



**ISHPSSB 2023 PROGRAM BOOKLET**

## Greetings from the President

Rachel A. Ankeny, University of Adelaide, Australia

I wish to begin by acknowledging the land on which the University of Toronto operates and on which we are meeting. For thousands of years, it has been the traditional land of the Huron-Wendat, the Seneca, and most recently, the Mississaugas of the Credit River. Today, this meeting place is still the home to many Indigenous people from across Turtle Island, and we are grateful to have the opportunity to meet on this land.



Welcome to Toronto! I have always had a soft spot in my heart for this town, as it is where we used to travel frequently from Detroit when I was a child in search of multiculturalism, good food, and the fabulous science museum. So it feels very appropriate to finally be back together again in person in this great city.

ISHPSSB always has been a welcoming and inclusive society, recognised as much for its informality and discussions as for its formal sessions. Over five plus days, we will be able to catch up with our colleagues and friends, and their latest scholarly efforts and ongoing projects, in what promises to be a stimulating and diverse program. We also will have the opportunity to learn more about the area in which Toronto is located including the Great Lakes, and threats faced to it by climate change. Most importantly, the meeting will provide us with opportunities to learn from members of Indigenous communities, and begin our efforts as a society to build new traditions of collaboration with these communities, in alignment with ISHPSSB's new Guidelines on Indigenous Land Acknowledgement and Related Processes.

I encourage you to look over the program in detail as there are many competing sessions and no doubt you will need to make difficult decisions. I also wish to recognise that there will be a number of memorial sessions dedicated to our recently deceased colleagues, and you are strongly encouraged to participate, learn, and remember.

I wish to extend our deepest gratitude to Denis Walsh (University of Toronto) and Eric Desjardins (Western University) as our Local Co-Chairs, who have valiantly organised this conference through moves of the site from Toronto to London (Ontario) and back again to Toronto, construction that threatened to interfere with having a conference dinner (unlike in São Paulo, building a restaurant wasn't an option!), and many other obstacles. Our program chairs Tatjana Buklijas and Jan Baedke together with the Program Committee have done outstanding work in shaping and organising a fantastic program: we greatly appreciate their efforts including to avoid conflicting sessions for our more active members.

We encourage you to attend our General Meeting and Awards Ceremony on Thursday afternoon, at which you will learn about the latest Society activities and plans as well as to be able to congratulate those who are being recognized for their scholarly achievements. Finally, take a moment to welcome a new participant to our society and its central activity, the biennial meeting: it is critical to continue our traditions of respectful dialogue and inclusion, and to include all attendees in our traditions. Enjoy the conference!

## Word from the Program Committee

Tatjana Buklijas, University of Auckland, New Zealand & Jan Baedke, Ruhr University Bochum, Germany

When we said our goodbyes in Oslo in July 2019, no one could have predicted or indeed imagined what would happen six months later. Even as the pandemic took hold in 2020, ISHPSSB remained hopeful that we would meet in person in Milwaukee in 2021. That did not happen and the 2021 meeting took place online. Our predecessors Roberta Millstein and Luis Campos did a heroic job, shifting the in-person conference to an online medium, and the conference was a great success by many measures. It allowed many for whom the cost, time, border/visa restrictions, or caring obligations at home presented obstacles to in-person conference participation to take part. Still, many of us missed the unstructured ‘hanging out’ of the pre-pandemic times—alongside the structured sessions—and were eager to meet again in person as soon as the circumstances allowed.

As we began to prepare for the 2023 meeting, we knew that it had to reflect the new world in which we live today. Online participation is here to stay globally so we were committed to retaining this option, although, as anyone who has organized conferences recently knows, organizing a ‘hybrid’ conference means organizing an in-person **and** an online event, and then fitting them, somehow, together. Pandemic also left the legacy of tightened border restrictions, inflation and stretched labor markets, all of which made the organization of a conference in Toronto, Canada, more difficult. Even before Oslo, our members have been concerned about the carbon emissions produced by conferences, especially due to long-distance air travel, and this concern has only grown stronger. There is no shortage of challenges for conferences as we know them, yet the push of these ‘external’ factors is matched by the ‘pull’: meeting and talking in person is more precious than ever.

When thinking about reflecting the new, post-pandemic world, we did not think just about technological opportunities and challenges. We also wanted to highlight the issues of high social interest to which historical, philosophical, social and scientific studies of biology are coming to bear. All of our keynote and plenary talks are discussing climate change; all of them are also looking at diverse ways that climate change is understood and responded to. We wanted to highlight local and indigenous knowledges and the ways in which they interact with what often is presumed to be universal science. Submissions have reaffirmed the continuing strength of the ISHPSSB as a community that critically thinks through and



contributes to the ways in which we understand the living world around us. The breadth and innovativeness of topics is astounding. From the more established themes and topics to sessions on data communities, trans/feminism, conceptualizations of environment, new takes on the ideas of purpose and agency, astrobiology, and many other topics, this conference promises to be intellectually stimulating, educational—and fun.

**Figure: Jan and Tatjana, here in Jan’s office in Bochum, trying to wrestle the unwieldy program into submission. Note multiple screens, Excel spreadsheets and Trello boards**

## Welcome from the Local Organizing Committee

Denis Walsh, University of Toronto & Eric Desjardins, Western University, Canada

It is with great pleasure that we extend our heartfelt welcome to ISH2023, taking place in the vibrant city of Toronto. For many of us, this gathering holds a special place, as it brings together cherished colleagues and friends from across the globe. We hope that the forthcoming days will be filled with excitement, the forging new connections, and engagement in thought-provoking discussions that will nourish our intellects.

This conference is not only a continuation of our Society's cherished tradition of innovative, inclusive, and informal gatherings, but it also serves as a platform to continue to address the climate crisis and bring awareness to the Great Lakes, part of the most important freshwater ecosystems in the North American region. Toronto boasts a captivating culture and a rich historical backdrop. It stands as the economic hub of Canada, a thriving global metropolis that connects diverse facets of trade, academia, and culture.

Allow us to emphasize one of the pivotal aspects of this event. Canada has a long and troubled historical connection with the indigenous communities that occupied and cared for this land before European settlement. This meeting is the occasion to acknowledge this, but also to work toward the creation of new traditions where indigenous communities and perspectives are recognized for their integral role as part of our society and intellectual landscape.

Organizing ISHPSSB 2023 has been a collaborative effort between the University of Western Ontario, the University of Toronto, and Guelph University. Countless hours of dedicated teamwork have been invested to ensure these few days become a success. We kindly invite each one of you to join us in expressing heartfelt gratitude to all the individuals behind ISHPSSB 2023 and the institutions that have graciously supported us. Their invaluable contributions have paved the way for this gathering.

Once again, we extend our warmest welcome to all participants, and we eagerly look forward to a conference filled with enriching experiences, enlightening conversations, and lasting memories!



## Homage to Garland Allen

Gregory Radick, University of Leeds, United Kingdom

“If this book has any lasting merit, ... it will be less in the questions that it answers than in those that it raises.” Thus wrote our much-missed colleague, friend, and Society stalwart Gar Allen, in the introduction to his first book in the history of science, the classic survey *Life Science in the Twentieth Century* (1975). Nearly forty years later, responding to papers presented at a “Gar Fest” symposium at his career-long professional home, Washington University in St. Louis, and subsequently published in the *Journal of the History of Biology* (which he co-edited with Jane Maienschein between 1998 and 2006), Gar picked out that sentence as one that still expressed his sense of the historian’s mission. Indeed, Gar’s questions are what many of us will cherish most in remembrance, above all the ones that he posed to us from the audience after a talk we gave at ISH, or later that same evening when he waved us over to join him and others for further discussion over drinks. No one was more encouraging or energetic in making junior scholars feel welcome or in helping them thrive professionally, no matter how grandly laurelled he became (the AAAS’s Sarton Lecture in 1998, the ISH Presidency in 2005–7, the HSS’s Sarton Medal in 2017...). Just as remarkably, he somehow fitted in all of his history-of-science community work, formal and informal, while pursuing a simultaneous (and very successful) career as a biology educator and participating in a range of social justice campaigns. Within the history of science, of course, he had his own questions too, notably about genetics and the role that a Marxian interpretive stance can play in illuminating its trajectories, including its entanglements with eugenics. Gar’s death from a mixture of health challenges this February, just shy of his 87<sup>th</sup> birthday, deprives us of the major book in which he aimed to set out his (interim, dialectic-spurring) answers, though the mostly complete draft manuscript is available at the Washington University Archives, and the *JHB* will soon publish a helpful guide written by Jane. For a long time to come, we’ll be learning from Gar.

## Homage to Ian Hacking

(this is a shortened version of the obituary published on the University of Toronto website)

The influential scholar, dedicated teacher, and prolific author—whose wide-ranging work probed foundational questions about the nature of concepts and who is credited with bringing a historical approach to the philosophy of science—passed away on May 10, 2023, after years of declining health.

Born in Vancouver in 1936, Hacking studied mathematics and physics at the University of British Columbia (BA, 1956) before moving on to the University of Cambridge, where he earned a bachelor's degree (1958) and a PhD (1962) in Moral Sciences.

Having taught at the University of British Columbia (1964-69; seconded to Makerere University College, Uganda in 1968-69), Cambridge University (1969-74), and Stanford University (1975-82), Hacking joined the University of Toronto, where he taught in the Department of Philosophy and the Institute for the History and Philosophy of Science and Technology from 1982 to 2004. In 1991, the University accorded him its highest honour by appointing him University Professor. In 2000, Hacking became the first Anglophone elected to a permanent position at the Collège de France, the Chair in the Philosophy and History of Scientific Concepts, which he held until his retirement in 2006. In addition, he held visiting positions at universities around the world and received too many honours to list here.

He published 13 books translated into more than a dozen languages, as well as hundreds of articles, on a staggering array of topics: probability, experimental physics, philosophy of language, and logic, but also social constructivism, mental health, race, and poverty, to name a few. Some of his most ground breaking books include *The Emergence of Probability* (Cambridge University Press, 1975, 2006), *Representing and Intervening* (Cambridge University Press, 1983); *The Taming of Chance* (Cambridge University Press, 1990); *Rewriting the Soul: Multiple Personality and the Sciences of Memory* (Harvard University Press, 1995), *Mad Travelers: Reflections on the Reality of Transient Mental Illnesses* (University of Virginia Press, 1998); *Historical Ontology* (Harvard University Press, 2002); and *Why Is There a Philosophy of Mathematics at All?* (Cambridge University Press, 2014). As a public intellectual, he penned transformative pieces for newspapers and magazines such as the *New York Review of Books* and the *New Republic*.

This overarching concern with the infrastructure of knowledge production uniquely bridged the gap between “theoretical philosophy” (examining the structure of reality and the nature of thought) and “practical philosophy” (thinking through questions of value and how to live). His theoretical contributions were based on careful micro-histories. Searching for this understanding brought Hacking into direct contact with thinkers and researchers from varied fields. Uniquely, his work held sway outside of the discipline of philosophy as well. In addition to the recognition he received in the social sciences and humanities, Hacking attracted respect and praise in the natural sciences and mathematics.

Yet the man behind the accolades was a gentle, generous one, a person as genuinely interested in people as he was in ideas, as many of his colleagues, students, family, friends and acquaintances attest. He will be much missed.

## Homage to Nancy Slack

Pnina Abir-Am, Brandeis University

Nancy Gutman Slack (1932-2022) was a plant ecologist graduate of Cornell and SUNY-Albany Universities who taught for most of her career at Russell Sage College (later the Sage Colleges) in Troy, New York, before retiring, as professor emerita in 2002. A historian of science since the 1980s, she had maintained a special interest in American women botanists and collaborative couples. She was one of 12 authors who, with her chapter on the “Nineteenth-century American women botanists,” contributed to the pioneering collection of essays *Uneasy Careers and Intimate Lives, Women in Science, 1789-1979* (1987, 1989, edited by Pnina G. Abir-Am & Dorinda Outram) which integrated for the first time the history of science with the history of women and gender over various disciplines, historical periods, countries, personal statuses, and levels of gender consciousness. In the early 1990s, Nancy co-edited *Creative Couples in the Sciences* (1996) and contributed a chapter to another volume on collaborative couples, *For Better or for Worse* (2012). Her interest in explaining the synergy of collaborative couples was inspired in part by her own experience with lifelong scientist partner Glenn. In 2010, Nancy completed her book length biography of leading ecologist G.E. Hutchinson of Yale University.

Nancy did a lot of hiking while teaching students on eco trips to Central America. She shared her adventurous life annually in a letter, such as this (possibly last) one: “Happy 2021! The pandemic has been difficult for those of us who live alone... But I have had many times outdoors with friends, hiking and botanizing, in nearby beautiful nature preserves.... A few of us are still hiking every Thursday, a remnant of the Thursday Naturalists, who have been doing that since the late 1960, but can’t now. I have therefore been writing a weekly illustrated blog for them...” Indeed, she passed away with her “boots on,” getting ready for yet another skiing expedition, when a final stroke took her from us suddenly and unexpectedly.

In her long life, Nancy witnessed many changes in the careers of women scientists and historians of science. All of us can greatly benefit by familiarizing ourselves with details of her most remarkable life and legacy of collegiality, friendship, role modelling, and an ever sublime balancing of her work and her personal life. Blessed be her memory!

## Respectful Behaviour

ISHSSPB has recently ratified both a [Policy on Respectful Behaviour and associated processes](#). Please make yourself familiar with this policy, as you have agreed to abide by it when registering for the conference. We are very grateful that two of our long-standing members have agreed to serve as Ombudspersons including for the Toronto conference. Their details are provided with their permission, if contact is required with regard to issues associated with this policy: Marsha Richmond (+1 734-277-2421) and Matt Haber (+1 530-848-5579), shared email: [ombuds@ishpssb.org](mailto:ombuds@ishpssb.org).

## Local Guide

### Wifi

While on campus, you will have access to wifi via Eduroam. For those without institutional access to Eduroam, a wifi network will be made available. Information to access this alternative network will be available at the registration table.

Public Transit: <https://www.ttc.ca/routes-and-schedules>

The wearing of masks is strongly advised (but not required), on public transit (TTC).

The TTC (Toronto Transit Commission) runs the subway, the buses, and the streetcars in Toronto. Tickets on these three systems are transferable within a 2-hour transfer window. There are a few options for purchasing tickets: you can either buy [a single-use 'PRESTO' ticket, a 'PRESTO' Day Pass ticket, or a rechargeable PRESTO card](#).

- Note: it's surprisingly hard to make the Day Pass worth it! The Day Pass expires at midnight on the day you bought it, and you'd need to use 5 separate tickets in one day to justify the price...
- Streetcar Tips: the streetcars run on tracks in the middle of the road, so they don't/can't pull to the side of the road like buses. They stop in the center of the road, open their doors, and lights flash so that cars know not to pass between the door and sidewalk. [Here is a video explaining the process](#).
- The '[Transit' app](#) is good for tracking buses and streetcars.

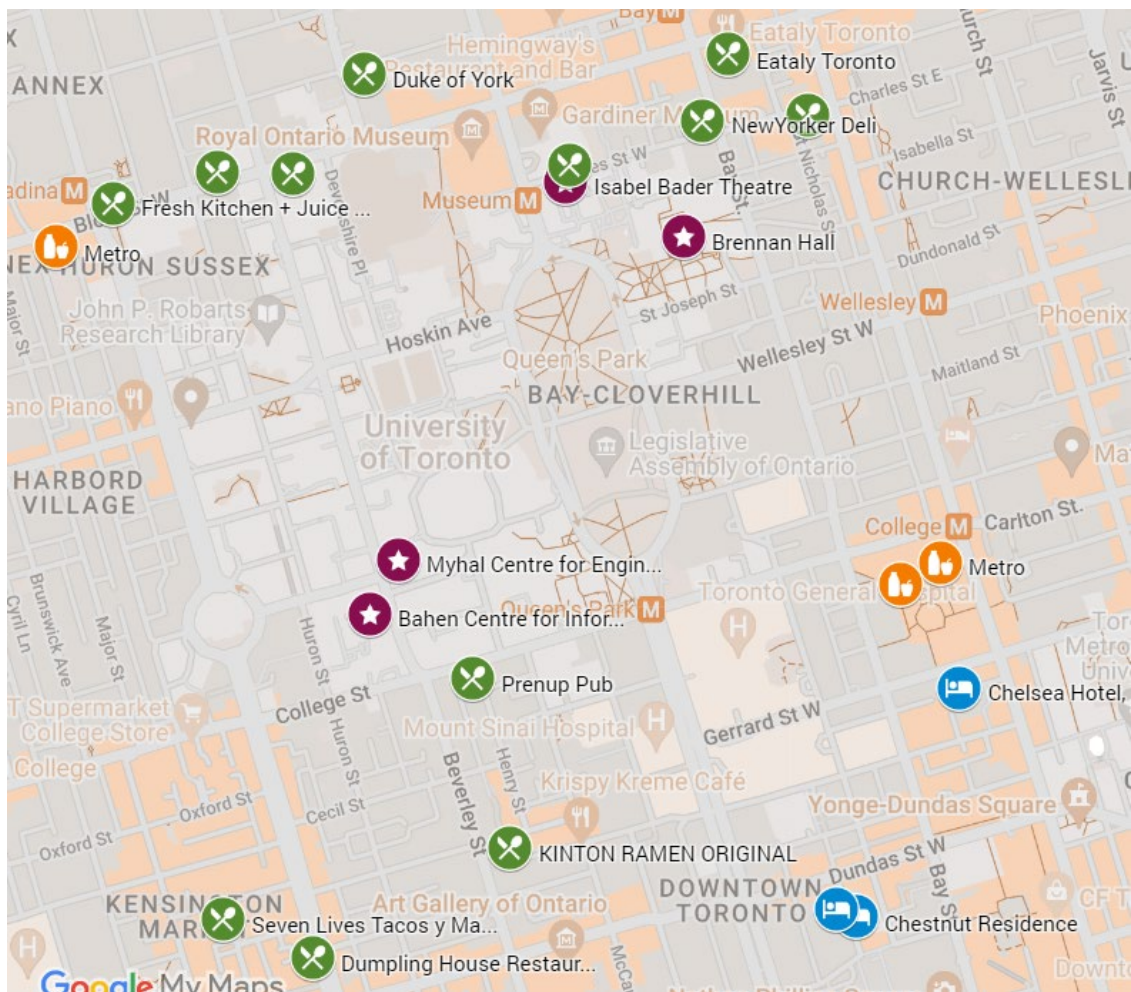
### Bikeshare Toronto

This is another good option for getting around. You can refer to [this map](#) to identify pick-up/drop-off locations around the city. Using [the Bikeshare app](#) will be helpful.



## Campus Venues and Some Lunch Spots

The [map](#) below shows where most of the action will take place. The Sunday inaugural address is at the Isabel Bader Theatre (93 Charles Street West on the grounds of Victoria College), which will be followed by an Opening Reception at Victoria College (91 Charles St., just behind the Theatre). All the other plenaries, most hybrid sessions and the coffee breaks are in the Myhal Centre (55 St-George St). Most in-person sessions and some hybrid sessions are in the Bahen Center (40 St-George St), located just across the street from Myhal. The Thursday conference dinner will be at the Brennan Hall of St Michael's College (81A St. Mary's Street, The Canada Room, 2nd floor).



## Where to Find Food Around Campus

Here are some suggestions for various food spots on/near campus that you could go to during the lunch breaks (many of them are highlighted on the map above). A link to an extended restaurants list can be found in the next section.

### Cafeterias

- Eataly (Manulife Centre, [55 Bloor St W](#))
- Ned's Cafe ([150 Charles St W](#)) (just by the Isabel Bader Theater)

### Restaurants

- Dumpling House (cash only — ATM inside) ([328 Spadina Ave.](#))
- Okonomi House (good vegetarian options) ([23 Charles St W](#))
- Maido Sushi ([362 Bloor St W](#))
- NewYorker Deli ([1140 Bay St.](#))
- Prenup Pub ([191 College St](#))
- Kinton Ramen Oriental ([51 Baldwin St](#))
- Seven Lives Tacos y Mariscos ([72 Kensington Ave](#))
- The Hogtown Vegan ([382 College St](#))
- Fresh ([326 Bloor St W](#))
- The Fortunate Fox ([280 Bloor St W](#))
- L'espresso bar mercurio ([321 Bloor St W](#))
- Fresh Kitchen + Juice Bar Bloor ([326 Bloor St W](#))
- The Fortunate Fox ([280 Bloor St W](#))

### Grocery

- Metro (\$) (two locations: [444 Yonge St](#) and [425 Bloor St W](#))
- Farm Boy (\$\$) ([777 Bay St. Unit C209](#))
- Whole Foods (\$\$\$) ([87 Avenue Rd](#))

### Coffee shops

- 7 West Cafe ([7 Charles St W](#))
- Goldstruck Coffee ([130 Cumberland St](#))
- Pilot Coffee Roasters ([55 Bloor St W Suite 128](#))
- b espresso bar ([273 Bloor St W](#))
- L'Espresso Bar Mercurio ([321 Bloor St W](#))

For more food options, coffee shops, beaches, and entertainment destinations, you can consult this [additional map](#).

## Restaurant Guide

Toronto's famed multiculturalism is reflected in its vibrant restaurant culture. If Paris is a moveable feast, then Toronto is an all-you-can-eat global buffet. There is food here for every diet, every palate, and almost every budget.

If you're not in a hurry, the best way to find a good café or restaurant is to explore Toronto's diverse neighbourhoods. In the vicinity of the conference site, you will find Little Italy, Little Portugal, Koreatown, The Annex (Bloor Street), Yorkville, Kensington Market, College Street West, Chinatown, Yonge Street (South of Bloor), and Queen Street West. A walk around these areas will reveal any number of intriguing places. Kensington Market and Yonge Street are particularly good for inexpensive places. Yorkville tends to be more expensive. A little further afield, you will find the historic Distillery District, Greektown (on the Danforth), Cabbagetown (Parliament Street), Little Ethiopia (Danforth), Little India (Leslieville), and Corso Italia (St. Clair). These places are easily accessible by public transit.

For those who would like a little help getting started, we have compiled a [cursory guide to some of the nearby restaurants](#). Some of our local favourites are in here, but we haven't tried them all. This is by no means the definitive list of worthwhile places to eat. We can't guarantee the accuracy of all the information.

### Ombudspersons

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### Parking

If you are driving and do not have parking with your hotel, see this page for St-George Campus Parking: <https://transportation.utoronto.ca/parking-map-rates/>

## Post-conference Tours and Excursions

[Royal Ontario Museum](#) (ROM), see registration about availability

Climate Change: History and Hope

In a whirlwind Museum-wide tour, you'll discover how climate change affects art, culture, and nature through the ages. Plus, you'll learn what's driving climate change today—and what you can do about it. This is a great complement to Soren Brother's Inaugural Address.

General Admission + Tour: \$20.80 + \$10.00 = \$30.80 (Taxes included)

The ROM also offers the possibility of adding-on two exhibits to this tour for an additional cost. You can sign up for these at the museum.

- [T.rex: The Ultimate Predator](#)
- [Being and Belonging](#)

[Ripley's Aquarium](#), see registration about availability

Immerse yourself in a world of 20,000 aquatic animals and discover your own underwater adventure. The Aquarium boasts more than 5.7 million litres of water, North America's longest underwater viewing tunnel, and more than 100 interactive opportunities! Get up close and personal with several touch exhibits featuring scarlet cleaner shrimp and stingrays. This awe-inspiring attraction consists of ten carefully curated galleries showcasing a cross-section of saltwater and freshwater environments from around the world, starting with species from Toronto's backyard, the Great Lakes basin.

## Ideas for Saturday Excursions

Below are some ideas for excursions that you could do on Saturday (or whenever you have time). Organize these on your own; we are happy to assist if you need help.

### Markets

**St. Lawrence Market:** <http://www.stlawrencemarket.com>, a large indoor public market near the waterfront, easily accessible via the Subway (10-minute walk east from Union Station). Tons of fresh food, produce, & meat, with a lovely coffee roaster in the basement. For meat-eaters, I recommend grabbing a peameal sandwich on the main floor. Tip: the market gets *busy* on the weekend, but if you're an early riser, it opens at 7 am on Saturday and it's much quieter in the morning. Voted by National Geographic as the world's best (2011) <https://www.nationalgeographic.com/travel/article/food-markets>

**Evergreen Brickworks:** <https://www.evergreen.ca/about/> Reclaimed quarry and brickworks. Now a place dedicated to green urban design. Farmers' market, good places to walk and eat (restaurant and food trucks). <https://www.evergreen.ca/evergreen-brick-works/what-is-evergreen-brick-works/>

**Distillery District:** <https://www.thedistillerydistrict.com> historic distilleries. Now a place for shopping and dining

## Parks

**Rouge River Urban Park:** A new national park in the city: <https://parks.canada.ca/pn-np/on/rouge> (a bit of a trek, but worth seeing)

**Tommy Thompson Park:** This is a fascinating wildlife area. World's largest inland nesting colony of cormorants. Great views of the city: <https://tommythompsonpark.ca> (renting a bike with Bikeshare might be a good option for visiting this location)

**Fort York:** A historic fort in Downtown Toronto, where the American invasions of 1812 were repelled: <https://www.fortyork.ca/history-of-fort-york.html>

**Humber River Walking Trail:** <https://www.alltrails.com/trail/canada/ontario/humber-river-recreation-trail>

**Beaches:** <https://www.toronto.ca/explore-enjoy/parks-gardens-beaches/beaches/> Large waterfront area with extensive beaches for swimming and picnicking.

**Canada's Wonderland (amusement park):** <https://www.canadaswonderland.com/>

**Niagara Falls:** <https://tourstoniagarafalls.com/> (departing from Toronto). You can also visit the Falls on your own. A good transit option for Niagara Falls is the Go Transit Niagara route: <https://www.gostransit.com/en/partners-and-promotions/go-trains-to-niagara-falls-7-days-a-week>

## Wine Tours

**Niagara on the Lake:** <https://niagaraworldwinetours.com/Tours> (Departing from Niagara on the Lake.)

## Galleries, Museum, and other Attractions

**Art Gallery of Ontario:** Includes the world's largest collection of Henry Moore maquettes: <https://ago.ca>

**McMichael Gallery. Museum of Canadian Art:** Holds the definitive Group of Seven collection. The gallery is set in beautiful woodlands: <https://mcmichael.com/visit/> .

**CN Tower:** <https://www.cntower.ca> You can see the city and how the land is as flat as the lake. You can even do the EdgeWalk <https://www.cntower.ca/brave-the-edgewalk>

## Entertainment

**Massy Hall:** <https://www.cntower.ca/brave-the-edgewalk>

**Roy Thomson Hall:** <https://roythomsonhall.mhrth.com>

**Koerner Hall:** [https://www.rcmusic.com/concerts?tps\\_activeFacetTab= showall](https://www.rcmusic.com/concerts?tps_activeFacetTab= showall)

**Rogers Centre:** for baseball aficionados, the Blue Jays are playing a series of three matches in Toronto against the D-backs, July 14-16 (<https://www.mlb.com/bluejays/schedule/2023-07>)

**Comedy Bar:** <https://comedybar.ca/>

## Other Resources

The City of Toronto has a website (<https://www.toronto.ca/>) with a lot of information for visitors.

Visit Toronto (<https://www.destinationtoronto.com/>) has a wide range of suggestions for everyone, from specialty museums to breweries, including suggestions of cycling routes for foodies who love art. You will likely find something interesting to visit there.

## Information about keynotes and public panel

### Climate, Lakes, and Museum: Intersections and Transdisciplinary Opportunities. Inaugural address by Soren Brothers

Sunday July 9

Soren Brothers is the Allan and Helaine Shiff Curator of Climate Change at the Royal Ontario Museum, Toronto. He is also an Assistant Professor at the Department of Ecology and Evolutionary Biology at the University of Toronto. Soren's research examines the effects of climate change on lakes, and how changes in aquatic systems can influence their greenhouse gas emissions to the atmosphere. More broadly, he is interested in understanding how feedback loops and the transdisciplinary study of lakes can help us better understand and predict global tipping points that may accelerate anthropogenic climate change. Soren has worked on lakes in a diverse array of environments around the world, including the Nunavut tundra, Quebec's boreal forests, and the Great Lakes. He is leading a Global Lakes Ecological Observatory Network initiative to improve understanding of the widespread greenhouse gas impacts of desiccation. He is also passionate about science communication and community outreach.



## An Indigenous ontology of climate change. Keynote lecture by Deborah McGregor

Tuesday July 11

Deborah McGregor, Anishinabe Associate Professor and Canada Research Chair: Indigenous Environmental Justice. Osgoode Hall Law School and Faculty of Environmental and Urban Change, York University. Professor McGregor's research has focused on Indigenous knowledge systems and their various applications in diverse contexts including environmental and water governance, environmental justice, health and environment, climate change and Indigenous legal traditions. Professor McGregor remains actively involved in a variety of Indigenous communities, serving as an advisor and continuing to engage in community-based research and initiatives. Professor McGregor has been at the forefront of Indigenous environmental justice and Indigenous research theory and practice. Her work has been shared through the IEJ project website <https://iejproject.info.yorku.ca/> and UKRI International Collaboration on Indigenous Research <https://www.indigenous.ncrm.ac.uk/>.



Professor McGregor's remarks will articulate what an indigenous ontology of climate change looks like, with an emphasis on Anishinabek perspectives. Indigenous scholars have delineated a distinct formulation of Indigenous climate justice based on Indigenous legal orders, knowledge systems, and conceptions of justice. Few proposed solutions are Indigenous-led or adequately informed by Indigenous ways of knowing. Over the past few years, climate change/justice has become a central focus for Indigenous peoples, with climate emergencies declared by numerous First Nations and the Assembly of First Nations. By applying Anishinabek theoretical foundations to Indigenous climate futures, Professor McGregor will provide a deeper understanding of climate justice issues facing Indigenous peoples and propose viable approaches to seeking a sustainable climate future on Indigenous peoples' own terms.

Her role as a leader in environmental and climate justice, Indigenous knowledge (IK) and Indigenous research methods has resulted in numerous advisory roles. Many of these initiatives, designed to gather independent advice, feed into policy development. Some notable examples include her appointment to the Indigenous Circle of Experts for the Assembly of First Nations Climate Change and Environment Committee. This enables her to contribute to national First Nation environmental directives in a number of areas, including: contributions to international position papers and UN Conference of the Parties (COP) meetings, and contributions to international agreements such as the Convention on Biodiversity. Deborah was also invited to contribute to the international and national climate assessments. In Canada, she was co-author to the Food Security and Food Safety chapter to the Health of Canadians in a Changing Climate: Advancing our Knowledge for Action assessment published in 2022.



## Great Lakes Panel

Wednesday July 12

The Great Lakes are a group of five freshwater lakes located in North America, and they are some of the largest and most important bodies of water in the world. The Great Lakes have a rich and complex history that spans thousands of years, with Indigenous and European settler communities living with and around the lakes for generations.

Over the years, the Great Lakes have been impacted by a range of environmental challenges, including pollution, invasive species, and climate change. The management and governance of the lakes have also been a topic of numerous debates, with various stakeholders, including governments, industry, and indigenous communities, all having different interests and priorities.

Throughout this panel, we will be exploring the historical, environmental, governance, and indigenous perspectives on the Great Lakes. We will discuss some of the past and current challenges and opportunities facing the lakes, as well as the different approaches being taken to address these issues. By bringing together four experts with a range of perspectives, we hope to provide a comprehensive understanding of the Great Lakes and the importance they hold for all of us.

### Panelists

Blaire Morseau is Assistant Professor of Anthropology and Interim Director of Native American and Indigenous Studies at the University of Massachusetts - Boston. She is a cultural anthropologist with interests in digital heritage, Native American counter-mapping, and Indigenous futurisms. She was the first archivist for her tribe, the Pokagon Band of Potawatomi, where she is an enrolled citizen. Her most recent book project is titled, *As Sacred To Us: Simon Pokagon's Birch Bark Stories In Their Contexts*.



Jen Read is Director of the University of Michigan Water Center. She provides intellectual and programmatic leadership to the Center's mission to foster collaborative research that informs the policy and management decisions affecting our nation's Great Lakes and coastal estuarine waters. Jen's career has focused on supporting better natural resource management decisions by bringing decision makers into the research process, including traditionally unheard or underrepresented voices, and working across jurisdictional boundaries.



Marsha L. Richmond joined the faculty at Wayne State University in Fall 1994, first teaching in the Interdisciplinary Studies Program and then in the Department of History, retiring as Emerita Professor in May 2022. Author of many articles on the history of heredity and genetics, cytology, and women in biology, she is preparing a scientific biography of Theo Colborn, who discovered the phenomenon of endocrine disruption in 1989 while studying the impact of Great Lakes pollution on wildlife. Marsha served as president of ISHPSSB the International Society for the History, Philosophy, and Social Studies of Biology, from 2017-2019.



Patricia Corcoran is a Professor of Earth Sciences at Western University. Her research focuses on natural and anthropogenic sedimentary deposits in order to gain an understanding of Earth's changing surface and atmospheric conditions through time. One significant element of her research concerns the distribution, accumulation and degradation of plastic debris in sediment, water, air, and aquatic animals. She was the first researcher globally to focus on plastic pollution in the Laurentian Great Lakes. Her award-winning contributions involves collaboration with visual artists, humanities scholars, biologists, chemists, statisticians, and engineers.



## Information for presenters

All presenters and attendees should have registered by June 9 using the [link](#) provided on the ISH2023 conference website. If for some reason you missed that deadline, it will be possible to register on-site. If you must register in Toronto, someone will be there to assist you through the process, but you will have to enter your information in the system and pay with a credit card. If for some reason online registration happens to be impossible, we will accept cash payment, but only in Canadian currency.

All registered participants will have access to the conference platform (Pheedloop) a few days prior to the conference, an email from [no-reply@pheedloop.com](mailto:no-reply@pheedloop.com) will contain your login credentials. The [conference website](#) also has a copy of the program, but it does not contain the links to the hybrid and virtual sessions. To reduce our ecological footprint and cost, we have decided not to print the program. A hard copy will be available for consultation only at the registration table from Monday to Friday.

In-person participants can pick up their name tag and conference swags at the Isabel Bader Theatre on Sunday July 9, from 3:00-4:30, immediately before the inaugural address and the opening reception. If you cannot attend the Sunday events, name tags and swags will be available throughout the week at the registration table located in the Myhal Center Atrium of Saint-George Campus.

In-person sessions will be in the Bahen Centre or the Myhal Centre. These sessions are only available to people attending the meeting in Toronto. All the rooms are equipped with the AV equipment you would normally expect in a university classroom (central computer, projector, and microphone). You can save your presentation on a memory stick and upload it to the room's computer. If you plan to use your own computer, make sure to bring the required adaptor(s) with you. We have booked the room 1220 in the Bahen Centre for you to use throughout the conference as a quiet space to go over your notes or slides. Arrive 15 min prior to your respective session to upload your material and/or test your equipment.

In addition to in-person sessions, this conference will have number of hybrids and strictly online presentations. The general information below applies to all person who intend to participate online (presenters and attendees).

### **General Virtual Conference Best Practices**

We recommend that you have the latest version of zoom installed on your computer. To install the latest zoom updates available click here: [ZOOM UPDATES](#)

While most browsers support our virtual event, we encourage you to use Google Chrome to get the most from your experience. [Google Chrome](#) can be downloaded here: [Download Chrome](#).

We also encourage you to use a hard-wired internet connection to reduce any opportunity for issues to arise due to poor connectivity. If a hard-wired internet connection is not available

and WIFI is your only option, we suggest that you close any other application that may be running unnecessarily on your computer.

Watch for an "*enable push notifications*" message to appear after logging in for the first time, we encourage you to enable notifications within your browser settings to allow notifications to appear throughout the event.

Pheedloop is not optimized for mobile devices. Please use a desktop or laptop computer to enjoy the Conference.

The hybrid sessions will be in the Myhal Centre and the Bahen Centre. The rooms for these sessions are equipped with the normal AV gears plus cameras and speakers that will allow for 2-way participation. Note that attending any of the hybrid sessions means that you will likely be on camera.

The person presenting remotely should read the next section carefully. A letter with instructions has been emailed to you by the Conference Services of Western University by July 5, 2023. Presentation times and additional best practices will be communicated at that time.

- **Zoom:** Please make sure that you have the most recent version of Zoom downloaded on your computer. Zoom updates can be found using this link to [ZOOM UPDATES](#).
- **Arrive early to test:** Please login to your Zoom Session no later than 15 minutes prior to the **Session** start time, to allow our technical support team to identify you and make you co-host before the Session starts.
- **Day of -Tech help:** If you experience any challenges logging into your specified Zoom Session, please contact your session technical representative immediately once you receive your zoom link, so they can provide assistance.
- **Have a good, stable connection:** We encourage you to use a hard-wired internet connection to reduce any opportunity for issues to arise due to poor connectivity. If a hard-wired internet connection is not available and WIFI is your only option, we suggest that you close all other applications on your computer and make every effort to utilize a reliable and secure WIFI source.
- **Quiet space:** Find a quiet area to use when presenting over Zoom. This will avoid the risk of a busy office or home surroundings interrupting your presentation.
- **Visibility:** Avoid bright lights or windows behind you while speaking on camera as this will darken your face. If you have the opportunity to add light pointed at your face, this will help the audience see you properly while speaking.
- **Microphone and Speakers:** While computer or laptop built-in microphones and speakers are adequate, we suggest using either a separate wired or a wireless microphone and earbuds or headphones. **Please do not use external speakers for your computer setup.** External speakers usually cause feedback problems in the Zoom session. If you cause feedback, you will be muted!

Each session should have a designated Chairperson. If your session does not have a Chair, the last person presenting in that session is by default acting as such. The Chair is responsible to briefly introduce the speakers, manage time, and the Q&A. It is the Chair's responsibility to

make sure that they are familiar with the format of their session ahead of time. Chairs of hybrid sessions should allow people from the floor and online to participate in the Q&A. As a general recommendation, Chairs should invite graduate students to ask their questions first.

### Flash talk session

For the first time in ISH history, we are trialling a new format, *flash talks*—informative and fun one-minute video accompanying online and in-person posters. The best (and most entertaining) flash talk will receive a 300 USD prize. They will be screened on Tuesday July 11<sup>th</sup> in a hybrid format in Myhal 150.

### In-person poster session and reception

In-person poster session will take place on Tuesday July 11<sup>th</sup> right after the short flash talk session, in Myhal Centre. It will be accompanied by reception.

### Online interaction space and online poster session

One of the most important parts of ISH meetings is to gather, exchange ideas and build relationships with colleagues and friends. For those of you participating online, ISH23 is no different! Besides the opportunity to participate in the majority of sessions and all plenary and keynote events, we are also hosting a virtual space for **interaction** and a **virtual poster session** on the platform **gather.town**.

If you registered to participate online you will receive an **invitation via email** to join the gather.town ISH23 space. This invitation includes a **link and password**, which you need to enter. The space is **open throughout the whole conference, from Monday July 10<sup>th</sup>, 00:00 to Friday July 14<sup>th</sup>, 23:59 (Toronto time, GMT-4)**.

Once you log in, you will be represented by a 64-bit avatar. As your avatar explores the gather space you'll interact (via video) with other people when your avatars are near each other.

For a **general introduction and tutorial** how to create your avatar and interact with your colleagues in the space, please **see this [video](#)**. (For additional information and tips, see [here](#)).

The interaction space includes a lobby and further rooms; whiteboards for browsing the program; tables to play games together; and a poster room.

All in-person poster presenters will present their posters on Tuesday July 11<sup>th</sup> 6-8 pm (Toronto time), but they will also present them in the **online poster session** on **Wednesday 12 July, 12:45-2:00 pm (local time Toronto, GMT-4)** in the poster room on gather.town.

Each presenter will be standing next to their poster (as their avatar), and once you approach the poster you will be able to video chat with them. You can also zoom into the poster and look at different parts in detail – actually, like a real poster session, except the experience of fighting for a better spot with your colleagues to better read the small print.

We hope you will all participate in these activities and have fun interacting with one another!

## Social media

ISHPSSB2023 provides an opportunity for presenters to share their work with wider audience. Social media can expand that audience. Norms around the use of social media in academic culture are still emerging. Meeting attendees using social media to broadcast content from the conference to a broader audience are asked to engage with respect and professionalism. You are asked not to post images from presentations without consent. Be clear about when you are posting the words or claims of a presenter and when you are posting your own opinion on a presentation. Be considerate of presenters' requests for no social media coverage; they may be sharing work with their peers at this conference to foster discussion and feedback but feel that the findings are not ready for wider consumption. If you prefer that your presentation not be shared via social media, communicate that clearly to your audience, perhaps with a 'no social media' icon on your slides. Chairs will remind audiences to be respectful of presenter preferences on this.

If you use social media to comment on ISHPSSB 2023, please use our [social media style guide](#). If using Twitter, please use the hashtag #ISH2023.

## Accessibility

If you are traveling with small children and require breastfeeding or changing space or if you need quiet space for other accessibility reasons, please contact our volunteer assistants in registration area.

All buildings and rooms are mobility accessible. The access to Victoria College, which is the site of the reception on July 9<sup>th</sup>, is on the ground floor in the southeast corner of the building, from where one must take an elevator located on the west end of the building.

The following rooms are equipped with hearing loops: MY 150, MY 330, MY 380, BA 1130, BA 1160, BA 1170, BA 1180, BA 1190

## Programme

Sunday July 9

<b>Room #</b>	<b>Time</b>	<b>Title</b>
Isabel Bader Theatre	3:00pm – 4:30pm	Registration
Isabel Bader Theatre	4:30pm – 6:00pm	Climate, Lakes and Museums: Intersections and Transdisciplinary Opportunities
Victoria College	6:00pm – 7:30pm	Welcome Reception

Monday July 10

<b>Room #</b>	<b>Time</b>	<b>Title</b>
Myhal Centre Atrium	8:00am – 4:00pm	Registration
Myhal Centre - MY 360	9:00am – 10:30am	Extended evolutionary synthesis
Myhal Centre - MY 380	9:00am – 10:30am	In search of biomedical validity: towards a cross-disciplinary history of validation practices I
Bahen Centre - BA 2175	9:00am – 10:30am	Keeping kinship in mind
Bahen Centre - BA 1170	9:00am – 10:30am	New perspectives on the origins of genetics
Bahen Centre - BA 1240	9:00am – 10:30am	Representations and metaphors
Bahen Centre - BA 1210	9:00am – 10:30am	Science and its publics
Myhal Centre - MY 150	9:00am – 10:30am	Shesvie meets ISHPSSB I
Bahen Centre - BA 2185	9:00am – 10:30am	Species
Bahen Centre - BA 2165	9:00am – 10:30am	The perceptible and imperceptible in altered neuro states
Myhal Centre - MY 330	9:00am – 10:30am	Uses and misuses of analogies in the life and environmental sciences
Atrium	10:30am – 11:00am	Morning Coffee Break
Myhal Centre - MY 330	11:00am – 12:30pm	Astrobiology science studies I
Bahen Centre - BA 1170	11:00am – 12:30pm	Biological sex: Explanans and explananda

Bahen Centre - BA 1210	11:00am – 12:30pm	Carving the human at its joints: Character individuation in hominin evolution
Myhal Centre - MY 360	11:00am – 12:30pm	Challenging the centrality of lineage formation in the context of Darwinian evolution I
Myhal Centre - MY 380	11:00am – 12:30pm	In search of biomedical validity: towards a cross-disciplinary history of validation practices II
Bahen Centre - BA 2165	11:00am – 12:30pm	Nancy Gutman Slack (1930-2022): Botanist, hiker, teacher, historian
Bahen Centre - BA 2175	11:00am – 12:30pm	Neural processes in animals and humans
Bahen Centre - BA 2185	11:00am – 12:30pm	Organism-environment relations
Myhal Centre - MY 150	11:00am – 12:30pm	Shesvie meets ISHPSSB II
Myhal Centre - MY 380	12:30pm – 2:30pm	First Council Meeting
N/A	12:30pm – 2:30pm	Lunch Break
Myhal Centre - MY 330	2:30pm – 4:00pm	Astrobiology science studies II
Myhal Centre - MY 360	2:30pm – 4:00pm	Challenging the centrality of lineage formation in the context of Darwinian evolution II
Bahen Centre - BA 1210	2:30pm – 4:00pm	Genopolitics, non-Western microbes and families: Racialized environment, past and present
Bahen Centre - BA 2165	2:30pm – 4:00pm	ISH-y journals: Meet the editors
Bahen Centre - BA 1220	2:30pm – 4:00pm	New old directions for the philosophy of biology
Bahen Centre - BA 1180	2:30pm – 4:00pm	Origins and challenges of animal experimentation in biopsychiatry
Myhal Centre - MY 150	2:30pm – 4:00pm	Philosophy of Immunology
Bahen Centre - BA 1190	2:30pm – 4:00pm	Tempos and modes in evolution: historical perspectives and present controversies
Bahen Centre - BA 1240	2:30pm – 4:00pm	The Resilience of the Genus
Atrium	4:00pm – 4:30pm	Afternoon Break
Myhal Centre - MY 150	4:30pm – 6:00pm	Celebrating Garland Allen



Tuesday July 11

<b>Room #</b>	<b>Time</b>	<b>Title</b>
Myhal Centre Atrium	8:00am – 4:00pm	Registration
Bahen Centre - BA 1170	9:00am – 10:30am	Agency and Darwinism I
Myhal Centre - MY 317	9:00am – 10:30am	Biochemistry: concepts, approaches, problems
Myhal Centre - MY 150	9:00am – 10:30am	Elliott Sober's philosophy of biology I
Bahen Centre - BA 1200	9:00am – 10:30am	Gene editing as a techno-solution for animal suffering I
Bahen Centre - BA 2175	9:00am – 10:30am	Normativity and morality in evolution
Bahen Centre - BA 2165	9:00am – 10:30am	Ontologies of biological individuality
Bahen Centre - BA 2185	9:00am – 10:30am	Philosophy of cognitive science
Myhal Centre - MY 360	9:00am – 10:30am	Societal values, politics & life's history I
Myhal Centre - MY 380	9:00am – 10:30am	The forgotten kingdom: Lessons from the history and philosophy of plant biology I
Bahen Centre - BA 1210	9:00am – 10:30am	The term "cell" is not a biological misnomer: Context, topology, and modes of explanation in old and new cell theory
Atrium	10:30am – 11:00am	Morning Coffee Break
Bahen Centre - BA 1170	11:00am – 12:30pm	Agency and Darwinism II
Bahen Centre - BA 1240	11:00am – 12:30pm	Causation, explanations & paradigms in molecular biology
Myhal Centre - MY 150	11:00am – 12:30pm	Elliott Sober's philosophy of biology II
Bahen Centre - BA 1200	11:00am – 12:30pm	Gene editing as a techno-solution for animal suffering II
Bahen Centre - BA 1210	11:00am – 12:30pm	Individuality and organization
Bahen Centre - BA 1130	11:00am – 12:30pm	New perspectives on biological function: Interdisciplinary issues and implications I
Bahen Centre - BA 2165	11:00am – 12:30pm	Proteins in motion: Theory and experiment in the study of protein dynamics
Bahen Centre - BA 2185	11:00am – 12:30pm	Reappraising Claude Bernard's legacy

Myhal Centre - MY 360	11:00am – 12:30pm	Societal values, politics & life's history II
Myhal Centre - MY 380	11:00am – 12:30pm	The forgotten kingdom: Lessons from the history and philosophy of plant biology II
Myhal Centre - MY 380	12:30pm – 2:30pm	ISH Inclusive
N/A	12:30pm – 2:30pm	Lunch Break
Myhal Centre - MY 360	12:30pm – 2:30pm	Mentoring Group Meeting
Bahen Centre - BA 1220	2:30pm – 4:00pm	Bias and epistemic injustice
Bahen Centre - BA 1180	2:30pm – 4:00pm	Colonial classifications and cultures of scientific inquiry
Bahen Centre - BA 2165	2:30pm – 4:00pm	Ecology and conservation
Myhal Centre - MY 380	2:30pm – 4:00pm	Human evolution
Myhal Centre - MY 360	2:30pm – 4:00pm	Making data communities
Myhal Centre - MY 317	2:30pm – 4:00pm	Methods in history and philosophy of biology
Bahen Centre - BA 1130	2:30pm – 4:00pm	New perspectives on biological functions: Interdisciplinary issues and implications II
Bahen Centre - BA 1240	2:30pm – 4:00pm	Pluralism in Science
Bahen Centre - BA 1210	2:30pm – 4:00pm	Psychology and psychotherapy
Bahen Centre - BA 1200	2:30pm – 4:00pm	Relationships among human and nonhuman animals: Research methods, gender, culture
Myhal Centre - MY 330	2:30pm – 4:00pm	Teleology and agency I
Atrium	4:00pm – 4:30pm	Afternoon Break
Myhal Centre - MY 150	4:30pm – 6:00pm	An indigenous ontology of climate change
Myhal Centre - MY 150	6:00pm – 6:30pm	Poster Flash Talk
Myhal Centre Atrium	6:30pm – 8:00pm	Posters & Light Reception

Wednesday July 12

<b>Room #</b>	<b>Time</b>	<b>Title</b>
Myhal Centre - MY 380	7:30am – 9:00am	Membership Development Meeting
Myhal Centre Atrium	8:00am – 4:00pm	Registration
Myhal Centre - MY 360	9:00am – 10:30am	Advancing biological explanation: purpose, variation, default state and agency
Bahen Centre - BA 2165	9:00am – 10:30am	Classifying humans: Race and intelligence
Myhal Centre - MY 150	9:00am – 10:30am	Conceptualising environments in and for research: Biological and philosophical perspectives I
Myhal Centre - MY 330	9:00am – 10:30am	Language and evolution: Constructionist views I
Bahen Centre - BA 2175	9:00am – 10:30am	Microbiome and holobiont
Bahen Centre - BA 2185	9:00am – 10:30am	Model Organisms
Bahen Centre - BA 1190	9:00am – 10:30am	Natural selection & drift
Bahen Centre - BA 1240	9:00am – 10:30am	Research networks / communities
Bahen Centre - BA 1180	9:00am – 10:30am	The new, extended or inclusive evolutionary synthesis: Where is it at and going?
Bahen Centre - BA 1210	9:00am – 10:30am	Uses of genetic testing
Bahen Centre - BA 1200	9:00am – 10:30am	What is a synthetic cell, and how do we know?
Atrium	10:30am – 11:00am	Morning Coffee Break
Bahen Centre - BA 2175	11:00am – 12:30pm	Affective encounters and visual tools
Bahen Centre - BA 1130	11:00am – 12:30pm	Bodies in conflict, Trans/feminisms, biology and the 4 <sup>th</sup> wave
Myhal Centre - MY 150	11:00am – 12:30pm	Conceptualising environments in and for research: Biological and philosophical perspectives II
Bahen Centre - BA 1180	11:00am – 12:30pm	Darwin & Darwinism
Bahen Centre - BA 1200	11:00am – 12:30pm	Essentialism & determinism in biology
Bahen Centre - BA 2185	11:00am – 12:30pm	Experiments & experimental systems

Myhal Centre - MY 360	11:00am – 12:30pm	Histories of heredity in the early to mid-20th century
Myhal Centre - MY 330	11:00am – 12:30pm	Language and evolution: Constructionist views II
Bahen Centre - BA 1240	11:00am – 12:30pm	Science education I
Bahen Centre - BA 2165	11:00am – 12:30pm	Thinking about explanatory integration in life sciences
Myhal Centre - MY 380	12:30pm – 2:30pm	Graduate Student Lunch Session
N/A	12:30pm – 2:30pm	Lunch Break
Gather Town	12:45pm – 2:00pm	Online Poster Session
Bahen Centre - BA 1130	2:30pm – 4:00pm	Biological sex: From models to medical consequences
Bahen Centre - BA 2185	2:30pm – 4:00pm	Computational and animal models and simulations
Bahen Centre - BA 1200	2:30pm – 4:00pm	Environment concepts in public health and holistic medicine
Bahen Centre - BA 1190	2:30pm – 4:00pm	Evidence in the life sciences
Bahen Centre - BA 1240	2:30pm – 4:00pm	Our earth and beyond: Chemistry, geo- & astrobiology
Myhal Centre - MY 150	2:30pm – 4:00pm	Problematizing biology: Jim Griesemer's contribution to our fields
Bahen Centre - BA 2165	2:30pm – 4:00pm	Science education II
Bahen Centre - BA 2165	2:30pm – 4:00pm	Teleology and agency II
Bahen Centre - BA 1210	2:30pm – 4:00pm	The evolution and psychology of social norms
Myhal Centre - MY 330	2:30pm – 4:00pm	The microbiome in practice
Myhal Centre - MY 360	2:30pm – 4:00pm	Theoretical debates on evolution
Atrium	4:00pm – 4:30pm	Afternoon Break
Myhal Centre - MY 150	4:30pm – 6:00pm	Great Lakes: Interdisciplinary Perspectives

Thursday July 13

<b>Room #</b>	<b>Time</b>	<b>Title</b>
Myhal Centre Atrium	8:00am – 4:00pm	Registration
Bahen Centre - BA 2185	9:00am – 10:30am	Biological individuality & pluralism
Bahen Centre - BA 2175	9:00am – 10:30am	Cancer evolution and evolution of cancer
Myhal Centre - MY 380	9:00am – 10:30am	Coordination within and beyond the lab: Challenges of transdisciplinary life science
Myhal Centre - MY 150	9:00am – 10:30am	Developmental niche construction: Memorial session in honour of Dr Karola Stotz (1963-2019) I
Bahen Centre - BA 1240	9:00am – 10:30am	Explanations from functions to mechanisms
Myhal Centre - MY 317	9:00am – 10:30am	Metaphysics of biology
Bahen Centre - BA 1200	9:00am – 10:30am	Organizational ecological functions: Developing and articulating the theory
Myhal Centre - MY 360	9:00am – 10:30am	Plants in translation: Global diasporas & local entanglements
Myhal Centre - MY 330	9:00am – 10:30am	Precision Medicine: From theory to practice I
Atrium	10:30am – 11:00am	Morning Coffee Break
Bahen Centre - BA 2185	11:00am – 12:30pm	Bioethics
Bahen Centre - BA 2165	11:00am – 12:30pm	Culture & evolution I
Bahen Centre - BA 1190	11:00am – 12:30pm	Data practices: Collecting, integrating, sharing
Myhal Centre - MY 150	11:00am – 12:30pm	Developmental niche construction: Memorial session in honour of Dr Karola Stotz (1963-2019) II
Bahen Centre - BA 1200	11:00am – 12:30pm	Ecological knowledge, nature control, and exploitation
Bahen Centre - BA 1210	11:00am – 12:30pm	Assessing the potential of the exposome as a central notion for contemporary epidemiology
Bahen Centre - BA 1180	11:00am – 12:30pm	Learning from the purpose project: Sociological considerations
Myhal Centre - MY 360	11:00am – 12:30pm	New roles for analogy in science: experiment, pluralism, and interdisciplinarity

Myhal Centre - MY 330	11:00am – 12:30pm	Precision Medicine: From theory to practice II
Myhal Centre - MY 380	11:00am – 12:30pm	Technological tinkering and bodies of knowledge
N/A	12:30pm – 2:30pm	Lunch Break
Myhal Centre - MY 380	12:30pm – 2:30pm	New Council Meeting
Myhal Centre - MY 380	2:30pm – 4:00pm	Domestication and artificial selection
Bahen Centre - BA 1180	2:30pm – 4:00pm	Exploring Ernst Haeckel's ecology: Letters – herbaria – travel writing
Myhal Centre - MY 360	2:30pm – 4:00pm	Health in humans and ecosystems
Bahen Centre - BA 1170	2:30pm – 4:00pm	Issues around cultural fitness revisited
Bahen Centre - BA 1200	2:30pm – 4:00pm	Levels and hierarchies
Bahen Centre - BA 1210	2:30pm – 4:00pm	Mechanism and/or organicism: Negotiating alternative perspectives on individuals, ecological communities, and the biosphere
Myhal Centre - MY 330	2:30pm – 4:00pm	Research methods & communities: Theories, practices, politics
Bahen Centre - BA 1240	2:30pm – 4:00pm	Theoretical issues in ecology and population biology
Atrium	4:00pm – 4:30pm	Afternoon Break
Myhal Centre - MY 150	4:30pm – 6:00pm	Prizes Ceremony and Members Meeting
University of St. Michael's College	7:00pm – 10:00pm	Conference Dinner

Friday July 14

<b>Room #</b>	<b>Time</b>	<b>Title</b>
Myhal Centre Atrium	8:00am – 12:00pm	Registration
Myhal Centre - MY 330	9:00am – 10:30am	Atoms, organisms & teleology in the history of philosophy
Bahen Centre - BA 1180	9:00am – 10:30am	Broadening our horizons in understanding genetic causation I
Bahen Centre - BA 2175	9:00am – 10:30am	Culture & evolution II
Myhal Centre - MY 380	9:00am – 10:30am	Decolonizing science
Myhal Centre - MY 360	9:00am – 10:30am	Explanations and models of evolution
Bahen Centre - BA 2165	9:00am – 10:30am	Laws of form and Darwinian mechanisms: The biological origins of early British cybernetics
Bahen Centre - BA 1130	9:00am – 10:30am	The new biology I
Bahen Centre - BA 2185	9:00am – 10:30am	Variation, chance and randomness
Atrium	10:30am – 11:00am	Morning Coffee Break
Bahen Centre - BA 1180	11:00am – 12:30pm	Broadening our horizons in understanding genetic causation II
Bahen Centre - BA 2175	11:00am – 12:30pm	Culture & evolution III
Myhal Centre - MY 380	11:00am – 12:30pm	Narratives of life in the life sciences: Stories of evolution, conservation, and resurrection
Myhal Centre - MY 330	11:00am – 12:30pm	Philosophy of medicine
Myhal Centre - MY 360	11:00am – 12:30pm	Science communication
Bahen Centre - BA 1190	11:00am – 12:30pm	Survival of the luckiest: Rethinking random drift
Bahen Centre - BA 1130	11:00am – 12:30pm	The new biology II

## Book publishers

Merchandise stands from the University of Chicago Press, Springer and Elsevier will be on display in the Myhal Centre foyer from Monday July 10 to Thursday July 13.

## Safety

According to *The Economist* Safe Cities Index (2021), Toronto is the second safest large city in the world (after Copenhagen). The areas around the St. George campus are safe. Information about campus safety can be found here: <https://www.campussafety.utoronto.ca>. The campus Safety Office is located close to the Bahen and Myhal centres at 2nd Floor of, 21 Sussex Ave (2<sup>nd</sup> floor) , Toronto, ON M5S 1J6. If you should have any security concerns, you are encouraged to contact the Campus safety Communications Centre (24/7). If non-urgent: 416-978-2323. If urgent: 416-978-2222 or 911.

## Health and Safety

The University of Toronto has lifted its mask requirement. However, we recognize that some members of our ISH community may choose to continue to wear a mask and so we ask everyone to respect each other's decisions, comfort levels, and health needs.

We also ask that if you are sick with any illness and especially if you are experiencing any of the following symptoms, please do not attend the conference in person, even if you are vaccinated: fever, cough, shortness of breath, sore throat, runny nose, headache, muscle aches, chills, loss of taste or smell, nausea or vomiting, or diarrhea.

Finally, conference participants are encouraged to take a self-test before travel, and to test during the conference if they are experiencing symptoms that could be Covid-19. You should refrain from coming to the event or leave promptly if you test positive for COVID-19 and should not rejoin until you test negative.

For more information on UT's ventilation strategy and related info, please see

<https://www.utoronto.ca/utogether/covid-19-planning-update>

## ISH Code of Conduct

### Policy on harassment and discrimination

We are very grateful that two of our long-standing members have agreed to serve as Ombudspersons including for the Toronto conference. Their details are provided with their permission, if contact is required with regard to issues associated with this policy: Marsha Richmond (+1 734-277-2421) and Matt Haber (+1 530-848-5579), shared email: [ombuds@ishpssb.org](mailto:ombuds@ishpssb.org)

For more information, please visit ISHPSSB

## End information



We would like to thank all the institutions, organizations and individuals who supported conference organization, through financial or in-kind support to the local and program committee, funding prizes, or through providing support for conference attendance:

From Western University: Rotman Institute of Philosophy, Faculty of Arts and Humanities, Department of Philosophy, Department of Biology

From University of Toronto: Institute of History Philosophy Science and Technology, Department of Philosophy, Faculty of Arts and Science

From University of Guelph: Department of Philosophy

From Windsor University: Great Lakes Institute for Environmental Research

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