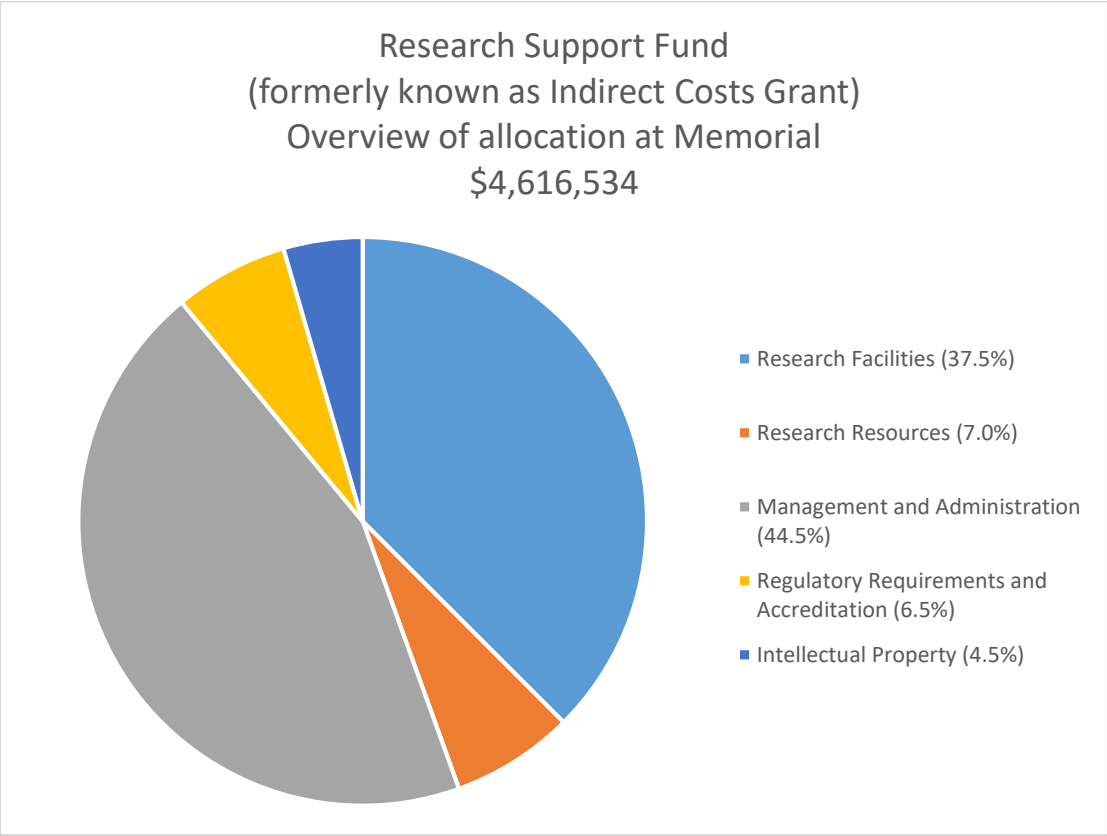


Memorial University of Newfoundland Research Support Fund Report 2020-21

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 2020-21, Memorial received \$4,616,534. The distribution of this funding is outlined in the chart below.



Memorial University of Newfoundland – Research Support Fund – 2020-21 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>Continued investment in professional development (via virtual conferences and training seminars) for scientific staff within</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>the Core Research Equipment & 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 Technicians hired into vacant positions that were vacated as a result of incumbents being successfully trained to take on enhanced technical and management roles. Hiring from within Animal Care Services ranks attests to the quality of training opportunities. Recruitment continues to be a challenge due to the lack of college- and university-level training for veterinary and vet tech staff in Newfoundland and Labrador.</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.</p> <p>Several ancillary pieces of equipment were purchased/installed and will allow older laboratory equipment to continue to meet needs of researchers. Two nodes of CREAIT will relocate to the new Core Science Facility early in the fall of 2021, with larger and greatly enhanced facilities for the instrumentation and users.</p>
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Memorial University of Newfoundland – Research Support Fund – 2020-21 Performance Indicators and Target Outcomes

				<p>A bulk clean bedding dispensing system has been identified for the Animal Resources Centre. This will reduce airborne allergens and improve occupational health and safety conditions for employees by markedly reducing heavy lifting of bedding material.</p> <p>New swine caging for the Animal Resource Centre will allow for reduced height differential between animals and caregivers and will improve air quality through the reduction of soiling of animals.</p>
Research Resources	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	Collection usage data as well as document delivery metrics.	Provide efficient and effective access to all library research content required by researchers and students.	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 and by maintaining memberships with open access (OA) publishers. In addition to contactless pickup, invested in large ebook packages from key academic publishers to enhance access to monograph literature during COVID-related facility closures.

Memorial University of Newfoundland – Research Support Fund – 2020-21 Performance Indicators and Target Outcomes

<p>Management and Administration of Institution's Research Enterprise</p>	<p>Maintain support to the implementation of the key objectives outlined within Memorial University's Strategic Research Intensity Plan (SRIP) to provide continued improvement and gain increased efficiency in research administration.</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 equipment through the Core Research Equipment and Instrument Training (CREAIT) Network.</p>	<p>Metrics have been developed to track the annual progression and success of SRIP.</p> <p>Research office metrics.</p> <p>Metrics for the utilization of CREAIT 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 2019-20 levels.</p> <p>Continued development of highly effective client communications and management of services through extensive consultations, feedback and change initiatives.</p> <p>Enhancement of CREAIT research instrument system remote access and remote research data access. CREAIT user numbers decreased to 355 from 680 the year prior, largely due to COVID-19 restrictions, but with the resumption of normal research activities and the relocation to the new Core Sciences Facility, use of the facilities is expected to return to pre-pandemic levels. The adoption of remote access is expected to further enhance the user experience going forward.</p>
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Memorial University of Newfoundland – Research Support Fund – 2020-21 Performance Indicators and Target Outcomes

	<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>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 191 new ethics applications and 142 amendment requests. There were 563 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. Service levels have been maintained during the pandemic, and workload is on par with that of the past few years.</p>

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	Maintain infrastructure, programming and staffing necessary to meet regulatory standards and to encourage excellence and innovation in research.	Proper housing and care of animals. Ventilated caging for animals. Ensuring emergency power to be safeguarded against animal distress/loss.	A safe, ethical research environment within Animal Care Services maintaining CCAC regulatory requirements.	Cross-training and purchase of international online resources has enabled lab-animal research-specific advanced certification for technical staff. COVID has highlighted the “Critical 1” level of ACS’ 24/7/365 staffing needs.
Intellectual Property (IP)	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	There were 24 disclosures made, two patents filed, three patents issued and 79 grants of rights. There were also 179 companies met with, 77 industry R&D contracts (36 of which with Atlantic Canadian companies) and 170 new spin-off or startup companies formed (1 with university IP and 170 without IP assignment but as a result of institutional support).