2025/06/12

SNOLAB Report

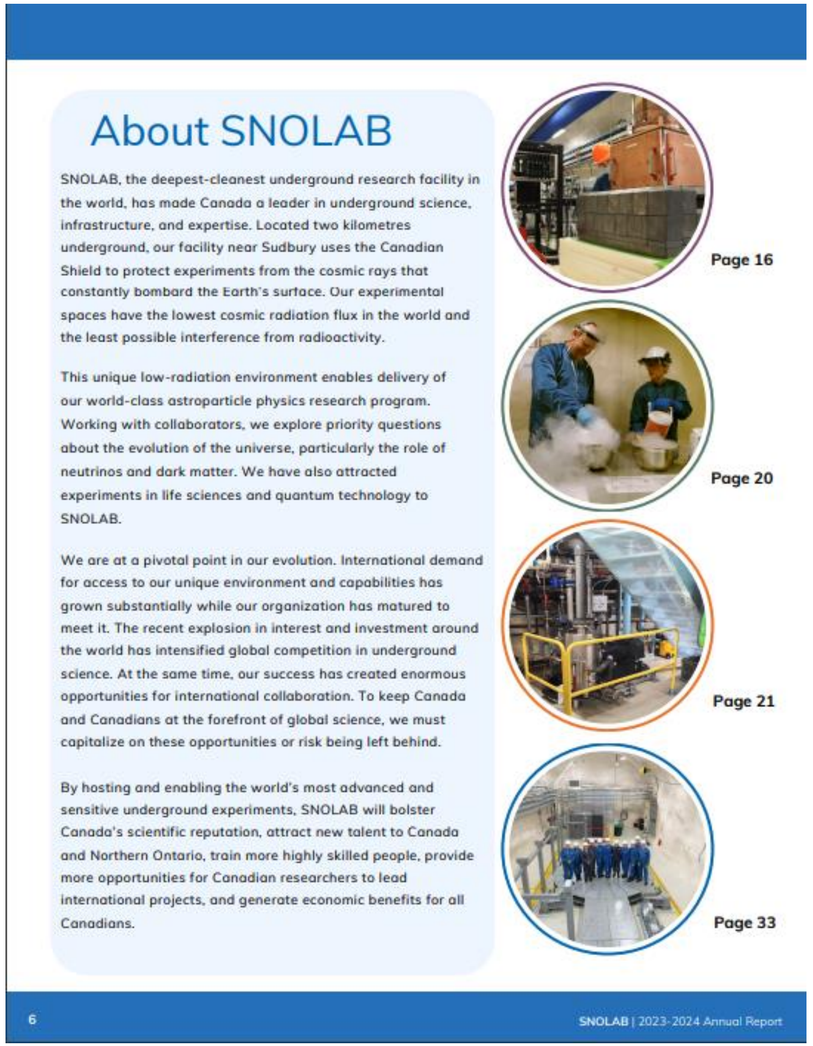
Jodi Cooley

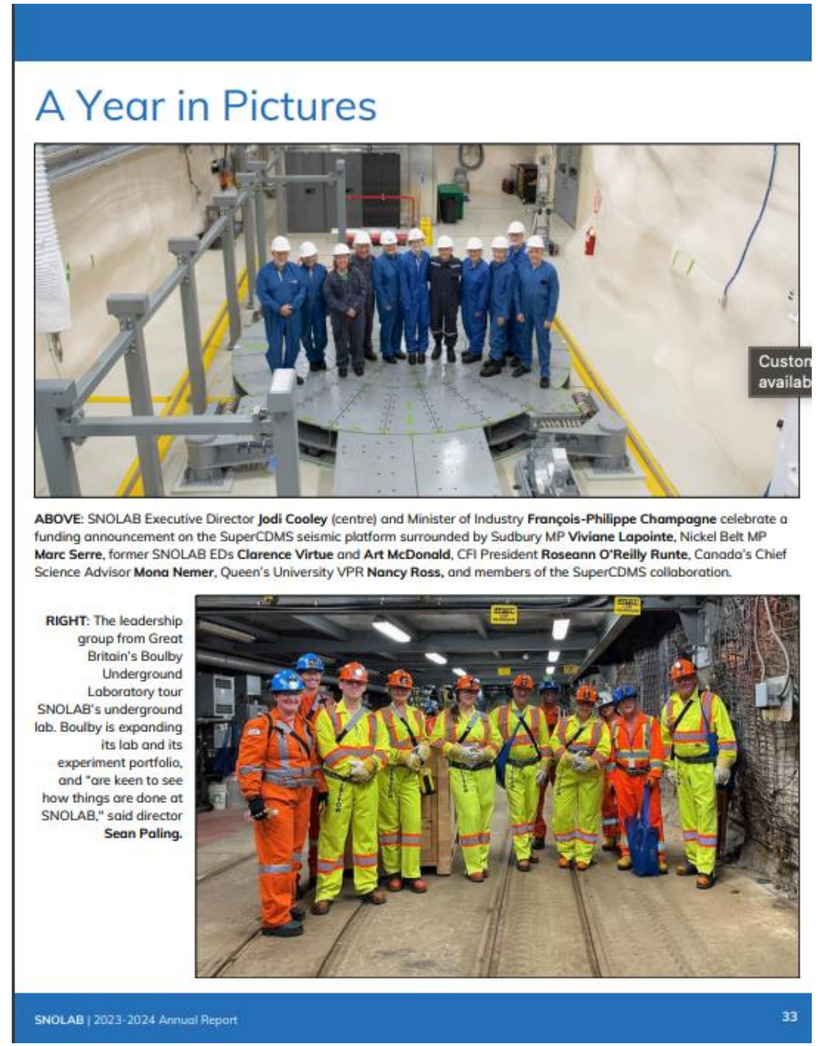
Executive Director | SNOLAB

Professor of Physics | Queen’s University

Adjunct Research Professor | SMU

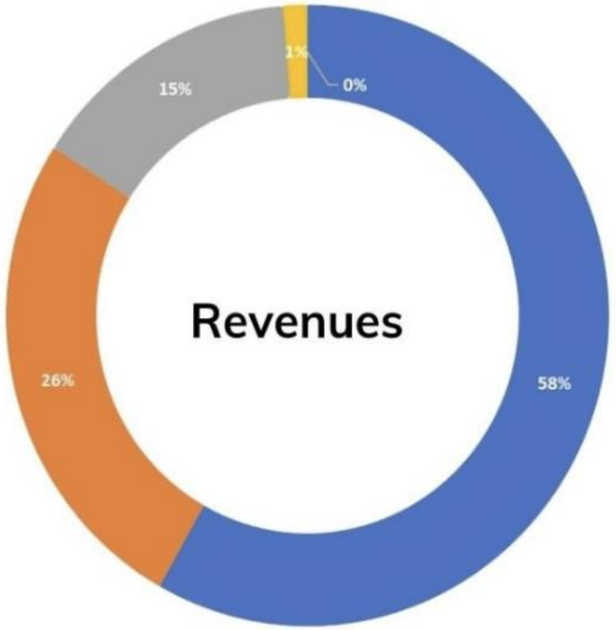
2023-2024 Annual Report Now Available



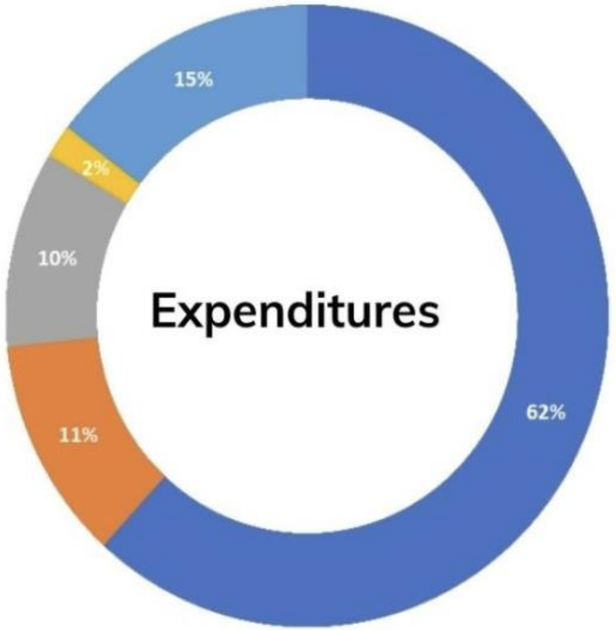


https://www.snolab.ca/about/strategic-plan/

FY24 Revenues and Expenditures

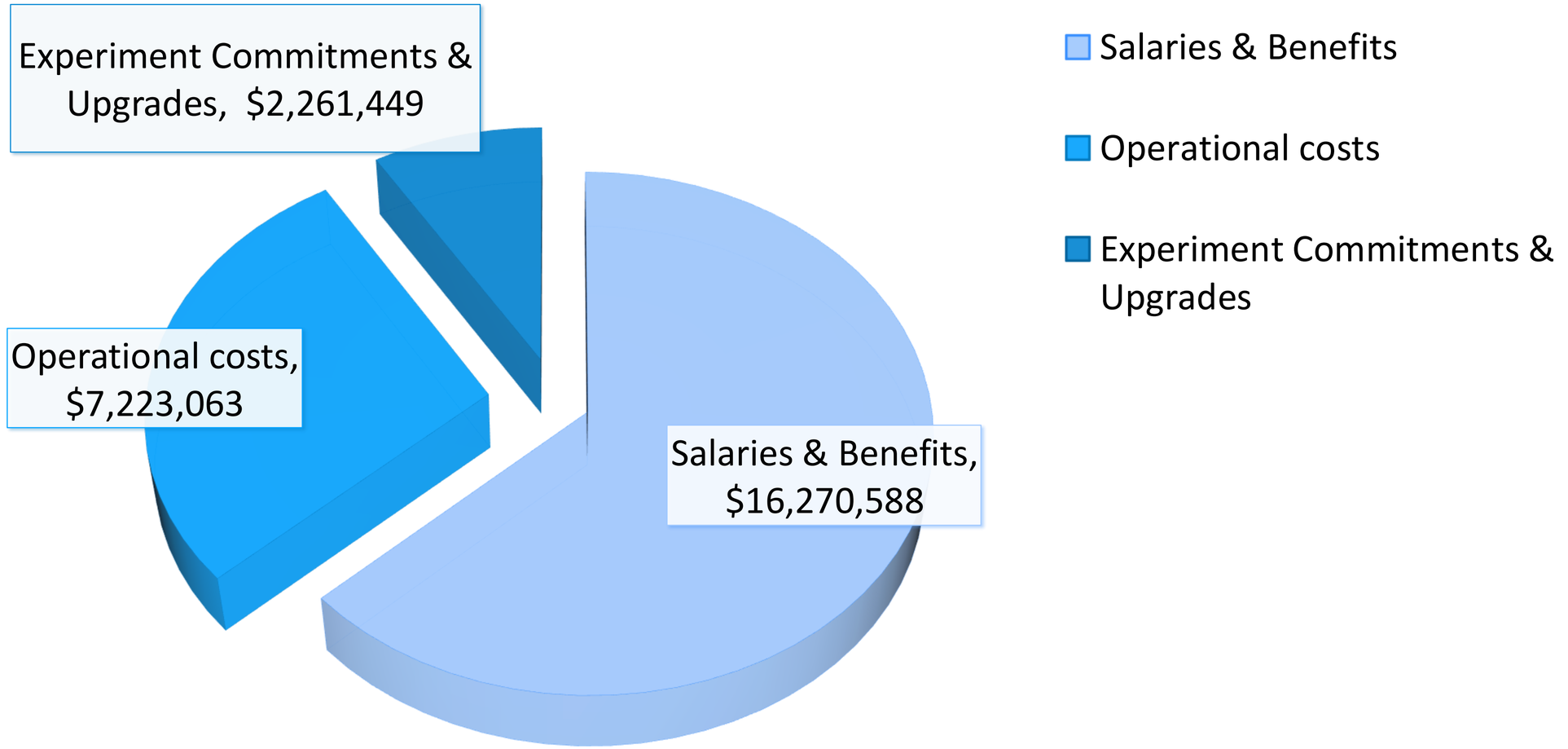


$13,467,982	Canada Foundation for Innovation
$6,000,000	Ontario MCU
$3,389,106	Amortization of deferred capital
$288,269	McDonald Institute
$8,106	Other
Total	$23,153,463



$14,312,822	Salaries and Benefits
$3,389,106	Amortization of capital assets
$2,689,008	External Contracts
$2,373,467	Equipment and Supplies
$394,506	Travel
Total	$23,158,909

Budget for Fiscal Year 26



Total Budget: $25,755,100

1

Excellent science

Drive breakthrough discoveries at the frontiers of underground science.

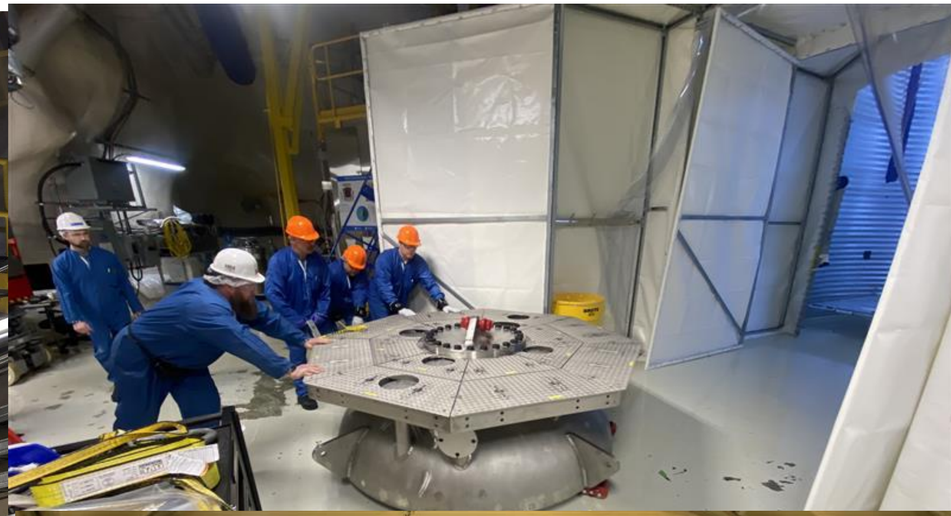
Expected outcomes:

- Cementing of Canada's leadership in deep underground science
- A stronger, more competitive Canada in scientific discovery
- More Canadian researchers positioned as global leaders

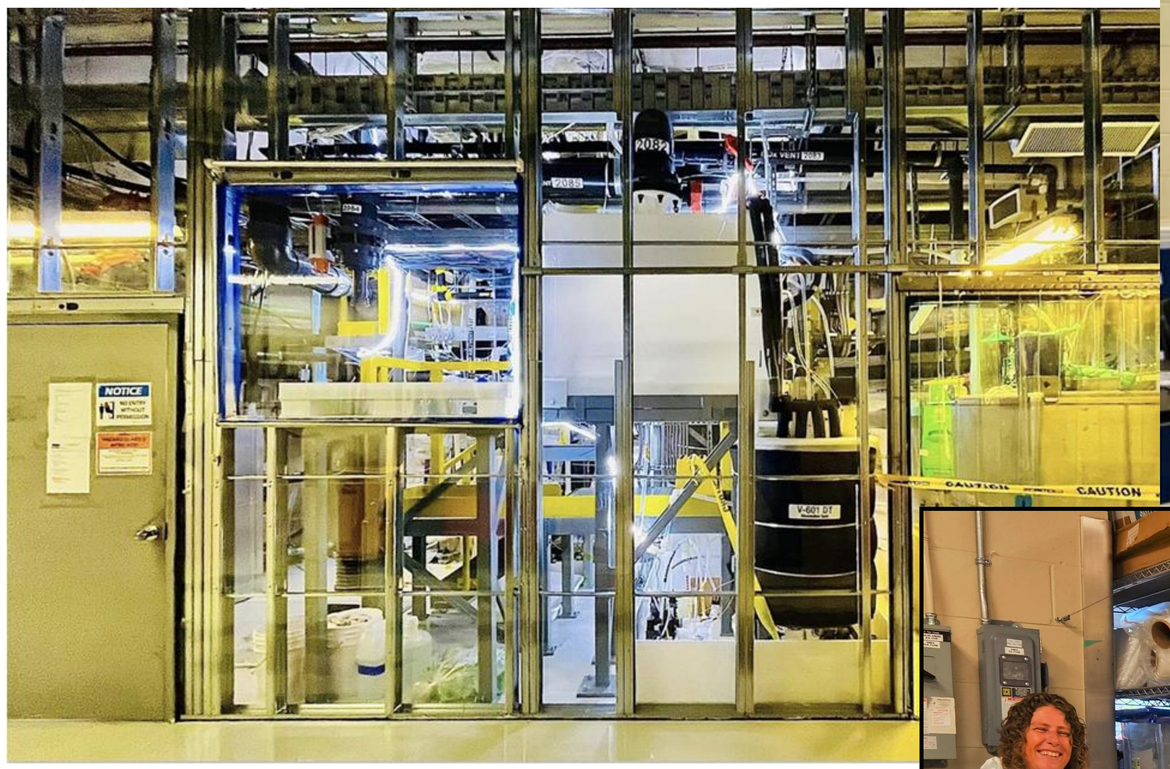
DEAP-3600 upgrades are complete, and operations have commenced

SuperCDMS construction is well underway, and expected to complete by summer

The PICO-500 welding has started, which is the result of sustained effort over many years



SNO+ is making substantial progress



Teleric Acid Purification Plant

DDA still commissioning

First drum of DDA arriving on surface

Second SNOLAB Underground Science Institute (SuSi) Lecture Program Underway!

Dr. Roxanne Guenette

Dr. Dan Hooper

Dr. Wouter van de Pontseele

https://indico.snolab.ca/e/susi2025

On site next week for lectures …

Conferences and Workshops

2025 Future Projects Workshop

April 29, 2025 to May 1, 2025
SNOLAB
Canada/Eastern timezone

Enter your search term

- Overview
- Registration
- Call for Abstracts
- Venue - About SNOLAB
  - Visitor Information & Meeting Site
  - Virtual Tour of SNOLAB
  - Underground Tour Information
- SNOLAB 15-Year Plan
- Transportation - Shuttles

Registration AND abstract submission has been extended to Friday April 11, 2025.

As part of our long-term planning process, SNOLAB provides a community-wide review of potential future projects interested in access to the underground laboratory. The Future Projects Workshop (FPW) engage with collaborations that have an interest in using any space underground, including any of the large-scale experimental areas within SNOLAB, over the next five to ten years are invited to present their capabilities, R&D projects, status, plans, and infrastructure requirements.

Additionally, the workshop will cover SNOLAB's new 15-Year Plan framework introduced in the 2024 Canadian Federal Budget to support Major Research Infrastructures. (See 15-Yr Plan tab for further details).

We look forward to hosting you in-person at SNOLAB!

https://indico.snolab.ca/e/fpw2025

2025 Conference for Project Management Professionals - SNOLAB

May 13 – 14, 2025
SNOLAB
Canada/Eastern timezone

Enter your search term

- Overview
- Timetable
- Registration
- Venue - About SNOLAB
  - Visitor Information & Meeting Site
  - Underground Tour & Information
  - Virtual Underground Tour of SNOLAB
- Accommodations & Visiting Sudbury
  - Hotel Link
  - Dining & Cuisine Options Near Hotel
- Abstract & Poster Information
- Call for Abstracts

Contact Emails:
erica.brunelle@snolab.ca
mehwish.obaid@snolab....

Canadian Laboratory Consortium Announces

TRIUMF · Canadian Light Source / Centre canadien de rayonnement synchrotron · SNOLAB · Canadian Nuclear Laboratories / Laboratoires Nucléaires Canadiens

2025 Conference for Project Management Professionals

SNOLAB, Sudbury, Ontario on May 13th, 2025

The Canadian Laboratory Consortium Conference for Project Management Professionals was established in 2021 to share project management lessons learned and best practices between Canada's National Laboratories. This conference is an opportunity to showcase excellence in project management and collaboration and promote networking between the laboratories.

The theme of the 2025 Conference is Communication on R&D projects with presentations on:

- Effective Stakeholder Communication to Plan and Report with:
  - General Audience and
  - Research Scientists.

https://indico.snolab.ca/event/20/

Join us for NNN25!

NNN25

International Workshop on Next Generation Nucleon Decay and Neutrino Detectors

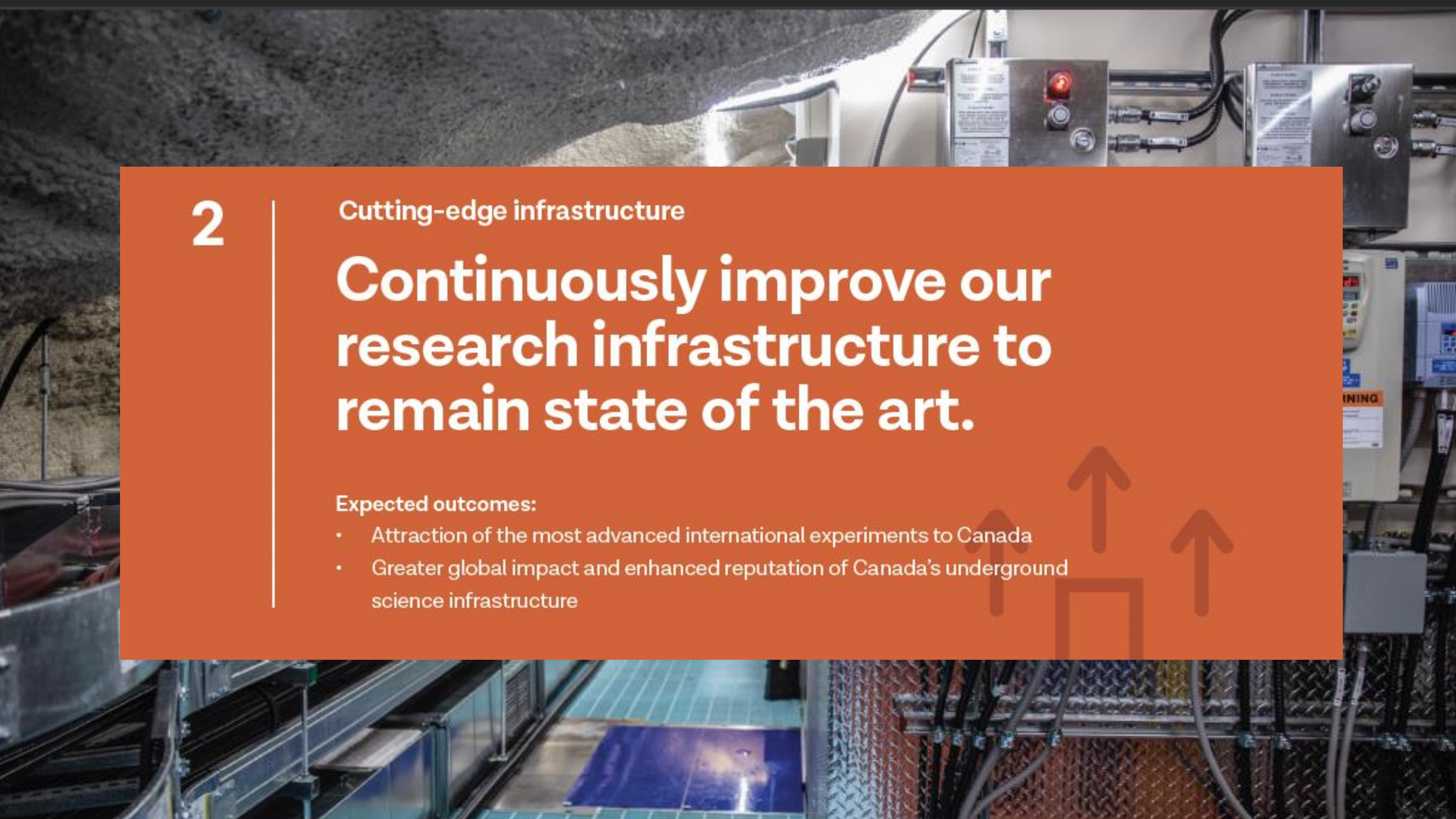
October 1-3, 2025

Underground laboratory tours will be available for all participants!

Watch for registration opening soon!

https://indico.snolab.ca/e/nnn25

A free pre-NNN neutrinoless double beta decay workshop will be held at SNOLAB on September 29-30. Stay tuned for details!



2

Cutting-edge infrastructure

Continuously improve our research infrastructure to remain state of the art.

Expected outcomes:

- Attraction of the most advanced international experiments to Canada
- Greater global impact and enhanced reputation of Canada's underground science infrastructure

Liquid Nitrogen Plant Improvements

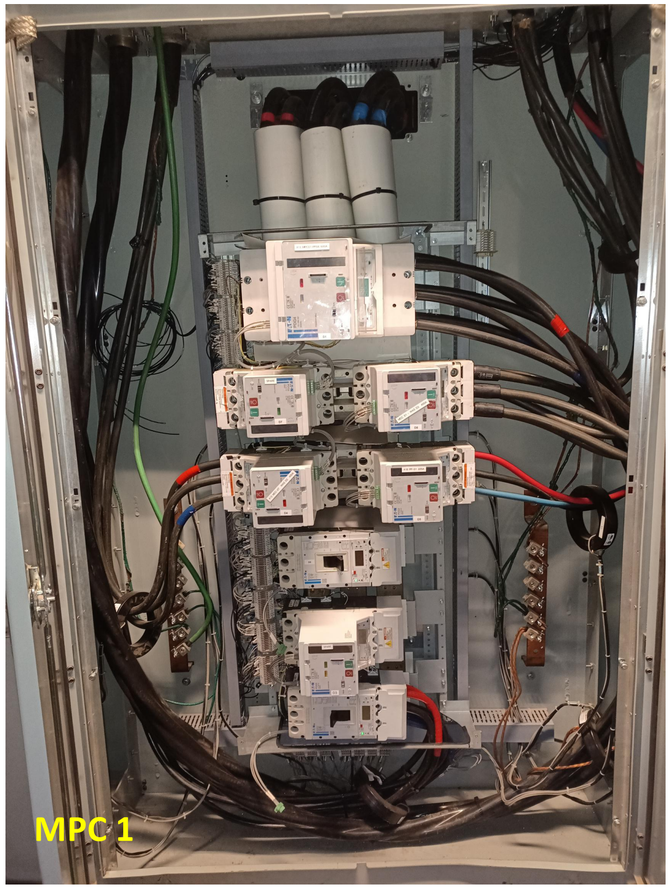
Pulse-tube Liquifier

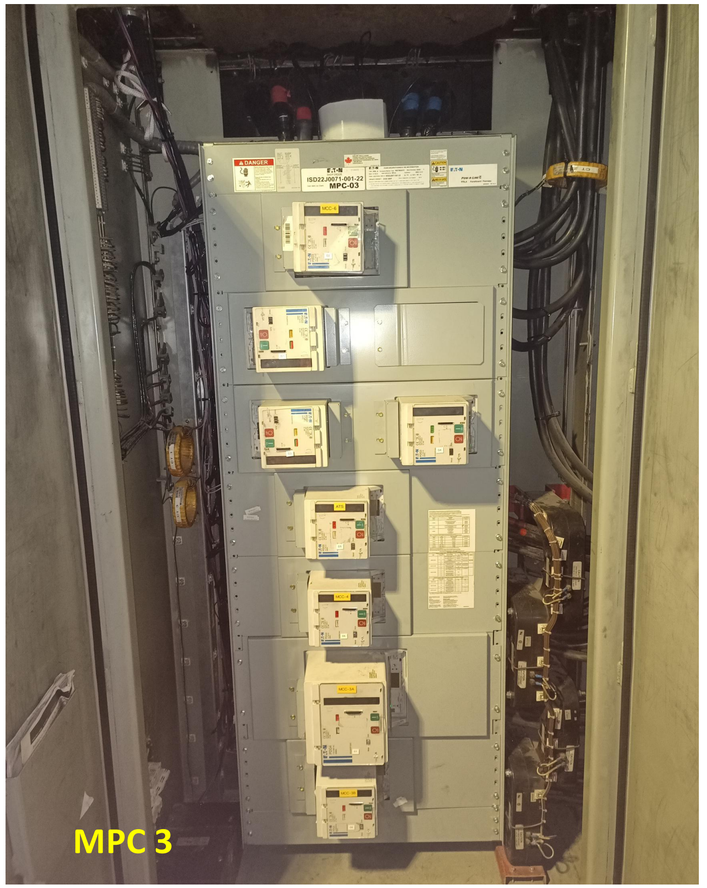
- Additional process flow instrumentation
- Second stage refrigerant air dryer
- Higher capacity PSA molecular sieve columns.

New CA Dryer

New PSA Columns

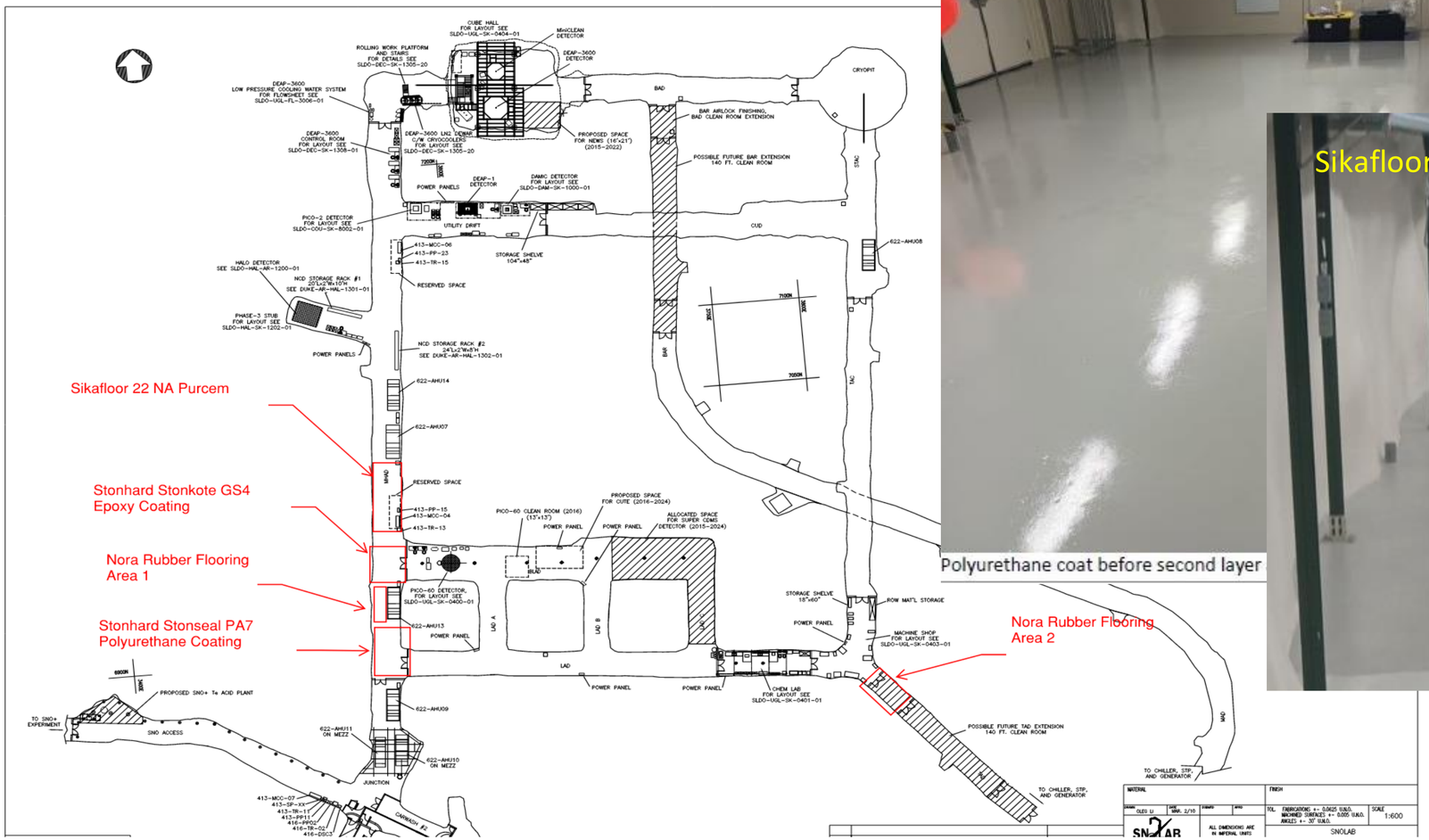
MPC Remote Breakers





- Modernization of power distribution!

Underground Flooring Pilot Project



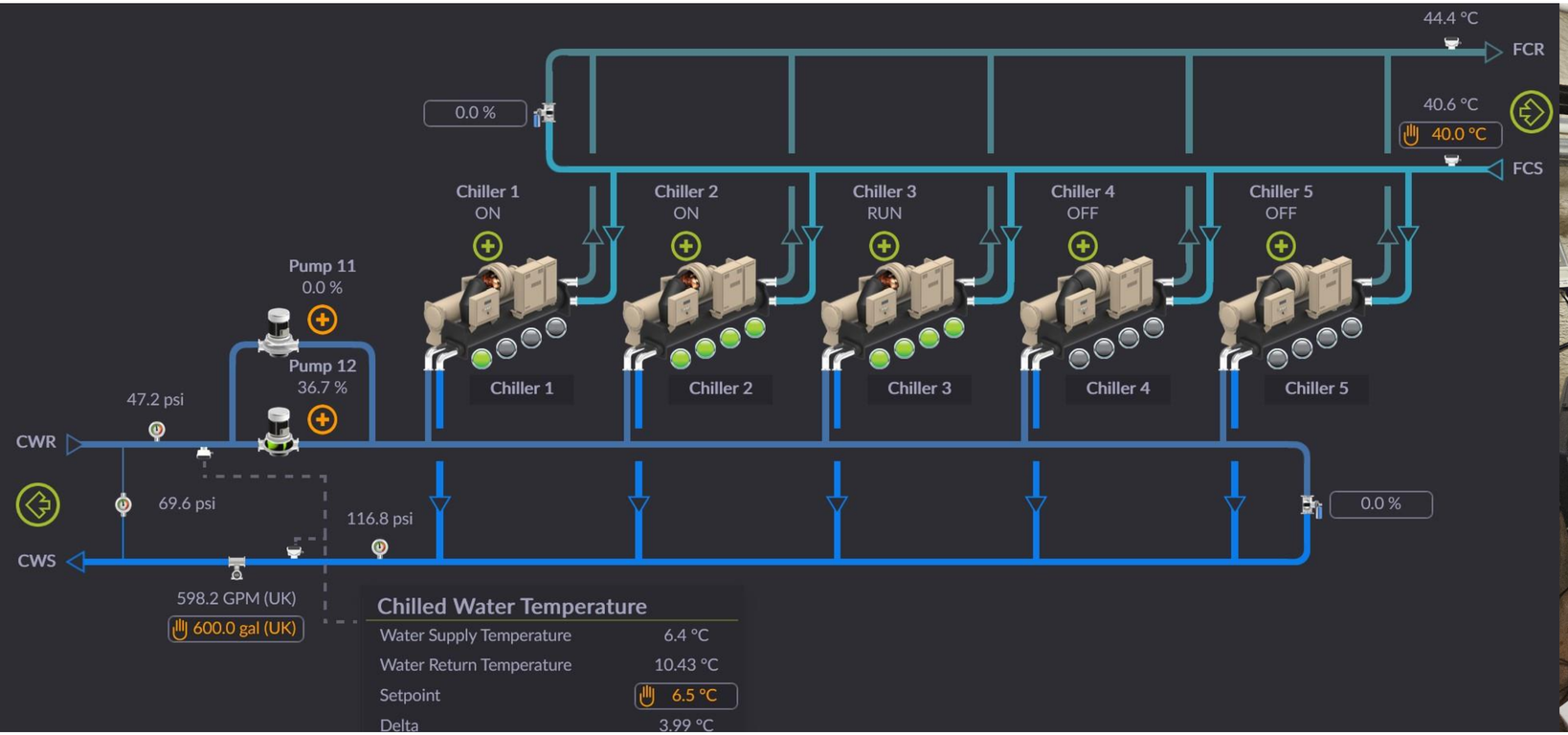
- Installed four different products/preparations throughout lab.

Facility Improvements

New Compressed Air Skid

New Kitchen

Facility Improvements



Improved chiller performance and increased chiller capacity

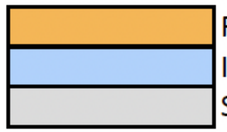
Upgraded underground laboratory workstations

FY26 SNOLAB Experiment and Infrastructure Initiatives

APPROVED POG PROJECTS for FY26

POG PROJECT #		GATEWAY
	Imminent Safety Issues and Facility Emergency Repairs	
	Facility Operations	
	Executive Requirements	
	Experiment Operations (HALO, CUTE, DAMIC, FLAME, REPAIR, Xe-Still, SNO+, NEWS-G, SENSEI, PICO-40, Low Background Measurements, HC Environmental Monitoring Station, DEAP)	GW-3
P2102C	Information Security	GW-2
P2104	MPC Breaker Upgrade	GW-2
P1806	SuperCDMS	GW-2
P2101	PICO-500	GW-2
P2204	SNO+ Te	GW-2
P2511	CUTE Cryogenic Fridge Enhancement	GW-2
P2007	CTBT Counter	GW-2
P2105	SBC	GW-1
P1902	nEXO	GW-0
P2512	IceCube DOM Test	GW-0
P2206	OSCURA	GW-1
P1903	LEGEND-1000	GW-0
P2505	Underground Monitoring Security	GW-0
P2501	Argon Removal from LN2	GW-0
P2506	Underground Monuments	GW-0
P2503	Underground Flooring Pilot	GW-2
P2205	Denka Boom	GW-2
P2608	Automated Radon Trap for Assays*	GW-0
P2609	Cleanliness: Particle Counters*	GW-0
P2603	DT Generator Repair and Upgrades*	GW-0
P2602	Electronics Workstations*	GW-0
P2611	EV Charging Trade Study*	GW-0
P2605	General Use Neutron Detector*	GW-0
P2606	Metal Assay and Production Laboratory using Electroforming (MAPLE)*	GW-0
P2601	Power Reliability Study*	GW-0
P2604	Radioactive Isotope Measurement Program at SNOLAB (RAMPS)*	GW-0
P2613	TAD Extension - Floor and Block Wall*	GW-0
P2607	Tellurium Acetylacetonate Solid Double Beta Decay Target*	GW-0
P2612	Underground High-Density Storage*	GW-0
P2610	Underground Pressure Zones & Differential Pressure Study*	GW-0

- 13 operating experiments
- 9 experiments under design or construction.
- 21 initiatives to upgrade instrumentation and infrastructure including:
  - High density storage underground
  - Power reliability study
  - New capabilities for material fabrications, isotope measurements, electronics repair
  - Next steps in TAD expansion



Responsive Requirements
Internal Projects
Science Programme

3

Skilled people

Foster and develop diverse talent in an inclusive environment.

Expected outcomes:

- Canadian leadership in advancing EDI in research facilities
- A new generation of HQPs prepared to discover and innovate in a global economy
- Greater access to STEM skills and opportunities in Northern Ontario

EDI Committee

The EDI Committee is established under the authority of the Executive Director to support a vision of an equitable, diverse, and inclusive laboratory. The EDI committee assesses SNOLAB policies and processes to ensure that equity, diversity, and inclusion are central to SNOLAB decision-making. The EDI Committee provides guidance to the SNOLAB Executive Director on the development, implementation, and ongoing improvement of SNOLAB's EDI action plan.

Thank you to the members:

Ezri Wyman

Olivia Lobban

Lorna Nolan

Keegan Paleshi

Erica Caden

Matt Stukel

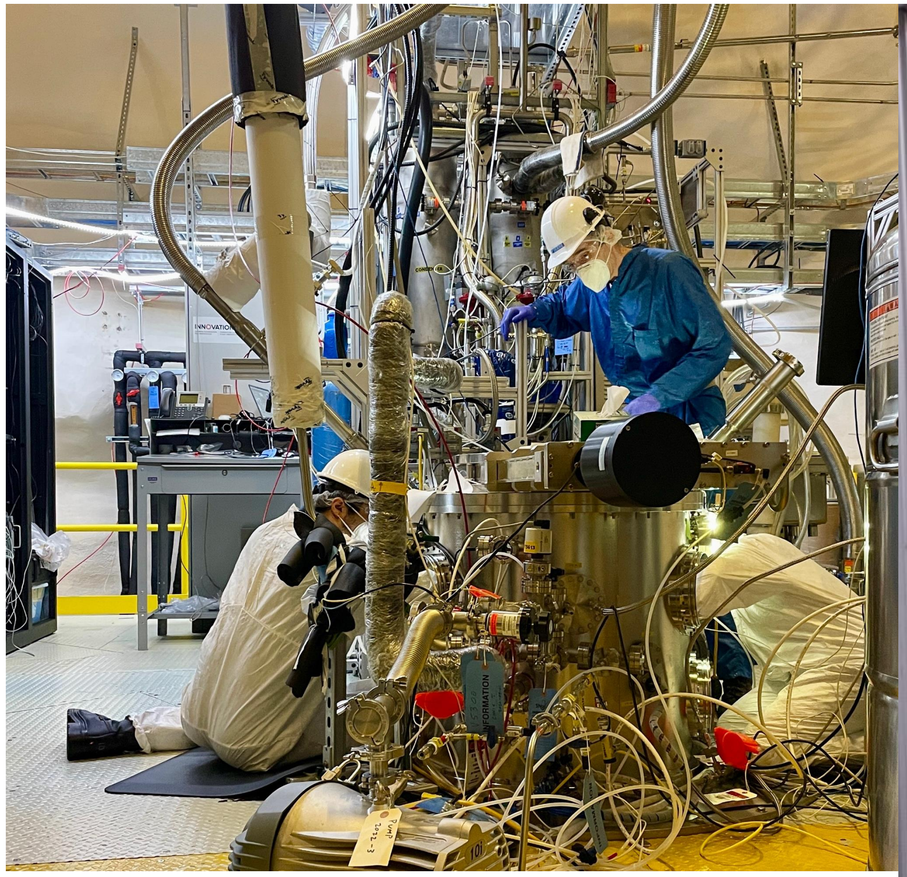
Alexandra Pedersen

Nasim Fatemighomi

Mehwish Obaid

Miriam Diamond

SNOLAB coop program still in high demand



- Fall 2024 term: 13 students
- Winter 2025 term: 9 students
- Summer 2025 term: 19 students

The SEEDLING Program was Funded!

- Science & Engineering Experiments at Depth: LearnING
- NSERC PromoScience grant to provide $225,000 over 3 years
- Grade 4 – 8 scientific inquiry program to support students/classes to propose small experiments underground
- Pilot planned for Sept 2025 launch

Planning for the Future

CFI Request for a 15-Year Plan

- CFI has requested SNOLAB to produce a 15-year under three budget scenarios by September 15, 2025.
    1. Maintaining current levels of operation
    2. Fully supporting the needs of the Canadian research community
    3. Increasing global competitiveness
- Engagement with SNOLAB staff occurred in December and January.
- Various engagements with SNOLAB community.
    - February 4th SEF meeting
    - Future Projects Workshop at SNOLAB Apr 29 – May 1
    - Special Session at CAP ***this Friday 8:00 am, Health Sciences RM 1150***
    - MI meeting Aug. 6-8

Thank you!

Questions?