December 19, 2023

ROSS DAMMANN
Assistant Vice Chancellor
Contract & Grant Administration
0934

JENNIFER FORD
Director
Conflict of Interest
0992

Subject: Kuali Research and Conflict of Interest
Report 2022-05

The final report for the AMAS review of Kuali Research and Conflict of Interest, Report 2022-05 is attached. We would like to thank all members of the department for their cooperation and assistance during the review.

Because we were able to reach agreement regarding management action plans in response to the audit recommendations, a formal response to the report is not requested. The findings included in this report will be added to our follow-up system. We will contact you at the appropriate time to evaluate the status of the management action plans.

UC wide policy requires that all draft reports be destroyed after the final report is issued. We also request that draft reports not be photocopied or otherwise redistributed.

Christa Perkins
Director
Audit & Management Advisory Services

Attachment

cc: Judy Bruner
Alexander Bustamante
Kevin Chou
Deston Halverson
Shanda Hunt
Ted Johnson

Vince Kellen
Pierre Ouillet
Corinne Peek-Asa
Cheryl Ross
Say-Ho Tan
Heather Vinograd
# TABLE OF CONTENTS

I. EXECUTIVE SUMMARY .......................................................................................................................... 1

II. BACKGROUND ....................................................................................................................................... 3

III. AUDIT OBJECTIVE, SCOPE, AND PROCEDURES ..................................................................................... 4

IV. CONCLUSION......................................................................................................................................... 5

V. OBSERVATIONS REQUIRING MANAGEMENT ACTION .......................................................................... 6
   A. Subaward Invoicing Data Consistency & Accuracy ......................................................................... 6
   B. Kuali User Separation of Duties ...................................................................................................... 9
   C. Kuali COI Reporting ....................................................................................................................... 11

ATTACHMENT A – Kuali Research Role Definitions
I. **EXECUTIVE SUMMARY**

Audit & Management Advisory Services (AMAS) has completed a review of Kuali Research and Conflict of Interest as part of the approved audit plan for Fiscal Year 2021-22. The objective of our review was to evaluate select Kuali Research (KR) and Kuali Conflict of Interest (Kuali COI) processes and system implementation to assess whether internal controls provide reasonable assurance that key processes related to sponsored projects' life cycle and COI disclosures were working as intended.

Based on our review, we concluded that the KR implementation of internal controls provide reasonable assurance that processes related to sponsored projects' life cycle are generally working as intended. With the implementation of KR and Oracle Financial Cloud (OFC), there have been improvements in compliance with sponsored project funding limits and budget periods. Generally, the transition to KR from the predecessor system went smoothly and special review processes have been incorporated into KR. In addition, KR has also been integrated with OFC for invoice approval and payment.

However, opportunities for improvement were identified related to subaward invoice processes. We identified inconsistencies and inaccuracies in KR and OFC data which were caused by manual subaward invoice processes, system invoice controls and OFC controls, system integration issues, and invoice approval processes and intercampus payment entry processes. Based on a detailed analysis of inconsistencies of subaward invoices between KR and OFC, we identified specific examples of the impacts on subaward administration, including invoices paid in duplicate and invoices with outstanding balances that had not been paid in full. These processes impacted aspects of sponsored project life cycle (data consistency between systems, including subaward invoicing), consequently impacting subaward administration activities in some cases.

With the implementation of KR, UCSD implemented additional internal controls to ensure research costs are associated with the proper award period and to prevent exceeding award funding, which increases fiscal responsibility and compliance. Also, OFC system controls were implemented to prevent expenses from being charged to projects/grants outside the performance period, on closed projects, or over the project budget. SPF has created workarounds or temporary solutions to mitigate downstream financial impacts, which could cause confusion or incorrect processing by fund managers. Examples are the temporary extension of award or budget period dates in OFC prior to KR update, or the creation of $.01 invoices. These steps require additional diligence by project managers to monitor project/budget period inconsistencies and understand the purposes of these inconsistencies.

We also noted opportunities for improvement with respect to user separation of duties. In addition, a review of user roles noted that many user roles did not maintain separation of duties between creation or preparation and approval of the proposal and/or award.

With respect to COI, the Kuali COI module improved processes by automating certain disclosure processes which were previously manual to make the disclosure process more effective, and enhancing integration with the sponsored award management system. Kuali planned enhancements were considered as part of the decision to implement Kuali COI. These planned enhancements included key features for efficient operations for COI reporting and evaluation. UCSD continues to work with Kuali on future enhancements to meet business needs. Also, Kuali COI third-party reporting has not fully
met the needs of COI to process disclosure and/or training compliance for Public Health Service (PHS) Financial Conflict of Interest regulations.

Management Action Plans to address these opportunities for improvement are summarized below:

A. **Subaward Invoicing Data Consistency & Accuracy**
   1. Business & Financial Services (BFS) and Office of Contract & Grant Administration (OCGA) are coordinating with Information Technology Services (ITS) to integrate subaward invoice submission to KR to eliminate manual processes currently performed by BFS.
   2. Invoices have been adjusted within KR and OFC to correct underpayments and overpayments identified in this review.
   3. Guidance has been issued on subaward invoice status questions in the Budget & Finance Knowledge Base at [FAQ: Subaward Invoices and Payments](#).
   4. BFS will coordinate with OCGA and ITS to reject invoices when there are not sufficient funds to pay out an invoice. If this is not feasible, an alternative process will be developed to eliminate $0.01 invoices.
   5. OCGA will provide additional education to subaward invoice approvers regarding their processes and responsibilities, including ensuring that $0.01 invoices are not approved (until an alternative process is implemented), and that appropriate action is taken to modify the invoice.

B. **Kuali User Separation of Duties**
   1. OCGA and ITS will evaluate whether the Kuali system will provide the opportunity to establish an automated policy that KR accounts not accessed within 180 are reviewed and inactivated as appropriate.
   2. OCGA, in coordination with the Unit Information Security Leads (UISLs), will provide education to supervisors and managers requesting and approving access regarding their responsibilities in ensuring that user roles are properly separated.
   3. OCGA, in coordination with the UISLs and supervisors and managers, will review access to ensure that user roles are properly separated. We created a KR User Role Matrix (see Table 1 below) to assist in identifying incompatible roles based on role descriptions.

C. **Kuali COI Reporting**
   1. UCSD COI and ITS continue to work with Kuali developers to discuss necessary features and their performance to meet COI needs for consideration for future Kuali development.
   2. ITS will coordinate with Kuali and COI to populate the Activity Hub with Kuali COI data and training data for reporting and enhanced real-time compliance monitoring.

Observations and Management Action Plans are described in greater detail in section V. of this report.
II. BACKGROUND

Audit & Management Advisory Services (AMAS) has completed a review of Kuali Research and Conflict of Interest as part of the approved audit plan for Fiscal Year 2021-22. This report summarizes the results of our review.

In January 2020, the University of California, San Diego (UCSD) implemented Kuali Research Sponsored Programs (KR) and Compliance Conflict of Interest (Kuali COI) modules. UCSD’s KR is a campus enterprise system and serves as the official institutional record of proposals, awards, and subawards. KR is utilized by departments, Office of Contract & Grant Administration (OCGA), the Scripps Institution of Oceanography (SIO) Sponsored Projects Office, and the Health Sciences Sponsor Project Pre-Award Office (HSSPPO). Kuali integrates and aligns all elements of the research lifecycle, including Principal Investigator (PI) certification, detailed budgets, scope of work, Conflict of Interest, Institutional Review Board (IRB\(^1\)), Export Controls, and sponsor requirements and other compliance elements essential for complying with Federal, State and University of California (UC) Regulations and Policies.

KR and Kuali COI are software as a service (SaaS) modules. For our review, KR refers to sponsored project pre- and post-award management modules and does not include compliance modules, such as Kuali COI. A description of the UCSD Kuali modules is provided below:

<table>
<thead>
<tr>
<th>Module</th>
<th>Brief Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Proposal and Budget Development (PD)</td>
<td>This module manages all aspects of the proposal, including a) proposal development, b) campus compliance requirements, c) proposal review and submission, and d) award acceptance stage. PD systematically encompasses compliance, PI certification, detailed budgets, scope of work, sponsor requirements, etc., and is routed for review and submission to the appropriate sponsored project office.</td>
</tr>
<tr>
<td>Institutional Proposal (IP)</td>
<td>This module manages the final official record of the proposal as submitted to the sponsor and incorporates all the compliance statuses to ensure these are completed prior to notice of award from the sponsor.</td>
</tr>
<tr>
<td>System-to-System (S2S)</td>
<td>This module connects sponsored projects with Grants.gov for electronic submissions. Institutionally configured identifiers allow grant data to be mapped to areas of sponsor forms so that a consistent interface may be used each time.</td>
</tr>
<tr>
<td>Negotiations</td>
<td>This module tracks and manages negotiation activity and links negotiation records to proposals, awards, and subawards.</td>
</tr>
<tr>
<td>Award</td>
<td>This module manages the complete record of the notice of award from the sponsor and represents the institution’s and sponsor’s final commitments for awarded proposals.</td>
</tr>
<tr>
<td>Subawards</td>
<td>This module manages the outgoing subawards that transfers a portion of the research and effort of a prime award to another institution. Subawards are also known as a flow-through awards.</td>
</tr>
<tr>
<td>Kuali COI</td>
<td>This module is a secure, user-friendly, web-based system for UCSD faculty and staff to submit and manage their conflict-of-interest disclosure activities.</td>
</tr>
</tbody>
</table>

\(^1\) Kuali IRB was implemented at UCSD on July 7, 2021; however, Kuali IRB was not included in this review.
In addition to the KR and Kuali COI implementation, UCSD implemented new business and financial systems, including Oracle Financials Cloud (OFC), and a new chart of accounts in July 2020. As part of OFC, a Project Portfolio Management (OFC PPM) subledger was implemented. In OFC PPM, a project is a primary unit of work that can be broken down into one or more tasks. A different task number is required for different burden/indirect cost (IDC) rates and different programs or functions. As part of the implementation of a new financial system shortly after the KR implementation, additional internal controls for financial accountability and budget periods for sponsored projects were implemented.

The UCSD COI is the primary owner of the Kuali COI module. UCSD COI reviews disclosure of related financial interest between University investigators and private entities to ensure that conflicts of interest are managed, financial conflicts are disclosed\(^2\), and provides expertise in policy and regulation interpretation to faculty, administrators and other staff. For the Fiscal Year (FY) 21, COI facilitated 11,163 disclosures: 3,025 700U, 1,553 Non-PHS, and 6,585 PHS Disclosures.

### III. AUDIT OBJECTIVE, SCOPE, AND PROCEDURES

The objective of our review was to evaluate select KR and Kuali COI processes and system implementation to assess whether internal controls provide reasonable assurance that key processes related to sponsored projects' life cycle and COI disclosures were working as intended. In order to achieve our objective, we performed the following:

- **Reviewed:**
  - Applicable federal regulations, and requirements, and UC policies relating to proposal submissions and awards and conflict of interest;
  - Selected process workflows;
  - Relevant procedure resources;
  - Kuali Purchase Order information and contracts; and
  - Information available within Kuali COI for impact on COI compliance checks for training and disclosures;

- **Interviewed the:**
  - Assistant Vice Chancellor, OCGA;
  - Director, Conflict of Interest Office;
  - Director, Health Sciences Research Service Core;
  - Director, SIO Sponsored Projects Office;
  - Manager, Health Sciences Affiliate & Industry Affairs;
  - Manager, Sponsored Projects Finance (SPF); and
  - Key personnel from the OCGA and Business & Financial Services (BFS); and

- **Evaluated:**
  - Kuali related information technology environments;
  - Service Organization Control Type II Report (SOC 2) for December 15, 2020 to April 30, 2021;
  - Workqueue volume for KR subaward invoice entry;
  - KR user access, segregation of duties, and privileged accounts and groups/roles as of September 6, 2022;

---

\(^2\) Disclosure requirements are summarized at [https://blink.ucsd.edu/sponsor/coi/disclosing/index.html](https://blink.ucsd.edu/sponsor/coi/disclosing/index.html)
o Processes and impact of removal of key personnel;
o Cycle time reporting conducted by OCGA;
o Consistency of KR data between KR and OFC; and
o Selected subaward system invoices.

Award closeout processes and some agreement types had not been implemented within KR as of the date of our review. In addition, as of the date of our review, Kuali COI data was not available within the Activity Hub in order to evaluate COI data for evaluation of Key Performance Indicators. Therefore, these processes were excluded from our review.

IV. CONCLUSION

Based on our review, we concluded that the KR implementation of internal controls provide reasonable assurance that processes related to sponsored projects' life cycle are generally working as intended. With the implementation of KR and OFC, there have been improvements in compliance with sponsored project funding limits and budget periods. Generally, the transition to KR from the predecessor system went smoothly and special review processes have been incorporated into KR. In addition, KR has also been integrated with OFC for invoice approval and payment.

However, opportunities for improvement were identified related to subaward invoice processes. We identified inconsistencies and inaccuracies in KR and OFC data which were caused by manual subaward invoice processes, system invoice controls and OFC controls, system integration issues, and invoice approval processes and intercampus payment entry processes. Based on a detailed analysis of inconsistencies of subaward invoices between KR and OFC, we identified specific examples of the impacts on subaward administration, including invoices paid in duplicate and invoices with outstanding balances that had not been paid in full. These processes impacted aspects of sponsored project life cycle (data consistency between systems, including subaward invoicing), consequently impacting subaward administration activities in some cases.

With the implementation of KR, UCSD implemented additional internal controls to ensure research costs are associated with the proper award period and to prevent exceeding award funding, which increases fiscal responsibility and compliance. Also, OFC system controls were implemented to prevent expenses from being charged to projects/grants outside the performance period, on closed projects, or over the project budget. SPF has created workarounds or temporary solutions to mitigate downstream financial impacts, which could cause confusion or incorrect processing by fund managers. Examples are the temporary extension of award or budget period dates in OFC prior to KR update, or the creation of $.01 invoices. These steps require additional diligence by project managers to monitor project/budget period inconsistencies and understand the purposes of these inconsistencies.

We also noted opportunities for improvement with respect to user separation of duties. In addition, a review of user roles noted that many user roles did not maintain separation of duties between creation or preparation and approval of the proposal and/or award.

With respect to COI, the Kuali COI module improved processes by automating certain disclosure processes which were previously manual to make the disclosure process more effective, and enhancing integration with the sponsored award management system. Kuali planned enhancements were
considered as part of the decision to implement Kuali COI. These planned enhancements included key features for efficient operations for COI reporting and evaluation. UCSD continues to work with Kuali on future enhancements to meet business needs. Also, Kuali COI third-party reporting has not fully met the needs of UCSD COI to process disclosure and/or training compliance for PHS Financial Conflict of Interest regulations. Opportunities for improvement are discussed in the balance of this report.

V. OBSERVATIONS REQUIRING MANAGEMENT ACTION

<table>
<thead>
<tr>
<th>A.</th>
<th>Subaward Invoicing Data Consistency &amp; Accuracy</th>
</tr>
</thead>
<tbody>
<tr>
<td>KR and OFC subaward invoice inconsistencies and inaccuracies were caused by manual subaward invoice processes, system invoice controls and OFC controls, integration issues, and variations in invoice approval effectiveness.</td>
<td></td>
</tr>
</tbody>
</table>

Risk Statement/Effect

Inconsistencies and/or inaccuracies in OFC and KR data increase the risk of errors in subaward invoice processing that may result in overpayment/underpayment, understated University liabilities, and inaccurate financial reporting of sponsored projects within OFC and to the award sponsor. These inconsistencies and/or inaccuracies may impact the decisions made by PIs and fund managers.

Management Action Plans

A.1 BFS and OCGA are coordinating with ITS to integrate subaward invoice submission to KR to eliminate manual processes currently performed by BFS.

A.2 Invoices have been adjusted within KR and OFC to correct underpayments and overpayments identified in this review.

A.3 Guidance has been issued on subaward invoice status questions in the Budget & Finance Knowledge Base at FAQ: Subaward Invoices and Payments.

A.4 BFS will coordinate with OCGA and ITS to reject invoices when there are not sufficient funds to pay out an invoice. If this is not feasible, an alternative process will be developed to eliminate $0.01 invoices.

A.5 OCGA will provide additional education to subaward invoice approvers regarding their processes and responsibilities, including ensuring that $0.01 invoices are not approved (until an alternative process is implemented), and that appropriate action is taken to modify the invoice.

A. Subaward Invoicing Data Consistency & Accuracy – Detailed Discussion

Although internal controls and processes were generally effective for subaward invoices, we identified inconsistencies in data between KR and OFC which were the result of manual subaward invoice processes, internal controls associated with subaward invoices and OFC financial controls, a lack of
integration between systems, and ineffective invoice review and approval processes. PIs and award administrators utilize data within these systems. Therefore, inconsistencies in data may impact the overall effectiveness of award administration.

**Manual Invoice Entry**

As part of research performed by UCSD PIs on a sponsored project, UCSD may subcontract some research activity to collaborators as a subaward. The collaborating organization conducts agreed-upon activities and periodically bills UCSD by submitting invoices to Payment Compass for payment. However, Payment Compass and the subaward module in KR are not integrated. Because of the lack of integration, an automated feed of the invoice document has been established from Payment Compass to iDocs, and BFS has agreed to perform manual entry of subaward invoices from iDocs into KR in the short-term. Once the invoice has been entered into KR, the unit approver reviews and approves the subaward invoice within KR, and then it is automatically entered into OFC for automated approval and payment. While the manual entry of subaward invoices into KR was intended to be short term, it has persisted since January 2020. This manual process increases potential errors and may delay the subaward payment process.

**Internal Controls**

$0.01 subaward invoices — With the implementation of KR, UCSD implemented additional internal controls to ensure research costs are associated with the proper award period and to prevent exceeding award funding, which increases fiscal responsibility and compliance. One of these internal controls was the establishment of $0.01 subaward invoices. For subaward invoices where payment would exceed available award funds, BFS manually enters an invoice amount of $0.01 into KR to indicate that the invoice needs additional review and modification before approval. In KR, subaward invoice approvers are expected to identify the unusual amount and modify the funding before approval for payment. Since $0.01 subaward invoices are not based on the actual invoice amount, payments are not expected for $0.01 subaward invoices. Once approved, invoices flow to OFC for payment, the invoice status is identified as “final” in KR, and the amount released is documented in KR for the approved invoice amount. Once the invoice is paid within OFC, Payment Compass is updated automatically to reflect the payment.

We assessed active subawards between July 1, 2020 and August 11, 2022 where payments were not expected for $0.01 subaward invoices, and identified 57 records (out of 11,683 subaward invoice records) with a fully paid invoiced status. These payments represented less than 1% of the subaward payments. However, entry and approval of these invoices at $0.01 rather than the full amount represent a risk as it understates University liabilities and award costs by the original invoice amount. For example, one $0.01 paid invoice we evaluated had an original invoice amount of $221,167.95. A judgmental sample of ten invoices were reviewed in detail, and all ten (100%) invoices were paid at $0.01, a subsequent invoice was submitted and paid for the remaining invoice balance for 9 of these invoices. For the remaining invoice, the residual invoice balance was subsequently paid on another subaward.

**OFC Financial Control** — Implemented OFC system controls to prevent expenses from being charged to projects/grants outside the performance period, on closed projects, or over budget through the use of default accounts. SPF has advised that to ensure the accuracy of OFC data and to ensure fiscal
responsibility and compliance, OFC records are only updated when sponsor notification has been
provided in support of a change in data. However, SPF is also aware of the financial impact of award
dates on payroll entries that cause transactions to go to default accounts. Therefore, if SPF can
validate information on an award that could impact payroll, SPF may temporarily extend the award
date in OFC prior to KR update. This results in inconsistency between the award date recorded in KR
and OFC. However, inconsistencies in data may impact award administration effectiveness activities
based on reliance on system data, creating a need for project managers to monitor inconsistencies in
award dates and ensure an understanding of the reason for the difference. SPF maintains a report to
monitor and evaluate differences in amounts and dates between KR and OFC on a weekly basis and
documents the reason for differences or resolves the differences.

**Systems Integration, Invoice Approval Effectiveness, and Intercampus Payment Process Deviations**

We identified inconsistencies and inaccuracies between KR and OFC subaward invoice data which were
caused by variations in invoice review and approval effectiveness, manual subaward invoice processes,
system integration issues, and intercampus payment process deviations.

We evaluated inconsistencies in KR and OFC data and selected 39 subaward invoices for further
analysis. As a result, the following are examples of issues we observed.

- A duplicate invoice was submitted, and payment was processed for $237,005.82. Detailed
  analysis shows that a variety of factors caused the duplicate payment: (1) The original invoice
  was not recorded in KR because the invoice preparer did not enter the subaward number into
  Payment Compass to associate it with a KR award; and (2) the transaction approver did not
  identify that a subaward number was required and did not ensure that the invoice was
  included in KR. Consequently, when the duplicate invoice was submitted, it was not identified
  because the original invoice was not in KR because it was not paid as a subaward and was not
  identified in the invoice approval process.

- An invoice for $156,968 was paid in duplicate resulting from an integration issue (due to a
  naming convention utilized in the integration of OFC). The integration issue was identified, and
  affected invoices were corrected.

- One invoice for $0.01 was paid, and the remaining invoice balance of $2,365.59 was approved
  within KR but remained outstanding as of the date of our evaluation. We were advised that
  this was due to an OFC integration issue; however, we noted that this was an intercampus
  subaward invoice approved, and no payment had been recorded within OFC.

- One $42,661.47 KR intercampus subaward invoice was recorded at $399,412.29 because of a
timing difference from an outstanding balance and multiple invoice submissions that required
adjustment of the overall balance for another outstanding invoice. However, this situation was
neither detected upon invoice entry nor by the invoice approver, leading to discrepancies in
amounts between KR and the invoice, which has since been revised to $42,661.47 and paid.

---

3 Judgmental samples were selected with consideration of payee, invoice amount, payment method, payment status,
payment amount, and/or perceived consistency between OFC and KR.
Errors in the subaward invoice submission process before approval of those invoices or intercampus payment processes contributed to variances in data between KR and OFC when looking at the invoice between systems. Invoice approvers play a key role in identifying the accuracy of the invoice and the application of the invoice to the project. Therefore, diligence of invoice approvers is required to ensure that the invoice process works as intended and accurately reflects projects' costs and liabilities.

### B. Kuali User Separation of Duties

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Many KR users had roles that did not maintain proper segregation of duties.</td>
<td></td>
</tr>
</tbody>
</table>

#### Risk Statement/Effect

University policies establish requirements to ensure information security protections, including separation of duties and responsibilities. Noncompliance with these policies increases the risk of data compromise.

#### Management Action Plans

- **B.1** OCGA and ITS will evaluate whether the Kuali system will provide the opportunity to establish an automated policy that KR accounts not accessed within 180 are reviewed and inactivated as appropriate.

- **B.2** OCGA, in coordination with the Unit Information Security Leads (UISLs), will provide education to supervisors and managers requesting and approving access regarding their responsibilities in ensuring that user roles are properly separated.

- **B.3** OCGA, in coordination with the UISLs and supervisors and managers, will review access to ensure that user roles are properly separated. We created a KR User Role Matrix (see Table 1 below) to assist in identifying incompatible roles based on role descriptions.

#### B. Kuali User Separation of Duties – Detailed Discussion

University policy (*IS-3: Electronic Information Security*) was established as a framework to ensure that all UC locations follow the same approach to reduce and manage cyber risk, protect information, and support the proper functioning of Information Technology resources. Additional standards (the *UC Account and Authentication Management Standard 4.14*) require that Workforce Members must ensure accounts under their control or area of responsibility that have not been accessed for one hundred and eighty (180) consecutive days are reviewed. If accounts are not needed, then they must be disabled or removed.

**Separation of Duties**

University Policy (*IS-3*) states that access to Protection Level 3 or higher information should be segregated so that requestors, approvers, and grantors are unique roles assigned to separate individuals or implement compensating controls to address risk associated with the combination of duties. If the assessed Protection Level is assessed at Protection Level 2, segregation is a best practice
that is highly recommended. University policy (IS-3) states that Workforce Managers must consider the principle of Separation of Duties when designing and defining job duties. Locally, Workforce Managers include supervisors or managers of workforce members. Policy also states that UISLs have responsibility for tactical execution of information security activities including implementing security controls. UISLs can educate Workforce Managers to follow appropriate separation of duties procedures when provisioning access to their workforce members to ensure that user roles are properly separated.

There were 1,319 unique user roles within KR as of the date of our review, with titles that appear to be associated with the KR roles defined in Attachment A. As part of our review of users, we considered the compatibility of KR roles, and it appeared that many user roles did not maintain separation of duties between creation or preparation and approval of the proposal and/or award. For example, a department Research Administrator can create PD records, and if they also have an Administrative Approver for the same department, they can also approve the record they created. This eliminates the oversight of the record as the same user can create and approve the record. Separation of duties is necessary to ensure that one user is not able to perform a task in its entirety without oversight.

We created a KR User Role Matrix (Table 1) to assist in identifying incompatible roles based on role descriptions. The KR User Role Matrix standardizes the roles found within KR. The role of a user would be identified within rows of the KR User Role below, and incompatible roles would be those indicated by an x in the Additional User KR Roles column. Therefore, no individual with a KR User Role, should have an Additional User Role with an x for the KR User Role.

Table 1: Kuali User Role Matrix

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Award Analyst</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Proposal Analyst</td>
<td>x</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Any Viewer Role</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Proposal Approver</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Academic Approver**</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Administrative Approver**</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Proposal Creator</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Research Administrator</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* Some roles were unique and did not fit within these standardized roles.
** Or Alternate.
<table>
<thead>
<tr>
<th>C.</th>
<th>Kuali COI Reporting</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kuali COI reporting has not fully met the needs of UCSD COI for evaluating disclosure and/or training compliance, and data was not available within the Activity Hubs for independent reporting.</td>
<td></td>
</tr>
</tbody>
</table>

**Risk Statement/Effect**

Effective reporting and monitoring are necessary for efficient compliance review of disclosure and training requirements.

**Management Action Plans**

| C.1 | UCSD COI and ITS continue to work with Kuali developers to discuss necessary features and their performance to meet UCSD COI needs for consideration for future Kuali development. |
| C.2 | ITS will coordinate with Kuali and UCSD COI to populate the Activity Hub with Kuali COI data and training data for reporting and enhanced real-time compliance monitoring. |

**C. Kuali COI Reporting – Detailed Discussion**

Kuali planned enhancements were considered as part of the decision to implement Kuali COI. These planned enhancements included key features necessary for efficient operations for UCSD COI reporting and evaluation. UCSD COI indicated that these planned enhancements include collecting disclosures by sponsor and activity types using unique form types and supporting additional system requirements throughout the process. UCSD COI and ITS continue to work with Kuali developers to discuss necessary features and their performance to meet COI needs for consideration for future Kuali development.

**Reporting for Performance & Compliance Monitoring**

Prior to the implementation of Kuali COI, processes to obtain and evaluate disclosure requirements were performed by manual identification and routing of disclosure information. Kuali COI implementation has been an improvement as Kuali COI asks gating questions to researchers participating in the project to evaluate whether additional COI review may be required as part of the proposal submission process. Based on these responses and research sponsor requirements, additional forms are presented as needed by Kuali COI for the researcher to complete and assist in the COI disclosure and compliance monitoring process.

As part of the COI compliance monitoring process, UCSD COI performs PHS/US Department of Energy (DOE) compliance checks that includes a review of PHS/DOE training. All Investigators and senior/key personnel are required to take PHS-compliant training prior to engaging in PHS-funded research for new awards and at least every four years while engaging in PHS-funded research. This training requirement also applies to those funding agencies that have adopted the PHS Financial Conflict of Interest regulations. UC and/or federal regulations require training based on a person’s role at the University or in the research being conducted.
Therefore, UCSD COI has asked Kuali Inc to add training to the Kuali COI compliance checks via the Kuali COI compliance report; however, this enhancement has not been approved. Kuali COI third-party reporting, SiSense, has not fully met the needs of UCSD COI to process disclosure and/or training compliance. Due to the complexity of the database utilized by Kuali for COI data, additional time was required to populate the Compliance Activity Hub with Kuali COI data, and it was not available for locally generated reporting. For example, UCSD COI has been working with SiSense for reporting for reviewing expired portfolios as the Kuali COI function was not efficient. However, as of the date of our fieldwork, the SiSense report was still under evaluation by COI to determine if it was working properly. As a result, each portfolio is individually evaluated upon expiration. Efforts are ongoing to populate the Activity Hub with Kuali COI data and training data for reporting and enhanced real-time compliance monitoring.
ATTACHMENT A – Kuali Research Role Definitions

Central Office Award Analyst: Can create Proposal Development (PD) records in any unit. Can view/edit any PD record in any unit. Can create and edit Address Book entries. Can view/edit any Institutional Proposal (IP) record. Can view/edit Negotiations. Can view Awards, Award Attachments, Time & Money Documents, Award Budgets, Negotiations, and Subawards. Can release record locks for any record. Can submit PD records to sponsor. This role is suitable for central office Contract & Grant Officers and Compliance Analysts who are responsible for reviewing, approving, submitting, and maintaining research agreements on behalf of UCSD. Can create/edit Awards, Award Attachments, Time & Money Documents, Award Budgets, Negotiations, and Subawards. Can bypass required approvers for any PD record that is in workflow routing. Can create/edit Organizations. This role is suitable for central office personnel responsible for creating and maintaining awarded research agreements, obligating funds, posting awards to the financial system, closeouts, accounting, budgeting and allocations, such as the Compliance Analysts, OCGA Award Services Team, and OPAFS Accountants.


Central Office Viewer: Can view any Proposal Development (PD) record in any unit. Can view Institutional Proposal (IP) records in any unit. Can view Awards, Award Attachments, Time & Money Documents, Negotiations, Subawards, and Award Budgets in any unit. May NOT create or edit records. This role is suitable for university administrators responsible for running/maintaining the University and who can be trusted not to disclose sensitive information to unauthorized parties.

Central Office UCSD Proposal Approver: A person who is responsible for reviewing, approving, and submitting an individual Proposal Development (PD) record to the sponsor. For contracts and other miscellaneous research agreements, this is the person who is responsible for reviewing and approving the proposed research agreement developed and submitted in the PD system.

Department Academic Approver: Primary departmental approver for Proposal Development (PD) records that require departmental review and approval by the Academic Approver or unit head. The approver can view any PD record that must be approved by the unit head before it can be submitted to the sponsor. This role is suitable for academic unit heads such as department Chairs, Organized Research Unit Directors or Deans.

Department Academic Approver Alternate: Alternate departmental approver for Proposal Development (PD) records that require departmental review and approval by the Academic Approver or unit head. The approver can view any PD record that must be approved by the unit head before it can be submitted to the sponsor. This role is suitable for assistant or associate unit heads such as Vice

https://blink.ucsd.edu/research/preparing-proposals/kuali-research/access.html#Role-Definitions
Chairs, Assistant Organized Research Unit Directors, Associate Organized Research Unit Directors or Associate Deans. A user assigned this role can approve a PD record on behalf of the Academic Approver or unit head.

**Department Administrative Approver:** Primary departmental approver for Proposal Development (PD) records that require departmental review and approval by the Academic Approver or unit head. The approver can view any PD record that must be approved by the Academic Approver. This role is suitable for the administrative heads of academic units such as Management Services Officers, Department Business Officers or Chief Administrative Officers.

**Department Administrative Approver Alternate:** Alternate departmental approver for Proposal Development (PD) records that require departmental review and approval by the Academic Approver or unit head. The approver can view any PD record that must be approved by the Academic Approver. This role is suitable for assistant administrative unit heads such as Assistant Management Services Officers, Assistant Department Business Officers or Assistant Chief Administrative Officers. A user assigned this role can approve a PD record on behalf of the Administrative Approver.

**Department Proposal Viewer:** Can view any Proposal Development (PD) records owned by the unit specified in the Group name. Can view Institutional Proposal (IP) records, Awards, Award attachments, Time & Money Documents, and Award Budgets where the lead unit group name is the lead unit of that proposal. May NOT view PD or IP records created by other users in ANY UNIT unless the user is also assigned the PI role on that record. This role is suitable for Unit Heads / Chairs and Administrative Officers who are responsible for running/maintaining this department.

**Department Proposal Creator:** Can create Proposal Development (PD) records within the unit specified in the access request. Can ONLY view and edit PD records created by this user. Can submit PD records for review and approval that were created by this user. May NOT view PD or IP records created by other users in ANY UNIT, including their own, unless the user is also assigned the PI role on that record. This role is suitable for anyone who needs to create and submit research proposals.

**Department Research Administrator:** Can create Proposal Development (PD) records owned by the unit specified in the Group name. Can ONLY view/edit PD records where the lead unit group name is the lead unit of that proposal. Can create and edit Address Book entries. Can view Institutional Proposal (IP), Award, Award attachments, Time & Money Documents, and Award Budgets where the lead unit group name is the lead unit of that proposal. May NOT view PD or IP records created by other users in ANY UNIT unless the user is also assigned the PI role on those records. This role is suitable for Research Administrators who support multiple researchers in this department.