



# *Service Level Agreement*

Research and  
Economic  
Development

Jul 2016 – Jun 2017

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**EXECUTIVE SUMMARY**

The Office of Research and Economic Development, ORG 24, consists of the following Units:

- Office of the Vice Chancellor
- Sponsored Programs Administration
- Research Integrity
- Proposal Development
- Corporate and Strategic Partnerships
- Campus Veterinarian/Vivaria
- Central Facility for Advanced Microscopy and Microanalysis (CFAMM)

Through the Office of Research and Economic Development, UCR is bringing advanced research from the lab to the marketplace while generating \$1.4 billion in economic impacts. In FY 2014-15, we attracted approximately \$124 million in research funding, including 865 contracts as well as receiving 10 new patents.

**Research Funding Overview**

**Contracts and Grant Awards by Source, Fiscal Years 2014 - 2015**

<u>FY2014</u>	<u>FY2015</u>
\$69.2 Million Federal – 63%	\$79.9 Million Federal – 64.6%
\$7.9 Million State – 7%	\$9.2 Million State – 7.5%
\$2.4 Million Other Government – 2%	\$1.9 Million Other Government – 1.5%
\$9.3 Million Industry – 9%	\$10.5 Million Industry – 8.5%
\$15.9 Million Non-Profit – 14%	\$17 Million Non-Profit – 13.8%
\$5.9 Million UC System – 5%	\$5 Million UC System – 4.1%

**FY2015 Overall increase in Contracts and Grant Awards: 12%**

**SERVICE LINE SUMMARY**

Service Line Summary				
Service	Level of Service			Page #
	Core Service	Premium Service	Recharge Service	
<b>Unit Services</b>				
Research and Economic Development	√			04
Sponsored Programs Administration	√			08
Research Integrity	√			14
Proposal Development	√			20
Corporate & Strategic Partnerships	√			23
Campus Veterinarian	√			26
Campus Vivaria	√	√	√	30
Central Facility for Advanced Microscopy & Microanalysis (CFAMM)	√		√	34
University of California Institute for Mexico & the United States (UC MEXUS)	√			37

## **RESEARCH AND ECONOMIC DEVELOPMENT**

California's investment in UC's research mission attracts federal funds, launches companies, and trains the next generation of scientists and scholars. UCR's increasing research funding stimulates every facet of the campus mission to educate, discover new knowledge, and disseminate findings to benefit the public.

The Office of Research and Economic Development works with the faculty, departments and schools on the following goals:

- Increase federal funding for research, education, outreach, and infrastructure.
- Launch research collaboration across schools and departments.
- Stimulate commercialization, entrepreneurship, and new company formation at UCR.
- Negotiate multi-faceted R&D partnerships with established companies.
- Grow a regional innovation ecosystem with the commercial sector and federal, state, county and city governments.
- Promote highest standards of research excellence and ensure compliance with federal and state regulations.

UCR research, traditionally known for advances in agriculture, has expanded discovery and scholarship throughout the disciplines, including:

Research on sleep for improved productivity; biomimetic materials; drug discovery including kidney disease and brain cancer; new strategies for education, special education, and undergraduate STEM retention; cultivating creative writers; contributing new ideas for public policy; improving air quality; and understanding and prevention of disease.

Still a leader in agricultural science, UCR is devising methods to increase food quantity and quality, including breeding new crops such as the Tango citrus, drought tolerant legumes, and submergent tolerant rice.

## **GENERAL SERVICE OVERVIEW**

- Provide support to the Vice Chancellor for Research and Economic Development (RED) and RED Units (Sponsored Programs Administration, Research Integrity, Proposal Development, Corporate and Strategic Partnerships, Campus Veterinarian / Vivaria, Central Facility for Analytical Microscopy and Microanalysis, UC MEXUS, Research Center)
- Manage the Collaborative Seed Grant Program and Proof of Concept for Technology Commercialization.

**SERVICE LINE DETAIL**

<b>Name of Service:</b>	<b>Research and Economic Development</b>
<b>Brief Description of Service:</b>	Support to Vice Chancellor and ORG24/ORG530 Units
<b>Customers Eligible to Request Service:</b>	Vice Chancellor's office, UCR Campus Community, Riverside Community
<b>Web Address</b>	<a href="http://research.ucr.edu/or-home.aspx">http://research.ucr.edu/or-home.aspx</a>
<b>Service Level Agreement Specifics:</b>	<ul style="list-style-type: none"> <li>• The Vice Chancellor's office manages the day-to-day operations for Research and Economic Development. This consists of the Chief of Staff (COS), Chief Financial and Administrative Office (CFAO), Executive Assistant to the Vice Chancellor (EA), Financial Operations Manager (FOM) and receptionist.</li> <li>• The CFAO, FOM and receptionist manage the human resource, financial, purchasing and administrative functions for the Vice Chancellor and Units.</li> <li>• The COS and EA support the Vice Chancellor and assist with managing the various activities/specific projects for the Vice Chancellor.</li> <li>• The Vice Chancellors office also provides partial matching funds when required or advantageous for federal grants, in collaborations with the deans or EVC/Provost.</li> </ul>
<b>Recharge Services</b>	N/A
<b>Premium Services</b>	N/A

Name of Service:	<b>Research and Economic Development</b>
Brief Description of Service:	Collaborative Seed Grant Program
Customers Eligible to Request Service:	Faculty, Staff, Students
Web Address	<a href="http://research.ucr.edu/or-home.aspx">http://research.ucr.edu/or-home.aspx</a>
Service Level Agreement Specifics:	<p>The <b>Collaborative Seed Grant Program</b> grants are internal funds for UCR faculty teams to collaborate and publish in advance of proposing multi-investigator projects and centers to external agencies. Teams with seed funding who generate preliminary results and gain experience working jointly have proven more successful when they later compete for multi-investigator and/or multidisciplinary grants.</p> <p>The purpose of the collaborative seed grant program is to serve as a catalyst for UCR faculty to form new teams, the seed grant program is intended to initiate new intellectual directions for faculty and to make UCR more competitive for multidisciplinary grants. Selection criteria for seed grants reward projects that create new relationships and synergies across schools, departments or centers. Key considerations include whether the project can be leveraged toward new externally-funded research, and whether the project cannot be otherwise initiated using regular department or school resources. An ideal project would apply for external funding within 6-10 months following seed funding.</p>
Recharge Services	N/A
Premium Services	N/A

Name of Service:	<b>Research and Economic Development</b>
Brief Description of Service:	Proof of Concept for Technology Commercialization
Customers Eligible to Request Service:	Faculty, Staff, Students
Web Address	<a href="http://research.ucr.edu/or-home.aspx">http://research.ucr.edu/or-home.aspx</a>
Service Level Agreement Specifics:	The <b>Proof of Concept for Technology Commercialization (POC) Award Program</b> . The POC award provides UCR investigators up to \$35,000 to further develop a commercializable invention based upon UCR intellectual property not yet licensed. The effort should address a critical issue, such as creating a prototype, scaling up a process, or obtaining additional data to support a commercialization effort by making the invention more attractive to licensees or investors. The award shall be used only for technical salaries and benefits, supplies, vivarium or other facilities fees and contracted services directly related to the project.
Recharge Services	N/A
Premium Services	N/A



**SPONSOR PROGRAMS ADMINISTRATION**

Due to the nature of sponsored programs administration, there are no distinct levels of service. All service should be based first on priority of deadlines, complexity of informational need, standards of procedures and adherence to the participation, and by the individuals or departments that require commitment and accountability.

The Office of Research and Economic Development (RED), through its Sponsored Programs Administration (SPA), is UCR's institutional office responsible for reviewing, endorsing, and submitting proposals to extramural sponsors for research, training, instructional, and other sponsored activities. SPA is also responsible for preparing and/or reviewing, negotiating, accepting/endorsing agreements for projects funded by federal, state, and other governmental agencies, foundations, corporations, marketing boards, and other public and private sources. Other responsibilities include: providing advice to faculty and staff regarding the management and administration of sponsored programs; interpreting the terms and conditions of awards, sponsor and university policies/procedures, and government regulations; monitoring institutional compliance with government regulations, sponsors' policies, and award requirements; drafting, negotiating, endorsing/executing and monitoring subawards under UCR's prime awards; coordinating pre-award and non-accounting post-award actions requiring either institutional or sponsor prior approval; and drafting/reviewing, negotiating, and signing various other agreements related to UCR's prime awards (e.g., material transfer agreements, data use agreements, confidential disclosure agreements, collaboration agreements, etc.).

**SERVICE LINE SUMMARY**

Service Line Summary				
Service	Level of Service			Page #
	Core Service	Premium Service	Recharge Service	
<b>Unit Services</b>				
Proposal Review and Submission	√			09
PreAward Administration	√			10
Award Review, Negotiation, Execution, and Set-Up	√			11
Post-Award Administration	√			12
General/Other	√			13

**GENERAL SERVICE OVERVIEW**

- Approximately 1,427 proposals submitted to over 400 sponsors
- Utilized over a dozen different sponsor-driven web-based proposal submission portals
- Value of awards received increased by \$21M
- Utilized over a dozen different sponsor-driven web-based award retrieval and post-award administration systems
- 35 – 50 departmental administrators received formal training each month through SPA’s Research Administrators INC sessions

**SERVICE LINE DETAIL**

Name of Service:	<b>Proposal Review and Submission</b>
Brief Description of Service:	Identify and resolve institutional issues to ensure that all proposals comply with University policies, sponsor requirements, and regulations prior to submitting such proposals to the applicable extramural sponsors
Customers Eligible to Request Service:	Principal Investigators (PIs), co-PIs, Chairs, Deans, Vice Chancellors, Chancellor, Staff, Post-Doctoral Fellows/Trainees, Graduate Students, and Extramural Sponsors
Web Address	<a href="https://research.ucr.edu/SPA.aspx">https://research.ucr.edu/SPA.aspx</a>
Service Level Agreement Specifics:	<ul style="list-style-type: none"> <li>• Facilitate the registration of new users to NSF FastLane, Grants.gov, NIH eRA Commons, and other electronic grant application portals</li> <li>• Facilitate requests for PI Eligibility by Exception</li> <li>• Review preliminary proposals and full proposals for compliance with sponsor and university policies, sponsor/agency-specific guidelines, government laws and regulations</li> <li>• Facilitate sponsor code and indirect cost rate exception requests to UCOP</li> <li>• Endorse and submit preliminary proposals and full proposals on behalf of The Regents of the University of California</li> <li>• Provide Cayuse software for proposal submission</li> <li>• Coordinate with Computing and Communications on enhancements/changes to the electronic Campus Approval Form (eCAF) system</li> <li>• Maintain databases of proposal submissions</li> </ul>
Recharge Services	N/A
Premium Services	N/A

Name of Service:	<b>PreAward Administration</b>
Brief Description of Service:	Facilitate the review, approval, and processing of requests for PreAward spending; and perform a variety of PreAward actions necessary to facilitate receipt of an award.
Customers Eligible to Request Service:	Principal Investigators (PIs), co-PIs, Chairs, Deans, Vice Chancellors, Chancellor, Staff, Post-Doctoral Fellows/Trainees, Graduate Students, EMF Accounting, Research Integrity, Campus Veterinarian, and Extramural Sponsors
Web Address	<a href="https://research.ucr.edu/SPA.aspx">https://research.ucr.edu/SPA.aspx</a>
Service Level Agreement Specifics:	<ul style="list-style-type: none"> <li>• Review and approve/endorse PreAward requests to spend funds in advance of receiving a sponsored award</li> <li>• Ensure all applicable regulatory approvals (e.g. IRB, IACUC, IBC, conflict of interest) are obtained prior to granting final approval of PreAward spending</li> <li>• Coordinate with Computing &amp; Communications on enhancements/changes to the online PreAward Request System and to the online Material Transfer Request System</li> <li>• Review and sign institutional certifications, representations, and assurances</li> <li>• Facilitate sponsor requests for additional information about proposed programs, including requests for "just-in-time" information</li> <li>• Review, approve, and submit proposal revisions/updates</li> <li>• Interpret sponsor and university policies, and government regulations</li> </ul>
Recharge Services	N/A
Premium Services	N/A

Name of Service:	<b>Award Review, Negotiation, Execution, and Set-Up</b>
Brief Description of Service:	Review and negotiate awards to resolve problematic terms and condition, for compliance with University policies, followed by the execution, set-up, and dissemination of sponsored awards.
Customers Eligible to Request Service:	Principal Investigators (PIs), co-PIs, Chairs, Deans, Vice Chancellors, Chancellor, Staff, Post-Doctoral Fellows/Trainees, Graduate Students, EMF Accounting, Research Integrity, Campus Veterinarian, and Extramural Sponsors
Web Address	<a href="https://research.ucr.edu/SPA.aspx">https://research.ucr.edu/SPA.aspx</a>
Service Level Agreement Specifics:	<p>Draft/review, negotiate, and executed/sign sponsored awards (e.g., contracts, grants and cooperative agreements) on behalf of The Regents</p> <ul style="list-style-type: none"> <li>• Review, negotiate, and endorse various other agreements related to the conduct of sponsored programs (e.g., material transfers, confidential disclosure, and data use agreements)</li> <li>• Ensure all applicable regulatory approvals (e.g. IRB, IACUC, IBC, conflict of interest) are obtained prior to executing any award</li> <li>• Interpret award terms and conditions, sponsor and university policies, and government regulations</li> <li>• Advise clients regarding special obligations or requirements associated with sponsored awards</li> <li>• Set-up awards in the Award Data Entry system for dissemination of award documents via PAMIS</li> <li>• Maintain award databases</li> </ul>
Recharge Services	N/A
Premium Services	N/A

Name of Service:	<b>Post-Award Administration</b>
Brief Description of Service:	Create, negotiate, and execute subawards to subrecipients; and conduct all (non-financial) activity associated with the management and subsequent closeout of awards and subawards.
Customers Eligible to Request Service:	Principal Investigators (PIs), co-PIs, Chairs, Deans, Vice Chancellors, Chancellor, Staff, Post-Doctoral Fellows/Trainees, Graduate Students, EMF Accounting, Equipment Management, Technology Commercialization, Subrecipients, and Extramural Sponsors
Web Address	<a href="https://research.ucr.edu/SPA.aspx">https://research.ucr.edu/SPA.aspx</a>
Service Level Agreement Specifics	<ul style="list-style-type: none"> <li>• Review, approve, and submit prior approval requests to sponsors (e.g., requests for no-cost time extension, PI transfers, re-budgeting of awarded funds, etc.)</li> <li>• Facilitate the timely submission of progress reports requiring institutional approval to sponsors</li> <li>• Provide advice regarding the management and administration of sponsored programs</li> <li>• Promote and facilitate institutional compliance with government regulations and award requirements</li> <li>• Draft, negotiate, and endorse subawards issued to subrecipients, and upload into PAMIS</li> <li>• Conduct risk assessment and institutional monitoring of UCR's subrecipients in compliance with 2 CFR Part 200 and university policies</li> <li>• Facilitate export control issues as they arise during the conduct of sponsored programs</li> <li>• Facilitate the closeout of awards (including submission of award deliverables/reports pursuant to 2 CFR Part 200 and any award-specific requirements), and subawards</li> </ul>
Recharge Services	N/A
Premium Services	N/A

Name of Service:	<b>General/Other</b>
Brief Description of Service:	Conducts various activities which do not correspond with any particular sponsored award, but which significantly impact the research enterprise with broad implications
Customers Eligible to Request Service:	Principal Investigators (PIs), co-PIs, Chairs, Deans, Vice Chancellors, Chancellor, Staff, Post-Doctoral Fellows/Trainees, Graduate Students, EMF Accounting, Equipment Management, Business Services, Extramural Sponsors, UCOP and SPA offices at sister-UC campuses
Web Address	<a href="https://research.ucr.edu/SPA.aspx">https://research.ucr.edu/SPA.aspx</a>
Service Level Agreement Specifics:	<ul style="list-style-type: none"> <li>• Liaising with sponsors</li> <li>• Promoting and facilitating institutional compliance with a myriad of government regulations</li> <li>• Providing research administration training courses and consulting services</li> <li>• Actively participating on various UC System-wide workgroups (e.g., Implementation of Assembly Bill 20 to sponsored agreements from State of CA; Implementation of 2 CFR Part 200 (Uniform Guidance) to all federally-funded awards, including the need for policy/procedure changes and changes to campus electronic systems; Negotiation of UC Master Clinical Trial Agreements; Development of UC System-wide research training tools; etc.).</li> <li>• Participation in various outside organizations (e.g., Council on Governmental Relations, Federal Demonstration Partnerships, and University-Industry Demonstration Partnerships) fostering productive relationships between the research community and its sponsors, and advocating for innovation and change that avoid and/or streamline unnecessary administrative burden</li> </ul>
Recharge Services	N/A
Premium Services	N/A

**RESEARCH INTEGRITY**

The Office of **Research Integrity** provides broad oversight, resources and education for integrity and compliance issues relating to the conduct of research at the University of California, Riverside. The Office of Research Integrity carries out its responsibilities by:

- Monitor and make recommendations concerning ethical, professional, federal, state and other (e.g., international) policies relating to research;
- Creating and maintaining the UCR research integrity and compliance infrastructure;
- Educate and train researchers in the responsible conduct of research and research compliance;
- Implement policy and procedural requirements relating to research misconduct and the federal Office of Research Integrity

**SERVICE LINE SUMMARY**

Service Line Summary				
Service	Level of Service			Page #
	Core Service	Premium Service	Recharge Service	
<b>Unit Services</b>				
Regulatory protocol/application development	√			15
Regulatory protocol/application review	√			16
Regulatory committee operations	√			17
Regulatory agency obligations & accreditation maintenance	√			18
Training & Education	√			18
General/Other	√			19

**GENERAL SERVICE OVERVIEW**

- All UCR students, faculty and staff engaged in research
- Research staff from community partner organizations engaged in research who use our IRB or other committees for review/oversight
- Approximately 500 active IRB applications
- Approximately 100 BUAs (biosafety use applications)
- Approximately 100 AUPs (animal use protocols)
- Number of applications and protocols has seen an average 20% increased across all ORI committees. We expect the trend to increase with more research from SOM

IRB APPLICATIONS*	Year 2013	Year 2014	Year 2015
Total Submitted	145	160	189

- IBC\*
  - 2014: 50 New applications
  - 2015: 70 New applications

\*Figures do not include amendments, modifications, renewals, determinations of exemption, and other related functions

**SERVICE LINE DETAIL**

Name of Service:	Regulatory Protocol/Application Development
Brief Description of Service:	Assisting faculty, researchers, students, and staff in applications development and submission for review by relevant committee.
Customers Eligible to Request Service:	<ul style="list-style-type: none"> <li>- All UCR faculty, researchers, students, and staff</li> <li>- Researchers from our community partner organizations</li> </ul>
Web Address	<a href="http://research.ucr.edu/ORI.aspx">http://research.ucr.edu/ORI.aspx</a>
Service Level Agreement Specifics:	<ul style="list-style-type: none"> <li>• Advise, train, and assist researchers in protocol/application development</li> <li>• Advise, consult, and educate researchers regarding regulations and policies</li> <li>• Steward the application and related modifications/actions throughout the research process</li> </ul>
Recharge Services	N/A
Premium Services	N/A



<b>Name of Service:</b>	<b>Regulatory Protocol/Application Review</b>
<b>Brief Description of Service:</b>	Review of all research-related applications following federal, state, UCOP standards and regulations, as well as best research practices.
<b>Customers Eligible to Request Service:</b>	<ul style="list-style-type: none"> <li>- All UCR faculty, researchers, students, and staff</li> <li>- Researchers from our community partner organizations</li> </ul>
<b>Web Address</b>	<a href="http://research.ucr.edu/ORI.aspx">http://research.ucr.edu/ORI.aspx</a>
<b>Service Level Agreement Specifics:</b>	<ul style="list-style-type: none"> <li>• Pre-review protocols/applications &amp; amendments</li> <li>• Facilitate processing and review of protocols/applications, amendments and other research-related functions</li> <li>• Advise reviews regarding regulations, guidelines and policy</li> <li>• Facilitate notices and submissions of renewals</li> </ul>
<b>Recharge Services</b>	N/A
<b>Premium Services</b>	N/A

<b>Name of Service:</b>	<b>Regulatory Committee Operations</b>
<b>Brief Description of Service:</b>	Stewarding the various oversight and review committees and promoting excellence in research.
<b>Customers Eligible to Request Service:</b>	<ul style="list-style-type: none"> <li>- All UCR faculty, researchers, students, and staff</li> <li>- Researchers from our community partner organizations</li> </ul>
<b>Web Address</b>	<a href="http://research.ucr.edu/ORI.aspx">http://research.ucr.edu/ORI.aspx</a>
<b>Service Level Agreement Specifics:</b>	<ul style="list-style-type: none"> <li>• Prepare agenda, record minutes in accordance with Federal guidelines</li> <li>• Advise committees regarding regulations and scientific issues, research issues as requested</li> <li>• Ensure inter- and intra – committee communications</li> <li>• Draft committee policies, guidelines, SOPs, forms and correspondence</li> <li>• Schedule, facilitate and draft reports for required inspections</li> <li>• Investigate non-compliance allegations, draft related reports, provide recommendations to committees and IO regarding relevant regulations, implement committee decisions regarding non-compliance</li> <li>• Oversee and document t IACUC occupational health reviews</li> <li>• Interface with campus units regarding occupational health requirements for biosafety programs</li> </ul>
<b>Recharge Services</b>	N/A
<b>Premium Services</b>	N/A

<b>Name of Service:</b>	<b>Regulatory agency obligations &amp; accreditation maintenance</b>
<b>Brief Description of Service:</b>	Ensuring compliance with federal/state mandates, associated statuses. Engaging in external, peer-driven assessments of UCR operations.
<b>Customers Eligible to Request Service:</b>	- All ORI committees, faculty, researchers, external accreditors, state and federal regulatory agencies.
<b>Web Address</b>	<a href="http://research.ucr.edu/ORI.aspx">http://research.ucr.edu/ORI.aspx</a>
<b>Service Level Agreement Specifics:</b>	<ul style="list-style-type: none"> <li>• Complete annual reports</li> <li>• Maintain accreditations, registrations, assurances and all required regulatory documentation</li> <li>• Facilitate regulatory agency accreditation site visits, inspections and audits</li> <li>• Participate in ongoing education and quality improvement initiatives in order to ensure compliance and maintain accreditations</li> </ul>
<b>Recharge Services</b>	N/A
<b>Premium Services</b>	N/A

<b>Name of Service:</b>	<b>Training and Education</b>
<b>Brief Description of Service:</b>	Ensuring training of all committee members and raising the level of research excellence and compliance on campus.
<b>Customers Eligible to Request Service:</b>	- All UCR faculty, students and staff - All ORI committee members
<b>Web Address</b>	<a href="http://research.ucr.edu/ORI.aspx">http://research.ucr.edu/ORI.aspx</a>
<b>Service Level Agreement Specifics:</b>	<ul style="list-style-type: none"> <li>• Facilitate and document required investigator training</li> <li>• Develop, implement and monitor committee member training</li> <li>• Provide campus and partner organizations with education regarding regulatory requirements and required public outreach</li> </ul>
<b>Recharge Services</b>	N/A
<b>Premium Services</b>	N/A

<b>Name of Service:</b>	<b>General/Other</b>
<b>Brief Description of Service:</b>	Miscellaneous services
<b>Customers Eligible to Request Service:</b>	- All: UCR faculty, staff, and students and committee volunteers
<b>Web Address</b>	<a href="http://research.ucr.edu/ORI.aspx">http://research.ucr.edu/ORI.aspx</a>
<b>Service Level Agreement Specifics:</b>	<ul style="list-style-type: none"> <li>• Liaison with other research-related campus units to ensure all regulatory, legal and policy requirements are met</li> <li>• Compare awarded fed grants &amp; MTAs to IRB protocol, ensure compliance</li> <li>• Compare awarded grants, contracts &amp; MTAs to IACUC and IBC protocols to ensure compliance</li> <li>• Comply and execute public records requests</li> <li>• Participate in UC system-wide consideration of relevant policy and response to government/court-related issues</li> <li>• Represent UCR as a global research university</li> </ul>
<b>Recharge Services</b>	N/A
<b>Premium Services</b>	N/A

**PROPOSAL DEVELOPMENT**

RED supports grant proposal development through its **Research Development** unit. Responsibilities include coordination with faculty and staff across the UCR campus to generate competitive proposals to federal and state agencies, foundations, and other entities.

**SERVICE LINE SUMMARY**

Research Development				
Service	Level of Service			Page #
	Core Service	Premium Service	Recharge Service	
Unit Services				
Write and edit funding proposals	√			21
Coordinate proposal activity in academic units	√			21
Manage internal competitions for limited proposals	√			22

**GENERAL SERVICE OVERVIEW**

The current two-member staff reviews proposal narratives for clarity, brevity, completeness, and responsiveness to funder priorities and requirements. Writing sections or sometimes the majority of the proposal *de novo* depends upon the kind of grant being sought and its scope. Assistance to faculty submitting proposals includes help identifying opportunities, participation in planning, suggesting use of an external evaluator, preparation of graphics, and other tasks as needed. Activities also include management of internal review and selection of so-called “limiteds,” competitions for which agencies restrict the number of proposals allowed from a single institution.

**SERVICE LINE DETAIL**

Name of Service:	<b>Write and edit funding proposals</b>
Brief Description of Service:	Write, review, and edit funding proposal narratives
Customers Eligible to Request Service:	<ul style="list-style-type: none"> <li>- Faculty</li> <li>- Staff</li> </ul>
Web Address	<a href="http://research.ucr.edu/ord/proposaldevelopment.aspx">http://research.ucr.edu/ord/proposaldevelopment.aspx</a>
Service Level Agreement Specifics:	<ul style="list-style-type: none"> <li>• Edit proposals written by faculty, narrative/abstract takes from one to two days, in some cases working iteratively with the faculty member.</li> <li>• Use Track Changes to indicate suggestions.</li> <li>• Write de novo sections of proposals. Writing sections, e.g. management plan, outreach plan, and editing for larger proposals.</li> <li>• Activity can span days to weeks.</li> </ul>
Recharge Services	N/A
Premium Services	N/A

Name of Service:	<b>Coordinate proposal activity in academic units</b>
Brief Description of Service:	Coordinate proposal activity in academic units including sharing funding opportunities.
Customers Eligible to Request Service:	<ul style="list-style-type: none"> <li>- Research Development staff and faculty as needed.</li> </ul>
Web Address	<a href="http://research.ucr.edu/ord/proposaldevelopment.aspx">http://research.ucr.edu/ord/proposaldevelopment.aspx</a>
Service Level Agreement Specifics:	<ul style="list-style-type: none"> <li>• Coordinate projects with research development personnel in Colleges and units</li> <li>• Convene a monthly meeting among departmental research development staff</li> </ul>
Recharge Services	N/A
Premium Services	N/A

Name of Service:	<b>Manage internal competitions for agency and foundation requests for proposals (RFPs) that limit the number of proposal submissions from campus.</b>
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Brief Description of Service:	Collect internal proposals to the Vice Chancellor for Research and Economic Development to submit proposals from the UCR campus.
Customers Eligible to Request Service:	- Faculty
Web Address	<a href="http://research.ucr.edu/ord/proposaldevelopment.aspx">http://research.ucr.edu/ord/proposaldevelopment.aspx</a>
Service Level Agreement Specifics:	<ul style="list-style-type: none"> <li>• Post limited calls on the internal review website</li> <li>• Devise reasonable internal deadlines to allow the faculty selected to go forward with maximum time to prepare a full proposal</li> </ul>
Recharge Services	N/A
Premium Services	N/A

**CORPORATE AND STRATEGIC PARTNERSHIPS**

The **Corporate and Strategic Partnerships** (CPS) team at UC Riverside furthers the university’s mission by building relationships between campus and corporations that will enhance the discovery, translation, and application of knowledge that addresses some of the most vexing problems facing society.

**SERVICE LINE SUMMARY**

Service Line Summary				
Service	Level of Service			Page #
	Core Service	Premium Service	Recharge Service	
<b>Unit Services</b>				
Business Development Services	√			24
Campus-wide Corporate Coordination	√			24
Expand Research Partnerships with Industry	√			25

**GENERAL SERVICE OVERVIEW**

Based in the Office of Research and Economic Development, the CSP unit coordinates UCR’s corporate relationships that transcend the boundaries of one school. We assist faculty in identifying and cultivating corporate relationships while also working with industry to identify relevant ways to engage with the university.

The business development model used by the CSP team focuses on developing long-term relationships (vs. of transactional exchanges), making as many connections as possible throughout the entire university (research support, gifts, membership on advisory boards, student recruiting, professional development opportunities, etc.).

Benefits that flow from corporate partnerships include one or more of the following: gifts, sponsored research contracts, MTAs, access to industry research facilities, jobs and internships for students, real-world research problems, research commercialization, advisory board members, campus speakers, etc.



**SERVICE LINE DETAIL**

Name of Service:	<b>Business Development</b>
Brief Description of Service:	Concierge services for industry and supports faculty interested in working with industry
Customers Eligible to Request Service:	<ul style="list-style-type: none"> <li>• Anyone from industry interested in partnering with UCR</li> <li>• All faculty members</li> </ul>
Web Address	<a href="http://research.ucr.edu/OCP/">http://research.ucr.edu/OCP/</a>
Service Level Agreement Specifics:	<ul style="list-style-type: none"> <li>• Providing concierge services for industry (CSP team efficiently helps companies identify areas of mutual interest and then facilitates access to specific areas of research, recruiting, internships, licensing, etc.)</li> <li>• Support faculty members who are interested in working with industry</li> </ul>
Recharge Services	N/A
Premium Services	N/A

Name of Service:	<b>Campus-wide Corporate Coordination</b>
Brief Description of Service:	Repository for corporate relations and coordinate campus interactions with industry
Customers Eligible to Request Service:	<ul style="list-style-type: none"> <li>• UCR Faculty and Administration (regardless of college/school)</li> <li>• Research Labs</li> <li>• Research Centers</li> <li>• Office of Technology Commercialization</li> <li>• Office of Sponsored Research</li> <li>• Office of Career Services</li> <li>• Any UCR office that interacts with industry</li> </ul>
Web Address	<a href="http://research.ucr.edu/OCP/">http://research.ucr.edu/OCP/</a>
Service Level Agreement Specifics:	<ul style="list-style-type: none"> <li>• Leverage campus corporate engagement efforts by coordinating efforts with staff throughout the campus who interact with industry</li> <li>• Serve as a single repository of all corporate relations activities on campus</li> </ul>
Recharge Services	N/A
Premium Services	N/A

Name of Service:	<b>Research Partnerships with Industry</b>
Brief Description of Service:	Assist with the development of sponsored research collaborations with industry.
Customers Eligible to Request Service:	<ul style="list-style-type: none"> <li>• Faculty</li> <li>• Researchers</li> <li>• Academic Leadership</li> </ul>
Web Address	<a href="http://research.ucr.edu/OCP/">http://research.ucr.edu/OCP/</a>
Service Level Agreement Specifics:	<ul style="list-style-type: none"> <li>• Work with faculty, academic leadership, and research centers to enhance their ability to develop sponsored research collaborations with industry</li> <li>• Work with leadership and across schools to translate and shape complex research projects and University priorities into compelling proposals</li> </ul>
Recharge Services	N/A
Premium Services	N/A

## **CAMPUS VETERINARIAN / VIVARIA**

The Office of **Campus Veterinarian** (OCV) oversees all animal facilities at the University of California, Riverside (UCR) and provides programs of veterinary care, which include training, preventive medicine, clinical, and diagnostic services.

The OCV also provides for the procurement, housing, and care of the laboratory animals in the campus vivaria. Vivarium animal housing areas are centralized in the Vivarium 3 (or V3 in the Psychology building), Boyce Annex, Life Science Psychology (LSP), and Spieth. The OCV is responsible for routine animal care services, which include animal procurement, housing, provision of diets and water, daily observation of animals, reporting of abnormal conditions to the veterinary staff, carcass disposal, sanitization of rooms, cages, racks, and other equipment.

The laboratory animal care and use program at UC Riverside complies with federal, state, and local guidelines for laboratory animal care.

UC Riverside adheres to Federal laws and regulations as published in:

- Animal Welfare Act (AWA)
- Guide for the Care and use of Laboratory Animals (Guide);
- Public Health Service Policy;
- U.S. Government Principles Regarding the Care and Use of Animals.

The University has a letter of assurance on file with the Public Health Service and is registered as a research facility with the United States Department of Agriculture (USDA), and is accredited by the Association for Assessment and Accreditation of Laboratory Animals Care International (AAALAC).

UC Riverside's program for the humane care and use of laboratory animals involves several entities working together to ensure that the University complies with the numerous Federal, state, local, and institutional guidelines and regulations, and remains accredited by their regulatory agencies. These entities are the:

- Institutional Animal Care and Use Committee (IACUC),
- Research Compliance Officer, Office of Research Integrity,
- Office of Campus Veterinarian (OCV),
- Environmental Health and Safety
- Institutional Biosafety Committee (IBC)
- Radiation Safety Committee

All animal use at UC Riverside facilities is covered by IACUC approved Animal Use Protocols.

**SERVICE LINE SUMMARY – CAMPUS VETERINARIAN**

Service Line Summary				
Service	Level of Service			Page #
	Core Service	Premium Service	Recharge Service	
Unit Services				
Veterinary Medical Care	√	√		05
Regulatory Compliance Requirements	√			06
Security	√			07
Administration	√			08

**GENERAL SERVICE OVERVIEW**

- The current campus vivaria includes Vivarium 3 (or V3) in Psychology building, Boyce Annex, Life Science Psychology (LSP), and Spieth.
- The staffing within the OCV includes one Campus Veterinarian, one Animal Facility Manager, one Animal Health Technician, one Principal Animal Technician, three Animal Technicians, five Assistant Animal Technicians, and one Administrative Assistant.
- There are approximately 60 principal investigators using animals for research, teaching, and testing in 90 animal use protocols.
- There are approximately 7,000 mice, 100 rats, 50 chickens, 7 turtles, 10 bats, 18 hummingbirds, 30 lizards, 3,000 fish on campus.

**SERVICE LINE DETAIL – CAMPUS VETERINARIAN**

Name of Service:	<b>Veterinary Medical Care</b>
Brief Description of Service:	The OCV assesses the animal’s health condition, treat the animal, investigate an unexpected death, or advise on euthanasia.
Customers Eligible to Request Service:	Faculty (Principal Investigators), Graduate Students, and any other research personnel that house animals in the vivaria.
Web Address	<a href="http://research.ucr.edu/ocv.aspx">http://research.ucr.edu/ocv.aspx</a>
Service Level Agreement Specifics:	<ul style="list-style-type: none"> <li>• Provide guidance on anesthetics, analgesics, sedatives, and tranquilizers</li> <li>• Provide perioperative care</li> <li>• Provide diagnostic procedures</li> <li>• Treat ill animals</li> <li>• Quarantine incoming animals</li> <li>• Conduct rodent health surveillance program</li> <li>• Perform euthanasia</li> <li>• Perform necropsy</li> <li>• Provide veterinary consultation</li> <li>• Provide training on animal care and handling</li> <li>• Provide emergency veterinary care</li> </ul>
Recharge Services	N/A
Premium Services	N/A

<b>Name of Service:</b>	<b>Regulatory Compliance</b>
<b>Brief Description of Service:</b>	The OCV ensures that all animal research activities are performed in accordance with federal, state, and the institution's regulations and guidelines.
<b>Customers Eligible to Request Service:</b>	Faculty (Principal Investigators), Graduate Students, and any other research personnel that house animals in the vivaria.
<b>Web Address</b>	<a href="http://research.ucr.edu/ocv.aspx">http://research.ucr.edu/ocv.aspx</a>
<b>Service Level Agreement Specifics:</b>	<ul style="list-style-type: none"> <li>• Function as an IACUC member and veterinary representative</li> <li>• Review Animal Use Protocols (AUPs)</li> <li>• Inspect vivaria, laboratories, and all areas that house laboratory animals.</li> <li>• Provide guidance to investigators and all personnel involved in the care and use of animals to ensure appropriate husbandry, handling, medical treatment, immobilization, sedation, analgesia, anesthesia, and euthanasia.</li> <li>• Advise investigators on methods to relieve or alleviate pain and distress, perioperative care, and surgical procedures.</li> <li>• Represent the animal housing areas during on-site inspections or visits by regulatory or accrediting agencies, and in meetings with all other government agencies and committees.</li> </ul>
<b>Recharge Services</b>	N/A
<b>Premium Services</b>	N/A

<b>Name of Service:</b>	<b>Security</b>
<b>Brief Description of Service:</b>	The OCV oversees security for all vivarium space, installation, maintenance, and access card and key usage.
<b>Customers Eligible to Request Service:</b>	Faculty (Principal Investigators), Graduate Students, and any other research personnel that house animals in the vivaria. Other personnel who needs entry to the vivaria such as Physical Plant, EH&S, Police Department, Capital Planning, Architects and Engineering, etc.
<b>Web Address</b>	<a href="http://research.ucr.edu/ocv.aspx">http://research.ucr.edu/ocv.aspx</a>
<b>Service Level Agreement Specifics:</b>	<ul style="list-style-type: none"> <li>• Provide vivarium access to investigators</li> <li>• Monitor vivaria burglary alarm systems and surveillance cameras</li> <li>• Work with the IACUC, Police Department, and Strategic Communications on animal rights activities awareness</li> </ul>
<b>Recharge Services</b>	N/A
<b>Premium Services</b>	N/A

Name of Service:	<b>Administration</b>
Brief Description of Service:	The OCV oversees overall operations of all the campus vivaria.
Customers Eligible to Request Service:	Faculty (Principal Investigators), Graduate Students, and any other research personnel that house animals in the vivaria.
Web Address	http://research.ucr.edu/ocv.aspx
Service Level Agreement Specifics:	<ul style="list-style-type: none"> <li>• Allocate space and equipment within the vivaria</li> <li>• Participate in vivaria facility planning</li> <li>• Process purchase requisition</li> <li>• Process animal transfer request (import/export – on/off campus)</li> <li>• Establish/maintain standard operating procedures.</li> <li>• Document preparation and site visits coordination.</li> <li>• Place work orders for Physical Plant issues in the vivaria.</li> </ul>
Recharge Services	N/A
Premium Services	N/A

**SERVICE LINE SUMMARY - VIVARIA**

Service Line Summary				
Service	Level of Service			Page #
	Core Service	Premium Service	Recharge Service	
Unit Services				
ANIMAL HUSBANDRY		√	√	02
FACILITY MAINTENANCE & SANITATION			√	
ANIMAL HEALTH & TECHNICAL ASSISTANCE		√	√	
CAGE WASHING			√	
ADMINISTRATION	√	√	√	

**SERVICE LINE DETAIL - VIVARIA**

<b>Name of Service:</b>	<b>Animal Husbandry</b>
<b>Brief Description of Service:</b>	This service includes animal housing, feed and water, daily observation of animals, and cage, bedding, water bottle change.
<b>Customers Eligible to Request Service:</b>	Faculty (Principal Investigators), Graduate Students, and any other research personnel that house animals in the vivaria.
<b>Web Address</b>	<a href="http://research.ucr.edu/ocv.aspx">http://research.ucr.edu/ocv.aspx</a>
<b>Service Level Agreement Specifics:</b>	N/A
<b>Recharge Services</b>	<ul style="list-style-type: none"> <li>• Feeding</li> <li>• Watering</li> <li>• Cage &amp; Bedding Change</li> <li>• Water Bottle Change</li> <li>• Lid Change</li> <li>• Micro-Isolator Top Change</li> <li>• Check Animal Health</li> <li>• Other Care</li> </ul>
<b>Premium Services</b>	<ul style="list-style-type: none"> <li>• Breeding/Weaning</li> </ul>

<b>Name of Service:</b>	<b>Facility Maintenance &amp; Sanitation</b>
<b>Brief Description of Service:</b>	This service include, sanitization of rooms, storage areas, cage-washing facilities, corridors, and procedure rooms.
<b>Customers Eligible to Request Service:</b>	Faculty (Principal Investigators), Graduate Students, and any other research personnel that house animals in the vivaria.
<b>Web Address</b>	<a href="http://research.ucr.edu/ocv.aspx">http://research.ucr.edu/ocv.aspx</a>
<b>Service Level Agreement Specifics:</b>	N/A
<b>Recharge Services</b>	<ul style="list-style-type: none"> <li>• Floors, Sinks, &amp; Counters.</li> <li>• Walls, Ceilings, Light Fixtures</li> <li>• Drains</li> <li>• Intake/Outtake Vents</li> <li>• Waste Disposal</li> <li>• Equipment Maintenance/Repairs</li> <li>• Laundry</li> <li>• Cleaning Ventilated Racks</li> </ul>
<b>Premium Services</b>	<ul style="list-style-type: none"> <li>• None</li> </ul>

<b>Name of Service:</b>	<b>Animal Health &amp; Technical Assistance</b>
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Brief Description of Service:	This service includes veterinary medical care including treatment of ill animals, rodent health surveillance (sentinel testing), assistance to research personnel such as teaching injections to animals.
Customers Eligible to Request Service:	Faculty (Principal Investigators), Graduate Students, and any other research personnel that house animals in the vivaria.
Web Address	<a href="http://research.ucr.edu/ocv.aspx">http://research.ucr.edu/ocv.aspx</a>
Service Level Agreement Specifics:	N/A
Recharge Services	<ul style="list-style-type: none"> <li>• Animal Disposal</li> </ul>
Premium Services	<ul style="list-style-type: none"> <li>• Medication, Injections, Treatments</li> <li>• Consulting (Investigator, Student)</li> <li>• Sacrificing Animals</li> <li>• Technical Assistance (tattooing, punching, tail snipping, etc.)</li> </ul>

Name of Service:	<b>Cage Washing</b>
Brief Description of Service:	This service includes sanitation of cages, racks, and other equipment.
Customers Eligible to Request Service:	Faculty (Principal Investigators), Graduate Students, and any other research personnel that house animals in the vivaria.
Web Address	<a href="http://research.ucr.edu/ocv.aspx">http://research.ucr.edu/ocv.aspx</a>
Service Level Agreement Specifics:	N/A
Recharge Services	<ul style="list-style-type: none"> <li>• Cages, Lids, Micro-Isolator Tops, Racks, Water Bottles</li> </ul>
Premium Services	<ul style="list-style-type: none"> <li>• None</li> </ul>

Name of Service:	<b>Administration</b>
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Brief Description of Service:	This service includes overall operations of the campus vivaria including space/equipment allocation, animal procurement, purchase requisition, placement of work orders, etc.
Customers Eligible to Request Service:	Faculty (Principal Investigators), Graduate Students, and any other research personnel that house animals in the vivaria.
Web Address	<a href="http://research.ucr.edu/ocv.aspx">http://research.ucr.edu/ocv.aspx</a>
Service Level Agreement Specifics:	<ul style="list-style-type: none"> <li>• Vivaria Manager (Partial support)</li> <li>• Sentinel Testing</li> </ul>
Recharge Services	<ul style="list-style-type: none"> <li>• Monthly Per Diem Counts</li> <li>• Entering &amp; Sending Per Diem Counts (Computer Work)</li> <li>• Misc. Computer Work (work orders, contacting depts..., email, calendar, etc.)</li> <li>• Purchasing</li> <li>• Animal Order (no set-up)</li> </ul>
Premium Services	<ul style="list-style-type: none"> <li>• Animal Transfer (import/export)</li> <li>• New Set-up</li> <li>• Travel to Pick-up Animals</li> </ul>

**CENTRAL FACILITY FOR ADVANCED MICROSCOPY AND MICROANALYSIS (CFAMM)**

CFAMM is a research, service, and consulting laboratory for microscopic characterization of organic and inorganic materials, biological tissue and minerals applying electron beam techniques. The facility utilizes state-of-the-art equipment and its personnel conducts research and provides collaborative assistance, training and service to faculty, staff, and students at UC Riverside as well as to clients in industry, government, and academia.

**SERVICE LINE SUMMARY**

Service Line Summary				
Service	Level of Service			Page #
	Core Service	Premium Service	Recharge Service	
Unit Services				
CFAMM	√		√	02

**GENERAL SERVICE OVERVIEW**

- Operation, training, and access to FEI Titan Themis 300 Scanning Transmission Electron Microscope.
- Operation, training, and access to FEI Tecnai12 Transmission Electron Microscope.
- Operation, training, and access to FEI NNS450 Scanning Electron Microscope
- Operation, training, and access to FEI XL30 Scanning Electron Microscope
- Operation, training, and access to FEI Quanta 200i Focused Ion Beam/Scanning Electron Microscope.
- The above services are provided to 76 UCR faculty, 5 staff members, 32 UCR post docs, and 215 UCR students; 14 faculty from outside academic organizations, 18 researchers from 9 external non-academic organizations.

**SERVICE LINE DETAIL**

Name of Service:	<b>CENTRAL FACILITY FOR ADVANCED MICROSCOPY AND MICROANALYSIS (CFAMM)</b>
Brief Description of Service:	Advanced imaging and microanalysis of customer specimens by CFAMM staff utilizing electron beam techniques such as imaging and diffraction by transmission electron microscopy, imaging by scanning electron microscopy, chemical microanalysis by energy dispersive spectroscopy, electron backscattered diffraction analysis, sectioning of materials by focused ion beam technique. Preparation of customer specimens for imaging and microanalysis. Training of customers in operation of electron microscopes and performing imaging and microanalysis. Providing consultation and interpretation of results, images, and data to customers. Providing collaborative research support to customers.
Customers Eligible to Request Service:	Services are provided to any customer for a fee. Customers are granted individual access to operate independently facility instruments after passing required training course.
Web Address	<a href="http://cfamm.ucr.edu/">http://cfamm.ucr.edu/</a>
Service Level Agreement Specifics:	Staff support for operation and maintenance of the CFAMM facility.
Recharge Services	<p><u>Services:</u></p> <ul style="list-style-type: none"> <li>• Critical-Point-Drying (CPD)</li> <li>• Operator Assistance</li> <li>• Sample Preparation</li> <li>• Sputtering 108Auto</li> <li>• Training / Consultation</li> <li>• Ultramicrotome</li> <li>• Vacuum Evaporation</li> <li>• Lapping/polishing/cutting</li> <li>• Diamond Saw</li> <li>• Dimpler</li> <li>• Fullam Carbon Coater</li> <li>• Ion Milling</li> <li>• Syton Polishing</li> <li>• Tripod Polisher</li> <li>• Ultrasonic Cutter</li> </ul> <p><u>Operation</u></p> <ul style="list-style-type: none"> <li>• STEM Titan Themis 300</li> <li>• SEM XL30</li> <li>• SEM NNS450</li> <li>• TEM Tecnai12</li> <li>• FIB/SEM Quanta 200i</li> <li>• Advanced Support/Consultation</li> </ul>

	<p><u>General</u></p> <ul style="list-style-type: none"> <li>• Perform collaborative Research</li> <li>• Develop/implement research methods for SEM imaging and analysis</li> <li>• Develop/implement research methods for TEM imaging and analysis</li> <li>• Develop/implement research methods for EDX analysis of bulk specimens</li> <li>• Develop/implement research methods for EDX analysis of thin specimens</li> <li>• Provide routine maintenance of microscopes/equipment</li> <li>• Provide system administration of CFAMM computers</li> <li>• Develop, maintain and upgrade facility website</li> <li>• Establish/enforce facility policies and procedures</li> <li>• Develop, establish, enforce facility recharge policies and fees</li> <li>• Establish, develop, maintain facility safety protocols</li> <li>• Develop standard operating instructions for all facility equipment</li> <li>• Develop training procedures</li> <li>• Negotiate with vendors and enforce equipment maintenance contracts</li> <li>• Teach classes in electron microscopy techniques</li> <li>• Support teaching activities utilizing EM techniques</li> <li>• Create written reports to clients</li> <li>• Provide methodological support and expertise in EM to CFAMM users</li> <li>• Specify and request purchase of chemicals, consumables and equipment</li> <li>• Research or determine through experience or experimentation appropriate sample preparation techniques for various applications.</li> <li>• Prepare specimens for transmission electron microscopy including suspensions techniques, ion milling, cutting and mechanical polishing, fixation, dehydration, embedding, sectioning, attaining, negative staining, immuno labeling, critical point drying, and any other techniques required.</li> <li>• Prepare specimens for scanning electron microscopy including coating, thinning, polishing, fixation, dehydration, critical point drying and any other related techniques.</li> <li>• Perform specialized photomicrography techniques and digital imaging processing.</li> <li>• Perform operational maintenance and alignment of microscopes.</li> <li>• Routine maintenance of the microscopes and all ancillary equipment.</li> </ul>
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	<ul style="list-style-type: none"> <li>• Maintain a clean and safe working environment in all areas of the laboratory.</li> <li>• Maintain inventory of laboratory supplies and equipment</li> <li>• Prepare chemical reagents and maintain chemical inventory</li> <li>• Manage chemical, biohazard and radioactive waste</li> <li>• Provide collaborative EM research support to external research grants</li> </ul>
Premium Services	N/A