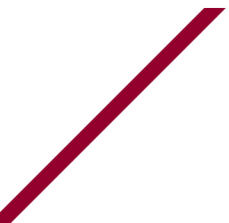




LOYOLA SUSTAINABILITY RESEARCH CENTRE

ANNUAL REPORT
2023 - 2024



1. Mission Statement

The Loyola Sustainability Research Centre (LSRC) promotes a transdisciplinary approach to research and education about relationships among natural, human, and technological systems through basic and applied research, research creation, and art and design. Our understanding of environmental issues and their societal context emphasizes interactions between social and ecological systems from local to global scales, a problem-oriented choice of methods, and solution-oriented integration of results from different perspectives. The LSRC brings faculty members, students, and post-doctoral associates from across the university together to explore the many facets of sustainability and resilience. The LSRC supports research synthesis and knowledge transfer relevant to decision-making, policy, and a transition toward a culture of sustainability.

2. Membership (name and affiliation)

2.1. Core members

1. Matthew Barker (Philosophy / Loyola College for Diversity and Sustainability)
2. Pascale Biron (Geography, Planning and Environment / Science College)
3. Natasha Blanchet-Cohen (Applied Human Sciences)
4. Selvadurai Dayanandan (Biology)
5. Emma Despland (Biology / Science College / Loyola College for Diversity and Sustainability)
6. Rebecca Dzedzic (Building, Civil, and Environmental Engineering)
7. Dylan Fraser (Biology)
8. Matthias Fritsch (Philosophy)
9. Marc-Antoni Goulet (Chemical and Materials Engineering)
10. James Grant (Biology / Loyola College for Diversity and Sustainability / Science College)*
Co-director of the LSRC from January 2023 to present
11. Jochen Jaeger (Geography, Planning and Environment / Loyola College for Diversity and Sustainability) Co-director of the LSRC from July 2023 to January 2024
12. Rassim Khelifa (Biology)
13. Philippa K. Langshaw (Design and Computation Arts / Loyola College for Diversity and Sustainability)
14. Jean-Philippe Lessard (Biology)
15. Shannon Lloyd (Management / Loyola College for Diversity and Sustainability)
16. Damon Matthews (Geography, Planning and Environment)
17. Mitchell McLarnon (Education)
18. Elizabeth Miller (Communication Studies / Loyola College for Diversity and Sustainability)
19. Katja Neves (Sociology and Anthropology / Loyola College for Diversity and Sustainability)
20. Raymond Paquin (Management / Loyola College for Diversity and Sustainability)
21. Pedro Peres-Neto (Biology)
22. Eric Pedersen (Biology)
23. Amy Poteete (Political Science)
24. Rajshree Prakash (Management)
25. Sam Rowan (Political Science)
26. Nicola Smith (Biology)
27. Jeannine Marie St-Jacques (Geography, Planning and Environment)
28. Craig Townsend (Geography, Planning and Environment)

29. Sarah Turner (Geography, Planning and Environment * Co-director of the LSRC January 2024-present
30. Robert Weladji (Biology)
31. Anya Zilberstein (History)

2.2. Associate Members (Internal Associates; 2023-2024)

1. Bengi Akbulut (Geography, Planning and Environment)
2. Anjali Awasthi (Concordia Institute for Information Systems Engineering)
3. Michael Bossert (CERC Smart, Sustainable, and Resilient Communities and Cities)
4. Joel Bothello (Management)
5. William Bukowski (Psychology / Loyola College for Diversity and Sustainability)
6. Carmela Cucuzzella (Design and Computation Arts)
7. Ricardo Dal Farra (Music)
8. Amelie Daoust-Boisvert (Journalism / Loyola College for Diversity and Sustainability)
9. Effrosyni Diamantoudi (Economics)
10. Jill Didur (English)
11. Ursula Eicker (Building, Civil, and Environmental Engineering)
12. Yves Gelinat (Chemistry and Biochemistry)
13. Govind Gopakumar (Centre for Engineering in Society)
14. Thibaud Henin (Political Science)
15. Kregg Hetherington (Sociology and Anthropology)
16. Angela Kross (Geography, Planning and Environment)
17. Simon Langlois-Bertrand (Political Science)
18. Alex Matveev (Geography, Planning and Environment)
19. Catherine Mulligan (Building, Civil, and Environmental Engineering)
20. Monica Mulrennan (Geography, Planning and Environment)
21. Ali Nazemi (Building, Civil, and Environmental Engineering)
22. Nicolas Renaud (School of Community and Public Affairs)
23. Ketra Schmitt (Centre for Engineering in Society)
24. David Secko (Journalism)
25. Leila Sujir (Intermedia)
26. Rebecca Tittler (Loyola College for Diversity and Sustainability / Geography, Planning and Environment)
27. Peter van Wyck (Communication Studies)
28. Carly Ziter (Biology / Loyola College for Diversity and Sustainability)

2.3. Junior Associate Members (graduate students and post-docs)

1. Jacob Baby (PhD Student)
2. Valérie Bolduc (MSc Student)
3. Isabelle Boucher (PhD Student)
4. Debdeep Chatterjee (PhD Student)
5. Jenny Chaverri (PhD Student)
6. Pramila Choudry (PhD Student)
7. Jonathan Cole (PhD Student)
8. Chloe Cull (MSc Student)
9. Miguel Ángel Del Pino (MSc Student)
10. Joëlle Dubé (PhD Student)

11. Stephanie Eccles (PhD Student)
12. Elahe Fakoor (PhD Student)
13. Ahad Farnood (PhD Student)
14. Kyleisha Foote (PhD Student)
15. Clara Freeman-Cole (MSc Student)
16. Marie Gagné (Post-doctoral Fellow)
17. Brian Gallagher (PhD Student)
18. Sabrina Gamez Ibarra (MFA Student)
19. Mikaela Gerwing (PhD Student)
20. Julia Ginsburg (PhD Student)
21. Maida Hadziosmanovic (PhD Student)
22. Olha Hnatyshyn (PhD Student)
23. Yogi Joseph (PhD Student)
24. Kyle Krumsick (Postdoctoral Fellow)
25. Semini Kushara Nawalage (PhD Student)
26. Mark Kwakye Frimpong (PhD Student)
27. Caroline Lesage (MSc Student)
28. Rubens Lima Moraes (PhD Student)
29. Tayebah Malmir (MSc Student)
30. Sepideh Mosharafian (MSc Student)
31. Alexander Pace (PhD Student)
32. Gerald Pond (PhD Student)
33. Kian Rahimi (PhD Student)
34. Negarsadat Rahimi (PhD Student)
35. Sreelakshmi Ramachandran (PhD Student)
36. Isabella Richmond (PhD Student)
37. Paul Savary (Post-doc)
38. Faisal Shennib (PhD Student)
39. Allegra Spensieri (MSc Student)
40. Brogan Stewart (PhD Student)
41. Andrée Tremblay (PhD Student)
42. Jordi Vilanova i Broto (PhD Student)
43. Haddie Winters (PhD Student)
44. Nicole Yu (MSc Student)
45. Larissa Zemke (MFA Student)

2.4. External Associate Members

1. Eric Abitbol (Universalialia)
2. Anna-Liisa Aunio (Dawson College)
3. Piero Genovesi (IUCN Invasive Species Specialist Group)
4. Christopher Gore (Ryerson University)
5. William V. Kennedy (UNEP)
6. Sandy Lamalle (Earth Systems Governance Representations of and Rights for the Environment Workgroup)
7. Cristina Romanelli (World Health Organization)
8. Tonia Ruppenthal (Hochschule Fulda University of Applied Sciences)
9. Laura Shillington (John Abbot College)
10. Peter Stoett (Ontario Tech University)

11. Owen Temby (University of Texas Rio Grande Valley)
12. Scott Vaughan (International Institute for Sustainable Development)

2.5. Advisory Board Members

1. Jason Ens - Executive Director, Academic Policy, Planning, and Strategic Initiatives, Office of the Provost and Vice-President, Academic Affairs
2. James Grant - Co-Director of the Loyola Sustainability Research Centre / Principal of the Loyola College for Diversity and Sustainability / Department of Biology, Faculty of Arts and Science
3. Aaron Johnson - Associate Dean Research, Faculty of Arts and Science
4. Elizabeth Miller - Co-Director of the Loyola Sustainability Research Centre / Department of Communication Studies, Faculty of Arts and Science
5. Rebecca Tittler - Coordinator of the Loyola Sustainability Research Center / Loyola College for Diversity and Sustainability
6. André Tremblay - Ph.D. Student and Student Associate Member of the Loyola Sustainability Research Centre / Department of Communication Studies, Faculty of Arts and Science
7. Manon Tremblay - Senior Director, Indigenous Directions, Office of the Provost and Vice-President, Academic Affairs

2.6. Administrative Board Members

1. Natasha Blanchet-Cohen - Department of Applied Human Sciences, Faculty of Arts and Science
2. James Grant - Co-Director of the Loyola Sustainability Research Centre / Principal of the Loyola College for Diversity and Sustainability / Department of Biology, Faculty of Arts and Science
3. Shannon Lloyd - Department of Management, John Molson School of Business / Loyola College for Diversity and Sustainability, Faculty of Arts and Science
4. Elizabeth Miller - Department of Communication Studies / Loyola College for Diversity and Sustainability, Faculty of Arts and Science
5. Katja Neves - Department of Sociology and Anthropology / Loyola College for Diversity and Sustainability, Faculty of Arts and Science
6. Raymond Paquin - Department of Management, John Molson School of Business / Loyola College for Diversity and Sustainability, Faculty of Arts and Science
7. Sarah Turner - Department of Geography, Planning and Environment, Faculty of Arts and Science

3. Collaborators

LSRC members collaborated with more than 125 researchers in other institutions across the world this year.

3.1. Partner Organizations¹

(Non-University e.g., Industry; NGOs; governmental; community)

1. American Society of Civil Engineers (ASCE).
2. American Water and Wastewater Association (AWWA);
3. Benedict Labre House
4. Black Community Resource Centre (Côte-des-Neiges)
5. Canada Space Agency

¹ Note that this list is not exhaustive.

6. Canadian Coalition for the Rights of Children (Toronto, ON)
7. Canadian Water and Wastewater Association (CWWA);
8. Casa da Criança e do Adolescente (Brazil)
9. CEDerva (Brazil)
10. Child Rights Connect (Switzerland)
11. Child Welfare Political Action Committee Canada (Toronto, ON)
12. Children's Parliament (United Kingdom)
13. Compute Canada
14. Corridor Appalachien
15. Dans La Rue
16. Digital Research Alliance of Canada
17. Éco-corridors Laurentiens
18. Environment and Climate Change Canada
19. Environmental and Water Resources Institute (EWRI)
20. Equal Education (South Africa)
21. Equitas: International Centre for Human Rights Education (Montréal, QC)
22. Eurochild (Belgium)
23. Families Canada (Ottawa, ON)
24. Fisheries and Oceans Canada
25. Future Earth / Sustainability in the Digital Age
26. Genome Canada
27. Government of New Brunswick (Fredericton, NB)
28. Greening Chinatown
29. Hydro Quebec
30. International Center for Research and Policy on Childhood (Brazil)
31. International Child Protection Network of Canada (Mississauga, ON)
32. International Institute for Child Rights and Development (Victoria, BC)
33. Learning for Well-being Foundation (The Netherlands)
34. Leibniz Institute for Ecological Spatial Development (IOER)
35. Les amis des Champs de Possibles (Montreal)
36. Maison des Jeunes de la Côte-des-Neiges
37. McGill University (Montréal, QC)
38. *Mila (Quebec)*
39. Ministère de l'environnement et de la lutte contre les changements climatiques (Quebec)
40. Ministère des Forêts, de la Faune et des Parcs (Québec)
41. Ministry of Public Safety (Quebec)
42. Ministry of Transportation (Quebec)
43. National Film Board of Canada
44. Natural Resources Canada
45. *Observatoire International sur les Impacts Sociétaux de l'IA et du Numérique (Quebec)*
46. Ouranos Research Consortium (Quebec)
47. Parks Canada
48. People for Education (Toronto, ON)
49. Plan Canada (Toronto, ON)
50. Public Health Agency of Canada (Ottawa, ON)
51. Reimagine AI
52. Ressources Aquatiques Quebec (Quebec)
53. Sauvons la Falaise (Montreal)

54. Save the Children Canada (Toronto, ON)
55. SHERPA (Montréal, QC)
56. Southern Cross University (Australia)
57. Studio No Bad Sound
58. Sustainable Livelihoods Foundation (South Africa)
59. Swire Properties (Hong Kong)
60. Swiss Federal Institute for Forests, Snow, and Landscapes (WSL)
61. Terre des hommes (Switzerland)
62. The Transition Accelerator
63. United Nations (Italy)
64. United Nations (South Africa)
65. University of Cape Town (South Africa)
66. University of Dundee (United Kingdom)
67. University of Edinburgh (United Kingdom)
68. UrbaNature (Montreal)
69. World Vision (Monrovia, CA)

3.2. Other Concordia University Partners

The LSRC has an official partnership with the Next-Generation Cities Institute. However, the LSRC also has associations with Milieux; the Indigenous Futures Research Centre; the Concordia Institute for Water, Energy, and Sustainable Systems; the Sustainability in the Digital Age; the Leadership in Environmental and Digital Innovation for Sustainability (LEADS) program; the Centre for Oral History and Digital Storytelling; the Carbon Governance Living Lab; and The Centre for the Study of Learning and Performance

3.3. Networks

LSRC members are affiliated with the following networks, among others:

- NSERC Create LEADS (Leadership in Environmental and Digital Innovation for Sustainability)
- The Quebec Centre for Biodiversity Research
- The Centre for Forest Research
- The Network for Sustainable Agriculture
- *Le Groupe de recherche interuniversitaire en limnologie*
- Future Earth
- The Centre for the Study of Learning and Performance

4. Staff

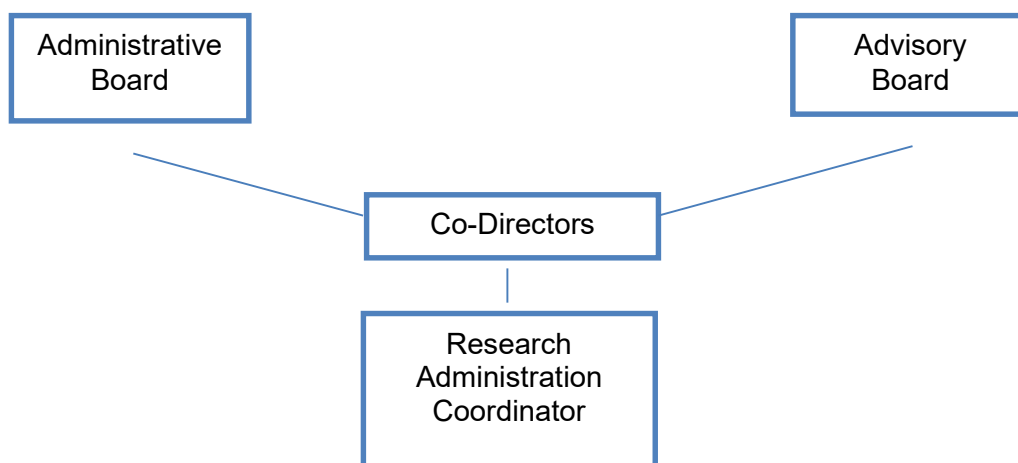
Rebecca Tittler is the only staff member of the Loyola Sustainability Research Centre. Her official title is Research Administration Coordinator. In addition to providing support for the LSRC, Rebecca is the academic advisor for all the students of the Loyola College for Diversity and Sustainability, where she also provides the only administrative support for the unit and is responsible for coordinating and running the internship program, managing the budget, scheduling classes, organizing the part-time and TA hiring processes, liaising with student

organizations on campus, and much more. She is also involved in all curriculum development at the College. Although her LCDS/LSRC position is full-time, the College portfolio requires upwards of 60-80% of her time.

5. Governance Structure

5.1. Organization Chart

The administrative structure of LSRC consists of two Co-Directors or a Director, the Administrative Board, the Advisory Board, the Annual Assembly, and Special Assemblies.



5.2. Co-Directors / Director: Responsibilities and Selection

As a research centre recognized by the Faculty of Arts and Sciences, the LSRC is led by two Co-Directors or, if this is not possible, by one Director. These positions report to the Dean or Associate Dean of Research in the Faculty of Arts and Science. The responsibilities of these positions are as follows:

- overseeing the scientific direction and administration of the research unit
- overseeing the coordination of LSRC activities, including outreach, special events, and management of communications both within the unit and externally to partner institutions, external members, funding agencies, and the community.
- managing the day-to-day staff operations of the unit
- ensuring that the unit conforms to the relevant Collective Agreements and policies in effect within Concordia University
- managing or overseeing the management of the budget of the unit
- preparing or overseeing the preparation of the annual report, which includes reporting on budget, human resources, internal relations with other Concordia units such as departments and faculties, and inter-institutional affiliations
- reviewing material for renewal of the recognition status

- developing and revising plans for securing external and internal funding for the unit's operations and research activities.

These positions are elected for three years and may be re-elected for a second three-year term without re-nomination. An outgoing Co-Director or Director can be re-nominated for a third term following the procedure outlined below. When there are Co-Directors, their terms are staggered.

The nomination and election procedure for Co-Directors and Directors is as follows: A call for nominations is sent out to Core Members² by the second week of the last winter semester of an outgoing Co-Director or Director's term. Ten working days are allowed for nominations. Nominees must be Core Members. Self-nominations are not allowed. Following the nomination process, the Coordinator circulates the CVs of the nominees to Core Members, who are then given ten working days to vote. A non-vote is treated as an abstention. The nominee with the majority of the votes cast is appointed to the position, subject to the approval of the Dean or Associate Dean of Research in the Faculty of Arts and Science. In the event that this process is unsuccessful in filling at least one Director's position, it is repeated. The directorship term runs June 1-May 31. When there is a single Director, a call for nominations for a Co-Director occurs the second week of January every year until the position is filled.

Upon approval of the current document, the sitting Co-Directors will complete the terms to which they have already been elected. Their replacements will be elected according to the procedures detailed above.

5.3. Administrative Board (AB)

This seven-member body oversees the strategic direction and administration of LSRC. The AB is responsible for determining the Centre's policies and procedures, advising on operations and activities, and selecting the members of the Advisory Board. In addition to the two Co-Directors, the AB consists of the Principal of the Loyola College for Diversity and Sustainability, one previous Director or Co-Director of the LSRC, and three other Core Members. The Coordinator of the LSRC serves as the recording secretary. The Coordinator does not have voting rights unless elected as one of the representative Core Members on this body. The Core Members and the previous LSRC Director/Co-director (if there is more than one interested) are elected to serve two-year terms. The election procedure is the same as for the Co-Directors (see 2a) except that self-nominations are allowed. There are at least two meetings each year.

Upon approval of the current document, the administrative board will be formed in accordance with the procedures detailed above.

5.4. Advisory Board (AdvB)

This seven-member body is responsible for providing general guidance and advice on LSRC operations and events and serves to facilitate information exchange. In addition to the two Co-Directors / Director, the AdvB consists of the Dean or Associate Dean of Research of the Faculty of Arts and Science, the Coordinator of the LSRC, two to three Concordia representatives who are not affiliates of the LSRC (two if there are Co-Directors, three if there is a Director), and one current Concordia student. The three Concordia representatives and the student are appointed

² Core members are internal Concordia researchers from any faculty whose primary internal research affiliation is with the LSRC. Note that this does not include postdoctoral fellows. See 3 and 4 for details on membership.

by the AB, the former for a two-year and the latter for a one-year term. There is at least one meeting each year.

Upon approval of the current document, the advisory board will be reconstituted in accordance with the procedures detailed above.

5.5. Membership, participation, and reporting

All affiliates of the LSRC are expected to be active in the intellectual life of the LSRC, attending seminars and/or workshops whenever possible. Affiliates are encouraged to participate via web conference when they are not local to reduce carbon costs of travel. Anyone wishing to become an affiliated member of LSRC must have a clear link to the LSRC mission. Those applying for Core Membership, Internal or External Associate, or Visiting Associate status must submit a *curriculum vitae* and/or bio. New applications will be vetted by the Centre's Coordinator and, except for potential Student and Post-doctoral Associates, by its Co-Directors. Where a person is applying to become a Core Member, Internal Associate, or External Associate of the LSRC, their *curriculum vitae* and/or bio will be circulated to all Core Members, who will then have ten business days to vote on their inclusion. A failure to vote within this timeframe will be taken as an abstention. New Core Members, Internal Associates, and External Associates will be accepted based on a majority of Core Member votes in favour. Affiliates are expected to acknowledge the contribution of LSRC in their work when appropriate.

The Loyola Sustainability Research Centre subscribes to the Statement on Equity, Diversity and Inclusion (EDI) set forth by the Tri-Council funding agencies of the Government of Canada and to that set forth by Concordia University. It is committed to

- Supporting equitable access to funding opportunities for all researchers and trainees;
- Promoting the integration of equity, diversity and inclusion-related considerations in research design and practices; and
- Increasing equitable and inclusive participation in the research system, including on research teams.

The LSRC will work to develop the inclusive culture needed for research excellence and to achieve outcomes that are rigorous, relevant and accessible to diverse populations.

5.6 Categories of affiliation

LSRC has the following five broad categories of affiliation:

5.6.1. Core Members

University researchers or practitioner researchers/creators/artists who are deeply invested in the research activities and intellectual life at LSRC and for whom LSRC is their primary Concordia research centre association. The Coordinator, hired by the Faculty of Arts and Sciences, will be a researcher or practitioner researcher and thus a Core Member. As individuals whose connection to LSRC is substantial and long-standing, Core Members advise the Administrative Board in setting the Centre's strategic direction through their participation in Annual Assemblies and Special Assemblies.

5.6.2. Internal Associates

University researchers or practitioner researchers/creators/ artists based at Concordia whose primary Concordia research centre association is not with the LSRC. This category also includes those who are at Concordia but have neither a permanent nor a tenure-track position, as well as retired former Core Members. LSRC Internal Associates are still expected to significantly advance the mission and outreach of LSRC through regular collaboration and attendance at LSRC events but will not be expected to take on an unpaid administrative load.

3.6.3. External Associates

University researchers or practitioner researchers/creators/ artists or community-based researchers and artists not based at Concordia whose activities enrich the community of practice of the LSRC. External Associates are still expected to significantly advance the mission and outreach of LSRC through collaboration and, if possible, attendance at LSRC events, but will not be expected to take on an unpaid administrative load.

3.6.4. Student and Post-doctoral Associates

Affiliated researchers who are working under the supervision of a Core Member or Internal Associate or whose affiliation is recommended by a Core Member or Internal Associate. Student and Post-doctoral Associates will have the option to be profiled on the LSRC website and will be invited, whenever possible, to participate in LSRC events.

Visiting Associates

Visiting researchers who have applied to be affiliated with LSRC during their stay in Montreal. The duration of these residencies is a maximum of one year, renewable.

6. Research Objectives and Program

6.1. Mission in relationship to Concordia and the Faculty strategic plan and to the landscape of other similar research units, provincially and nationally

The mission of the Loyola Sustainability Research Centre (LSRC) is to promote a transdisciplinary approach to research and education about relationships among natural, human, and technological systems through basic and applied research, research creation, and art and design. This mission is relevant to several of the 9 Strategic Directions of the University, including Double our Research, Mix it Up, Experiment Boldly, and Get your Hands Dirty. This mission is also in line with the Sustainability Action Plan of the University. Specifically, the LSRC supports inter-disciplinary networking, collaboration, and research in sustainability and provides grant application support for interdisciplinary sustainability researchers. It also runs conferences and events that increase the visibility of sustainability research at Concordia and this year, it helped develop and piloted the Concordia Sustainable Events certification for online events.

The mission of the LSRC is complementary to that of several other research units at Concordia and within the province, filling an important gap. Within Concordia, several members and affiliates are also associated with the Next Generations Cities Institute (NGCI); Milieux; the Indigenous Futures Research Centre (IFRC); the Concordia Institute for Water, Energy, and Sustainable Systems (CIWESS); and the Centre for Oral History and Digital Storytelling (COHDS). Provincially, members are also associated with the Quebec Centre for Biodiversity Research (QCBS), the Centre for Forest Research (CFR), and the *Groupe de recherche interuniversitaire en limnologie*. However, it is the only research unit that explicitly supports transdisciplinary sustainability research writ large; most other units are more specifically devoted to particular aspects of sustainability, for example, as it pertains to biodiversity (QCBS), forests (CFR), cities

(NGCI), etc. It is also the only sustainability-focussed research unit housed within the Faculty of Arts and Science.

Nationally and internationally, several members are associated with Future Earth. Future Earth is a global network of sustainability researchers across disciplines. In some ways, the missions of the LSRC and of Future Earth are similar, although they function at different scales. The LSRC focusses on developing collaborations across disciplines within Concordia, whereas Future Earth has a global focus. Here again, though, the two are complementary; 7 of the 8 Concordia researchers who are part of the NSERC CREATE LEADS (*Leadership in Environmental and Digital innovation for Sustainability*) program are members of the LSRC. In addition, Future Earth does not host events (seminars, conference, Ignite sessions) to foster conversation across disciplines in the same way that the LSRC does.

6.2. Overarching goal of centre / institute

Recognizing that many of the wicked sustainability problems of the day cannot be effectively addressed from a single disciplinary perspective, the overarching goal of the LSRC is to foster the conversation and support the development of impactful sustainability research at Concordia, with a particular focus on discussion and research across disciplines.

6.3. Research activities in the previous year³

In addition to all of the research projects outlined in the Funding, Scholarly Output, and Training of Highly Qualified Personnel sections below, the LSRC runs various events, an annual Ignite session, and an annual Sustainability across Disciplines conference. In 2024-2025, we ran the following:

In July and August, the LSRC hosted four *Wastescapes* walking / biking tours of Montreal. Led by LSRC co-director Professor Elizabeth Miller, the tours explored a range of topics including place-based learning, outdoor family adventures, cycling the Islands, and expanded cinemas. A few dozen participants attended these tours.

In October, the LSRC hosted an event entitled *Tree mapping as a transformative approach to climate change*, in collaboration with the Adaptation Futures Conference series, an international conference series devoted entirely to climate change adaptation, bringing together researchers, policymakers, practitioners, industry representatives and communicators to present their work in adaptation, learn what others are doing, and build networks. Over 40 people participated in this event, led by LSRC coordinator Rebecca Tittler.

Later that same month, the LSRC collaborated on the *Thinking Allowed Fall Colloquium*, hosted by the Elastic Spaces SSHRC Connection funded project, Thinking Allowed, in collaboration with LSRC members Leila Sujir and co-director Sarah Turner, among others. This three-day event brought together a network of artists, curators, scientists, students and community members coming with expertise from different branches of knowledge – artistic, scientific and Indigenous – to address urgent issues around social justice and the environment.

In November, the LSRC planned an event entitled *What would the future look like unconstrained by current unsustainable systems?* In the campus de la transition écologique, parc Jean-Drapeau. The event was designed to bring students and researchers into the space to spark

³ This list is not complete.

dialogue and collaboration. Unfortunately, this even had to be cancelled due to unforeseen events but relationships that may foster future collaborations were nonetheless built.

In January, the LSRC hosted a full-day exhibit / conference entitled *Worth defending: Montreal's (extra)ordinary green spaces*. This event showcased the work of LSRC members Amy Poteete, Emma Despland, Elizabeth Miller, Rebecca Tittler, and Carly Ziter, in collaboration with Karen Fisher Favret and a range of community partners (Les Amis du Champ des Possibles, Mobilisation 6600, Sauvons la Falaise, TechnoparcOiseaux, UrbaNature Éducation) and residents. Using citizen science, interdisciplinary research, art, and education, this team is working to help redefine the “value” of four informal urban green spaces in Montreal: Falaise St-Jacques, Technoparc, Champ des Possibles, Parc-Nature MHM. The goal is to examine how we might work together to enhance biodiversity, social inclusion, nature education, and climate resilience in these spaces. The event invited both the Concordia community and the general public to explore this work and these green spaces through a series of interactive activities and demonstrations, interviews with community groups, tables, and a film screening. More than 2 dozen people attended at 4th Space throughout the day.

As we do every year, in February, the LSRC hosted a closed Ignite session to foster collaboration among members. So as to maximize conversation among and participation of LSRC members, this two-hour event is split into 20-minute blocks of presentations interspersed with 20-minute blocks of discussion. With 35 LSRC members participating in the discussion, this year's presenters were junior associate member Mikaela Gerwing and LSRC members Raymond Paquin, James Grant, Emma Despland, Nicolas Renaud, William Bukowski, Carly Ziter, James Grant, and Jean-Philippe Lessard.

Also in February, the LSRC hosted the Annual Symposium of the Quebec Centre for Biodiversity Science, of which many LSRC researchers are members. Welcoming hundreds of participants and presenters, this event was featured workshops on circular economy, science outreach, the role of the social sciences in conservation, and much more.

In March, the LSRC teamed up with the Loyola College for Diversity and Sustainability (LCDS) to host its annual Sustainability across Disciplines conference, this year with the theme of *Hope and Agency in Uncertain Times*. Hosted both online and in person at Concordia's 4TH Space and in the conference centre at Loyola, this four-day conference featured a series of panels, discussions, workshops, and presentations focussed around the theme. Of particular note were keynote addresses given by Concordia's own Professors Mitchell McLarnon (Education) and Marc-Antoni Goulet (Chemical and Materials Engineering), both news members of the Centre, as well as panels on Agency and academic legitimacy, Transdisciplinarity and agency, Digital disruptions, and much more. Close to 300 people attended the conference synchronously on Zoom or in person and hundreds more have since viewed the recordings posted on YouTube.

Finally, in May and June of this year, LSRC members collaborated with the School of Graduate Studies to offer the new Graduate Microprogram in Sustainability in its inaugural year, bringing their research expertise and insights to this unique program. This program served graduate students from across disciplines and faculties this year, as well as professionals from outside the University. Since it was only approved by Senate in late March, there were only 11 students enrolled this year, but LSRC members will continue to collaborate to bring their research to the program next year, when student numbers are expected to quadruple.

6.4. Future research activities for the next year: workshops, symposia, conferences, summer schools⁴

In the 2024-2025 academic year, the LSRC will again host events throughout the year, including a Sustainability across Disciplines conference in March and an Ignite session in February. Plans are currently in development but some of the issues we are planning on focussing on through these events include investigations into intersections between art, science, the humanities, and the social sciences in sustainability research and action.

In addition, the LSRC collaborated with the School of Graduate Studies in running the new Graduate Microprogram in Sustainability in the summer of 2024 and will continue to do so in the summer of 2025.

In October, the LSRC will collaborate with the Office of Research to host a one-day symposium on Sustainable Research Practice.

Finally, the LSRC will also host the Annual Symposium of the Quebec Centre for Biodiversity Science once again in February of this year.

6.5. Future long-term objectives: Plans for joint publications, collaborative grants, recruitment of faculty, students, or partner organizations.

Moving forward, the LSRC will continue to support current collaborations and develop new ones, as well as the hiring of sustainability researchers and recruitment of HQP. The LSRC will also continue to support the development of a cross-disciplinary graduate student community.

For example, Mitchell McLarnon and Rebecca Tittler will collaborate on a project entitled *Développement d'une trousse d'outils pour les enseignant.es du primaire axée sur l'éducation à l'environnement, la lutte contre les changements climatiques et la gestion de l'éco-anxiété chez les jeunes*, funded by the Ministère de l'Éducation du Québec.

6.5.2. Ongoing collaborations with external funding⁵

In addition, the following collaborations are already externally funded and will continue into the next year(s):

- Damon Matthews (PI), Pedro Peres-Neto, Jeannine-Marie St-Jacques, Sarah Turner, Carly Ziter, Pascale Biron, Bengi Akbulut, and 25 others from other institutions: NSERC CREATE (Science Leadership for Global Sustainability or LEADS). \$1,650,000, 2020-2026.
- Selvadurai Dayanandan, Emma Despland, Dylan Fraser, James Grant, Jochen Jaeger, Jean-Philippe Lessard, Katja Neves, Eric Pedersen, Pedro Peres-Neto, Sarah Turner, Robert Weladji, Carly Ziter and 91 from other universities across Quebec (PI Andrew Gonzalez from McGill): Fonds Québécois de la Recherche sur la Nature et les Technologies (FQRNT) Regroupement Stratégique (Québec Centre for Biodiversity Science). \$3,000,000 total (1% per LSRC researcher); 2021-2026.
- Emma Despland, Jeannine-Marie St-Jacques, and 72 others (PI Pierre Drapeau, Université du Québec à Montréal): Fonds Québécois de la Recherche sur la Nature et les

⁴ This list is not complete.

⁵ This list is not complete.

Technologies (FQRNT) Regroupement Stratégique (Centre for Forest Research). \$3,300,000 (2% per LSRC researcher); 2019-2024.

- Govind Gopakumar (PI), Craig Townsend and 3 others from other institutions: SSHRC Insight. \$280,995; 2020-2024.

6.5.3. Joint publications in preparation, progress, or forthcoming⁵

- Clarke S, J-M Matte (PhD)*, B Gallagher, S Michaelides, E Lawrence, R Koumrouyan (BSc)*, S Salisbury, JWA Grant, DE Ruzzante, DJ Fraser (2024) Global assessment of effective population sizes across taxa reveals major challenges in meeting 50/500 criteria. *Molecular Ecology*, in revision.
- Engler A, DJ Fraser, P Peres-Neto (2024) Vive la différence: functional traits vary in their contributions to community assembly. *Ecology*, in revision.
- Ginath Yuh, Y., N'Goran, P. K., Kross, A., Heurich, M., Matthews, H. D., & Turner, S. E. (submitted June 2024) Monitoring forest cover and land use change in the Congo Basin under IPCC climate change scenarios. *PLOS One*
- Langer, L., Brander, M., Keles, D., Lloyd, S., Matthews, H. D. and Bjørn, A., Do voluntary renewable energy certificates lead to emission reductions? A review of studies quantifying their impact. *Journal of Cleaner Production*, submitted May 2024.
- Lesage, C, Stewart, B M, Lazure, L., Weladji, R., Matthews, H. D., & Turner, S. E. (in preparation). Social grooming and alopecia in a group of captive Japanese macaques (*Macaca fuscata*). *American Journal of Primatology*.
- Lesage, C., Kross, A., & Turner, S. E. (in revision June 2024) North American river otter habitat suitability and human-wildlife coexistence on Protection Island, British Columbia, Canada. *The Journal of Wildlife Management*.
- Reid, M., Fritsch, M., Tittler, R., Townsend, C., Bukowski, W., Persram, R., & Jaeger, J.A.G. (under review June 2024). Sharing cities with the future: How concerned are Montrealers today about the implications of their residential choices for future generations? *Canadian Geographies*.
- Sinno S, MacInnis G, Lessard JP, Ziter C. (in review). Variation in flower morphology associated with higher bee diversity in urban green spaces.
- Turner, S. E., Hogan, J., Fedigan, L. M., Matthews, H. D., & Reader, S. M. (in preparation). Placentophagia in free-ranging Japanese monkeys (*Macaca fuscata*). *Placenta*.
- Velosa, S. D., Turner, S. E., & Jaeger, J. A. G. (in preparation). Death by a thousand cars: Identifying roadkill hotspots at multiple scales along a high-traffic highway. *Environmental Management*.
- Velosa, S. D., Turner, S. E., Anderson, M., Warnock-Juteau, K., Brunen, B., & Jaeger, J. A. G. (in preparation). To cross or not to cross? Is use of crossing structures related to road mortality frequencies among mammals. *Journal of Wildlife Management*.

7. Research Infrastructure and Resources

The LSRC operates out of the Loyola College for Diversity and Sustainability on the Loyola Campus. Although members do sometimes share equipment, the Centre itself has no infrastructure or physical resources.

8. Budget

8.1. Funding for which core members are Principal Investigators⁶

Core LSRC members brought in at least \$2.8 million in external research funding this year, mostly from NSERC and SSHRC.

8.2. Funding for which core members are co-investigators or collaborators⁷

Core LSRC members were also involved as co-investigators and collaborators on projects with over \$6 million per year in external funding.

9. Publications (core members only)⁸

1. Aune, M., Ramasco, V., Warren, M., Cyr, F., Pedersen, E.J., Eriksen, E., Koen-Alonso, M., Primicerio, R., Lindstrom, U., Renaud, P., Wells, N. (2024). Taxonomic and functional-trait metrics track recovery of demersal fish and shrimp communities following system collapse. *Frontiers in Marine Science* 11. <https://doi.org/10.3389/fmars.2024.1237573>.
2. Barker, M. J., & Fraser, D. J. (2023). Misrelating values and empirical matters in conservation: A problem and solutions. *Biological Conservation*, 281, 109966.
3. Barrie, C., Fleming, T. G., & Rowan, S. S. (2024). Does Protest Influence Political Speech? Evidence from UK Climate Protest, 2017–2019. *British Journal of Political Science*, 54(2), 456-473.
4. Bjørn, A., Lloyd, S., Schenker, U., Margni, M., Levasseur, A., Agez, M., & Matthews, H. D. (2023). Differentiation of greenhouse gases in corporate science-based targets improves alignment with Paris temperature goal. *Environmental Research Letters*, 18(8), 084007.
5. Bjørn, A., Matthews, H. D., Hadziosmanovic, M., Desmoitier, N., Addas, A., & Lloyd, S. M. (2023). Increased transparency is needed for corporate science-based targets to be effective. *Nature Climate Change*, 13(8), 756-759.
6. Blanchet-Cohen, N., * Picard, V., Robert-Careau, F., & Gray-Lehoux, C. (2023). “We are slowly reclaiming for ourselves”: The generative possibilities of Indigenous youth voices. *Journal of Youth Studies*. <https://doi.org/10.1080/13676261.2023.2248916>
7. Blanchet-Cohen, N., *Cooper, A., & Doel-Mackaway, H. (2023). (Re)imagining children’s participatory rights with decolonial learning [Special Issue]. *O Social em Questão PUCRio*, 56, 25–52. <https://doi.org/10.17771/PUCRio.OSQ.62281>
8. Boivin, J., Canapé, M. H., Lamarre-Tellier, S., *Ibarra-Lemay, A., & Blanchet-Cohen, N.

⁶ This list is not complete.

⁷ This list is not complete.

⁸ This list is incomplete.

- (2023). “Community envelops us in this grey landscape of obstacles and allows space for healing”: The perspectives of Indigenous youth on well-being [Special Issue]. *Genealogy*, 7(1), 9. <https://doi.org/10.3390/genealogy7010009>
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 10. Botrel, M., Hudon, C., Biron, P. M., & Maranger, R. (2023). Combining quadrat, rake, and echosounding to estimate submerged aquatic vegetation biomass at the ecosystem scale. *Limnology and Oceanography: Methods*, 21(4), 192-208.
 11. Bouchard, E., Searle, E. B., Drapeau, P., Liang, J., Gamarra, J. G., Abegg, M., ...Dayanandan, S... & Paquette, A. (2024). Global patterns and environmental drivers of forest functional composition. *Global Ecology and Biogeography*, 33(2), 303-324.
 12. Braga, P.H.P., Kembel, S. and Peres-Neto, P.R. (2023) Historical and contemporary processes drive global phylogenetic structure across geographical scales: Insights from bat communities. *Global Ecology and Biogeography*, 32: 747-765.
 13. Khattar, G. and Peres-Neto, P.R. (2024) The Geography of Metacommunities: Landscape Characteristics Drive Geographic Variation in the Assembly Process through Selecting Species. *The American Naturalist*, 203: E142-E156.
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11. Training of Highly Qualified Personnel⁹

LSRC members supervised over 156 graduate and undergraduate research students this year.

12. Awards and Recognitions¹⁰

This year, several LSRC members received various honours. Among them are the following:

- Natasha Blanchet-Cohen received the Dean's Award for Excellence in Scholarship, (Mid-career scholar) from the Faculty of Arts and Science.
- Damon Matthews was ranked 3995st globally (177th in Canada) for most highly cited researcher in the field of Environmental Sciences by research.com.
- Pedro Peres-Neto was welcomed as a Fellow of the Ecological Society of America and was included in the Provost's Circle of Distinction.
- Joel Bothello was awarded the JMSB Dean's Award for Distinguished Scholarship (Mid-Career Scholar) and appointed to Academy of Management Review (AMR) Editorial Board

13. Partnership and Collaborators

Most of the active partnerships and collaborators of the LSRC and its members are reflected above and below.

⁹ This list may be incomplete.

¹⁰ This list is not complete.

14. Other

This year, LSRC co-director Jochen Jaeger earned an ARRE grant from OVRGS for the March conference entitled *Hope and Agency in Uncertain Times*. This is a matching fund. The conference budget was cut back mid-way to accommodate sudden budgetary cutbacks across the University. A total of \$7039.06 was spent in the end, split between OVRGS and the Loyola College for Diversity and Sustainability, the School of Community and Public Affairs, and the departments of Biology; Communication Studies; Geography, Planning and Environment; and Political Science. Almost 400 Concordia and external community members attended the conference, which was offered for no registration or admission fees.