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 2019/20, 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 supports workflows in the administrative AHS database used to capture volume and timeline metrics within the Health System Access (HSA).

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 responsible for the post-award financial administration of sponsored research and restricted funding. Research Accounting is instrumental to research at UCalgary as it works with research teams, administration and leadership, and funding agencies to ensure compliance with agency guidelines and policies, as well as accurate and timely reporting. The RSF funding allocated to AHS is reinvested in various services to UCalgary faculty and staff provided by the AHS HSA team. 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, Research Services ethics and compliance, and environment health and safety 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 ensure AHS maintains its regulatory obligations to maintain patient privacy, a detailed health information disclosure log and monitoring of chain of custody for the disclosures.

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
    - 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 30 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**, **W.A. Ranches** and School of Architecture, Planning and Landscape (SAPL) **City Building Design Lab**. These facilities are crucial in the support of leading-edge research and innovation.

Innovate Calgary is assisting the University of Calgary in transforming the University Research Park into a new Innovation zone: University Innovation Quarter.

Research Resources

A number of initiatives have been established at UCalgary in 2019/20:
- Significant ongoing upgrade in digital research infrastructure for advanced research computing and data management.
- University of Calgary has been a member of the HathiTrust Digital Library since 2011 and the Library recently expanded our agreement by signing on to the Emergency Temporary Access Service (ETAS). During this period of restricted physical access to our collections, the agreement provides researchers online reading access to more than 1.2 million in-copyright digitized items, which is about 33% our physical collections. This temporary access is an expansion to the normal access to public domain corpus.
- Continued support and deployment of Secure Research Computing platform for L3/L4 data storage processing.

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, partnerships 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)*: Six committees (Chairs, Infrastructure, Major Grants and Partnerships, Prizes and Awards, and 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. Committees comprise 45 faculty members from across campus, plus associate vice-presidents (research) and representatives from service units responsible for implementation, such as Facilities Development, Supply Chain Management and IT.
- The Research Management System (RMS) is the platform at the University of Calgary that provides complete management of the research life cycle from pre-award through to publication of the results a research grant or contract. RMS continues to be released in phases as new functionality is developed. Throughout the Grants and Contracts life-cycle, RMS interfaces 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. Release-1 focused on a select number of single sponsor competitions, and went live on June 18, 2019. Two subsequent releases have delivered functionality including:

Post-Award, Project Set-up, Notice of Decision, Ethics, Animal Care and Biosafety, again targeting select single sponsor competitions. Release-4 which is planned for November/December 2020 will include Amendments and Multi-Sponsor functionality. It is of note, it is anticipated that over September and October of 2020 all single sponsor competitions will be supported by RMS.

- AHS utilizes the partnership model to provide research support through staff dedicated to the HSA team. These services include administrative support platforms (e.g. access to AHS IT systems, extraction of data from repositories, access to to operational areas, etc), efforts to accelerate timelines for study initiation, navigation to to appropriate AHS resources, streamlining of approval processes to enable 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. a 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 2019/20: (includes certification, modification, renewal & closure): 8,045 applications (value does not include reportable events).
- Time to Determination in 2019: (upon submission to REB) 44 days for CHREB (*certification only*) and 55 days for CFREB (*certification only*).
- Quality Assurance (QA) and Regulatory Compliance services are provided to ensure that all clinical research meets high-quality standards.Conducted 8 Internal File Reviews of Investigator-initiated clinical trials
- CITI Canada online training completed: 1729 people - Good Clinical Practice course; 948 people - Health Canada Division 5 course; 459 people - Biomedical Ethics course; 305 people - Social and Behavioural Research course
- Hosting of IRISS in a virtual environment for better business continuity and reliability. REB Exchange adds a new set of features which enables a single ethics application for multi-site studies and reduces the burden on participating sites.
- Pursuing institutional licensing related to cannabis research.

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 2019/20 is 136 (including Alliance, CRD, Engage/Engage Plus, I2I, IRC and SPG).
- The Legal & IP team works closely with Innovate Calgary to ensure efficient progression of new inventions from the University environment into the commercial world.
- The University's Intellectual Property policy is currently under review to better support the research community.