

University of California Merced

Research Development Services

Program Evaluation

FINAL REPORT

August 20, 2012

National Organization of Research Development Professionals



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Introduction: Background, Charge, and Approach

At the request of Vice Chancellor for Research, Samuel Traina, the National Organization of Research Development Professionals (NORDP) performed an evaluation of the Research Development Services (RDS) unit at the University of California, Merced (UC Merced). The evaluation was conducted through a site visit June 19-21, 2012 and covered issues related to the effectiveness of RDS, the research environment at UC Merced, and interactions with key stakeholders. Because Research Development activities are generally viewed as *strategic* research investments as opposed to core requirements, the review also examined the ability of RDS to contribute to the strategic research goals of the organization. The scope of work, site visit itinerary, and NORDP Reviewer Bios are included in the appendices (Appendices A-D).

Research Development (RD) is an emerging trend at research universities across the nation due to the increasingly competitive nature of the extramural research funding landscape over the last decade. Institutional research development resources leveraged to gain access to the formative stages of new funding program development, to connect investigators and develop strategic alliances, and provide targeted notification of funding opportunities, are critical to institutions' success in this highly competitive environment. NORDP was founded to better serve institutional research priorities through the advancement of research development as a field and to provide the associated training and evaluation opportunities that exist through the development of a professional organization. NORDP members pursue effective practices and approaches to support the efforts of researchers and their institutional research enterprises to develop strategic research activities in response to the extramural funding landscape, catalyze new collaborations and partnerships, and inform funding agencies about exciting ongoing and emerging research efforts at their institutions. NORDP was incorporated in 2010 and currently has close to 500 members in academic institutions across the globe. Recognizing the relative youth of RD as a field, national standards are just beginning to emerge. Key elements of many RD offices included multi-investigator proposal development, coordination of faculty development programs, oversight and strategic utilization of limited submissions, dissemination of federal trends and links to federal funders and coordination of strategic research planning activities under the guidance of campus leadership. This report represents the perspectives of individuals in senior leadership roles at tier one research institutes. Both reviewers are founding members of the NORDP organization and have served on its Board of Directors. The recommendations herein are based upon their experiences starting and growing RD offices and leading the integration of research development activities into their institutions' overall research advancement strategy (see Appendix D for NORDP Reviewer Bios).

Current Environment for Research Development

Funding for university-based research has become increasingly competitive and complex. In the current economy, funds for research from all sources are steady at best and often decreasing due to inflationary pressures. In addition, regulatory requirements have grown more challenging, proposals include new

requirements such as outreach or professional development, and the growing trend toward multi-investigator and interdisciplinary awards conspire to increase the difficulties facing investigators developing competitive proposals. To increase investigator success, research institutions across the country have created offices staffed with professionals who support the research program and grant development process. The National Organization of Research Development Professionals (NORDP) provides a venue for these professionals to share best practices, develop mechanisms to measure success of various support strategies, and provide education and mentoring to assist in the career development of new research development professionals.

The Reviewers commend UC Merced on its foresight to establish the Research Development Services unit early in the creation of the University. RDS is a major catalyst for Merced faculty that helps them to pursue high profile multi-investigator and interdisciplinary awards, build institutional collaborations and partnerships that increase proposal competitiveness, and assist junior faculty in establishing solid proposal development skills. Several UC Merced faculty members have won prestigious awards such as the Guggenheim, Presidential Early Career Award in Science and Engineering, and NSF CAREER, which is extremely impressive in such a young institution. It speaks to the overall culture that emphasizes excellence in research as well as teaching and service.

This report outlines recommendations that will enable RDS to support critical growth of the research environment at UC Merced over the next five years and facilitate positive interactions with faculty members and institutional research partners. Our assessment of the research environment at UC Merced leads us to the conclusion that the institution is at a crossroads with respect to the future of its research program and environment. There are several key investments that are needed to improve the overall environment and culture surrounding research. Understandably, the University invested significant resources and attention during its early years towards establishing the academic foundation and undergraduate experience. Individual research programs were a critical component of faculty effort; however, the development of research infrastructure common in other peer institutions has lagged behind the important work of establishing curricula and associated academic structures. Our impression is that the need to build a more functional and comprehensive research environment is reaching critical proportions. Faculty with high performing research programs at Merced face a significantly increased burden versus their peers at other state and private research universities. UC Merced risks significant flight of its best faculty members and potential difficulty recruiting new faculty of the same caliber if the issues surrounding the research environment are not addressed in a timely manner. The opportunity to transform UC Merced into an innovative, interdisciplinary, and highly-productive research institution is powerful; but, we caution that there is a narrow window of opportunity for creating this environment. RDS can be a key part of the path forward, providing a visible, cost-effective and highly regarded focal point for support of faculty research programs through proactive strategic capacity building and infrastructure growth.

Key Findings from Advance Materials Review and Site Visit

Common Themes

Several common themes ran through the advance materials provided and interviews conducted, which we summarize below. The recommendations that follow in subsequent sections of this report will offer suggestions on how to promote activities deemed to be successful and develop solutions for areas of challenge.

- Those who are familiar with RDS are highly satisfied with its activities and dedication of its staff, notably its director, Susan Carter, and would like to see an increase in related capacity across the institution.
- The environment for externally funded research is perceived to be highly challenging at UC Merced due to factors such as: limited unit-based infrastructure for day-to-day grant development and management; the intense emphasis on launching educational programs and supporting business functions during the early years of UC Merced; the perceived lack of priority for research across UC Merced units; lack of core research infrastructure from facilities to electronic research administration (eRA) systems; and confusion on the part of faculty and other University units regarding roles of existing research administrative offices such as the Sponsored Project Office (SPO) and RDS.
- Concerns surfaced about growing isolation in research planning and infrastructure between central administration, schools, organized research units, and business support functions such as IT and business systems.
- Faculty who achieved significant externally supported research programs are growing frustrated with the challenging grants management, overall un-coordinated research environment, and perceived relatively high teaching load, which translates into a perception that there is a lack of institutional commitment to the University's Research mission. These individuals are primary candidates for recruitment away from UC Merced by competing institutions.

Notable Accomplishments

Launching a research enterprise from the ground up is a daunting challenge. Critical compliance units have been developed and are functioning well. A good foundation of expertise exists around regulatory requirements for research administration. UC Merced has recruited a stellar cadre of investigators across a number of disciplines. Many have managed to achieve external support for their research programs equal to or above peers at institutions with well-established and successful research environments. The investment in Research Development Services (RDS) by VCR Traina and the subsequent hiring of Director Susan Carter is an impressive commitment to the development of research support services for Merced.

In just a few short years, RDS has had significant impact on UC Merced's research enterprise. We

highlight a number of notable accomplishments here.

- The number of proposals—notably multi-investigator, interdisciplinary proposals—submitted through RDS has increased significantly since its creation in September 2008, as has the success rate associated with those proposals. Faculty report high levels of satisfaction for the support and services provided through RDS on these proposal development endeavors.
- RDS created a highly functional and unique calendar of funding opportunities with active links to the full announcement, submission site, and letter of intent and proposal deadlines.
- RDS was instrumental in the coordination and development of the UC Merced Center of Excellence on Health Disparities, playing a critical role in building the links with external partners.
- RDS supported the development of a pre-proposal and subsequent full-proposal for a highly-competitive NSF Science and Technology Center opportunity. Given the difficulty of winning an NSF STC, it is a major accomplishment to pass the first round of review and be invited to submit a full proposal.
- In 2012, RDS launched their first grant writing workshop to support the development of junior faculty proposal development skills. Feedback on the value of workshop was very positive.
- RDS was recognized by every faculty member with whom we met as the “go to place” to build a solid and highly competitive proposal. “We need more Susans” was a common refrain.

Opportunity and Risk for Research at UC Merced

UC Merced can be very proud of its efforts to build a strong undergraduate education enterprise and its initial accreditation by the Accrediting Commission for Senior Colleges and Universities of the Western Association of Schools and Colleges. Well on its way to achieving excellence in the teaching aspect of the University's mission, UC Merced needs to now focus similar intense attention and resources to bolstering its research enterprise and achieving excellence toward becoming a Research 1 university.

Recruitment efforts have been very successful, with UC Merced research faculty outperforming colleagues at other UC campuses and peer institutions. Yet, without the necessary resources to support early career faculty as they transition into robust independent and sustainable research careers, the risk is that UC Merced becomes a “researcher incubator” for other institutions. It will be critical to develop a comprehensive strategy for the University's research enterprise to guide university, school, and organized research units leadership in coordinated decision-making around growth and investment areas to leverage existing resources and maximize investment in new areas of research and research resources.

Detailed Recommendations for Research Development Services

Because of its notable track record of advancing the institution's research enterprise through promotion of individual faculty and collaboration as well as the development of institutional partnerships, Research Development Services (RDS) is positioned to be a key player to further advance the proactive, strategic capacity building and infrastructure growth of UC Merced's entire research enterprise. Further investment in RDS, based on the recommendations below, will propel the institution forward in meeting its mission of excellence in research.

The areas below represent different facets of RDS and/or its role in the overall UC Merced research enterprise. We highlight those recommendations we feel represent the greatest needs or offer maximum return on investment as "High Priority." This is not to say that the other recommendations are unimportant, only that we realize that the institution may not be able to address every recommendation in this report, but hope that serious consideration will be given to follow through on those areas where we feel the institution can make the greatest strides.

Area 1: Research Environment and Strategic Planning

For RDS to provide a strong foundation for faculty and strategic growth of the research programs at UC Merced, several issues must be address in the overall research environment of the campus. Without these critical investments, the University will not be able to maximize its investment in RDS or attract and retain highly-productive faculty members.

Recommendation 1 (Highest Priority): Align resources and authority with the Vice Chancellor for Research to implement Quali Coeus (KC) or a similar electronic research administration (eRA) tool within the next 12 months. A functional eRA tool is a *critical* piece of research support infrastructure, with more institutional impact than any individual piece of major instrumentation. The current implementation of KC overlooks the vast majority of stakeholders who will utilize the eRA tool for federal, state and foundation reporting, faculty who will develop proposals and manage grants with the tool, compliance units, Business and Financial Systems, Deans and ORU directors, the VCR and RDS to support strategic decision making. The resources and authority for implementation of the eRA must reside with the VCR, who will actively engage ALL major stakeholders to ensure the system meets the most pressing needs and is designed appropriately for expansion of proposal and award activity. This tool is critical for the long-term success and tracking of RDS undertakings and for the necessary growth of sponsored research activity. An eRA provides the intelligence needed to analyze areas of strength and gaps when planning for future center or programmatic proposals, to understand where additional support is needed to increase faculty success rates and understand campus-wide research trends or emerging strengths that cross school and departmental boundaries.

Recommendation 2 (High Priority): Develop a strategic plan for the Office of the Vice Chancellor for Research and the University's research enterprise. The reviewers met with the three School Deans and the two Organized Research Unit Directors individually. They were supportive of OVCR activities in general and specifically with respect to RDS services. There was consensus that the support for faculty proposal development needed to increase but mechanistic preferences varied considerably. In addition, these leaders mentioned several research critical areas where additional infrastructure or support was desired. Perspectives and strategies for growing common or shared research infrastructure also differed dramatically. Given the expense associated with support and growth of the research enterprise, we recommend that a Strategic Plan for Research be developed that prioritizes the campus-wide infrastructure investments that impact research, outlines areas of opportunity, sets goals for research support units, and reaches out to key stakeholders, schools and research units to increase opportunities for interdisciplinary planning and exchange.

Additional Strategic Considerations:

- Opportunities for selective investment in thematic research areas
- IDC distribution model that incentivizes collaboration and is capacity building
- Create a seed funding mechanism managed by RDS to support development of cross-school, interdisciplinary research programs, arts and humanities scholar release time
- Development of an institutional proposal matching policy and fund
- Long-term strategic planning for research cores and shared facilities to increase competitiveness for center and programmatic proposals.

Area 2: Proposal Development and Submissions

Minimal support exists for preparation and submission of single investigator grant proposals at the school level. In many cases, faculty members are responsible for all administrative aspects of proposal development and budget creation. Frequently faculty request RDS or SPO assistance for proposal budget development or collection of institutional data. The minimal RDS staff (2.0 FTE) limits their focus to high-priority multi-investigator and interdisciplinary proposals. SPO assistance is variable with some, but not all, staff offering aide for budget development. SPO does not have sufficient resources to provide this function. In addition, because one of SPO's primary responsibilities is to review proposals for compliance with funder guidelines and allowable costs, it is difficult for SPO to effectively review proposals they have helped develop. School based support is need to help with budget development and other administrative aspects of proposal development and to provide post-award support for faculty. Unit-based grant support is common practice at peer institutions

Recommendation 3: Create a centralized but distributed proposal development and pre-award support function to be trained and overseen by RDS in partnership with SPO until a critical mass of unit based support is available. During the initial expansion of unit based support for individual proposal development, a model can be created that allows for centralized training utilizing the expertise of RDS and flexible distribution of proposal development support.

Recommendation 4: Clearly define roles and responsibilities regarding proposal development and award support in RDS, SPO, and Foundation Relations that identifies appropriate support services from proposal conceptualization to award close-out for both the federal and foundation sectors.

Recommendation 5: RDS should create customizable “boilerplate” documents made readily available on-demand or from the web that provide institutional data, description of institutional research resources, and linkages to outreach activities and partner organizations.

Recommendation 6: RDS should work with VCR and key stakeholders to develop a focus on major research instrumentation grants and training grant proposals.

Recommendation 7: RDS should work closely with Foundation Relations to expand opportunities for faculty to pursue high-profile Foundation awards and to increase opportunities with family foundations and donors for support of research programs.

Area 3: Collaboration and Partnerships

Recommendation 8 (High Priority): Consider implementation of a campus-wide research networking/researcher profiling tool (e.g., Elsevier SciVal Experts, Harvard Profiles, or VIVO) to increase external and internal visibility discovery and encourage collaboration across school boundaries. Making an investment in an expertise discovery tool now, while the faculty is still small, will provide UC Merced with a competitive advantage over larger research-intensive institutions without such an implementation. RDS should oversee selection and deployment of such a tool as they have expertise in and provide valuable resources for building interdisciplinary proposals and supporting team science.

Recommendation 9: RDS should assist with outreach and partnerships for NSF CAREER awards, which require a strong outreach component.

Recommendation 10: RDS should serve as the key external partnership liaison to facilitate the interaction of faculty members with key national and international research centers, UC campuses and other Universities

Recommendation 11: Because of RDS’s unique understanding of the breadth of research activities across the institution, RDS should coordinate the strategic planning processes for the Organized Research Units (ORUs).

Area 4: Funding Opportunity Dissemination and Limited Submission

The identification of funding opportunities and management of limited submission opportunities is a key mechanism for the development and strategic pursuit of funding programs in priority areas.

Recommendation 12 (High Priority): RDS should assume management of the campus Limited Submissions process and emphasize strategic, capacity-building opportunities.

- Ensure competitions are open to all eligible faculty
- Interface with Assistant Deans and school-based research administrators to disseminate funding opportunities and plan strategically for annual competitions like the Major Research Instrumentation (MRI) program and NSF Science and Technology Centers (STCs).
- Establish a standing faculty review committee that will
 - Guide policy and strategy for institutional submissions
 - Add content experts as needed
 - Provide some feedback to all applicants
- Proactively share interdisciplinary/collaborative funding opportunities with faculty and encourage the development of teams
- Coordinate with SPO and Foundation Relations

Recommendation 13: RDS should maximize the use of GrantForward (formerly IRIS) and COS-Pivot for targeted funding opportunity dissemination and offer training for faculty and other researchers to utilize these tools effectively.

Area 5: Training and Professional Development

As a young institution, UC Merced professional development and mentorship opportunities for junior and mid-career faculty are limited. This was a key area of concern in the two open sessions with faculty members, particularly the limited availability on campus of senior faculty mentors in their areas of research. The current need is greatest for junior faculty just entering UC Merced as the amount of recruitment at that level remains relatively high. Over the next few years, the campus should begin to develop offerings to help mid-career faculty transition into lead PI roles and increase leadership potential.

Recommendation 14 (Highest Priority): RDS should expand its faculty development offerings and integrate experienced faculty from UC Merced and other UCs in its training and mentor programs.

For junior faculty:

- RDS should consider cohort training opportunities, which provide peer mentoring and increases connections across campus
- Junior faculty professional development curriculum should include a UC Merced research orientation, grantsmanship, research group management and resubmission

strategies

- Focused workshop on NSF CAREER awards and NIH career development awards

For Mid-career faculty

- Workshops on interdisciplinary and research center grant development and team science
- Leadership development. *Note: As the planned School of Management is being developed, faculty there should be included in discussions about developing a robust Leadership Development Program specifically for faculty.*

Recommendation 15: The VCR should consider investing resources through RDS to expose promising faculty members to their funding agencies. After participation in an intensive grantsmanship workshop, junior faculty with well-developed project descriptions and specific aims should be introduced to program managers in Washington DC and provided with an orientation to the federal funding landscape through partnership with the UC office of Government Relations. Other incentives could be considered to encourage faculty participation in grantsmanship workshops.

Recommendation 16: RDS should partner with UC Government Relations to identify opportunities to nominate UC Merced faculty to federal agency advisory panels and/or participate in planning workshops and the formative stages of new finding opportunity development.

Area 6: Communications and Outreach

In academic settings it is often easy to overlook investments in communications, materials development, and website design and maintenance. However, these resources are generally the entry point into the research enterprise for faculty and external stakeholders. Because the need is great, units often attempt to create their own web resources, resulting in staff time, often redundant, spent on activities that are necessary but do not reflect the core expertise of the staff. This is true of RDS and several other units within the VCR's portfolio.

Recommendation 17 (High Priority): The VCR office should invest in communications and web management to support all Office of Research units, including RDS.

- Create a an Office of Research newsletter that highlights new opportunities, recent research accomplishments, and helps clarify roles and responsibilities of the various research support offices across the institution to minimize the current confusion between RDS, SPO and other units such as Foundation Relations.
- Assign RDS as the OR point of support for web-based research development (RD) tools like research networking tools, research support decision trees, funding opportunities calendars, etc.
- Provide consultation on development of user interface for eRA software environment

Area 7: Tracking and Assessment

The lack of an electronic Research Administration (eRA) tool seriously limits UC Merced's ability to track trends in proposal success rates across agencies, schools and ORUs, minimize the administrative burden on faculty, assess the effectiveness of its research infrastructure investments, and therefore engage in long-term and strategic planning from an informed perspective. Recommendations in Tracking and Assessment are directly related to the eRA recommendations outlines in the *Area 1: Research Environment and Strategic Planning* above. However, we deem this to be such a critical piece of research infrastructure and consider the current strategy to be so ineffective, that we are re-emphasizing the earlier recommendation.

Recommendation 18 (Highest Priority; see also Recommendation 1): Fast-track the implementation of Kuali Coeus (KC) and move resources, staff and authority for implementation of KC under the VCR

- We recognize that other UC campuses are implementing KC and that Merced has been aligned with the system implementation timeline. Merced implementation must be expedited immediately. All other UC's working toward a KC implementation have existing eRA legacy systems in place and by necessity must take a slower approach as they determine how to merge legacy and existing business operation systems with KC. Merced is under no such constraints and should therefore move to immediate implementation.
- KC must be viewed as a mission critical institutional research infrastructure component and not merely an organizational tool for SPO.
- The reviewers left with impression that the CIO office was making decisions regarding the structure of KC that essentially dictate institutional research policy without consultation with the VCR or stakeholders other than SPO. For example, reviewers were told that the CIO office decided that KC would not connect to Business and Financial Services systems despite the growing number of federal and state awards. This leads to the question of who is responsible for negotiating the federal ICR rate, how are research income and expenses reconciled, particularly as concerns institutional investments. These ad hoc approaches are feasible when the institution is small, but as UC Merced grows to its projected size, this data will be increasingly difficult to manage. Integrated approaches should be developed now – while systems are still malleable and of a manageable size.
- As a primary user and subject matter expert, RDS should be deeply engaged in the KC development and implementation process.

Area 8: Coordination with Other UC Merced Units

Confusion over roles and responsibilities regarding school-based grant support, RDS, Sponsored Projects Office (SPO), interaction with funding agencies and other units (e.g., Federal Relations) was a recurring theme during the sight visit.

Recommendation 19: The VCR should create a decision-tree and roles & responsibilities matrix that clearly outlines how the faculty interacts with the various research support across the institution.

- Research support services across the institution (within the Office of Research and other Central Administration units, and school-based) should have shared understanding of respective roles and consistently operate in alignment with those roles.
- Provide regular opportunities for research administration infrastructure units to meet and share information amongst themselves and to discuss effective practices for delivering information to the faculty in a timely, clear, and non-redundant way.

Recommendation 20: To take advantage of existing expertise, RDS, in partnership with SPO, should be responsible for training and coordination of a distributed system of school-based research administrators, particularly until units house a critical mass of research support personnel. Placing a single research administrator in each school and ORU will undoubtedly result in isolation and development of variable or conflicting services across the research enterprise. Early training and coordination is essential for the success of the growth in unit-based research administration support.

Recommendation 21: The VCR should welcome new faculty to the campus with a letter that orients them to the existing research support resources and description of the Office of Research units and the complementary services they provide for the faculty.

Area 9: Funder/Agency Strategy

Opportunity exists to enhance research funding strategies through active engagement with federal agencies, foundations, and other funding agencies.

Recommendation 22: RDS should develop several strategies for increasing faculty interactions with Federal funding sources.

- Propose hosting regional NIH and/or NSF workshops
- Coordinate and encourage response to formal funder Requests for Information (RFI)
- Assist faculty in engaging in formative stages of agency funding opportunities and program development
- Develop capabilities to fully utilize opportunities presented via Hispanic-Serving Institution status

Recommendation 23: VCR should encourage inclusion of faculty interactions with federal agencies and other funders as part of the annual Vita update process

- Consider holding an event such as a VCR's Research Strategy Reception to discover faculty connections with funding agencies

Area 10: Staffing and Resources

The reviewers have two levels of recommendations to make with respect to staffing and resources to support the continued growth of the research enterprise at UC Merced over the next five (5) years.

Office of Research specific recommendations:

There are several functions that if housed within the central Office of Research (OR) could provide much needed guidance or specialized support for a number of OR units, thereby elevating the entire central research enterprise.

Recommendation 24: The VCR should develop an external advisory panel to provide critical strategic advice on trends in research, opportunity areas for UC Merced, and strategies for prioritizing and building the campus environment for research.

Recommendation 25: The VCR should hire a full time communications coordinator/web manager to support the development of all OR unit webpages and web resources. This allows existing OR unit staff to focus effort on their primary position responsibilities and will offer opportunities for better coordination across these units, and clearer information disseminated to the faculty.

Recommendation 26: Overall management of the Kuali Coeus (KC) project should be assigned to the Vice Chancellor for Research and the reporting line for the KC Project Web Developer should be re-aligned to report to the Director of Operations in the Office of Research.

Recommendation 27: In an effort to eliminate redundancy and duplication of effort, research development and sponsored research activities should remain centralized research functions. Planned investments in single-investigator proposal development and post-award research administration should be distributed through the schools, but reporting should be to the VCR office, coordinated through RDS, which will work in partnership with SPO to provide ongoing training and development of the distributed team. Such a distributed yet centrally coordinated team can take full advantage of existing expertise and proposal development capabilities and ensure a highly professional and consistent level of support to the faculty.

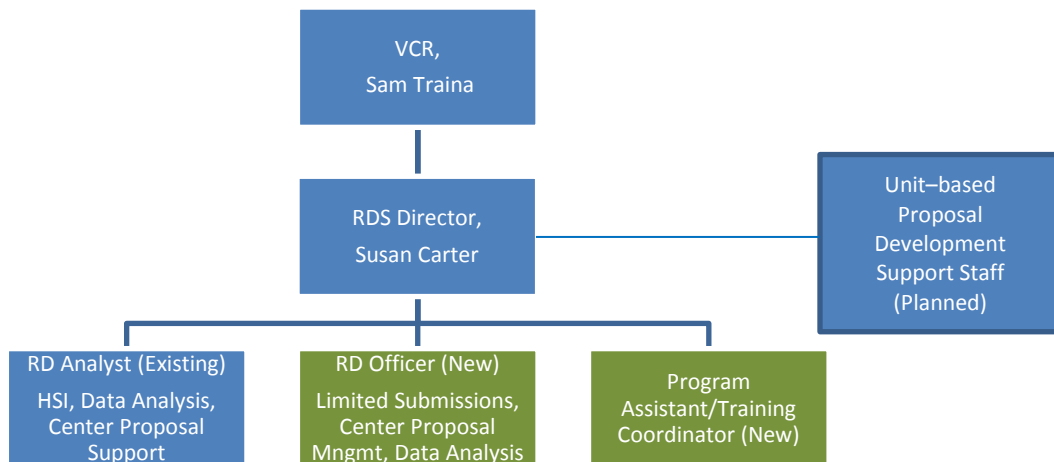
Research Development Services specific recommendations:

In each meeting with faculty and academic leaders, a recurring theme was the following - if every faculty member thoroughly understood the services and support available through RDS, demand would immediately exceed capacity! RDS has developed a solid foundation of expertise in proposal development and an outstanding rapport with the faculty it has served. We found no instances of dissatisfaction with RDS, except as concerned capacity. Clearly, RDS is too small to serve the research aspirations of the University and the needs of its faculty. However, recognizing current funding limitations, a phased staffing plan is recommended for increasing activities associated with a robust RDS office.

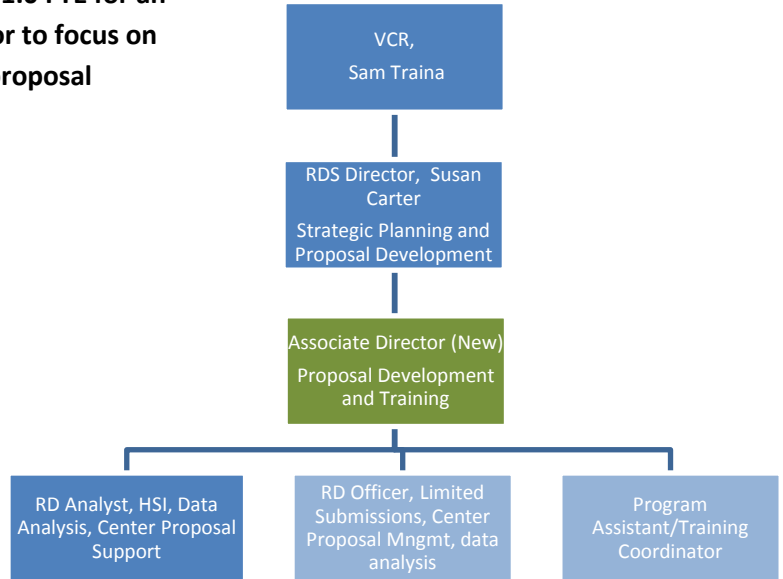
Support for all knowledge domains of the UC Merced research enterprise should be considered in the context of the recommendations below. RDS has been able to provide valuable support for the sciences and engineering and major research centers. Because of the unique nature of humanities and social/behavioral sciences scholarship, it will be important to have designated resources focused on opportunities for grant-supported research in those areas as well.

Recommendation 28: Increase Research Development Services staff by 2 FTE in Year 1 (the next 12 months) and assign reporting of Unit-based Proposal Development Support Staff to RDS Director.

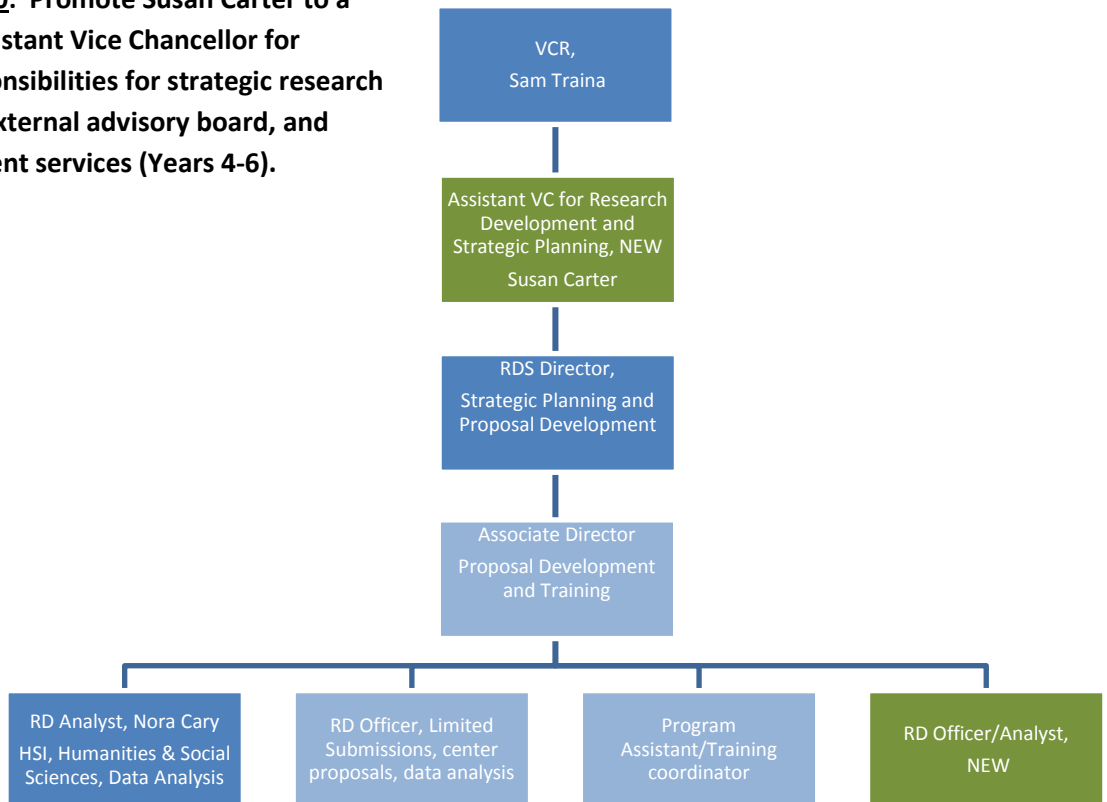
- Research Development Analyst (Existing): Re-focus toward Hispanic-Serving Institution coordination, data analysis, and support for large center proposal coordination
- Research Development Officer (New): Limited submissions management, large center proposal project management, data analysis
- Program Assistant/Training Coordinator (New): Support scheduling and organization of faculty development and other professional development programs
- Unit-based Proposal Development Support (Planned): New school/ORU proposal development support staff will report to RDS Director with dotted-line reporting to the Dean/Directors' offices



Recommendation 29: Provide an additional 1.0 FTE for an Associate Director position to enable Director to focus on support of strategic planning activities and proposal development (Years 2 and 3).



Recommendation 30: Promote Susan Carter to a new position as Assistant Vice Chancellor for Research with responsibilities for strategic research planning, staff for external advisory board, and research development services (Years 4-6).



Appendices

Appendix A: Scope of Work (provided by UC Merced)

Appendix B: List of Advance Materials Provided to Reviewers

Appendix C: Site Visit Itinerary

Appendix D: NORDP Reviewer Bios

Appendix E: Acronyms

Appendix F: List of Participants in Open Faculty Sessions

Appendix A: Scope of Work

National Organization of Research Development Professionals

750 N. Lake Shore Drive
Rubloff Bldg, 11th Floor
Chicago, IL 60611
312-503-0889

Scope of Work for Site Visit and Peer Review Evaluation of UC Merced Office of Research Development Services by the National Organization of Research Development Professionals (NORDP)

Duties

As part of the UC Merced Office of Research Development Services self-assessment, NORDP will provide evaluation services consisting of:

1. Site visit to UC Merced by NORDP consultants Dr. Jennifer Eardley, Co-Chair of the NORDP Effective Practice & Professional Development Working Group and Associate Vice Chancellor for Research and Associate Director of the Division of Biomedical Sciences, University of Illinois at Urbana-Champaign, and Holly Falk-Krzesinski, NORDP Immediate Past President and Director, Research Team Support & Development NUCATS Institute, Northwestern University. The site visit will consist of interviews with pertinent stakeholders, and observational assessment of relevant facilities and resources.
2. Preparation of an evaluation report.

The site visit shall take place June 19-21, 2012. The report will be completed and submitted to the UC Merced Office of Research Development Services by July 30th, 2012.

Compensation and Terms

UC Merced shall pay NORDP the sum of \$10,000.00 for services performed. Payment shall be due in full within 30 days of the submission of the evaluation report.

The Regents of the University of California:

UC Merced:

Signed: Todd A. Harris Date: 6/1/12

Name: Todd A. Harris Title: Senior Buyer

NORDP:

Signed: Barbara Walker Date: 6-1-12

Name: Barbara Walker Title: Treasurer



Appendix B: List of Advance Materials Provided to Reviewers

1. RDS 2009 Annual Report
2. UC Merced campus profile
3. UC Merced Office of Research Organizational Chart
4. Job descriptions for Susan Carter and Nora Cary
5. RDS Budget, 2009-2013
6. UC Merced Strategic Plan
7. UC Merced Office of Research Strategic Plan
8. Training Agendas and Evaluations
 - CoS Pivot Training Announcement
 - CoS Pivot Training Evaluation
 - 1/23/12 New Faculty Orientation Agenda
 - 8/19/09 New Faculty Orientation Agenda
 - Graduate Fellowship Proposal Writing Workshop Evaluation
 - Graduate Researcher's Workshop Announcement
 - 1/24/12 Grant Writing Institute Agenda
 - 3/13/12 Grant Writing Institute Agenda
 - Grant Writing Institute Survey Results
 - List of RDS Workshops and Training Seminars
 - Responsible Conduct of Research Course Syllabus
9. Funding Calendars, January-June, 2012
10. Sponsored Projects Proposal and Award Reports
 - Monthly Activity Reports, 2012
 - SPO Awards FY 2008- 2009
 - SPO Awards FY 2009-2010
 - SPO Awards FY 2010-2011
11. Campus Information from Office of Institutional Planning and Analysis
12. Background information on the Health Sciences Research Institute
13. Biographical information for the people scheduled to meet with the NORDP Team
14. Sponsored Projects NCURA Peer Review Report
15. NORDP Site Visit Agenda
16. SACA Periodic Review Announcement
17. Susan Carter's NORDP Annual Meeting Slide Presentation
18. Susan Carter Periodic Review Self-Study
19. List of UCM Awards by Sponsor
20. List of UCM Proposals by Sponsor

Appendix C: Site Visit Itinerary

University of California, Merced

Research Development Services Peer Review

NORDP Site Visit

June 19-21, 2012

Kolligian Library Room 326

Tuesday, June 19, 2012

3:00 – 7:00 p.m.

3:00 - 4:30 p.m. Campus Tour with Susan Carter

5:30 – 7:00 p.m. Dinner with Susan Carter, Samuel Traina, Nora Cary, and Emily Langdon

Wednesday, June 20, 2012

8:00 a.m. – 4:15 p.m.

8:00 – 8:30 a.m. Introductory Briefing with Susan Carter and Nora Cary

8:30 – 9:30 a.m. Meeting with Susan Carter, Director, Research Development Services

9:30 – 10:00 a.m. Meeting with Nora Cary, Analyst, Research Development Services

10:00 – 10:30 a.m. Meeting with Juan Meza, Dean, School of Natural Sciences

10:30 – 10:45 a.m. Break

10:45– 11:15 a.m. Meeting with Vice Chancellor for Research Samuel Traina

11:15 a.m. –12:15 p.m. Meeting with Thea Vicari, Director, Sponsored Projects Office

12:15 – 1:00 p.m. Lunch (provided)

1:00 – 2:00 p.m. Meeting with Sponsored Projects Pre-Award Services
Jennifer Teixeira, Principal Research Administrator
Jue Sun, Principal Research Administrator
Maggie Hollinger, Principal Research Administrator

2:00 – 2:45 p.m. Meeting with Mark Aldenderfer, Dean, School of Social Sciences, Humanities and the Arts, and Chris Kello, Associate Dean, Graduate Division, and Associate Professor, School of Social Sciences, Humanities and the Arts

2:45 – 3:00 p.m. Break

3:00 – 3:45 p.m. Skype Meeting with Dan Hirleman, Dean, School of Engineering
3:45 – 4:15 p.m. Meeting with Lacey Kiriakou, Director, Federal Government Relations
4:15 p.m. – on NORDP Team Meeting and Dinner (on own)

Thursday, June 21, 2012

9:00 a.m. – 5:15 p.m.

8:30 – 9:00 a.m. Telephone Meeting with Patricia La Croix, Director of Development, Corporations and Foundations
9:00 - 9:30 a.m. Meeting with John Jackson, Director of Operations for the Office of Research, and Mark Perez, Sponsored Projects Account Analyst
9:30 – 10:15 a.m. Meeting with David Hosley, Executive Director, Sierra Nevada Research Institute, and Roger Bales, Professor, School of Engineering and Sierra Nevada Research Institute Director
10:15 – 11:00 a.m. Meeting with Paul Brown, Director, Health Sciences Research Institute
11:00 – 11:30 a.m. Meeting with Associate Professor Monica Medina, School of Natural Sciences
11:30 a.m. – Noon NORDP Team Meeting
Noon – 1:00 p.m. Lunch (provided)
1:00 – 2:00 p.m. Open faculty session in Kolligian Library Room 232
2:00 – 2:15 p.m. Break (Coffee and refreshments provided)
2:15 – 3:00 p.m. Open faculty session in Kolligian Library Room 232
3:00 – 3:30 p.m. NORDP Team Meeting
3:30 – 4:15 p.m. Meeting with Kyle Hoffman, Vice Chancellor for Development and Alumni Relations
4:15 – 5:15 p.m. Wrap up meeting and debrief with Susan Carter and Samuel Traina
5:30 – 7:30 p.m. Dinner with Susan Carter
7:30 p.m. – on NORDP Team Meeting at hotel

Appendix D: NORDP Reviewer Bios

Holly J. Falk-Krzesinski, PhD is a Research Assistant Professor and Director of Research Team Support & Development at Northwestern University. She is a member of the NIH CTSA-supported Northwestern University Clinical and Translational Science (NUCATS) Institute, where she engages in navigation and support for clinical and translational collaboration; multi/inter/transdisciplinary research; research teams; and research development and grantsmanship for collaborative opportunities. Focusing on the science of team science (research on scientific teams) and the praxis of team science (the practical aspects of science performed in teams), her efforts serve as a conduit to help translate empirical research findings about team science into evidence-based effective practices for scientific teams, institutional leaders, and funders of collaborative team science. As chair of the Annual International Science of Team Science (SciTS) Conference, Dr. Falk-Krzesinski has been instrumental in developing a strong, interdisciplinary community of practice for team science and SciTS and interdisciplinary training.

Two areas of focus for Dr. Falk-Krzesinski include tools and training to support team science and interdisciplinary research. In addition to co-developing TeamScience.net, Dr. Falk-Krzesinski also developed and teaches one of only a handful of graduate-level Team Science courses in the country. She also has considerable expertise related to the assessment and implementation of research networking tools (knowledge management systems for the research enterprise), which support the efforts of researchers, librarians, and research development professionals to initiate and nurture new interdisciplinary partnerships and secure collaborative extramural research funding.

In her earlier role as founding director of Northwestern's central Office of Research Development, Dr. Falk-Krzesinski fostered numerous major multi/inter/transdisciplinary research initiatives spanning structural genomics of infectious diseases to cancer nanotechnology to regenerative medicine to oncofertility to art history to bioenergy to solar energy to astrobiology, securing over \$140M in collaborative federal grants and contracts. In 2008, Dr. Falk-Krzesinski launched the national network of research development professionals, which evolved into the National Organization of Research Development Professionals (NORDP). She served as the founding president of NORDP until 2011, and now as Immediate Past President and Membership Chair, she is spearheading the organization's initiative to advance research collaboration nationally. Dr. Falk-Krzesinski and colleagues at Northwestern built one of the most comprehensive career and professional development training programs for PhD-level trainees in the life, biomedical, and chemical sciences.

Building on that success, Dr. Falk-Krzesinski now serves as the Co-Director of the Navigating the Professoriate program, part of the Chicago Collaboration for Women in STEM, which fosters professional development of early career, tenure-track/eligible women faculty in STEM disciplines at Northwestern University and The University of Chicago.

Dr. Falk-Krzesinski is a research assistant professor in the NUCATS Institute at the medical school, senior lecturer in the Department of Molecular Biosciences in the college of arts and sciences, and an instructor in the School of Continuing Studies at Northwestern. Dr. Falk-Krzesinski has her B.S. in biological sciences with honors and a chemistry minor from the University of Illinois at Chicago (UIC), where she conducted research on gene regulation and cell development in *Bacillus subtilis*. While still at UIC, Dr. Falk-Krzesinski worked at Abbott Laboratories with a pharmaceutical group developing the first HIV protease inhibitor, an important drug for the treatment of AIDS. Dr. Falk-Krzesinski then received her Ph.D. in microbiology and immunology from Loyola University of Chicago at the medical center, where she studied the genetics and biochemistry of central energy metabolism in *Escherichia coli*, and implications of the research on Parkinson's Disease. She returned to UIC at the medical campus as a postdoctoral fellow in the Department of Medicine, Section of Digestive and Liver Diseases studying host-microbial pathogen interactions in human intestinal cells. Dr. Falk-Krzesinski went on to earn a Certificate of Professional Development in Nonprofit Management from the Kellogg School of Management at Northwestern University.

Recent Publications:

- Falk-Krzesinski, H.J., Contractor, N., Fiore, S.M., Hall, K.L., Kane, C., Keyton, J., Klein, J.T., Spring, B., Stokols, D., and Trochim, W. (2011). Mapping a Research Agenda for the Science of Team Science. *Research Evaluation* 20, 143-156.
- Elfner, L.E., Falk-Krzesinski, H.J., Sullivan, K., Velkey, A., Illman, D.L., Baker, J., and Pita-Szczesniewski, A. (2011). Team Science: Heaving Walls & Melding Silos. *American Scientist* 99, s1-8.
- Falk-Krzesinski, H.J., Börner, K., Contractor, N., Fiore, S.M., Hall, K.L., Keyton, J., Spring, B., Stokols, D., Trochim, W., and Uzzi, B. (2010). Advancing the Science of Team Science. *Clinical and Translational Sciences* 3, 263-266.
- Börner, K., Contractor, N., Falk-Krzesinski, H.J., Fiore, S.M., Hall, K.L., Keyton, J., Spring, B., Stokols, D., Trochim, W., and Uzzi, B. (2010). A Multi-Level Systems Perspective for the Science of Team Science. *Science Translational Medicine* 2, cm24.

Jennifer Eardley, PhD

Jennifer Eardley is Associate Vice Chancellor for Research and Interim Director of the Division of Biomedical Sciences at the University of Illinois at Urbana-Champaign. As Associate Vice Chancellor for Research, Dr. Eardley is responsible for coordination of campus-wide planning activities for the Health Sciences and the development strategic research partnerships with key healthcare institutions, including oversight of the Illinois-Carle Biomedical Research Center – a joint research venture between UIUC and the Carle Foundation Hospital.

Through leadership of the Division of Biomedical Sciences (DBS), Dr. Eardley supports the efforts of faculty, researchers and campus leaders to pursue clinical and translation opportunities in the biomedical sciences. DBS programs include establishment of strategic research initiatives in the health sciences, coordination of large multidisciplinary research proposals, career development for faculty in the biomedical sciences and management of NIH limited submissions. DBS also provides assistance with development of clinical research studies, including feasibility assessment, subject accrual and data management assistance.

Dr. Eardley received a BS in Cell Biology & Biochemistry from University of Maryland Baltimore County and her PhD in Cell Biology from Johns Hopkins University. Dr. Eardley joined the University of Illinois in 2000 and has held positions as Associate Director of Corporate Relations, Assistant Vice Chancellor for Research and Associate Vice Chancellor for Research. She was a founding Board Member of the National Organization of Research Development Professionals and is currently co-chair of the Effective Practices & Professional Development working group. She also serves on the Board of Directors of the Illinois Division of the American Cancer Society. In 2012, she received the University of Illinois Chancellor's Award for Professional Excellence.

Appendix E: Acronyms

eRA:	Electronic Research Administration systems
KC:	Kuali Coeus
MRI:	NSF Major Research Instrumentation Program
NIH:	National Institutes of Health
NORDP:	National Organization of Research Development Professionals
NSF:	National Science Foundation
OR:	Office of Research
ORU:	Organized Research Unit
RD:	Research Development
RDS:	Research Development Services
SPO:	Sponsored Programs Office
STC:	Science and Technology Center
UC Merced:	University of California Merced

Appendix F: List of Participants in Open Faculty Sessions

Paul Almeida, Associate Professor, School of Social Sciences, Humanities and Arts

David Ardell, Assistant Professor, School of Natural Sciences

Eric Brown, Assistant Professor, School of Natural Sciences

Asmeret Asefaw Berhe, Assistant Professor, School of Natural Sciences

Andy LiWang, Associate Professor, School of Natural Sciences

Patricia LiWang, Professor, School of Natural Sciences

Ruth Mostern, Associate Professor, School of Social Sciences, Humanities and Arts

Stergios (Steve) Roussos, Community Scientist and Lecturer, School of Natural Sciences

Florin Rusu, Assistant Professor, School of Engineering

Michael Scheibner, Assistant Professor, School of Natural Sciences