2025/02/03

SEF Meeting: Research Division Update

Jodi Cooley

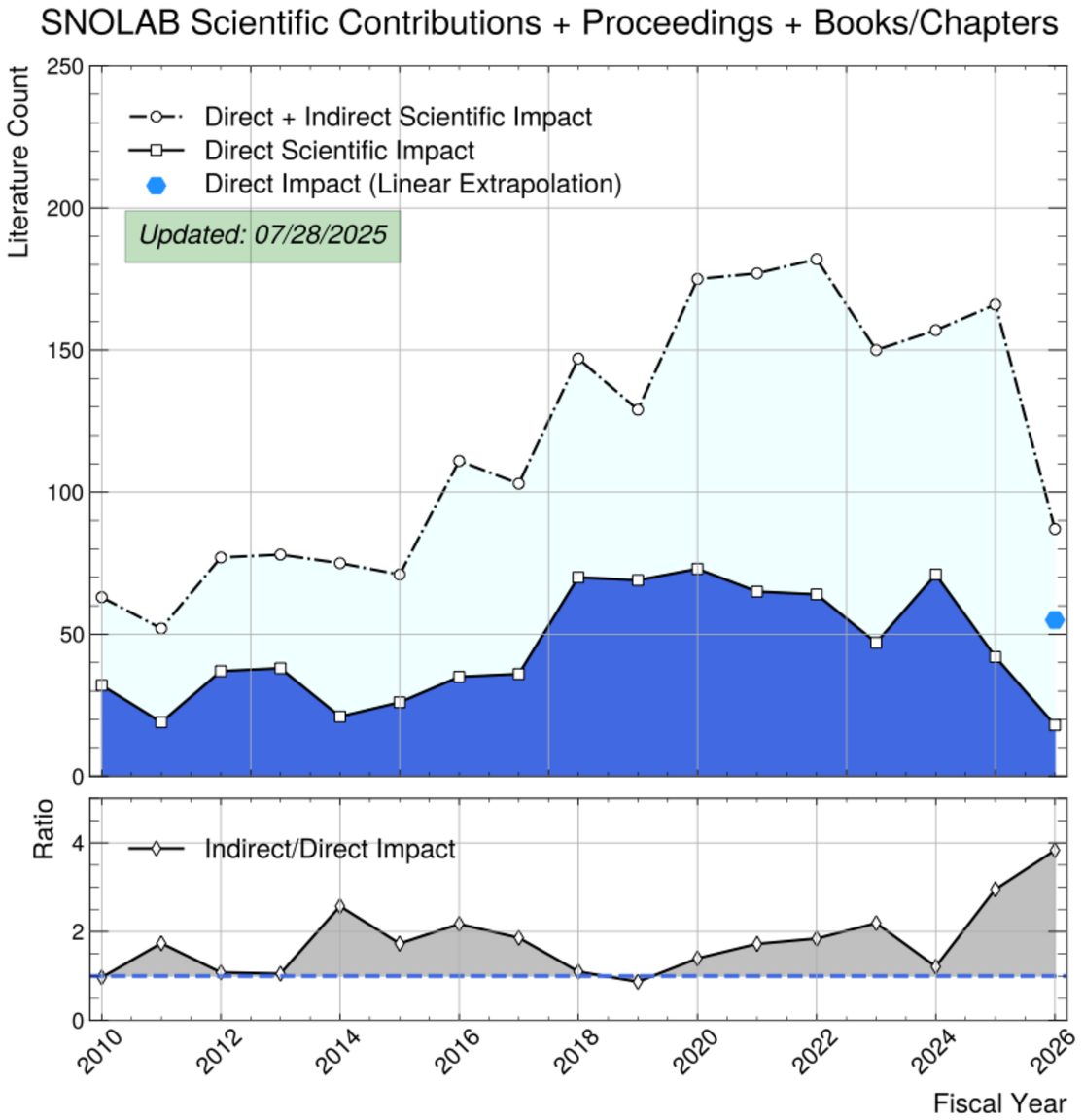
Executive Director | SNOLAB

Professor of Physics | Queen's University

Adjunct Research Professor | SMU

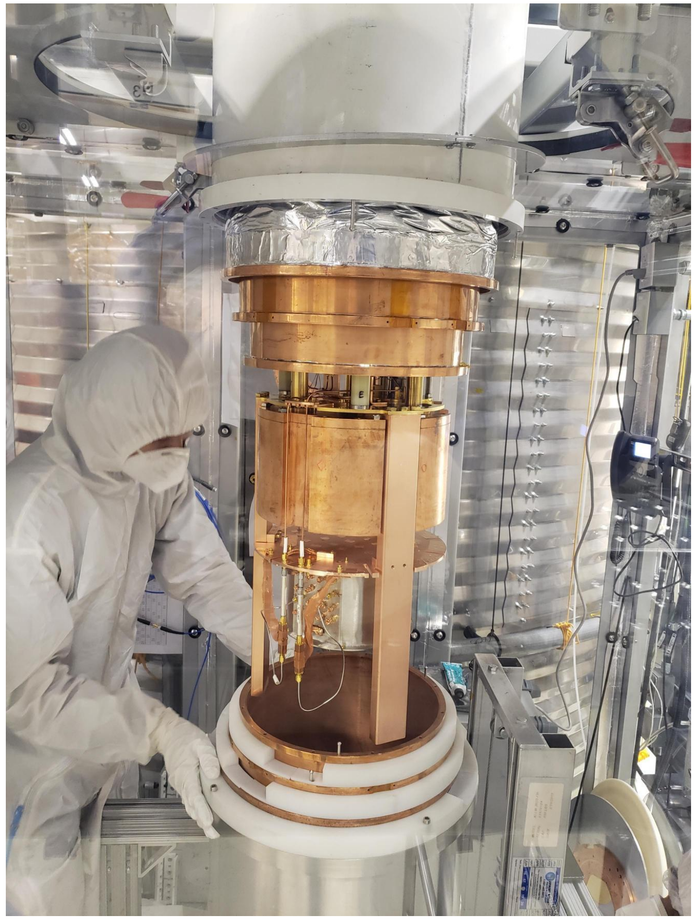
Scientific Outputs

- Fiscal year 2025 outputs on track with our recent average
- Another great year of scientific contributions!
- Indirect impact (people citing SNOLAB projects) continues to be very high



Experiment Updates – CUTEbits

- First superconducting qubits are cooling down in the CUTE cryostat
- Measurements are planned for two months
- We are fielding inquiries about more quantum computing and quantum sensor work



Students and postdocs from SNOLAB/Laurentian University, University of Toronto, and University of Waterloo have worked tirelessly to install the first qubits in CUTE.

Project Management Workshop

MANY THANKS TO ALL THE STAFF WHO MADE THIS A SUCCESS!

- The 2025 workshop was held at SNOLAB
  May 13 – 14th.
- There were 58 in-person and 23 virtual participants from SNOLAB, CLS, CNL, TRIUMF and CFI who participated in 4 breakout sessions, 4 plenary sessions and 1 panel discussion

Future Projects Workshop

MANY THANKS TO ALL THE STAFF WHO MADE THIS A SUCCESS!

The SNOLAB Future Projects Workshop (FPW) was held from April 29–May 1, 2025. There were about 70 in-person and, at any time, 20–30 virtual participants. 23 presentations by members of the community, two of which were delivered from the underground laboratory itself and 5 given remotely.

https://arxiv.org/abs/2507.11368

SNOLAB-STR-2025-XXX

Community Report from the 2025 SNOLAB Future Projects Workshop

M. Diamond*[1], P. Abbamonte, A. Arvanitaki[2], N. P. Baker[3], D. Balut, D. Baxter, C. Blanco, D. Boreham[4], M. Boulay[5], B. Broerman[6], T. Brunner[7], E. Caden[8,7,9], A. Chavarria[10], M. Chen[6], J. P. Davis[3], A. Drlica-Wagner, J. Estrada[11], J. Foster, D. Freedman, C. Gao, W. Halperin, M. Hirschel[3], N. Hoch, Z. Hong[1], A. Ianni[12,13], C. Jillings[8,9], D. Johnson, Y. Kahn[1], C. B. Krauss[3], T. Laframboise[5], M. Lai[6,14], M. R. Lapointe[8,4], B. Lillard, H. Ma[15], E. Marrufo Villalpando, K. Mistry[16], M. Nguyen, J. Oh, A. Radick, H. Reaume[8], B. Roach, J. C. Sankey[7], J. Schütte-Engel, F. M. Schweizer[3], S. Scorza[17], J. W. Scott, S. J. Sekula[6,9], D. Sinclair[5], S. Singh[18], C. Thome[8,4], L. Thompson, J. Tiffenberg[11], V. Vadakkumbatt[3], K. J. Vetter[19], A. Williams, L. A. Winslow[19], M. Wurm[20]

*Corresponding author.
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Second SNOLAB Underground Science Institute (SuSi) Lecture Program Underway!

Dr. Wouter van de Pontseele

Dr. Dan Hooper

Dr. Roxanne Guenette

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

Up Next …

Join us for NNN25!

NNN25

International Workshop on Next Generation Nucleon Decay and Neutrino Detectors

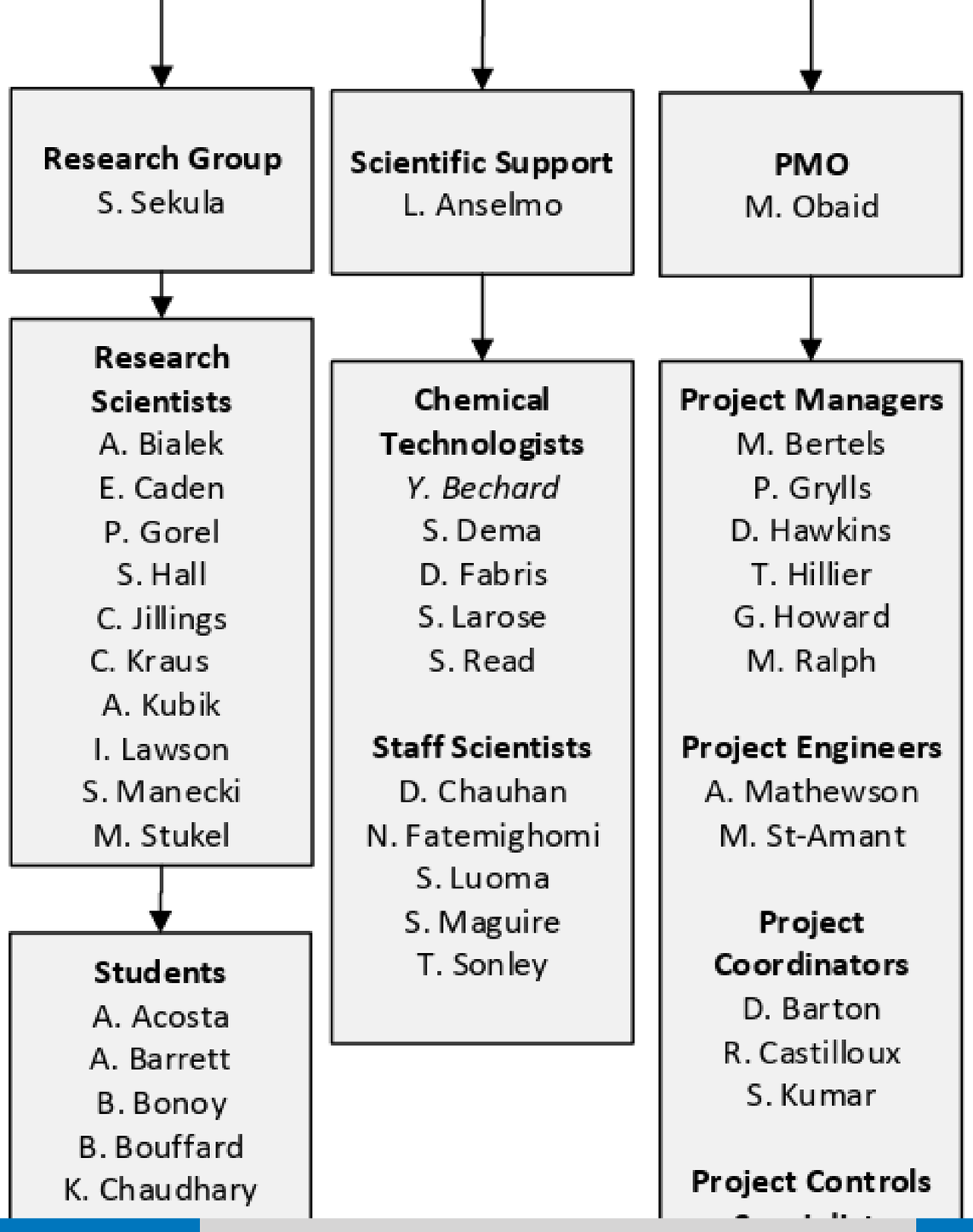
October 1-3, 2025

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!



Increased the size of scientific support to include an additional chemical technologist position

Summer Term Coop and Undergraduate Students

SNOLAB Coop Students:

- Alvero Accosta
- Austin Barrett
- Brianna Binoy
- Brayden Bouffard
- Kishan Chaudhary
- Dev Chauhan
- Noah Fenlon
- Julia Gorovitz
- Sahara Karima
- Muhammad Naseem
- Peter Qin
- Abhipsha Sahu
- Kai Soini
- Oluwasemoore Tijani
- Arina Tseragotin
- Cameron Van Der Zyl
- Jacob Warren

SNOLAB Undergraduate Students:

- Yusuf Ahmed
- Zainab Ali
- Emilio De La Cruz Navarro
- Simon Forero
- Lilly Hines
- Ayesha Iqbal
- Xavi Mara
- Rori McDonald
- Cheyanne Monk
- Cody O’Neill
- Keegan Paleshi
- Zoe Shipp-Weidersprecher

Status Update: Research Scientist Hires

Research Scientist (Two Positions)

The ideal candidates will be responsible for conducting research activities in one of the following concentration areas:

1. **Low-Background Science:** Modern experiments that aim to observe rare phenomena require advanced methods to control and assess background processes. The successful candidate will develop low-background technologies that can be used across the laboratory project portfolio. They will lead efforts designed to enhance or develop new low-background techniques. This is an indeterminate position.

2. **Quantum Science:** The successful candidate will develop a burgeoning program in quantum sensing, quantum materials, and quantum computing, utilizing the Cryogenic Underground TEst (CUTE) facility at SNOLAB. Familiarity with Canada's National Quantum Strategy will be an asset. This is an indeterminate position.

Thank you!

Questions?