MEMORANDUM

To: Don Boyd, VP for Research
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Date: 13 October 2010
Subject: FINAL REPORT
Subcommittee on Research Administrative Support
of the Research Advisory Board

Problem Statement:

As research at RIT has grown, the management of sponsored projects has placed an increased burden on principal investigators. This is due to the increasingly complex regulatory environment surrounding federal programs. The burden is compounded by additional scrutiny associated with government transparency requirements surrounding how funds are expended by sponsoring agencies and regulatory bodies. Compliance with federal regulations, including those governing effort reporting, export control, conflict of interest, and other areas consumes an increasing portion of a principal investigator’s time and energy.

Across RIT, the research administrative support to help principal investigators manage their projects is not evenly distributed. In some units, investigators have no administrative support to manage sponsored projects whatsoever. Investigators in areas without dedicated administrative support must perform many administrative tasks themselves. Consequently, this takes away from the time they have available to complete ongoing research and pursue other external funding opportunities.

Additionally, while principal investigators have exceptional scientific and technical backgrounds, performing administrative functions is generally not their strength nor should their talents be directed to these functions. This is consistent with findings in recent internal audits of sponsored projects performed by the Office of Institute Audit, Compliance & Advisement (IACA). Recent audits indicate that principal investigators lack the knowledge and experience to fully understand RIT’s financial systems and processes. Audits also show that principal investigators need a basic level of administrative support to help them manage projects appropriately and to help them comply with the regulatory requirements they are ultimately
responsible for, such as ensuring financial activity is an accurate reflection of programmatic outcomes. The Research Advisory Board has appointed a subcommittee to address these issues.

**Charge to the Subcommittee**

This subcommittee of the Research Advisory Board was charged with developing a set of recommendations to address this problem.

The subcommittee was charged to:

- Examine existing research administrative support models currently being utilized by RIT (such models are currently in place in CIMS, CIS, and COS)
- Develop a resource model and make recommendations to deploy professional research administrative support uniformly to all areas of the University
- Discuss specific options for funding the additional resources needed given the current economic climate, e.g. staff positions
- Create metrics or other indicators of performance that will identify the need for additional support in specific areas of RIT, and
- Consider the development of mandatory education in Federal research compliance requirements for principal investigators.

**Existing Research Administrative Support Models**

The subcommittee developed a questionnaire that was distributed to members of units across the campus. This document invited respondents to identify the individual (by name and affiliation) who provides research administrative support to PI's in their unit. The attributes are listed in the table below, and reflect the items identified in the Memorandum from IACA to the Sr. Vice President for Academic Affairs and Provost and the Vice President for Research regarding “Administrative Support Activities Associated with Externally Sponsored Projects – Starting Point for a New Job Description” dated December 16, 2009. The questionnaire also gave respondents an opportunity to identify "Other Support" they are currently providing, and "Unmet Needs" that they currently have no particular means to provide. The attributes studied are listed in the table below, and the boldface names are used as the keywords in the plots which follow.

<table>
<thead>
<tr>
<th>Regulatory Compliance: Keeping current on and informing principal investigators and other project personnel with respect to rules and requirements affecting externally sponsored research projects.</th>
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<tbody>
<tr>
<td><strong>Document Repository:</strong> Maintaining organized files of documents pertinent to the project(s). E.g. approved proposal with budget and budget narrative, transaction documentation, financial reports/reconciliations, effort certifications, etc.</td>
</tr>
<tr>
<td><strong>Financial Transactions:</strong> Assisting with the processing of transactions (i.e., procurement card, travel, invoice payment forms, petty cash, purchase orders). Obtaining PI approvals and sign-off on these documents.</td>
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</table>
**Personnel Transactions:** Assisting with the processing of personnel-related transactions. (i.e. Employee Action Form (EAF), student hire forms, graduate research assistant hire and tuition remission forms. Obtaining PI approvals and sign-off on these documents.

**Transaction Review:** Ensuring the project transactions are allowable, allocable, reasonable, and necessary for the project by reference to regulations, sponsor requirements, RIT Policies, and in accordance with the approved project budget.

**Monthly Payroll Review:** Monthly, reviewing the Payroll Distribution Report to ensure the project is being charged only for individuals working on the project.

**Monthly Effort Review:** Monthly, meet with PI to ensure current effort allocations are reflective of the individual’s actual effort. Initiate corrections as necessary.

**Quarterly Effort Allocation:** Monthly (or quarterly), compare the current effort allocation to that which was committed to in the project award. Report significant deviations (25% or more) to Sponsored Research Services so, if needed, the sponsor can be notified.

**Quarterly Workload Reports:** Assist principal investigator in reviewing and returning Quarterly Monitored Workload Reports (QMWR) in a timely fashion.

**Monthly Account Review:** Performing monthly financial review that includes reconciling the detailed Account Analysis Report to the Grant Statement for all awards, including cost share and participant support costs accounts. This step would encompass ensuring that transactions are supported with back-up documentation and that they are allowable, reasonable, and necessary to accomplish the project’s objectives. Meet with PI to discuss questions and items in need of follow-up. Initiate corrections/changes as needed.

**Budget V. Actual:** Perform monthly reviews of the Grant Statement for budget vs. actual and spending trends/patterns. Review the results with the principal investigator.

**Subaward Review:** Reviewing sub recipient financial activity – e.g. budget versus actual, timeliness of billings, and sharing with the results with the principal investigator. Assist principal investigator with the review of subrecipient invoices prior to approval for payment.

**Update NOA:** Updating the Notice of Award Form as needed.

**Report Preparation:** Assist PI with any reporting requirement, as requested – final reports, interim progress reports, intellectual property, etc.

**Currently Provided:** Insert in this area below any ADDITIONAL tasks that you CURRENTLY PROVIDE to PI’s related to sponsored programs support.

**Unmet Need:** Insert in this area below any ADDITIONAL tasks that you NEED, BUT DO NOT CURRENTLY PROVIDE to PI’s related to sponsored programs support.

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A total of fifteen response sets were received from various offices around campus. In some cases, the response was for a single department, while other responses may have been for an entire college, depending upon the volume of activity in the unit.
Responses identifying responsible individuals were mapped into 3 categories: Controller, Home Department and Sponsored Programs Accounting (SPA). Figure 1 illustrates the perception of various units across the campus regarding "who is responsible" for providing each attribute of research administrative support to principal investigators (PIs). It is clear that almost every unit responding considers the following attributes as being the responsibility of the home department or unit where the PI resides:

- monthly payroll review
- monthly effort review
- quarterly workload reports
- monthly account review
- personnel transactions
- document repository
- quarterly effort allocation
- budget vs. actual tracking
- financial transactions

Conversely, the survey revealed some confusion regarding who is responsible for these attributes:

- Update NOA
- Transaction Review
- Report Preparation
- Subaward review
- Regulatory Compliance.
Review of the written comments from the submittals did not identify any other common "Currently Provided" or "Unmet Needs" attributes that were widely identified across the campus. Thus, the subcommittee concludes that the attributes studied are indeed the correct areas of concern.

Next, the subcommittee reviewed the responses to identify the perceived gaps between what needs to be accomplished, and who is actually tackling the tasks. When individuals (other than the PI) were identified as providing administrative support, the subcommittee did not identify this to be a "gap." However, when a response indicated that no individual provided this attribute of support, or that only the PI provided this attribute, the subcommittee identified this as a "gap" in support services. Please note that this interpretation does not speak to the quality or accuracy of the services actually provided -- it is only a first-order estimate of areas that clearly need additional support. The results of the gap analysis are presented in Figure 2.

In Figure 2, a response of "None" indicates that the responding unit has not identified any individual as providing the support. A response of "PI" indicates that the responding unit does not provide any administrative support, but that the PI provides this attribute themselves. The subcommittee did not try to correct any responses, but instead reports perceptions from the respondents. For example, while it is known from SPA that "Quarterly Workload Reports" are regularly filed, this is perceived to be a gap because three units report that nobody is responsible and another three units report that the PI completes them alone.
The following attributes appear to be the most common gaps across units, perhaps as high as 25% of the units on campus:

- quarterly effort allocation
- monthly effort review
- budget vs. actual tracking
- subaward review
- regulatory compliance.

Additional attributes also appear to have significant gaps:
- transaction review and
- monthly account review.

The remaining attributes appear to be somewhat readily completed by the PI, and may be not as critical as other attributes in the gap analysis:
- quarterly workload reports,
- updating NOAs
- report preparation and
- document repository.

These results are consistent with IACA’s findings as documented in the Memorandum to the Senior Vice President for Academic Affairs and Provost, the Senior Vice President for Finance and Administration, and the Vice President for Research entitled “Federal Sponsored Programs at RIT” dated October 15, 2009.

**Proposed Resource Model and Metrics**

The subcommittee recommends that every PI at RIT have access to departmental or home unit staff support for all basic administrative functions associated with sponsored projects. These are the same types of functions administrative staff are currently responsible for performing when the transactions are funded with operating funds. The source of funding should not exclude a PI from departmental staff support. This seems to punish rather than reward PI initiative and is contrary to RIT’s strategic goal of growing sponsored research.

The subcommittee defines basic administrative support as assisting PIs with the processing of routine transactions. These include obtaining proper signatures and routing documents to the final departmental destination. Examples of basic administrative support include:

- **Financial**
  - Procurement Card
  - Travel
  - Invoice Payment Forms
  - Petty Cash
• Requisitions/purchase Orders

• Personnel
  - Employee Action Forms (EAF)
  - Student Employment Hire Forms
  - Graduate Research Assistant Stipend Payments
  - Tuition Remission

• Monthly Reports
  - Grant statements
  - Payroll distribution reports
  - Account analysis

• Monthly account review

The subcommittee recommends that colleges use existing administrative resources to provide consistent basic administrative support to all PIs. In many colleges and units, this is already occurring. Where it is not, staff resources should be positioned as appropriate, preferably as close to the home departments of the PIs as possible. In some cases, a staff member may split his/her time between two or more departments, while in other cases a staff member may be dedicated to a single department, based upon the research volume in the department.

Certain tasks associated with managing sponsored programs effectively are beyond the scope of basic administrative support in the home department. A specialized skill set is required to help PIs manage grants and contracts effectively and ensure compliance with regulatory requirements. These attributes are the ones where the largest gap exists in the responses (Figure 2) and arguably present the most significant risk to RIT by not being assigned to a responsible and qualified individual.

The subcommittee recommends addressing the identified gaps by learning from the current best practices at RIT. There are three models in place which utilize employees with an accounting/grant and contract administrative background to perform these functions.

• Center for Imaging Science (CIS) – In addition to “home department” personnel who provide basic administrative support, CIS utilizes a team of accounting/regulatory experts that provide assistance with all other attributes listed. The team consists of one staff accountant, one financial analyst, and two SPA representatives. These four individuals report through the Controller’s Office organization.

• Center for Integrated Manufacturing Studies (CIMS) – A very similar model operates successfully in CIMS, including one staff accountant and one financial analyst both reporting through the Controller’s Office.

• The College of Science (departments outside of CIS) – PI support is provided by one senior staff accountant and one SPA representative both reporting through the Controller’s Office.

These individuals work with home department staff or are themselves responsible for all the elements listed in the questionnaire, that are not defined as basic administrative support.
The subcommittee recommends that staffing beyond basic administrative support be in direct proportion to two metrics:

1. **NUMBER** = The average number of discrete sponsored research accounts, including cost share accounts and all other accounts necessary to support the award (e.g. participant support cost accounts, alpha-numeric award carve-outs), in the COLLEGE/UNIT over the preceding three fiscal years. Note that this NUMBER should reflect the number of grants being tracked by the college/unit. If, for example, there is a joint project between COS and GCCIS, and the project is tracked by an office in the COS, then the NUMBER should be assigned to the COS since that is where the staff support is needed.

2. **VALUE** = The average dollar value of direct research expenditures from sponsored research accounts, including cost share accounts and all other accounts necessary to support the main award (e.g. participant support cost accounts, alpha-numeric award carve-outs), in the COLLEGE/UNIT over the preceding three fiscal years. This VALUE reflects the College where the dollars are actually spent since those transactions were originated and approved in the College they are ultimately charged.

The subcommittee recognizes that there are certain tasks which are associated with the existence of each project, whether the project be a small or large one, while other tasks (such as transaction processing and personnel actions) typically grow in direct proportion to the dollar volume of the project.

Active projects and direct research expenditures can be obtained from the Oracle financial system. The subcommittee proposes a weighted result by computed for each College/Unit:

\[
\text{RESULT} = \text{NUMBER} + \left( \frac{\text{VALUE}}{100,000} \right)
\]

Using CIS, COS (departments outside of CIS), and CIMS as units that have sufficient volume to necessitate this level of infrastructure, other units can be examined comparatively to determine if additional support may be needed.

It is anticipated that number of staff positions desired will exceed the funds available to create them. The RESULT may be computed for each College/Unit. The goal is to keep each College/Unit RESULT somewhat uniform across campus. This RESULT may be recomputed periodically, or as additional funds for staff become available and may be used as a guideline for determining resource needs for the College/Unit.

The subcommittee recommends that deans work closely with their Controller's Office partner to identify specific departments or units with the largest gaps in support services according to the attributes identified in Figure 2.

**Proposed Funding Model**
There is clearly a need for more staff support than the current economic conditions will permit. The subcommittee recommends that the administration identify a dollar value, or FTE count, that can be supported under the current financial condition of the institution. Incremental FTEs can be distributed through negotiation with central administration. Another option is for the colleges to repurpose existing FTEs to support the additional personnel needed to support grant and contract administrative functions. The deans in turn will allocate a portion of the FTEs to each department based on input from their college partner.

After one year, the Controller’s Office college partners should be polled to identify areas that continue to be poorly addressed; the RESULT should be reviewed to identify research growth since the prior year. Over time, the RESULT indicator may be used as a means of developing a ratio of RESULT per FTE that is a target metric for the campus. The subcommittee feels that there is insufficient experience, data, and research volume to specify a desirable target for the RESULT per FTE ratio until further study has been completed.

**Proposed Training**

The subcommittee recognizes that RIT already offers excellent training for both PIs and support staff, through a combination of resources provided the CPD, SPA, and SRS. However, participation in training by PIs is inconsistent. As a result of significant audit findings involving large financial settlements, many major research universities have developed mandatory education and training for PIs. Stanford has deployed an online module that covers all major research compliance topics at a survey level with additional detail on specific topics as needed by individual investigators. For example, while the overall module offers an overview of materials regarding human subjects in research, investigators with awards that actually have research subjects have access to additional information about the IRB process.

Several universities offer online, self-paced research compliance education for investigators. RIT’s SRS and SPA offices have the expertise and materials available that could be used to develop such an online education program. This content could be developed and delivered through myCourses with the support of instructional development professionals at the Wallace Center.

The subcommittee recognizes that mandating compliance education will not be successful without the full support of the President and Provost. The mandate should come from the highest levels at RIT to underscore the importance of research compliance and to recognize the significant responsibilities of RIT’s PIs. RIT is committed to growing research and full compliance with all federal laws and regulations. This can only be accomplished with the support of the leadership from all parts of RIT.

**Conclusion**

The subcommittee conducted a survey of units at RIT to identify perceptions of responsibility for administrative support of sponsored research projects. The findings of the survey, consistent with
an earlier memo from IACA identify a set of support “gaps” that must be addressed to encourage an active research culture and maintain compliance with regulatory and legal requirements.

The subcommittee recommends a two-fold approach to address these gaps:

1) Home departments/colleges should provide resources to ensure basic administrative support to all principal investigators.
2) PIs should have access to specialized grant and contract administrative support as needed.

There are best practices currently in place at RIT that reflect this approach. These practices, or others yet to be developed, should be extended to units in need of such support. A suggested metric to providing support should be based on the number of transactions and dollar value of sponsored projects.

Finally, the subcommittee recommends the development of an online education module that provides an overview of requirements associated with externally-funded research and that all PIs be required to participate, similar to current best practices already in place at major research universities.
Appendix

Shortly after the completion of this report, SPA gathered data to examine the potential need for administrative support in different campus units. Three units, CIMS, CIS, and COS (without CIS) have administrative support models that include administrative services as described in the report. The tables below illustrate the dollar value of expenditures and counts of sponsored project accounts by unit for FY 08 through FY 10 for six five largest units at RIT.

<table>
<thead>
<tr>
<th>Unit</th>
<th>FY 08 Total Expenses</th>
<th>FY 09 Total Expenses</th>
<th>FY 10 Total Expenses</th>
<th>VALUE = 3 Year Sum of Total Expenses</th>
<th>FY 08 Count of Projects</th>
<th>FY 09 Count of Projects</th>
<th>FY 10 Count of Projects</th>
<th>NUMBER = 3 Year Sum of Count of Projects</th>
<th>RESULT</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIMS*</td>
<td>$7,970,127</td>
<td>$8,094,345</td>
<td>$8,711,185</td>
<td>$24,775,657</td>
<td>97</td>
<td>97</td>
<td>97</td>
<td>291</td>
<td>373.59</td>
</tr>
<tr>
<td>CIS*</td>
<td>$4,833,158</td>
<td>$6,505,586</td>
<td>$5,233,137</td>
<td>$16,571,881</td>
<td>119</td>
<td>117</td>
<td>119</td>
<td>355</td>
<td>410.24</td>
</tr>
<tr>
<td>KGCOE</td>
<td>$5,555,563</td>
<td>$5,925,720</td>
<td>$6,369,261</td>
<td>$17,850,544</td>
<td>124</td>
<td>146</td>
<td>134</td>
<td>404</td>
<td>463.50</td>
</tr>
<tr>
<td>NTID</td>
<td>$6,656,539</td>
<td>$5,764,375</td>
<td>$5,937,920</td>
<td>$18,358,834</td>
<td>66</td>
<td>91</td>
<td>71</td>
<td>228</td>
<td>289.20</td>
</tr>
<tr>
<td>NPRL*</td>
<td>$1,670,152</td>
<td>$2,437,159</td>
<td>$1,876,998</td>
<td>$5,984,309</td>
<td>18</td>
<td>17</td>
<td>19</td>
<td>54</td>
<td>73.95</td>
</tr>
<tr>
<td>COS*</td>
<td>$2,524,154</td>
<td>$2,161,947</td>
<td>$4,199,285</td>
<td>$8,885,386</td>
<td>63</td>
<td>78</td>
<td>106</td>
<td>247</td>
<td>276.62</td>
</tr>
</tbody>
</table>

A few notes about the data:
- Total expenses and project counts include all project accounts related to externally sponsored awards. Cost share accounts, supplements, participant support accounts and any separately created accounts related to the main award are counted separately.
- Units indicated by an * have an existing administrative support model, units not marked do not.
- The tables show the top six units each year by total expenses. In each FY, these units represent over two thirds of total expenses at RIT.
- The RESULT column is defined as in the report. \( \text{RESULT} = \frac{(\text{NUMBER} + (\text{VALUE}/100,000))}{(3 \text{YEARS})} \)

The RESULT is essentially an index illustrating the volume and complexity of administering sponsored projects in a given unit. A higher index indicates a greater need for administrative support.