task Force at least once to provide guidance and to respond to questions.

To assist in identification of administrative hurdles, members of the campus community were asked to participate in an anonymous online survey where they could identify problems, rank their impact, and provide suggestions for reducing the burden. The survey was e-mailed to 18,300 faculty and staff on three separate occasions. Survey responses, which were organized according to the nine task force focus areas,
were forwarded to the respective task forces for further analysis. Details of the survey responses are provided in Appendix B. The task forces also conducted their own research, with some engaging outside expertise and/or examining procedures at other universities.

The Task Forces also engaged senior leadership in their respective focus areas. For example, Bob Megna met with one task force to discuss facilities and lab renovation issues. Lynn Johnson, VP for Human Resources, met with a Task Force to discuss hiring processes. Senior leadership for Procurement also met with a Task Force.

After the Task Forces completed their work, the Leads presented their recommendations to the Steering Committee for additional discussion. The Leads also participated with the Steering Committee in developing methodology for prioritizing the recommendations and assessing their impacts.

The FRS Steering Committee intended that the Project should address the full scope of activities in which investigators engage when seeking funding (at the front end) through management of awards and activities encountered during performance of research. Included in this scope are compliance activities required for human subjects and animal research, hiring and procurement processes, technology transfer, relationships with industry, and laboratory facilities required for research. The Steering Committee created and charged nine task forces to identify administrative hurdles and recommend changes to eliminate or minimize their impact. The nine task force focus areas are identified in Figure 2.

Task force leads met monthly with the Steering Committee to provide status updates and receive additional guidance from Steering Committee membership. Task forces concluded their activities in mid-June 2017, with each task force providing a written report to the Steering Committee. These nine reports, attached as Appendices D1-D9, detail the hurdles and recommend changes. Task force Leads continued to meet with the Steering Committee to discuss cross-cutting themes and to assess priorities, impacts and return on investments for this report.

The recommendations presented in this report, once implemented, should relieve investigators and their support staff of unnecessary administrative burdens to spend more time on research, while the University retains adequate controls and safeguards to ensure compliance with federal, state, and Research Foundation regulations. Expected outcomes from reducing administrative burdens include increases in submissions of higher quality proposals leading to increases in external funding. As a result, Stony Brook should be able to attract better quality faculty and students and advance our scholarly achievements.

The Steering Committee extends a very sincere ‘thank you’ to all of the task force members, and especially to the task force Leads, who contributed their valuable time to this project. We also acknowledge the valuable insights provided by members of the campus community who shared their experiences and frustrations with the expectation that this study will pave the way for positive changes.
2. Organizing Framework for Reporting Findings and Recommendations

After reconciling and assessing responses from more than 200 community members, yielding more than 1000 comments, the nine task forces made nearly 65 recommendations intended to streamline functions and direct resources to support Stony Brook’s research enterprise.

The recommendations are in two categories: those that require major investments, substantial resources and/or time to achieve and those that can be implemented fairly quickly, often involving only a procedural change. Indeed, some “quick wins” have already been introduced.

Several common themes are evident among the recommendations, and cut across several focus areas; one example is the benefit of improving the “customer service” culture in service units.

The list of administrative hurdles and proposed recommendations are presented in Section 3 in a sequence familiar to investigators, beginning with Pre-award issues and followed by Post-award/Performance of Research topics. Within this framework, recommendations that require major investments are distinguished from those mainly involving changes in process or communication.

Some of the recommendations presented in Section 3 differ in detail from their presentation in the task force reports; this typically reflects subsequent discussions within the Steering Committee. The summary of hurdles and recommendations, while comprehensive, is necessarily concise, and may not always faithfully convey the strong emotions reflected in survey responses or the individual reports of the task forces. Therefore, we strongly recommend reading the individual reports of the nine task forces (attached as Appendices D1-D9 in a separate file).

In Section 4, we summarize the Steering Committee’s collective effort in prioritizing the recommendations, as well as their expected impacts and return on investment. Section 5 offers guidance relating to implementation of the recommendations.

3. Findings – The hurdles present in our support systems and recommended solutions

3.1. Cross-cutting Themes

As the task forces and the Steering Committee began reviewing the survey responses from the campus community, it became apparent that several kinds of complaints were common to many of the focus areas. After further consideration, five cross-cutting themes were identified that point to practices where improvements would benefit investigators and strengthen the infrastructure that supports the research enterprise across the campus. These five themes can be summarized as:

- A need to improve the “customer service” culture within service units that support researchers
- A need to improve the availability, accessibility, and usability of web resources that support researchers and their support staff
- A need to improve communications internally (between service units, departments, investigators) and also externally
- A need to streamline existing processes and “go electronic” where possible
- A need to continue the Facilitating Research Success project (or an equivalent process) to assess progress toward goals, including the impact of changes introduced, and identify future hurdles in the research enterprise.
3.1.1 Customer Service Culture – Investigators, Steering Committee members, and campus leadership were all able to recall experiences in which support staff were not as helpful as expected or failed to respond in a timely manner. Whereas isolated events may not rise to a level of concern, systematic patterns among staff or within units can undermine investigators’ trust and contribute to an adversarial climate that widens the gulf between faculty and staff in support units. In fairness, some subject matter experts indicated that unreasonable demands were sometimes placed upon service units by investigators. Customer service culture is undoubtedly one of the most challenging and complex issues in any organization. Key strategies to effect change involve establishing and/or communicating standard operating procedures that foster more transparent and seamless transactions thereby reducing perceptions among the research community that the proverbial hoops are unnecessary or redundant. Leadership and line management must share the same vision for achieving the University’s goals and set examples for staff to follow. Training among staff to frame conversations to be solution-focused as well as a more fundamental recognition of the important role of research administration staff to the research enterprise are also critical strategies that must be employed. Similarly, awareness training among PIs to set and communicate clear expectations will also help to improve the customer service culture.

3.1.2. Inadequate Web Resources – Access to accurate and relevant information in real time is of critical importance to the research community. It can be difficult and overwhelming for researchers to navigate complex policies and procedures, particularly because they often do so under a looming deadline. Requests for topic specific webinars (e.g., effort reporting, purchasing systems), decision trees and Frequently Asked Questions are all examples of ways in which web resources should be improved.

3.1.3. Communications – Fundamental to all service units is the need to establish and maintain clear channels of communication. Poor communication creates the feeling of being in a ‘black hole’ for researchers, which, in turn, induces frustration and anxiety. Investigators sometimes do not know which individual or which office to contact with for assistance. This can result in being bounced around resulting in heightened stress and delays. Similarly, transactions that flow between business units create additional confusion for which clear channels of communication can be a real game-changer. Electronic systems can facilitate certain transactions to be initiated during non-business hours while also providing direct access to view workflow at any time.

3.1.4. Streamlining Processes – The need to evaluate workflow, routing, bottlenecks and approval procedures to determine where steps can be eliminated or streamlined to reduce processing time was mentioned several times in various contexts. Along these lines, a number of procedural changes have been recommended, are currently being explored, or are being implemented. It was also suggested that boiler plate agreements, proposal content and administrative documents be made available as a reference point as it gives investigators a standard framework from which to build.

3.1.5. Continuous Assessment – The need to continually evaluate our policies and practices was echoed across all the task force reports and reiterated by the steering committee as a major priority. The very process itself of gathering concerns, identifying bottlenecks and making strategic improvements needs to be institutionalized to ensure that we are actively making an effort to align our actions to the university mission. Moreover, a continuous process would facilitate the creation of metrics to better understand where savings are realized, what new revenues streams are generated (or possible) and what risks are (or are not) being
mitigated. It was suggested that the continuous assessment be realized as a full-time position dedicated to the FRS mission.

3.2. Task Force Recommendations

In the below text, a one-line summary of the Hurdle(s) is followed by the detailed Hurdle and the corresponding Recommendation. A recommendation followed by dollar signs ($$$) indicates a significant investment of resources, costs, and/or time is required for implementation. Recommendations with a check mark before it indicate the recommendation has either been implemented or is in the process of being implemented.

3.2.1. Pre-Award

There were two separate pre-award task forces examining the spectrum of activities implicated from proposal conception to submission. The first task force focused on growing the rate and scale of the research enterprise vis-a-vis diversifying funding sources, competing more effectively, and creating a more accountable research culture by empowering, training, mentoring, and rewarding faculty. The second focused on becoming a more efficient research infrastructure by providing researchers with tools and support for the administrative components of the proposal as well as revisiting requirements that may be overly stringent.

3.2.1.1. Incentivizing Research

3.2.1.1.1. Lack of Seed Funds and Cost Sharing Funds

- **Hurdle**: Faculty lack access to adequate seed funds, especially for enabling teams to demonstrate proof of concept and then to prepare large program proposals. The necessary investments are commonly made too late (if at all) to enable creative teams to assemble far enough in advance of a funding opportunity to write a competitive proposal.

- **Hurdle**: Faculty have limited access to funds for cost-sharing on proposals. Currently, the formal mechanism for obtaining cost-sharing is through the Research Support Request (RSR) mechanism. At present, the discretionary funds available to the Vice President for Research (VPR) for cost-sharing is limited to 5.5% of campus-wide IDC, or approximately $1.7M. Because of this limited amount, current practice requires that other academic areas (Provost, Deans, and Departments) must share in the costs. Sometimes, requests for support are made directly to the President.

- **Recommendation $$$**: Increase the percentage of IDC made available for cost-sharing and seed funding initiatives by 1% each year for the next three years. Direct a portion to a broader range of seed funding activities, for example, funds to help investigators assemble teams focusing on targeted areas so they have adequate time to prepare competitive proposals with preliminary findings. Annual assessments should evaluate the use of the funds and the impacts to determine return on investment.
3.2.1.1.2. Limited Ability to Incentivize and Reward Research

- **Hurdle:** Leaders of academic units are limited in their ability to incentivize and reward research productivity, including success in securing sponsored research funding. This is aggravated by union contracts and limited discretionary funds available to Deans and Chairs. These limitations impact retention of productive faculty and recruitment of new faculty alike.

- **Recommendation $$$:** Faculty will respond when clear guidance is presented, and appropriate incentives are given. Deans and Chairs should be encouraged to clearly define expectations for faculty research productivity. A variety of incentives should be available for appropriate recognition and rewards for exceptional performance. Incentives could include teaching release for a specific duration, return of a portion of IDC, support for proposal development, and a one-time salary bonus (beyond base salary) for exceptional success in winning grants. Independent of the FRS Project, the VPR, the Deans, and the Provost are developing a proposal intended to incentivize increased submission of proposals. The details of that effort are beyond the scope of the present report.

3.2.1.2. Funding Opportunities

3.2.1.2.1. Need Awareness of Broader Range of Funding Opportunities

- **Hurdle:** Faculty ask to be made aware of a broader range of funding opportunities, including those from private funding sources and foundations. Currently, the Office of Proposal Development uses the active feed from Grants.gov to provide funding opportunities to Stony Brook researchers. This does not include non-federal funding sources that are essential to growing our research portfolio. Related to this, stronger coordination is needed among the various stakeholders, namely the Research Foundation and the Stony Brook Foundation/Advancement.

- **Recommendation:** Subscribe to a new and more comprehensive funding opportunity data source ($25K/year) and expand collaborations with the Advancement Office. OVPR recently met with Brookhaven National Laboratory staff members who expressed that identifying a broader spectrum of funding opportunities is currently a priority area for them. Efforts are underway to explore possible joint subscriptions through Brookhaven Science Associates and the Advancement Office for comprehensive funding opportunities to include federal, nonfederal and international sponsors. In addition, we will take advantage of a new initiative in the RF Central Office to identify funding opportunities. These initiatives will be coupled to development of more effective methods for notifying faculty across the University.
3.2.2. Proposal Support

3.2.2.1 Inadequate Support for Writing and Developing Proposals

- **Hurdles (and six recommendations):** Faculty have inadequate support for developing and writing proposals. The Pre-award task force argued forcefully, and the Steering Committee concurs, that a lack of support for proposal development is the single greatest barrier limiting the number and quality of proposals submitted, stating: “Failure to provide this resource puts Stony Brook researchers at a disadvantage with respect to colleagues at other institutions, and will result in continued under-performance in successful grant funding.” The Funding Opportunities task force independently reached this same conclusion. The impact may be greatest for multi-institution, large or complex program proposals for which non-technical requirements can easily overwhelm a team that does not have adequate support. Time spent by PIs assembling budgets, biosketches, education and data management plans, and other supporting documents detracts from their efforts in developing scientific aspects and overarching goals for studies, which are more important for ensuring proposal scoring and success. Inadequate proposal support was also identified as a factor that discourages new submissions, perhaps contributing to the decline in submission numbers. Technical (professional) grant-writing support, beyond those aspects described above, is also lacking. Some faculty (often early-career) may have good ideas but might be unable to articulate or organize the essential elements to result in a readable, competitive proposal.

These issues frame a multi-faceted problem that requires a combination of integrated solutions. PIs need to be able to focus on key scientific aspects of proposal writing, and, for those requiring it, technical writing support should be made available. Early career faculty need mentoring that emphasizes the importance of research combined with effective training in grant writing. Internal reviews can also improve the competitiveness of proposals. Additionally, the non-technical components of proposals should be made available as a library of resources whenever possible. This should include the required components of education and training proposals that are data intensive (e.g., NIH Data Tables) for NIH T-32 and NSF NRT funding mechanisms.

- **Recommendation $$$:** Hire seven (7) new full-time staff to provide support to faculty in proposal development. We recommend that these should be Research Foundation employees that are centrally managed and trained by the Office of Proposal Development\(^3\), with 3-5 of them deployed to support Colleges/Departments. Alternate deployment models (centralized in OPD vs decentralized in colleges) can be considered, but we believe these hires must represent a close connection that allows access by faculty. At least one of the hires should have technical writing expertise. Estimated cost is $1.1M/yr.

\(^3\) The pre-awards task force proposed that these additional proposal development staff should be housed in the Office of Sponsored Programs. Subsequent discussions with the task force regarding the scope of responsibilities for these proposed positions made it clear that these positions should be housed in the Office of Proposal Development and deployed at the respective college/school levels. This is synergistic with a similar recommendation made by the proposal/funding opportunities task force on the top priority issue of needing more proposal development support.
The Pre-award task force observed that this expense could be entirely offset by the F&A for new awards totaling $3M in direct costs. The impact of these hires should be evaluated regularly to determine the return on investment, recognizing that 1.5-2.0 years is needed before a fair assessment is possible. If this investment shows a positive return in proposal submissions and new grant funding, additional investments should be made in more proposal support staff. We note that there has been a direct relation between increased gifts to Stony Brook and the addition of staff in the Advancement Office. We argue that increases in sponsored research are equally important to Stony Brook as philanthropic gifts, and staffing to support proposal development should be viewed in a similar way.

✓ **Recommendation**: Develop and implement a uniform mentoring program aimed primarily at early career faculty (and possibly mid-career). This should have guidance provided by the Office of the Provost and the Senior VP for Health Sciences. Expectations should be clearly provided for scholarly performance, including sponsored research. We are aware that the Office of the Provost has made this initiative a high priority. In the School of Medicine, mentoring is provided at the department level mainly by the department chairs (and/or small ad hoc mentoring committees) and enhanced by centralized activities such as grant development seminars, workshops, and Women’s Research Day.

✓ **Recommendation**: Expand current training for (primarily) early-career faculty in preparation of competitive proposals. The current grant writing course is offered yearly by OVPR and is heavily subscribed. Additional training courses (or guides) could focus on specific sponsors to provide greater depth (e.g., DOE, NIH). One example is to develop a “how to” guide for breaking into funding opportunities in the Department of Defense.

✓ **Recommendation**: Encourage and support the use of internal proposal review (“red”) teams within departments and colleges. Red team reviews have proven valuable for large program proposals; this concept could be scaled to individual investigator proposals using experienced faculty. Departments should identify suitable recognition or reward for such service.

✓ **Recommendation**: Expand the current repository of “boilerplate” materials and make information needed for proposal development easier for faculty to find. This is currently already being developed as a shared document in a SharePoint repository accessible for Stony Brook faculty and staff via NETID and password. Initial content pertains to the NSF CAREER Award, the NIH K Award, and the NIH data table requirements for training grants. As requirements are continually changing, regular updates will be crucial to the effectiveness of this resource.

✓ **Recommendation**: Provide collaboration tools that are uniform across east and west campus and can engage off campus users. Currently Google Drive/Docs is not widely used on the east campus (access to Google shared resources is limited due to HIPAA concerns), Microsoft Office 365 is not easily accessible to off campus users and Dropbox is not supported by the campus. A greater variety of collaboration tools that are easily accessible and offer the flexibility for multiple modes of sharing and editing documents with collaborators both on and off campus would greatly enhance the speed and accuracy of communications.
3.2.3. Proposal Submission

We note that a significant number of survey responses pointed out shortcomings and frustration associated with COEUS, the current online submission system. These problems are not reflected in this report because of the implementation of Huron’s Click portal, which is replacing COEUS. Initial indications suggest that many of the shortcomings in COEUS will be resolved in Click. (See Figure 3)

3.2.3.1 Five-Day Requirement for SOM Proposals

- **Hurdle**: PIs in the SOM are required to submit proposals for internal review/approval five days prior to the Office of Sponsored Programs’ 5-day pre-sponsor deadline. This additional 5-day period poses an unnecessary burden on faculty who are already struggling to complete proposals that target sponsor deadlines.

- **Recommendation**: The ongoing implementation of Huron’s Click Portal for proposal submission offers an opportunity the streamline the approval process. The Office of Sponsored Programs should work closely with SOM and IT staff responsible for the Click portal to reduce or eliminate the additional pre-deadline submission requirement. Furthermore, Deans should be engaged to assess the appropriate level of approvals prior to release of a proposal to the sponsor. Some approvals could also be delayed until notification of award is received, thereby eliminating unnecessary actions (and associated delays).

Other recommendations that involve procedural changes include:

- Eliminate the internal requirement for detailed NIH modular budgets at the time of proposal submission.
- Create check lists, tutorials and other resources to assist researchers in preparing a budget and a “how to” guide for specific aspects, such as creating a salary offset.
3.2.4. Post-Award / Performance of Research

The Post-award task force determined that the most critical needs in the post-award process are improved access to staff members and better guidance for managing awards. Concerns were noted regarding subcontracts, accounts payable, travel reimbursements and appointment paperwork, especially involving the interdependence of such post-award functions among several units on campus, namely Grants Management, Procurement and Human Resources. These procedures, described in more detail in the task force report, need to be reevaluated and streamlined where possible and are not duplicated here.

3.2.4.1 Award Management

3.2.4.1.1 Constrained OGM Resources for Interfacing with Faculty

- **Hurdle**: Faculty have difficulty accessing staff in the Office of Grants Management and are commonly uncertain who to contact for different functions. The Post-award task force noted the frustration of investigators in managing various processes once an award is received. Two processes among many were highlighted: grant closeout procedures and management of subcontracts with other institutions. The task force reported delays being common for both of these functions, with unintended consequences of losing encumbered but unreleased grant dollars and delays in research activities with collaborating partner institutions. The concerns raised here reflect multiple factors. One is clearly a communication issue where investigators need better guidance for directing their questions to Grants Management staff. Existing procedures also need to be re-examined to eliminate the delays described. However, an underlying cause for these issues is a shortage of staffing in the Office of Grants Management to manage the volume of grants.

- **Recommendation $$$**: Whereas several recommendations mainly require re-evaluation of current procedures, the staffing shortfall needs investment. We propose adding one Grants Management specialist in the first year at a cost of $87K ($62K + 25K fringe) to alleviate the volume problem and eliminate delays. The staff member will be cross-trained in bottleneck areas to shift focus where needed. Additional responsibilities can include troubleshooting issues and expediting urgent requests. The resulting impact should be examined after one year, at which time adjustments should be made (eliminate or add more staff).

3.2.4.1.2 Travel Reimbursement Procedures

- **Hurdle**: Procedures for travel reimbursement are slow, inefficient, and divert investigator and support staff time.

  ✓ **Recommendation**: Transition to an online/electronic travel reimbursement system. The University is currently working with Concur to develop the Stony Brook University Travel & Expense electronic travel system. If implemented correctly, this will substantially reduce the time and effort spent by investigators and support staff on travel reimbursement.

Other recommendations that relate mainly to procedural changes include:

- Creating a working group to identify opportunities to streamline subcontracts between BNL and SBU.
- Removing the requirement for PIs to approve all purchase orders on subcontracts.
3.2.4.2. Hiring Processes

The existing procedures for hiring research support personnel and postdocs received the largest number of survey responses, and were recognized by the Human Resources task force as a source of frustration and delay. The task force pointed to hurdles posed by the current implementation of the Taleo TMS system, the lack of support staff in certain departments to assist with hiring, and a lack of uniformity in their knowledge and training. Other process-related hurdles were also identified, including the reliance on paper forms for processing changes. Some of these hurdles, however, appear to be the result of poor communication, staff shortage and inadequate understanding of procedures.

3.2.4.2.1. Insufficient Staff at Visas and Immigration Services

- **Hurdle:** Visas and Immigration Services appears to have insufficient staff to provide advice and guidance to faculty, postdocs, and department administrators about complex and changing laws and procedures. The significant number of foreign national postdocs and graduate students places a major burden on VIS, resulting in delays that impact research activities.

- **Recommendation $$$:** Hire 1.0 FTE in VIS to support research personnel and related transactions. The estimated cost is $77K/year for a RF employee, inclusive of fringe. The impact should be evaluated annually to determine the value of the investment.

3.2.4.2.2. Talent Management System (TMS) Change

- **Hurdle:** The Taleo TMS system, as currently configured, restricts a PI’s access to viewing only the candidate pool that qualifies as “ACE applicants”. This shortcoming is compounded by the reliance on applicants judging the extent of their own qualifications, commonly resulting in unwarranted inclusion/exclusion. The task force noted the failure to effectively identify the best applicants and the lengthy delay before applicants can be reviewed both result in wasted time and failed searches, and impede progress on research projects.

✓ **Recommendation:** Adapt the Taleo TMS configuration to permit PIs to review non-ACE applicants, if desired and on a rolling basis, and also to change search criteria if/when the applicant pool is judged to be inadequate. This would eliminate some failed searches and allow the process to be concluded more quickly. The task force observed that appropriate staff in Human Resources Services (HRS) and the Office of Institutional Diversity and Equity (OIDE) must participate in this process to ensure equity. As with any third-party enterprise system, the viability of adapting the system must be assessed, along with any associated costs.

3.2.4.2.3. TMS Training and Streamlining

- **Hurdle:** Some departments do not have staff available to support investigators with hiring research personnel. Moreover, where department-level staff are available they commonly do not have expertise or an adequate understanding of the recruitment process or of the Taleo TMS, despite the training that is available for this system. Hence, some investigators are given incorrect guidance, leading to frustration and unnecessary delays in hiring research personnel.

✓ **Recommendation:** The two essential aspects of a solution are availability of staff and the adequacy of their training to support PIs with recruitment and hires. We propose that Human Resources Services and OVPR jointly inventory staff resources across departments and assess the adequacy of training. Where needed, HRS can provide training in recruitment and other HR related matters to ensure that staff provide correct information and support to PIs. For departments that do not have adequate support staff,
procedures can be established to connect PIs directly to support in HRS. For small departments that have infrequent research hiring, arrangements could also be made to access support staff in another department. This could be explored through increased duties paid for by the smaller department(s) to handle HR transactions.

3.2.4.2.4. Use of Paper Forms for Personnel Changes

- **Hurdle:** The continued use of paper personnel change forms delays transactions and causes additional work in the department and in HRS. In addition, the re-entry of information from paper forms is a common source of errors. This is one example of the common theme highlighting the need to streamline processes via electronic solutions.

  ✓ **Recommendation (early stages):** Develop an electronic method for making personnel changes. If done correctly, this would save time, allow tracking (no more lost forms), and reduce input errors. We have been informed that electronic forms capability is available in the proposed upgrade to the PeopleSoft system currently being considered by the campus. The adaptability of the upgraded system should be evaluated by DOIT staff, and implementation should be planned, involving coordination with HRS to determine if the concerns raised by the task force will be addressed. At present, the status of the proposed upgrade and a timeline for potential implementation are unknown.

3.2.4.2.5. Process for Hiring Postdocs

- **Hurdle:** Early in this project, survey respondents and the Human Resources task force voiced frustration and noted delays associated with hiring postdocs. A major source of this frustration was the requirement to conduct a formal search, rather than being able to obtain a waiver, when the pool of qualified applicants is extremely small, and the top candidate is already known to the PI. HRS responded promptly to this concern by restarting the practice of posting an institution-wide advertisement on a regular basis that PIs could choose to use for creating a pool of applicants. This change is expected to speed the recruitment process for postdocs.

  The Human Resources task force also suggested that postdoc recruitment might better be accomplished with the same system used for faculty recruitment, rather than through Taleo TMS.

  ✓ **Recommendation:** The impact of the regular postings on the postdoc recruitment process should be evaluated after approximately 12 months to determine its value in streamlining hiring. Although the task force offered no time frame for considering an alternate online hiring system for postdocs, we recommend that a subset of the task force members meet with HRS to consider suitability of the faculty hiring system for postdocs.
3.2.4.2.6. Six-Month Waiver for Retaining Student Assistants

- **Hurdle**: PIs commonly want to retain/hire a graduate or undergraduate student to continue work in their lab after the student has completed their degree requirements. While this is currently possible through a 6-month waiver, many faculty investigators felt this period is too short in many cases.

- **Recommendation (early stages)**: Develop a mechanism that allows PIs to retain/hire a grad student or undergrad to continue working for up to 12 months without a search process. A mechanism is currently being developed jointly by Human Resource Services and the Office of Institutional Diversity and Equity. We applaud this early response to the concern, and recommend that OVPR be engaged in assessing the implementation and impact of the new mechanism.

Other recommendations that relate mainly to procedural changes include:

- Care should be taken to avoid introducing unnecessary intermediaries in the hiring process. For example, the task force recommends that routing research hires through the VP Coordinator or the Dean’s Office should be eliminated, noting that this practice is unnecessary and commonly represents a bottleneck in the hiring process.
3.2.4.3. Procurement

The Procurement task force focused on the impediments that investigators face when purchasing items needed to perform their research. While Wolmart and the iLab Core in School of Medicine provide effective access for many routine purchases, survey respondents pointed to the need for additional flexibility for some types of purchases and in situations where expediency is critical, and also for better department-level support for purchases that are not routine.

3.2.4.3.1 Cumbersome Procurement Mechanisms

1) **Hurdle**: Existing purchasing mechanisms can be slow and cumbersome for certain types of purchases. Examples include equipment repairs, small replacement parts that can be obtained by immediate purchase at local stores, software where credit cards are commonly required by the vendor, books, page charges, and urgent shipping, to name just a few. We note that the Post-award task force also identified purchasing of such items as posing hurdles for investigators. Whereas these purchases can be handled by buyers in the Procurement Office, experience shows that this process can be slow due to minimal staffing. Investigators waste precious time if equipment repairs cannot be made quickly and research can be delayed unnecessarily. The Procurement task force learned that investigators commonly resort to using their personal credit cards for such expenses in order to avoid delays that would be encountered via Wolmart; they subsequently request reimbursement, which can be an added lengthy process.

- **Recommendation $$$**: Create a program to issue credit cards to PIs for research purchases. Credit card use should be restricted to bona fide research purchases linked to active awards for which the card holder is PI or co-PI. Purchases should charge directly to awards, avoiding the need for a subsequent reimbursement process. We recommend that cards be issued only to those PIs (or Co-PIs) that request one; consideration should also be given to issuing cards to designated support staff. A brief survey shows that many research universities issue such credit cards, including other SUNY campuses (e.g., University at Buffalo).

We recognize the creation of a card program requires close coordination between the Offices of Procurement and Grants Management. We recommend that these Offices jointly develop a plan for implementation. They should examine existing practices at University at Buffalo and other SUNY campuses, who are also constrained by RF guidelines. Attention must be given to appropriate safeguards to limit abuse and avoid purchases for which payment could be disallowed. Implementation and continued oversight of the card program will require additional staffing in Procurement and/or Grants Management. We estimate initially that this will require hiring at least one FTE at a cost of $84K/yr ($60K + $24K fringe). The impact of the plan should be evaluated regularly to assess its overall usage to determine if it is cost-effective.

- **Recommendation**: Explore the possibility of integrating iLab into Wolmart to facilitate access and “comparison shopping” and allow for iLab purchases on state funds. Alternatively, adapt iLab to enable access by a broader range of designees, including staff, postdocs, etc.

- **Recommendation**: Facilitate research purchases from Amazon. The task forces observed that State P-card holders can access Amazon via Wolmart. This access could be expanded to RF funds if research credit cards were issued (see previous recommendation).
3.2.4.3.2. Lack of Support for Non-Routine Purchases

- **Hurdle:** Closely related to the previous hurdle, some investigators have inadequate support for making non-routine purchases requiring additional steps and/or communication with buyers in Procurement. Without knowledgeable support at the department level, PIs waste time that could be spent on research. This issue is similar to the departmental staffing concerns noted for hiring: some department have well-trained support staff while others do not.

- **Recommendation:** Procurement and OVPR should jointly assess relevant departments for staff availability and level of training to support PIs for non-routine purchasing needs. We recommend that Procurement develop a suite of training resources for faculty/staff to aid in purchasing. Procurement should consider the most effective implementation, which could include orientation for new faculty/staff, periodic refresher training courses, web-based tutorials, including video clips, as well as one-on-one training by request. In some departments, we anticipate that research purchasing needs cannot be handled with existing staff. Investments to hire staff (perhaps part-time) could be made from IDC return at the college and/or department level, or by pooling resources from multiple PI’s awards. Regular evaluation of purchasing support should be performed jointly by OVPR and Procurement to assess needs.

- **Recommendation:** Relax purchasing limitations for GoIndustry DoveBid purchases to at least $5000.

Other recommendations that involve procedural changes include:

- Develop a procurement orientation for new faculty and staff on rules and systems pertaining to purchasing
- Create a FAQ on Procurement and Wolfmart websites that explain how to place certain types of orders.
3.2.4.4. Compliance (IRB, IACUC, IBC, COI)

The Compliance Task Force focused primarily on the special processes that investigators must navigate when conducting research involving human subjects, animals, or recombinant DNA. Additional topics included certification of conflicts of interest and export control.

We note that Huron’s Click portal, which is currently being implemented, contains separate modules for managing IRB, IACUC, IBC, and COI. The Click implementation team briefed the Compliance task force to provide a detailed understanding of the impact of the new software portal. Many of the processes that were noted as being hurdles are addressed by Click. The task force report states: “The Task Force noted that implementation of an IRB module on Huron Click could either improve or eliminate more than half of the problem areas identified in the FRS survey results (issues with application process and forms). In addition, this software package also will address similar issues identified with the IACUC and IBC.” Therefore, we do not describe those issues here. Still, the Compliance task force made several recommendations regarding Huron’s Click portal implementation, as noted below.

3.2.4.4.1 Office of Research Compliance Staffing Shortage

- **Hurdle**: While the Compliance task force commended the Office of Research Compliance (ORC) for their capable oversight of the range of highly regulated activities associated with human subjects research, they also noted that responses to faculty requests for changes to IRB protocols and related questions are commonly delayed. The task force concluded this is due to chronic understaffing in the ORC. The task force expressed concern that these delays will be magnified as the Cancer Center significantly increases its volume of clinical trials in order to obtain NCI designation.

- **Recommendation $$$**: Hire two full-time staff; one to support the Human Research Protection Program in the ORC and one to reduce bottlenecks across other high-volume areas in ORC. This first hire will specifically alleviate delays and facilitate increased volume of clinical trials. Estimated cost for these RF positions is $98,000/yr ($70K + $28K fringe) and $87,000/year ($62K + $25K), respectively. The impact of both new hires should be assessed annually by evaluating changes in response time for implementing IRB changes and processing new protocols.

3.2.4.4.2. Single Portal for Required On-Line and In-Person Training

- **Hurdle**: Stony Brook investigators, including faculty not engaged in sponsored research, are required to complete periodic training on various topics, some of which is mandated by federal sponsors. The burden is greatest for investigators whose research requires specific training. Currently, the components of training that can be delivered online are hosted on different sites (e.g., CITI, EH&S), and contributes to frustration by faculty and compliance staff, especially concerning notification for renewing training. In some instances, failure to complete required training can delay research activities.
**Recommendation**: Engage task force members and experienced IRBNet users during implementation/testing of the IRB module in Click, scheduled to go live in January 2018. Staff in ORC are actively engaged in its configuration and will identify experienced IRBNet users to participate in early testing. Several task force members are included among this group.

**Recommendation**: Consolidate all required campus training in a single online portal that allows appropriate administrative oversight for record-keeping and notification. We propose that the Click portal is a candidate for hosting a training module to provide this single point of entry for all required training. The Click software has this capability. We caution, however, that existing planned Click modules must be implemented and fully operational before adding a training module. The cost for adding another module in Click should be balanced against the potential savings that result from consolidating other training portals. We recommend that the units responsible for training coordinate with the Click implementation team to evaluate the relevant technical and cost requirements.

### 3.2.4.3. IRB Regulations Pertaining to Low-Risk Human Subjects Research

- **Hurdle**: Survey respondents and task force members expressed a high level of frustration with current IRB regulations pertaining to low-risk human subjects research and the burden of continuing review of expedited studies. The updated NIH Common Rule that is anticipated to become effective in January 2018 is expected to address these concerns and related issues. However, the task force noted the risk of noncompliance (and the impact on research) if implementation is delayed.

**Recommendation**: Rapidly implement the updated NIH Common Rule when it becomes effective without adding unnecessary campus restrictions. We note that planning by the ORC is well underway to meet this goal. In addition, Huron Consulting is preparing updates to the IRB module that facilitate compliance.

### 3.2.4.4. Implementation of Export Control for Investigators

- **Hurdle**: The complex set of export control laws pose potential burdens for investigators, who are largely unfamiliar with the requirements. Whereas universities must comply with export control laws, the implementation should minimize the impact on investigators and their support staff.

**Recommendation**: Establish a separate Export Control advisory committee, comprised of investigators that currently have experience with and are affected by export controls, to advise the Vice President for Research and the Director of Export Control on appropriate implementation. We note that an Export Control Executive Committee has been created to advise the VPR and Export Control Officer accordingly, and will be meeting on a regular basis. Furthermore, Stony Brook’s export control policy has recently been updated to facilitate compliance with federal regulations. Training modules are being developed to inform the campus community about export control and compliance.
3.2.4.5. Technology Transfer and Industry Relations

The scopes of two task forces—Industry Relations and Patents, Tech Transfer, and IP—were found to converge on the importance of motivating and educating faculty on the IP tech transfer process as well as the need for active and consistent outreach to industry. A greater awareness and understanding among faculty about the opportunities to catalyze applied research and technology developments via disciplinary clusters and annual meetings/training is repeatedly mentioned in different contexts. Issues of smooth workflow and strong expertise and cooperation with related offices in Compliance and Grants Management are emphasized as being important, as is the availability of standard agreements and other templates as resources. Greater synergy is needed with Economic Development for a more comprehensive interface with industry.

3.2.4.5.1. Outreach to Faculty on IP/Tech Transfer Processes

- **Hurdle:** Many faculty are unaware of the procedure for filing new technology disclosures (NTD) and, more generally, the technology transfer landscape. These knowledge gaps may deter faculty from developing and disclosing IP for potential licensing agreements, with lost potential for royalty returns. The challenge is how to first identify investigators that have potentially useful IP and then to effectively communicate with them to increase NTDs and grow the University’s applied research and technology licensing.

- **Recommendation $$$:** Educate faculty about the technology transfer process using several approaches, including making available key resources on the Office of Technology Licensing and Industry Relations (OTLIR) website, such as frequently asked questions (FAQ) on NTD preparation and a repository of information on commercialization topics. Create a regular “lunch and learn” workshop and/or annual symposium to engage researchers on the patent process. We also suggest inviting specialized attorneys from area law firms that have successfully engaged in patent applications to give ‘seminar series’ of Case Presentations that involve SBU faculty/inventors. Finally, we should learn what other universities are doing to stimulate or promote tech transfer more broadly.

3.2.4.5.2. Proactively Seek Industry Connections and Licensing Opportunities

- **Hurdle:** Stony Brook has not been sufficiently proactive in showcasing its strengths and seeking relationships with industry. As a result, we may miss opportunities for which we have technical capabilities, as well as licensing opportunities for existing IP.

- **Recommendation $$$:** Establish cross department ‘science and technology’ clusters to represent SBU in target-focused industry meetings (e.g., with Pfizer, Sanofi) to foster relationships and communication at all levels. Use External Advisory Boards (industry/commercial volunteers) to guide awareness of opportunities in the market place for each cluster. Raise the visibility of Stony Brook and its investigators by establishing an “industry day” to attract industry interest as well as creating Target Product Profiles for SBU scientists/engineers.

- **Recommendation:** Partner with Stony Brook’s Advancement Office to identify industry targets and key points of contact (especially those with a prior Stony Brook connection) and establish strategies for building connections. We note that the VPR has already begun this work with the VP for Advancement.
3.2.4.5.3. Poor Understanding of Industry Partnerships and the Marketplace

- **Hurdle:** The Industry Relations task force concluded that partnerships with industry commonly “cooled” or even broke down over negotiations relating to IP. Indeed, after reaching out to industry contacts, the task force found the perception that Stony Brook was difficult to work with in finalizing agreements. Furthermore, the task force noted that the value attributed to such partnerships by Stony Brook investigators was not shared by the industry side, each having different goals. These differences underscore the limited understanding of some investigators regarding the commercial market space and successful pathways for interacting with industry. These gaps pose barriers for investigators who could establish research partnerships with industry.

- **Recommendation $$$:** “Rebrand” Stony Brook (to potential industrial partners) to show that we’re industry friendly and a good place to invest for research partnerships. Such changes in image require a consistent and focused approach that must be maintained over time. All support units that “interface” with industry should form a team to develop a holistic strategy for streamlining interactions and agreements with industry. The Industry Relations task force suggested the use of a matrix management approach to optimize use of staff and reporting.

- **Recommendation:** Create and make available standard agreements that provide transparency and flexibility for negotiating with industrial partners. These should include MTAs, CDA/NDAs and SWIFT-like agreements for contracts.

- **Recommendation $$$:** Build synergistic activities with Economic Development to ensure that all avenues to grow research as an economic driver are fully explored. Maintain and increase the use of REACH-like grants to enhance commercial awareness and development across a broader technology set (biotechnology, electronics, energy, etc.). This creates a forced awareness of the commercial market space and allows building relationships with industry leaders.

Other recommendations include:

- Create an External Advisory Board that can give industry-oriented advice and provide commercial awareness to our researchers.
- Have SBU scientists develop Target Product Profiles (TPP) for interacting with industry, investors and non-profits.
- Pursue NSF GOALI program and use their award information and best practices to devise our own policy.
- Learn from successful partnerships (e.g., Sensor CAT) how to develop and maintain connections to industry.
The majority of the comments received from the campus survey on the issue of facilities expressed frustration over the time, cost and quality of research lab renovations and the need for continual critical maintenance. These negatively impact the ability of investigators to conduct research, contribute to the high cost of start-up packages, ultimately limiting our competitiveness in attracting leading researchers. A confounding issue is the lack of clear distinction between maintenance of university core infrastructures, which is the responsibility of Campus Planning, Design and Construction (CPDC) and/or Campus Operation and Maintenance (COM), versus research-specific needs for lab rehab and renovations funded by the academic units. Other concerns related to space allocation, IT issues and Core facilities were raised but not directly addressed. The recommendations focus on strategic approaches to optimize the limited funding available in order to provide researchers with safe and adequate research space.

3.2.4.6.1. Responsibility for Maintaining Core Infrastructure Systems in Buildings

- **Hurdle:** Aging and crumbling infrastructure present in many of the University’s buildings poses a challenge for conducting modern research as well as for attracting new faculty. Renovations and repairs are commonly delayed because no basis for assigning responsibility exists, and repair/renovation costs have not been quickly or readily determined. Investigators complain that renovation/repairs to core infrastructure are commonly folded into the cost of research lab rehabs (often as start-up) that come at the expense of the academic units. In an environment of limited resources, diversion of such funds to address core infrastructure diminishes funds to support research activities.

- **Recommendation $$$:** A basis should be established for delineating what constitutes base systems and core infrastructure of academic buildings. The task force proposed a list of such core infrastructure, which can serve as a starting point for further consideration. Maintenance of these systems and core infrastructure is the responsibility of campus service units. To determine if/when repairs/renovation is needed, a condition index of these base systems should be created and monitored on a regular basis. The task force proposed that $2-3M be dedicated each year for maintenance or updates of these systems in the context of lab renovations/rehabs and to address safety concerns in research facilities.

3.2.4.6.2. Need Improved Coordination, Representation and Communication for Lab Rehabs

- **Hurdle:** End user faculty are commonly disconnected from the planning and coordination of their lab rehabs. The task force observed a lack of transparency in the planning process (normally conducted by Campus Planning, Design and Construction (CPDC)), and “scope reports” commonly take many weeks to be completed. Furthermore, these reports usually do not provide itemized cost estimates making it difficult to match rehab to available funding. The lack of transparency and coordination sometimes results in project time scales that are excessively lengthy and a completed product that may not meet expectations. These result in lost research time and poorly spent renovation funds.

- **Recommendation $$$:** Investigators and/or their spokespersons (e.g., Director of Labs) must have greater engagement in planning at every step of the process. This can be achieved in different ways, but will require cooperation of all stakeholders and oversight by appropriate academic leadership. The facilities task force recommended creation of an Assistant Provost for Academic Operations and Research Facilities position to bridge communication between the key academic and administrative units and to provide oversight of planned projects. This would create a culture of shared responsibility and
partnership between service units and academic units that would go a long way to eliminate much of the frustration with renovation projects. The Assistant Provost could serve as liaison between the academic units in the Provostial area and the universities central service units, such as CPDC and COM, and would participate in prioritization of renovation projects and management of space assignments.

3.2.4.6.3. Need Funding for Small Scale Renovation/Painting

- **Hurdle:** Investigators and academic building staff (e.g., Building Managers) are prohibited from performing small-scale repairs and surface-level maintenance, resulting in delays and frustration. Every building has a significant need for such small-scale renovation projects, including painting of faculty and student offices, etc. Much of this has been deferred to lack of funding. This leads to frustration when public spaces, like hallways and classrooms are painted on a regular basis, while faculty offices may go unpainted for decades.

- **Recommendation $$$:** Expand the in-house team of qualified tradesmen to conduct these small-scale projects and other maintenance funded by the academic units. Enable academic units to bid out small projects if in-house manpower is not available.

- **Recommendation $$$:** Allocate $1-2 million per year to perform small-scale, surface-level maintenance and upgrades to research facilities.

3.2.4.6.4. High Cost of Renovation Projects Managed by CPDC

- **Hurdle:** There is a high cost charged for renovation projects managed through CPDC, which seems to substantially exceed market costs. This limits the number and quality of projects that can be completed, impacting research activities. The task force concluded that, with the limited resources available, much more could be achieved by more cost-effective management of renovation projects.

- **Recommendation $$$:** Academic units should have the option to bid out the design and construction of renovation projects. The University administration has recently encouraged academic units to conduct pilot projects that are bid out to outside contractors. To facilitate such pilot projects, written guidelines should be established as soon as possible that authorize alternative approaches to the established policies.

- **Recommendation $$$:** Implement new procedures for mid-size renovation projects, i.e., individual research labs or small contiguous research spaces. Recruit a “construction estimator” who will work with academic units to identify the most cost-effective renovation options and help assure that projects match the available funds. Encourage a competitive bidding process for all stages of a project.

- **Recommendation $$$:** Renovate large, contiguous areas, such as parts of floors to achieve a cost benefit of scale. Review historic space allocations in academic buildings across schools and colleges and evaluate the best use of research space in the R&D Park. Establish lab swing space to facilitate those renovations.

“Renovate larger sections of research space, like floors or parts of floors in research buildings.”
<table>
<thead>
<tr>
<th>COI</th>
<th>IRB</th>
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| • Replaces COEUS  
  • Streamlined disclosures  
  • Automated workflow  
  • Early flagging of potential conflicts  
  • IRB, IACUC and Grants process integration  
  • Training (CITI) integration | • Replaces IRBNet  
  • AAHRPP Reporting  
  • Supports submissions, modifications and continuing reviews  
  • Support for multiple study models  
  • Single IRB Support  
  • Final rule compliant | • Full proposal lifecycle support  
  • Flexible online budgeting  
  • Multi-project applications support  
  • Opportunity coverage for NIH, NSF, DoD, etc.  
  • eSubmissions to Grants.gov  
  • Automated reward creation and comprehensive award management  
  • Award budget reconciliation | • Animal Use  
  • Simplify animal protocol construction  
  • Improve collaboration through all IACUC activities from new protocols to de novo reviews  
  • Help reduce non-compliance risk  
  • Ease of reporting for OLaW, USDA, DoD, VA, and AAALAC | • Single point of entry  
  • Flexible management of reviewer and approval processes  
  • Agreement linking to related agreements and other related projects  
  • Streamline management of financial and non-financial research agreements | • Biosafety  
  • Stem Cell Use  
  • Radioactive Drug Metabolism Research  
  • Strengthen safety committee oversight processes  
  • Accelerate preparation, submission, and review of research studies  
  • Integration points with IRB, IACUC, and Grants |

Figure 3. The six Huron Click modules in Stony Brook’s myResearch online portal.
4. Setting Priorities

With nearly 60 recommendations, it is impossible to begin implementation of all of them at the conclusion of the project. We note, however, that at least 20 recommendations have either been implemented or are in the stage of being implemented at the time of writing this report. Nevertheless, practical considerations require a strategy for guiding the implementation of recommendations. This should be based in large part on the expected impact of the recommended changes, and should also account for the effort and financial resources required.

In the previous section, we distinguished between recommendations that mainly involve changes in procedure or policy (where the “costs” of implementation are primarily personnel effort) and the “big lifts” where significant investment of funds (and personnel effort) is needed for implementation. In setting priorities, the Steering Committee focused only on the recommendations requiring substantial investment of funding. This decision reflects the reality that their implementation is likely to be limited by the availability of funds, and the resulting priorities should guide the strategy for investments.

4.1 Prioritization Approach

The Steering Committee converged on three main criteria for evaluating the impacts of the proposed changes:

1. Alignment with strategic goals of the project, i.e., elimination of administrative hurdles
2. Number of investigators that would benefit
3. Potential for increasing grant funding

A rubric was developed that allowed Steering Committee members to rank the importance of the recommendations according to each of these criteria. The Steering Committee members and the Task Force Leads were asked to provide three scores (for each of the three criteria noted above) for all of the recommendations that required substantial investment. In total, 13 sets of rankings were received and averages were obtained for each of the three criteria. These were compared with Z-scores to control for idiosyncrasies in scoring. The prioritization results based on the Z-scores are not substantially different from those based on the averages, and the latter were used for subsequent discussion. Further details of the prioritization approach are given in Appendix C. Figures 4, 5, and 6 show the ranked prioritization of the recommendations based on each of the three criteria. Included in these figures is an initial estimate of the cost of implementation for each recommendation.

4.2. Priority Recommendations

The Steering Committee’s rankings based on the three distinct criteria (alignment with strategic goals of the project, number of investigators likely to be impacted, and potential for leading to more external funding; Figures 4, 5, and 6) allow different perspectives for setting priorities.

The Steering Committee viewed the highest priority recommendations for achieving the strategic goals as:

1) increasing personnel to support proposal development (3.2.2.1) ***
2) increasing personnel support for Grants Management (3.2.4.1.1)
3) streamlining the postdoc hiring process (3.2.4.2.5)
4) increasing personnel support for Compliance (3.2.4.4.1)
5) increasing personnel support in departments to support HR transactions (3.2.4.2.3) ***
The Steering Committee ranked these recommendations as **impacting the greatest number of investigators**:

1) providing additional seed grant funding (3.2.1.1.1) ***
2) increasing personnel to support proposal development (3.2.2.1) ***
3) increasing personnel support in departments to support HR transactions (3.2.4.2.3) ***
4) increased funding for maintenance of core research infrastructure (3.2.4.6.1)

The recommendations that would have the **greatest impact on increasing new funding** are:

1) increasing personnel to support proposal development (3.2.2.1) ***
2) providing additional seed grant funding (3.2.1.1.1) ***
3) large-scale lab renovations (3.2.4.6.4)
4) incentivizing researcher productivity (3.2.1.1.2)

It is not surprising that several recommendations are ranked among the top for more than one criteria (denoted by ***). Below we provide justification for the recommendations that rose to the top of each of the three criteria along with the rationale for expected return on investment.

**Increasing personnel to support proposal development.** This single recommendation was ranked among the top across all three criteria. An investment in this area is universally viewed as being ‘a game changer’ for our research enterprise, predicted to have the greatest transformative impact at Stony Brook. The Office of Proposal Development (OPD), launched in June 2016, currently has three FTEs dedicated to providing specialized assistance to early career investigators and for the development of large and complex proposals. This leaves a significant population of investigators for whom services are currently not available. Among SUNY’s University Centers, Stony Brook was the last to stand-up an office dedicated exclusively to proposal development support and research advancement more broadly. The resounding recommendation from faculty, and supported by the Steering Committee, is to rapidly increase the depth and breadth of this effort through an investment of seven additional FTEs (~$800K per year).

While OPD works closely with college/school level proposal development staff (CEAS, CAS, SOM, SOMAS), it is important to note that the scope of responsibilities varies across these colleges/schools. Both the proposal development and sponsored programs task forces expressed a strong consensus that success in winning large proposals as well as increased support to investigators in establishing or growing their research programs are the most promising mechanisms to grow research funding. Support towards this effort will require an in-depth exploration of faculty and department level goals and challenges in order to fine-tune the services to fit the needs of our investigators. Focused efforts to increase proposal submissions; aggressively pursue large, prominent funding opportunities; diversify our funding portfolio and accelerate our success record would no doubt ‘pay for itself’ after a period of time through increased IDC. In section 3.2.2.1 we noted the analogy to investments in the Office of Advancement, where the costs of additional staff were offset by increases in philanthropic gifts. We believe the same rationale applies to sponsored research funding. While scaling of the recommended staff additions is certainly reasonable given budgetary constraints, we strongly urge an immediate initial investment of at least three FTEs to trigger rapid and critical advancements in support of proposal development. At its core, the services envisioned through a highly coordinated centralized/decentralized proposal support effort presents a fundamental shift in research culture at Stony Brook. Therefore, a period of time must be given to raise awareness, generate buy-in/cooperation and maximize participation across the academic and administrative units on campus. By expanding the scale of services offered to grow research, investigators are strategically positioned to more rapidly achieve a higher and more consistent level of external funding.

**Providing additional seed grant funding.** Increasing funds for seed grants and cost-sharing on proposals is clearly viewed as being critical for increasing proposal submission and success rates as well as increasing industry funding and potential future royalty revenue. Seed funding enables researchers to collect initial data as proof-of-concept, to build collaborations, and to explore ways to expand their research efforts beyond their traditional domains. In addition to having more funding available for these activities, the
recommendation also encapsulates the need for more structure and guidance in acquiring this support, so that the process is more clear and uniform. Seed funding available on campus is currently very limited in scope. There are several small grant programs in the School of Medicine, such as the TROs (Targeted Research Opportunity). The Brookhaven Affairs Office oversees a small but well established Seed Grant program for Stony Brook-Brookhaven National Lab collaborations. A newer engineering-driven medicine seed program for cancer research is still in its early stages. Industry-related seed grants, such as REACH and TAF (Technology Accelerator Fund), provide opportunities to cultivate industry relationships and commercialization of technology. In the near future, SUNY will also release a seed grant funding opportunity specifically dedicated to the ultimate goal of submitting large and complex proposals. This funding mechanism is expected to require some level of seed fund match from the campus to demonstrate enthusiasm and support for the effort.

The recent increase in funds provided to OVPR will support both seed funding and cost sharing on proposals. Even with these news funds, Stony Brook’s seed funding remains limited. In order to make a meaningful impact on proposal submissions and their quality, we strongly recommend increasing the percentage of IDC funds made available for seed funding and cost-sharing initiatives by 1% each year for the next three years. Expanded seed grant programs allow more faculty to benefit from preliminary funding. A direct benefit of a seed grant program comes from the internal peer review process, which in many ways validates the merits of the proposed research project and results in more competitive proposals. Similarly, cost share through RSR support is a mechanism for investigators to have access to additional funds; these funds are often more flexible than the grant funds, which provides valuable security and elasticity to investigators.

**Increasing personnel support in departments to support HR transactions.** Another high priority recommendation addresses the need for additional staff to support human resource transactions at the department level. The Human Resources task force concluded that many departments lack administrative staff to provide the necessary support for HR transactions. Many of these transactions require continual training on policies and procedures and the ability to both monitor and triage problems before serious consequences arise. A common occurrence is the set of actions necessary to prevent an employee from falling off payroll and losing health insurance as an award nears an end date. In other cases, there are cost saving implications to be considered. Delays in submitting and processing change forms commonly result in overpayments for which there is little to no recourse in recovering those funds. Implementing this recommendation will require numerous steps, starting with an inventory of staff resources across departments that can be tapped to provide support. Where possible, intermediaries should be eliminated (such as VPCs which are not relevant to the sponsored research hiring process) and clearer lines of communications developed through improved use of web information and standing committees that bring together OGM, HRS and research support staff. Moreover, greater assistance with HR procedures (e.g., creation of position descriptions, interview questions and managing search committees) would reduce administrative burdens associated within the hiring process. Finally, some department may need greater access to HR staff, either through hiring or by having some services performed by HRS staff.

**Increasing personnel support for Grants Management.** Another recommendation that rose to the top is to add one FTE to the grants management staff to facilitate communications with investigators and their research staff as well as between relevant offices that interface regularly with grants management to mitigate transactional delays. The major pain point addressed by adding this person is accessibility to an individual entirely dedicated to trouble shooting problems or delays in real time, irrespective of whether the problem is in grants management or in a related office such as human resources, travel, accounts payable, or elsewhere. Much of the interface between grants management and other office presents a challenge in identifying where or why in the process flow a transaction is stuck. This can lead to frustration at best and loss of grant dollars at worst. This is a particular vulnerability during the grant close-out period, which has a prescribed window for final processing. Improved stewardship of the complex transactional flows between offices can significantly improve communication and process times and ultimately save our investigators time and money.
**Increasing personnel support for Compliance.** Investment to increase personnel in the Office of Research Compliance also emerged as a top recommendation. The compliance task force reached a strong, unanimous conclusion that slow or delayed communication and processing times is due to staff shortages in this office and that this will be further compounded by the projected expansion of the clinical research portfolio. Currently, there are over 1100 active research projects involving human subjects, and another 380 active research projects involving animals or biosafety, which are regulated by three separate committees that meet biweekly. Collectively, these 1400+ projects are managed by a staff of only seven FTEs. Comparisons to peer offices at other institutions with similar volume of research activity provides evidence that the Office of Research Compliance is severely overburdened. The addition of an IRB Assistant to support the Human Research Protection Program (HRPP) Administrator and a Research Compliance Administrator to direct all non-IRB compliance areas would permit a more effective management of the various areas of responsibility in the ORC and would consequently facilitate researcher success. While mitigation of risk is clearly an important consideration here, the greater benefit will be realized by investigators who are overburdened and under pressure to have protocols approved in short time periods.

**Incentivizing researcher productivity.** This recommendation supports current efforts to make incentive options available to Deans and Chairs to recognize and reward faculty for exceptional efforts in writing proposals and/or securing funding (beyond the normal expectations in their units for obtaining external funding). Such incentives create accountability, highlight performance expectations, and serve to attract and retain star performers. Although detailed consideration of incentive models was beyond the scope of the FRS project, the Steering Committee agreed that having several models would afford flexibility to suit the department and the interests of different faculty. Some of the mechanisms discussed includes one-time salary bonuses, return of a fraction of IDC, course release, and support for graduate student and/or staff. We note that, concurrent with the FRS study, an incentive model is being developed that would allow investigators to receive “bonus” supplements to their annual compensation for exceptional success in obtaining external funding. Implementation of effective incentive plans could significantly increase our research expenditures with little to no upfront investment. We encourage adoption of such plans but also caution that incentive plans must be transparent and uniform in practice.

**Streamlining the postdoc hiring process.** The need to streamline the postdoc hiring process was strongly voiced throughout the FRS process. Investigators expressed considerable frustration over the lack of flexibility in hiring postdocs. PIs desire autonomy in identifying trainees with whom they wish to work in their specialized areas of research and the ability to recruit/onboard them with minimal administrative steps. The VP for Human Resources and the Manager of Recruitment responded quickly and early in the project to this request through the implementation of an omnibus ad several times a year in *Science*, for example, to fulfill the advertisement requirements. In addition, a generic TMS requisition that links to these ads has been created to reduce the administrative steps associated with creating the job requisition. This new process is already in effect and numerous investigators are participating in this new, streamlined process. As investigators navigate this new process and provide helpful feedback, adjustments will be made to ensure the process is having the desired impact.

**Increased funding for maintenance of core research infrastructure.** The need for maintenance of core infrastructure that supports the research mission is recognized as a critical priority. Much of the current frustration is centered around the lack of a clear, shared understanding of where maintenance responsibility resides and the lack of a source of dedicated funds to enable repairs. The failure to address core maintenance promptly results in delays in research and ultimately hinders recruitment of top faculty. The recommendation to delineate what constitutes core infrastructure in buildings used for research will allow assignment of responsibility. The task force proposed a list of such core infrastructure, which can serve as a starting point for further consideration. A “condition index” of these core systems should serve to direct maintenance. A resource on the order of $2-3M should be assigned each year for identified maintenance of these core systems. These modest steps will help to improve the value of our physical support infrastructure, and address safety concerns in research facilities. This will also decrease the amount of time and effort that investigators must spend in advocating for and coordinating repairs of core systems. A related issue is the
operation of core research facilities in the School of Medicine, which, although not examined here, is the focus of a new task force.

**Undertake large-scale lab renovations.** The combination of high renovation costs from CPDC/COM and the historic practice of renovating individual labs one-by-one is recognized as being inefficient for maximizing improvements and modernization of lab space. It would be more cost effective to renovate large contiguous areas within buildings, such as entire floors or wings. Whereas this would require a significant financial investment, there would be a far greater beneficial impact, enabling more useful research space for a greater number of investigators. Critical to the successful implementation of this recommendation is the need to introduce lower costs either through a revised bidding process or market comparable prices through COM/CPDC. In addition, “swing space” would be needed to make this possible. The use and assignment of lab space in the R&D Park buildings should be reviewed to determine suitability for swing space.

The commonalities among the highest priority recommendations detailed above represent 1) an opportunity to create a more efficient system, addressing key areas in which a lack of personnel is the root cause for delays that have financial and/or risk implications and ultimately lock many offices into ‘survival mode’; and 2) an opportunity to create a specialized and strategic support structure that increases the time that our researchers have to focus on doing their best science and also helps them in their efforts to expand their collaboration and funding networks.
Figure 4. Prioritized recommendations based on alignment with strategic goals. Yellow bars are estimated costs for implementation. The numbers in the center refer to the section in this report that describes the recommendation.
Figure 5. Prioritized recommendations based on greatest impact on researchers. Yellow bars are estimated costs for implementation. The numbers in the center refer to the section in this report that describes the recommendation.
Figure 6. Prioritized recommendations based on potential to increase external funding. Yellow bars are estimated costs for implementation. The numbers in the center refer to the section in this report that describes the recommendation.
5. Implementation

This report has proposed a significant number of initiatives that can eliminate or minimize administrative hurdles faced by investigators and strengthen support for Stony Brook’s research enterprise. However, investigators will realize no benefits unless the recommendations are implemented effectively, without inadvertently introducing new burdens. Successful implementation requires a plan that identifies leadership and stakeholders, clear goals with stakeholder buy-in, resources for investments, an understanding of associated risks, and a methodology for assessing impacts. Here, we outline some of the essential considerations for developing a suitable implementation strategy.

5.1 Leadership and Stakeholders

The FRS Project has been guided by a Steering Committee representing all of the research-active areas of the University as well as administration. While some of the membership could change, we believe this Committee should play a role in guiding implementation. The VPR (Richard Reeder) has taken primary responsibility for leading the activities of the Steering Committee, and it makes sense for his leadership role to continue for implementation.

It should be clear that the proposed changes will involve several service units across the University, notably the Office of the Vice President for Research, Human Resources Services, Procurement, Division of Information Technology, and Facilities units. Each of these support units is a critical stakeholder in the success of the project and must share in the responsibility for directing implementation. The Steering Committee does not have the detailed understanding or authority to direct changes, especially when knowledge of specific procedures or workflow are required. Engagement of leaders and subject matter experts from affected units is critical for successful implementation. Moreover, support from University leadership is needed to emphasize the message of shared responsibility.

5.2 Implementation Planning

With more than 60 recommendations, it is impractical to propose that all be implemented immediately. The prioritization described in Section 4.2, based on alignment with strategic goals, impact on investigators, and the potential for increasing sponsored research, can serve as a starting point for the recommendations that require significant implementation costs. Yet, as we note below, fiscal constraints will almost certainly limit implementation of some of these recommendations. We note that the implementation of the six modules of the Click online portal is properly funded and on schedule. This project by itself will ease a wide range of burdens once completed. For other recommendations that involve streamlining procedures or updating webpages to improve communication, the Steering Committee should engage directors/leaders of affected units to develop a detailed plan (and time frame) for implementation. In some cases, coordination among several service units will be required. A measure of success for all the recommendations to be implemented must address the cross-cutting theme of improving the overall service culture. The Steering Committee should ask unit leaders to report back regularly to assess progress.

5.3 Communication

Changes in procedures often represent hurdles in themselves, since they require doing something differently (at least for the first time). Therefore, communicating changes is essential for effective implementation. We intend to work with unit leaders to announce changes and ensure that web resources are updated to explain new processes. These will be emailed to investigators and research support staff, posted on the FRS webpage, and noted in the quarterly Research Newsletter as needed. Service units that have implemented changes will also be encouraged to highlight new procedures.

VPR Reeder will also schedule meetings with faculty, chairs, deans, and other groups to explain the outcomes of FRS, its recommended changes, and implementation plans.
5.4 Resources
As we have noted, implementation of some of the recommendations requires a significant investment in funds and/or personnel effort. We are aware that the present fiscal climate and overstretched staffing levels will limit the investments that can be made immediately. For recommendations where funds or personnel are not available, alternate ways of achieving goals should be considered, even if limited in scope. Nevertheless, the Steering Committee expresses a very strong view that some measured investment of new funds is made to permit implementation of some of the highest priority recommendations, even if the investments are limited.

5.5 Risks
A Steering Committee member observed that the greatest risk is in not implementing the recommendations, as failure to do so would continue to subject investigators to the very burdens of which they have informed us. It would also call into question the reason for performing the study and undermine the credibility of those who carried it out. This is partly a matter of properly communicating changes and goals with members of the research community, who have an expectation that beneficial changes will be introduced that reduce burdens. As noted in the preceding section, the Steering Committee strongly believes that a meaningful investment to enable implementation of some of the highest priority recommendations is the best way to demonstrate the University’s commitment to research.

In making significant changes, there is also a risk of eliminating or weakening internal controls needed for compliance. It is essential to achieve the right balance of easing burdens while maintaining adequate compliance with regulations.

5.6 Recommendations In-Progress
It is important to acknowledge that over 20 of the nearly 60 recommendations in this report have been implemented or are in progress. The various units implicated with these recommendations are to be applauded for their efforts. These can be viewed as “quick wins” and are possible because they involve mainly procedural changes or improved communication channels. This is not to suggest that these changes are straightforward or cost neutral. Therefore, the personnel effort or technological enhancements that will be required to successfully implement these recommendations merit acknowledgment. In some cases, the actual cost of this effort or technological enhancement may require modest financial investments to ensure successful implementation.

5.7 Continual Assessment
One of the cross-cutting themes among the task forces’ focus areas is the importance of making the project an ongoing effort to continue addressing administrative burdens. A primary responsibility of the Steering Committee should be to develop a framework for assessing the progress of implementation and the impacts on reducing burdens. This is especially important for evaluating the return on investments made and determining whether such resources should be increased or decreased. The task forces could also be engaged in such evaluations.
6. Summary

This report represents completion of the stage of this project involving investigation, analysis, and development of recommendations to address administrative burdens. The task forces listened to the concerns expressed by faculty investigators and research support staff. With help from subject matter experts, the task forces provided measured recommendations to reduce or eliminate unnecessary hurdles. The Steering Committee, informed by regular meetings with task force leads, converged on 60-some recommendations, and offered priorities for their implementation. The Committee also identified five common themes among the recommendations that cut across focus areas.

The next stage of the project provides the opportunity to make significant improvements in the administrative environment of our research enterprise. Indeed, a number of the recommendations have already been implemented or are in progress. Among these is the ongoing implementation of the Huron Click online portal, which will streamline workflow and eliminate unnecessary processes in many of the focus areas covered by this study. The Click project is approximately 25% complete, with one of the modules ‘live’, two in advanced stages of configuration and expected to go live within months, and the remaining modules planned for roll out in late 2018.

Other ‘quick wins’ include elimination of unnecessary COI disclosures, a streamlined postdoc hiring process, elimination of unnecessary approvals, expanded funding opportunity database, and improved web resources to better guide investigators. The Steering Committee must continue to have a role in guiding further implementation of recommendations, as well as assessing progress and impacts. Recommendations involving mainly procedural changes will require full engagement of the leaders in affected units, as well as their subject matter experts. Indeed, this report refrains from directing details of implementation, knowing that subject matter experts and unit leaders must determine how to optimize the changes. Task forces can serve as additional resources to evaluate the impacts of implemented changes.

For recommendations that require new resources (i.e., new funds, added personnel), the implementation is likely to be limited by the current budget conditions. Nevertheless, the Steering Committee strongly believes that some meaningful investments be made to enable implementation of some of the highest priority recommendations, even if limited in scope. Doing so will send a positive and much needed message to the research community that the University is truly committed to its research future. Failure to make a substantial investment risks our credibility at a time when peer institutions are making notable advances in research. Perceptions (and communications) cannot be marginalized in this respect.

Finally, it must be acknowledged that we are only at the beginning of a critical period of change. Many of the desired outcomes of this project will take years to be fully realized. Bringing about a change in ‘customer service’ culture, one of the cross-cutting themes, cannot be accomplished overnight. It requires that leadership sets the expectation for its support units, leads by example, and demands accountability. This takes time and requires ongoing commitment. Hence, we point to another of the common themes—the need to continue the FRS project in some form. Doing so will allow assessment of impacts, which can guide further investment (or de-investment). It will also permit other administrative burdens to be addressed. We note that new task forces are currently being created to examine research computing across the University and the operation of the core facilities in the SoM. By making the process ongoing, we can continually improve Stony Brook’s research support infrastructure, and build greater trust between investigators and the University’s support units.
Appendix A.
Steering Committee Membership

Rich Reeder, Vice President for Research (Chair)
Bob Megna, Senior Vice President for Finance and Administration (Co-Chair)
Michael Bernstein, Provost and Senior Vice President for Academic Affairs
Nina Maung-Gaona, Associate Vice President for Research
Mitch Menarchem, Program Manager, Project 50 Forward
Lina Obeid, Dean of Research, School of Medicine; Professor of Medicine
Nicole Sampson, Professor of Chemistry; Co-Director, Chemical Biology Training Program
Fotis Sotiropoulos, Dean, College of Engineering and Applied Sciences
Larry Swanson, Interim Dean and Associate Dean, School of Marine & Atmospheric Sciences
Chuck Taber, Dean, Graduate School and Vice Provost for Graduate and Professional Education
Mary Truhlar, Dean, School of Dental Medicine
Stella Tsirka, Deputy Provost and Vice Provost for Faculty Affairs
Task Force Membership

1 - Proposal Development & Funding Opportunities

Lead - Robert Harrison, Institute for Advanced Computational Science
-Nicholas Fisher, School of Marine and Atmospheric Sciences
-Samir Das, Computer Science/CEAS Dean’s Office
-Aaron Neiman, Biochemistry and Cell Biology
-Laurie Shroyer, Surgery
-Julio Carrion, School of Dental Medicine
-Soraya Zahibi, CAS Dean’s Office
-Toni Sperzel, CIE/The Graduate School
-Alan Calder, Physics and Astronomy
SMEs* – Sheri Clark (OPD), Kathryne Piazzola (OPD), Adnan Rangwala (OVPR-IT), Deborah Mann-Rodriguez
(* Subject Matter Experts)

2 - Sponsored Programs (Pre-Award)

Lead - Jon Longtin, Mechanical Engineering
-Arianna Maffei, Neurobiology and Behavior
-Glen Itzkowitz, School of Medicine
-Lucille London, School of Dental Medicine
-Cynthia Forman, Psychology
-Miguel Garcia-Diaz, Pharmacology
-Christine Cesaria, Computer Science
-Kathryne Piazzola, Office of the Vice President for Research
-Lauren Donovan, STEM Smart/Technology and Society
-Kamazima Lwiza, School of Marine and Atmospheric Sciences
SMEs – Debbie Chalmers (OSP), Mary Serra (OSP), Razeema Sahib (OSP), Leigh Gentilcore (OSP)

3 - Grants Management (Post-Award)

Lead - James Konopka, Molecular Genetics and Microbiology
-Scott Reid, Cancer Center
-Laurie Krug, Molecular Genetics and Microbiology
-Robert Kukta, Mechanical Engineering
-Amy Marschilok, Materials Science, Chemistry
-Deborah Murphy, Advanced Energy Research and Technology Center
-Thomas MacCarthy, Applied Mathematics and Statistics
-Annie Rohan, School of Nursing
-Laura Colucci, Geosciences
SMEs - Sheila Routh (OGM), Ana Maria Goncalves (OGM), Stephanie Ammann (OGM), Annette Ainsley (OGM)
4 - Compliance (IRB, IACUC, IBC, COI, Export Control and Training)

Lead - Richard Kew, Pathology
- James Bliska, Molecular Genetics and Microbiology
- Jennifer Hofecker, Cancer Center
- Sharon Nachman, Pediatrics
- Patricia Thompson-Carino, Pathology/Cancer Center
- Arthur Samuel, Psychology
- Marie Badalamente, Orthopedics
- Stephen Walker, Oral Biology/School of Dental Medicine
- Jeronimo Cello, Microbiology
- Elizabeth Boon, Chemistry

SMEs - Betsy Baron (IRB), Tom Zimmerman and Vanessa Scott (IACUC, DLAR), Christopher Kuhlow, Susan Gasparo (Export Ctrl), Judy Matuk, Adnan Rangwala and Lydia Chabza for Huron Click, Matt Nappi (Information Security)

5 - Patents, Technology Licensing & IP

Lead - Maurizio Del Poeta, Molecular Genetics and Microbiology
- Stanislaus Wong, Chemistry
- Susan Gasparo, Office of the Vice President for Research
- Diane Fabel, Center for Biotechnology
- Arie Kaufman, Computer Science
- Sanjay Sampath, Materials Science & Chemical Engineering
- Lorne Golub, Oral Biology/School of Dental Medicine

SMEs - Seema Levy, Pete Donnelly (OTLIR)

6 - Industry Relations

Lead - John Haley, Cancer Center/Proteomics Center
- Clint Rubin, Biomedical Engineering
- Maria Ryan, Oral Biology/School of Dental Medicine
- Satya Sharma, Center for Excellence in Wireless and Information Technology
- Gerald Smaldone, Respiratory Care Program / Physiology and Biophysics
- Jason Trelowicz, Materials Science and Engineering
- Manny London, School of Business
- Iwao Ojima, Chemistry

SMEs - Sean Boykevisch, Pete Donnelly (OTLIR)
7 - Human Resources Issues

- Lead - Dan Klein, Psychology
  - Christine Linneman, Cancer Center
  - Ute Moll, Pathology
  - Nancy Hollingsworth, Biochemistry and Cell Biology
  - Alfredo Fontanini, Neurobiology and Behavior
  - Katy Ehms, The Graduate School/IREP
  - Susan Scheckel, Provost Office/IREP
  - Soosan Ghazizadeh, Oral Biology/School of Dental Medicine
  - Christina Babzien, Molecular Genetics and Microbiology
  - Lynda Perdomo-Ayala, Pharmacology
  - Heidi Ciolfi, Chemistry
  - Nathan Leoce-Schappin, Physics and Astronomy
  - Andrea Curran, Applied Mathematics and Statistics
  SMEs – Jenn Rossler (HRS), Marjorlie Leonard (Title IX/Risk Mgmt.), Sheila Routh (OVPR)

8 - Procurement Issues

- Lead – Surita Bhatia, Chemistry
  - Janet Allopenna, School of Medicine Dean’s Office
  - Carol Juliano, Biochemistry and Cell Biology
  - Srinivas Myneni, Periodontology
  - Stacey Scott, Psychology
  - Diane Riccardo, Biochemistry and Cell Biology
  - Heather Lynch, Ecology and Evolution
  - Rachel Ingrassia, CEAS Dean’s Office
  SMEs - Sheila Routh (OVPR), Mike Standridge, Christine Wilson (Procurement)

9 - Facilities and Lab Rehabs

- Lead - Axel Drees, Physics and Astronomy
  - April Musano, Chemistry
  - Sasha Levy, Biochemistry and Cell Biology
  - Glen Itzkowitz, School of Medicine
  - Owen Evans, Geosciences
  - James Kierych, Life Sciences
  - Steven London, School of Dental Medicine
  - Cyril Rickson, Property Control
  - Jim Hart, Division of Information Technology
  - Ed McFadden, CAS Dean’s Office
  - Alan Tucker, Applied Math and Statistics/CEAS Dean’s Office
  SMEs – Bob Megna, Melissa Woo
Appendix B. Highlights of Campus-wide Survey Responses

Figure 7. Numbers of survey responses by Colleges and Schools.

Figure 8. Numbers of survey responses by department or unit.
Appendix C. Prioritization Methodology

Task forces submitted final reports of their findings and recommendations in mid and late June. A specific format was not required in order to allow for creative flexibility in the presentation of the findings. These reports were immediately shared with the Steering Committee. At the next Steering Committee meeting (6/27/17), each of the task force leads summarized their report. The group then discussed different strategies for developing a prioritized list to identify the top recommendations. To grapple both visually and practically with the collection of recommendations in the written reports, and elucidated in the oral reports, a matrix was created that grouped all recommendations (in bullet point format) into two categories: 1) those requiring significant investment (count 27) and 2) all other recommendations (count 38), including “quick wins”. The matrix was shared with task force leads for validation.

The final version of the matrix was discussed at the next steering committee meeting in early July at which time several committee members suggested the need to cross validate the recommendations requiring significant investment against the survey responses as a source of empirical data. Each recommendation therefore was coded against the survey data to indicate whether the recommendation would resolve or address the comment. The corresponding impact score from the survey was also recorded to be included in the analysis. For each of the 27 recommendations requiring significant investment, two figures were generated: 1) the percent of comments addressed by the recommendation and 2) the average of the corresponding impact score. This information was shared with the Steering Committee and task force leads for consideration and further discussion on next steps in generating a prioritized list.

At the next steering committee meeting (mid-July), there was a lengthy discussion regarding a permit to permit ranking of the recommendations. Ultimately, it was decided that the rubric should include scores with adjustable weights to capture the following measures:

- **Alignment with Strategic Goals** (score 1-5): the degree to which the recommendation is expected to reduce or eliminate administrative hurdles and improve the overall research environment, including incentivizing research, streamlining administrative processes, expanding capacity (i.e., additional support personnel), improving the administrative service culture or providing an opportunity to cross-train, and increasing communication and the availability or accessibility of information. Each criterion was given one point, where a score of 5 for strategic goal indicates the recommendation would address all five of the aforementioned criteria.

- **Impact on Researchers** (score 1-5): the expected number of researchers impacted is measured on a Likert scale as follows: 1-small percentage, 2-fair number, 3-about half, 4-large number, and 5-most or all.

- **Potential to Increase Research Funding** (score 1-3): the potential for the change to result in increased external grants was measured as follows: an anticipated return of less than $1 million received a score of 1, $1-5 million received a score of 2, and greater than $5 million received a score of 3.

The question of who should be asked to score was also discussed. It was agreed that the Steering Committee members along with the task force leads are best informed about the whole FRS process and all the FRS issues, and therefore most strategically positioned to score the recommendations. The final rating sheet was distributed to the steering committee and task force leads for completion.

A total of 13 rating sheets were received. The scores were analyzed with two approaches. First, a straight average of the scores was calculated and plotted. Second, the Z-Score was calculated to normalize idiosyncrasies by individual raters. There were slight differences in the prioritization lists using these two different approaches. Similarly, rank by mean scores for each of the three measures individually or combined revealed slight differences in the prioritization list. However, these differences were considered to be insufficient to require separate rankings, and the ranking based on averages are presented.
Appendix D. Task Force Reports (separate file)

The original task force reports are not available for download. Please contact the Office of the Vice President for Research for further information.

Task Force 1 – Proposal Development & Funding Opportunities

Task Force 2 – Sponsored Programs (Pre-Award)

Task Force 3 – Grants Management (Post-Award)

Task Force 4 – Compliance (IACUC, IRB, IBC, COI, Export Control and Training)

Task Force 5 – Patents, Technology, Licensing & IP

Task Force 6 – Industry Relations

Task Force 7 – Human Resources Issues

Task Force 8 – Procurement Issues

Task Force 9 – Facilities and Lab Rehabs