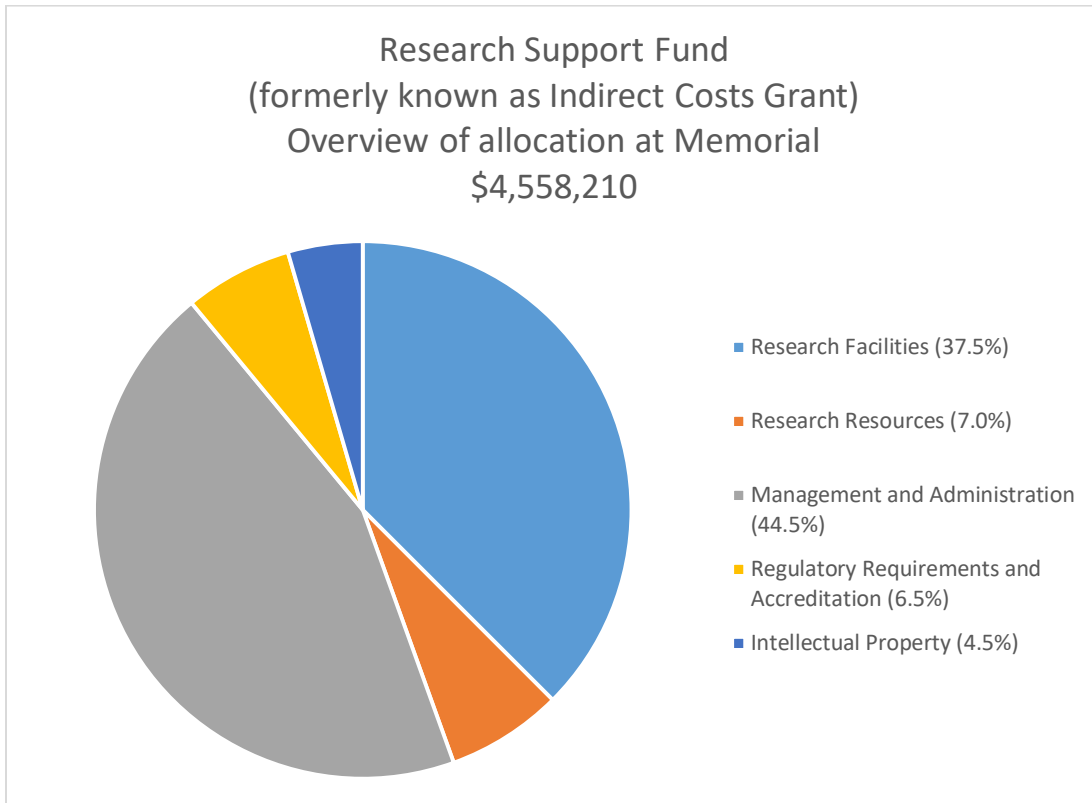


## Memorial University of Newfoundland Research Support Fund Report 2021-2022

The grant provided through the Government of Canada Research Support Fund (RSF) is essential to Memorial's research success. Funding is allocated among a variety of activities that support the research enterprise. In 2021-2022, Memorial received \$4,558,210. The distribution of this funding is outlined in the chart below.



**Memorial University of Newfoundland – Research Support Fund – 2021-22 Performance Indicators and Target Outcomes**

Eligible Program Expenditure Category	Institutional Performance Objectives	Performance Indicator	Target Outcomes	Outcomes Reported at Year-End
Research Facilities	<p>Research data maintained through appropriate data storage capacity.</p> <p>Competent technical staff and appropriate facilities to maximize research support.</p>	<p>Volume of data back-up.</p> <p>Provision of technical support appropriate for research needs and functional equipment.</p>	<p>Research data maintained.</p> <p>Technical research support facilities meeting the needs of researchers and graduate students.</p>	<p>Data storage capacity in the Information Technology Services (ITS) data centres is approximately 900TB to support storage requirements, which includes research storage. 100% of this data was backed up on a regular basis.</p> <p>Memorial’s IT Governance and Collaboration Framework includes a research IT committee which provides input to the university IT governance council.</p> <p>With its team of engineers, technologists and craftpersons, and with its significant investment in technology and equipment, the Department of Technical Services assists researchers and graduate students in the design and development of the many custom devices required by their experimental programs.</p> <p>The Department of Technical Services is responsible for the production of cryogenic liquids for Memorial and must ensure an uninterrupted supply of liquid nitrogen and liquid helium. The department produces greater than 40,000 litres of LN2 and 2.000 litres of LHe annually.</p> <p>Significant facility renewal has improved reliability of supply of cryogenic liquids and</p>

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	<p>Research infrastructure upgrades and development.</p>	<p>Structural condition of buildings and laboratories.</p>	<p>A safe working environment.</p>	<p>facilitated the successful move of research instruments to the Core Science Facility.</p> <p>Continued investment in professional development (via virtual conferences, training seminars, and in-person meetings where possible) for scientific staff within the Core Research Equipment &amp; Instrument Training (CREAIT) Network laboratories ensures continuity of high quality/expert laboratory output along with high quality performance management for a Network of sophisticated scientific equipment and instrumentation.</p> <p>Animal Care and Veterinary Resources added technical personnel to assist in evaluation and space assignments; &gt;30% increase in animal research programming.</p> <p>The Department of Technical Services provides the staffing and maintains certifications to ensure that Memorial’s 300 fume hoods and 100 Biological Safety Cabinets are compliant with current legislation. This capability proved to be highly valuable in assisting with commissioning of the Core Science Facility due to pandemic related travel restrictions for vendors.</p> <p>Improvements to Animal Resource Centre HVAC infrastructure and controls with planning underway for Environmental Health and Safety deficiencies for Vivarium breeding facility for swine.</p>
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**Memorial University of Newfoundland – Research Support Fund – 2021-22 Performance Indicators and Target Outcomes**

<p>Research Resources</p>	<p>Ensuring Memorial University’s researchers and students have the essential resources available within all branches of the Library system and access to all required content not held onsite</p>	<p>Collection usage data as well as document delivery metrics.</p>	<p>Provide efficient and effective access to all library research content required by researchers and students.</p>	<p>Invested in online access to academic literature and primary sources. Continue to support open access publishing for Memorial University authors through discounted and waived article processing charges (APCs) negotiated as part of journal subscription packages.</p>
<p>Management and Administration of Institution’s Research Enterprise</p>	<p>Continue to increase research intensity and provide exemplary service in relation to all areas of research administration at Memorial University of Newfoundland.</p> <p>Optimizing pre- and post-award services offered to Memorial’s research community by Research Grant and Contracts (RGCS) and Strategic Institutional Research Initiatives (SIRI).</p> <p>Maximizing the impact of Memorial’s multi-disciplinary array of laboratories and</p>	<p>Annual metrics have been developed to track the annual progression and success of research intensity at Memorial University.</p> <p>Research office metrics.</p> <p>Metrics for the utilization of CREAT facilities.</p>	<p>Maintain and increase research intensity.</p> <p>Maintain or improve service levels.</p> <p>Maintain or improve service levels.</p>	<p>Maintained high levels of Tri-Agency funding. Overall funding from all sources increased over 2020-21 levels.</p> <p>Continued development of highly effective client communications and management of services through extensive consultations, feedback and change initiatives. During this year, the RGCS and SIRI offices merged to become Research Initiatives &amp; Services (RIS), which now houses all pre- and post-award services within one office.</p> <p>Enhancement of CREAT research instrument system remote access and remote research data access. CREAT user numbers decreased to 355 in 2020-21, largely due to COVID-19 restrictions,</p>

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	<p>equipment through the Core Research Equipment and Instrument Training (CREAIT) Network.</p> <p>Providing academic unit resources to assist with grants facilitation, research development, grant administration and project management.</p>	<p>Researcher engagement with grants facilitation within the units and continued professional development of research administration staff.</p>	<p>Research funding success and researcher participation rates; maintain or improve financial oversight of research.</p>	<p>but with the resumption of normal research activities and the relocation to the new Core Sciences Facility, user numbers increased to 557 and are expected to return to pre-pandemic levels. The adoption of remote access is expected to further enhance the user experience going forward.</p> <p>RSF supported annual membership registrations and conference attendance for continuing education of grants facilitation officers in various faculties.</p>
<p>Regulatory Requirements and Accreditation</p>	<p>Maintain high-quality support for ethical research and teaching through Memorial University’s Ethics Boards and Animal Care Services.</p>	<p>Number of researchers and graduate students involved in human and animal research.</p>	<p>Maintain or improve service levels.</p>	<p>The Interdisciplinary Committee on Ethics in Human Research (ICEHR) received 237 new ethics applications and 144 amendment requests in the fiscal year April 1, 2021 - March 31, 2022. As well, ICEHR processed 525 annual updates, which monitor continued ethics review for compliance with the TCPS2 for the duration of a research project involving human participants. Ethics clearances were renewed if data collection was ongoing and/or expected to continue, and closed if data collection was finished or because the researcher did not provide an annual update and did not respond to repeated reminders that their clearance had expired.</p>

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	Maintain infrastructure, programming and staffing necessary to meet regulatory standards and to encourage excellence and innovation in research.	Proper infrastructure for and care of animals, including HVAC, housing, procedure and behavioural testing spaces. Ensuring appropriate environmental monitoring to safeguard animal wellbeing and conditions for research.	A safe, ethical research environment within Animal Care Services maintaining CCAC regulatory requirements.	<p>Service levels have been maintained, and workload is on par with that of the past five years.</p> <p>Discovery and development phases of Memorial’s software that will integrate animal ethics oversight with post-approval research activities. Implementation for research community will be in Spring 2023.</p> <p>Purchase of equipment in support of animal models of research, including new rack washer, which will allow for redundancy in this critical program area.</p> <p>Funding for evaluation of and functional planning for new swine facility in accordance with CCAC recommendations.</p>
Intellectual Property	To assist Memorial University’s researchers with intellectual property protection, commercialization, industry engagement, and related activities.	Increase in industry engagement and collaboration with external partners.	Creation of collaborations and partnerships with external stakeholders.	The Research Innovation Office (RIO) assisted 95 start-ups (e.g. IP advice and funding advice) and met with 158 companies and 850 faculty, students and staff on intellectual property, research commercialization and industry collaboration. RIO serves in 51 institutional/eco-system boards and committees with industry.
	Implementation of a process for developing a new institutional Innovation Strategy.	Endorsement to initiate the Innovation Strategy process.	Draft of a new strategy to guide Innovation at Memorial University.	Consultations are completed and a first draft of the Innovation Strategy is finalized and shared online for feedback from internal and external stakeholders.