

**UNIVERSITY OF CALIFORNIA, DAVIS  
AUDIT AND MANAGEMENT ADVISORY SERVICES**

**Office of Research  
Project #16-01**

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**Office of Research  
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**MANAGEMENT SUMMARY**

**BACKGROUND**

With the vision “To enable the University of California, Davis (UC Davis) to be a global leader in research and technology transfer”, Office of Research (OR) was provided campus funding in 2011-12 to address operating deficiencies and to enhance opportunities to grow UC Davis into a world class research institution. This funding brought approximately 35 additional employees to OR and allowed the division to reorganize its functional units and realign and streamline processes to better achieve its mission. Seven of these 35 positions were allocated to Sponsored Programs (SPO) as part of this initiative.

To better meet the needs of the research community, SPO restructured their unit into four distinct processing areas: proposals, negotiations, sub awards, and award processes. In addition to this restructuring, SPO committed to implementing an electronic research administration system, the Sponsored Programs Administration and Research Kiosk (SPARK), in recognition of the need to employ technology as part of the solution for addressing the needs of the research community.

**PURPOSE AND SCOPE**

As part of the fiscal year 2015-16 audit plan, Audit and Management Advisory Services included a review of OR’s pre-award activities to evaluate how well they are meeting the needs of the research community. Based on our preliminary survey results, the audit focused on the following areas: 1) the proposal processes, 2) the training programs offered by SPO, 3) the implementation of SPARK, and 4) proposals that are processed between the department principal investigator (PI) and sponsor without SPO involvement or approval.

To meet our objectives we met with SPO management to understand key proposal processes. We documented how the current processes have changed in the last couple of years, and how they will further change with the fully implemented SPARK modules. We also conducted a survey to the research community to obtain their feedback on how well SPO was meeting their needs. In this survey we included questions covering all four areas mentioned above, and offered several opportunities throughout the survey for the respondents to provide feedback through comments or suggestions. We invited 1,533 PIs and 286 departmental administrative support staff to participate in our survey, and we recorded 326 PIs (21%) and 114 administrative staff (40%) who responded to our request.

**CONCLUSION**

Based primarily on survey feedback, we found SPO is providing better support to the research community than in previous years primarily due to the reorganization efforts. The SPARK project manager indicated that the final phases of the SPARK modules are expected to be implemented no later than 2017. Survey responses identified possible opportunities for SPO to enhance proposal processes and training opportunities provided to the community. We recommended and SPO agreed to consider the comments and suggestions provided by the respondents, to determine if any could be incorporated into new and future practices or programs in an effort to better meet the needs of the research community. Regarding proposals processed without SPO’s involvement, we found legal, reputational and relationship risks which are outside OR’s span of authority to address; therefore, (OR) agreed to discuss this condition with the Provost and Executive Vice Chancellor, so that opportunities to influence behavior can be identified as needed.

The four areas included in the focus of the audit are further discussed within the body of the report, and a summary of the survey responses are presented within the Appendix. The survey results including all comments and suggestions were provided to SPO at the end of our review.

## I. Overview of Processing Metrics

UC Davis recognized \$786 million in contract and grant awards in FY 2014-15. Based on information from UC Office of the President's (UCOP) Institutional Research and Academic Planning (IRAP), the five year trend of contract and grant awards and proposal activity are presented below<sup>1</sup>. FY 2010 is inserted to achieve a 5 year trend of activity for both the awards and proposal activity.

### Fiscal Year Awards

FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015
\$678,854,197	\$684,581,839	\$750,299,992	\$753,566,710	\$704,342,286	\$785,601,305
% Incr/(Decr) from Previous FY	0.8%	9.6%	0.4%	(6.5%)	11.5%

### Proposals Submitted

Fiscal Year	Count of Proposals	Total Dollar Amount	% Incr/(Decr) in Total \$ from Previous	Average Proposal Amount
2010	4,697	\$3,069,097,757		\$653,417
2011	4,427	\$2,498,804,259	(18.6%)	\$572,841
2012	4,535	\$2,814,592,104	10.8%	\$620,638
2013	4,373	\$2,037,948,551	(27.6%)	\$466,030
2014	4,256	\$2,397,587,988	17.6%	\$563,343
2015	4,758	\$2,720,544,355	13.5%	\$571,783

The IRAP office provided an analysis of the 5-year trend in total proposal dollars, which we have summarized below:

The 2011 decrease resulted from the fact that by 2011, the American Recovery and Reinvestment Act of 2009 (ARRA) proposal opportunities were no longer available. 2012 is considered to have been the only "normal" year since 2008. In 2013, federal agency appropriations were dramatically curtailed because of the budget sequester. Because UC's fiscal years and federal fiscal years are offset by one quarter, the drop carried over somewhat into 2014. The proposal-to-award pipeline has been slowly recovering since then, as reflected in the upward trend in 2015.

<sup>1</sup> On January 11, 2016, OR released its Five-year Retrospective on Research Awards. We noted that the total award dollars and number of proposals in the OR report differ from the IRAP data presented above. According to IRAP, the *Fiscal Year Awards* data above was in sync with the OR data at the time of submission; however, post-period adjustments caused immaterial differences of less than .1%. The IRAP *Proposals Submitted* data above is based on a snap shot of data fed on a quarterly basis and then compiled for an annual reporting. This compilation may include multiple counts for the same proposal in instances such as continuations, extension and other conditions, whereas OR presented a count of *unique* proposals submitted over the 5 year period.

IRAP also noted that these fluctuations are generally consistent with those of other UC campuses, especially those with medical centers.

## II. Areas of Audit Focus

### A. Proposal Processing

Although the manually-driven processing of proposals itself has not significantly changed in the last couple of years, according to survey responses, the SPO reorganization of analysts into proposal teams assigned to support specific departments, colleges and divisions was a welcomed improvement and the catalyst to better meeting the needs of the research community. This new approach replaced the former practice of assigning the newly received proposal to the next available analyst. The actual processing of proposals will, however, change dramatically with the implementation of the new SPARK Proposal Module, which is scheduled for rollout during 2016. With this rollout, the predominantly manual proposal processes will change to a fully electronic process. The Proposal Module will allow for development and maintenance of proposals in a transparent environment for the PI and department processors; allow data links to our financial system data for budgetary items; and allow timely review and approval by SPO in advance of proposal submittal deadlines, while allowing the PI to finalize the scientific portions of the proposal.

As part of the evaluation of the proposal processes, we assessed metrics used and relied on by SPO and campus management. At the time of our review, the internal metrics used by SPO management were limited due to the dynamics of the retiring Contracts and Grants (C&G) database, and were used mostly for monitoring for proposal deadlines, to evaluate workload issues, or to accumulate sponsor information. The C&G database is being replaced by the SPARK system, which will provide better reporting metrics due to system controlled data fields and more robust reporting capabilities.

We also evaluated the metrics relied upon by campus management and learned that OR is required to electronically feed proposals and award funding data quarterly from its C&G database to IRAP for system wide compilation and reporting. We validated that the awards dollars reported by OR to campus management are based on the information compiled and reported by IRAP.

Based on the FY 2015 data fed by OR to IRAP, we tested the top 20 awards based on current dollars awarded, also referred to as authorized funding, and confirmed that the award data fed to UCOP was supported within the Kuali Financial System (KFS) award record. Additionally, we determined that the information reported by IRAP would not necessarily match our Financial Information System (FIS) decision support reported award dollars for a given authorization period, as our FIS reports generate dollars authorized based on a concise fiscal period, whereas the IRAP award dollars represent all awards successfully funded during the quarter, which may include additional funding periods or fiscal years<sup>2</sup>.

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<sup>2</sup> The awards funded and fed quarterly to UCOP are for only newly authorized dollars and not an accumulation of previous award amendments. However, certain factors may affect the timing of the authorizations; e.g., award notifications are sometimes received late and may be for previous budget periods or fiscal years, or the authorized dollars may represent a contract that covers several years with only annual spending amounts inserted in the contract. Within KFS, these contract awards are set up with authorized funding amounts for the period; however, the award data fed to UCOP may include the total funding amount for the full term of the award.

Overall, the survey respondents agree that the SPO proposal processes and support has been improving over the last couple of years. (See Appendix, questions 2 through 14) On average they strongly agreed that SPO staff was:

- Effective at addressing any issues that arose
- Handles issues fast and expedient
- Treated the respondent with courtesy and respect
- Was knowledgeable and helpful

We noted that the majority of respondents (35%) have submitted 15 or more proposals through SPO, and on average interact with SPO 3-5 times per proposal (49%). The respondents fairly split the fault of minor processing delays equally between themselves (83%) and SPO Analysts (79%).

## **B. SPARK Implementation**

We evaluated the implementation of SPARK and found sufficient campus representation and oversight provided through the 27 participants of the Quali Coeus Oversight Committee. A full time Project Manager is now assigned to the SPARK implementation resulting in perceptible progress to the full implementation of all SPARK modules.

To date, the SPARK Awards module has been implemented and campus can now access award information. Access to the awards is restricted based on user roles and responsibilities associated with the award. Also, recently implemented was the Cayuse 424 system, which supports proposals submitted to “grants.gov”. During 2016, the SPARK Proposal Module, Subawards and Negotiations Modules will be implemented, offering several benefits such as in-system proposal development; electronic routing of data sheets; system-to-system submission of proposals to “grants.gov”, NSF FastLane, and other sponsor portals; and immediate pre-submission validation checks. The final phase will include additional campus-wide benefits by integrating the SPARK modules with our Conflict of Interest (COI) and Institutional Research Board (IRB) systems.

We learned through our survey that a majority of respondents (60%) had not heard about the new Cayuse module; but for those who had heard of it (26%), or had used it (3%), on average they agreed it will be an improvement to the current processes. (See Appendix, questions 15 through 17)

## **C. Training Programs**

We evaluated the level of training provided by SPO, and found SPO offers courses via the classroom, or online, and provides tutorials on their website to support the proposal processes. We relied on the survey responses to gauge how well SPO is meeting the training needs of the research community. (See Appendix, questions 19 through 25)

Overall, the participants who have attended training in the last year, on average, thought the quality of training provided was high. When asked if they thought SPO provided ample opportunities for them to be trained on Cayuse, the weighted responses resulted in an averaged neutral opinion, which may indicate a training area that should be considered for improvement. (See Appendix question 21)

Regarding the Research Administrative Forums, we received approximately 120 comments suggesting that opportunities also exist to enhance these forums to better meet the needs of the community. We summarized these comments into groupings as follows:

- 44 respondents cited they have no time to attend.
- 30 comments relating to not knowing what the Research Forums were, not knowing about them, or not being invited.
- 22 comments related to the location being a factor in not attending.

Finally, 62 respondents offered comments on how SPO could improve the training to meet their needs. Of those, the following responses were grouped into similar themes:

- 27 comments with suggestions for better and more frequent training, tailored trainings to individuals or specific subject matter, and training cohosted by the schools or colleges.
- 7 comments identifying the need for better marketing of courses and training opportunities.

#### **D. Noncompliant Proposal Processing Initiated Outside of SPO**

We evaluated a campus proposal processing practice that is non-compliant with University policy, by which proposals are submitted by the PI to the sponsor prior to obtaining SPO approval. Based on information provided by SPO, there were approximately 650 such successful awards, contracts or agreements in FY2015, which originated through these proposals. UCOP Policy 95-01 *Policy on the Requirement to Submit Proposals and to Receive Awards for Grants and Contracts through the University*, requires any proposal for extramural support be submitted through the local contracts and grants office.

Of the 650 non-compliant successful award proposals, the top four types of entities providing these funding opportunities included the State (20%), Commodity Boards (18%) and Corporate and Charity entities (12% each). Bypassing SPO during the initial proposal processes often creates inefficiencies once the proposal is received at SPO due to complexities within proposals that must be addressed prior to institutional approval, such as the following:

- IRB, IACUC<sup>3</sup> and other approvals may not have been properly obtained
- Potential export control related issues may not have been considered
- Potential faulty legal terms may not have been included, or appropriate terms excluded, which would be unacceptable to the University
- Indirect cost rates may have been set to below the required rate without proper approvals
- Cost sharing may have been included that hadn't been approved at the appropriate level of authority.

SPO indicated that often after they receive completed awards, terms and conditions must be renegotiated with the sponsor. This can lead to strained relationships among all parties and may cause the sponsor to terminate their involvement completely.

We learned that with the implementation of the SPARK Proposal and Negotiations modules in 2016, an opportunity will exist for PI's to process proposals in a more transparent environment, which may help reduce the number of proposals initiated and submitted without SPO's involvement and approval. However, these modules will not provide controls to prevent departments from processing proposals in this manner.

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<sup>3</sup> Institutional Animal Care and Use Committee

### **III. OBSERVATIONS, RECOMMENDATIONS, AND MANAGEMENT CORRECTIVE ACTIONS**

#### **A. Survey Comments and Suggestions**

##### **1. General Opportunities Exist for Process Improvement**

**Suggestions and comments from the survey respondents identified opportunities for SPO to better meet the needs of the research community.**

Although the survey results validated that SPO proposal processes have improved, and it is also known that new processes are scheduled to be implemented in the near future, which will replace most of the current processes, opportunities may currently exist for SPO to better meet the needs of the campus research community.

As part of our survey, we received hundreds of comments and suggestions throughout the survey which provided what we believe to be excellent constructive feedback. Although some suggestions may be unattainable or may not be appropriate, there may be many that could be considered to provide some benefit to all parties involved. All responses have been provided to management.

#### **Recommendations**

SPO should evaluate suggestions and comments from the survey respondents to identify opportunities to better meet the needs of the research community.

#### **Management Corrective Actions (suggested)**

By July 15, 2016, SPO will evaluate the survey comments and suggestions to determine if any could be incorporated into existing processes, or considered for future enhancements to processes.

##### **2. Opportunities to Improve Training**

**Survey responses identified possible opportunities to enhance SPO training and delivery methods.**

During our review we learned that SPO is planning a comprehensive training program to support the new SPARK modules that will be rolled out in 2016. Although we found respondents strongly agreed that the quality of training provided by SPO was high, we found numerous constructive comments and suggestions supporting a need for enhanced training and training opportunities for the research community.

#### **Recommendations**

SPO should evaluate the suggestions and comments from the survey respondents relating to training programs which may identify opportunities that can be incorporated into existing and future training programs to better meet needs of the research community.

#### **Management Corrective Actions (suggested)**

By July 15, 2016, SPO will evaluate the survey comments and suggestions to determine if any could be incorporated into existing training programs, or considered for future training opportunities.

**B. Communicate with Senior Management regarding Noncompliant Proposal Processing**

**The noncompliant proposal processing practices cannot be effectively addressed by the Office of Research and therefore should be communicated to Campus Senior Management.**

The noncompliant processing of proposals between PIs and sponsors may damage not only relationships between PIs and SPO, but also between sponsors and the University. SPO does not have the authority to address the noncompliant proposal processing at the department level, other than to provide opportunities to move the PI's toward compliant processing through training and more efficient systems. Once the SPARK system, including the Negotiations Module, is fully implemented, there may still be a population of PI's who process their proposals outside of SPO's sphere of influence and approval.

**Recommendations**

The Vice Chancellor of Research should meet with the Provost and Executive Vice Chancellor to discuss the noncompliant processes and provide data behind this practice.

**Management Corrective Actions (suggested)**

By July 15, 2016, the Vice Chancellor of Research will meet with the Provost and Executive Vice Chancellor to discuss the noncompliant proposal processing between the PI and the sponsors and determine if future discussions or actions are warranted.

## APPENDIX

## SPONSORED PROGRAMS SURVEY RESULTS

Some questions may have been removed from this presentation, but all questions and comments were provided to SPO at the conclusion of this audit.

**Key for Questions with Rating Averages:**

4.1 – 5.0 = *Strongly Agree*

3.1 – 4.0 = *Agree*

2.1 – 3.0 = *Neutral*

1.1 – 2.0 = *Disagree*

0.0 – 1.0 = *Strongly Disagree*

**2. Please select which group you identify with:**

Answer Options	Response Percent	Response Count
Principal Investigator (PI) or Co-PI who has submitted one or more proposals through the Sponsored Programs Office in the last year.	66.6%	293
>>PI- No proposal submitted through SPO within the last year.	3.2%	14
Administrator who assists with proposal development, budget creation, assembly, or submission and routing of grant and contract proposals that will be routed through Sponsored Programs Office, and has submitted a proposal within the last year.	24.1%	106
>>Admin- No proposal submitted through SPO within the last year.	1.8%	8
Graduate students or post doc who engage in proposal development and/or submissions through SPO.	0.2%	1
I do not work with SPO to process contracts or grant proposals. (If you select this, please continue to answer any questions you may have feedback on)	1.6%	7
Other- (Please describe and please continue to answer any questions you may have feed back on)	2.5%	11
Other (please specify)		13
	<b><i>answered question</i></b>	<b>440</b>
	<b><i>skipped question</i></b>	<b>0</b>

**Proposal Processes***PI evaluation of departmental support*

3. In general, I am very satisfied with the proposal development support and processes handled within my college, department or division.								
Answer Options	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	N/A	Rating Average	Response Count
Comment	7	27	34	109	112	1	4.0	290 63
								<i>answered question</i> 290
								<i>skipped question</i> 150

PI's on average "agree" with the statement that they are very satisfied with the proposal development processes handled within their college, department or division. However, their associated comments indicated a strong need to do things better in the department; which they noted is driven by a lack of support staff, a need for better trained staff, and better defined more efficient processes.

*Admin evaluation of PI interactions*

4. In general, I am very satisfied with the interactions with the PI / CO PIs during the proposal development processes within my college, department or division.								
Answer Options	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	N/A	Rating Average	Response Count
Comment	4	6	12	47	34	3	4.0	106 15
								<i>answered question</i> 106
								<i>skipped question</i> 334

Administrative staff on average "agree" with the statement that they are very satisfied with the interactions with the PI/Co PI's during the proposal development processes. 12 of the 15 comments received identified that most support staff cite the PI's delay in providing documents to them in time to perform their duties timely, which impacts the their abilities and SPO's ability to achieve a successful outcome.

**5. Approximately how many proposals have you submitted through SPO?**

Answer Options	Response Percent	Response Count	PI's Only	Admin's Only
1-2	11.1%	44	11.2%	10.8%
3-6	27.1%	107	33.9%	7.8%
7-15	26.6%	105	30.0%	16.7%
15 or more	35.2%	139	24.9%	64.7%
<i>answered question</i>		<b>395</b>		
<i>skipped question</i>		<b>45</b>		

**6. Average number of interactions with SPO per proposal:**

Answer Options	Response Percent	Response Count	PI's Only	Admin's Only
0-2	24.7%	98	28.6%	11.9%
3-5	49.1%	195	46.7%	55.4%
6-10	15.6%	62	15.9%	15.8%
Greater than 10	10.6%	42	8.7%	16.8%
<i>answered question</i>		<b>397</b>		
<i>skipped question</i>		<b>43</b>		

**7. How many business days prior to a sponsor deadline do you submit your proposals to the sponsored programs office?**

Answer Options	Response Percent	Response Count	PI's Only	Admins Only
5 or more business days	39.2%	155	44.4%	27.2%
3 to 5 business days	29.4%	116	27.1%	35.0%
1 or 2 business days	7.3%	29	8.3%	4.9%
Usually the day of the deadline	2.5%	10	3.2%	1.0%
After the deadline	0.3%	1	0.4%	0.0%
It varies from deadline to deadline	21.3%	84	16.6%	32.0%
<i>answered question</i>		<b>395</b>		

**8. How would you rate SPO's timeliness of the proposal processing:** (Considering that institutional guidelines require 5 business days for SPO review and submission of proposals)

Answer Options	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	N/A	Rating Average	Response Count	PI's Only	Admin's Only
Fast and expedient, issues	5	18	41	151	156	6	4.2	377	4.2	4.3
Some minor delays, my fault	22	38	68	138	24	60	3.4	350	3.3	3.6
Some minor delays, their fault	22	48	88	102	15	71	3.2	346	3.1	3.2
Some major delays, my fault	71	76	56	18	5	114	2.2	340	2.1	2.5
Some major delays, their fault	62	70	56	23	17	111	2.4	339	2.4	2.4
Comment								93		
							<i>answered question</i>	378		
							<i>skipped question</i>	62		

## Key comments included:

- I appreciate that SPO personnel are working the best that they can with multiple and often competing deadlines. We have experienced challenging delays from SPO when 1. The assigned analyst is switched mid-course 2. New issues arise that SPO did not originally flag midway through processing 3. Materials that are submitted to SPO get lost requiring me to resubmit.
- I think the SPO staff does an exceptionally good job given the high demands for their time. I have noticed that there does not appear to be any reward for those that submit proposals ahead of time, as the staff is always having to deal with the last minute proposals. Until this changes, there will always be a great level of dissatisfaction with SPO, and unfortunately, the staff will take unwarranted criticism. (3 similar comments)
- SPO in general is fantastic! Sometimes there are minor delays due to issues with the proposal. There have been times that each issue is raised independently (one at a time, one after another) and therefore must be addressed separately, rather than a list of issues communicated to the PI that I can handle all at once. I would prefer from a time efficiency stand point to handle all issues at the same time. (2 similar comments)

**9. SPO staff was effective in addressing any issues that arose.**

Answer Options	Strongly Disagree	Disagree	Neutral	Agree	Strongly agree	N/A	Rating Average	Response Count	PI's Only	Admin's Only
	4	17	33	162	153	10	4.2	379	4.1	4.4
							<i>answered question</i>	379		
							<i>skipped question</i>	61		

10. SPO staff treated me with courtesy and respect.										
Answer Options	Strongly Disagree	Disagree	Neutral	Agree	Strongly agree	N/A	Rating Average	Response Count	PI's Only	Admins Only
	3	2	21	110	235	8	4.5	379	4.1	4.6
								<i>answered question</i>	379	
								<i>skipped question</i>	61	

11. SPO staff was knowledgeable and helpful.										
Answer Options	Strongly Disagree	Disagree	Neutral	Agree	Strongly agree	N/A	Rating Average	Response Count	PI's Only	Admins Only
	5	10	32	156	167	7	4.3	377	4.2	4.4
								<i>answered question</i>	377	
								<i>skipped question</i>	63	

12. The overall service level provided by the following teams, was very high.										
Answer Options	Strongly Disagree	Disagree	Neutral	Agree	Strongly agree	N/A	Rating Average	Response Count	PI's Only	Admins Only
Proposal Team	6	9	36	112	152	22	4.3	337	4.2	4.6
Negotiations Team	8	13	43	72	65	128	3.9	329	3.7	4.2
Comments								51		
								<i>answered question</i>	376	
								<i>skipped question</i>	64	

Constructive comments included:

- Overall the technical support that SPO is providing is good. There is however, a difference in support needed between young/starting faculty and established faculty. Generally, I think SPO has to do a better job in providing info to new faculty to avoid mistakes/confusion/frustration and that is unfortunately not provided. SPO cannot assume new faculty know everything such as what kind of support SPO is providing and what is handled at the department level.

13. Over the last couple of years I believe the service level from SPO has been improving.										
Answer Options	Strongly Disagree	Disagree	Neutral	Agree	Strongly agree	N/A	Rating Average	Response Count	PI's Only	Admins Only
	4	15	74	139	109	34	4.0	375	4.0	4.1
Comments								61		
								<i>answered question</i>	375	
								<i>skipped question</i>	65	

32 of the comments commended SPO for improvements; with comments ranging from moving in the right direction, to service level, is like day and night to a few years back. 13 comments suggested mostly inconsistent levels of service, which was documented in other question comments also. Key comments include:

- There seems to be a forward/backward movement to SPO's improvements. As noted above, there is some unevenness between individual SPO personnel, with some being excellent and other less so.
- It is very uneven. While we interact with several excellent analysts and officers, other analysts and officers are unresponsive or not as helpful/knowledgeable, or diplomatic. It seems to vary by individual person rather than by a unit.

14. Do you have any suggestions on how the SPO proposal processes could be improved upon?

Answer Options	Response Count	PI's Only	Admins Only
	110	80	26
<i>answered question</i>	110		
<i>skipped question</i>	330		

Reoccurring comment themes included:

- More staff needed to support SPO activities, and better retention of existing staff
- Training needed for all parties: SPO Analysts, campus admin, and new PI's
- Personal interactions to include face to face meetings and more use of phone communications
- Electronic systems to promote electronic signatures, dashboards to allow monitoring of project status, and online submission of proposals to agencies.
- Better and timely follow through on requests
- Better and timely communications from SPO
- A way to reward early submissions of proposals to SPO, so there is incentive to do so
- Clarification of processes through flow charts, lists of requirements, revision of current forms
- Revision of some processes to eliminate wasted steps or effort

### System Implementation

15. What is your level of awareness/use of the new Cayuse tool for proposal submission?

Answer Options	Response Percent	Response Count	PI's Only	Admins Only
I have not heard of the system yet.	60.2%	228	73.9%	21.7%
I have heard about the system, but have not yet investigated it.	26.1%	99	19.9%	43.5%
I have heard about the system and attended at least one of the trainings provided by SPO.	5.3%	20	0.4%	17.4%
I have begun preparing a proposal in the system.	0.8%	3	0.8%	1.1%
I have used the Cayuse system and submitted at least one proposal.	1.8%	7	1.1%	4.3%
I have heard about the system and am interested in using it but a federal opportunity has not arisen yet that would prompt me to utilize it.	1.3%	5	1.1%	2.2%
Comment	4.5%	17	2.7%	9.8%
	<i>answered question</i>	<b>379</b>		
	<i>skipped question</i>	<b>61</b>		

16. If you are knowledgeable about Cayuse, do you feel that this system will improve the proposal and submission processes?

Answer Options	Strongly Disagree	Disagree	Neutral	Agree	Strongly agree	N/A	Rating Average	Response Count	PI's Only	Admins Only
	2	4	27	22	8	260	3.5	323	3.5	3.5
Comment								18		
								<i>answered question</i>		
								<i>skipped question</i>		
								323		
								117		

17. If you have been selected to start processing with Cayuse, you have received sufficient information/communications to allow you to understand how it will work.

Answer Options	Strongly Disagree	Disagree	Neutral	Agree	Strongly agree	N/A	Rating Average	Response Count	PI's Only	Admins Only
	1	3	20	13	4	286	3.4	327	3.5	3.4
								<i>answered question</i>		
								<i>skipped question</i>		
								327		
								113		

18. In regards to the implementation of Cayuse, do you have any suggestions on how the processes could have been improved?

Answer Options	Response Count	PI's Only	Admins Only
	28	14	13
<i>answered question</i>	28		
<i>skipped question</i>	412		

Constructive comments related to better training and resources to support the learning of the system, including more dedicated SPO staff to ensure they can process appropriately in the new systems. Comments included:

- For the proposal submissions by my staff, there were substantial differences between the paper version of the forms and the Cayuse version. Because they had problems getting SPO support early in their attempts to use Cayuse and didn't have confidence that it would work, they ended up preparing both the paper and online proposals, which was essentially twice as much work since they did not correspond to each other. I think attention needs to be paid to helping users (faculty and staff) understand the differences between prior submission systems and the new one. Also, more dedicated staff for department assistance will help significantly.
- I think it would be helpful for SPO to coordinate with the Dean's Offices to set up college-wide training or spot training as needed. We need to roll out as a more cohesive unit, or we will be wasting efforts in duplicate training.

**SPO Training**

19. Have you attended any SPO provided training on the proposal development process or the Cayuse system in the last year?

Answer Options	Response Percent	Response Count	PI's Only	Admins Only
Yes	12.1%	45	3.1%	38.9%
No	87.9%	326	96.9%	61.1%
		<b>answered question</b>		
		<b>skipped question</b>		
		<b>371</b>		
		<b>69</b>		

20. If yes to previous question, you would say the quality of the training was high.

Answer Options	Strongly Disagree	Disagree	Neutral	Agree	Strongly agree	N/A	Rating Average	Response Count	PI's Only	Admins Only
The proposal	0	0	9	22	8	196	4.0	235	4.1	4.0
The new Cayuse	1	2	6	13	4	189	3.7	215	5.0	3.6
								<b>answered question</b>		
								<b>skipped question</b>		
								<b>239</b>		
								<b>201</b>		

21. SPO provides ample opportunities for me to be trained on:

Answer Options	Strongly Disagree	Disagree	Neutral	Agree	Strongly agree	N/A	Rating Average	Response Count	PI's Only	Admins Only
The proposal	11	29	55	66	25	131	3.4	317	3.1	3.7
The new Cayuse	11	21	45	20	10	188	3.0	295	2.6	3.4
								<b>answered question</b>		
								<b>skipped question</b>		
								<b>320</b>		
								<b>120</b>		

Relating to the proposals process training, on average, respondents agreed that SPO provides ample opportunities for them to be trained on the proposal processes. However, 11 persons recorded that they strongly disagree, and 29 persons recorded that they disagree with this statement.

Relating to the Cayuse training, on average, respondents "neither agreed, nor disagreed" that SPO provides ample opportunities for them to be trained on the new Cayuse module. Again, 11 persons responded that they strongly disagree, and 21 responded that they disagree with the statement. This is the only question that received less than an "Agreed" weighted average indicating a flag for an area that should be considered for improvement.

22. If I receive information from SPO, or Office of Research, and it is communication they have asked me to share, I forward it to the appropriate parties.

Answer Options	Strongly Disagree	Disagree	Neutral	Agree	Strongly agree	N/A	Rating Average	Response Count	PI's Only	Admins Only
Comment	3	6	17	123	101	94	4.3	344	4.1	4.5
								<b>answered question</b>		
								<b>skipped question</b>		
								<b>18</b>		
								<b>344</b>		
								<b>96</b>		

23. If you do not forward the communications, we'd like to understand why. Please select the appropriate reasons:

Answer Options	Response Percent	Response Count	PI's Only	Admins Only
I only share if the message states to forward the message to specific persons.	59.4%	41	58.5%	61.5%
I do not have the ability to forward to specific groups of persons.	7.2%	5	5.7%	15.4%
It is not my responsibility to forward these messages, that is what list serves are for.	26.1%	18	28.3%	15.4%
I don't always feel like it is appropriate for me to share this information, or that the information would be helpful to share.	21.7%	15	20.8%	30.8%
Reasons not listed		19		
	<b>answered question</b>	<b>69</b>		
	<b>skipped question</b>	<b>371</b>		

Constructive comments included:

- Too much information from SPO leads to important issues being lost in translation. Besides, every message that I receive from SPO is forwarded to me by multiple parties. The same information should not be distributed multiple times.
- Rather than sending a generic email request to share, it should be tailored to individual PI's. For example, earlier this fall, SPO sent an email about the training course/workshops that can be a fulfillment for the NSF/NIH Responsible Conduct of Research requirement. However, SPO didn't explain which grants require this requirement and which do not..

24. Do you attend the Research Forums?

Answer Options	Response Count	PI's Only	Admins Only
Yes	33	5.6%	18.0%
No	230	75.5%	32.6%
Sometimes	99	18.9%	49.4%
If no, why not? Or,	123		
<b>answered question</b>	<b>362</b>		
<b>skipped question</b>	<b>78</b>		

General themes as to why respondents do not attend the Research Forums include:

- 45 comments relating to not enough time available to attend
- 30 comments relating to not knowing what the Research Forums were, not knowing about them, or not being invited
- 22 comments related to the location being a factor in not attending

Constructive comments and suggestions included:

- The collaborative venue with SPO, EFA [Extramural Funds Accounting], IRB, etc. is extremely useful - especially if one has not had time to keep up on related current events. Separate but related, it's frustrating on the SOM side when the connection doesn't work properly (video and no sound, no connection, sound no video, etc.).

- It would be VERY helpful if a summary of the research forums was posted or distributed after the meetings. Key issues should be disseminated via the listserv so that follow-up could be obtained, as appropriate.
- 1) Please tape these Research Forum sessions and have them available on-line the same day for those who could not attend. 2) Please post the handouts and presentations provided by speakers on-line the same day.
- I used to, when they were held on campus. Now, it is an inconvenience to drive to Research Park Drive. Is it possible to have direct transmission of the meetings (meaning I can watch the meeting, on-line, in my office)?

**25. Do you have any suggestions on how the SPO training could be improved upon?**

Answer Options	Response Count	PI's Only	Admins Only
	62		
<i>answered question</i>	<b>62</b>	34	21
<i>skipped question</i>	<b>378</b>		

Overall, 7 comments identified better marketing of courses and training opportunities is needed, while 27 comments supported the need for better or more frequent training. Suggestions include:

- It would be great if the Cayuse training had a fake proposal that the entire group worked on together so that questions and problems could be addressed as a whole.
- Online web-based on demand training. Faculty should not have to attend in person sessions. Clinical faculty at UCDMC may be even more constrained. Can augment services with a web-based forum so investigators can ask questions, search, etc.
- Ask the Schools or Colleges to host and we will set it up and invite our research staff and our neighbors. Ask us how we can help.

**Proposal Processing Initiated Outside of SPO**

**26. I sometimes send proposals (scope of work and budget) to sponsors without first obtaining SPO review and approval.**

Answer Options	Response Percent	Response Count	PI's Only	Admins Only
Yes	30.7%	111	33.3%	25.6%
No	56.4%	204	56.0%	61.6%
N/A	13.0%	47	10.7%	12.8%
<i>answered question</i>		<b>362</b>		
<i>skipped question</i>		<b>78</b>		

## 27. If you answered yes, you sometimes do this because: (check all that apply)

Answer Options	Response Percent	Response Count	PI's Only	Admin's Only
I did not know that the proposal required prior SPO approval.	22.0%	28	20.0%	24.1%
I thought it would be easier to submit this way and ask for forgiveness later.	6.3%	8	6.7%	6.9%
The SPO process provides no added value to the proposal.	15.0%	19	14.4%	17.2%
The SPO submission processes and/or systems are too cumbersome for proposals that may or may not be accepted.	18.9%	24	21.1%	13.8%
There was no formal proposal process in these instance(s), rather, ongoing conversations with the sponsor resulted in issuance of an award document to begin the process.	40.2%	51	41.1%	44.8%
It was a preliminary proposal discussion and we assumed there would be intermediary steps to prepare a final proposal to be reviewed by SPO.	53.5%	68	54.4%	51.7%
The Sponsor created the scope of work and budget and asked us to respond to their proposed information.	27.6%	35	24.4%	37.9%
Other (please specify)	28.3%	36	23.3%	44.8%
	<b><i>answered question</i></b>	<b>127</b>		
	<b><i>skipped question</i></b>	<b>313</b>		

7 out of 36 comments received were similar in that the Admin responder stated the PI circumvents the process, and 5 out of 36 responses noted these were UC Grants, intercampus proposal, and others types of agreements where SPO interaction is not required.

**Miscellaneous Questions and Feedback**

**28. What improvements in the proposal submission process do you think SPO should adopt in the future?  
(check all that you agree with)**

Answer Options	Response Percent	Response Count	PI's Only	Admin's Only
Allow for local submissions of proposals (after SPO review of key business elements of a proposal such as face page, institutional infrastructure and equipment, budget), so that PI can work on scope of work closer to the deadline	63.2%	165	70.6%	51.7%
Allow Cayuse tool to expand beyond use for only federal proposal submissions	11.1%	29	5.1%	26.9%
Provide additional services such as budget preparation or providing a library of biographical sketch templates for submission	31.8%	83	35.6%	19.4%
Provide on-line tracking mechanisms for status of proposal routing, review and submission	54.8%	143	49.7%	65.7%
Provide better information/reminders about sponsor deadlines	18.4%	48	18.6%	13.4%
Other (please specify)	16.1%	42	14.1%	22.4%
		<b><i>answered question</i></b>	<b>222</b>	
		<b><i>skipped question</i></b>	<b>179</b>	

10 out of 42 comments suggested better communication and training or informational opportunities, while 6 comments related to the need for a better online submittal or electronic processes.

**29. Have you missed a proposal deadline in the last year?**

Answer Options	Response Percent	Response Count	PI's Only	Admins Only
Yes	7.5%	27	7.7%	9.1%
No	86.4%	310	89.5%	88.6%
N/A	6.1%	22	2.8%	2.3%
		<b><i>answered question</i></b>	<b>359</b>	
		<b><i>skipped question</i></b>	<b>81</b>	

30. If yes, what do you feel was the primary reason for the missed deadline?				
Answer Options	Response Percent	Response Count	PI's Only	Admin's Only
Waited till the last minute to submit the proposal and there were errors that prevented submission.	15.8%	6	11.1%	37.5%
Provided the full five days to SPO for submission, but they waited till the last minute to submit and technical errors prevented submission	5.3%	2	7.4%	0.0%
Submitted initial proposal in a timely manner but significant revisions and/or last minute changes pushed the actual submission to be too close to the deadline	0.0%	0	0.0%	0.0%
Lack of a system that provided validations to prevent technical errors in electronic submissions	7.9%	3	7.4%	0.0%
Other / Or Comment	71.1%	27	74.1%	62.5%
		<b>answered question</b>	<b>38</b>	
		<b>skipped question</b>	<b>402</b>	

The largest group (15.8%) responded that they waited until the last minute.

- 13 comments related to delays in the department or other external delays as the cause.
- 5 comments related the missed deadline to SPO processes.