## Annual Research Report 2024-2025



# Message from the Dean of Academic Development



We are pleased to present the accomplishments of Dawson's research community in this year's Annual Research Report.

Dawson's longstanding tradition of research and innovation continues to provide space for professional growth, contributions to society, and meaningful engagement in student training. Despite a year marked by resource constraints and wider global challenges, our community has shown remarkable resilience and dedication.

In 2024–2025, third-party funded research initiatives remain strong, supporting projects that span the natural and social sciences, the scholarship of teaching and learning, accessibility studies, food and social justice, sustainability, artificial intelligence, and the arts and literature. Our researchers have shared their work at conferences, workshops, and symposia across Canada and internationally, contributing to conversations that extend well beyond our campus.

We are also proud to highlight the ongoing contributions of our Scholars in Residence (SIR), retired Dawsonites who continue to enrich our research culture with their active engagement. Their presence underscores the enduring strength of our community across generations.

This year, we also take a moment to acknowledge with gratitude and respect the memory of Dr. Catherine Fichten, whose legacy and contributions continue to inspire our collective work. A dedicated tribute to her life and research appears later in this report.

We extend our thanks to the Research Support Fund for sustaining an environment that enables teacher-researchers to thrive and partnerships to flourish.

Most of all, we thank our research community for their courage, perseverance, and vision. Your efforts—undertaken in a time of uncertainty—remind us that curiosity and collaboration can create lasting impact.

I invite you to discover the projects presented here, which reflect not only the diversity and excellence of Dawson's research, but also the resilience and hope that define our community.

Sincerely,

Isabelle Carrier

Dean of Academic Development



## Research Highlights

- Number of Researchers holding third-party research grants: 17
- Number of Paid Research Assistants who are Students: 34
- Number of Active Projects: 18
- Number of Completed Projects: 11

The total funding (including release): \$1,800,492.00

## Research Support Fund

Dawson College acknowledges support from the Tri-Council Research Support Fund (RSF). The Research Support Fund assists Canadian postsecondary institutions with the expenses associated with managing the research funded by the three federal research granting agencies. The Government of Canada allocates a portion of research grants from federal agencies received by researchers to their home institutions each year. RSF grant funds are used to offset salaries for the Research Office staff and professional development activities in research administration. These staff play a central role in identifying and advertising funding opportunities, ensuring grant applications are complete and admissible, tracking institutional and REB approval, ensuring compliant post-award administration, and internal benchmarking and report writing.

The full public disclosure of funds statement for this year and previous years is available on the Dawson Research website: <a href="https://www.dawsoncollege.qc.ca/research/research-support-fund/">https://www.dawsoncollege.qc.ca/research/research-support-fund/</a>.



In memory of

Catherine Fichten

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### Arts, Literature, and Communications

#### CINEMA-COMMUNICATIONS

#### MAGDALENA OLSZANOWSKI

#### **Publications**

- 2024 Olszanowski, M. "A Mother's Tongue Across Linguistic Worlds" Tint Journal, Fall 2024. https://tintjournal.com/flash-nonfiction/a-mothers-tongue-across-linguistic-worlds
- 2024 Heap-Lalonde, M., Olszanowski, M. & Rowell-Katzemba, T. "Comment justifier la passivité devant la tragédie à Gaza?" La Presse, 15 April 2024. https://www.lapresse.ca/dialogue/opinions/2024-04-15/melanie-joly-apostropheepar-un-citoyen/comment-justifier-la-passivite-devant-la-tragedie-a-gaza.php

#### **Upcoming Publications**

- Olszanowski, M. "Be Who You Are. May You be Blessed In All That You Are: Involving Children In Re-Framing Jewish Ritual" in Re-storying Jewish Relationships to Community, Self, and Place: Interrogations of Settler Colonialism Willow-Samara Allen and Charles Levkoe (Eds). Athabasca University Press. (accepted and forthcoming 2026)
- Olszanowski, M. "Moving at their pace: Activism with Children" Atlantis: Critical Studies in Gender, Culture & Social Justice Journal (47, 1) (accepted and forthcoming 2026)

#### **Grants**

2024 University of Toronto Jackman Institute for Humanities for the Public Writing Workshop (\$1700)

#### Workshops

2024 University of Toronto, Jackman Humanities Institute, Public Writing Workshop, Professor: Irina Dumitrescu

#### Researcher

2025 Phi Studio, Sexuality & Digital Intimacy Exhibition, Quebec City. Advances and Intersection between Gender Equality and Digital Technology: A comprehensive timeline exploring artistic and activist movements—like cyberfeminism that bridge the relationship between media technologies, intimacy, and equality.

#### Referee

2022 Present McGill Journal of Education / Revue des sciences de l'éducation de McGill

#### **Boards, Memberships, Committees**

- 2024 Present Faculty Member, Réseau québécois en études féministes (RéQEF)
- 2023 Present Founder & Coordinator of *Art Monsters: Motherhood* Art Criticism & Reading Group
- 2023 Present Faculty Advisor, Subtext: Journal of Cinema and Communications
- 2016 Present Board Member RECAA (Respecting Elders: Communities Against Abuse),
  Montreal
- 2015 Present Copy Editor for dancecult: journal of electronic dance music culture

#### **ENGLISH**

#### **ANNA LEWTON BRAIN**

#### **Publications**

- "Trauma-Informed 'Vernacular Criticism' and Pedagogy: A Case Study of Shakespeare's *The Rape of Lucrece*" co-written with Brooke Harvey for Shakespeare Studies. Vol 51. 2024.
- "Dynamic Conversions Through Grief and Joy in George Herbert's Musical Verse," in *Conversion Machines in Early Modern Europe: Apparatus, Artifice, Body*. Eds. Paul Yachnin and Bronwen Wilson. Edenborough University P. 2023.
- Review of Simon Jackson, *George Herbert and Early Modern Musical Culture*. Cambridge: Cambridge UP. 2023 for The Spenser Review, 54.2 (Summer 2024). https://spenserreview.org/article/id/100/
- Metaphysical Music, recorded live 14 June 2024, at Chapel Notre-dame-de-bon-secours, Montreal, Quebec. https://youtu.be/82B96v\_\_9vk
- Jenkins, John. "The Shephards sing, and shall I silent bee," recorded 23 March, 2022, Christ Church Cathedral, Montreal, Quebec. https://youtu.be/h72B0MBo1Oc
- Jenkins, John. "O take thy Lute and tune it to a Straine," recorded 23 March, 2022, Montreal, Quebec. https://youtu.be/fhgBGFNkK8Y

#### **Conference Papers and Presentations**

- "Is there in beauty no truth?: searching for truth with *Hamlet*," Shakespeare Association of America Conference, Boston, March 2025
- "Singing from the Heart: Historically Informed Approaches to Early Music" co-presented with Nick Veltmeyer, including live performance with Len Torrie and John Giffen at Express Yourself: The Arts and Humanities Alive at Dawson College. Dawson College, Montreal, October 2024.
- "Metaphysical Music: A Concert of Seventeenth-Century Sacred Song". An invited plenary presentation on 13 June 2024 for the Canadian Society for Renaissance Studies Conference, co-sponsored by the Canadian Association of Music Librarians, and an "Open Event" of the Congress of Federation for the Humanities and Social Sciences at McGill University, and presented on June 14 2024 at the Montreal Baroque Festival. https://youtu.be/82B96v-9vk





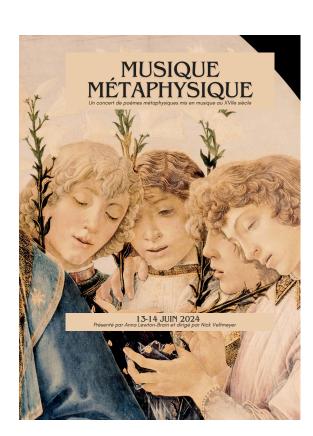


Figure 1 Cover of programme for Metaphysical Music

"'When the soul unto the lines accords': Towards an Historically Informed Performance Studies Approach to George Herbert's Musical Verse." Presented on 25 June 2022 at George Herbert in Cambridge. Sixth Triennial Conference of the George Herbert Society. 'Lovely Enchanting Language': George Herbert and Eloquence, at Magdalene College, Cambridge, UK and Presented (virtually) and on 14 June 2024 at Sound Faith: Religion and the Acoustic World, 1400-1800 at the University of York, UK.

"Reckoning with George Herbert's Verse as Sung Prayer: An Historically Informed Performance Studies Approach." Presented with live performance on 28 May 2023 at the Canadian Society for Renaissance Studies Association Conference, at York University, Toronto.

#### Grants

2024 Canada Council for the Arts, Explore and Create Grant for "Metaphysical Music" (\$13,850)

#### **DAVID DELINEAU**

#### **Publication**

David Gelineau. "Poet of Joy: Nietzschean Motifs in Philip Larkin." Literature, Voice, Meaning: Philosophical Aspects. Edited by Garry L. Hagberg. Palgrave Macmillan, 2025. 277-306.

#### JEFF GANDELL

#### **Publication**

The Faculty Learning Communities Steering Committee published a Guidebook for *Faculty* Learning Communities at Dawson.

#### KRISTOPHER WOOFTER

#### **Publications**

As Editor-in-Chief of the peer-reviewed, open-access journal Monstrum, Kristopher oversaw the publication of volume 7, issue 1 (June 2024) and vol. 7, issue 2 (December 2024), a special issue guest-edited by Dana McLeod (McGill University), our first videographic essay issue with the theme "Queer/ing Horror." Monstrum is the primary research outlet for the Collective for Research on Epistemologies and Ontologies of Embodied Risk (CORERISC), for which Kristopher now serves as co-director with Alanna Thain (McGill).

In April 2025, Kristopher published *The Weird: A Companion*, a collection of 31 essays focusing on the Weird as a traveling concept in literature, the moving image, the arts and philosophy. Kristopher co-edited the book with Carl H. Sederholm (Brigham Young University), with whom he also wrote the book's introduction, meant to be a definitive statement on Weird theory and studies.

The Weird features contributions from five CEGEP faculty in English and the Humanities, four of whom are Dawson faculty (Mikaela Bobiy, Neil Hartlen, Greg Polakoff and Michael Wood).

In June 2025, Kristopher published the essay "Necrogeography: American Folk Horror Cinema and New England as a (Bad) State of Mind" in Vampires and the Making of the United States in the Twenty-first Century, edited by Simon Bacon (Routledge).

#### **Conference and Events Organization**

In July 2024, Kristopher co-organized (with Alanna Thain and Lynn Kozak) the summer workshop "Horror Ecologies," held July 2-7, 2023. The workshop was funded by a SSHRC Connection grant for with Kristopher served as the Primary Investigator.

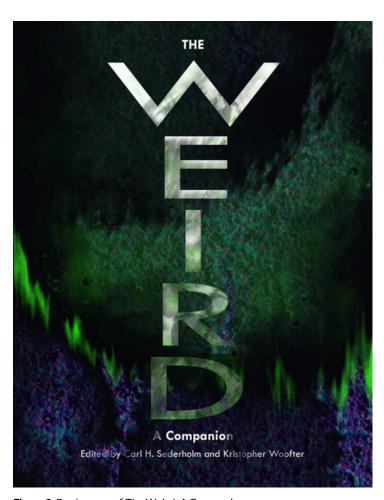


Figure 2 Book cover of The Weird: A Companion





#### **Presentations**

"Tragic Affects and Horror Histories" for the panel "Affective Impacts" at the Ancient Drama: Between Tragedy and Horror conference, September 17–22, 2024, Athens, Greece.

"'Something is pushing against the surface of things': General Orders No. 9 as Gothumentary" for the panel "Southern Gothic III: Southern Regionalities in Film and TV" at the PCAS/ACAS conference, October 17–19, 2024, Charleston, SC.

"Somnolent Horror in Syndication: Freddy's Nightmares" for the panel "Bad Sleepers: Protocols and Procedurals for Sleep Horror Media" at the "Freddy's Coming For You: A Nightmare on Elm Street @ 40" conference, November 8-9, 2024, Nottingham, UK.

#### **Publications in Development**

In May 2025, Kristopher submitted the manuscript for his first monograph, Archival Anxiety in <u>Documentary and Mockumentary Horror</u>, to be published by Anthem Press in December 2025.

Kristopher is currently working on the following projects, all with submission dates before June 2026:

- One Step Beyond (TV Milestones) (Wayne State University Press)
- (co-editor with Lynn Kozak and Alanna Thain) Undead Sleep: Risk and Rest in 21st-Century Horror Media (Edinburgh University Press)
- (co-editor with Stacey Abbott, Adam Lowenstein, Roger Luckhurst) The Routledge Companion to Horror (Routledge)
- (co-editor with Emily Banks) the 45-essay collection Oxford Handbook to Shirley Jackson (Oxford University Press)

#### MERRIANNE COUTURE

#### **Thesis**

In April 2025, Merianne submitted her thesis, "Exploring Anti-Racist and Decolonial Training for Global North Humanitarian and International Development Workers" for completion of an MSc in Humanitarian Action from the SOAS Institute, University of London, UK. She will convocate with Merit in September.

#### WILLIAM BRUBACHER

#### **Publication**

Burbacher, William. (2024). Between Word and Body: (Re)Organizing the Autobiography in bpNichol's Organ Music: Parts of an Autobiography. Intérmédialités/Intermédialities, 44. 1-19. https://doi.org/10.7202/1115014ar

#### **FINE ARTS**



Natalie Olanick in the process of doing an artist residency in beautiful and hot British Columbia.

#### POHANNA PYNE FEINBERG

#### **Exhibitions**

December 2024-January 2025 Exhibition title: Light and Shadow Group exhibition John O'League Gallery in Hayward, California

June 2024 Exhibition title: Paper Trails Group exhibition View Arts Center, Old Forge, New York



Figure 3 Paper Trails exhibition.

#### RACHEL ECHENBERG

#### **Exhibitions**

October 18, 2024 – January 19, 2025, Instants Vidéo, Marseille, France

#### **Video Screenings**

- Comment tenir le vide: 3 tentatives, Distributed by Vidéographe (Montreal)
- March 15, 2025, FIFA EXPÉRIMENTAL Toucher à distance, Montreal, QC
- March 16, 2025, Moving Time Frames, Teatro San Materno, Ascona, Switzerland
- October 17, 2024, POOL: movement art film, Berlin, German
- October 14-23, 2024, <u>Bideodromo</u>, Bilbao, Spain
- August 30, 2024, *La Grande Rencontre*, Percé, Gaspesie, QC
- Conversation with my Husband, distributed by Vidéographe (Montreal)
- August 15, 2024, VFP2024, Théâtre de Verdure du parc La Fontaine, Montréal, QC
- May 29, 2024, <u>La Voûte #16: Invisible. Désormais visible. /Unseen. Just Now Visible. GIV,</u> Montreal QC
- Perdre ses bois, Distributed by Vidéographe (Montreal)
- April 25, 2024, Jardins sans murs Manif 11, Cinéma Beaumont, Qc
- Couple, distributed by Vidéographe (Montreal)
- April 2024, <u>Buenos Aires Independent Film Festival</u>, Buenos Aires, Argentina





#### **Publication**

Projets de Jacynthe Carrier, par Rachel Echenberg Inter, Art Actuel #144, Theatrum Mundi/Le théatre du monde, Automne 2024

#### **FRENCH**

#### EMMA GAUTHIER-MAMARIL

#### Co-direction d'un numéro de revue savante

FREIDEL, Nathalie, Emma Gauthier-Mamaril et Judith Sribnai (dir.), «Femmes en correspondances. Épistolarité et agentivité (XVIIe-XVIIIe siècles) », Tangence, no 135, août 2024, <<u>https://www.erudit.org/fr/revues/tce/2024-n135-tce09524/</u>>.

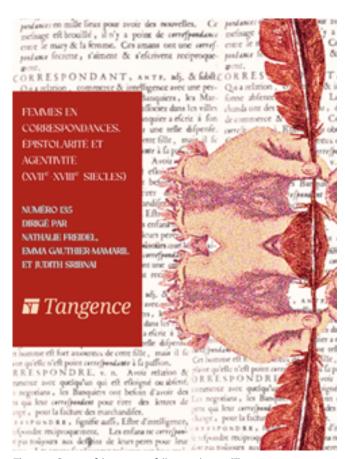


Figure 4 Cover of issue 135 of literary journalTangence

#### **Présentations**

FREIDEL, Nathalie et GAUTHIER-MAMARIL, Emma, «Présentation de la base Épistolières 17 », Journée d'étude Des sources hétérogènes pour l'histoire de la réception. Mémoires, journaux, correspondances, Journée d'étude organisée par Véronique Lochert et Magali Thomas, 8 et 9 avril 2025, Lab de la Bibliothèque Universitaire de Strasbourg.

GAUTHIER-MAMARIL, Emma, «Se regarder pour se reconnaître: l'échange savant dans la correspondance Sévigné-Grignan», Colloque international à l'occasion des 25 ans de la SIÉFAR, 16 et 17 mai 2025, Reid Hall, Paris.

#### **Bourse**

Aide à la mobilité étudiante offerte par le Groupe de recherche en histoire des sociabilités (GRHS)

#### **THEATRE**



Mila Thé reports the publication of her research (mémoire de maîtrise) entitled « Étude de facteurs influençant la persévérance et la réussite scolaires en danse au collégial : perceptions d'étudiant.e.s au sein de leur parcours de formation préuniversitaire au Québec ». The research thesis was officially published online (UQAM archives) in December 2024 and was distributed to the participants as well as shared to four CÉGEPs in the province.





## Social Science and Business Technologies

#### ANTHROPOLOGY

#### **DANIEL RUIZ**

#### **Awards**

Daniel Ruiz's book When Forest Run Amok (Duke University Press) received an Honorable Mention from the Canadian Anthropology Society's 2024 Labrecque-Lee Book Award

Additionally, it was awarded the 2024 SLACA Book Prize (Society for Latin American and Caribbean Anthropology), presented by the American Anthropologist Association

#### **Publications**

"Wounded lands, resentful mountains, and mourning maize. The ecological violence of war and peace in Latin America" in Southern Anthropocenes, edited by Casper Bruun Jensen. London: Routledge

"Fostering a decolonial approach to podcasting. Storytelling and co-creation methodologies in Colombia" in Palgrave Handbook of Humanities Podcasting, edited by Kim Adams, Saronik Bosu, Beth Kramer, and Milan Terlunen. London: Palgrave Macmillan

#### **Conference Presentation**

Mountains, Rivers, and the Law. Rethinking Rights Beyond the Human. Organized by the Austrian Academy of Sciences, Vienna, May 21-22, 2025.

Annual Conference of Humanities and Social Science, Organized by the Universidad Autonoma de Mexico, Mexico, Nov 21, 2024.

#### Involvement

I hold a position in the Publication Committee of the Scholarly Book Awards for the Canadian Federation for the Humanities and Social Sciences.

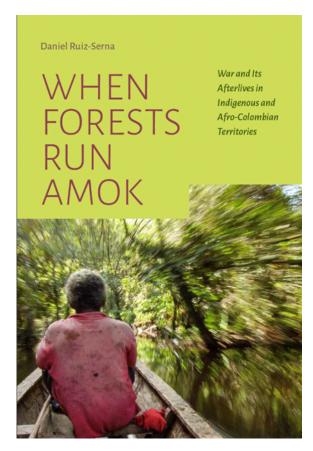


Figure 5 Book cover of When Forests Run Amok

#### **ECONOMICS**

#### AHMAD BANKI

Ahmad Banki published an article and attended an academic conference, session 10.

#### **HISTORY**

#### **ELIZABETH KIRKLAND**

#### **Publications**

- Kirkland, Elizabeth. "Weaving a Tapestry of Suffrage Activism in the Atlantic Provinces". Acadiensis, May 2025, 53 (2):168-74. https://doi.org/10.63489/acad.2024.34837.
- "Getting on Track at Windsor Train Station: Disruptions and Pivots in the lives of Domestic Workers, 1898-1902.", Annual Meeting of the Canadian Historical Association, McGill University, 16-19 June 2024.
- Podcast interview, Episode 274, "Montreal's Square Mile: The Making and Transformation of a Colonial Metropole", Witness to Yesterday, Champlain Society, 14 June 2024. Available at: <a href="https://champlainsociety.utpjournals.press/podcast/wty/montreals-square-mile-">https://champlainsociety.utpjournals.press/podcast/wty/montreals-square-mile-</a> making-and-transformation-of-colonial-metropole-with-dimitry-anastakis-elizabethkirkland-and-don-nerbas
- "Mistresses and Maids: the daily lives of women inside Montreal's elite homes" at Raconte-moi Peter-McGill Atelier de discussion et de concertation, Table de quartier Peter-McGill, le Centre de recherches interdisciplinaires en études montréalaises (CRIEM) de l'Université McGill en collaboration avec l'Office de consultation publique de Montréal (OCPM) et le Service de la Diversité et de l'inclusion sociale (Ville de Montréal), 10 October 2024.
- "Montreal's Square Mile", Atwater Library Lunchtime Series, 24 October 2024. Available at: https://youtu.be/H3\_OfOsRR\_E?si=qCh\_UprhZMdZZN8M
- "From Scotland to Montreal: Agents, Migrants and the Movement of Female Domestic Labour at the Turn of the Twentieth Century", 2025 Canadian-Scottish Studies Annual Colloquium, Atwater Library, 14 May 2025.
- "'It is a most terrible thing...': Grief and Loss in the Lives of Two Montreal Mothers during the Great War", Women's Experiences Matter: Women and Loss from the Medieval Through the Ages, Women's Historical Association of Ireland, Carlow College - St. Patrick's, 23-24 May 2025.



#### Grant

Le Groupe d'histoire de Montréal a obtenu une subvention du Fonds de recherche du Québec (Soutien aux équipes de recherche) pour 2025-2029! Le projet « Montréal, ville d'empires (1800-2000) » réunira des chercheurs, chercheuses, collaboratrices, collaborateurs, étudiant·es et postdoctorant·es de plusieurs établissements québécois et canadiens.

« Cette programmation scientifique porte sur une période de deux siècles (1800-2000) et posera un regard inédit sur l'histoire de Montréal en tant que lieu d'enchevêtrement d'empires. Nous nous intéressons au double statut de cette ville, comme colonie et métropole, et à la manière dont sa trajectoire historique est intimement liée à celle de différents empires formels ou informels (français, britannique, américain, canadien/québécois). La programmation proposée s'articule autour de trois axes qui traitent chacun d'une dimension centrale de la question, soit : Colonialismes, Mobilités et migrations et Capitalisme. Elle s'inspire des travaux critiques de théoriciens qui se sont penchés sur le concept d'empire, tout en apportant une contribution significative à l'historiographie portant sur le Canada, le Québec et Montréal. »

#### NANCY REBELO & STACEY ZEMBRYZCKI

Stacey Zembryzcki and Nancy Rebelo had an article published in the Oral History Journal in the UK. It explains the making of their award-winning audio tour titled Refugee Boulevard: Making Montreal Home after the Holocaust.

Nancy Rebelo, Anna Sheftel, Stacey Zembrzycki with Eszter Andor, "Bringing Survivors' Postwar Stories to Montreal's Streets: The Making of Refugee Boulevard, a Multimedia Project." Oral History Journal 53:1(Spring 2025): 99-110.

#### **HUMANITIES**

#### **CORY LEGASSIC**

#### **Publication**

Legassic, C. (2024). Towards a Theory of Collective Care as Pedagogy in Higher Education. LEARNing Landscapes, 17(1), 125-142. https://doi.org/10.36510/learnland.v17i1.1124

#### **Award**

McGill Doctoral Award in Educational Sciences (20,000\$)

#### Grant

CGS-SSHRC recipient (40,000\$/yr)

#### **Podcast**

Cory also produced The Action Research Podcast

#### MICHAEL WOOD

Michael Wood. "Conan the Uncanny: Weird Elements in Robert E. Howard's Conan Stories." *The Weird: A Companion*, edited by Carl H. Sederholm and Kristopher Woofter, 213-222. Oxford, UK: Peter Lang, 2025.

#### **PSYCHOLOGY**

#### **SYLVIA COX**

#### Peer reviewed publications

- Huc M, Bush K, Berrigan L, **Cox S**, Jaworska N. The influence of emotional intelligence on facial expression processing in males and females with and without psychiatric illnesses. *Personality & Individual Differences* 2025; 237:113040
- Caswell CB, Hosseini-Kamkar N, **Cox SML**, Palacio Prada N, Iqbal M, Nikolic M, Banaschewski T, Barker GJ, Bokde ALW, Brühl R, Desrivières S, Flor H, Garavan H, Gowland P, Grigis A, Heinz A, Martinot JL, Martinot MLP, Artiges E, Nees F, Orfanos D, Poustka L, Smolka MN, Hohmann S, Vaidya N, Walter H, Whelan R, Schumann G, Paus T, Leyton M. A novel diathesis-stress model of commonly comorbid early onset psychiatric disorders. *JAMA Network Open*, In Review medRxiv doi: 10.1101/2025.04.08.25325481
- Nikolic M, **Cox SML**, Jaworska N, Castellanos-Ryan N, Dagher A, Vitaro F, Brendgen M, Parent S, Boivin M, Côté S, Tremblay RE, Séguin JR, Leyton M. A multi-modal neuroimaging study of youth at risk for substance use disorders: functional magnetic resonance imaging and [18F]fallypride positron emission tomography. *Alcohol: Clinical and Experimental Research* 2025;49(2):332-344 (IF: 3.0)
- Bdair H, Sato Fitoussi M, Planche S, Moquin L, Kang MS, Aliaga A, Nagano-Saito A, Smart K, Cox SML, Near J, Aguilar-Valles A, Massarweh G, Rosa-Neto P, Benkelfat C, Soucy JP, Kostivov A, Gratton A, Leyton M. Testing PET-[11C]ABP688 as a tool to quantify glutamate release in vivo. *Imaging Neuroscience* 2024;2:1-18
- Scala SG, Kang MS, **Cox SML**, Rosa-Neto P, Massarweh G, Leyton M. Mesocorticolimbic function in recreational cocaine users: a multimodal study of cue reactivity and cognitive regulation. *Addiction Biology* 2024;29(1):e13358.



# Science, Medical Studies, and Engineering

#### **MATHEMATICS**

#### **BENJAMIN SEAMONE**

#### **Grants and Research Programs in progress**

- NSERC Discovery Grant (2017-25), "How do forbidden induced subgraphs impact global phenomena in graphs?"
- AARMS Research Group, "Games & Graph Searching in Atlantic Canada"

#### **Publications submitted/accepted**

- J. Jooken, B. Seamone, and C. Zamfirescu. Counting small cycle double covers, submitted.
- I. Beaton, S. Finbow, B. Seamone, and S. Fitzpatrick. On the eviction model of eternal domination, *submitted*.
- O. S. Lo, B. Seamone, and X. Zhu. Defective acyclic colorings of planar graphs, *Journal of Graph Theory*, 107:4 (2024), pp. 729-741.

#### Invited research lectures

- Atlantic Graph Theory Seminars, Ramsey Numbers of Signed Graphs, Jan 2025
- Canadian Math Society Winter Meetings, Ramsey Numbers of Signed Graphs, Dec 2024

#### Contributed research lectures

 56th Southeastern International Conference on Combinatorics, Graph Theory, and Computing, Ramsey Numbers of Signed Graphs, Mar 2025

#### **Supervision**

- Mehri Oghbaei, PhD (visiting research assistant), Sharif University of Technology, Iran
- Gianluca Badiambile, MSc, Université de Montreal
- Francis Clavette, MSc, Université de Montreal
- Margaux Marseloo, BSc, Université Paris-Saclay
- Nathan Acheampong, BSc, Université de Montreal

#### Service

Reviewer for Graphs and Combinatorics, Contributions to Discrete Mathematics, Involve,
 AMS Mathematical Reviews

#### MATHILDE HITIER

#### Doctoral dissertation (defended in January 2025)

Hitier, M. (2024). Apprentissage de la dérivée au postsecondaire : analyse des pratiques entre les cours de calcul et de mécanique, et identification de ruptures et continuités. [Doctoral thesis, Université de Montréal]. https://hdl.handle.net/1866/41032



Figure 6 Mathilde Hitier at her doctoral thesis defense

#### Conference proceeding

Hitier, M., & González-Martín, A. S. (2024). 'Dodging the bullet': constraints on the use of derivatives in mechanics courses. In T. Evans, O. Marmur, J. Hunter, G. Leach, & J. J. hagroo (Eds.), Proceedings of the 47th annual conference of the International Group for the Psychology of Mathematics Education (Vol. 3, pp. 41–48). https://www.igpme.org/wp-content/uploads/2024/10/PME47\_Auckland2024.zip





Hitier, M., & González-Martín, A. S. (2024). Derivatives in calculus and in mechanics. Missed opportunities in the context of free-fall. In A. S. González-Martín, G. Gueudet, I. Florensa, & N. Lombard (Eds.), INDRUM2024 Proceedings, Fifth conference of the International Network for Didactic Research in University Mathematics (pp. 473–482). Escola Univeristària Salesiana de Sarrià – Univ. Autònoma de Barcelona and INDRUM. https://indrum2024.sciencesconf.org/data/pages/Proceedings\_INDRUM2024.pdf

#### Conference Thematic Working Group (TWG) co-leader

 Co-leader in the TWG14—University Mathematics—for the 14th Conference of the European society for Research in Mathematics Education (CERME14), Bozen-Bolzano in February 2025. https://www.cerme14.it

#### **Presentations**

- Hitier, M., & González-Martín, A. S. (2025, February). Using knowledge from mechanics to solve a calculus task: a study through the lenses of mixed praxeologies [Presentation]. Congress of European Research Society in Mathematics Education (CERME14), Bozen-Bolzano, Italy.
- Hitier, M., & González-Martín, A. S. (2024, July). 'Dodging the bullet': constraints on the use of derivatives in mechanics courses [Presentation]. 47th annual conference of the International Group for the Psychology of Mathematics Education (PME47), Auckland, New-Zealand.
- Hitier, M., & González-Martín, A. S. (2024, June). Derivatives in calculus and in mechanics. Missed opportunities in the context of free-fall. [Presentation]. Fifth conference of the International Network for Didactic Research in University Mathematics (INDRUM2024), Barcelona, Spain.
- Lenton, K., Charles, E., Samson, A.-H., Hamdani, S., Hitier, M., Dudgale, M., Hughes, S., Adams, R. Laroche, K., & Brière, J.-F. (2024, June). Designing for Interdisciplinary Education. [Presentation]. SALTISE 13th Annual Conference, Montréal, Canada.

#### Founded research projects

- Co-researcher in a 3-year research (2023–2026) founded by PAREA (PA12711), involving researchers from Vanier and John Abbott and Dawson: Co-conception et collaboration interdisciplinaires: Aider les éducateurs à concrétiser le plein potentiel du nouveau programme de sciences de la nature.
- Participant in a research project founded by ECQ (to be started in fall 2025), in collaboration with John Abbott, Université de Montréal and Concordia University: Surmonter l'échec en calcul avec un Système de Tutorat Intelligent pour les cégépiens.

#### **RACHID SAAD**

#### **Publication**

Saad, Rachid. (2024). Parallel Connectivity in Edge-Colored Complete Graphs: Complexity Results. *Graphs and Combinatorics*. https://doi.org/10.1007/s00373-023-02747-4.

#### PHYSICAL EDUCATION

#### **CHARLOTTE HUEBNER**

**Huebner, C.**, Mercure, C., & Gadais, T. (2024). Social media as a learning resource for outdoor enthusiasts: a Canadian perspective. *Journal of Adventure Education and Outdoor Learning*, 1–22. https://doi.org/10.1080/14729679.2024.2403022

#### **PHYSICS**

#### **HÉLÈNE NADEAU**

#### **Supervision**

In her courses Special Topics in Physics, Introduction to Research in Brain Imaging (for Science students) and Contemporary Issues, Introduction to Research in Neuroscience (for students of all programs), Hélène Nadeau directed 16 research projects in the winter of 2024 and 14 research projects in the winter of 2025.

#### **Boards, Memberships, Committees**

Member of the Dawson Research Ethic Board.



## Scholars in Residence

#### JANICE HARVEY

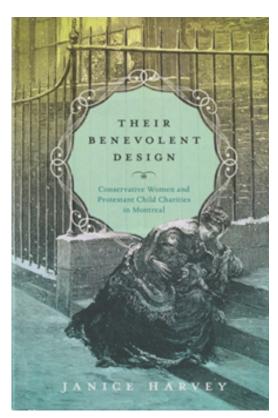


Figure 7 Book cover of Their Benevolent Design

Janice's recent book, Their Benevolent Design, was published by McGill Queens University Press, Spring 2024. For more information: https://www.mqup.ca/their-benevolent-designproducts-9780228020561.php?page\_id=46&

#### **Book review**

Their Benevolent Design: Conservative Women and Protestant Child Charities in Montreal by Janice Harvey (review) Roderick MacLeod, The Canadian Historical Review, Volume 105, Issue 4, December 2024, pp. 611-612

#### Presentation

Women-led Charities in Montreal. Their Benevolent Design: Conservative Women and Protestant Child Charities in Montreal, Westmount Library Lunchtime Series, May 9, 2024.

#### **ALLISTER NEHER LIZARS**

#### **Publication**

"John Lizars' (1792–1860). A system of anatomical plates of the human body: Artistry and analysis," in the Journal of Medical Biography, 2024, pp.1-9.

The paper is about how the anatomist and surgeon, John Lizars, used the conventions of the fine arts to create the illustrations for his famous anatomical atlas. I have attached a copy of this article with this message. Dawson was of course thanked in the Acknowledgments.

#### Referee

I served as a referee for the Journal of Medical Biography for two articles that dealt with subjects on the intersection of the history of medicine and the history of art.

#### Research

I have been researching the ways in which writings on physiognomy, by the anatomist James Parsons, influenced the art of the famous British artist William Hogarth. I have been invited by the Royal College of Physicians of England to give a talk on this research this October 30th in London. The talk will then be prepared for publication as an article.

#### **Boards, Memberships, Committees**

This past year, my status as a research associate with the Osler Library of the History of Medicine, McGill University, was renewed.





## Staff

#### **ALLISON KURZ, CECS**

#### Presentation

"Preventing Language Deprivation Syndrome: The rationalist argument that d/Deaf babies should be immersed in signed language", Graduate Student Symposium (Education Department of Concordia), March 2025

#### **ALLISON KURZ, OAD**

#### **Context and Challenge**

In preparation for external evaluation by EQual Canada – Accreditation Canada and internal program evaluation (and the necessary remediation required to meet the standard) was first conducted.

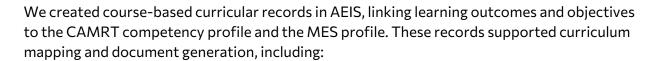
The program's curriculum had been developed in separate Word documents (one for each departmental course, approximately 23 in total), making it difficult to analyze how the program —elaborated from the Ministère de l'Enseignement supérieur du Québec (MES) competency profile—aligned with the national competency profile of the Canadian Association of Medical Radiation Technologists (CAMRT). Because the two competency profiles are structured differently, a direct comparison was not feasible without structuring the profiles in the same way to be able to analyze the information.

Curricular and program knowledge doesn't need to be articulated to be recorded and stored in a central system when communication and collaboration among all key program personnel is ongoing, when faculty are not retiring, and when documentation is already stored and organized. In this case, a solution was needed so the program's documentation could demonstrate to the external evaluator that the teaching and learning and coordination in the program matched the standard.

To support the program in meeting the accreditation standard, I was tasked to find a way to demonstrate that the program enables students to develop all CAMRT competencies in the didactic phase before the third-year hospital internship. I also needed to determine which CAMRT competencies are not attained at the hospital and then collaborate with the program to support them in ensuring the competencies are evaluated and attained in simulation at the College.

#### **Approach and Outcomes**

To use a deductive approach, I worked closely with Anna Likht in IST, a computer programmer, and the program coordinators, to build a solution using Microsoft SharePoint and Power BI which was named AEIS (Accreditation and Evaluation Information System).



A CAMRT cross-reference document (Report 38a) showing where each CAMRT competency is addressed in the didactic phase

A course-level MES-CAMRT alignment table (Report 75c), included in each course outline

Rubrics to evaluate competencies using the specific objective-learning outcome record

#### **Impact**

- Demonstrates that all CAMRT competencies are addressed before clinical placements
- Replaces fragmented documentation with centralized, queryable records
- Enables auditing, tracking, and reporting for internal and external evaluations
- Can create evaluation tools and other documentation
- Can update documentation

#### Future Plans (2025-2027)

I hope to continue working in a team to address user experience, so that the rich and structured information now stored in AEIS drives or supports this program's decision making.

Also, given it already creates evaluation tools in Power BI Paginated Reports I hope to be able to collaborate with any team who wants to innovate student evaluation, especially in clinical settings, to be in real time and greatly reduce the amount of paperwork and document storage and organization currently required.

I hope that anyone who develops or evaluates programs can benefit from the logic and process in AEIS.

#### ETIENNE CAPACCHIONE, PHOTOGRAPHY

#### **Scholarship**

SSHRC Canada Graduate Scholarship – Master's for thesis project supervised by Dr. Carol Payne at Carleton: Narrative Imagination in Photobooks and The Limits Photographic Information: Sally Mann's Immediate Family and Larry Towell's The World from My Front Porch Compared.

#### **Invited Lectures**

Invited lecturer for History and Theory of Photography with Dr. Shannon Perry on Postmodernism and Conceptualism in Photography.

Invited lecturer for History and Theory of Photography with Dr. Amy Bruce. Lecture on the histories of Kodak and Polaroid as well as moderating a workshop to engage students with my thesis research about how photographic create narrative.





#### CHRIS BOYNE, PHOTOGRAPHY

## Conseil des arts et des lettres du Québec Exploration and Research Grant – Visual arts Sculpture

CLAQ funding received for the project Squarebody Resolute; a task-based project that saw the artist Chris Boyne source a former Government of Canada squarebody truck (squarebody is an appellation that describes 1973-1987 General Motors trucks) from Resolute, Nunavut ( $^{6}$ D $^{4}$  $^{6}$ D $^{5}$  in Inuktitut: romanized: Qausuittuq, 'place with no dawn').

#### Verticale - centre d'artistes - Trajectoire, aménagement et genius loci - saison 4 Carnets d'expériences - Programmation 2023—25

Project Support / Exhibition: Squarebody Resolute <a href="https://verticale.ca/en/projects/squarebody-resolute/">https://verticale.ca/en/projects/squarebody-resolute/</a>

The task-based project Squarebody Resolute, saw the artist Chris Boyne source a former Government of Canada squarebody truck (squarebody is an appellation that describes 1973-1987 General Motors trucks) from Resolute, Nunavut (% $PAC^C$ % in Inuktitut: romanized: Qausuittuq, 'place with no dawn'). These trucks were procured by Environment Canada, Transport Canada, Natural Resources Canada, the RCMP and other government departments and assigned to the High Arctic. When the trucks reached the end of their service lives, they were decommissioned and eventually cast off. The trucks now share similar states: rust-free because of the climate with low mileage but beat up from years of abuse and picked over. Through performing the deceivingly simple action of returning a single derelict truck from the North, the artist hopes to highlight the complex system that leads to the unidirectional transfer of industrialized materials to the Arctic and the interrelatedness between that transfer of materials, arctic sovereignty and settler colonialism. The project entailed sourcing the former Environment Canada 1986 GMC Sierra 3500 3+3 truck from Resolute and having it transported to Montréal via arctic sealift ship. The project culminates with the exhibiting the vehicle itself as a large-scale sculptural object.

Squarebody Resolute considers the materiality of the truck as an object that simultaneously embodies the multiple positionalities of derelict vehicle, commodity, enthusiast item, repository of historical and technical knowledge and art-object. The action at the center of Squarebody Resolute could only be accomplished by a funded artist as government, industry and individuals have deemed shipping materials from the Arctic back to the south prohibitively expensive. Instead, new materials are sent north during annual sealifts. This unidirectional flow of materials results in an accumulation of abandoned technology in communities like Resolute, Grise Fiord and Igloolik. The project Squarebody Resolute seeks to reverse this reality. The act of removing an industrialized object from the North contrasts with traditions of natural resource extraction, the establishment of settlements to assert arctic sovereignty and historical exploitation of indigenous communities. If the truck itself can be read as a symbol of colonialism, then its return to the South is meant to act as a gentle gesture of reconciliation.

## Annandale Artist Residency - August 2024 Residency - Annandale, Prince Edward Island, Canada

https://www.annandaleartistresidency.com/ Part of the August 2024 cohort of the Annandale Artist Residency (AAR) to explore drawing as a medium. Text from AAR application:

I would use the Annandale Artist Residency to experiment with drawing as a medium. I have drawn my whole life but have not found the confidence to consider drawings part of my 'real' art. Two years ago, I bought 200 sheets of drawing paper from Robert Bateman Sketchbooks in Victoria. I thought ordering the sheets would force me to draw but I found the sheets intimidating and I only made a handful of drawings. My friend Evergon told me that I should take the sheets out in the street and let cars drive over them so they were already 'ruined' but that was impossible for me because I like the sheets pristine even if that same quality is the problem. Then I started collecting used seamless paper from the school where I work as a photography technician but even if those papers are covered in kinks, shoe prints and scuff marks I am still intimidated.

Where I have been able to draw is on tiny scraps of paper, in the margins of my French class exercise books, post-it notes and sometimes, in Robert Bateman sketchbooks where the size and quantity of pages seems to ease my anxiety. I have used these small drawings to revisit childhood experiences



Figure 8 Drawing documentation from Annandale residency



 $\textbf{Figure 9} \ Drawing \ documentation \ from \ Annandale \ residency$ 

and drawings. I suppose I have been trying to master the same side-profile drawings of boatyard trucks, container ships and sailboats since I was little. I have also used these drawings to record different experiences related to my art practice- notably my experiences around ships and the maritime industry. see arriving in Annandale with my massive 107" wide rolls of seamless paper and the 190-something sheets of Robert Bateman drawing paper I still have left, ink pens and pencil or two and enjoying the moment to really get into this medium- to see what it is all about, have fun, experiment and see what sticks.



## Crtl+P Biennale of Contemporary Art - PDF Biennale: Seventy Six is part of the PDF Exhibition Lagoumiphobia curated by Michael Eddy

https://www.ctrlp--artjournal.org/

https://www.ctrlp--artjournal.org/journalbiennale.html

An excerpt from the project 'seventy six' was included in the *The Ctrl+P Journal/Biennale of Contemporary Art* 

#### seventy six

seventy six combines generative approaches to photographic image-making with minimalist writing to move the viewer through a set of unresolved bits from my life. For the project, I located, established or re-created content surrounding these bits. Real or not, based in fantasy, ideas or ways of thinking, taken from dreams or appropriated from others, they make up a curious amalgam of reminiscence, regret, malaise and curiosity. In working each to a satisfactory conclusion, I hoped to find peace.

#### The Ctrl+P Journal/Biennale of Contemporary Art

The Ctrl+P Journal/Biennale of Contemporary Art is an institutional critique of the hegemonic biennale. A hypermedia exhibition embodied in several PDFs — "perhaps the lowest and most throwaway file form, a poor format"\* — sited in an e-journal and unthemed, Ctrl+P J/B is an exploration of how an online PDF art journal can be made into a critical site for biennale-making. It is also a proposal for a possible sustainable future-pandemics biennale model. Work on Ctrl+P J/B started in 2021, the second year of Covid.

A biennale with zero-financial capitalization, it relies completely on the social and cultural capital of all involved. Operating within the gift economy of friendships, it has no ties to national or to international funding agencies or corporations. It is not oriented to feed the global art market. Its ecological footprint is a fraction of that of the hegemonic biennale. It operates outside the structures of economic power. Therefore, it is a biennale of resistance in its non-alignment with dominant values of neoliberalism.

The first *Ctrl+P Journal/Biennale of Contemporary Art* consists of seven PDF exhibitions developed by eight curators and organizers, and one proposal for a "PDF pavilion" by two critical theorists. Eighty participants are exhibiting in this biennale. The members of the curatorium of Ctrl+P J/B1 are Founding Artistic Director Judy Freya Sibayan, Curators Edson Cabalfin, James Clar, Michael Eddy, Linde B. Lehtinen, Yumi Janairo Roth, and Dominic Zinampan. Exhibition Organizers are Lena Eriksson and Varsha Nair. Jonathan Beller and Neferti X. Tadiar are the Cultural Theorists who proposed a PDF pavilion.

#### 57W57Arts Group Exhibition: Lobster - April 13 - May 16, 2025 - New York, NY https://www.57w57arts.com/

Group exhibition including 'Lobster', a collection of five heavily painted sculptures made while in-residence at the Annandale Artist Residency in Prince Edward Island in August, 2024.

#### 'Lobster'

Annandale is a fishing village with a small fleet of older lobster boats. Many of the parts on these older boats are improvised, made of wood and heavily painted whereas the same parts on newer boats are 'off the shelf' and made of stainless steel or plastic. I found the approaches the fisherman and builders took to fashion these improvised parts fascinating. The boats all had similar parts, but the form of the parts was often different from one boat to the next. On working boats, it can be assumed that the parts were all highly functional, but each was conceptualized so differently. I loved it. It made me think about today and what I see as a boring and subjective interest in 'best'. Whoever built these parts came to design conclusions over time and through experience and preference. I made careful measurements of five of these improvised parts on lobster boats including Jacob's Run, the Robin Gayle and North Star and made precise replicas of the parts to heavily paint in high gloss marine black. I painted the objects over and over to mimic the build-up the real parts had from years of circular maintenance.



Figure 10 The 'Lobster' sculptures



## Pedagogical Research

#### RESEARCH IN NEUROSCIENCE GROUP

The Research in Neuroscience Program, led by Sylvia Cox (Psychology) and Hélène Nadeau (Physics), has been very active during the entire year through teaching courses introducing students to the field of neuroscience and research, leading extracurricular activities, participating in conferences and running the summer internship.

We are pursuing our partnership with the McGill based ThinkSci Outreach Program. Graduate and undergraduate students from McGill came to Dawson on March  $5^{th}$ , 2025 to give a workshop of introduction to research in science in general and physiology in particular. The workshop targets students from groups underrepresented in research in university. About 30 of our students participated in the workshop.

In the Winter of 2024, the extracurricular activity of the group gave the opportunity to about 50 students to experience first-hand research in neuroscience. Eight neuroscience experiments were performed on topics including the effect of trilingualism, white noise, sleep and colour contrast on attention and memory processes as well as emotion recognition and risk-taking behaviour.

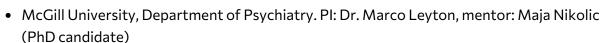
During the Summer of 2024, we partnered with 8 university labs at McGill University, Concordia and Polytechnique (details listed below). All the projects were showcased in a public oral presentation at Dawson in August and a poster presentation in October 2024. Details of these projects are listed below. Two of these teams presented at ACFAS in May 2025.

In the Fall of 2024, about 150 students participated in the weekly meetings where we explored different aspects of neuroscience. Out of these 150, 40 students continued during the winter semester. Ten teams were formed in January 2025 to design, perform and analyze experiments during the Winter term. The details of these projects are listed below. Two of these teams presented at the Science Fest at Dawson in May 2025. Seven of these teams are presenting at the SALTISE conference June 4 and 5 2025. Two teams presented at ACFAS in May 2025 and applied for the Prix de l'ARC. One of the teams won third prize. The details of these publications will appear in the research report of 2025-2026.

#### Partnerships (summer 2024)

For the summer 2024 we had the following partnerships with university researchers and organisations.

• McGill University, Department of Psychiatry, Douglas Hospital. Pl: Dr. Romina Mizrahi, mentors: Belen Blasco (PhD candidate) and Christian Ramos Jimenez (PhD candidate)



- McGill University, Department of Psychiatry, Douglas Hospital. Pl: Dr. Pedro Rosa-Neto.
   Mentor Arthur Macedo
- McGill University, Montreal Neurological Institute. PI: Dr. Yasser Iturria-Medina. Mentor: Lazaro Sanchez-Rodriguez (PhD candidate)
- McGill University, Montreal Neurological Institute. Pl: Dr. Sridar Narayanan. Mentor: Sneha Senthil (PhD candidate)
- Concordia University, Department of Physics, Pl, Dr. Glaudine Gauthier, mentor: Ali Rezaei
- Concordia University, Department of Psychology, PI: Dr. Emily Coffey, mentor: Mary Brooks.
- Polytechnique Montréal, <u>Département de génie informatique et génie logiciel</u>, PI: Benjamin De Leener. Mentor: Erjun Zhang (PhD candidate)

## Supervision of summer 2024 internship projects (under the mentorship of university partners listed above) leading to public oral and poster presentations

- 1. Alessia Panait, Alex Kim, Lazaro Sanchez-Rodriguez, Yasser Iturria-Medina, Hélène Nadeau, Sylvia Cox. Neuropathological Function Estimations: graphical user interface for the multivariate neuroimaging characterization of functional disease alterations. This work has been accepted for publication a peer-reviewed journal (see details below):
- 2. Alexandra-Teodora Sofinet, Kiana Saebnia, Mary Brooks, Emily Coffey, Hélène Nadeau, Sylvia Cox. The role of direct auditory stimulation of sleep spindles on memory consolidation on different types of memory tasks after a nap in older adults. This work was presented at ACFAS in May 2025 (and will appear in the research report of 2025-2026).
- 3. Arthur Casa-Macedo, Stuart Mitchell, Vadim Zamurayev, Sylvia Cox, Hélène Nadeau. Increased body mass index association with lower levels of Alzheimer's disease biomarkers.
- 4. Josephine Emadoye, Hanna Ton That, Erjun Zhang, Benjamin De Leener, Gregory Lodygensky, Hélène Nadeau, Sylvia Cox. *Characterization and detection of Punctuate White Matter Lesion using Diffusion MRI*. This work was presented at ACFAS in May 2025 (and will appear in the research report of 2025-2026).
- 5. Fatima Lamar, Michelle Tang, Sneha Senthil, Sridar Narayanan, Sylvia Cox, Hélène Nadeau. Oxidative Stress in Multiple Sclerosis.
- 6. Mathieu Joly, Romina Roman, Christian Ramos Jimenez. The endocannabinoid system, neuroinflamation, and the effects of cannabis on the FAAH enzyme.
- 7. Xintong Hou, Jasmin Metwally, Belen Blasco, Romina Mizrahi, Pablo Rusjan, Sylvia Cox, Hélène Nadeau. *Effect of stress on Synaptic Density in Clinical High Risk and Early Psychosis*.
- 8. Tanusha Kanagasingam, Habiba Megawer, Ali Rezai, Claudine Gauthier, Hélène Nadeau, Sylvia Cox. *Vein segmentation using Quantitative Susceptibility Mapping*.
- 9. Caroline Sonier, Nushin Kazi, Maja Nikolic, Nancy Huo, Sylvia Cox, Marco Leyton. *The Relationship between Childhood Trauma and Impulsive Traits in Young Adults*.
- 10. Emma Cato, Benafsha Bashar Doost, Maja Nikolic, Nancy Huo, Sylvia Cox, Marco Leyton. *Risk factors for Substance Use Disorders and other Psychiatric Conditions.*





## Peer-reviewed publications in scientific journals (stemming from our projects conducted during winter 2023 and summer 2024)

- 1. Panait AM, Kim A, Rodriguez-Rojas R, Sanchez-Rodriguez LM, Iturria-Medina Y. "Neuropathological function estimations": a user-friendly module for analyzing neural activity in neurological disorders. *Bioinform Adv.* 2025 Apr 9;5(1):vbaf083. doi: 10.1093/bioadv/vbaf083. PMID: 40270928; PMCID: PMC12017617.
- 2. Kylie Xu, Hoi Ching Wat, Stuart Mitchell, Heba Filkou, Dilinur Abdumutaloa, Mahan Mansoor, Sylvia Cox, Hélène Nadeau. The Effects of White Noise on Neurotypical Students' Short-Term Memory Retrieval Time. *Dawson Research Journal of Experimental Sciences*. Vol 15. Winter 2025.

#### Peer-reviewed publications in conference proceedings

Nadeau H. and Cox, S., (2024) "Best practices for group work, self- and peer assessment and self-reflection", talk presented as a symposium at SALTISE conference and published in the Proceedings of the 13<sup>th</sup> annual SALTISE Conference, Montreal, Canada, June, 2024.

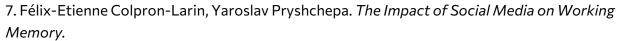
Student posters at ACFAS 2024: Colloquium: La diffusion de la recherche collégiale: un beau et grand défi, May 14, 2024, 91<sup>e</sup> congrès de l'ACFAS. These research projects were carried out as part of the summer internship in 2023.

1.Emily Issa, Nayemur Rahman, Isabelle Arseneau-Bruneau, Robert Zatorre, Hélène Nadeau, Sylvia Cox. Le cerveau humain qui perçoit les sons lors du jeu à l'instrument: la réponse d'adoption de fréquence et la mémoire de travail auditive.

2.Kylie Xu, Sara Hernandez, Hélène Nadeau, Sylvia Cox, Erjun Zhang, Benjamin de Leener, Gregory Lodygensky. Changements dans le cerveau néonatal: une évaluation du développement et de la maturation des tissus cérébraux néonatals grâce à l'imagerie par résonance magnétique de diffusion.

## Supervision of student projects during the winter semester 2025 (the first 7 lead to publications in May-June 2025 and will appear in the research report of 2025-2026)

- 1. Kiara Breton, Angelina Mashraki, Peter Stoyanov. The Cost of Connectivity: The Effect of Social Media on the Cognitive Abilities of Students.
- 2. Nicole Slanina, Aline Dubinsky, Feodor Gornostayev, Sara Isabelle Barajas-Cruz. *The Impact of Light Mode and Dark Mode on Short-Term Memory.*
- 3. Sylia Amara, Francesca Dinh, Sandra Nitchi, Valeria Pena Caputto. *Typed vs Handwritten Notes: Effects on Memory*.
- 4. Anais Hébert St-Pierre, Natali Petrosyan, Pershian Kahrizi, Claire Rodham, Sara Shaykhian. *The Effects of Language Familiarity on Short-Term Memory.*
- 5. Samya Kc, Loïc Nzenang. Correlation between Physical Activity and Selective Attention.
- 6. Samantha Tilleria, Grace Manuella Mbarga Basemeg, Annie Koutsaris. Brain Under Pressure: How Stress Affects Working Memory in Students.



- 8. Emeline Tchung, Su Yeon Kim, Elizabeth Trepanier. The influence of visual versus auditory presentation of stimuli on working memory performance.
- 9. Tristan Peirce, Lisa Zubkova, Jahsia Hayden. On-line versus paper material and the efficiency in studying.
- 10. Sherry Ni, Edith Wang, Changyu Li, Cathy Zheng. The influence of colour on working memory performance.

#### **Preparation for the Summer 2025**

During the winter semester of 2025 we recruited 9 partners for the summer internship 2025 which will host a total of 20 students. For the first time, we will be able to provide all students with a stipend. Details will appear in the research report of 2025-2026.

#### **ELIZABETH CHARLES & RESEARCH TEAM**

#### **Awards**

- Prix Gérald Sigouin awarded by the AQPC (Association québécoise de pédagogie collégiale). This award is presented every year at the opening of the AQPC conference to an individual (or a group of individuals) whose exceptional work has had a lasting impact on the college community. In the award's 30+ year history, only one other individual from an anglophone institution has received this recognition.
  - https://cdn.ca.yapla.com/company/CPYAEJBaj9LM VrlKzgeiCYmup/asset/files/documents%20AQPC/ Prix%20AQPC/Gerald-Siguoin\_Archives\_2025.pdf.
- Elected to the Board of Directors (6 year term) for the International Society of the Learning Sciences (ISLS). https://www.isls.org/about/board-ofdirectors/.
- Co-chair of the Annual Meeting Committee (AMC), for the International Society of the Learning Sciences (ISLS). 2024-25.
- Advisory Board, ISLS Annual Meeting 2025, Helsinki, Finland, June 10-13, https://2025.isls.org/organizers/

#### Conference presentations with proceedings

• Laferrière, T., & Charles, E., (2025). Mirroring what's in the shared repertoires of two communities of practice: A cultural-historical perspective using generative Al. Paper to be presented at the International Society of the Learning Sciences (ISLS) meeting – poster 629, Helsinki, Finland, June 10-14.



- Adams, R. & Charles, E. (2025). *The Practitioner's Voice in Co-Design: Agentic boundary crossing*. Poster to be presented at the International Society of the Learning Sciences (ISLS) meeting poster 629, Helsinki, Finland, June 10-14.
- Hamdani, S., Charles, E., Samson, A-H., Briere, J-F., Hitier, M., Dugdale, M., Hughes, S., Adams, R., Laroche, K., & Lenton, K. (2025). *Thematic Issues: Three design models to address the challenge of a new interdisciplinary course*. Paper to be presented at the International Society of the Learning Sciences (ISLS) meeting poster 629, Helsinki, Finland, June 10-14.

#### Conference presentations without proceedings

- Charles, E.S, Dugdale, M., Lenton, K. (2025). Changing the Beat: Gen-Al and Classroom Orchestration Dashboards. Talk presented at the Colloque Annuel, Association Québecoise de Pédagogie Collégiale (AQPC), Québec, QC., June 9, 2025.
- Lenton, K., et al (2025). From Insight to Action: Assessing and Designing for Interdisciplinary Thinking and Learning. Talk presented at the 14th Annual SALTISE Conference, Montreal, QC., June 4th, 2025.
- Charles, E., Dugdale, M., Torres, A., Amorim, G., Zhang, C., & Choquette, J. (2025). Au service du personnel enseignant: l'IA générative en mission pour la planification et l'organisation des cours. Talk presented at l'ARC, 92e Congrès de l'Acfas, Montreal, QC., May 6th, 2025. https://www.acfas.ca/archives/evenements/congres/activites/88204
- Lenton, K., Samon, A-H, Hamdani, S., Charles, E., Hitier, M., Dugdale, M., Hughes, S., Brière, J-F, Adams, R., & Laroche, K. (2025). Le défi interdisciplinaire: créer des passerelles vers un apprentissage mieux intégré. Poster presented at l'ARC, 92e Congrès de l'Acfas, Montreal, QC., May 5th, 2025.
- Rhys, A., Lenton, K., Dugdale, M., Charles, E. (2025). *Une recherche orientée par la conception pour analyser le rôle de l'étayage dans des laboratoires par enquête en physique*. Poster presented at l'ARC, 92e Congrès de l'Acfas, Montreal, QC., May 6th, 2025.

#### **CONFERENCES ORGANIZED**

- 14th SALTISE Annual conference (2025). Theme: Connecting Communities Over A Decade: Reflections On Past, Purpose, And The Path Ahead. June 4-5, 2025, at Dawson College. Participated in the organization of this event. https://www.saltise.ca/saltise-conference/
- Conference program: https://www.saltise.ca/wpcontent/uploads/2025/06/Program\_SALTISE-2025\_single-pages\_v9.pdf

#### STUDENTS IN RESEARCH

• 2 students from Dawson College (hired as research assistants) participated in the FRQ research grant involving development of AI agents.

#### SOFTWARE DEVELOPMENT - CONTINUED DEVELOPMENT

• CourseFlow – this curriculum mapping platform is now used by over 200 educators. https://www.saltise.ca/tool/courseflow/

#### Grants

(Completing) Fonds de recherche du Québec (FRQ) (2024-SE3-325956). Title: Soutien aux équipes de recherche pour la programmation intitulée « Groupe de recherche interuniversitaire sur l'intégration pédagogique des technologies de l'information et de la communication » (GRIIPTIC).

Budget: \$61,000.00 over two years

Principal Investigator: Normand Roy (Université de Montréal)

Co-researcher: Elizabeth S. Charles (Dawson College),

(In progress- 2023-2026). Programme d'aide à la recherche sur l'enseignement et l'apprentissage (PAREA). Title: Collaborations interdisciplinaires et co-conception: Aider les éducateurs à concrétiser le plein potentiel du nouveau programme de sciences de la nature.

Budget: \$800,000.00 (approx.) over three years.

Principal Investigator: Dr. Kevin Lenton

Co-researchers: Dr. Elizabeth S. Charles, Dr. Mathilde Hitier, & Dr. Annie-Hélène Samson (Dawson College), Michael Dugdale & Dr. Sean Hughes (John Abbott College), participating teachers (Karl Laroche & Rhys Adams (Vanier), Jean-François Brière (Dawson College) and research assistants.

#### SUSTAINABLE DAWSON

#### **Presentations**

- 3 Presentations at CICan annual
   Conference/Calgary: Partnership with Canadore
   College Dawson College Carbon Neutral Forever;
   Sustainable Happiness; Panel Discussion for President's
   (March/April 2024)
- Living Campus Presentations: Intercollegiate Dawson College Counselling group, Lower Canada College, International Food Justice group, Mount Allison University research reps (May/June 2024), president of Federation des CEGEPS
- 3. Conference presentation: <u>Bishop's Forum Civic Leadership for English-Speaking Youth</u>
- 4. PED Day & Career Council presentation: High-impact practices
- 5. Presentation at CICan National Webinar Scope 3 emission calculation
- 6. 38 Living Campus/Open House tours

#### Sustainable Happiness (SH)

- SH presentation for SDG week with Canadore college
- Consultant completes report on Sustainable Happiness program (May/June 2024)





#### **SH Certificates**

- 10 Dawson Support Staff
- 3 Dawson Professionals
- 7 Dawson Faculty
- Facilitator Training
- 2 Professionals in progress

#### **National Committees**

- CICan NPC for Awareness Raising for a **Net-Zero Campus** meetings continue
- National Planning Committee for CICan ImpAct Climate



Figure 11 Office of Sustainability intern Veronica at the harvest market

- CICan: Sustainability office represents Canadian Colleges on National Planning Committee on Campus Green Buildings and Indigenous Land Management
- CICan: SDG Accord Working Group
- CICan: Climate Action Scope 3 Technical Working Group
- Awareness Raising for a Net-Zero Campus
- MOU between Canadore College and Dawson sharing best practices in sustainability

#### **Awards/External Certifications**

- Chris Adam receives Governor General's Meritorious Service Award & Dawson College recognized
- Jenn D. and Sophie L. complete 4-day Sustainable Innovation course in North Bay, Ontario
- Dawson's landscaping efforts mentioned at Oxford University's Nature Positive Universities program <a href="https://www.naturepositiveuniversities.net/case-studies/">https://www.naturepositiveuniversities.net/case-studies/</a>
- Renewal of Fair Trade Designation
- Okanagan Charter signed
- MAPAC Food handling training completed by Jenn de Vera
- Achieved AASHE Platinum Designation

#### **Grants Awarded**

CICan Career Launcher interns secured

#### Conferences

- International Environment Peace Building conference in Holand
- UAEM University (May/June 2024)
- Mexico Psychology Dept:Investigación en Psicología Ambiental, (May/June 2024)

#### **Reports Prepared**

- Campus tree inventory and individual tree health data completed
- Bibliography created by the BAHM (Black Art Histories Montreal) research group cataloguing in Vanier, JAC, Heritage, and Dawson College Libraries (both languages)
- Waste audit completed phase 1(Feb 2025)
- Created and submitted new AASHE member report
- AASHE Sustainable Campuses Index
- Eco-online Global Case Study Report, GHG assessments & other recommendations for building envelope & climate action
- Executive Summary of 1000 species, processes, outcomes, alignment

#### Involvement of Students in Research

- Eco-location recording software purchased for student bat study on campus
- Testing of expired Sanitizer with Chemistry department to facilitate sustainable methods of end-of-life use
- Bioretention/raised wetland on Campus -Study of water filtration effectiveness % copper reduction

#### **Outreach Events**

- April Bioblitz campaign launched with community & public event
- Weekly Living daycare program (Winter semester)
- Canadore applies for AASHE certification Dawson assists as reviewer of report
- Butterfly Foster program launched; 425 caterpillars given to Dawson Staff (August 2024)
- Five-day summer camp pilot offered to children of Dawson employees (August 2024)
- NGG day camps visit Dawson grounds and participate in activities (Comite Jeunesse NDG) (July 2024)
- 1000 species/1000 days celebrates its 1,000th species in Sept 2024
- UN COP15 Biodiversity Conference commitment met
- Peace Centre: Peace Pilgrimage involves 5 partner organizations; Congregation Notre-Dame, Selwyn House, Westmount United & Unitarian Church and Atwater Club

#### **Associated organizations**

- Alliance for Sustainability Leadership in Education (EAUC)
- Francophone University Association (AUF)
- HESI Higher Education Sustainability Initiative
- International Association of Universities (IAU)
- The Association of Commonwealth Universities (ACU)
- United Nations Environment Programme (UNEP)







Figure 12 Rooftop beehive

#### Newsprint/digital

- Westmount Independant, Gifting of Ginko Trees
- Journal de Chambly, Chambly
- The Plant, Dawson College, Living Campus/Earth Day

#### TV/Web TV

- CBC, Dawson College's Living Campus
- CICan National Demonstration Project Report: Bioretention project, Bioretention project, CICAN membership

#### Web

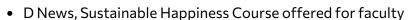
- Voir Vert, Green Gown Award
- AMEQ, MOU with Canadore College press release

#### **Radio**

Brian Mader, CKUT, Eco

#### **Newsletter - DNews**

- D News & D Announcements, Peace Week
- D News, SDGs & Illustration Design Awards. Nighttime observation of species on Campus for campus biodiversity project
- D News, Trip to Canadore
- D News, Towards a 1000 species



- D News, Thousands of bulbs planted on campus
- D News, Canadore & Dawson partner on Sustainable Happiness. Free Sustainable Happiness courses for Staff & Professionals. 1000 species, a year in review
- D News, First winter wellness activity-peace & sustainability series. Biophilia
- D News, Expansion of Dawson Dining & Early Bird Breakfast
- DNews, Active Alternate Transportation Working Group
- Tree Cutting Announcement
- Round up of 1st Wellness Activity
- D News, BioBlitz



Figure 13 Student volunteers apart of the Sustainabili-Team





## **Special Section**

#### **CATHERINE FICHTEN**

By now, many members of the Dawson community have heard that Dr. Catherine Fichten, an esteemed member of the Psychology Department and the founder and co-director of the Adaptech Research Network, passed away peacefully on Thursday, October 31st, 2024. She leaves behind a remarkable legacy of teaching and research. Catherine's accomplishments were many and varied, but she will be remembered by those who had the privilege to study or work with her as a remarkable individual who used every interaction as an opportunity to mentor others. Little wonder that social psychology drew her away from her original undergraduate studies of chemistry at McGill.

Shortly upon completion of her master's degree in psychology, Catherine began her teaching career when Dawson College opened its doors in 1969. Her courses in Psychology of Sexuality and Abnormal Psychology were always popular with students, but not just because of the subject matter. Catherine's inclusive approach to teaching was sparked by an interest in pedagogy that began early in her career. In 1977 she published a paper on the effects of examination retest procedures on performance, test anxiety and attitudes. In those days, the notion of retesting was viewed as quite progressive, even radical. Although research and clinical practice took more of her time in later years, Catherine always made certain that she taught at least one course per year. She valued her contact with students and the changing teaching practices that make higher education more inclusive.





Alongside teaching, Catherine began to develop her identity as a researcher. One of her earliest studies, in 1983, examined the social interaction between physically disabled and non-disabled college students. The Adaptech Research Network was founded in 1996 and consisted of a team of academics, students and other stakeholders. By the late 1990's Catherine was seen as a leader in cegep research; her study into Learning Technologies and Students with Disabilities in Postsecondary Education (1999) was the largest, nation-wide, empirically based, bilingual research study of its kind in Canada. No surprise that Catherine's work continued to be recognized with awards such as the Prix Reconnaissance of the Association pour la recherche au collégial (ARC) in 2004. Her reputation went beyond Canada as researchers from the United States, Israel, Great Britain and Germany sought her collaboration in international projects.

Catherine understood the power of technology and through research demonstrated the important role it played in the lives of individuals with disabilities. She was also concerned that the high cost of technology might be a barrier for many students. The Free and Inexpensive Adaptive Technology Database (FANDI), found on the Adaptech website, continues to serve as a reference for both students and professionals.

Catherine had more than one research family. She was a member of the Behavioural Psychotherapy and Research Unit at the Jewish General Hospital, where she practiced as a clinical psychologist and did research on issues related to sleep. Her most recent studies, focusing on the impact of parasomnias on college students, and sleep and well-being during Covid-19, provided a wonderful opportunity for members of both research teams to work together.

Described as a brilliant researcher, in March 2016 Catherine received the Fred Strache Leadership Award. This honour recognizes not only leaders in their respective fields through publications, presentations and research, but those who continue to work with students as educators and mentors. No three words: leader, educator and mentor, could better describe Catherine Fichten.

# leader educator mentor

dawsoncollege.qc.ca

Research report layout and design by Vanessa Lyness