Research Support Fund Distribution

The University of Calgary and its affiliated institutions are committed to building a culture of research and innovation. The RSF grant is invested in various services.

In 2018/2019, UCalgary invested the RSF grant in **facilities** to support and maintain laboratories across campus. These funds help provide a vital physical space where the lights are on, the environment is safe, and the equipment is functional to ensure the research team can rely on a lab space where they can discover, create, and innovate. The RSF funding also continues to provide critical infrastructure to support UCalgary-affiliated researchers' access to Alberta Health Services (AHS) resources vital to their clinical health research projects. This is particularly true for grant-funded and unfunded studies.

Dedicating a significant portion of the grant to **research resources** ensures current and relevant material is available to support research and training at the undergraduate, graduate, and faculty levels. Maintaining a current library is at the very core of a post-secondary institution as it is a repository of knowledge and an academic foundation for the research enterprise. RSF funding contributes a portion of the annual fee for the web-based, administrative platform, EDGE, that AHS uses to manage the diverse requests for AHS resources related to health research.

This year, the portion of the RSF grant allocated to **management and administration** supported Research Accounting salaries and benefits as that team operates as a central service unit facilitating the administrative, post-award financial administration supporting research initiatives. Research Accounting is instrumental to research at UCalgary as it works with research teams, administration and leadership, and funding agencies to ensure accurate and timely reporting. AHS utilized a portion of RSF funds to support research administration at UCalgary. The RSF funding provided a team of trained research-oriented professionals to navigate the complex AHS environment. This team has streamlined the processes for data acquisition, management of privacy, and the use of IT resources within AHS for research purposes. Overall, the RSF funding has enabled staff to continue supporting researchers in meeting administrative requirements, to cut down the administrative barriers of initiating research and to carry out their important work in the most efficient manner. The RSF funding positively contributed to ongoing process improvements and increasing capacity to accommodate research activities.

This year, the portion of the RSF grant allocated to **regulatory requirements and accreditation** supported Animal Care Certification and Research Services ethics staff. The Institutional Research Information Services Solution (IRISS) provides researchers and their teams a convenient, secure, online process that streamlines and modernizes research certification application processes related to human ethics and animal care protocols. IRISS aims to reduce process time and will alert researchers of potential compliance issues. A key area of investment is to the AHS Health System Access team (HSA). This includes administrative support platforms to accelerate timelines for study initiation, navigation to appropriate AHS resources, streamlining of approval processes to enable the researchers to focus more directly on their programs of research, and engaging with clinical leaders and staff about the importance of research to improving care.

In line with the strategic vision to sharpen our focus on research and scholarship, UCalgary has dedicated salary support for in-house legal counsel to ensure faculty and students protect their **intellectual property** and successfully execute contracts and agreement when working with sponsored research and industry.

Affiliated Institutions

- Alberta Health Services (AHS)
- Alberta Children's Hospital Research Centre
- Foothills Hospital
- Peter Lougheed Centre
- Rockyview General Hospital
- Tom Baker Cancer Centre
- South Health Campus
- Calgary Lab Services
- Arctic Institute of North America (AINA)
- Alberta Sulphur Research Limited (ASRL)
- Carbon Management Canada Research Institutes Inc. (CMCRI)
- Canadian Energy Research Institute (CERI)
- University Technologies Inc.
- Calgary Technologies Inc.

- Alberta Bone and Joint Health Institute
- Canadian Research Institute for Law and the Family
- Van Horne Institute
- Vecova Centre for Disability Services and Research
- TRIUMF
- Bamfield Marine Sciences Centre
- Alberta Civil Liberties Research Centre
- PolicyWise

Outcomes Report

Listed below are the qualitative and quantitative measurements on the impact of the Research Support Fund at the University of Calgary, supplemented by the university's internal operation budget. Funds have been invested in each eligible category.

Research Facilities

UCalgary has many research facilities that support thousands of researchers (including faculty members, students and postdoctoral fellows) and provide the infrastructure to implement hundreds of research projects each year. A list of 32 core facilities across 7 faculties is available on the website. Additional facilities that support research include: Centre for Mobility and Joint Health (MoJo), Advancing Canadian Wastewater Assets (ACWA), Arctic Institute of North America, Biogeoscience Institute, International Microbiome Centre, CERC (Canada Excellence Research Chair) lab, The Life Sciences Innovation Hub, The Prairie Regional Data Center and W.A. Ranches. These facilities are crucial in the support of leading-edge research and innovation.

Innovate Calgary is assisting the University of Calgary in negotiating the transfer of the University Research Park land from the Province of Alberta to UCalgary, and establishing it as an Innovation Park.

Research Resources

A number of initiatives have been established at UCalgary in 2018/19:

- Creation and deployment of Secure Research Computing platform for L3/L4 data storage processing
- Recruitment of Director of Research Computing
- Significant ongoing upgrade in digital research infrastructure for advanced research computing and data management
- Library acquisition of Glenbow collection that includes roughly 22 million pages of textual records, two million phonographs, 125,000 books, 15,000 maps, 600 hours of audio recordings, as well as 4,000 videos and films

Management and Administration of Institutions and Research Enterprise

- More than 150 personnel are dedicated to research support systems in accounting, legal, and ethics, with an additional 150 personnel providing support in human resources, IT, and supply chain management.
- UCalgary's Research Services Office, with a staff of 46, offers services ranging from pre-award assistance to
 facilitation of major strategic initiatives, networks, centres of excellence and research infrastructure
 programs (including business case development, securing matching industrial support and developing
 commercialization strategies as necessary).
- Twelve faculty-embedded research facilitators across the UCalgary campus provide local support for individual researchers in securing and utilizing research funding.
- Strategic University Proposal and Platform Opportunity Review Team (SUPPORT): Four committees (Chairs, Infrastructure, Major Grants, and HQP Training) provide content feedback to researchers and make recommendations to the Vice-President (Research) for the strategic allocation of institutional opportunities, quotas, and major infrastructure and operating funds. The SUPPORT process provides more than 75 full peer reviews of research funding applications annually, and feedback to researchers has significantly improved quality and success of our applications (with nationally leading success rates in CRC and CFI JELF awards). Committees comprise 49 faculty members from across campus, plus associate vice-presidents (research) and representatives from service units responsible for implementation, such as Facilities Development and IT.

- Research Management System (RMS) is a new platform that was in its final stages of development in 2018-19 progressing towards a phased release in 2019 and 2020. It will provide complete management of the pre-award, post-award, and publication phases of a research grant or contract. Throughout the Grants and Contracts life-cycle, RMS will interface with other UCalgary systems, including IRISS and PeopleSoft, to provide a seamless process for grants and contracts management, eliminate re-keying of data and heightened transparency into the status of applications at any time. RMS will be rolled out across several releases, with increased functionality at each release. Release 1 will focus on a select number of competitions, and went live on June 18, 2019. We expect that all releases will be complete by September 2020.
- Alberta Health Services (AHS) utilizes the partnership model to provide research support through staff dedicated to the AHS Provincial Research Administration team. These include administrative support platforms (e.g. access to AHS IT systems, extraction of data from repositories, etc), efforts to accelerate timelines for study initiation, regulatory oversight to ensure the highest level of research integrity, some support in the translation of results into care, and streamlining of approval processes to enable the researchers to focus more directly on research programs. An example of an improvement was the implementation of the triage function. When the AHS Research Administration Team designated one FTE of an Advisor to the function of triaging and processing the organized studies, the team was able to "fast-track" approximately 25% of the data requests completion in one day or less and 50% of the data requests were completed in 5 calendar days or less.

Regulatory Requirements and Accreditation

The Institutional Research Information Services Solution (IRISS): an online automated workflow for researchers when applying for the certifications necessary to conduct research involving humans or animals. This system supports over 12,000 researchers annually and has significantly reduced the administrative workload when applying for ethics certification, supports efficiencies for the review boards, and ensures institutional compliance with Tri-Council guidelines.

- Submission Stats for 2018/19: (includes certification, modification, renewal & closure): 10,138 applications.
- Time to Determination in 2018: (upon submission to REB) 42 days for CHREB (certification only) and 59 days for CFREB (certification only).
- Quality Assurance (QA) and Regulatory Compliance services now being provided.
- Hosting of IRISS in a virtual environment for better business continuity and reliability.

Intellectual Property

- Legal & Intellectual Property (IP) works closely with the Office of the Vice-President (Research), General Counsel,
 Deans, faculty and Innovate Calgary (formerly University Technologies International). The team provides advice on
 the legal and business aspects of sponsored research and assists researchers in understanding options for
 commercialization.
- The current fiscal period has seen significant growth in research funding from spin-off companies to support validation and testing of inventions developed at the University of Calgary
- The Legal & IP team has also supported growth in research funding from a wide range of international organizations including the European Space Agency, NIH, DARPA (USA) and CONACYT (Mexico).
- The number of active NSERC partnership grants in 2018/19 is 117 (including Engage, CRD, SPG, IRC, Engage Plus, and I2I).
- The Legal & IP team works closely with Innovate Calgary to ensure efficient progression of new inventions from the university environment into the commercial world.
- Innovate Calgary was restructured in early 2017 and about 30 staff are now fully integrated in the university. This has enabled better support for commercialization of IP generated at the university.
- Intellectual Property policy is currently under review to better support the research community.