# 2022-2023 Research Support Fund Research Security

Public Acknowledgement, Objectives & Outcomes

Office of the VP (Research & International)

The University of Manitoba received **$602,592** in Federal RSF-IPG Research Security support.

The following provides an overview of how the funds were spent under each of the five expenditure categories (including the affiliated institutions):

| Management & Administration | Information Resources |
|---|---|
| $302,592 | $300,000 |

*Management & Administration*

Research Security Office

The University of Manitoba established the Research Security Office to support the National Security Guidelines for Research Partnerships by assisting and coordinating research security activities and training across the institution.

The Research Security Office consists of a Director, a Research Security Officer, and a Research Security Assistant.  It has acquired two external programs for compliance to conduct the necessary security risk and sanctions due diligence required by NSERC, NIH and all other US federal funders:

- Computer Services Inc. (CSI) WatchDog Elite for screening against 16 US, Canadian, and International (EU) watch and sanctioned lists.
- Kharon Clearview an intelligence firm focused on uncovering the networks of sanctioned and other high-risk actors by translating data from 25 different languages.

Current operations are to build capacity to provide one on one risk assessment support for NSERC Alliance Grant applications while continuing to do security, risk, and sanction due diligence for all other research partnerships and research contracts with industry members.

The future operational plans are based on internal needs assessments, funding agencies, provincial and federal guidelines and requirements, there will be a need to expand the Research Security Office.

*Information Resources*

<u>Advanced Research Computing (ARC) Security</u>

The renewal of the University of Manitoba's Grex HPC System and Infrastructure Renewal. Grex was originally built in 2010 and provides UM researchers with access to as many as 3000 core years of computing and storage capacity. A significant portion of the computing system and supporting infrastructure is obsolete, at growing risk of failure and constrains our ability to meet growing local demand for this capability.

The modernization of the HPC facility includes:

- Replacement of 3000 obsolete processor cores
- Replacement of obsolete storage network equipment
- Repair or replacement of the heavily corroded cooling system water supply
- Replacement of obsolete racks and cooling doors
- Updating the cooling loop system to easily connecting new racks
- Updating the electrical distribution with an overhead busbar system
- Adding an overhead cabling distribution system
- Commissioning an electrical and mechanical engineering assessment

While completing this modernization effort, this renewal will document the incremental infrastructure improvements required to enable future expansion of this facility to meet growing demand for research computing capacity.

## 2022-2023 Performance Indicators and Outcomes

| Project Title | Output (Investment of Research Security Funds) | Performance Objectives | Performance Indicators | Target Outcomes | Reported Outcomes |
|---|---|---|---|---|---|
| Research Security Office | $302,592 invested in hiring research security staff and providing research security training (officers, assistance, etc.) | • Assist in coordinating research security across the Institution <br> • Research Security Officer and Office Assistant positions <br> • Acquire & maintain security software licenses | Aid in identifying and mitigating research security risks | Identify and mitigate risks to research security (physical, cyber, partnerships, intellectual property, people | • Salaries and benefits for the Director, Research Security Officer & Research Security Office Assistant <br> • Acquired the Computer Services Inc. WatchDog Elite for screening and the Kharon Clearview Security Software <br> • One on One risk assessments |
| Advanced Research Computing (ARC) Security | $300,000 invested in expanding cyber security infrastructure (computer processing, network connectivity, data storage and data backup) | • Assist researchers (faculty, students, and staff) with accessing both local and national ARC systems and support | • Perform computationally and data-intensive research and data management | Increase security and its user-contributed systems, providing archiving, capacity, and space & cooling for centralized, secure hosting of research-contributed systems | - Procurement of technology equipment initiated <br> - Installation in process |