

2025 SLCAN SUSTAINABLE LABORATORY CONFERENCE

FORTIFYING CANADA'S LABS FORGING INTO THE FUTURE







2025
PROGRAM

JOIN US IN QUEBEC CITY!

Dear colleagues and friends,

The 2025 SLCan Sustainable **Laboratory Conference** is a Canadian national forum focused on strengthening the laboratory community sharing knowledge, promoting best practices and innovation, as well as providing a platform strategic thinking for discussion on the challenges and opportunities related to these assets. We are pursuing efforts provide our to participants with the best content for learning professional development in field of sustainable the laboratories.



IN SHORT...

NOVEMBER 17 - 20, 2025

CONFERENCE VENUE IS THE QUEBEC CITY CONVENTION CENTRE

ROOM BLOCK AT THE HILTON QUEBEC IS SOLD OUT

REGISTRATION IS OPEN.

SPACE IS LIMITED FOR THE PRE-CONFERENCE TRAINING.

READ MORE AND REGISTER
WWW.SLCAN.CA

PRE-CONFERENCE TRAINING

USING THE LATEST LABS2ZERO TOOLS FROM I2SL

NOVEMBER 17, MORNING, ENGLISH TRAINING ONLY

Participants will receive hands-on training on the key tools of I2SL's Labs2Zero program: the Laboratory Benchmarking Tool (LBT) and the brandnew Actionable Insights and Measures (AIM) Report, I2SL's automated energy audit tool for lab buildings. The session will include insights into the calculations embedded in the tools, how to use them effectively, and how to apply their results. Each attendee will work through live examples on their own laptop and will leave the session with confidence in using the LBT to benchmark lab buildings and the AIM Report to identify potential projects to improve the buildings' energy performance.

CONTAINMENT: HOW IT IMPACTS DESIGN APPROACHES FROM 10,000 FEET TO THE BENCH TOP.

NOVEMBER 17, AFTERNOON, ENGLISH AND FRENCH TRAINING

Intended for laboratory planners, architects, engineers, and facility operators, the course will help attendees to understand how to design containment facilities and rooms, including various methods of containment within a lab facility. The course will discuss principles such as:

- What is containment and why do we have it?
- Codes and standards used in science facility design in Canada
- Architectural considerations for facility design to suit various containment types
- Mechanical ventilation, pressurization, controls
- Electrical considerations
- Design examples

2: POST OCCUPANCY

CONCURRENT BREAKOUTS

NOV. 18

WORKSHOP: BUILDING A FOUNDATION - FUNCTIONAL PROGRAMMING AND EARLY PLANNING

In this interactive workshop, participants will:

- Identify the best tools for developing a program that evaluates laboratory space needs
- Learn how to streamline data collection and use benchmarking to shape future laboratory spaces and assist those making decisions in capital spending
- Discuss strategies for overcoming your specific planning challenges
- Learn how to develop a 3-dimensional program

RESILIENT BY DESIGN: A CASE STUDY IN FLEXIBILITY, INSIGHT, AND FUTURE-PROOFING

The objective of this presentation is to explore how design resilience, flexibility, and ongoing evaluation can help Canada's labs thrive amid evolving needs, through a case study of the STEM complex at the University of Ottawa.

RENOVATION OF BIOLOGY LABORATORIES AND THE INSTALLATION OF A FISH ANIMAL FACILITY

The objective of this presentation is to explain how laboratories built in a different era have been renovated with consideration for users, energy, resilience, and safety.

FROM NEED TO REALITY: PLANNING ERRORS THAT COMPROMISE INSTRUMENTAL EFFECTIVENESS

The objective of this presentation is to illustrate, using concrete and real examples, the consequences of inadequate planning of instrumental and scientific needs in the development of a laboratory design at the time of its conception, construction and occupation.

EVALUATING FUME HOOD CONTAINMENT USING COMPUTATIONAL FLUID DYNAMICS

The objective of this presentation is to present a standardized methodology for the evaluation of fume hood containment in CFD and have an open forum discussion on the methodology and steps to adoption.

CONCURRENT BREAKOUTS

NOV. 19

STRATEGIES TO FUTURE PROOF LABORATORIES WHILE RENOVATING

The objective of this presentation is to discuss future-proofing laboratories during renovations and how this requires a holistic approach that integrates circular economy principles, accessibility and inclusion, and flexibility for quick reconfiguration.

PLAN FOR PRECISION, PREPARE FOR REVISION – EMBRACING FLEXIBILITY FOR FUTURE SUCCESS

The objective of this presentation, delivered jointly by the Laboratory Design team and the Construction Manager, is to explore how foundational laboratory planning strategies—such as modularity, standardized infrastructure, and future-proofing—correlate directly with measurable construction efficiencies.

INNOVATIVE RESOURCE MANAGEMENT AT THE SIDNEY CENTRE FOR PLANT HEALTH: A PATHWAY TO DECARBONIZATION AND ENERGY EFFICIENCY

The objective of this presentation is to provide an overview of the innovations in resource management and sustainability which were achieved in the design and construction of the recently completed Sidney Centre for Plant Health in Sidney, BC.

DELIVERING THE BIOLOGICS MANUFACTURING CENTRE IN 10 MONTHS: A MODEL OF AGILITY, COLLABORATION, AND SUSTAINABILITY IN RESPONSE TO CRISIS

The objective of this presentation is to share our experience, the lessons learned, and the strategic decisions involved in the design and construction of the Biologics Manufacturing Centre, a public-private, not-for profit GMP facility in Montreal, Quebec.

REFRIGERANT LANDSCAPE AND REGULATIONS IMPACTING THE INDUSTRY AND THE ENVIRONMENT

The objective of this presentation is to understand regulations for refrigerants in order to maintain a sustainable approach in the management of laboratory facilities.

AIR QUALITY MONITORING - A SOLUTIONS DEEP DIVE

The objective of this presentation is to present a technical review of a 40-year life cycle analysis of available options around air quality monitoring systems.

CONCURRENT BREAKOUTS

NOV. 19

DOING MORE WITH LESS: CANADIAN RESOURCEFULNESS IN LAB DESIGN

The objective of this presentation is to gain insights into how strategic architectural decisions can enhance the adaptability and efficiency of research facilities, even within the constraints of limited budgets and space. Participants will also explore how effective collaboration between the design team and constructors drives cost-efficiency, ensures constructability, and aligns with the client's design intentions.

NOW HOW MUCH DOES A ZERO-CARBON LAB COST?

The objective of this presentation is to educate lab owners and operators on the funding streams available to decarbonize their buildings.

NEW HOSPITAL COMPLEX: ENABLING THE SAFE OPERATION OF CRITICAL INFRASTRUCTURE THROUGH HOLISTIC DESIGN

The objective of the presentation is to offer solutions for the design of laboratory evacuations where patient health and safety must be balanced with the safe operation of laboratory fume hoods, within the framework of a heliport design project.

THE CRIOPQ AND THE NCH: CATALYSTS FOR COLLABORATIVE, CROSS-DISCIPLINARY, AND INTEGRATED RESEARCH

The objective of this presentation is to highlight how the design, realization, and occupancy of the CRIOPQ facilities were conceived to foster synergies among research teams, notably through the deployment of shared specialized research platforms that encourage intergroup collaborations and maximize the use of collective resources. It will also explore how a strategic integration with the CIC has fostered the emergence of an ecosystem where fundamental, clinical, and translational research mutually reinforce one another, while also considering the tangible benefits for patients.

WORKSHOP: LABORATORY CODES

The objective of this workshop is to provide an overview of the National Fire Code requirements relevant to laboratories working with flammable and combustible liquids and compressed gases, as well as explore jurisdictional differences and other regulatory standards reference by the building and fire codes.

CONCURRENT BREAKOUTS

NOV. 20

RESEARCH LABORATORIES IN MUSEUM DESIGN: HOW CULTURAL RESEARCH AND ARCHITECTURE CAN LEAD TO HUMAN INSPIRATION

The objective of this presentation is to discuss how research laboratories in museum design integrate architecture and cultural research to inspire and educate. This presentation highlights the importance of laboratory design for conservation, research, and public engagement, using case studies to illustrate the impact of well-designed spaces on both researchers and visitors.

PANEL DISCUSSION: ADMARE BIOINNOVATION'S NEW INNOVATION CENTRE

The objective of this presentation will be to take participants through the development of a new laboratory facility in Vancouver, BC. This facility is approximately 30,000 ft2 in size, will be incorporated into an existing building, and is the outcome of both the Government of Canada and the Province of BC's strategic plans to develop Life Science across Canada. We will speak from all perspectives to help understand:

- How a facility like this could support a growing ecosystem in the BC market.
- Pre-Planning and validating to support how an office space can become laboratory in a market without leasable lab space.
- How collaboration between the client, the design team and early engagement with the contractor, support a successful project.
- How to plan for an Innovation Center, and ensure flexibility.
- Consideration for the complexities of construction for a facility like this, within an
 existing building designed for office space, and how a builder can offer expertise to
 ensure project budget and timelines are maintained where we have hard deadlines
 for project funding.

FORGING INTO THE FUTURE WITH IMPROVED FIRE PROTECTION IN CRITICAL ENVIRONMENTS

The objective of this presentation is to highlight the necessity of specialized fire protection measures in laboratories to ensure the safety of personnel, equipment, and sensitive materials.

HAZARDOUS MATERIAL HANDLING AND FIRE SAFETY IN LABORATORIES

The objective of this presentation is to bring awareness on the fire risks associated with handling hazardous materials in laboratories.

KEYNOTE PRESENTATIONS

NOV. 18

SOVEREIGNTY, INNOVATION AND RESILIENCE:
BUILDING A STRONG AND SUSTAINABLE
MEDTECH INDUSTRY IN CANADA

FRANÇOIS BERGERON, VICE PRESIDENT OF CORPORATE DEVELOPMENT, MEDTEQ+

With a PhD in life sciences and an MBA specializing in corporate finance, François Bergeron founded and ran a start-up developing technologies for human fertility. François joined MEDTEQ+ in 2014, where he currently serves as VP of Corporate Development. In this role, he develops and manages the continuum of support for companies in the medical technology ecosystem, from innovation to commercialization, through direct financing and strategic partnerships.



12SL'S NEWEST TOOLS FOR LAB EFFICIENCY

ALISON FARMER, LABS2ZERO PROGRAM DIRECTOR, I2SL

Alison Farmer is a former research astrophysicist turned Labs2Zero Program Director and also Secretary of the Board of Directors of I2SL. She has worked in both consulting and lab owner's roles, specializing in energy modeling, analytics, and control systems.

GORDON SHARP, PRESIDENT, 12SL

Gordon Sharp is the inventor of many important, widely applied technologies that have had a significant impact on lab sustainability and energy efficiency such as the sash sensing variable volume fume hood, laboratory airflow controls, the electronic venturi airflow valve, and demand based control of lab ventilation.



PANEL DISCUSSIONS

NOV. 19

A FIRESIDE CHAT WITH LABORATORY ASSOCIATION PRESIDENTS

Join the SLCan, I2SL and EGNATON Presidents as they share updates on their current activities and their vision for the future of their associations. They will also provide an overview of the initiatives that the Associations will be working on collaboratively with the goal of strengthening the global sustainable laboratory community.

KEVIN HUMENIUK, PRESIDENT, SUSTAINABLE LABS CANADA

Kevin Humeniuk is Architecture49's National Sector Leader for Science & Technology. Over his twenty-four years in architectural practice Kevin has gained considerable experience in a wide variety of roles and responsibilities. For the past fifteen years, Kevin has been exclusively involved in research laboratory projects as a project manager, project architect and laboratory planner.



MIGUEL ANTUNES PINTO, PRESIDENT, EGNATON

Architect since 1998, Miguel Antunes Pinto started to dedicate his career to specialized projects since 2003 and became a full-time laboratory designer by experience since then, never losing the focus of this specific area of Architecture, also called Lab Planning.

Elected President of EGNATON in 2025, with participation in Knowledge Hub #2 Lab Planners and Knowledge Hub #10 BIM IFC4LAB, which includes laboratory designers, architects, engineers.



GORDON SHARP, PRESIDENT, 12SL

Gordon Sharp has over 35 patents covering inventions that are today collectively saving well over \$2.B USD annually in energy use and over 7.5M metric tons annually in carbon emissions.

He is an ASHRAE Fellow, and a former ASHRAE Distinguished Lecturer that has contributed to many laboratory and healthcare ventilation standards.



PRESENTER DIRECTORY

THANK YOU TO ALL OF THE PRESENTERS FOR SHARING THEIR EXPERTISE, EXPERIENCE AND INSIGHTS. THANKS AS WELL TO THEIR EMPLOYERS FOR SUPPORTING THIS INFORMATION EXCHANGE.

- Greg Aarestad, Ventana
- Greg Babiak, A. W. Hooker
- Pierre-Luc Baril, Pageau Morel & Associés
 Inc.
- François Bergeron, MEDTEQ+
- Anne-Marie Blais, Groupe A
- France Brazeau, University of Ottawa
- Rick Buhr, Bird
- Russell Chernoff, Chernoff Thompson Architects
- Anne-Laurence Chevalier, Labworks International
- Ana Coppinger, Architecture49
- Greg Dallas, WSP
- Dominic Daoust, NFOE Inc.
- Michel de Jocas, Educational Consulting Services Corp.
- Deirdre Ellis, NFOE
- Alison Farmer, I2SL
- Marco Garcia, Architecture49 Inc.
- Dennis Giobbe, Diamond Schmitt Architects
- Jan-Willem Gritters, Perkins&Will
- Naomi Gross, Chernoff Thompson Architects
- Robert Haughland, Canadian Food Inspection Agency
- · Lee-Ann Hill, DFS Architecture
- Samuel Houle, Perkins&Will
- Kevin Humeniuk, Architecture49
- Sean Kirkwood, University of Ottawa
- Marcin Kucharski, Canadian Turner Construction Company
- Yvon Lachance, YLA Architecture
- Jacques Lavergne, Groupe AES

- Annie Léger Bissonnette, Pageau Morel & Associés Inc.
- Sylvain Letarte, Ingenio Sciences
- Jay Levine, DIALOG
- Iliah Lorenz-Luca, Fathom Studio
- Sindhu Mahadevan, Michael Green Architecture
- Rob Mariani, DIALOG
- Erin McClintock, LMDG
- Ruth McMath, RWDI
- Graeme Mouat, Arup
- Mary On, Introba
- Antoni Paleshi, WSP
- Shadnoush Pashaei, Arup
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- Marc-André Perreault, Pageau Morel & Associés Inc.
- Miguel Pinto, PharmaArquitetos
- Dominik Reuter, Asecos
- Serge Rivest, Université Laval
- Nathan Rogers, Dalhousie University
- Audrey Roy-Poirier, Arup
- Patrick Séguin, Pageau Morel et Associés Inc.
- Gordon Sharp, I2SL
- Kevin Shea, Introba
- Kevin Shelast, Aqua Air
- Peggy Theodore, Diamond Schmitt Architects
- Donna Thiffault, Laporte Experts Conseils
- Nicolas Thiffeault, Public Services and Procurement Canada
- Magali Tremblay, Pageau Morel & Associés Inc.
- Dominic Vachon, Admare Bio Innovations
- Dianthé van Weerden, RWDI



SPONSOR DIRECTORY



ARCHITECTURE

49

diamond schmitt





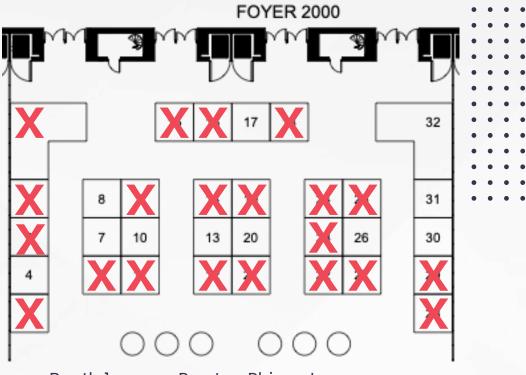
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	Booth 24	Mohawk Group
	Booth 25	Kildonan Energy Products
	Booth 27	Architecture49 Inc.
	Booth 28	Alliance Scientific Inc.

NOT ON THE LIST? DON'T WAIT! EMAIL US AT INFO@SLCAN.CA

Booth 29 Bedcolab

NETWORKING EVENTS

OPENING RECEPTION IN THE TRADE SHOW

THANK YOU TO KILDONAN ENERGY FOR THEIR SUPPORT!

Join us in the trade show as we kick off the 2025 Conference!



AWARDS DINNER AND RECEPTION

You won't want to miss this exclusive event at the Musée national des beaux-arts du Québec. It will be a night of art, scrumptious food, catered by Fairmont Le Château Frontenac, and celebration!

We will also have the opportunity to tour two of the exhibitions during the reception portion of the evening.

CONTEMPORARY ART IN QUÉBEC

We drew from our rich collection of over 9,000 pieces of contemporary art for this exhibition, which features seminal works created after 1960.

US

Us aims to spark individual and collective reflection, offering converging views of the self and the other by holding up a mirror that reflects our society. This selection of 70 pieces encompassing all periods of our collections will take you on a unique philosophical voyage that explores three universal themes: identities, migrations, and territories.

IN THEIR WORDS

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Over the years SLCan events were my happy place. The community provided me with knowledge, ensured my technical growth and networking hub, during facility tours, are always fun and engaging.

Ivana Miljanic, Project Manager, Facilities Planning & Development,

Centre for Addiction and Mental Health



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I find it very valuable when I go to the national conference, as an owner, because there are the displays, there are the vendors. We get to talk to a lot of vendors and see what's out there face-to-face.

Erica Tong, Facilities Director
The Michener Institute of Education at UHN





As a long-time participant of SLCan events, I am continually inspired by the altruistic spirit of learning and sharing by all members.

Marty Mihowich, Senior Director, Laboratories Canada,
Public Services and Procurement Canada