

Promotion and Tenure Committee
SN2012, Department of Geography
Memorial University St. John's, NL Canada, A1B 3X9

September 15, 2022

To the committee:

I am pleased to submit my assessment file to the Department of Geography Promotion and Tenure Committee for promotion to Professor, as governed by Article 12 of the MUNFA Collective Agreement. There are two routes to becoming a full Professor as per section 12.17.c., and I am applying under the research track (i), where promotion is based on "a superior record of research, scholarship, and critical, creative, professional or developmental work; along with a satisfactory record of teaching effectiveness and scholarly competence as a teacher ...; and, a satisfactory record of academic service."

Department Chair Dr. Arn Keeling accepted my nomination for promotion as per section 12.17.d., given that I am applying before five years of service as an Associate Professor. The Collective Agreement is clear that "a Faculty Member who has clearly established an international reputation as a scholar in their field, for example, by major publications or by national or international awards indicative of a high level of academic recognition, may be deemed eligible for promotion at any time" (12.17a). 12.17.d states, "An application or nomination for promotion to the rank of Professor before the applicant has completed five (5) years of service as an Associate Professor shall be considered and decided on its merits." It further outlines that these merits include "intellectual maturity, characterized by depth and breadth of teaching and scholarship, and academic integrity" and "an international reputation as a scholar in their field" (12.17a). To aid in evaluation, each dossier is structured to address these elements directly.

I am an interdisciplinary scholar practicing within and across natural and social sciences with a specialization in anti-colonial methodologies and plastic pollution. My work, whether in research, mentorship, or service, is characterized by the **application of theories** of humility (relatedness), accountability (ethics), and collectivity. Some of the methods I develop for place-based research on plastic pollution in Newfoundland and Labrador appear technical (such as creating open-source instruments or creating protocols in citational politics) while others focus on the social side of research relations (such as the equity in author order protocol). But in the spirit of science and technology studies, methods are always both technical and social. Many of these are theorized and documented in my book, *Pollution is* 

Colonialism (Duke University Press, 2021), and practiced (and constantly re-theorized!) in my lab, Civic Laboratory for Environmental Action Research (CLEAR).

My trajectory since arriving at Memorial University in 2014 has been unique. I began in the Department of Sociology as a "sociology of technology" hire, then moved to the Department of Geography to better support my research in both social and natural sciences. This transfer provided me with dedicated lab space for the first time in 2016 and I was able to build interdisciplinary collaborations and networks within and through CLEAR. Two years later, I moved into executive administration as the inaugural Associate Vice President (Indigenous Research) (AVPIR) from 2018-2020, where my expertise could be applied to institutional change, primarily through policy and Indigenous data sovereignty practices. I did not stop my tenure clock during that time and two years after I began that position, on September 1, 2022, I became an Associate Professor. At that point, I began to scale up research efforts to foster international networks and impact policy deliberations around both plastic pollution and approaches to research. I also published two peer reviewed books that reflected a career's worth of knowledge. As per section 12.13b in the Collective Agreement, where "Promotion recommendations and decisions shall be based on the entire career, but the candidate shall demonstrate an appropriate record of academic performance since the most recent promotion decision in the body of work," this file concentrates almost exclusively on this last segment of my career, with reference to work before my promotion when appropriate.

There are several key research metrics I wish to highlight in my application:

- Since my appointment at Memorial in 2014, I have obtained \$4.6 million in funding as a Principle Investigator (95% of which is external) and an additional half a million as a Co-Investigator or Collaborator. Of my PI funding, \$3.7million has been obtained since I became an Associate Professor—about 80% of my total funding. The vast majority of this funding goes directly to personnel.
- I have published two peer-reviewed books, 34 refereed articles, 18 invited articles, 13 book chapters, 12 white papers, and four short films as well as well over one hundred public and magazine articles. Thirty-one (31) of those publications have occurred since my promotion to Associate Professor in 2020, including the two books: *Pollution is Colonialism* (2021) with Duke University Press and *Discard Studies: Systems, Wasting and Power* (2022) with co-author Josh Lepawsky from MIT Press.
- Pollution is Colonialism has been the best performing first book at Duke Press in memory and has sold out twice from the press. It has won two international book awards, has had 15

- **positive published reviews**, and a **special review issue** in the journal *Landscape Research* is dedicated entirely to the book. It has been **cited 215 times**. It is only a year and half old.
- I have multiple peer-reviewed publications ranked in the top 5% of all research outputs by Almetric, including a sole-authored publication in *Nature Geoscience* ranked third of all texts of the same age from the journal. A co-authored publication in *Applied Spectrometry* is ranked first among outputs of the same age and sixth of all articles published by the journal.
- While H-indexes are problematic for comparing scholars to one another, they work well for comparing scholars to themselves: When I went up for promotion and tenure as an assistant professor, I had an H-index of 8 and an average citation rate of 8.5 citations per article. Today, my H-index is 25 and I have an average citation rate of 34.6.
- I have a strong international reputation. More than 85% of the scholars who cite and teach my work, view my lab website, and buy my books are outside of Canada. I have been invited to speak on waste colonialism to the United Nations' Global Partnership on Marine Litter and the European Union's Zero Waste Alliance, and was invited by the World Health Organization (WHO) to co-author a white paper on waste and culture. I am one of two Canadian representatives on the Arctic Council's Arctic Monitoring and Assessment Programme (AMAP) Expert Group on Marine Plastics.
- I have mentored over 100 research assistants in my lab, CLEAR, 37 of whom have been
  mentored since becoming Associate Professor. Since 2020, this is in addition to my current
  two PhD students (including a Vanier scholar), four master's students (two of whom have
  graduated), and five full time staff as well as members of CLEAR who do not fit the designation
  of research assistant (Early Career Researchers, other professors, artists in residence, etc).
- My work has been recognized by two major research awards since 2020: my induction into the
  Royal Society of Canada's (RSC) College of New Scholars, Artists, and Scientists, one of the
  highest academic awards in Canada, and the award of Memoria's Presidents Award for
  Outstanding Research (PAOR), one of the highest research awards at Memorial University (I
  share the latter with Dr. Carissa Brown. This information is embargoed).

More details on my research projects and their metrics, as well as information on teaching and service, can be found in the attached dossiers and my CV.

If I characterize the first stage of my career at Memorial as **digging deep and building up**, this next phase of my work, which I hope will be undertaken as a full Professor, might be best described as **weaving together**. One of my new foci is building and maintaining international networks of Indigenous researchers

to collaboratively advance Indigenous methodologies in STEM. I have three new grants on the topic of

Indigenous quantitative methodologies (SSHRC Insight, NSERC Discovery Horizons, SSHRC Explore) with

several Indigenous scientists in Canada and the United States. Facilitating bridges between Indigenous-

led labs and projects is a key part of that work. I have also been successful in my letter of intent (LOI) to

SSHRC's Partnership Grant to co-lead a network of 20 international Indigenous gender minority

researchers called IndigeLab Network (IN) for seven years and will be progressing to the full application

for \$2.5 million due in October 2022. This year and future years have also seen my project on plastic

pollution with the Nunatsiavut Government expand to include both a full time youth researcher based in

Nain and international collaborators out of the UK and the Netherlands.

Thank you in advance for reviewing my file and the attached documents: my curriculum vitae, my

research, mentorship, teaching, and service dossiers, and a list of six potential external referees (all

outside of Canada to help make the argument for international reputation), in that order. I appreciate that

the administrative work of promotion and tenure is time-consuming, but also important, as it shapes the

world of academia and who counts as formal knowledge-makers. Thank you for agreeing to be part of

that labour.

Sincerely,

Dr. Max Liboiron

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# **EDUCATION**

PhD 2007- 2012	Media, Culture, and Communication, New York University Dissertation: "Redefining Pollution" Advisor: Brett Gary
MFA 2003-2006	Studio Art, State University of New York at Stony Brook Graduate Certificate, Culture Studies Thesis: "Dioramas and Hybridity: Stories and Concepts of Nature" Advisor: Christa Erickson
BFA 19998-2002	Studio Art (with Distinction), Mount Alison University

# **ACADEMIC APPOINTMENTS**

2020-present	Associate Professor, Department of Geography, Memorial University Cross-appointed to Department of Sociology and Marine Institute Fisheries and Oceans program Affiliated with Program in Environmental Sciences
2015-present	Principal Investigator/Director, Civic Laboratory for Environmental Action Research (CLEAR), Memorial University
2022-present	Member, Scholars Council, Data & Society (two-year term)
2020-2021	Distinguished Visiting Indigenous Faculty Research Fellow, Jackman Humanities Institute, University of Toronto
2018-2020	Associate Vice-President (Indigenous Research), Office of the Vice President Research, Memorial University (1-year appointment, extended for an additional year)
2016-2020	Assistant Professor, Department of Geography, Memorial University
2015-2017	Chair of Teaching and Learning, Faculty of Humanities & Social Sciences, Memorial University (Elected, 2-year term)
2014-2016	Assistant Professor, Department of Sociology, Memorial University
2013-2014	Postdoctoral Research Associate, Social Science Environmental Health Research Institute, Northeastern University
2012-2013	Postdoctoral Fellow, Intel Science and Technology Center in Social Computing (ISTC-S), New York University

### **PUBLICATIONS**

Books	Refereed	Invited	Book	Writing for	White	Special	Films	Total
	Articles	Articles	Chapters	Public	Papers	Issue		
				Audiences		Co-Editor		
2	34	18	13	~120	12	4	4	83
2%	39%	21%	15%	not included	14%	5%	5%	100%

Student and postdoc co-authors <u>underlined</u>. Articles where author order determined by consensus marked with a \*

### **BOOKS**

Liboiron, Max, and Josh Lepawsky.\* (2022). *Discard Studies*. Cambridge, MA: MIT Press. Liboiron, Max. (2021). *Pollution is Colonialism*. Durham, NC: Duke University Press.

## **REFEREED ARTICLES**

- Smith, Ariel, Max Liboiron, Louis Charron, Jesse McIntyre, Kaitlyn Hawkins, Katie McLean, Sheldon Peddle, Greg Moore, Mary Jane Walzak, Alexa Goodman, Leah Fulton, Shanna Fredericks, Brooke Nodding. (2022). Quantification and characterization of plastics in near-shore surface waters of Atlantic Canada. Marine Pollution Bulletin 181: 11369-11375.
- Martin, Jake, Maria Granberg, Jennifer F. Provencher, Max Liboiron, Liz Pijogge, Kerstin Magnusson, Ingeborg G. Hallanger, Melanie Bergmann, Stefano Aliani, Alessio Gomiero, Bjørn Einar Grøsvik, Jesse Vermaire, Sebastian Primpke, Amy Lusher. (2022). The power of multi-matrix monitoring in the Pan-Arctic region: plastics in water and sediment, Arctic Science, https://doi.org/10.1139/AS-2021-0056.
- Lusher, Amy L., Jennifer F. Provencher, Julia E. Baak, Bonnie M. Hamilton, Katrin Vorkamp, Ingeborg G. Hallanger, Liz Pijogge, Max Liboiron, Madelaine Bourdages, Sjúrður Hammer, Maria Gavrilo, Jesse Vermaire, Jannie F Linnebjerg, Mark L. Mallory, and Geir Wing Gabrielsen. (2022). Monitoring litter and microplastics in Arctic mammals and birds. Arctic Science, https://doi.org/10.1139/AS-2021-0058
- 4. Liboiron, Max, Alex Zahara, Kaitlyn Hawkins, Christina Crespo, Bárbara de Moura Neves, Vonda Wareham-Hayes, Evan Edinger, Charlotte Muise, Mary Jane Walzak, Rebecca Sarazen, Jill Chidley, Carley Mills, Lauren Watwood, Hridisha Arif, Elise Earles, Liz Pijogge, Jamal Shirley, Jesse Jacobs, Paul McCarney, Louis Charron.\* (2021). Abundance and types of plastic pollution in surface waters and the case for reconciliation science in the Eastern Arctic (Inuit Nunangat). Science of the Total Environment 782: 146809-22.
- 5. Melvin, Jessica, Madeline Bury, Justine Ammendolia, Charles Mather, and **Max Liboiron.\*** (2021). Critical Gaps in Shoreline Plastics Pollution Research. *Frontiers in Marine Science* 8: 1-8.
- 6. <u>Harris, Lucas</u>, **Max Liboiron**, Louis Charron, and Charles Mather.\* (2020). Using citizen science to evaluate extended producer responsibility policy to reduce marine plastic debris shows no reduction in pollution levels. *Marine Policy*, 123: 104319.
- 7. <u>Saturno, Jacquelyn, Max Liboiron, Justine Ammendolia, Natasha Healey, Elise Earles, Nadia Duman, Ignace Schoot, Tristen Morris, and Brett Favaro.\* (2020). Occurrence of plastics ingested by Atlantic cod (*Gadus morhua*) destined for human consumption (Fogo Island, Newfoundland and Labrador). *Marine Pollution Bulletin*, 153: 110993.</u>

- 8. Provencher, Jennifer, **Max Liboiron**, <u>Stephanie Borelle</u>, Alexander L. Bond, Chelsea Rochman, Jennifer Lavers, <u>Stephanie Avery-Gomm</u>, Rei Yamashita, P. Ryan, Amy L. Lusher, S. Hammer, <u>Hillary Bradshaw</u>, <u>J. Khan</u>, Mark Mallory. (2020). A Horizon scan of research priorities to inform policies aimed at reducing the harm of plastic pollution to biota. *Science of The Total Environment*, 733(2020): 1-11.
- Cowger, Win, Andy M. Booth, <u>Bonnie M. Hamilton</u>, Clara Thaysen, Sebastian Primpke, Keenan Munno, <u>Amy L. Lusher</u>, Alexandre Dehaut, <u>Vitor P. Vaz</u>, <u>Max Liboiron</u>, Lisa I. Devriese, Ludovic Hermabessiere, Chelsea Rochman, Samantha N. Athey, Jennifer M. Lynch, Hannah De Frond, Andrew Gray, Oliver A.H. Jones, Susanne Brander, <u>Clare Steele</u>, Shelly Moore, <u>Alterra Sanchez</u>, and Holly Nel (2020). Reporting guidelines to increase the reproducibility and comparability of research on microplastics. <u>Applied Spectrosocopy</u>, 74(9): 1066-1077.
- Liboiron, Max, <u>Jessica Melvin</u>, <u>Natalie Richárd</u>, <u>Jacquelyn Saturno</u>, <u>Justine Ammendolia</u>, France Liboiron, Louis Charron, and Charles Mather.\* (2019). Low incidence of plastic ingestion among three fish species significant for human consumption on the island of Newfoundland, Canada. *Marine* Pollution Bulletin, 141: 224-248.
- 11. <u>Persaud, Donny</u>, Josh Lepawsky, and **Max Liboiron**.\* (2019). Viscous Objects: The Uneven Resistances of Repair. *Techniques & Culture*. Revue semestrielle d'anthropologie des techniques, (72): 126-129.
- 12. <u>Kenny, Catherine</u>, **Max Liboiron**, and Sara Ann Wylie. (2019). Seeing Power with a Flashlight: Making and Doing Politics in Classroom Pedagogy with DIY Open Science Hardware. *Social Studies of Science*, 49(1): 3-28.
- 13. <u>Provencher, Jennifer F., Stephanie Avery-Gomm, Max Liboiron, M.</u>, Birgit M. Braune, J.B.Macaulay, Mark Mallory, Robert J. Letcher. (2018). Are ingested plastics a vector of PCB contamination in northern fulmars from coastal Newfoundland and Labrador? *Environmental Research*, 167: 184-190.
- Liboiron, France, Justine Ammendolia, Jacquelyn Saturno, Jessica Melvin, Alex Zahara, Natalie Richárd, and Max Liboiron.\* (2018). A zero percent plastic ingestion rate by silver hake (Merluccius bilinearis) from the south coast of Newfoundland, Canada. Marine pollution bulletin, 131, 267-275.
- 15. **Liboiron, Max**, Manuel Tironi, Nerea Calvillo. (2018). Toxic Politics: Acting in a Permanently Polluted World. *Social Studies of Science*, 48(3): 331-349.
- 16. McWilliams, Matthew, Max Liboiron, Yolande Wiersma.\* (2018). Rocky shoreline protocols miss microplastics in marine debris surveys (Fogo Island, Newfoundland and Labrador), Marine Pollution Bulletin, 129(2): 480-486.
- 17. **Liboiron, Max**, <u>Justine Ammendolia</u>, <u>Katharine Winsor</u>, <u>Alex Zahara</u>, <u>Hillary Bradshaw</u>, <u>Jessica Melvin</u>, Charles Mather, <u>Natalya Dawe</u>, <u>Emily Wells</u>, <u>France Liboiron</u>, Bojan Fürst, <u>Coco Coyle</u>, <u>Jacuelyn Saturno</u>, <u>Melissa Novachefski</u>, <u>Sam Westcott</u>, and Grandmother Liboiron.\* (2017). Equity in Author Order: A Feminist Laboratory's Approach. *Catalyst: Feminism, Theory, Technoscience*, *3*(2): 1-17.
- 18. **Liboiron, Max.** (2017). Compromised Action: The Case of BabyLegs, *Engaging Science, Technology, Society*, 3: 499-527.
- 19. Wylie, Sara, Nicholas Shapiro, Max Liboiron. (2017). Making and Doing Politics Through Grassroots Scientific Research on the Energy and Petrochemical Industries, Engaging Science, Technology, Society, 3: 393-425.
- 20. <u>Avery-Gomm, Stephanie, Jennifer F. Provencher, Max Liboiron, Florence E. Poon</u>, and <u>Paul A. Smith</u>. (2017). Plastic pollution in the Labrador Sea: An assessment using the seabird northern fulmar Fulmarus glacialis as a biological monitoring species. *Marine Pollution Bulletin*, 127: 817-822.
- 21. <u>Sardelis, Stephanie, Samantha Oester</u>, and **Max Liboiron**. (2017). Ten strategies to reduce gender inequality at scientific conferences. *Frontiers in Marine Science*, 4: 231.

- 22. Dosemagen, Shannon, **Max Liboiron**, and Jenny Molloy. (2017). Gathering for Open Science Hardware 2016. *Journal of Open Hardware*. 1(1): 4-6.
- 23. Eriksen, Marcus, Max Liboiron, Tim Kiessling, Louis Charron, Abigail Alling, Laurent Lebreton, Heather Richards Barnet Roth, Nicolas C. Ory, Valeria Hidalgo-Ruz, Erika Meerhoff, Carolynn Box, Anna Cummins, Martin Theil. (2017). Microplastic sampling with the AVANI trawl compared to two neuston trawls in the Bay of Bengal and South Pacific. *Environmental Pollution*, 232: 430-439.
- 24. **Liboiron, Max**, <u>France Liboiron</u>, <u>Emily Wells</u>, <u>Natalie Richárd</u>, <u>Alexander Zahara</u>, Charles Mather, <u>Hillary Bradshaw</u>, and <u>Judyannet Murichi</u>.\* (2016). Low plastic ingestion rate in Atlantic Cod (Gadus morhua) from Newfoundland destined for human consumption collected through citizen science methods. *Marine Pollution Bulletin*, 13 (1-2): 428-437.
- 25. **Liboiron, Max**. (2016). Redefining pollution and action: The matter of plastics. *Journal of Material Culture*, 21(1): 87-110.
- 26. Avery-Gomm, Stephanie, Michelle Valliant, Carley R. Schacter, Katherine F. Robbins, Max Liboiron, Pierre-Yves Daoust, Lorena M. Rios, and Ian L. Jones. (2016). A study of wrecked Dovekies (Alle alle) in the western North Atlantic highlights the importance of using standardized methods to quantify plastic ingestion. *Marine Pollution Bulletin*, 113(1-2): 75-80.
- 27. <u>Carmella Gray-Cosgrove</u>, **Max Liboiron**, and Josh Lepawsky.\* (2016). The Challenges of Temporality to Depollution & Remediation. *SAPI ENS. Surveys and Perspectives Integrating Environment and Society*, (8.1).
- 28. <u>Pine, Kathleen H.</u>, and **Max Liboiron**.\* (2015). The Politics of Measurement and Action. *Proceedings of the 33rd Annual ACM Conference on Human Factors in Computing Systems*, ACM: 3147-3156.
- 29. Morello-Frosch, Rachel, <u>Julia Varshavsky</u>, **Max Liboiron**, Phil Brown, and Julia G. Brody. (2015). Communicating Results in Post-Belmont Era Biomonitoring Studies: Lessons from Genetics and Neuroimaging Research. *Environmental Research*, 136: 363-372.
- 30. Cohen, Daniel A. and Max Liboiron. (2014). New York's Two Sandys. Metropolitics. Online.
- 31. **Liboiron, Max** and <u>David Wachsmuth</u>. (2013). The Fantasy of Disaster Response: Governance and Social Action During Hurricane Sandy. *Social Text Periscope*. Online.
- 32. **Liboiron, Max**. (2013). Modern Waste as Strategy. Lo Squaderno: Explorations in Space and Society, 29: 9-12.
- 33. **Liboiron, Max**. (2012). Tactics of Waste, Dirt and Discard in the Occupy Movement. *Social Movement Studies: Journal of Social, Cultural and Political Protest*, 11(3-4): 393-401.
- 34. **Liboiron, Max**. (2010). Recycling as a Crisis of Meaning. *Canadian Journal of Cultural Studies*, Intersections Conference Journal: 1-9.

## INVITED ARTICLES (EDITOR-REVIEWED)

- 35. Garcîa, Maru, and Max Liboiron. (2022). Cross Contamination. Art in America. April 2022: 36-40.
- Fernanda Yanchapaxi, María, Max Liboiron, Katherine Crocker, Deondre Smiles, and Eve Tuck.\* (2022).
   Finding a good starting place: An interview with scholars in the CLEAR Lab. Curriculum Inquiry 52(2): 162-170.
- 37. **Liboiron, Max**. (2021). Decolonizing geoscience requires more than equity and inclusion. *Nature Geoscience* 14: 876-877.
- 38. Ngata, Tina, **Max Liboiron**.\* (2021). A Māori Approach to starting research from where you are. *Catalyst: Feminism, Theory, Technoscience*, 7(2): 1–7.
- 39. Gutiérrez, Rochelle, **Max Liboiron.**\* (2020). Strong Animals: Humility in Science. *Science for the People* 22(2), Special issue on The Science We Need.

- 40. **Liboiron, Max.** (2019). Discard Studies: Doing Science Differently. *Journal fu Entwicklungspolitik* 35(2-3): 197-216.
- 41. **Liboiron, Max**. (2018). Hormone Disruption in Newfoundland, Correspondences, *Cultural Anthropology*. August 14.
- 42. EDAction and CLEAR. (2018). Pollution is Colonialism. Grafting 1: 01.11.
- 43. <u>Borelle, Stephanie</u>, Chelsea Rochman, **Max Liboiron**, Alexander L. Bond, <u>Amy Lusher</u>, <u>Hillary Bradshaw</u>, <u>Jennifer Provencher</u>. (2017). Opinion: Why we need an international agreement on marine plastic pollution, *PNAS* 114(38): 9994-9997.
- 44. Liboiron, Max, Trans. Laure Vermeersch. (2017). Recycler: une crise du sens. Vacarme, (2), 99-103.
- 45. Lepawsky, Josh, **Max Liboiron**, Arn Keeling, and Charles Mather.\* (2017). Repair-scapes, *Continent* 6(1): 56-61.
- 46. Chagas, Andre Maia, **Max Liboiron**, Jenny Molloy, Juan Manuel Garcia Arcos, and Jeffrey Warren. (2017). Gathering for Open Science Hardware 2017: Building a Movement. *PLOS* Channels & Collections Blog.
- 47. **Liboiron, Max.** (2016). Civic Technologies for Monitoring Marine Plastics. *Journal of Ocean Technology* 11(2): 36-45.
- 48. **Liboiron, Max.** (2016). Care and Solidarity are Conditions for Interventionist Research. *Engaging Science, Technology, Society,* (2): 67-72.
- 49. **Liboiron, Max.** (2015). Davis, 'Banned: A History of Pesticides and the Science of Toxicology,' *Roundtable Review, Hnet* 5(8).
- 50. **Liboiron, Max.** (2015). An Ethics of Surplus and the Right to Waste, *Society & Space Open Forum*, special forum on discards, diverse Economies, and degrowth.
- 51. Lepawsky, Josh, and **Max Liboiron**.\* (2015). Why Discards, Diverse Economies, and Degrowth?, *Society & Space Open Forum*, special forum on discards, diverse Economies, and degrowth.
- 52. **Liboiron, Max.** (2014). Mapping Waste When Waste is Invisible, *Grassroots Mapping Forum: The Public Lab Community Journal of Environmental Research*, 6: 2.

# CHAPTERS IN EDITED COLLECTIONS (EDITOR REVIEWED)

- 53. **Liboiron, Max.** (2022). Matter out of place. *The Routledge Handbook of Waste Studies*, Ed. Gille, Z., and Lepawksy, J. Routledge Press: 32-40.
- 54. Liboiron, Max, Emily Simmonds, Edward Allen, Emily Wells, Jessica Melvin, Alexander R. Zahara, Charles Mather, and All Our Teachers.\* (2021). Doing Ethics with Cod. In Making & Doing:

  Activating STS through Knowledge Expression and Travel, Ed. Downey, G., and Zuiderent-Jerak, T. MIT Press: 137-154.
- 55. **Liboiron, Max**. (2021) "Pollution is a function of colonialism," *No Planet B*, Edited by Lucy Diavolo. Haymarket Books: 188-192.
- Liboiron, Max. (2020). "Exchanging," Transmissions: Critical Tactics for Making and Communicating Research. Edited by Kat Jungnickel. MIT Press: 89-108.
- 57. <u>Henderson, Jennifer</u>, **Max Liboiron**.\* (2019). Compromise and Action: Tactics for Doing Ethical Research in Disaster Zones, *The New Environmental Crisis: Hazard, Disaster, and the Challenges Ahead*, Eds. Kendra, James, Scott G. Knowles, and Tricia Wachtendorf, T. Springer: 295-309.
- 58. **Liboiron, Max.** (2018). Using art to research diverse economies: social experiments in re-valuing waste. In Crocker, R (Ed). *Subverting Consumerism*. Routledge: 46-64.
- 59. Fortun, Kim, Scott G. Knowles, Vivian Choi, Paul Jobin, Miwao Matsumoto, <u>Pedro de la Torre,</u> **Max Liboiron**, Luis Felipe Rosado Murillo. (2016). Researching Disaster from an STS Perspective, in

- Ulrike Felt, Rayvon Fouché, Clark A. Miller, and Laurel Smith-Doerr. The Handbook of Science and Technology Studies, fourth edition. MIT Press: 1003-1028.
- 60. **Liboiron, Max.** (2016). Tactics of Waste, Dirt and Discard in the Occupy Movement, Pickerill, J., Krinsky, J., Hayes, G., Gillan, K., Doherty, B. (Eds). *Occupy! A Global Movement*. Routledge: 114-122.
- 61. Robles-Anderson, Erica, and **Max Liboiron**. (2016). Coupling Complexity: Ecological Cybernetics as a Resource for Nonrepresentational Moves to Action, Starosielski, N., & Walker, J. (Eds.). Sustainable Media: Critical Approaches to Media and Environment. Routledge: 248-263.
- 62. **Liboiron, Max**. (2015). Disaster Data, Data Activism: Grassroots Representations of Hurricane Sandy, *Extreme Weather and Global Media*. Eds. Diane Negra and Julia Leyda. Routledge.
- 63. **Liboiron, Max**. (2014). The Plastisphere, *The Petroleum Magna*. Eds. Marina Zurkow and Valerie Vogrin. Peanut Books: 24.
- 64. **Liboiron, Max**. (2013). "Plasticizers: A Twenty-first Century Miasma," Accumulation: The Material Politics of Plastics, Eds. Jennifer Gabrys, Gay Hawkins, Mike Michael. Routledge: 22-44.
- 65. **Liboiron, Max**. (2012). Entries on: "Recycling," "Recycling Labels," "History of Consumption and Waste in the US: 1800-1850," in *Encyclopedia of Consumption and Waste: The Social Science of Garbage*, Eds. Carl Zimring and William Rathje. SAGE Publishing: 735-738, 729-730, 356-358.

## SPECIAL ISSUE CO-EDITOR

2018	Co-Editor, with Manuel Tironi & Nerea Calvilo, "Toxic Politics," Social Studies of Science
2017	Co-Editor, with Sara Wylie & Nicholas Shapiro, "Making and Doing Politics Through
	Grassroots Scientific Research on the Energy and Petrochemical Industries," Engaging
	Science and Technology
2015	Co-Editor, with Josh Lepawsky, Discards, Diverse Economies, and Degrowth?, Society &
	Space Open Forum
2014	Co-Editor, with Robin Nagle & Michele Acuto, "Discard Studies Compendium," Discard
	Studies

## WHITE PAPERS

- Follmer, Jula, Max Liboiron, Andrea Rechenburg, Thomas Kistenmann. (2022). WHO Health Evidence Network synthesis report: Cultural contexts of health: how do the cultural contexts of waste practices affect health and well-being? Health Evidence Network, Geneva.
- 2. AMAP. (2021). <u>AMAP Litter and Microplastics Monitoring Plan</u>. Tromso, Norway: Arctic Monitoring and Assessment Programme.
- 3. AMAP. (2021). <u>Overview of AMAP Initiatives for Monitoring and Assessment of Plastic Pollution in the Arctic</u>. Tromso, Norway: Arctic Monitoring and Assessment Programme.
- 4. AMAP. (2021). <u>AMAP Litter and Microplastics Monitoring Guidelines. Version 1.0</u>. Tromso, Norway: Arctic Monitoring and Assessment Programme.
- Kuzmochka, Nic and Max Liboiron.\* (2020). Memorial University Diversity Audit of Awards: 2013-2019.
   Office of the Vice-President (Research). St. John's, Newfoundland and Labrador: Memorial University.
- 6. **Liboiron, Max**, Nadia Duman, Alexander L. Bond, Louis Charron, France Liboiron, Kaitlyn Hawkins, Emily Wells, Jessica Melvin. (2020). Regional Report on plastic pollution in Newfoundland and Labrador, 1962-2019. Civic Laboratory for Environmental Action Research (CLEAR). St. John's: Memorial University.
- 7. Liboiron, M., Zahara, A., Schoot, I.\* (2018). Community Peer Review: A Method to Bring Consent and

- Self-Determination into the Sciences. Preprints. doi: 10.20944/preprints201806.0104.v1
- 8. EDAction. (2016). <u>Toxic by design: Eliminating harmful flame retardant chemicals from our bodies, homes, and communities</u>, *Endocrine Disruptors Action Group*. White paper. 1,130+ views.
- 9. Superstorm Research Lab. (2013). A Tale of Two Sandys. Policy white paper. Institute for Public Knowledge, New York City.
- 10. **Liboiron, M**. and <u>Seaward, D</u>. (2011). *Operational Analysis: Green Grants Program*. Sustainability Task Force, New York University.
- 11. **Liboiron, Max**. (2010). *H204U:* A Qualitative Study of the Culture of Drinking Water Consumption at New York University. Sustainability Task Force, New York University.

# WRITING FOR PUBLIC AUDIENCES (SELECTION)

- Liboiron, Max. (2021). <u>Firsting in Research</u>. *Discard Studies*, January 18. 5.9k views. Reblogged at CLEAR Blog and <u>Heliotrope</u>.
- Liboiron, Max. (2021). <u>#Collabrary: a methodological experiment for reading with reciprocity</u>. *CLEAR*, January 3. 6k views.
- Liboiron, Max. (2020). <u>Plastics in the Gut: A search for sand on a rocky shoreline upends colonial science</u>. Orion (winter): 22-29.
- Liboiron, Max. (2019). <u>Brief to the House of Commons Standing Committee on Environment and Sustainable Development Study: Plastic Pollution</u>. House of Commons/ Chambre des Communes Canada, *ENVI 421*, April 3.
- Liboiron, Max. (2019). <u>Decolonizing your syllabus? You might have missed some steps</u>. *CLEAR*, August 12. 35.7k views.
- Liboiron, Max. (2019) The Power (Relations) of Citizen Science, CLEAR, March 20. 4.3k views.
- Liboiron, Max. (2018). How Plastic is a Function of Colonialism. Teen Voque, December 21.
- Liboiron, Max. (2018). <u>Not all fish eat plastics</u>, *The Conversation*, July 11. 30.7k views. Republished in the National Post, The Telegram, Southern Friend Science, The Inertia and Sport Fishing BC.
- Liboiron, Max. (2018). Waste Colonialism. Discard Studies, November 1. 13k views.
- Liboiron, Max, and Jenny Molloy. (2017). We need to break science out of its ivory tower here's one way to do so, *The Conversation*, April 25. 7k views. Republished at Phys.org.
- Liboiron, Max. (2017). <u>Toxins or Toxicants? Why the Difference Matters</u>. *Discard* Studies, September 11. 13.5k views.
- Liboiron, Max. (2016). <u>The Politics of Recycling vs. Reusing</u>. *Discard Studies*, March 9. 9k views. Reblogged by *The Story of Stuff*.
- Liboiron, Max. (2016). <u>Municipal versus Industrial Waste: Questioning the 3-97 ratio</u>, *Discard Studies*, March 2. 18k views.
- GOSH. (2016). <u>Global Open Science Hardware (GOSH) Manifesto</u>. Facilitating author with Greg Austic. 449 signatories.
- Liboiron, Max. (2015). <u>LA's Shade Balls: The ecological costs of plastics in water</u>. *Discard Studies*, August 16. 19.5k views.
- Liboiron, Max. (2015). <u>How the Ocean Cleanup Array Fundamentally Misunderstands Marine Plastics and Causes Harm</u>. *Discard Studies*, June 5. 17.7k views. Quoted in *The Guardian*.
- Liboiron, Max. (2014). <u>Against Awareness, For Scale: Garbage is Infrastructure, Not Behavior</u>. *Discard Studies*, January 23. 9k views.
- Liboiron, Max. (2014). Modern Waste is an Economic Strategy. Discard Studies, July 9. 11.8k views.

### **DOCUMENTARIES**

- 2021 Laboratory Life, Episode 3: Running a Lab Meeting. Couple3 Films. 12 minutes
- 2021 Laboratory Life, Episode 2: Choosing Values. Couple3 Films. 12 minutes
- 2021 Laboratory Life, Episode 1: Author Order. Couple3 Films. 11 minutes
- 2021 SuliaKaKatigelluta: Community monitoring of plastic pollution in Nunatsiavut. Couple3 Films. 10 minutes. Directed by Liz Pigogge.

### ART

Pam Hall, CLEAR lab. (2022) Knowledge Quilt. Mixed media textile.

## **UNDER REVIEW**

- **Liboiron, Max**. (in press). Contamination Chores, in *Fragilities: Essays on the Politics, Ethics and Aesthetics of Care, Maintenance and Repair*, Eds. Fernando Rubio, Jérôme Denis. MIT Press. 13 pp.
- **Liboiron, Max**. (revision submitted). Diptych: I am not invested in decolonizing STS (following Nash) // I want an STS that decolonizes (following la paperson), in *Unsettling STS*, Eds. Tom Ozden-Schilling, Denielle Elliot, Candis Callison. MIT Press. 6pp.
- **Liboiron, Max**, <u>Rui Li</u>, <u>Elise Earles</u>, and <u>Imari Walker</u>.\* (under review). Models of justice evoked in published scientific studies of plastic pollution. *FACETS*. 39 pp.
- Liboiron, Max, Sarah Crocker, Willa Neilsen, Patricia Johnson-Castle, Nikki Wright, Nancy Penney, Jordan Lawrence, Mollie Yetman, Kaitlyn Hawkins, Noah Parsons, Morgan Davidson, Amanda Affram, Abdul Ature, Anne Lynch, Mary Feltham, Lorna Knight, Alison Bennet, Amy Norman, Liane Kennedy, Michael Power, Stephanie Parsons-Tucker, Jessica Winters, Frédéric Dwyer-Samuel, Lori March, Sarah Morgan, Andrea Barnes, Michael Penton, Renee Pilgrim, Kerri Neil, Debbie Wiseman, Leah Paranavitana, Mary Butt, Tracey Galloway, Lynn Blackwood. (under review). Comparative Food Pricing in Newfoundland and Labrador using Citizen Science. Civic Laboratory for Environmental Action Research (CLEAR). St. John's: Memorial University.
- Hill, Stephen, **Max Liboiron**, <u>Alex Zahara</u>, <u>John Atkinson</u>. (submitted). Significant secondary ingestion of microplastics from zooplankton by larval fish. *Marine Pollution Bulletin*. 16 pp.
- Pollet, Ingrid L., Julia E. Baak, Louise Feld, Bjørn E. Grøsvik, **Max Liboiron**, Mark L. Mallory, Peter Murphy, Jennifer F. Provencher, and Jakob Strand. (submitted). Monitoring litter on Arctic and sub-Arctic shorelines; Current status, and next steps for monitoring programs. *Arctic Science*. 26 pp.

## IN PREPARATION

Author order not yet determined.

- **Liboiron, Max,** Sara Tolbert, and Marc Higgins. (in prep). A conversation with Max Liboiron: Towards an everyday, anticolonial science (education) practice. In *Reimagining Science Education in the Anthropocene Vol 2*. Eds, Sara Tolbert and Marc Higgins. Palgrave McMillan. OA.
- O'Riely, Janine, Max Liboiron, Alana Derry, Susannah Polack, Brittany Schaefer, Louis Charron. (in prep).

  DAISI (Drill-Assisted Ice Sampling Instrument). Journal of Open Hardware.
- **Liboiron, Max,** Morgan Maunel, Rui Li. Infrastructural Theories of Change: The case of participatory budgeting for Indigenous research sovreignty. *Engaging Science, Technology Society.*

Hawkins, Kaitlyn, **Max Liboiron**, Louis Charon. The impacts of seasonal ice-break up on shore plastic pollution loading. *Marine Pollution Bulletin*.

<u>Oladimeji, Iwalaye, Max Liboiron, Elise Earle</u>. Accessible digestion method for plastic pollution water samples. *Marine Pollution Bulletin*.

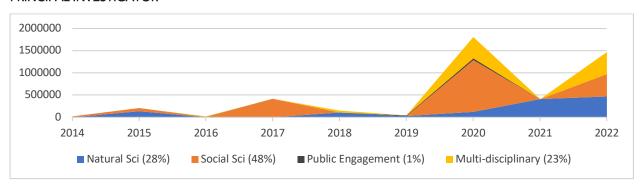
### **CO-AUTHORSHIP**

Of the 230 co-authors on peer reviewed, invited, and chapter publications, 67% are women, non-binary, or gender minorities; 32% are students; 8% are Indigenous, and 44% are international. When Liboiron is first author, students account for 57% of co-authors, and 10% of co-authors are Indigenous.

## **GRANTS**

Funding Summary				
Principal Investigator: \$4.4 million		Co-Investigator/ Collaborator: \$19.6 (\$4.3 million)		
Internal 5%	External 95%			

#### PRINCIPAL INVESTIGATOR



2022-2027 A pluriverse of Indigenous Sciences, SSHRC Insight. PI: Max Liboiron. Collaborators: Stephanie Russo Carrol (University of Arizona), Desi Rodriguez (UCLA), Andrea Gomez (UC Berkley), Sarah Aarons (UCSD). Amount of award: \$498,909. [Status: in progress]

2022-2027 Indigenous and decolonial quantitative methodologies (horizon), Discovery Horizons (NSERC). Pl: Max Liboiron. Collaborators: Stephanie Russo Carrol (University of Arizona), Katherine Crocker (Albert Einstein College of Medicine), Krystal Tsosie (NativeBio Consortium). Amount of award: \$497,235. [Status: in progress]

Plastics and heavy metals in Nunatsiavut foodways and environments, Canada-Inuit Nunangat-United Kingdom Arctic Research Programme (CINUK). Joint funding by Inuit Tapiriit Kanatami (ITK), United Kingdom Research and Innovation (UKRI), and National Research Council of Canada (NRC). Co-Pls: Liz Pijogge (Nunatsiavut Government), Alexander L. Bond (Natural History Museum, UK), Shan Zou (NRC), Zoltan Meister (NRC). Collaborators: Wouter jan Strietman (Wageningen Economic Research, The Hague). Amount of Award: \$450,000CAD (held by Liboiron) and £543,000 (held by Bond).

2022-2024 Indigenous and decolonial quantitative methodologies (seed), SSHRC Explore via Memorial University. Pl: Max Liboiron. Amount of award: \$7,000. Ethics permit:

Committee for Ethics on Research Impacting Indigenous Groups (CERIIG) [Status: in progress]

IndigeLabs Network (NI): Building research collectives through gendered Indigenous theories of change. SSHRC Partnership Grants- Stage 1. PI: Max Liboiron. Co-Director: S. Russo-Carroll. Co-I: Andersen, C., Ellenwood, C., David-Chavez, D., Tuck, E., Crocker, K., Milligan-Myhre, K., Leonard, K., Bos, K., Jennings, L., Murphy, M., Alegado, R., Aarons, S. Partners: First Nations Information Governance Centre, Native BioData Consortium, ORCID Inc., The Carpentries, Engaging Science, Technology, and Society, ArcticNet, University of Arizona, University of Toronto. Amount of Award: \$20,000. [Status: in progress]

2022-2023 Equitable science hardware for investigating microplastics in ice, Ocean Frontier Institute, Seed Fund. PI: Max Liboiron. Co-I: Janine O'Rielly (Marine Institute, Memorial University). Amount of award: \$18,040. [Status: in progress]

2021-2024 Wild food movements and contaminants of concern in Imappivut, POLAR Canada. PI: Max Liboiron. Co-I: Tanya Brown (DFO). Collaborators: Liz Pijogge (Nunatsiavut Government), David Cote (DFO), Rodd Laing (Nunatsiavut Government). Amount of award: \$294,600. Ethics permit: Nunatsiavut Government. Research Advisory Committee (NGRAC) [Status: in progress]

2021-2024 Nunalinni kamatsianik palastikkinik igitauKattatunik Nunatsiavummi / Community-Based Monitoring of plastic pollution in Nunatsiavut. Northern Contaminants Program. CO-Pls: Max Liboiron and Liz Pijogge (Nunatsiavut Government). Amount of Award: \$114,534. Ethics permit: NGRAC [Status: in progress]

2020-2024 Nunavut Arctic College's North by North Research Program: A NAC Case Study
Exploring Inuit Qaujimanituqangit in Nunavut Institutional Research. ArcticNet, North by
North Project. Co-Pls: Max Liboiron, Jamal Shirley, Karyn Vanden Boomen, in
partnership with the Nunavut Research Institute and Nunavut Arctic College. Amount of
award: \$1,164,835. 100% of funds to be used in Nunavut by NAC. Ethics permit:
Nunavut Research Institute (NRI) [Status: in progress]

Work Package 4: First Nations Data Sovereignty and Infrastructures for Atlantic AAROMs within The Future Ocean and Coastal Infrastructures (FOCI) project. Ocean Frontier Institute. FOCI Pls: Lorenzo Moro, Paul Foley. WP4 Pl: Max Liboiron. Co-I: Ken Paul (Assembly of First Nations). Partners: Atlantic Policy Congress (APC) of First Nations Chiefs Secretariat, Mi'kmaq Confederacy of PEI (MCPEI), Unama'ki Institute of Natural Resources (UINR), The Confederacy of Mainland Mi'kmaq (CMM), Mi'kmaq Maliseet Aboriginal Fisheries Management Association (MMAFMA), Anqotum Resource Management, Gespe'gewaq Mi'gmaq Resource Council (GMRC), Maliseet Nations Conservation Council (MNCC), and Mi'kmaq Alsumk Mowimsikik Koqoey Association (MAMKA): east and west, and NunatuKavut Community Council (NCC). Amount of FOCI award: \$4.0 Million; WP4: \$480,000. [Status: in progress]

2020-2022 Investigating relationships between plastics in ice, snow, and Inuit wild food around Nain, Nunatsiavut. Nunatsiavut Government via the Indigenous Community-Based Climate Monitoring Program. PI: Max Liboiron. Project Lead: Liz Pijogge (NG). Amount of contract: \$92,100. Ethics permit: NGRAC [Status: in progress] 2020-2021 A regional comparison and community analysis of food prices in Newfoundland and Labrador. Smallwood Foundation, Memorial University. Pl: Max Liboiron. Co-Is: Patricia Johnson-Castle (Nunatsiavut Government), Kerri Claire (Social Justice Coop, NL). Amount of award: \$8000. [Status: complete] 2020-2021 Food Pricing Survey: From Nain to Corner Book. Quick Start Award for Public Engagement, Memorial University. Pl: Max Liboiron. Co-ls: Patricia Johnson-Castle (Nunatsiavut Government), Kerri Claire (Social Justice Coop, NL). Amount of award: \$2475.20. [Status: complete] 2020-2021 Laboratory Life. Marine Environmental Observation Prediction and Response Network (MEOPAR) Knowledge Mobilization Fund. #1-02-05-089.1. Pl: Max Liboiron. Partner: Couple3 Films. Amount of award: \$34,650. [Status: complete] Movement of microplastics from land to sea in an urban waterway in St. John's, 2020-2021 Newfoundland. Ocean Frontier Institute Seed Grant. Pl: Max Liboiron. Amount of Award: \$15,793.20. [Status: complete] 2019-2022 Towards a marine management plan for Nunatsiavut: Coastal ecosystem research in support of priority concerns of Inuit. ArcticNet, #72. Co-Pls: Tanya Brown (DFO) and Max Liboiron. Project team: David Cote (DFO), Evan Edinger (Biology/Geography, Memorial), Kathleen Robert (MI, Memorial), Aaron Fisk (University of Windsor). Collaborators: Rood Laing (Nunatsiavut Government), Liz Pijogge (Nunatsiavut Government), Joey Anganatok (independent), Ian Bradbury (Dalhousie University), Paul Snelgrove (Memorial University), Sara Iverson (Dalhousie University), Marie Noel (Ocean Wise), Anna Posacka (Ocean Wise), Peter Ross (Ocean Wise), Kristin Westdal (Oceans North). Amount of award: \$288,372. Ethics permit: NGRAC [Status: in progress] 2019-2020 State of knowledge study on plastic marine debris in Newfoundland and Labrador. Fisheries and Oceans Canada (DFO), Ocean Management Contribution Program. Pl: Max Liboiron. Amount of award: \$28,518. [Status: complete] 2019-2020 Democratizing marine pollution science through DIY instrumentation: Building BabyLegs. MEOPAR Fathom Fund. Pl: Max Liboiron. Project Team: Jeffrey Yoo Warren (Public Laboratory for Open Technology), Bronwen Desmore (Public Laboratory for Open Technology). Amount of award: \$11,563 (25% crowdfunded, 75% MEOPAR). [Status: complete] 2018-2022 Community monitoring of plastic pollution in wild food and environments in Nunatsiavut. Northern Contaminants Program (NCP), Indigenous and Northern Affairs Canada and Indigenous Community-Based Climate Monitoring (ICBCM). Co-Is: Max Liboiron, Liz

Pijogge (Nunatsiavut Government), Collaborator: Rodd Laing (Nunatsiavut Government). Amount of award: \$97,859. Ethics permit: NGRAC [Status: in progress]

- 2018-2020 Food, Contaminants, and Culture: Marine plastics and methylmercury contamination in wild food around Lake Melville. Seed, Bridge, and Multidisciplinary Fund, Memorial University of Newfoundland; Co-Is: Max Liboiron, Ashlee Cunsolo (Labrador Institute).

  Amount of award: \$10,000. Ethics permits: NGRAC, Innu Nation, NunatuKavut Community Council [Status: complete]
- 2018-2020 Research Grant (AVPIR), Office of the Vice President (Research), Memorial University. Pl: Max Liboiron, AVIPR. Amount of award: \$40,000. [Status: complete]
- 2018-2020 Community-based monitoring of marine plastic pollution and its chemical loads in Labrador. National Geographic #NGS-391R-18. Pl: Max Liboiron. Collaborator: NunatuKavut Community Council. Amount of award: \$18,000. [Status: declined]
- Placing Science: Implementing Feminist, Indigenous, and Decolonial Theories of Place and Land in the Laboratory. SSHRC Insight Grant # 435-2017-0567. PI: Max Liboiron; Cols: Charles Mather (Memorial University, Geography) & Michelle Murphy (University of Toronto, Women & Gender Studies); Collaborators: Carissa Brown (Memorial University, Geography), Chelsea Rochman (University of Toronto, Ecology & Evolutionary Biology), & Richard Chavolla (Elder, Kumeyaay Nation). Amount of award: \$293,633. Ethics permit: Interdisciplinary Committee on Ethics in Human Research (ICEHR) [Status: in progress]
- 2017-2021 Inuit Definitions and Practices of Land-Based Wellness in Nunatsiavut: An Insider's Research Program. President's Doctoral Student Investment Fund (PDSIF), for Geography PhD student Edward Allen. Amount: \$120,000. [Status: in progress]
- 2016-2017 Place-based scientific instruments: Do-it-yourself citizen science trawls for monitoring marine plastics in extreme environments, Seed, Bridge, and Multidisciplinary Fund, Memorial University of Newfoundland; Pl: Max Liboiron; Collaborators: Josh Lepawsky (Memorial University, Geography), Paul Winger (Memorial University, Marine Institute). Amount of award: \$10,000. [Status: complete]
- 2016-2017 Citizen Science on Marine Plastic Pollution in Newfoundland and Labrador K-12 Schools, Public Engagement Accelerator Fund, Memorial University of Newfoundland; PI: Max Liboiron. Partner: Let's Talk Science. Amount of award: \$9,109. [Status: complete]
- 2015 -2018 Monitoring Marine Plastics in Canada's North, The Marine Environmental Observation Prediction and Response Network (MEOPAR); Pl: Max Liboiron; Partners: Yolanda Wiersma (Memorial University, Biology), Charles Mather (Memorial University, Geography), Dean Bavington (Memorial University, Geography), Josh Lepawsky (Memorial University, Geography), Mario Blaser (Memorial University, Anthropology), Jenna Jambeck (University of Virginia, Engineering), Mark Mallory (Acadia, Environmental Science), and NGOs: 5 Gyres, Coastal Connections, Scope Ecological,

2015 -2018 Action Research Methodologies for the Anthropocene: Knowing Ocean Plastics Through Participatory Citizen Science. SSHRC Insight Development Grant #430-2015-00413; PI: Max Liboiron; Co-Is: Charles Mather & Dean Bavington (Memorial University, Geography); Collaborators: Josh Lepawsky (Memorial University, Geography); Mario Blaser (Memorial University, Anthropology). Amount of award: \$73,347. Ethics permit: ICEHR [Status: complete] 2014-2015 Start-up Fund, Department of Sociology, Faculty of Arts, Office of the Vice President (Research), Memorial University. PI: Max Liboiron. Amount of award: \$20,000 [Status: complete] 2014 Citizen Science with Women in Newfoundland on Plastic Ingestion by Fish, American Association of University Women, International Project Grants. [Status: awarded but not funded] 2014 Data Activism in Hurricane Sandy. Project Grant, Institute for Public Knowledge, New York University; Max Liboiron (PI). Amount of award: \$1,650USD. [Status: complete] 2014 Superstorm Research Lab, Project Grant, Institute for Public Knowledge, New York University; Co-Pls: Max Liboiron, Daniel Cohen, David Waschmuth, Liz Koslov, Shelly Ronen, Erin Bergen, Ned Crowly. Amount of award: \$15,000USD. Ethics permit: NYU IRB [Status: complete] 2014 Superstorm Research Lab, Green Grant, Office of Sustainability, New York University; Co-Pls: Max Liboiron, Daniel Cohen, David Waschmuth, Liz Koslov, Shelly Rone, Erin Bergen, Ned Crowly. Amount of award: \$13,065USD. Ethics permit: NYU IRB [Status:

award: \$137,600. Ethics permit: NGRAC [Status: complete]

Let's Talk Science, the Nunavut Research Institute, and Environment Canada. Amount of

# **COLLABORATOR**

2014

complete]

Any projects where I was named a collaborator but I did not receive any funding *and* where I was not an active member of the team are not listed. This removes approximately \$15.5 million in name-only "collaborative" grants.

Object Ethnography Project, Digital Commons Grant, Digital Commons Initiative,

(NYU, Media Studies), Vincent Lai (community member), Marisa Solomon (NYU,

English Department and Humanities Initiative, New York University; Co-Pls: Max Liboiron

Anthropology). Amount of award: \$2,000USD. Ethics permit: NYU IRB [Status: complete]

2020-2024 The Future Ocean and Coastal Infrastructures (FOCI) project. Ocean Frontier Institute. FOCI Pls: Lorenzo Moro, Paul Foley. Details on ML's work package within FOCI detailed above. Amount award: \$4.0 Million. [Status: in progress]

Sources of methylmercury, poly- and perfluoroalkyl substances, and polychlorinated biphenyls to ringed seal food webs of Lake Melville, Northern Labrador, Northern Contaminants Program. Pl: Jane Kirk (Environment and Climate Change Canada). Co-Is: Liz Pijogge (Nunatsiavut Government), Sarah Roberts (ECCC). Collaborators: Max Liboiron, Tanya Brown, Magali Houde, Derek Muir, Igor Lehnherr, Elsie Sunderland, Amila DeSilva, David Wolfrey, Rodd Laing. Total amount of award: \$102,830. Amount to Liboiron: \$10,200 [Status: in progress]

2017-2020

Atlantic Canada Microplastic Research Project. Atlantic Canada Ecosystems Initiative (AEI), Environment Canada. PI: Bluenose Coastal Action Foundation; Partners: Max Liboiron (Memorial University), Sherri Mason (Fredonia University), Matt Walzak (University of Western Ontario), Reba McIver (Huntsman Marine Science Centre), Sheldon Peddle (ACAP Humber Arm). Amount of Award: \$203,500 [Status: complete]

Just what kind of junk is on our beaches? Classification of marine debris using citizen scientists, Seed, Bridge and Multidisciplinary Fund, Memorial University of Newfoundland; PI: Yolanda Wiersma (Memorial University Biology), Co-I: Max Liboiron, Jeffrey Parsons (Memorial University Business Administration). Amount of award: \$10,000 [Status: complete]

### **ADVISEE GRANTS & AWARDS**

Awardees are students who I directly supervise or co-supervise and do not include unofficial mentees or mentees whose committees I sit on. I advised in crafting all awards.

2022-2025	Vanier Scholarship, for Geography PhD student Samantha Morton. Amount:
	\$50,000/annually, for three years.
2022	Indigenous Graduate Trainee Stipend. Atlantic Indigenous Mentorship Network, for
	Geography PhD student Edward Allen. Amount: \$2,500.
2018-2021	Terra Nova Aboriginal Doctoral Student Scholarship, for Geography PhD student Edward
	Allen. Amount: \$10,000 annually, renewable for three years.
2018-2020	Wild and Country Food Survey Project. Public Engagement Grant, Memorial University,
	for Environmental Science PhD student John Atkinson in partnership with FoodFirstNL.
	Amount: \$10,000.
2019	Blue Charter Fellowship, Association of Commonwealth Universities, for visiting marine
	biology PhD student Oladimeji Awalaye from the University of KwaZulu-Natal. Amount:
	£10,000 GBP.
2018	Wellness from Cultural Engagement with the Land. Traditions and Transitions Program,
	for Geography PhD Edward Allen. Amount: \$5,000.
2017-2019	Investigating the role of fishing gear in the generation of microplastic waste and
	ingestion by Atlantic cod in Newfoundland, Canada. Early Career Grant, National
	Geographic, for MSc Fisheries Science student Jacquelyn Saturno. Amount: \$10,000
	USD.
2017-2018	Investigating the role of fishing gear in the generation of microplastic waste and
	ingestion by Atlantic cod in Newfoundland and Labrador. Applied Waste Fund, Harris

Max Liboiron 14

Jacquelyn Saturno. Amount: \$10,000.

Center for Applied Research, Memorial University, for MSc Fisheries Science student

2017	Distribution of benthic plastic in Frobisher Bay near Iqaluit. Northern Scientific Training
	Program, for Environmental Science MSc student Hillary Bradshaw. Amount: \$3,000.
2017	Monitoring Marine Plastics in Canada's North. MEOPAR Training Program, for Environmental Science MSc student Hillary Bradshaw. Amount: \$2,500.

AWARDS	
2022	The Labriola Center American Indian National Book Award, for Pollution is Colonialism
2022	Marilyn Harvey Award to Recognize the Importance of Research Ethics, Office of the Vice-President Research, Memorial University
2021	College of New Scholars, Artists, and Scientists, Royal Society of Canada (RSC). A national system of multidisciplinary recognition for the emerging generation of Canadian intellectual leadership. Members have the capacity to help Canada and the world address major challenges and seize new opportunities including those identified in emerging fields.
2021	Clay Morgan Award for Best Book in Environmental Political Theory, Western Political Science Association (WPSA), for <i>Pollution is Colonialism</i>
2021	Finalist, Victoria Davion Award for Intersectionality in Environmental Ethics, International Society for Environmental Ethics. The award honors scholars engaged in intersectional work that describes, considers, or responds to overlapping forms of exclusion, discrimination, or injustice
2020-2021	Distinguished Visiting Indigenous Faculty Research Fellow, Jackman Humanities Institute, University of Toronto. This position for a senior Indigenous scholar is by invitation only.
2019-present	Circle Holder, Science for the People. Begun in 1969, Science for the People is a USA-based group of activist-scientists committed to the practice of science to end oppression and violence. This award is one of two inaugural life-long fellowship positions for the society.
2018	Nature Inspiration Award (adult category), Canadian Museum of Nature/Musee Candien de la Nature. This award, "recognizes individuals and organizations that, through their work or specific projects, encourage Canadians to take an interest in natural history, create links with nature and contribute to its preservation." Amount: \$5,000 to be donated to organization of awardee's choice.
2018	Most-Accessed Dissertations and Thesis, ProQuest. "Redefining Pollution: Plastics in the Wild" was one of the top 25 dissertations accessed of 2.25 million full-text graduate works across all subject areas based on total PDF downloads in the ProQuest® Dissertations & Theses Global™ database.
2015	Next Generation Polar Researchers. Competitive membership to a network of early career, interdisciplinary early career polar researchers spanning the physical, biological,

and social sciences.

2015	Making and Doing Prize, Society for the Social Studies of Science (4S): Inaugural award "to recognize 4S members who have demonstrated scholarly excellence in formulating, enacting, and sharing theoretically-informed practices of participation, engagement, and intervention through STS work."
2015	CHI Honorable Mention, Computer-Human Interaction Best Papers, Seoul, Korea: "The Politics of Measurement and Action." CHI accepts less than 22 percent of over 3000 submissions, and Honorable Mention is given to the top 5 percent of accepted papers.
2013	Samuel Eshborn Service Award, Steinhardt School of Culture, Education and Human Development, New York University: "in recognition of superlative and extraordinary service"
2013	Cleaning the Air Award, PSC-CUNY Environmental Health and Safety Watchdogs: given to the individual or group that best contributes to a better understanding of occupational or environmental health
2013	Allington Short-Term Residency Research Fellowship, Chemical Heritage Foundation, Philadelphia (\$6,000USD)
2011-2012	International Fellow, American Association of University Women (AAUW) (\$20,000USD)
2011-2012	Humanities Initiative Research Fellowship, New York University (\$22,000USD) (Funding declined, position accepted)
2011-2012	Global Research Fellowship, Provost's Global Research Initiative, New York University in London (\$1,500USD)
2010-2012	Graduate Fellow, Forum on Interdisciplinary Study, New York University (\$1,000USD)
2011	Finalist, Association for Environmental Studies and Sciences Outstanding Student Paper Award, AESS: "Defunct Models of Pollution: Ocean Plastics and Body Burdens"
2011	Scholar-Activist Grant, Radical Art Caucus, College Art Association
2011	President's Service Award for environmental advocacy, New York University
2010	W.E.B. DuBois & Nelson Mandela Commitment to Dialogue and Education Award, The Center for Multicultural Education and Programs, New York University
2010	Resident Researcher, Anna K. and Mary E. Cunningham Research Residency, New York State Library (\$2,000USD)

# **TEACHING**

Right hand column: SemesterYear(number of enrolled students). In reverse chronological order.

# UNDERGRADUATE COURSES AT MEMORIAL UNIVERSITY

GEOG1050 Introduction to Geography F22(120 online)

GEOG/SOCI 3015	Science, Technology, Society F17(27), W22(25), F F22(25 online)		
MSTM 410A/B	Technical Projects (Marine Institute)	F15(1), W16(1), W22(1)	
GEOG4030	Discard Studies	W22(15)	
GEOG/SOCI 4107	Feminist GeoTechnologies	W18(16), W22(24)	
GEOG4999	Honours Dissertation	S18(1)	
GEOG 3222	Introduction to Quantitative Research Design	W18(35)	
SOCI 2120	Society and Technology	F14(65), W15(71), F15(34), W16(36), W17(60)	
SOCI 4107	Feminist Technologies	F14(13), W15(14), FA16(16), W17(16)	
SOCI 3150	Classical Sociological Theory	W16(35)	
GRADUATE COURSES A	AT MEMORIAL UNIVERSITY		
GEOG 6505	Political Ecology	W22(2)	
SOCI 6330	Science and Technology	W17(6)	
SOCI 6380	Women, Nature, Science, and Technology	F14(1)	
SOCI 6370	Feminist Theory and Methods	W16(9)	
UNDERGRADUATE CO	URSES AT OTHER UNIVERSITIES		
New York University			
MCCUE 1027/ENV4	50 Environmental Communication	F12(24)	
MCCUE 1152	Cultural Capital: Media and Arts in NYC	S11(16)	
MCCUE 59	History of Media and Communication	F10(24), F11(24)	
MCCUE 90	Space and Place	S10(8)	
Suffolk Community Colleg	ge		
CA 86	Animation	F06(16), W07(16)	
CA 22	Digital Illustration	F06(16), W07(16)	

SUNY Stony Brook ARS 154

CA 257

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S04(12), F04(30), W05(30)

W04(12)

Foundations of Drawing

Introductory Printmaking

## **SUPERVISION**

Status	Research Associates (RAs)	PhD Students	Masters students	Graduate Committees	Undergraduate Honours Theses	Full-time Staff
In program	31	2	2	1		3
Complete	79		6	2	1	3
Total	110	2	8	3	1	6

# **PHD STUDENTS**

2022- present Samantha Morton, PhD (Geography). "Encountering 'the animal' in International

Development."

2017-present Edward Allen, PhD (Geography). "Inuit healing and its ties to Land and time."

# **MASTERS STUDENTS**

10 10 0 . 0 _	
2019-present	Nadia Duman, M.Sc. (Geography). "The role of global oceanic currents of marine plastics flowing from and to Newfoundland and Labrador." On leave.
2016-present	Hillary Bradshaw, M.Sc. (Environmental Sciences). "Investigation of benthic plastics in Iqaluit and Frobisher Bay, Nunavut: Distribution, Types, Sources." On Leave.
2017-2020	John Atkinson, MES (Environmental Sciences); "Surveys of wild and country foods in Newfoundland and Labrador."
2017-2020	Jacqueline Saturno, M.Sc. (Marine Institute, Fisheries and Oceans). "Fishing Gear as a Main Contributor to Marine Plastic Pollution, Fogo Island, NL."
2017-2019	Lucas Harris, M.A. (Geography). "Marine Plastics Policy Efficacy for Extended Producer Responsibility in Plastic Packaging."
2015-2018	Natalie Richard, M.Sc. (Geography). "Citizen Science and marine microplastics ingestion by capelin and cod in Newfoundland," Co-supervisor with Charles Mather (Geography).
2015-2017	Judyannet Muchiri, M.A. (Sociology). "African Youth's Views of Development: A Photo-Voice Approach", Co-supervisor with Liam Swiss (Sociology).
2016-2017	Jessica Melvin, MNR. (Environment & Natural Resources), "Quantity, distribution, and types of microplastics ingested by cod destined for human consumption on the Avalon Peninsula," University Center of the Westfjords, Iceland, Thesis supervisor.
2015-2016	Matt McWilliams, M.Sc. (Environmental Sciences); "Historical fishing logbooks and a new ethic of engagement: Constructing a database of the past and present Fogo Island ecosystem for adaptive fisheries management," Co-supervisor with Yolanda Wiersma

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(Biology). Withdrawn for personal reasons.

### **GRADUATE COMMITTEES**

2015-present Alex Zahra, Ph.D. Candidate (Geography); "Settler colonialist logics in wildfire management in Saskatchewan," Committee member.

2014-2019 Grace Akese, Ph.D. (Geography); "Electronic Waste Science and Advocacy at

Agbogbloshie: The Making and Effects of 'The World's Largest E-waste Dump.'"

Committee member.

2015-2019 Donny Persaud, MA (Geography); Behind breakdown: The case of the MV Veteran"

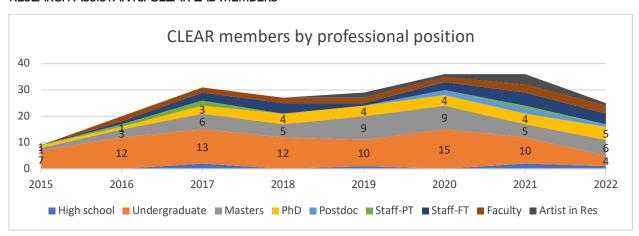
Committee member.

## **UNDERGRADUATE HONOURS THESIS**

2019 Kyekue Mweemba, B.Sc. (Geography); "The comparison of two age cohorts for feminisation of 2D:4D Digit Ratios as an indication of increased exposure to Endocrine

Disrupting Compounds in Newfoundland."

## RESEARCH ASSISTANTS/CLEAR LAB MEMBERS



Since it was founded in 2015, I have mentored 103 CLEAR members. This has included: 39% undergraduates and 33% graduate students; 69% women or gender minorities; 31% international students; and 34% Black, Indigenous, and/or people of colour. These figures represent the cohort in the lab per year, so high recruitment with low retention is not misrepresented as a high degree of diversity. My own graduate students who are also CLEAR members/RAs are marked with an \* below.

Years	Name	Position	Funding
F2015-F2018,	Alex Zahara	PhD candidate, Geography	SSHRC IG
S2020-present			
F2016-present	*Hillary Bradshaw	Master's student,	MEOPAR, ArcticNet
		Geography	
S2016-2022	Dr. Charles Mather	Full Professor, Geography	
S2016-2022	Dr. Nicole Power	Full Professor, Sociology	
F2017-present	*Edward Allen	PhD in Geography	SSHRC IG
W2021-present	Charlotte Florian	Staff (Lab Manager)	Nunatsiavut Government contract,

			NSERC	
W2022-present	Doménica Lombedia	Staff (Lab Technician)	NCP, NSERC, POLAR	
F2019-present	*Nadia Duman	Master's student, Geography	DFO, SSHRC	
F2019-present	Alexander Flynn	Master's student, Biology	GradSWEP (Bluenose Coastal Action), ArcticNet, NunatuKavut Community Council (contract), NCP	
S2020-present	Arif Abu	Memorial Staff		
S2020-present	Christina Crespo	PhD in Anthropology, University of Georgia	University of Georgia, SSHRC IG	
S2020-present	Janine O'Reilly	Undergraduate, Bachelor of Technology	MUCEP. OFI Seed	
S2020-present	Mukhtara Yusuf	Artist in Residence	SSHRC IG	
F2020-present	Rui Liu	Undergraduate and MA, Women and Gender Studies, University of Toronto	SSHRC IG	
F2020-present	Dr. Katherine Crocker	Co-Investigator/Affiliated Faculty	SSHRC IG	
F2020-present	Dr. Deondre Smiles	Co-Investigator/Affiliated Faculty	SSHRC IG	
F2021-W2022	Jefta Merkruatsuk	Undergraduate, Marine Institute	MUCEP, Canada Summer Jobs	
F2021-present	Girish Daswani	Associate Professor, Anthropology, University of Toronto		
F2021-present	Silvana Rodrigues Pereira	PhD student, Science	GradSWEP	
F2021-present	Joseph Onalik	Youth, based at Nunatsiavut Research Centre	ArcticNet, Nunatsiavut Government Contract, CINUK	
S2021-present	Brittany Schaefer	Staff (Project Manager)	SSHRC IG, NSERC	
S2022- present	Sam Morton*	PhD, Geography		
S2022- present	Melanie Flynn	Staff (Nunatsiavut contract)	CINUK	
S2022	Riley Cotter	Undergraduate, geography		
S2022	Sid Ford	High school	NSERC	
S2022	Susanna Polack- Finely	High school	WISE	
W2022	Alyson Park	Undergraduate, Earth Sciences	MUCEP	
W2022	Aidyashini Thamodharanl	Graduate student, Marine Institute	GradSWEP	

W2022	Ayoade Adeyemo	Graduate student, Marine Institute	GradSWEP	
W2022-present	Sophia Jaworsky	PhD student, University of Toronto	SSHRC Explore, SSHRC partnership LOI	
W2022-present	Joe Wark	PhD student, Social Work	SSHRC Explore	
W2022-present	Morgan Manuel	Undergraduate, Geography	OFI	
F2019-2021	Kaitlyn Hawkins	Staff (Lab Manager)	Nunatsiavut Government contract, Memorial University, SSHRC IG, OFI seed	
F2019-F2021	Doménica Lombedia	Undergraduate in Biology	ArcticNet, ISWEP	
F2019-F2021	Molly Rivers	Master's student, Ocean Sciences	ArcticNet, GradSWEP (Bluenose Coastal Action), Northern Contaminants Prog.	
S2020-F2021	Willa Neilsen	Undergraduate, Biology	MUCEP, Smallwood Foundation	
S2020-F2021	Charlotte Florian	Undergraduate, Geography	MUCEP, ArcticNet	
S2020-F2021	Morgan Davidson	Undergraduate, Biochemistry	MUCEP, OFI	
S2021-F2021	Pam Hall	Staff (Artist in Residence)	SSHRC Insight	
S2021-F2021	Prakash Krishnan	Staff (Artist in Residence)	SSHRC Insight	
S2021-F2021	Emily Roehl	Staff (Artist in Residence)	SSHRC Insight	
S2021, S2022	Alana Derry	High school student	WISE, POLAR	
S2021	Korede Akinkunmi	Visiting position		
S2021	Taylor Thompson	Visiting position		
S2021	Paul McCarney	Visiting position		
S2021	Emma Ford	Staff (Research Assistant)	Canada Summer Jobs, ArcticNet	
F2020-W2021	Dr. Alex Sawatzsky	Memorial Staff		
W2017-S2021	Elise Earles	Undergraduate, Biology	MUCEP, SSHRC IG	
F2017-F2020	*Jacqueline Saturno	Master's student, Fisheries and Oceans	Self-funded: National Geographic, Harris Center Waste Fund	
F2017-F2020	*John Atkinson	Master's student, Environmental Science	MUN Public Engagement	
F2020	Abdul Rafeh Rahat	Undergraduate, Engineering	ISWEP	
F2020	Paddy Dawe	Undergraduate, Education	Canada Summer Jobs	
F2020	Anna Malone	Undergraduate	Canada Summer Jobs	
F2017-S2020	Natasha Healey	Undergraduate, Geography & Earth Science	MUCEP, OFI Seed, ArcticNet	
W2020	Forough Emam	Master's student, Gender Studies	GradSWEP (Bluenose Coastal Action)	
W2020	Tammy Sheppard	Undergraduate, Indigenous	SSHRC IG	

		Studies		
W2020	Zhe Shi	Master's Student, Computing	GradSWEP (Bluenose Coastal Action)	
S2019-W2020	Carley Mills	Undergraduate, Geography MUCEP & Communication Studies		
F2019-W2020	Tiaasha Naskar	Undergraduate, Biology	MUCEP	
F2019-W2020	Melissa Paglia	Master's student, Political Science	GradSWEP (Bluenose Coastal Action)	
F2019-W2020	lwalaye (Ayo) Oladimeji	Visiting Doctoral Student	Blue Commonwealth Fellowship	
F2017-F2019	*Lucas Harris	Master's student, Geography	SSHRC IDG	
W2018-F2019	Emily Simmonds	PhD Candidate, Science & Technology Studies, York University		
S2019-F2019	Celestine Muli	Master's student, Environmental Humanities	GradSWEP (Bluenose Coastal Action)	
F2019	Michael Broz	PhD student, Philosophy	GradSWEP (Bluenose Coastal Action)	
F2018-S2019	Kaitlyn Hawkins	Undergraduate, Biology	SSHRC, Canada Summer Jobs, MUCEP	
S2019	Lauren Watwood	Master's student, Anthropolo	ogy, University of Heidelberg	
S2019	Hridisha Arif	Undergraduate, Earth ISWEP Science		
S2019	Jillian Chidley	Undergraduate, Bachelor MUCEP of Technology		
S2019	Taylor Hess	Independent Filmmaker, Couple3 Films		
S2019	Noah Hutton	Independent Filmmaker, Cou	uple3 Films	
S2019	Luke Lucy- Broomfield	Community member	ArcticNet	
S2018-W2019	Kelechi E. Anyaeto	Undergraduate, Applied Mathematics	ISWEP	
F2018	Megan Dicker	Undergraduate, Undeclared	Northern Contaminants Program	
F2018	Shramana Sharka	Undergraduate, Chemistry	ISWEP	
S2018	Arielle Przybysz	Undergraduate, Biology	MUCEP	
F2015-S2018	*Natalie Richard	Master's student, SSHRC IDG Geography		
W2018-S2018	Marissa van Harmelen	Undergraduate, Social MUCEP, SSHRC IG Work		
F2016-W2018	Bojan Furst	Photographer in Residence		
W2017-W2018	Taylor Stocks	Memorial Staff		
S2017-W2018	Jessica Melvin	Staff, RAII	MEOPAR	

S2017-W2018	France Liboiron	Staff (Lab Manager)	MEOPAR, SSHRC IDG	
F2017-W2018	Nadia Duman	Undergraduate, Earth Science	ISWEP, MUCEP	
F2017-W2018	Ignaus Schoot	Master's student, Geography	Dept Geography	
W2018	Alexandra Hayward	Undergraduate, Biology	MUCEP	
W2018	Nic Kuzmochka	Undergraduate, Sociology	MUCEP	
F2015-F2017	Emily Wells	Undergraduate, Biology & French	NSERC, MUCEP, Canada Summer Jobs	
F2017	Tristen Morris	Undergraduate, Social Work	MUCEP	
F2016-S2017	*Jessica Melvin	Master's student, Environment Natural Resources, University Center of the Westfjords		
F2016-S2017	Jackie Saturno	Community member	MEOPAR	
S2017	Erin Burt	Highschool intern	WISE	
S2017	Mikayla Downey	Highschool intern	WISE	
S2017	Danielle Henley	Undergraduate, Biology	MUCEP	
S2017	Ky Reese	Undergraduate, Sociology	MEOPAR	
S2017	Rahma Tasnim	Undergraduate, Applied Mathematics	MUCEP	
S2017	Sam Westcott	Undergraduate, English	MUCEP	
F2016-F2017	Kate Windsor	Master's student, Sociology	MUN Public Accelerator	
F2015-W2017	France Liboiron	Undergraduate, Biology	MUCEP, MEOPAR	
F2016-W2017	Natalya Dawe	Undergraduate, Geography	MUCEP	
S2016-W2017	Melissa Novacefski	Undergraduate, Geography	MUCEP	
S2015-S2016	William Glatt	Undergraduate, Marine Technology	MUCEP, MEOPAR	
F2015-W2016	Hillary Bradshaw	Undergraduate, Geography	MEOPAR	
F2015-W2016	Judyannet Muchiri	Master's student, Sociology	Sociology Dept	
F2015-W2016	Alicia Poole	Undergraduate, Sociology	MUCEP	
S2016	Kate Windsor	Undergraduate, Sociology	Canada Summer Jobs	
S2016	Coco Coyle	Undergraduate, Engineering, Harvey Mudd College	Harvey Mudd College Internship	
S2016	Claudine Metcalf	Undergraduate, Chemistry	MUCEP	
F2015	Colin Grenning	Undergraduate, Sociology	MUCEP	
W2015	Carmella Gray- Cosgrove	Master's student, Sociology	Scholarship for the Arts	
F2014	Gina Molleson	Master's student, Sociology	Sociology Dept	

## INTERNAL EXAMINER (PHD COMPREHENSIVE PAPER)

SU2018 Chris Dawson (PhD Sociology: Disaster Sociology in Environment and Labour)
WI2016 Grace Akese (PhD Geography: Waste Geographies & Political Economies)
WI2016 Gary Catano (PhD Sociology: Environment & Work)
S2016 Elahe Nezhadhossein (PhD Sociology: Gender & Political Sociology)

# **EXTERNAL EXAMINER (PHD DISSERTATION)**

S2016 Stephanie Sodero (PhD Sociology: "Navigating Disruption: Mobile Society and Hurricanes Juan and Igor")

## SCHOLARLY LECTURES AND OTHER PROFESSIONAL PRESENTATIONS

Summary of Lectures and Presentations						
Expert	Keynotes	Juried	Invited	Public	Workshops	Total
Witness		Presentations	Presentations	Presentations		
1	14	38	27	25	28	133
1%	~11%	~29%	~20%	~19%	~21%	100%

## **EXPERT WITNESS**

2019 Expert witness, Standing Committee on Environment and Sustainable Development (ENVI), House of Commons, Canada

## **KEYNOTES**

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2022	"The power of wasting," Discard Studies Conference, New York University, online.  "Theories of Change in Tight Places," 23rd Annual Aldrich Interdisciplinary Conference,
	Memorial University, online.
2021	"Methodologies in Fraught Terrain," Ruderal Ecologies 2, RPI, online.
	"Artists in Residence in an environmental science lab: ethics, processes, lessons," Expanding
	Communities of Sustainable Practice Symposium, Leeds Art University, online.
	"Science, Science Communication, and Land Relations," Inclusive SciComm Symposium,
	online.
	"Pollution is Colonialism (And Research is Land Relations)," Yale School of the Environment,
	online
2019	"The Power (Relations) of Citizen Science," Citizen Science Association (CSA), Raleigh, NC
2018	"Obligation, Compromise, and Protocols: Research is Tricky," Indigenous STS conference, University of Alberta, Edmonton, AB
2017	"Cod Objects," Anthropocene Campus Philadelphia, Drexel University, Philadelphia, PA
	"Open Science Hardware for Equity," Gathering for Open Science Hardware (GOSH),
	Pontificia Universidad Católica de Chile, Santiago, Chile
	"Critical Methods: Lessons from a Feminist Laboratory," Seeing Systems Symposium,
	University of Illinois Urbana-Champaign, IL
2016	"Leveraging Strategies from Civic, Citizen, and Open Science to Make Research Matter,"

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International Marine Conservation Congress (IMCC), St. John's, NL

- "Theorizing Externalities: 185 Pieces of Junk Walk into a Bar...", Binocular Graduate Conference, STS & HPST, York University & University of Toronto, ON
- 2015 "Waste: Problem Definition > Scale > Action," Students for Zero Waste Conference, Post-Landfill Action Network, University of New Hampshire, Durham, NH

### **JURIED PRESENTATIONS**

- 2021 "State of current knowledge on plastic pollution in Nunatsiavut," with Liz Pijogge, ArcticNet Annual Scientific Meeting, online
  - "Nunalinni kamatsianik palastikkinik igitauKattatunik Nunatsiavummi / Community-Based Monitoring of plastic pollution in Nunatsiavut," with Liz Pijogge, Northern Contaminants Program Results Workshop, online.
  - "Nunatsiavut community-based monitoring of marine plastics," with Liz Pijogge, International Symposium on Plastics in the Arctic, online
- "Community-based plastic monitoring in Nunatsiavut/ Nunalinni kamatsianik palastikkinik igitauKattatunik Nunatsiavummi," with Liz Pijogge, Arctic Change conference, ArcticNet Annual Scientific Meeting, online
- 2019 "Indigenous science, anti-colonial science, and community-based Western science on marine plastic pollution in Nunatsiavut," The Society of Environmental Toxicology and Chemistry (SETAC), Toronto, ON
  - "Re-centering standardization for Indigenous, northern-led, and citizen sciences," The Society of Environmental Toxicology and Chemistry (SETAC), Toronto, ON
  - "Bodies as Land: Animal Respect Protocols in an Anti-colonial Marine Science Laboratory," Land/Body in Indigenous Science and Technology Studies, Native American and Indigenous Studies Association (NAISA), Auckland, New Zealand
  - With Liz Pijogge, "Community-based monitoring of marine plastics in Nunatsiavut," Labrador Research Forum, Upper Lake Melville, NL
- 2018 "Risk Communication at the Community Level: Towards Meaningful Collaborations on Environmental Hazards," Townhall/round table, Canadian Meteorological and Oceanographic Society (CMOS) 52<sup>nd</sup> Congress & Marine Observation Prediction and Response Network (MEOPAR) Annual Scientific Meeting, Halifax, NS "Counting fish like a Métis," Métis Feminists Take Technoscience, Native American and Indigenous Studies Association (NAISA), Los Angeles, CA
- 2018 "Macro Et Micro (Plastiques) Présents dans les Environnements de Rivieres Francaises," Vincent Verney, Gaëlle Bissagou Koumba, Florence Delor Jestin, Dominik Zdybal, Haroutioun Askanian, Jean-Luc Peiry, Erwan Roussel, Olivier Voldoire, Alexandre Schaal and Max Liboiron, Polymères & Océans, Université de Montpellier, France
- "Contested Concepts of Harm in Scientific Studies on Marine Plastic Pollution," Contesting Harm panel, Society for the Social Studies of Science (4S), Boston, MA
  "The Invention of Modern Pollution," Toxic Legacies, Global Pollutants workshop, Durham University, UK
  - "Theorizing Harm," Visualizing and Measuring Bodies, Health and Disease: From Cells to Patients, Cain Conference, Chemical Heritage Foundation, Philadelphia, PA
  - "Citizen Science Tools, Practices, and Ethics for Monitoring Marine Plastics Developed in a Feminist Laboratory," Lives and Afterlives of Plastics, online conference via University of New Zealand http://perc.ac.nz/wordpress/the-lives-and-afterlives-of-plastic/

- "Brining Ethnographic Refusal into Pollution Science," National Women's Studies Association (NWSA), Montreal, QC
  "Feminist Imaginaries for Pollution Research in the Laboratory," National Women's Studies Association (NWSA), Montreal, QC
- 2015 "Charismatic Data in Citizen Science Environmental Monitoring," Society for the Social Studies of Science (4S) Annual Conference, Denver, CO

  "Knowing Amorphous Phenomena: Participatory Citizen Science on Marine Plastics," Next Generational of Polar Researchers, Catalina Island Marine Research Institute, CA

  "Network Analysis of Research on Discards, Diverse Economies, and Degrowth," with Josh Lepawsky, American Association of Geographers (AAG), Chicago, IL
  - "Remembering Marine Plastics," Memory and Disaster panel, American Society for Environmental History (ASEH), Washington, DC
- "Ocean Plastics and Citizen Science," Math-Science SIC Provincial Conference, Memorial University, St. John's, NL
   "Civic Hacking," Digital Labor: Sweatshops, Picket Lines, Barricades (#DL2014), New School,
  - New York City
  - "Data Collection as Activism," panel on Civic Infrastructure and Democratic Epistemologies, Society for the Social Study of Science (4S), Buenos Aires, Argentina
- 2013 "Multiple Spaces and Times of Superstorm Sandy: Governments, Activists, and Sanitation Workers in New York City," panel on Bodies, Selves, and Projects in Contested Space, Association of American Anthropologists, Chicago, IL
  - "Making Pollution Manifest: The Sigmoid Nature of Harm," panel on Making Environmental Harm Manifest, 4S Annual Conference, San Diego, CA
  - "Defining Pollution by Defining Harm: The Rise and Fall of Assimilative Capacity from Sewage to Plastics," Waste and Indeterminacy panel, Association of Canadian Geographers, Memorial University, NL
  - "The Potential for Spatial and Temporal Restructuring of Action After Sandy," with Superstorm Research Lab, Nature, Ecology and Society Colloquium, CUNY Graduate School, New York, NY
  - "Geographies of Garbage: The State of the Art of Discard Studies," Roundtable, American Association of Geographers, Los Angeles, CA
  - "Scale, Action and the Environment: Superstorm Sandy," session on Environmental and Spatial Justice, Association of American Geographers, Los Angeles, CA
  - "The SpaceTimes of Disaster," with David Waschmuth, Annual Sociology Graduate Conference, New York University, NY
- 2012 "Emerging Phenomena and Scalar Fallacies," Methodologies and Theories of Scale, 4S Annual Conference, Copenhagen
  - "The Need for Theories of Scale in Activism," Technoscience as Activism Conference, Rensselaer Polytechnic Institute, Triple Helix Program, Troy, NY
  - "Twentieth Century Models of Pollution Meet Twenty-first Century Plastic," The Matter with Plastic: Plastic Waste in the Oceans, American Society for Environmental History (ASEH), Madison, WI
  - "Delimiting Catastrophe and its Objects," Producing Environments of Crisis: Economies, Histories and Politics, Neil Postman Conference, New York University, New York, NY "Plastic: Planetary Versus Global Scales," Geographies of Garbage, American Association of Geographers (AAG), New York, NY

- 2011 "Defunct Models of Pollution: Ocean Plastics and Body Burdens," Outstanding Student Papers Session, Association for Environmental Studies and Sciences (AESS), University of Vermont, Burlington, VT
  - "Analysis of Successes, Failures, and Characteristics of an Established Campus Sustainability Granting Program," Association for the Advancement of Sustainability in Higher Education (AASHE), Pittsburgh, PA
  - "Defunct Models of Pollution: Oceanic Plastics and Body Burdens," Conference on Dirt, New York Metro American Studies Association, New York, NY
  - "Artistic Trash-Based Social Economies and Environmental Sustainability," on Environmental Sustainability in Art History, Theory, and Practice, Radical Art Caucus, College Art Association (CAA), New York, NY
- 2010 "Trash Art, Economics and Methodologies," Neil Postman Graduate Conference, New York University, New York, NY
  - "Trash Art and Creative Economies," on Recycling the Practice Artists' Panel, Recycling Conference: Comparative Literature and Cultural Studies, SUNY Stony Brook, New York NY "The Branding of Recycling and the Poverty of Description," on Recycling the Garbage, Recycling Conference: Comparative Literature and Cultural Studies, SUNY Stony Brook, New York NY
  - "Exchange and Regimes of Value: The Dawson City Trash Project," on Visual Culture Division panel: Visualizing Economies, Cultural Studies Association (CSA), Berkeley, CA

### **INVITED PRESENTATIONS**

- "Community-based observation," with Liz Pijogge, Arctic Science Summit Week, hosted by The Arctic University of Norway, Norwegian Polar Institute, The Research Council of Norway, and the Norwegian Ministry of Foreign Affairs, hybrid format in Tromsø and online "Pollution is Colonialism," Humanities Institute, SUNY StonyBrook, online

  "Fresh Basana Legyes y Pollution is Colonialism; Author mosts Author " with Dr. Joseica."
  - "Fresh Banana Leaves x Pollution is Colonialism: Author meets Author," with Dr. Jessica Hernandez, Sustainable Seattle, online
  - "Building a Community-based lab," hosted by CAT Lab, Cornell University, online "Climate change research at CLEAR and Memorial University," Atlantic First Nations Youth Climate Change Careers Event, Assembly of First Nations, online
  - "Indigenous plastic pollution research and open data: Three points," Global Partnership on Marine Litter Action Track 5 and Digital Platform phase 3 release: Environmental Justice, Digital Transformation and Accessibility, United Nations Environmental Programme, online "Building feminist and anticolonial technologies in compromised spaces," Feminist and Accessible Publishing and Communications Technologies Speaker Series, co-sponsored by McGill and Concordia Universities, online
- "Waste Colonialism," on "Should the EU ban waste exports," European Zero Waste Alliance, GAIA, online
  - "Anticolonial environmental sciences are already here," Political Ecologies of Abolition and Sovereignty series, hosted by the UC Davis Political Ecology Lab, the UC Davis Humanities Institute, and the Feminist Research Institute, online
  - "Scientists and Technologists *doing* the work called for by feminist STS, with and/or without feminist STS," panel on the Futures of Feminist STS, *Catalyst* 10<sup>th</sup> anniversary, online "Colonialism and 'Citizen' Science," UNC Charlotte Center for Professional and Applied Ethics, online

- "Waste Colonialism," Beaver Brook Lecture, Discarded: Unmasking and Understanding the Waste Stream, Lear-Conant Symposium, Goodwin-Niering Environmental Center, Connecticut College, online
- 2020 "CLEAR as a model," with Kaitlyn Hawkins, Humanities for the Public lab symposium & workshop, Iowa State University, online
  - "Indigenous research ecosystems at Memorial University," Collabroatory for Indigenous Data Governance, University of Arizona, online
  - "Research Methods are Land Relations," Geography seminar series, Western University, online
  - "Methodologies and protocols from an anticolonial marine science laboratory (a buffet)," Tribal Science Council of the Environmental Protection Agency (EPA), USA (online)
  - "How?" Department of Anthropology, University of Chicago, IL
  - "Land relations in science: Insights from an anticolonial laboratory," College of Education at Illinois Mathematics, Science, and Engineering Education Speaker Series, Urbana-Champaign, IL
- "Capture and Consent," Technoscience Research Unit, University of Toronto, Toronto, ON With Liz Pijogge. "Community-based Monitoring of Plastics in the Environment and Country Foods in Nunatsiavut," Northern Contaminants Program Results Workshop, Whitehorse YT "Indigenous-Led Research," DeacarbonizeNL conference, St. John's, NL "Advancing Indigenous Innovation in Science and Technology," (roundtable), Native American and Indigenous Studies Association (NAISA), Auckland, New Zealand "How to Titrate Like a Feminist," What is a Feminist Lab? Symposium, University of Colorado,
  - Boulder, CA "Pollution is Colonialism," Robert Penn Warren Center for the Humanities, Science and Technologies Seminar, Department of Human and Organizational Development, Vanderbilt University, Nashville, TN
- 2018 "Waste colonialism," Webinar for The 5 Gyres Institute, San Jose, CA "Tactics," Cornell Summer School on Designing Technology for Social Impact, Cornell University, Ithaca, NY
  - "Refusal in research: Communicating research is not inherently good," Environmental Humanities Symposium, Memorial University of Newfoundland, St. John's, NL
- 2017 "Resist Canada 150," Critical Research on Oceans in the Social Sciences (CROSS), Dalhousie University, Halifax, NS
  - "Being a Scientist Means Taking Sides: Activist Methodologies in Scientific Research," STS seminar series, University of California, San Diego, CA
- 2016 "Science as Resistance," Luz Gallery, New York, NY
  - "Titrating Like a Feminist," Gender Studies Speaker Series, Memorial University of Newfoundland, St. John's, NL
  - "Staples of Discard Studies," MidWaste Symposium, University of Illinois at Urbana-Champaign, IL
  - "Charismatic Data in Marine Plastic Pollution Science & Advocacy," LETStudio, University of Gothenburg, Sweden
  - "Activist Research in Science and Technology," MIT, Boston, MA
  - "Plastics at the Edge of the World: Challenges of Microplastics Research in Newfoundland," Ocean Sciences Centre, Memorial University of Newfoundland, NL

- "Scientific Cultures and Controversies Over 'Matter Out of Place," Sagan National Colloquium, Ohio Wesleyan University, OH
- 2015 "Representing Invisible Harm: A dilemma of charisma, plastics, fish, & ethics," Blue Box Series, Department of Geography, Memorial University of Newfoundland, NL
  - "The Art and Craft of Syllabi," Chair in Teaching and Learning, Memorial University of Newfoundland and Labrador, NL
  - "Charismatic Technologies: Marine Plastics & Citizen Science," Carpenter Center for Visual Arts, Harvard University, Cambridge, MA
  - "Charismatic Data: Representing Marine Plastics for Action," Environmental Protection Agency (EPA), Division 2, New York City, NY
  - "Marine Plastics and Citizen Science in Newfoundland," Sponsored by Petty Harbour Mini-Aquarium, Marine Institute, NL
  - "Charismatic Data: A Close Reading of Ocean Plastics," Arts on Oceans, Memorial University of Newfoundland and Labrador, NL
  - "Talking to the Public About your Research," Engage Memorial, Public Engagement Office, Memorial University of Newfoundland and Labrador, NL
  - "The Political Consequences of Definitions," Symposium of Waste and Space, Princeton University, NJ
  - "Evidencing Disaster," Politics of Evidence Group, York University, Toronto, ON.
- 2013 "Problem: Investigative Rigor and Art Praxis Methods," Inventive Methods, University of California, Irvine, CA
  - "Designing Against Waste," Harvard School of Art and Design, Cambridge, MA
  - "Public Forum: Occupy Sandy and Emerging Forms of Social Organization," Institute for Public Knowledge, New York University, New York, NY
  - "Waste," IDEAS City Festival, New Museum, New York City, NY
  - "Praxis: Using Art to Model Sustainable Economies," Fleming Museum, University of Vermont, Burlington, VT
- 2012 "Tactics for Justice in the Arts and Sciences in Occupy Wall Street," Berlin Biennial 7, Berlin, Germany

### **PUBLIC PRESENTATIONS**

- 2021 Smiles & Liboiron on Indigenous methodologies: "Unthought Feminisms," Online.
  Panelist, "Plastic issues and impacts," Plastic Waste Reduction Summit, Atlantic Healthy
  Oceans Initiative, online
- "Ocean health," Engaging Evenings at The Rooms, St. John's, NL"Oceans under our influence," sponsored by The Conversation Canada, Johnson Geo Centre, St. John's, NL
  - "Elephant in the Room: Music, Poetry, and Talking About the Climate Crisis," Rocket Room, St. John's, NL
- 2018 "Marine plastic pollution in Labrador," (community meeting) Nain Research Centre, Nain, NL
- 2017 "Citizen Science on Marine Plastics in NL," NAACAP AGM, St. John's, NL
  - "Community-based monitoring methods for marine plastics in the food web," Labrador Institute, Goose Bay, NL
  - "Marine Plastics in Newfoundland Fish and Ecosystems Public Meeting," (community meeting & peer review) Bauline, NL

2016 "Marine Plastics in Newfoundland Fish and Ecosystems Public Meeting," (community meeting & peer review) Petty Harbour, NL "Being a Scientist Means Taking Sides: Morals, Values, and Ethics in a Feminist Science Laboratory," Public Lecture Series, hosted by Department of Philosophy, Memorial University of Newfoundland & The Ship Pub, St. John's, NL 2015 "Marine Plastics," Scouts Canada, Torbay group, Torbay, NL "Civic Science: Theories of Change for Marine Plastics Activism," 5Gyres, Bermuda "Drowning in Waste: Marine Plastics," Rosa Luxembourg Institute, New York City, NY 2013 "Defining Pollution in the Early Twentieth Century: Allowable Limits and Natural Thresholds," Chemical Heritage Foundation, Philadelphia, PA "A Tale of Two Sandys," with David Waschmuth, Superstorm Research Lab: One Year On, Institute for Public Knowledge, New York University, NY 2012 "Terrible and Charismatic Waste: A Close Reading of Ocean Plastics," Trash Talk Series at the Peabody Museum of Archaeology & Ethnology, Harvard University, Cambridge, MA **WORKSHOPS** 2020 "A Humble Laboratory: Running a lab based on your values," MEOPAR Annual Scientific Meeting, online Workshop on community-based shoreline plastic monitoring, Nunatsiavut Government, online 2019 "OpenHour: Babylegs," Public Lab for Open Technology, online "Dressing Up Academia: a free clothing swap & workshop on academic fashion for graduate students," Memorial University, St. John's, NL "Explore + Tour: Nature Professional Development Workshop," Cooper Hewitt Education, New York City, NL "Lessons from a Feminist and Anti-colonial Lab: A Workshop on Reimagining the Research Lab," Vanderbilt University, Nashville, TN 2018 "Goals, Objectives, Strategies, & Tactics," Cornell Summer School on Designing Technology for Social Impact, Cornell University, Ithaca, NY Surface trawling for microplastics, field training for Bluenose Coastal Action, ACAP Humber Arm, CARP Annapolis, Lunenburg, NS "Feminist Research Methods," Environmental Humanities symposium, Memorial University of Newfoundland, St. John's, NL: invited workshop "Open workshop: Find plastics in wild food!," Nain Research Centre, Nunatsiavut Government, Nain, NL 2017 "Plastic Forensics: Colonialism and Infrastructure," Field School, Anthropocene Campus, Philadelphia, PA: invited field course "Building Feminist Research Technologies," University of California, San Diego, CA: invited workshop "Decolonizing Teaching and Mentorship," with Michelle Murphy and Emily Simmonds, Memorial University, NL: organizer and co-presenter "Building Feminist Technologies for Monitoring Water Systems Plastics," Seeing Systems Symposium, University of Illinois Urbana-Champaign, IL: invited workshop 2016 Marine Debris Tracker Training for Citizen Science, trained members of Nature Conservatory NL, Coastal Connections, & Newfoundland and Labrador Environmental

Max Liboiron 30

Network (NLEN)

"Indigenizing and Decolonizing the Curriculum," with Edward Allen, Memorial University, NL: co-organizer and co-presenter "Building Local Values into Technologies for Monitoring Marine Plastics," Junior University for students from Labrador, Aboriginal Resource Office, Memorial University, NL: invited workshop "Artists & Scientists: Think Tank on Plastics Pollution," Western University, ON: invited workshop and participant "Building DIY Citizen Science Tools: Politics have Artifacts," LETStudio, University of Gothenburg, Sweden: invited workshop 2015 "The Power of Powerpoint," TopHat demonstration to DELTS Classroom Technology group, Memorial University, NL: organizer and presenter "The Art and Craft of Syllabi," Chair in Teaching and Learning initiative, Memorial University, NL: organizer and presenter "Consensus-Based Decision Making," With Ailsa Craig, Women's Resource Center, Memorial University, NL: co-organizer and co-presenter "Activist Research Methodologies," Politics of Evidence Salon, Science and Technology Institute, York University, Toronto, ON: invited workshop 2014 "Mutual Aid Research Models and Methods," Free University, New York City, NY: invited workshop 2013 "Best Practices of Grassroots Disaster Data Collection," Superstorm Research Lab: One Year On, Institute for Public Knowledge, New York University, NY: organizer and With Sara Wylie, "Workshop on Experiments Monitoring the Everyday: Art, Design, and DIY Methods for Environmental Health Research," 4S Annual Conference, San Diego, CA: co- organizer and co-presenter 2011 "Steady-State Economies and Urban Planning with Zero Waste," Freshkills Park: New York City Department of Parks & Recreation, NY: invited workshop "Steady-State: Development without Growth," Festival of Ideas for a New City, New Museum, New York City, NY: invited workshop

### PROFESSIONAL DEVELOPMENT

2020	The Fundamentals of OCAP®, First Nations Information Governance Centre and Algonquin College. Online course on First Nations principles of ownership, control, access, and possession of data.
2019	Short Course on Quality Assurance/ Quality Control (QA/QC) in Microplastics Research. Society for Environmental Toxicology and Chemistry (SETAC), Toronto. Day-long methods course.
	Nature Masterclass: Masterclass in scientific writing and publishing. Nature Journals, St. John's, NL. Day-long course.
2018	Reconciliation Through Indigenous Education. University of British Columbia. Online course.
2017	Gathering for Open Scientific Hardware (GOSH). Santiago, Chile. Workshops and presentations on creating and licensing open-source scientific inventions.

fo2016	Gathering for Open Scientific Hardware (GOSH!). CERN, Geneva, Switzerland. Workshops and presentations on creating and licensing open-source scientific inventions.
2015	Critical Participatory Action Research. City University of New York (CUNY), New York, NY. Week-long training in CPAR methodologies.
2015	Mapping Controversies, Geography Department, Memorial University of Newfoundland and Labrador, NL. Audited Josh Lepawsky's GEOG4010 course to learn mapping skills.
2013	DigitalSTS and Design Workshop. MIT's metaLAB and Harvard University's Arnold Arboretum, Boston. Two-day workshop on digital science and technology studies.
2012	Art and Design Methods for Science and Technology Studies, European Association for Science and Technology Studies, Copenhagen, Denmark. One-day workshop on art and design methodologies in STS research.
2010	Summer Institute on Conducting Archival Research, George Washington University, DC. Week-long intensive training on archival research methodologies.

# **PROFESSIONAL MEMBERSHIPS**

2010-present	Society for the Social Studies of Science (4S)
2016-present	Native American and Indigenous Studies Association (NAISA)
2016-2018	Society for the History of Technology (SHOT)
2010- 2016	American Association of Geographers (AAG)
2016-2018	National Women's Studies Association (NWSA)
2010, '12, '15	American Society for Environmental History (ASEH)
2013	Association of American Anthropologists (AAA)
2011	Association for Environmental Studies and Sciences (AESS)
2010-2011	Association for the Advancement of Sustainability in Higher Education (AASHE)
2008-2010	National Communication Association (NCA)

# PROFESSIONAL SERVICE

# PANELS AND SYMPOSIA ORGANIZED

Co-Organizer, Co-Chair, and participant with Joe Dumit, "STS Labs Otherwise"
Roundtable, Society for the Social Studies of Science (4S) Annual meeting. Online.
Organizer and participant, "IndigeLab Roundtables," a series of four days of 15
Indigenous scientists and researchers. Funded by the Jackman Humanities Institute.
Online.

2020	Organizer & Chair, "Indigenous Sciences," Native American and Indigenous Studies Association (NAISA), Toronto, ON (cancelled due to COVID19)
	Co-organizer with Chris Anderson, Indigenous Administrators Pre-conference," Native American and Indigenous Studies Association (NAISA), Toronto, ON (cancelled due to COVID19)
2017	Co-organizer with Beza Merid, "Theorizing Harm," Society for the Social Study of Science (4S), Boston, MA
	Organizer for Michelle Murphy and Emily Simmonds, "Decolonizing Teaching and
	Mentorship," and research meetings with Waste, and Science, Technology, Environment (WaSTE), Memorial University, NL
2016	Organizer for Laura Watts, "The Electric Nemesis: marine energy futures without hubris," Memorial University STS, Memorial University, St. John's, NL
2015	Co-organizer with Josh Lepawsky, "Discards, Diverse Economies, and Degrowth," American Association of Geographers (AAG), Chicago, IL
2014	Co-organizer with Manuel Tironi and Nera Calvillo, "Ecologies and Material Politics of the Inorganic," Society for the Social Study of Science (4S), Buenos Aires, Argentina Co-organizer with Jen Henderson, "Grounding Disaster STS," Society for the Social Study of Science (4S), Buenos Aires, Argentina
2013	Co-organizer with Lindsey Dillon, "Polluting Borders: Re-thinking the Social Relations of Environmental Health through Space and Time," Association for the Society of
	Environmental History, San Francisco, CA Co-organizer with Sara Wylie, "Marking Environmental Harm Manifest," 4S Annual Conference, San Diego, CA
2012	Organizer and Chair, "Methods and Theories of Scale" Panel, 4S Annual Conference, Copenhagen, Denmark
	Organizer and Participant, "Indigenous Interfaces," All-Native, day-long symposium with the Native American and Indigenous Students' Group and Native Studies Forum, New York University, NY
2010	Organizer and Chair, "Developing Development: Native American and Indigenous Peoples and Questions of Progress," Native American and Indigenous Student's Group and Native Studies Forum, New York University, NY

### PEER-REVIEW, GRANTS

Titles of proposals and years withheld to maintain anonymous review

National Science and Engineering Research Council (NSERC) (40), NSERC Discovery Horizons (35), Social Science and Humanities Research Council (SSHRC) Doctoral Fellowships (34), Next Generation of Polar Researchers (NGPR3) (9), National Science Foundation (NSF) (2), Social Science and Humanities Research Council (SSHRC) Insight Grants (1), Natural Environment Research Council (NERC), UK (1)

### PEER-REVIEW, ARTICLES

Social Studies of Science (9), Catalyst: Feminism, Theory, Technoscience (4), Marine Pollution Bulletin (3), Transactions for the Institute of British Geographers (2), Environmental Pollution (2), Engaging Science, Technology, and Society (ESTS) (2), E-Topia: Canadian Journal of Cultural Studies (1), Journal of Visual Culture (1), Engineering Studies (1), Environment and Planning A (1), FACETS (1), Labour/Le Travail (1),

Science and Technology Studies (1), Science as Culture (1), Social and Cultural Geography (1), Society and Space (1), American Studies (1), Journal of the Native American and Indigenous Studies Association (1), Journal of Sustainability Science and Management (1), Feminist Formations (1), Material Culture (1), Journal of Political Ecology (1)

## PEER-REVIEW, BOOK MANUSCRIPTS

MIT Press (1), Routledge (1), ASU Press (1), Berghahn Books (1), Bloomsbury Academic Titles (1), Polity Press (1), Duke University Press (1)

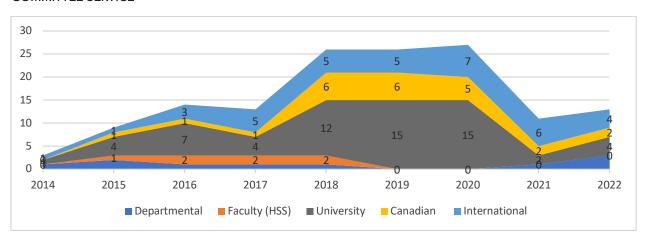
# PEER-REVIEW, CONFERENCE SUBMISSIONS

Computer-Human Interaction (CHI) (3), Environmental Communication Division, National Communication Association Annual Conference (4), International Marine Conservation Congress (3), SIGCHI (Special Interest Group on Computer-Human Interaction) Conference (1)

## EXPERT-REVIEW, GOVERNMENT/INTERGOVERNMENTAL ORGANIZATIONS

Multi-Materials Stewardship Board (MMSB) (4), Assembly of First Nations (AFN) (1), First Light Native Friendship Centre (1), Inuit Circumpolar Council (ICC) (1), Health Evidence Network (HEN) at World Health Organization (WHO) (1), Protection of the Arctic Marine Environment (PAME) & The Arctic Council (1), OceansNorth (1), Ocean Conservatory (1)

#### **COMMITTEE SERVICE**



From 2018-2020 I held a university administrative position and could not sit on departmental or faculty committees. From 2020-2021 I was on sabbatical.

#### **UNIVERSITY COMMITTEES**

2022-present Member, Equity, Diversity, Inclusion and Anti-Racism (EDI-AR) Advisory Committee

(reports to the President's Advisory Team), Memorial University

2021-present Member, Harris Center Applied Waste Research Advisory Committee, Memorial

University

2018-present 2022	Member, Vice President's Indigenous Advisory Committee, Memorial University Member, EDI-AR (Equity, Diversity, Inclusion, Anti-Racism) Strategic Planning Team,
2020	Memorial University  Member, Research Exemptions Working Group, Office of the Vice President (Research),
2020	Memorial University  Member, Research Pandemic Preparedness Subcommittee, Office of the Vice President  (Page 2014) Magnetic University
2020	(Research), Memorial University Chair, Selection Committee, Committee for Research Impacting Indigenous Groups (CERIIG), Memorial University
2019-2020	Member, Athena SWAN Advisory Group, Memorial University
2017-2020	Chair, Vitamin Research Fund, Memorial University
2019-2020	Member, Search committee for Chief Risk Officer, Memorial University
2017-2020	·
	Chair, Awards Advisory Committee, Memorial University
2018-2020	Chair, Research Council, Memorial University
2018-2020	Chair, Marilyn Harvey Award for Research Ethics Selection Committee, Memorial University
2018-2020	Chair, Terra Nova Young Innovators Award Selection Committee, Memorial University
2018-2020	Chair, Bridge, Seed, and Multidisciplinary Fund Selection Committee, Memorial University
2018-2020	Member, Labrador Institute at 40 Strategic Task Force, Memorial University
2018-2020	Member, Senior Academic Administrators Group (SAAG), Memorial University
2018-2020	Member, Canada Research Chair Steering Committee, Memorial University
2018-2019	Member (VPR representative), Conflict of Interest Committee, Memorial University
2018-2019	Member (VPR Representative), Senate Committee on Research (SCOR), Memorial University
2018-2019	Member (VPR representative), Academic Council, School of Graduate Studies, Memorial University
2015-2017	Co-Director, Memorial University Science and Technology Studies (STS) Hub, Memorial
2044 2047	University
2014-2017	Co-Director, Waste and Science, Technology, Environment Research Group (WaSTE), Memorial University
2015-2017	Consultant, Technology Transfer and Commercialization Strategy, Memorial University
2015-2017	Chair, Harris Center Applied Waste Research Grant Committee, Memorial University
2016	Research Team Member, Feasibility Study for Semester in Dialogue, Harris Centre, Memorial University
2016	Member, Selection Committee for Research Professor, Memorial University
2016	Member, Selection committee, Vanier SSHRC graduate award, School of Graduate
2010	Studies, Memorial University
2008-2013	Member, Environmental Task Force, New York University
2008-2013	Executive Member, Native Studies Forum, New York University
2010-2011	Co-Chair, Working Group on Purchasing, Food, and Waste, Sustainability Task Force,
2010-2011	New York University
2011	Member, Hiring Committee for Director Position, Center for Multicultural Education and Programming, New York University
2011	Member, Selection Committee on Green Grants, Sustainability Task Force, New York University

## **DEPARTMENTAL & FACULTY COMMITTEES**

Note: I could not serve on departmental or faculty committees during the AVPIR position from Sept 2018-Aug 2020.

2022-2023	Chair, Appointment Committee and Search Committee for GIS faculty position, Department of Geography, Memorial University
2022-2023	Member, Graduate Committee, Department of Geography, Memorial University
2021-2022	Member, Promotion and Tenure Committee, Department of Geography, Memorial University
2017-2018	Chair, Selection committee for Canadian Research Chair in Self-Determination and Indigenous Connections to Land, Faculty of HSS, Memorial University
2017-2018	Chair, Curriculum & Planning Committee, Department of Geography, Memorial University
2016-2018	Member, Vice-President's Grants Committee, Faculty of Humanities and Social Sciences, Memorial University
2015-2016	Member, Committee on Undergraduate Studies (CUGS), Faculty of Humanities and Social Sciences, Memorial University
2015-2016	Member, Search Committee (three positions), Department of Sociology, Memorial University
2014-2015	Webmaster, Department of Sociology, Memorial University

# EXTRA-UNIVERSITY COMMITTEES & GROUPS: CANADIAN

2021-present	Community Advocate, First Voices Partnership Table, First Light
2020-2022	Member, Research Data Management Knowledge Circle, First Nations Information
	Governance Centre (FNIGC)
2017-2020	Steering Committee Member, Coasts and Oceans Risk Communication (CORC)
	Community of Practice (CoP), Marine Environmental Observation Prediction & Response
	Network (MEOPAR)
2016-2020	Member, Endocrine Disruption Action Group (EDAction)
2020	Chair, 3D Committee, Social Science and Humanities Research Council of Canada
	(SSHRC), Doctoral Fellowship Competition
2018-2020	Member, Program Design Expert Committee (PDEC), Dimensions Program, Tri-Agency
	(based at NSERC)
2018-2020	Member, Alliance of Canadian Comprehensive Research Universities (ACCRU)
2018-2019	Committee member, Excellence, Impact and Engagement Committee (EIEC), Ocean
	Frontier Institute (OFI)
2018-2019	Board Member, Management Board, Karluk NRC-MUN collaboration space, National
	Research Council and Memorial University
2018-2019	Member, Oceans Research in Canada Alliance (ORCA)
2015-2016	Co-founder, Write to Know Campaign (write2know.ca)

# EXTRA-UNIVERSITY COMMITTEES & GROUPS: INTERNATIONAL

2022-present	Member, Scientists' Network for an Effective Plastics Treaty (SNEPT)
2021-present	Member, Editorial Board, Engaging Science, Technology, and Society journal

2020-present	Member, Research Advisory Board, An Indigenous Data Governance Approach for
	Enhancing Ethical Research Policies and Practices, National Science Foundation (NSF)
	ER2 Project
2020-present	Member, International Advisory Board, Journal of Open Hardware, Ubiquity Press
2019-present	Canadian representative, AMAP Litter and Microplastics Expert Group, Arctic Monitoring
	and Assessment Programme (AMAP), part of the Arctic Council
2011-2021	Managing Editor, Discard Studies (discardstudies.com)
2021	Invited consultant, User group consultation, Global Partnership on Marine Litter (GPML),
	United Nations Environmental Programme (UNEP)
2018-2020	Member, Editorial Board, Journal of Open Hardware, Ubiquity Press
2017-2020	Board Member, Expert Advisory Board, 5 Gyres
2017-2020	Consultant, Expert Group on Marine Litter, Protection of the Arctic Marine Environment
	(PAME), The Arctic Council
2016-2018	Member, Making and Doing Committee, Society for the Social Studies of Science (4S)
2016-2017	Co-Organizer & Head of documentation. Gathering for Open Science Hardware (GOSH)

#### **COMMUNITY & NGO RESEARCH PARTNERS**

2015-2019

2015-2017

2015-present Bluenose Costal Action Foundation, Lunenburg, NS: a developing partnership where I work as a research consultant, conduct training, and pro bono sample processing to foster coordinated marine plastic monitoring across Atlantic Canada.

2018- present Nunatsiavut Government, NL: working closely with Liz Pijogge, we work on an Inuit community-based monitoring program to monitor plastics in wild food, on shorelines, and in water in Nunatsiavut and Imappivut.

Public Lab for Open Technology, USA: partnering with an NGO with international reach has allowed users of CLEAR's open source technologies to be supported, including the provision of a BabyLegs "kit" for citizen scientists and educators.

Multi-Materials Stewardship Board (MMSB): working with the crown corporation of the provincial government that manages waste has fostered shared research that is focused on terrestrial plastic waste in the province and the possibility of it moving into waterways.

Placenta Bay Ocean Debris Survey (PODS): with two alumni from CLEAR, I work with the PODS team as a plastic monitoring consultant and advisor.

2017-present NunatuKavut Community Council, NL: we conduct studies on marine plastics in tradition southern Inuit food webs and report back to NCC. Contract relationship.

5 Gyres, California, USA: this is a long-term partnership on making plastic pollution research accessible and merging science, science education, and environmental activism.

Let's Talk Science, NL: we worked together on our Public Engagement grant to create resources for K-12 teachers to use CLEAR tools in classroom settings.

Fishing for Success, NL: we worked with this CBO that revitalizes traditional fishing techniques to create and test citizen science fish ingestion protocols.

Shorefast Foundation, NL: this Fogo-island NGO helped coordinate plastic and climate research on the island.

Coastal Connections, NL: we collaborated with this ship-based education program via our MEOPAR grant for ocean research and to develop plastic-related curriculum.

#### MEDIA & COVERAGE

Number of media interviews and feature coverage since 2012				
Feature film/television	International	National	Local	Total
2 (~1%)	57 (~32%)	41 (~23%)	79 (~44%)	179 (100%)

#### **FEATURE FILM AND TELEVISION**

- 2022 *niKet (Food)*, Dir. Wendell Collier, Wanderer Entertainment. Aired on *CBC Gem*. Part of the documentary collection *Mi'kma'ki*. 23 minutes.
- 2019 *GUTS*, Dir. Noah Hutton, Taylor Hess. Couple3 Films. Documentary. Featured in *The Atlantic*. 16 minutes.

### INTERNATIONAL MEDIA

- 2022 "<u>Habiter colonial, pollution et production d'ignorance</u>," Malcom Ferdinand & Nathalie Jas, *La vie des Idees* (College De France) (print). March 15.
- 2021 "<u>Tech's Problem With Plastics Plus Solutions Tech Can Offer</u>," Carolyn Fortuna, *CleanTechnia* (Tesla) (print). June 1.
  - "On Science and Colonialism: Max Liboiron," This is Hell (radio/podcast).
  - "Why Trying to Clean Up All the Ocean Plastic is Pointless," Molly Taft, Gizmodo (print). November 26.
  - "Smithsonian Scholars Pick Their Favorite Books of 2021," Beth Py-Lieberman, Smithsonian Magazine (print). November 24.
  - "Why pollution is as much about colonialism as chemicals," Don't Call Me Resilient, EP11 (podcast), The Conversation. November 3.
  - "Interview with Dr. Max Liboiron, Presenter at Ruderal Ecologies 2," Media Sanctuary (radio). October 20.
  - "Recycled plastic won't solve tech's waste problem," Justine Calma, Verge (print). October 6.
  - "When fish are kin: Max Liboiron's anti-colonial science," Natasha Mitchell, Science Friction, Australia Broadcasting Corporation (ABC) (radio). August 8.
  - Feature of "GUTS," Labocine video magazine, issue #60: Trash/Treasure (film). July 6-August 3.
  - "An Interview with Max Liboiron," Shanti Escalante-De Mattei, *The Believer Magazine* (print). June 23.
  - "How to Run a Feminist Company," Lila MacLellan, Quartz (print). June 10.
  - "Q&A with Max Liboiron, Author of *Pollution is Colonialism*," Duke University Press blog (print). May 14.
  - "The Sand Protocol," Justine Paradis, Outside/In Radio (radio and print). May 6.
  - "So small, yet so deadly. Investors force plastic industry to reveal pollution," Marc Fawcett-Atkinson, National Observer (print). May 5.
  - "Outside/In: The Influence of the Sand Beach on Plastic Pollution Research," Justine Paradis, NHPR (radio and print). April 17.
  - "Max Liboiron: Pollution is Colonialism," Mairhri, NextNature Network (print). April 5.
  - "What a Feminist, Anti-colonial Science Lab Taught Me About Ethical Filmmaking," Noah Hutton, *TalkHouse* (print), February 12.
  - 2020 "Welcome to the Plastisphere," Katherine Martinko, *Treehugger* (print). November 23.
    - "The Drilldown: Major oil companies' climate plans fall short of Paris agreement targets," Felixe Denson, iPolitics (print). September 23.

- "Max Liboiron: The courage of dealing with extreme ambivalence," Kate Clancy, Courageous Scientist (podcast). July 27.
- "We are not disposable: Decolonizing plastic-free living," Rachel Kippen, Santa Cruz Sentinal (print), July 11.
- Coverage of the Nature-Cooper Hewitt Design Triennial," Ministry of Education broadcast in partnership with the Smithsonian, Indonesia (TV). July.
- "Solidarity Chat 9: Max Liboiron," Aimi Hamraie, Contra\* (podcast). June 17.
- "This Citizen Science Gig Pays People to Match Space Photos," Altec News. May 26.
- "How Climate Science Could Lead to Action," Samantha Jo Fried, American Scientist 108(1): 34.
- "<u>Max Liboiron on running an anti-colonial, feminist lab</u>," Susan Nerberg, *The Broadview* (print). May 6.
- "When Coronavirus Closes Your Lab, Can Science Go On?", Cara Giaimo, The New York Times (print). March 23.
- "Reorienting within a world of plastic," Ayana Young, For the Wild, Episode 156 (podcast). January 29.
- "Build Yourself Some Science," Bronwen Densmore, Make Magazine, January 7.
- 2019 "This simple contraption can tell you the amount of plastic pollutants in your water," staff, Wonderful Engineering (print). August 26.
  - "BabyLegs—the inexpensive, educational way to monitor ocean plastic pollution," Dawn Hammon, *Inhabit*. August 14.
  - "Glimpsing Our Post-Consumption Future at the Cooper Hewitt," James S. Russel, New York Times (print), July 25, 2019.
  - "A New Look at the 'Guts' of the Plastic Pollution Problem," Mukta Patil, Sierra Magazine (print), July 4.
  - "This Trawl Monitors Ocean Plastics, Built from Baby Tights," Tom Spendlove, Engineering.com (print and audio), June 20
  - "Watch: Guts, Noah Hutton and Taylor Hess's Short Doc on the Feminist, Anti-Colonial Environmental Lab, CLEAR," Scott Macaulay, Filmmaker Magazine (print), June 18.
  - "So much plastic is being made that 'recycling has no impact,'" Katherine Martinko, Treehugger (print). June 14.
  - "On Gangrene Reusing is Just Like a Band-aid," Lloyd Martinez, *Jala News*, Science (print). June 14
  - "Canada wants to ban single-use plastics. Would it make a difference?" Vicky Stein, PBS News Hour (print). June 13.
  - "Recycling is like a band-aid on gangrene," Emily Buder, The Atlantic (print). June 13.
  - "Episode 180: Max Liboiron," Dominic Boyer and Cymene Howe, Center for Energy and Environmental Research in the Human Sciences (CENHS) (podcast), Rice University. June 6.
  - "<u>Feminist lab symposium shines light in equity issues in scientific fields</u>," Veniece Miller, *CU Independent* (print). April 18.
  - "A Tale of Two Circles," Joel Makower, GreenBiz. April 9.
  - "Anti-Colonial Science & The Ubiquity of Plastic," Interview with Tatti Riberio, Frank News US (print). January 9.
- 2018 "Assigning authorship for research papers can be tricky. These approaches can help," Dalmeet Singh Chawla, Science Magazine (print). December 20.
  - "The Riddle of the Roaming Plastics," Matthew Halliday, Hakai Magazine (print). December 4.

- "The Many Reasons Biologists Eat Their Study Subjects," Cara Giaimo, Camera Obscura (print).

  June 14.
- "<u>Plastic pollution pileup on Canada's beaches exposes environmental policy gaps</u>" Alia Dharssi, The Discourse (print). April 3.
- 2017 "Punk Science: Do-it-yourself Science is taking off," *The Economist* (print), December 19.

  "Bürgerwissenschaft mit Kabeljau wie man die Plastikflut im Meer an die Öffentlichkeit bringt (Citizenship with cod how to bring the plastic flooding into the sea to the public)," Bettina Wurche, *Greenpeace Schweiz* (Swiss) (print). August 4.
- 2016 "In Conversation with Dr. Max Liboiron: Community Engagement and Social Change," Judyannet Muchiri, Network of African Youth for Development (NYAD) (print). June 20. "13 Artists Who Turned Ocean Trash into Amazing Art," Marisa Gertz, Time Magazine (print), June 8.
  - "Researchers are Dumpster Diving Outside the Large Hadron Collider," Neel Patel, Inverse Magazine (print). April 5.
- 2015 "LA Black Ball Strategy May Result in 'Bacterial Nightmare'", Jill Arce, *Tech Times* (print), August 22.
  - "Why shade balls aren't such a great idea after all," Katie Herzog, Grist (print), August 19.
  - "Ocean Plastic is a smog, not a floating island," Margaret Badore, Treehugger (print), June 25.
- 2012 "Occupy Museums, part 1" and "Occupy Museums, part 2," Lauren Frances Adams, *Temporary Art Review* (print), July 30 + 31.
  - Quebec student protests continue despite government crackdown," Matthew Petrillo, Free Speech Radio News (radio), May 23.
  - "Artists on Strike!" Sean Captain, SALON Magazine (print), May 1.
  - "Trouble Afloat: Ocean Plastics," Alvin Powell, Harvard Gazette (print), February 10.
- 2011 "Plastic Bags," BronxTalk with Gary Axelbank, Bronxnet Television (TV), New York, October 25.

#### **NATIONAL**

- 2022 "What will the new UN treaty to control plastic pollution need to achieve?" Quirks and Quarks, CBC radio, March 12.
- 2021 "Canada's waste disposal policy is settler colonialism," Lucas Edmond, *The Manitoban* (print), November 24.
  - "Hope and Alterlives," Odette Auger, Watershed Sentinel (print), November 18.
  - "This election could decide how Canada fights plastic pollution," Marc Fawcett-Atkinson, National Observer (print). September 9.
  - "<u>Does Canada support a plastics treaty?</u>", Marc Fawcett-Atkinson, *National Observer* (print), September 3.
  - "Colonialism created food insecurity in the Arctic. It will take huge changes to end the crisis," Marc Fawcett-Atkinson, Mother Jones (print). July 16.
  - "The Haunting Nature of Plastics," Meera Subramanian, Hakai Magazine (print). June 8.
  - "Our Plastic Is Poisoning Eggs Eaten by the World's Poor, Study Finds," Marc Fawcett-Atkinson, Mother Jones (print). June 23.
  - "The plastics you throw away are poisoning the world's eggs," Marc Fawcett-Atkinson, National Observer (print). June 22.
  - "'Pollution is Colonialism': Part 2 (ep 259)," Rick Harp and Candis Callison, MEDIA INDIGENA (podcast). May 29.

- "Ep22: The Colonial Lens (Ft. Uahikea Maile, Max Liboiron, and Pam Palmater)," Cited Media, Darts and Letters (podcast). May 28.
- "'Pollution is Colonialism': Part 1 (ep 258)," Rick Harp and Candis Callison, MEDIA INDIGENA (podcast). May 27.
- "<u>Will Canada support a global plastic pollution treaty</u>?" Marc Fawcett-Atkinson, *National Observer* (print), May 19.
- "Canada Declares Plastics Toxic, Paving the Way for Restrictions," Marc Fawcett-Atkinson, Mother Jones (print), May 14.
- "Canada officially tosses plastics in the 'toxic' bin," Marc Fawcett-Atkinson, National Observer (print). May 13.
- "So small, yet so deadly. Investors force plastic industry to reveal pollution," Marc Fawcett-Atkinson, *National Observer* (print), May 5.
- "De territoires naturels en paysages manufacturés : portrait d'un art rural critique enraciné au nord du 60e parallèle," Noémie Fortin, Vie des arts, no. 262 (print: pp. 44-49).
- "<u>Dr. Max Liboiron is changing how science is done</u>," Ocean School, with The National Film Board of Canada, MEOPAR, Ocean Frontier Institute, and Dalhousie University (short film), April 19
- "On Canada's East Coast, researchers look for plastic and a new way to do science," Marc Fawcett-Atkinson, National Observer (print), March 10.
- "Canada is drowning in plastic waste—and recycling won't save us," Marc Fawcett-Atkinson, National Observer (print), March 9.
- "The backroom battle between industry, Ottawa, and environmentalists over plastic regulation," Marc Fawcett-Atkinson, National Observer (print), March 8.
- Black, CarrolAnne. <u>Gender Equity in Ocean Science: Amplifying Voices, Increasing Impact.</u> Department of Fisheries and Oceans, Canada.
- 2020 "Memorial has a new record-setting Indigenous research policy," Natalie Samson, University Affaires Universitaires (print), September 10.
  - "MUN blazes new policy path of Indigenous-related research," CBC News, Newfoundland and Labrador (print), July 28. This piece was recirculated in Academic TopTen, CBC Indigenous, Indigenous Land and Resources Today, Nation Talk, Yahoo!News, and The Canadian News. "Microplastique au fond du St-Laurent: parmi les pires cours d'eau étudiés." Mélissa
- 2019 "<u>Plastique on en a abuse. Maintenant, que fait-on?"</u>, Mélissa Guillemette, *Québec Science* (print), November 14.
  - "Max Liboiron," 'What does a Culture change in science mean to you? Campaign,' Innovation, Science and Economic Development Canada (ISED-ISDE Canada) (video), August 13.
  - "Praxes of Refusal," Emily Simmonds, Digital Research Ethics Collaboratory (DREC) (print), June 20.
  - "Waves of Change," Carsten Knox, CBC Halifax (radio), April 8.

Guillemette, Quebec Science (print), February 7.

- 2018 "Plastique dans le poisson, un scientifique séme la controverse," Camille Martel, CBC Radio-Canada (radio), July 23.
  - "Microplastics found in 93% of bottled water tested in global study," CBC Marketplace (print and TV), March 14.
- 2017 "Plastic pollution and marine microfibers," Melissa Suran, EMBO Reports (print), May 1.
- 2016 "Oceans 'absolutely choked' by plastic bottles and microplastic fibres," Anna Maria Termonti.

  The Current, CBC National Radio (radio), October 31.

- "Mass seabird die-off an opportunity of plastic ingestion research," CarolAnne Black, MEOPAR News (print), October 4.
- "Civic Laboratory uses citizen science to combat microplastics," Brigitte Dreger-Smylie, Swim Guide, Ontario Waterkeeper (print), May 3.
- "21-year-old inventor has a plan to clean the oceans of plastic," Raveena Aulakh, *Toronto Star* (print), February 29.
- 2015 "Plastic Pollution Low on the Priority List for Many Communities," Sam Andrews, The Fish Site (print), September 22.
  - "Write2Know Campaign," Rick Howe, *The Ricke Howe Show*, News 95.7 (radio). Halifax, March 12
  - "Write2Know: Science in Canada," Sheldon MacLeod, *Sheldon MacLeod Show* (radio), Halifax, March 11
  - "Scientists raise alarm over plastic waste in oceans," Dene Moore, *The Globe and Mail* (print), February 12.

#### LOCAL

- 2022 "Building northern Capacity," Jeff Green, The Gazette (print), July 6.
  - "Cutting-edge innovation," Gazette staff, The Gazette (print), June 23.
  - "Interdisciplinary perspectives," Gazette staff, The Gazette (print), June 17.
  - "Setting an example: Geographer recognized for exceptional ethical research leadership," Jeff Green, The Gazette (print), May 3.
  - Interview about youth jobs in CLEAR and plastic research in Nunatsiavut, with John Gaudi, Labrador Morning Show, CBC (radio).
- 2021 "Immunocompromised MUN students say they're being forced to choose between safety and education," Darrel Roberts, CBC News (print and radio), Jan 25.
  - Interview on plastic pollution from COVID-19, VOCM morning show (radio), Jan 7.
  - Interview on *Pollution is Colonialism* and COP21, Janice Gaudi, Labrador Morning Show, *CBC* (radio), November 8.
  - "Exceptional achievement," Jeff Green, The Gazette (print), September 7.
  - "Price Watchers: Students seek community volunteers for citizen science projects," Jeff Green, *The Gazette*, June 7.
  - "Pollution is Colonialism," Jeff Green, The Gazette (print), May 14.
- 2020 "Pollution and accountability," Terri Coles, Gazette (print), September 29.
  - "Newfoundland and Labrador is a 'net exporter' of plastic waste," Juanita Mercer, The Telegram and The Chronicle Herald (print), September 23.
  - "<u>Plastic pollution increasingly clogging N.L. coastlines, decades of data show,</u>" Jane Addy, *The Broadcast, CBC News* (print), September 21.
  - "Memorial University adopts Indigenous research impacts policy," SaltWire Network (print), July 29.

Interview on new Research Impacting Indigenous Groups policy at Memorial University, Krissy Holmes, CBC Morning Show, St. John's (radio), July 28.

Interview on new Research Impacting Indigenous Groups policy at Memorial University, Bernice Hillier, CBC Newfoundland and Labrador Morning Show (radio), July 28.

"<u>Historic approval: Memorial national leader with adoption of Indigenous research policy</u>," Jeff Green, *Gazette* (print), July 21.

- "Principled partnerships: Memorial implements agreement supporting Indigenous data sovereignty," Jeff Green, Gazette (print), June 16.
- "Memorial University changes how Indigenous data is handled," Evan Careen, *The Telegram* (print), July 13.
- "Memorial University makes Indigenous data available," Evan Careen, *The Telegram* (print), July 9

Discussion of moving CLEAR science lab online during COVID-19 epidemic, Anthony Germain, CBC Here & Now (radio), April 3

- "Plastic Bag Ban: Will it Work?," CBC Newfoundland and Labrador (television), February 12.
- "Banning the bag a great step, but it's a speck of N.L.'s plastic pollution, says researcher," Meghan McCabe, CBC News (print), February 1.

<u>Interview on Newfoundland and Labrador's plastic bag ban</u> with David Salter. *NTV News* (television), January 31.

Interview on Newfoundland and Labrador's plastic bag ban. CBC Newfoundland and Labrador Morning Show (radio), January 30.

Interview on CLEAR's call for artists-in-residence. VOCM Morning Team (radio), January 13.

- 2019 "Oceans under our influence," Carolyn Stokes, Here and Now, *CBC Newfoundland and Labrador Television* (television), September 18.
  - "Local researcher invents innovative way to monitor ocean microplastics," *VOCM* (print), July 3. "Canada bans single use plastics—will that change how much plastic we eat with our fish?" Jane Addey, Fisheries Broadcast, *CBC Radio Newfoundland* (radio), June 11 & 12.
  - "Indigenous Research (Episode 6)," Natalie Dignam, Memorial University Get Schooled, CHMR Radio (radio & podcast), April 18.
  - "<u>To ban or not to ban? Take a deep dive on plastic bags</u>," Zach Goudie, In Depth, *CBC News*. March 14.
  - "What's the hold up with banning the bag," Interview with Zach Goudie, *St. John's Morning Show*, CBC Radio One (radio), March 13.
  - "Episode 3: To Bias or not To Bias?" *The Academic + The Activist Podcast*, Amanda Bittner, CHMR Radio (radio & podcast), March 14.
- 2018 "Inspiring Others: Researcher named national leader for scientific pursuits, community activism," Jeff Green, *The Gazette* (print). November 9.
  - "Atlantic Voice: Promiscuous Plastics," Agenla Antle, CBC News (radio), September 23.
  - "<u>What's SUP, anyway? Here's what you need to know about single-use plastics,</u>" Zach Goudie, CBC News (print & TV), September 20.
  - Interview on Environment Canada grant on microplastic monitoring in Nova Scotia and Newfoundland, with Fred Hutton, St. John's Morning Show *CBC radio* (radio). September 11. "Tiny pieces of plastic easy to find in vast Atlantic waters," Paul Withers, *CBC News* (print).
  - September 7.

    "The biggest source of ocean plastic may not be what you think," Evgeni Matveev, CBC News
  - (print & radio), July 2.
  - "Looking for plastic-free fish? Here's one to put on the menu," Maggie Gillis, CBC News (print) and Central Morning Show (radio). May 13.
- 2017 "Newfoundlitter: The millions of pieces of trash we throw on our roads," Peter Cowan, CBC News (national TV and print). December 11.
  - "Plastic Bag Ban a Good Start, but Not Enough: Liboiron," VOCM, November 20.
  - "Culture of Excellence," Jeff Green, The Gazette (print), November 16.

- "No such thing as 'good' plastics: The big picture," Jamie Kitzpatrick & Krissy Holmes, *St. John's Morning Show* (province-wide edition), CBC Radio, November 13.
- "Provincial Plastic Bag Ban," Cecil Haire, CBC Cross Talk (radio), November 9.
- "Cigarette butts: Litter in Newfoundland," Peter Cowen, CBC News (TV and radio), June 6.
- "A bag ban in St. John's? Perspectives," Peter Cowen, CBC News (TV and radio), June 6.
- "Litter in Newfoundland," Jo-ann Dooley, CBC Morning Show (radio), May 18.
- "Newfoundland plastic washes up in Scotland," Peter Cowan, CBC News (TV and radio), May 4.
- 2016 "Province moving closer to plastic bag ban," Justin Brake, *The Independent* (print), December 8.
  - "Petition to stop DFO plastic tagging regime," Lacy O'Conell, VOCM News (radio), November 11.
  - "Toxic by Design," Bob Murphy, Mainstreet, CBC Halifax (radio), October 28.
  - "Fire Retardant Chemicals and the Failure of Canadian Regulations," Leigh Anne Power, *Gander Morning Show*, CBC Radio (radio), October 29.
  - "Marine microplastics problem in NL: Memorial University scientist," Lindsay Bird, CBC News (TV and radio), October 17.
  - Segment on microplastics, Jonathan Crowe, Here and Now, *CBC Television News* (TV), Newfoundland and Labrador, October 11.
  - "How to Titrate like a Feminist," C. Meech, VOCM (radio), September 22.
  - "Biodegradable versus compostable plastic bags," Krissy Holmes, The Morning Show, CBC Radio NL (radio), September 21.
  - "<u>Time to part ways with plastic, St. John's city councilor says</u>," Ryan Cooke, *CBC News* (print), September 20.
  - "Taking Aim at marine microplastics," Jeff Green, The Telegram (print), August 28.
  - "Food Fishery Guts," Fred Hutton, VOCM (radio), July 22.
  - "'These ones are called baby legs, because they are made with baby tights' says DIY surface trawl maker," Mark Quinn, CBC News (TV and web), July 13.
  - "Hauling a Trawl for the Health of the Ocean," Jane Adey, Fisheries Broadcast, CBC Radio Newfoundland (radio), July 13.
  - "The Charter File: Microplastics in our Oceans," NTV (TV), July 13.
  - "Testing the Trawls: Memorial-invented equipment tested in world's largest flume tank," Jeff Green, The Gazette (print), July 14.
  - "Canada Classifies Plastic Microbeads as Toxic," Jane Adey, Fisheries Broadcast, *CBC Radio Newfoundland* (radio), June 27.
  - "Dark Side of Plastics," Jeff Green, Memorial University Gazette (print), February 18.
  - "Plastics in our Fish," Jane Adey, Fisheries Broadcast, CBC Radio Newfoundland (radio), January 23.
  - "The Hard Science of a Plastic Problem," Josh Pennell, The Telegram (print), January 20.
  - "Public Meeting on Plastic in Fish," Linda Swain, Afternoon News, VOCM (radio), January 19.
  - "Plastics in our Oceans?" Alex Mason, Mainstreet Nova Scotia, *CBC Radio Halifax* (radio), January 2.
- 2015 "Plastic Toxics," Jonathan Richler, Nightline, VOCM (radio), December 3.
  - "Topsail Beach Cleanup," Jane Adey, Fisheries Broadcast, *CBC Radio Newfoundland* (radio), November 4. "Write2Know and the new Liberal government," Dale Goldhawk, Goldhawk Fights Back, *Zoomer Radio* (radio), Toronto, ON, September 28

- "Got Fish Guts? Why this Memorial University researcher needs a fresh supply," Jane Adey, CBC Radio Newfoundland (radio), September 26.
- "Plastics?," Pete Soucy, Backtalk, VOCM (radio), September 21.
- "Got Guts?," Jane Adey, Fisheries Broadcast, CBC Provincial Radio (radio), September 20.
- "Seabird Ingestion of Plastics," Fred Hutton, Morning Show, VOCM (radio), September 2.
- "Marine Plastics," Jodi Cook, NTV (TV), August 29.
- "Should we ban bottled water?," Ramona Dearing, Cross Talk, CBC Radio Newfoundland (radio), August 26.
- 2014 "Coming to do Research in Newfoundland," Andrea Antle, *Weekend AM*, CBC Radio Newfoundland (radio), December 20.
  - "Max Liboiron on ocean plastics," Vik Adhopia, *CBC at 6*, CBC National Radio (radio), December 11. "Have you seen marine plastics?," Ramona Dearing, *Cross Talk*, CBC Radio NL (radio), October 1.
  - "Marine plastics in Newfoundland," Cecil Haire, St. John's Morning Show, CBC Radio (radio), September 29. "Marine Plastic Pollution," Brian McHugh, Corner Brook Morning Show, CBC Radio (radio), September 29.
  - "Marine plastics in Newfoundland," Melissa Tobin, Central Newfoundland Morning Show, CBC Radio (radio), September 23.

#### **CASE STUDIES**

CLEAR has been used as an example, case study, or field site in the following works, arranged by date:

- Mahony, Martin. (2022). Geographies of science and technology II: In the critical zone. Progress in Human Geography, 46(2), 705-715.
- Reno, Joshua O., and Britt Halvorson. Waste and whiteness. In *The Routledge Handbook of Waste Studies*: 41-54. Routledge.
- Nxumalo, Fikile, Preeti Nayak, and Eve Tuck. (2022). <u>Education and ecological precarity: Pedagogical, curricular, and conceptual provocations</u>. *Curriculum Inquiry* 52(2): 97-107.
- MacIntosh, Kenzie Siobhan. (2022). <u>Anthropological Attempts at Indigenous-Settler Relations</u>. *Anti-Colonial Science: A Course Journal*, 1.
- Quinn, Sadie. (2022). <u>Climate Science: Past, Present, and Future</u>. *Anti-Colonial Science: A Course Journal*, 1: 1-2.
- Peever, Ric. (2022). <u>Sustainability and Anticolonialism: Foundations for Anticolonial Science</u>. *Anti- Colonial Science: A Course Journal*, 1.
- Posey, Julianna, and Erin Lavik. (2021). Storytelling for social justice and engagement: a materials science class. *Journal of Chemical Education* 99(1): 472-479.
- Blaise, Mindy, Jane Merewether, and Jo Pollitt.(2021). <u>Reading with Reciprocity: A Feminist Move Towards Reviewing with Generosity</u>. The Ediths.
- Wreshler, Darren, Lori Emerson, and Jussi Parikka. (2021). <u>The Lab Book: Situated Practices in Media Studies</u>, section on "Infrastructure." University of Minnesota Press.
- Reichle, Ingeborg. (2021). <u>Toxic Plastic Politics: Rethinking Plastic Pollution through Art and Activism</u>. In *Plastic Ocean: Art and Science Responses to Marine Pollution:* 61-80. De Gruyter.
- Kawa, Nicholas C., Mark Anthony Arceño, Ryan Goeckner, Chelsea E. Hunter, Steven J. Rhue, Shane A. Scaggs, Matthew E. Biwer S. Downey, J Field, K. Fremillion, J McCorriston. (2021). Training wicked scientists for a world of wicked problems. *Humanities and Social Sciences Communications*, 8(1), 1-4.

- Kravitz, Ben, and Tina Sikka. (2021). Conducting more inclusive solar geoengineering research: A feminist science framework. arXiv preprint *arXiv*:2109.04217.
- Packer, Melina. (2021). <u>Chemical Agents: The Biopolitical Science of Toxicity</u>. *Environment and Society*, 12(1): 25-43.
- Tauginienė, Loreta, Philipp Hummer, Alexandra Albert, Anna Cigarini, and Katrin Vohland. (2021). Ethical Challenges and Dynamic Informed Consent. *The Science of Citizen Science*, 397.
- Ruddy, Evie, and Laura Horak. (2021). Orienting Toward Social Justice: Trans, Anti-Racist, Anti-Colonial, Feminist, Queer, and Crip Approaches to Ethical Practices in the Digital Humanities. *Canadian Society of Digital Humanities Annual Conference* (online).
- Kaşdoğan, Duygu. (2020). Feminist Laboratuvarda Bilim, Emek ve Politika. Praksis, (52), 157-180.
- Bosworth, Kai. (2020). Feminist Geography in the Anthropocene: Sciences, bodies, futures. In *Routledge Handbook of Gender and Feminist Geographies*. Routledge: 445-454.
- Dryer, Sophi, Gabriela Ivens. (2020). What would a feminist open source investigation look like? *Digital War* 1: 5-17
- Fried, Samantha Jo. (2020). How Climate Science Could Lead to Action, American Scientist 108(1): 34.
- Watwood, Laura. Value and Practice in a Feminist, Anti-Colonial Marine Science Laboratory (Master's thesis, Ruprecht-Karls-Universität Heidelberg)
- Albornoz, Denisse, Katherine Reilly, and Marieliv Flores. (2019). Community-Based Data Justice: A Model for Data Collection in Informal Urban Settlements. *Development Informatics Working Paper*, (82).
- Belontz, Sara L., Patricia L. Corcoran, Heather Davis, Kathleen A. Hill, Kelly Jazvac, Kirsty Robertson, and Kelly Wood (2019). Embracing an interdisciplinary approach to plastics pollution awareness and action. *Ambio*, 48(8), 855-866.
- Black, CarrolAnne. (2019) <u>Gender Equity in Ocean Science: Amplifying Voices, Increasing Impact</u>. Department of Fisheries and Oceans, Canada.
- Livio, Maya, and Lori Emerson. (2019). Towards Feminist Labs: Provocations for Collective Knowledge-Making. *The Critical Makers Reader:(Un) learning Technology*, 286.
- Dosemagen, Shannon. (2019). For a People-Centered Science: A Call to Action. Science for the People Magazine. https://magazine. scienceforthepeople. org/vol22-2/community-science-people-centered-call-action.
- Wesner, Ashton. (2019). Messing up mating: queer feminist engagements with animal behavior science. Women's Studies, 48(3), 309-345
- Bergmann, Sven. (2018). Schleimige Assoziationen im Meer–die Plastisphäre. In *NaturenKulturen*: 353-384
- Helmreich, Stefan, and Caroline A. Jones. (2018). Science/art/culture through an oceanic lens. *Annual Review of Anthropology*, 47, 97-115
- Higgins, Marc, and Sara Tolbert. (2018). A syllabus for response-able inheritance in science education, *Parallax* 24(3): 273-294.
- Hannigan, John. (2017). Toward a sociology of oceans. *Canadian Review of Sociology/Revue canadienne de sociologie*, 54(1), 8-27.
- Wagoner, Maya M. (2017). Technology against technocracy: Toward design strategies for critical community technology (Doctoral dissertation, Massachusetts Institute of Technology).
- CLEAR has been influential in the development of the following lab structures, social methodologies, and/or guiding documents (mainly lab manuals) for other groups and institutions. The following list is

based on personal communication and where CLEAR has been cited as a model in published literature or on websites:

- Agro-ecology Research-Action Collective (ARC), interdisciplinary collective based in the US,
   Canada, and Mexico
- Carceral Ecologies Lab, UCLA
- <u>Center for Interdisciplinary Environmental Justice (CIEJ)</u>, interdisciplinary collective based in San Diego, CA, San Francisco, CA, El Paso, TX, and Guerrero, MX
- Couple 3, Filmmaking Handbook, independent film production company, New York City
- Environmental Data & Governance Initiative (EDGI), collaborative authorship quide
- GenderSci Lab, Harvard University
- Moore Institute for Plastic Pollution Research, California
- More-Than-Human Lab, Te Herenga Waka (Victoria University of Wellington), Aotearoa (New Zealand)
- Political Ecology Lab, UC Davis
- <u>Science and Society Collective</u>, University of Ottawa
- Solar Ecology Collaborative Research Lab, College of Earth and Mineral Sciences, Penn State
- <u>Transgender Media Portal</u>, Carleton University
- Gender and Politics Lab, Memorial University
- Beresford, Melissa, Amber Wutich, Margaret V. du Bray, Alissa Ruth, Rhian Stotts, Cindi SturtzSreetharan, and Alexandra Brewis. (2022). <u>Coding Qualitative Data at Scale: Guidance for Large Coder Teams Based on 18 Studies</u>. *International Journal of Qualitative Methods* 21: 16094069221075860.
- Bittner, Amanda. (2021). Teaching Research Design: The Gender and Politics Lab and Reflections on the Lab Model for the Social Sciences. In *The Palgrave Handbook of Political Research Pedagogy*: 205-214. Palgrave Macmillan.
- Boulicault, Marion, Annika Gompers, Katharine MN Lee, and Heather Shattuck-Heidorn. (2022).
   A Feminist Approach to Analyzing Sex Disparities in COVID-19 Outcomes. IJFAB: International Journal of Feminist Approaches to Bioethics 15(1): 167-174.
- Oldach, Eliza, Helen Killeen, Priya Shukla, Ellie Brauer, Nicholas Carter, Jennifer Fields, Alexandra Thomsen, C. Cooper, L Mellinger, K Wang, and C. Hdendrickson. (2022). <u>Managed and unmanaged whale mortality in the California Current Ecosystem</u>. *Marine Policy* 140: 105039.
- Smaranda, Sirbu. (2022). Witchcraft Futuring: The Knowledge Below the Surface. Thesis: Linnaeus University, Faculty of Arts and Humanities, Department of Design

### ART EXHIBITIONS RELATED TO RESEARCH

2019	"Nature," (group show), Cooper Hewitt, Smithsonian Museum, New York City, NY
	"Nature," (group show), Cube Design Museum, Kerkrade, Netherlands
	"Overflow," (group show), Gallatin Galleries, New York City, NY
	"Plastic Soup," (permanent exhibition, featured as Science Changemaker), Canadian
	Museum of Nature/ Musée Canadien de la Nature, Ottawa, ON
2017	"Ocean Plastics Lab," (group show), front of Place de l'Hôtel de Ville, Paris
	"How we do science on permanent plastic pollution," The Study, Philadelphia, PA
	"From Outrage to Action," (group show), curated by Keith Miller, Gallatin Galleries, New
	York City, NY

2016 "Resistance After Nature," (group show), curated by Kendra Sullivan and Dylan Gauthier.
Cantor Fitzgerald Gallery, Haverford College, Haverford, PA

"Emergent Ecologies," (group show), curated by Eben Kirksey, Lissette Olivares, Grace Glovier, Cody Kohn, Kayli Marshall, Greg Umali, and Alexandra Palocz. Kilroy Metal Ceiling, New York, NY

"Ethnography in the Expanded Field," (group show), organized by Barbara Adams, Scott Brown, and John Bruce. Curated by Xavier Acarin. Graduate Institute for Design, Ethnography & Social Thought, New York, NY

2014-2015

"Plastic GYRE," (group show), traveling exhibition of science and art on marine plastic pollution: David J. Spencer Centers for Disease Control and Prevention Museum, Atlanta & Anchorage Museum, Alaska

### **ART IN COLLECTIONS**

2019 BabyLegs. Cooper Hewitt, Smithsonian Design Museum, New York City, NY. Accession Number NATURE.014. Object ID 2318798839

#### **TECHNOLOGICAL INVENTIONS**

Under review

DAISI ((Drill-Assisted Ice Sampling Instrument): Janine O'Rielly, Max Liboiron, Alana Derry, Susannah Polack-Finley, Brittany Schaefer, Louis Charron. A technical process for coring ice for sampling microplastics. Undergoing review to obtain an CERN Open Hardware License 1.2.

2016

**LADI (Low-tech Aquatic Debris Instrument) Trawl**: Coco Coyle, with Emily Wells, Melissa Novechefski, Max Liboiron. Standardized DIY neuston trawl for monitoring marine plastics. CERN Open Hardware License 1.2. Used in the following published studies:

Bashir, A., & Hashmi, I. (2022). Detection in influx sources and estimation of microplastics abundance in surface waters of Rawal Lake, Pakistan. Heliyon, 8(3), e09166.

Nuamah, Francis, Samuel Kofi Tulashie, and Joseph Sefah Debrah. (2022). Assessing contamination of microplastics in the Ghanaian coastal sea using a self-constructed LADI trawl. *Marine Pollution Bulletin* 182: 114006.

Gharuri, Clare. (2021). <u>Case study: Belize – Towards Expansion of No-Take Areas in the MPA System</u>. The Commonwealth Blue Charter Case Study Series.

Camins, Elsa, William P. de Haan, Vanessa-Sarah Salvo, Miquel Canals, Amandine Raffard, and Anna Sanchez-Vidal. (2020). Paddle surfing for science on microplastic pollution. *Science of The Total Environment* 709: 136178.

Gerber, Gemma. (2017). More than just food: mussels as biomonitors of microplastic pollution in the KwaZulu-Natal coastal environment. PhD dissertation. University of KwaZulu-Natal, South Africa.

2015

**BabyLegs**: Max Liboiron. Do-it-yourself (DIY) citizen science surface trawl for monitoring marine plastics designed to be inexpensive, open-source, and easy to build. CERN Open Hardware License 1.2. Used in the following published studies:

Wilson, Alex. (2021). Queering Land-Based Education During Covid19. *Journal of Global Indigeneity*, 5(1), 1-10.

Belontz, Sara L., Patricia L. Corcoran, Heather Davis, Kathleen A. Hill, Kelly Jazvac, Kirsty Robertson, and Kelly Wood (2019). Embracing an interdisciplinary approach to plastics pollution awareness and action. *Ambio*, 48(8), 855-866.

Verney, Vincent, Florence Jestin, Dominik Zdybal, Camila Mota-Moteiro, Lola Desvignes, Haroutioun Askanian, Alexandre Schaal, Lise Durantou, and Max Liboiron. (2018) Micro (plastics) in the Environment of Some French rivers. In MICRO 2018: Fate and Impact of Microplastics: Knowledge, Actions and Solutions. Poster.

### **OPEN SOURCE PROTOCOLS**

2019 "How to Investigate Fish Guts for Marine Microplastics": Max Liboiron. Open source procedural guide to visual identification of microplastics in fish gastrointestinal tracts.

Cited in:

Khan, H. M. S., & Setu, S. (2022). Microplastic ingestion by fishes from Jamuna River, Bangladesh. *Environment and Natural Resources Journal (EnNRJ)*, 20(2),

157-167.

"Spotter's Guide To Plastic Pollution": Max Liboiron. Open source procedural guide to visual identification of microplastics with a microscope. CC-BY License. Cited in:

Lee, Huan Chiao, Mohammad Mansoob Khan, Nor Asmaa'Jaya, and David J. Marshall. (2022). Microplastic accumulation in oysters along a Bornean coastline (Brunei, South China Sea): Insights into local sources and sinks. *Marine Pollution Bulletin 177*: 113478.

Blankson, Emmanuel R., Patricia Nakie Tetteh, Prince Oppong, and Francis Gbogbo. (2022). <u>Microplastics prevalence in water, sediment and two economically important species of fish in an urban riverine system in Ghana</u>. *PLOS one* 17(2): e0263196.

2017

### Research Dossier: Max Liboiron

#### Overview

My core research goal is to create theories and infrastructures for bringing anti-colonial research methods into an array of disciplines and spaces to foster research "otherwise." I am best known for founding CLEAR, a plastic pollution laboratory whose methods foreground humility and good land relations and bring theory and practice together at the multiple scales at work in research labs: the interpersonal, the institutional, and the disciplinary. I have also influenced national and international policy on both plastics and Indigenous research and invented open-source technologies and protocols for community monitoring of plastics. I am a key figure--meaning that I am invited to comment on and represent these fields--in Science and Technologies Studies (STS), discard studies, and plastic pollution environmental science.

In this dossier I will narrate the ways I endeavour to change research culture and practices *through* research in ways that are valued by the MUNFA Collective Agreement as articulated in section 12.13.b. I will begin by describing my key multi-project research foci, then outline specific key research metrics from section 12.13.b. in the Collective Agreement.

### Sources of information and data

The information in this dossier comes from multiple sources, including:

- Almetric, a semi-public software that collects and collates information about published research
  outputs (mainly peer reviewed papers, but sometimes grey literature). Rather than only considering
  citations and their sources, Altmetric also includes data on online mentions (mainly news outlets and
  social media), public policy, Wikipedia, the Open Syllabus Project, and blogs. I use three metrics from
  them.
  - The Attention Score combines and weighs three elements: the *volume* of mentions (one per unique source), the *sources* of the mention (news sources are weighed more than blog posts), and the *author* of the source (which is how they account for bias, devaluing authors that often share to conspiracy sites and up-valuing doctors sharing to doctor-specific website, for example).
  - Comparison scores compare how a research output does against other research published around the same time and from similar or the same source (e.g. other peer reviewed articles in the same journal that were also published in May-June 2020).

- Where in the World? Is a mapping function that pulls information from Twitter and Mendeley only, where the location of users is pulled exclusively from user bios. It does not track IP addresses.
- Web of Science Author Metrics include several tools that analyze results from articles within its
  corpus, which is skewed heavily towards the sciences and covers only peer reviewed articles. It
  tracks the number of lifetime citations and h-indices for articles within its corpus as well as a
  collection of visualization tools to analyze a particular author's corpus, including their citations.
- Google Scholar metrics analyze a wider range of publications, including blog posts, grey literature, book chapters, and other items that people have cited. It offers the number of citations per text, an h-index, and raw count of citations. When I use these figures, I am using them from Google Scholar, not Scopus, since Scopus contains roughly half of my research outputs.
- WordPress Stats and Insights track traffic to websites I oversee (mostly CLEAR's website and Discard Studies). I three types of data:
  - Visitors are counted when a user or browser comes to the website for the first time and must stay on the site for at least 10 seconds. The same visitor returning every week is only counted once.
  - File downloads: counts the number of times a file hosted on the website has been either opened within the browser or downloaded.
  - Views by Country tracks IP address when users allow website cookies. If a visitor location cannot be detected, they are not reflected in the data.
- Informal Twitter Survey: In early August 2022, I posted a question on Twitter, asking instructors who used my work to tell me: 1) the discipline(s) the course(s) was in, 2) the country they taught in, and 3) if they wanted to "leave a comment for the promotion committee about how/why/where you teach the work". Data was collected using a Google Form. Participants knew these data were going be shared with a promotion committee at Memorial. I use these figures and quotes below. For transparency, the raw data from the survey is in Appendix 17.

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Introduction: Science Otherwise

I am a methodologist. **My primary research interest in is** *how* **research is done**, and what the impactions, impacts, ethics, premises, and politics of those methods are. I work to expose and then challenge many of the extractive, colonial, sexist, and masterful norms of dominant research culture and instead conduct "science otherwise" to use a term coined by feminist STS scholar Susan Leigh Starr. In all aspects of my research, I work to ensure research practices—whether they are fancy statistics or taking out the laboratory trash—are mindful of the land relations they are always already part of, and endeavour to create or maintain good land relations in these acts. Core among these land relations are the legacies of colonialism: process that continuously provide non-Indigenous access to Indigenous land for non-Indigenous goals, including benevolent goals such as conducting environmental research. Too often, "good" research practices and dominant research ethics reinscribe colonial land relations, even if they achieve other forms of good. These are the power relations I attend to in my research.

I theorize and apply this work at multiples sites and scales: intellectual infrastructure such as author order, instrumentation, and research policy; social relations such as lab meetings, partnership models, and data agreements; and of course, in research methodology. Each project, partnership, and project in my work is a case study for both theorization and application of "science otherwise."

One of the anonymous respondents to my informal survey described this enmeshed relationship between different disciplines and between theory, practice, and ethics:

"Max Liboiron's work at the intersections of science and culture, Indigenous studies and ethics, has been fundamental to recent approaches to the environmental crisis. This is not hyperbole. Rather, in my work and in my experience as an Indigenous faculty member at a Research 1 university, I have seen firsthand how Dr. Liboiron's interventions have already made an impact on how we discuss the relationships between science, the environment, and human and more-than-human relations. This is no small feat, and it is something that may not show up in citations or peer-reviewed engagement with their work. But it is clear to me that not only has Dr. Liboiron started to shape new conversations around pollution and its effects, but also on how we as residents of a particular landscape must engage more thoughtfully and ethically with the world around us. The impact of these conversations is broad. What is more, these conversations influence how we live, more than how we research. And it is because of this broad and deep

impact that I have an immense amount of gratitude for their work, their advocacy, and their commitment to foregrounding ethical relations as part of our engagement with academic study."

Another noted:

"Dr Liboiron's work helps me, my collaborators, and my students articulate our methodologies, and demonstrates by doing how to critically and relationally engage as Indigenous scholars in the practice of dominant science while acting to the greatest extent possible as anti-colonial scyborgs within the institutions where we work. My students who are new to critically engaging with dominant science commonly say that Dr Liboiron's books & articles are among the most transformational they have ever encountered. Those that come from Indigenous & community-oriented traditions say that this work is permission to be/write/study on their own terms."

"Dr. Liboiron transforms the ways my students understand plastics and pollution, as well as relationships to land and environment. Their work and related coverage of their work also help to show students radically different ways of doing science and working with others. I couldn't do the work I do without Dr. Liboiron's scholarship."

I foreground these accounts of my work because they are the accounts that matter—if promotion is about influence and impact of research, as well as the reputation and circulation of work that come from having "superior" influence and impact, then those in a position to be impacted are the ideal spokespeople for these evaluations. Secondly, one of the challenges of the genre of the promotion dossier is narrating a list of projects and accolades, where even if they were fluid in practice, in narration they are split apart—these testimonies help bring back the spirit and relations that my research aims to create in the first place.

I begin by organizing my research into themes, narrating them using MUNFA Collective Agreement terms of merit, including "depth" (12.13.b. & 12.17.a.), "breadth" (12.13.b. &12.17.a.), "integrity" (12.17.a.), "superior record" (12.17.c.i.) and "international reputation" (12.17.a.). In each case, I note which aspects of the projects have occurred since becoming an Associate Professor (Sept 1, 2020-present). There is considerable overlap and cross-pollination, so some descriptions refer back to other projects to help give a sense of the interwoven nature of the work.

## Description of CLEAR

CLEAR is not just the space where I do research: CLEAR is a research project in and of itself. Part interdisciplinary lab, part methodology incubator, and part safer space for underrepresented researchers, CLEAR plays a role in developing and fostering anticolonial relations in all aspects of research. This requires significant structure and facilitation, which in turn require strategies and methods. Sometimes our work results in peer reviewed publications on methods such as equity in author order (Liboiron et al., 2017) or community peer review (Liboiron, Zahara, and Schoot, 2018), in open access manuals for creating ethical lab collectives such as the CLEAR lab book (downloaded 7k times), or, more recently and since I've becoming an Associate Professor, in films about how we run lab meetings using anti-oppressive facilitation techniques (Couple3, 2021). A methodological focus has resulted in research outcomes at multiple scales. For instance, a few years ago, when I asked CLEAR members what they thought was most valuable about the lab, they said: "it's a safe place to eat lunch." This is a research outcome that results from decentering knowledge systems that systematically create unsafe and unwelcoming spaces for the mainly gender minority and BIPOC junior scholars and their diverse ways of knowing, doing, and being in the academy.

# Depth & Breadth: STS

There is an existing literature in Science and Technology Studies on laboratory culture and its impact on how and what kind of knowledge is produced, including critiques of the power dynamics of normal science. My work directing CLEAR leverages these critiques and insights to transform how research is done. Applying theory to lab activities then creates more nuanced theory, since the degree of accountability and jurisdiction (ability to exercise agency) is much more acute in your own lab than if you are studying a third party. For example, CLEAR was invited to contribute to an edited volume on maintenance, care, and purity (during my tenure as Associate Professor). Many other chapter authors critiqued scientists for purity discourses and practices in their research, as well as maintenance practices premised on purity. After discussing with CLEAR wet lab members, we agreed that while contamination protocols (mostly keeping plastic dust out of samples) are paramount in our bench work, we neither believe that purity is possible nor strive to achieve it so much as use it as an orienting trope for patience with samples, bodily comportment to mitigate contamination, and statistical models to understand multiple sources of plastics at various stages of research (Liboiron et al., in press). The way practice drives theory is also paramount in my book *Pollution is Colonialism*, detailed below.

### Depth & Breadth: Development of new methods and tools

One way to understand "depth of knowledge" and (12.13.b.) "intellectual maturity" (12.17.a.) is not just through the content of knowledge produced, but in **how innovative knowledge production requires new tools**. In the case of CLEAR's work, because we are critiquing and changing dominant research practices, we have

needed to invent, adapt, and use new or unusual methods for research. These tools are also our intellectual production. Each method/tool outlined below has been developed or published since I became an Associate Professor.

#### Collective Consent

Dominant ethics regimes and leadership models focus on the coordination and consent of individuals. The underlying theory is that a mass of individual consent creates a group. However, at CLEAR we have several methods and instances for facilitating and maintaining collective consent and use them to choose our collective lab values (documented in Couple3, 2021) and in choosing author order (Liboiron et al. 2017, updated in Couple3, 2021). We also use the method outside of CLEAR in our community peer review protocol. When I began our peer review process, it was to report research findings to communities most impacted (in our case, the rural communities who caught, ate, and sold the fish we monitored for plastics) and ensure the results would not cause harm, as determined by the community. As with all consent processes, this meant creating an overt ability to refuse to allow our work to be published (Liboiron, Zahara and Schoot, 2018). Since becoming an Associate Professor, this protocol has matured significantly and now starts with invitations and obtaining research questions from communities and is structured using Indigenous Data Sovereignty where Indigenous partners own, control, and have access to data from their lands (details below) (see presentations by Pijogge and Liboiron 2020, 2021). This is a much more robust model of ongoing collective consent--and thus the ability to redirect and refuse the research--that has a significantly greater impact on the way the research is conducted and thus on findings. I discuss Indigenous Data Sovereignty in more detail below.

### Participatory statistics

Since becoming an Associate Professor, I have started working with participatory statistics, where community members analyze the data together using local knowledge and research priorities to refine research questions, query relationships, and test hypothesized correlations. These sessions must be facilitated by a researcher who can: 1) translate common language into statistical queries and then translate results back in a way accessible to those without statistical training; and 2) conduct statistical queries quickly, in real time, during community meetings. I used participatory statistics for the first time in 2022 for the white paper, Comparative Food Pricing in Newfoundland and Labrador using Citizen Science (under community review). We held three community meetings online (during COVID) that included the citizen scientists who were part of data collection, members of the Nunatsiavut Government, Justice Coop, Food First NL who were part of the research design and guiding team, and members of the interested public (these meetings were advertised on social media and were open to all). I used a data visualization tool (Tableau) to show some of the basic relationships in the data (mainly descriptive statistics via time plots and

comparisons between places). Community members then began asking questions and/or posing hypotheses about the data, which I input into the dataset using Tableau and to a lesser extent, R. Participants then discussed results, often offering further queries or ways to cut the data. The final white paper is based on their questions and queries. I will be using the same technique with our plastic pollution data in Nunatsiavut this fall.

## Participatory budgeting

Another new methodology I've committed to since becoming an Associate Professor is participatory budgeting, where those receiving or who are impacted by funding make consensus-based decisions about funding priorities and distribution. Administration is a key site for research ethics, and as such is understood as an important location to apply theory to practice. In my OFI phase 2 grant, I used participatory budgeting with twelve research partners (Indigenous Nations and groups participating in the Aboriginal Aquatic Resource Oceans Management (AAROM) program) to decide how to allot our \$480k budget. The approach was so successful that I used it again in my SSHRC Partnership Grant phase 2 planning this summer, again with positive results. The success of this technique is being written up as a case study in an in-progress paper entitled, "Infrastructural Theories of Change" that theorizes the intersection of scales of agency, the politics and power relations of administrative infrastructure, compromise, and Indigenous sovereignty. Had the technique failed, it may have also been a case study in the same paper.

### Open Science Hardware & Protocols

Most of my Open Science Hardware tools were developed while I was an Assistant Professor, but for the past year I have been working with Marine Institute student Janine O'Rielly on DAISI (Drill-Assisted Ice Sampling Instrument), an open-source process for sampling ice for microplastics aimed to replace the \$10k Kovacs Corer that is the scientific standard. The licence and instructions for use will be published on the lab website, and an article is in preparation for submission to *The Journal of Open Hardware*. DAISI was funded by an OFI Seed grant.

I have also a **publication in preparation for an open-source process for digesting biotic samples** for plastic pollution research. Usually digestion chemicals are highly toxic, and so dangerous to users, expensive to dispose of, and can cause environmental harm. We have developed a method using over the counter drain declogger for similar results with lower risk (though the digestor is still toxic). The publication requires final edits and an author order meeting before submission to *POLS One* this October.

## Impacts of CLEAR open technologies

While my earlier open technologies were developed while I was an Assistant Professor, activities such as media interviews, presentations, and publication that popularize them are only now bearing fruit. My open-source surface water trawls, LADI and BabyLegs, as well as my bench protocols for identifying plastics, have

been used in several published scientific studies, mainly in regions and contexts where researchers do not have access to research funding:

- Bashir, A., & Hashmi, I. (2022). Detection in influx sources and estimation of microplastics abundance in surface waters of Rawal Lake, Pakistan. Heliyon, 8(3), e09166. Used LADI.
- Nuamah, Francis, Samuel Kofi Tulashie, and Joseph Sefah Debrah. (2022). Assessing
  contamination of microplastics in the Ghanaian coastal sea using a self-constructed LADI trawl.

  Marine Pollution Bulletin 182: 114006. Used LADI.
- Gharuri, Clare. (2021). Case study: Belize Towards Expansion of No-Take Areas in the MPA System. The Commonwealth Blue Charter Case Study Series. Used LADI.
- Camins, Elsa, William P. de Haan, Vanessa-Sarah Salvo, Miquel Canals, Amandine Raffard, and Anna Sanchez-Vidal. (2020). Paddle surfing for science on microplastic pollution. Science of The Total Environment 709: 136178. Used LADI and BabyLegs.
- Wilson, Alex. (2021). Queering Land-Based Education During Covid19. *Journal of Global Indigeneity*, 5(1), 1-10.
- Khan, H. M. S., & Setu, S. (2022). Microplastic ingestion by fishes from Jamuna River, Bangladesh. *Environment and Natural Resources Journal (EnNRJ)*, 20(2), 157-167.
- Lee, Huan Chiao, Mohammad Mansoob Khan, Nor Asmaa'Jaya, and David J. Marshall. (2022).
   Microplastic accumulation in oysters along a Bornean coastline (Brunei, South China Sea):
   Insights into local sources and sinks. Marine Pollution Bulletin 177: 113478.
- Blankson, Emmanuel R., Patricia Nakie Tetteh, Prince Oppong, and Francis Gbogbo. (2022).
   Microplastics prevalence in water, sediment and two economically important species of fish in an urban riverine system in Ghana. PLOS one 17(2): e0263196.

### Impacts of CLEAR in STS, Environmental Sciences, and Geographic theory

CLEAR has been used as an extended example, case study, or field site in 30 works (see CV). Only a selection are detailed here. These papers engage in CLEAR's work in an extended manner, not merely as a citation or passing mention. Usually, CLEAR is held up as a model for something the authors are advocating for (anticolonial research, equitable research spaces) or one or more of our methods are used as evidence for an argument (not as a method in and of itself):

- Mahony, Martin. (2022). **Geographies of science and technology** II: In the critical zone. *Progress in Human Geography*, 46(2), 705-715.
- Posey, Julianna, and Erin Lavik. (2021). Storytelling for social justice and engagement: a materials science class. *Journal of Chemical Education* 99(1): 472-479.

- Kawa, Nicholas C., Mark Anthony Arceño, Ryan Goeckner, Chelsea E. Hunter, Steven J. Rhue,
   Shane A. Scaggs, Matthew E. Biwer S. Downey, J Field, K. Fremillion, J McCorriston. (2021). Training wicked scientists for a world of wicked problems. Humanities and Social Sciences
   Communications, 8(1), 1-4.
- Kravitz, Ben, and Tina Sikka. (2021). Conducting more inclusive solar geoengineering research: A
  feminist science framework. arXiv preprint arXiv:2109.04217.
- Packer, Melina. (2021). Chemical Agents: The Biopolitical Science of Toxicity. Environment and Society, 12(1): 25-43.
- Ruddy, Evie, and Laura Horak. (2021). Orienting Toward Social Justice: Trans, Anti-Racist, Anti-Colonial, Feminist, Queer, and Crip Approaches to Ethical Practices in the Digital Humanities.
   Canadian Society of Digital Humanities Annual Conference (online).
- Kaşdoğan, Duygu. (2020). Feminist Laboratuvarda Bilim, Emek ve Politika. *Praksis*, (52), 157-180.
- Bosworth, Kai. (2020). Feminist Geography in the Anthropocene: Sciences, bodies, futures.
   In Routledge Handbook of Gender and Feminist Geographies. Routledge: 445-454.
- Fried, Samantha Jo. (2020). How Climate Science Could Lead to Action, *American Scientist* 108(1): 34.
- Albornoz, Denisse, Katherine Reilly, and Marieliv Flores. (2019). Community-Based Data Justice: A
  Model for Data Collection in Informal Urban Settlements. Development Informatics Working Paper,
  (82).
- Black, CarrolAnne. (2019). *Gender Equity in Ocean Science:* Amplifying Voices, Increasing Impact. Department of Fisheries and Oceans, Canada.

Most of these studies are in the field of Science and Technology Studies (STS), the social study of science and technology. In addition to being used as an exemplar in theory, CLEAR's work doing "science otherwise" has been recognized in STS by the inaugural award of the Making and Doing Prize from the Society for the Social Studies of Science (4S) (2015), an invited keynote for the inaugural Indigenous STS conference at the University of Alberta (2018), an invitation to be part of an edited collection on *Unsettling STS* (in press), and most notably, an invitation to present on "the future of feminist STS" for *Catalyst* journal's 10th anniversary. The other panelists included Donna Haraway and Banu Subramaniam. The invitation was a surprise and an honour, to say the least.

### Impacts of CLEAR in research culture

The CLEAR lab book has been **downloaded at least 7,000 times** (we only have data from 2019 onward for downloads), and the CLEAR lab book page is one of our most viewed pages. In the instructor survey from Twitter, **over 15% of respondents taught CLEAR's lab book**. Respondents are using the lab book in Sociology,

Art/Design, Education, Anthropology, Biology/Life Sciences, Chemistry, Engineering, Information/data sciences, Indigenous Studies, STS, Geography, Mathematics, and Environmental Studies. Some respondents wrote:

"I am using the lab manual as required reading to kick off a discussion **on research integrity in a PhD** level course on professional ethics."

"Dr. Liboiron's work serves as an example that I repeatedly turn to in **training STEM graduate students**. I run a training program that teaches researchers how to addresses historical bias and legacies of oppression in scientific practices. Their work and the materials coming out of the CLEAR lab have been an invaluable resource that resonates with participants. I have **trained over 200 researchers at UC Davis** including graduate students, postdocs, and faculty and exposed them to Dr. Liboiron's work."

"All Dr. Liboiron's work has been a key reference in my research for more than ten years. Pollution is Colonialism and CLEAR lab book have now become key in my interdisciplinary teaching, no matter the subject. I teach their work as a rol[e] model on how to think and practice thinking, writing, researching, citing, reading or living with others and in good relations. Their work has become an incredibly productive reference in postgraduate settings, artistic environments and institutions, where there is no syllabus and yet, Liboiron's work becomes an incredible inspiration and 'resource' to think/do (everything) differently and in better relations. Their work has changed us, and I can't express my gratitude for it."

Some researchers have taken up our work in the development of the following lab structures, social science research designs, and/or guiding documents (mainly lab manuals) for other groups and institutions. The following list is based on personal communication and where CLEAR has been cited as a model or in a method section in published literature or on websites:

- Agro-ecology Research-Action Collective (ARC), interdisciplinary collective based in the US, Canada, and Mexico
- Carceral Ecologies Lab, UCLA
- Center for Interdisciplinary Environmental Justice (CIEJ), interdisciplinary collective based in San Diego, CA, San Francisco, CA, El Paso, TX, and Guerrero, MX
- Couple 3, Filmmaking Handbook, independent film production company, New York City
- Environmental Data & Governance Initiative (EDGI), collaborative authorship guide
- GenderSci Lab, Harvard University

- Moore Institute for Plastic Pollution Research, California
- More-Than-Human Lab, Te Herenga Waka (Victoria University of Wellington), Aotearoa (New Zealand)
- Political Ecology Lab, UC Davis
- Science and Society Collective, University of Ottawa
- Solar Ecology Collaborative Research Lab, College of Earth and Mineral Sciences, Penn State
- Transgender Media Portal, Carleton University
- Gender and Politics Lab, Memorial University
- Beresford, Melissa, Amber Wutich, Margaret V. du Bray, Alissa Ruth, Rhian Stotts, Cindi SturtzSreetharan, and Alexandra Brewis. (2022). Coding Qualitative Data at Scale: Guidance for Large Coder Teams Based on 18 Studies. *International Journal of Qualitative Methods* 21: 16094069221075860.
- Bittner, Amanda. (2021). Teaching Research Design: The Gender and Politics Lab and Reflections on the Lab Model for the Social Sciences. In *The Palgrave Handbook of Political Research Pedagogy*: 205-214. Palgrave Macmillan.
- Boulicault, Marion, Annika Gompers, Katharine MN Lee, and Heather Shattuck-Heidorn. (2022). A Feminist Approach to Analyzing Sex Disparities in COVID-19 Outcomes. *IJFAB: International Journal of Feminist Approaches to Bioethics* 15(1): 167-174.
- Oldach, Eliza, Helen Killeen, Priya Shukla, Ellie Brauer, Nicholas Carter, Jennifer Fields, Alexandra Thomsen, C. Cooper, L Mellinger, K Wang, and C. Hdendrickson. (2022). Managed and unmanaged whale mortality in the California Current Ecosystem. *Marine Policy* 140: 105039.
- Smaranda, Sirbu. (2022). Witchcraft Futuring: The Knowledge Below the Surface. Thesis: Linnaeus University, Faculty of Arts and Humanities, Department of Design

### Impacts of CLEAR research on EDI

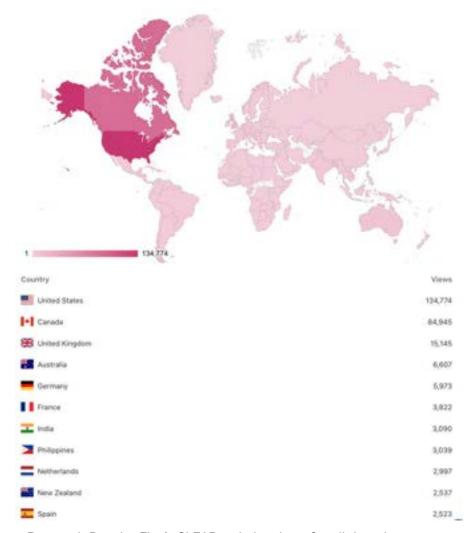
One of the unanticipated impacts of my work in making CLEAR an engine for methodological interventions in research space is how that research has been taken up in equity, diversity, and inclusion (EDI) work. For example, one of the case studies above is a white paper for DFO on gender equity in ocean research (Black 2019), which discusses CLEAR as a positive example. Several survey respondents noted using CLEAR's publications for EDI, including how they "Used lab guidelines in DEI training for lab scientists" in a "US Government facility, non-academic." Dr. Kim Clark (who included her name in her response) wrote, "as Assistant Dean (Equity, Diversity, Inclusion & Decolonization) in the Faculty of Social Science at Western University, among other things I gather and share resources to help members of the FSS community deepen the principles of EDI-D through all of our activities. I have shared several of the blog posts from Max Liboiron's CLEAR lab... We are also working on a Faculty-wide EDI-D webpage where links to some of these

thought-provoking resources will provided for those who want to learn more about the range of points where and ways that principles of decolonization can be integrated into their work. "

## CLEAR's international reputation and circulation

You can see the range of countries represented above in terms of where our open hardware is used (**Ghana**, **Pakistan**, **Bangladesh**, **USA**), locations of labs that use our methods (mainly **Canada**, **USA**, **and Mexico**), and where the CLEAR lab book is taught (primarily the **US**, **UK**, **Canada**, **and other parts of Europe**).

The CLEAR website hosts most of our methods, papers, open-source materials, and project descriptions. We've had over 305k unique views, with more than half of those in the last three years. More than 80% of viewers are outside of Canada. The largest share of viewers by far are from the United States (31%), followed by Canada (18%), the UK (3%), and then ~1% each from Germany, Australia, New Zealand, France, the Netherlands, and the Philippines.



Research Dossier Fig 1: CLEAR website views for all time, by country.

# Policy activities and impacts

A cluster of my professional activities have focused on Indigenous sovereignty in research, the right for Indigenous groups to direct activities that directly impact their peoples and lands. Two of the most notable achievements in this area completed within a month or two of becoming an Associate Professor:

- 1. 2018-2020 I oversaw the creation of Memorial University's Research Impacting Indigenous Groups (RIIG) Policy, a university policy based on the collective consent of Indigenous groups at the start of research. Working with a team from the Vice-President (Research) Office and Indigenous advisors, I consulted with over 2,000 stakeholders and rightsholders, both within the university and without (the average number of consultations for policy creation at Memorial is less than 50). This policy required considerable research, including horizon scans of similar policies worldwide (since Canadian universities and colleges did not have any), an overview of administrative jurisdiction and law, and depended on my expertise as a researcher in general and on research ethics and models of sovereignty in particular. I turned to theories and practices of sovereignty and the rights of Indigenous groups to self-determination in research, which required a different approach. The policy is the result.
- 2. The second university-level research infrastructure for Indigenous sovereignty in research that I put into place is Memorial's Indigenous Research Agreement (IRA), an Indigenous data sovereignty contract that confers Indigenous groups the right to control, own, access, and possess data created on their lands or on their peoples. Memorial had three standard contract agreements for governing data transfer, and the IRA became the fourth. This was the first of its kind for universities in Canada or the US (based on consultations with North American experts in Indigenous Data Sovereignty, a horizon scan, and reaching out to higher education institutes that served Indigenous students or advertise their links to Indigenous nations).

While both of the above activities are indeed a type of service, I want to emphasize that they are also the products of acute expertise, required substantial research, and can be considered research outputs. Both were created while I held the inaugural Associate Vice President (Indigenous Research) (AVPIR) position, which allowed me to scale up my efforts as a researcher-administrator beyond those usually experienced by an ASM. While the interrelation of teaching and research is often acknowledged in promotion evaluations, I would also submit that research and service is often necessarily intertwined as well. This is recognized, in part, by one of the replies from a scholar who uses my work in their teaching, who stated that "Among other

examples, I use Max's work to illustrate that high-quality data can be collected ethically in ways that *repair* relationships" (emphasis added). Policy and contract outcomes are very much part of that work.

## Facilitation as an ethical research role

In 2020, I began the project, "First Nations Data Sovereignty and Infrastructures for Atlantic AAROMs" within *The Future Ocean and Coastal Infrastructures (FOCI)* project funded by the Ocean Frontier Institute. This is the project mentioned above that used participatory budgeting to determine how funding would be allotted between **11 partners**:

- Assembly of First Nations,
- Atlantic Policy Congress (APC) of First Nations Chiefs Secretariat,
- Mi'kmaq Confederacy of PEI (MCPEI), Unama'ki Institute of Natural Resources (UINR),
- The Confederacy of Mainland Mi'kmaq (CMM),
- Mi'kmag Maliseet Aboriginal Fisheries Management Association (MMAFMA),
- Anqotum Resource Management,
- Gespe'gewaq Mi'gmaq Resource Council (GMRC),
- Maliseet Nations Conservation Council (MNCC),
- Mi'kmag Alsumk Mowimsikik Kogoey Association (MAMKA) east,
- Mi'kmag Alsumk Mowimsikik Kogoey Association (MAMKA) west, and
- NunatuKavut Community Council (NCC).

This was my first large-scale research project that solidified my research role as a facilitator, rather than the driver, of projects relating to Indigenous group's research priorities. In short, the project is premised on Indigenous sovereignty. This approach acutely impacted the types of research questions asked, the methods used, and the personnel trained. My role as a researcher was to create and maintain knowledge infrastructure that both allowed some knowledge to stay local, sacred, and protected while allowing other knowledge to be shared, translated out of place, and circulate. There is a manuscript in preparation called "Infrastructural Theories of Change: The Case of Administrative Activism" that outlines the role of participatory budgeting in changing dominant power relations in research settings.

The second project that uses a sovereignty and research infrastructure approach is, "Nunavut Arctic College's North by North Research Program: A NAC Case Study Exploring Inuit Qaujimanituqangit in Nunavut Institutional Research," a \$1.2 million grant through ArcticNet's North by North Project. While I am the PI on the project, the North by North project requires that 100% of funding be spent in Nunavut and/or on Inuit. The project goal is to investigate research trends, priorities, and outlooks in Nunavut according to Inuit and northern standards, specifically in regard to Inuit Qaujimanituqangit (IQ), or Inuit knowledge. To these ends and at the request of NAC staff, I "trained the trainers" for conducting an extensive systematic literature

review to document the Inuit-researcher relations of *all* research conducted in Nunavut since the 1970s. I have also provided infrastructural support for a project led out of Nunavut called "Tuqqutausimajuviniit Angiramut Utiqtut – Home from the Archives" to **repatriate** archived film and sound recordings made by Western researchers back to communities (repatriation). Jamal Shirley, the director of the Nunavut Research Institute and core partner on the project, notes that "These are archival materials that have never been heard or seen in these communities" (as quoted in *The Gazette*'s "Building Northern Capacity," 2022). We are working together to ensure a copy stays with community, and a digitized copy is held at NAC.

## Reconciliation science and mistakes

An opportunity to articulate the tension between colonial norms of science and what anti-colonial science might look like presented itself in 2020, when writing up results of a large-scale collaboration with Evan Edinger, DFO staff, CLEAR alumni, and Dr. Edinger's former students (19 authors in all). Plastic pollution samples from Nunavut and western Greenland had been obtained with permission, but without participation or other forms of input from Indigenous groups whose homelands samples were from. Community peer review was difficult to implement because researchers had no community ties in those regions. The original baseline paper was transformed when I used it as an opportunity to show the processes in normal science that led to these gaps, as well as how we could attempt to address them. I brough on several Indigenous coauthors with expertise in Indigenous research methods and governance in Inuit Nunangat. The resulting paper, "Abundance and types of plastic pollution in surface waters and the case for reconciliation science in the Eastern Arctic (Inuit Nunangat)" is fairly odd in that it both presents scientific methods and findings and then analyzes and criticizes those same methods and findings using social science approaches. It ends with theorization of what "reconciliation science" might entail, and list of recommendations for doing science better in the future. Almetrics for the paper put it in the top 5% of all research outputs scored by Almetrics, and rate it as having a High Attention Score (93th percentile for outputs of the same age, and 94th percentile for outputs of the same age and source) (see Appendix 7). The paper itself is in Appendix 6.

### Research contracts with Indigenous nations

There are two more partnerships and projects on the horizon that are in a similar spirit to the OFI FOCI work and the North by North program. I have a contract with **Miawpukek Mi'kamawey Mawi'omi** (Miawpukek First Nation in southern Newfoundland) and a letter of relationship with the **Prince Albert Grant Council** (a tribal council representing 12 First Nation bands in Saskatchewan) to work on plastic pollution research together. In both cases, I will be using the facilitation model of research to guide ways of working together that foreground local needs, accountabilities, and ways of knowing.

# Partnership with Nunatsiavut Government

Five years ago, I began a partnership with the Nunatsiavut Government (NG) working side by side with their Northern Contaminants Researcher Liz Pijogge, to develop one of the most extensive, multi-media, long-term plastics monitoring programs in the Arctic. Our research questions, sampling sites, and sampling species/media are based on community priorities expressed both explicitly in conversation and workshops as well as implicitly from activities with the Nain community freezer. This year, we have added a youth apprenticeship program through CINUK funding for a young person to stay full-time in their homelands to learn research methods and culture.

While much of this research resulted in much-needed baseline data that would allow us to tell whether there were changes in plastic pollution levels in the province (e.g. Liboiron et al., 2016, 2018, 2019, 2020, 2021, Avery-Gomm et al. 2017, Provencher et al. 2018), we also **created, tested, and nuanced methods to foreground community priorities and participation** in this research, including community peer review (Liboiron, Zahara, and Schoot 2018), open source protocols and hardware (e.g. DAISI), place-specific methods (e.g. McWilliams, Liboiron, and Weirsma 2018), Indigenous Data Sovereignty, community-based monitoring designs (see all presentations with Pijogge and Liboiron 2019-2022), participatory statistics and (ongoing). All data from the Nunatsiavut project goes directly to NG and is currently embargoed. We anticipate it being approved for publication this fall (2022).

This work drew the attention of **The Arctic Council**, "a high-level intergovernmental forum that addresses issues faced by the Arctic governments and the indigenous people of the Arctic." In 2019, Liz Pijogge and I were invited as the two Canadian representatives on their Arctic Monitoring and Assessment Programme (AMAP)'s Marine Litter Expert Group, which we've served on ever since. The group meets twice a week to: 1) produce knowledge about the state of the knowledge on plastics in the Arctic; 2) decide on best practices and recommendations for future monitoring for the international scientific community, and 3) communicate these results in peer reviewed articles (e.g. Martin et al. 2022, Lusher et al. 2022, Pollet et al. submitted), government reports (AMAP 2021a, 2021b, 2021c), and invited international presentations (e.g. International Symposium on Plastics in the Arctic presentation with Pijogge, 2021). While Pijogge and I participate as experts in monitoring plastics in fish, mammals, on shorelines, and in water, we are also the sole experts on community-based monitoring, Inuit/Indigenous Traditional Knowledge, and Indigenous partnerships in research for the entire Expert Group. Thus, we have done significant editing work or even written parts of AMAP reports and articles which we are not listed as authors on, often at our request because much of the research is still in a deficit framing where southern researchers are in the primary

position to solve problems in and for the North. We are working with the Arctic Council to create an Indigenous-led expert working group that can provide this type of expertise more equitably than the current arrangement.

## Impacts of plastics pollution research: methods harmonization

As plastic pollution research has grown from its infancy ten years ago when all research was done with whatever tools and measures were at hand to having its own journals today, a **core issue in the field has** been the variety of methods used to monitor plastics, which has resulted in many findings being incomparable between studies. One call in the professional community has been to standardize methods universally so that all studies are directly comparable. I have been one among several voices opposing this approach, instead advocating for harmonization of methods (where some but not all aspects overlap) and robust transparency in methods (so it is clear what can be compared and if some parts of a study can be compared while others can't be).

I've advocating for this position mainly because of early experiences attempting to adapt the "universal" shoreline protocol--the most standardized in the field--to rocky shorelines in Newfoundland and Labrador. They simply didn't work, and we found that microplastics, the most common size class of plastics worldwide, was radically underrepresented on our studies of rocky shorelines, and argued that "new protocols and/or technologies will have to be developed to capture microplastics on rocky beaches" (McWilliams et al., 2017). Several years later, a systematic review brought this place-based methodological issue into even sharper relief when we found that after reviewing "361 published shoreline surveys, encompassing 3,284 sample sites, [we] found that only 4% of sites included coarse sediment [rocks], only one study described sampling organic material [the wrack line] for plastic, and only 2.5% of sites are sampled in the presence of ice or snow" (Melvin et al., 2021). In short, standardized methods have consistently assumed--and thus prioritized-landscapes that are not characteristics of Newfoundland and Labrador or the North generally. This issue was central to my expert witness testimony for the Canadian House of Commons in 2019, presentations at The Society of Environmental Toxicology and Chemistry (SETAC) (2019), media interviews about this on Inside/Outside Radio (2020) and New Hampshire Public Radio (NHPR) (2020) and a public article I wrote for Orion Magazine (2020). It is also the reason 23 other scientists and I wrote an open access article on "Reporting guidelines to increase the reproducibility and comparability of research on microplastics" (2020) to address necessary differences in methods and still allow comparison between studies. The article includes guidelines, check lists, and other resources for researchers. The paper is ranked in the top 5% of all research outputs scored by Altmetrics, is the #1 article (of 16) of similar age from Applied Spectroscopy, and is one of the highest-scoring outputs from the journal (#6 of 2,121 articles) (Appendix 8). Finally, I have

impacted plastic pollution methods by creating several open science hardware technologies, detailed above with notation on where and how they have been used by other scientists.

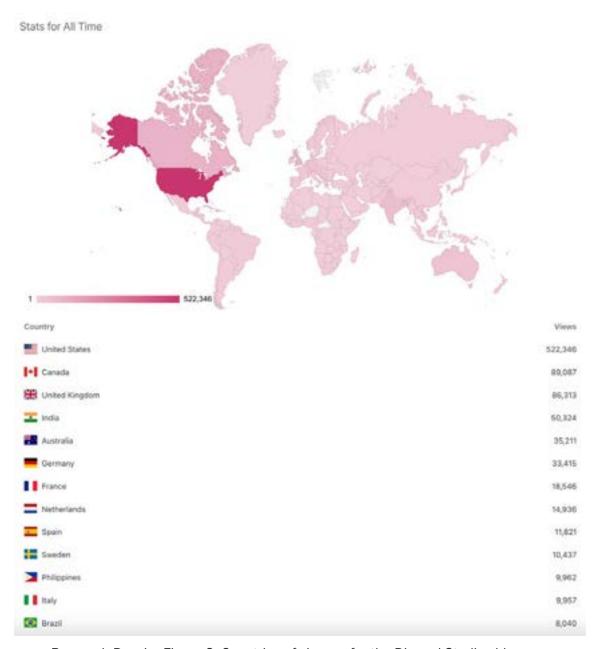
## Impacts of plastics pollution research: national and international policy

In the policy realm, I was an invited expert witness to the Canadian House of Commons Standing Committee on Environment and Sustainable Development (ENVI) in April 2019. The committee was hearing testimony in preparation for their *Report 21: Turning the Tide on Plastic Pollution in Canada* (released June 18, 2019), where both my oral and written testimony figures heavily in the report. Since becoming an Associate Professor, I have been involved in both formal and informal consultations with Environment and Climate Change Canada and the United Nations' Global Partnership on Marine Litter Action Plan (GPML) (not in CV). In 2022, I was invited by the United Nations Environmental Programme to present on "Indigenous plastic pollution research and open data" for the GPML group. In 2021 I was invited to speak to the European Zero Waste Alliance (mainly environmental ministers and environmental NGOs) on plastic exports and their relationship to colonialism, including the metrics used for "success" in plastic pollution mitigation, which often means exporting plastics for "recycling" in over-extracted (sometimes called developing) nations. Finally, I am one of the many scientists in the Scientists' Network for an Effective Plastics Treaty (SNEPT), which advises various NGOs and stakeholder groups on their activities concerning the new UN Treaty on Plastic Pollution (2022). I've given several interviews on the Treaty, including with CBC's Quirks and Quarks, the *National Observer*, and *Mother Jones*.

### Project Foci 4: Discard studies

### Discard Studies blog (international following)

From 2011 to 2021, I was the Managing Editor of *Discard Studies*, a blog-based publication platform accessible to waste practitioners, high school students, artists, and a general interest audience as well as being nuanced and precise enough for expert academic audiences. During my tenure I **oversaw the publication of over 700 posts read by nearly 988,000 unique viewers** (stabilizing at about 100k/year). The blog's **main readership is based in the United States** (522k viewers for the blog's lifetime), followed in equal shares by **Canada and the UK (89k and 86k** respectively). **India** is the next largest share (50k), with just over 30k each from **Australia and Germany**.



Research Dossier Figure 2: Countries of viewers for the Discard Studies blog.

The blog and my related publications and talks have been **credited with the solidification of the field of discard studies**, which studies the material lives and politics of things thrown away, extinguished, or alienated from a critical social science perspective. My most cited blog post on *Discard Studies* (cited 48 times) is about the field itself, entitled, "The what and the why of Discard studies" (2018).

# Discard Studies: Wasting, Systems, and Power (MIT, 2022)

My work in the field of discard studies led to Oxford University Press, MIT Press, and Routledge reaching out requesting that I publish a book on the topic. I declined repeatedly due to time constraints until 2018, when

Dr. Josh Lepawsky (Geography, Memorial University) approached me to write the book collaboratively for MIT Press. Our resulting fully open access, peer-reviewed book, *Discard Studies: Wasting, Systems, and Power* was published by MIT press in May 2022. The initial print run (500 books) sold oul before the book was even released, even though the book is freely available online. In three short months since publication, it has been downloaded nearly 4.500 times and cited seven times. The book is particularly popular in the UK (appendix 16). According to WorldCat, the book is in 211 libraries, even though the book is open access and freely available online.

Reviews of the book have included those by Alice Mah, Professor of Sociology at University of Warwick, who writes, "Profoundly insightful, important, and provocative, Discard Studies reveals how dominant systems maintain power through discarding and offers an inspiring theory of change." Another by Nancy Langston, Distinguished Professor of Environmental History at Michigan Technological University, writes, "In *Discard Studies*, Liboiron and Lepawksy accomplish the seemingly impossible: a brilliant, entertaining, theoretically engaged, and accessible introduction to a field of vast importance. Read this! Even better, assign it to students."

### High impact publications in the field of discard studies

- 1. A core peer-reviewed publication is "Toxic Politics" (2018), written with Manuel Tironi (based in Chile) and Nerea Calvillo (based in Spain and Poland) for our special issue on discard studies in Social Studies of Science, one of the top journals in the field of Science and Technology Studies. That paper is the second most cited paper in Social Studies of Science in last 3 years (cited 193 times) and in the top 5% of papers rated by Altmetrics (Appendix 9 & 10).
- 2. More recently, the US-based journal *Art in America*—one of leading art journals in the world—invited me to write about the intersection of environmental art and science with artist Maru Garcı̂a that brings discard studies into disciplines of visual arts (Garcı̂a and Liboiron, 2022).
- 3. Another invitation was from the World Health Organization (WHO) to co-write a write paper for the Regional Office for Europe on "How do the cultural contexts of waste practices affect health and wellbeing?" (2022). This white paper was contracted in order to impact European Union policy around waste management in a way that acknowledges how waste is not merely a technical problem, but is always bound up in power relations, cultural norms, and social relationships.

### Impact of discard studies research on different fields and disciplines

In many ways, the book brings over a decade of developing the field of discard studies into focus. One survey respondent from the **United States** noted, "Dr. Liboiron's work has **helped to define a field.** They have been

instrumental in underscoring a systems approach to waste and discard." Another respondent added, "Liboiron's work has transformed plastic studies, environmental studies, and higher education more broadly. They are respected across disciplines. I cite them prominently in my forthcoming environmental and cultural studies book to define plastics. When talking with my acquisition editor at University of California press who should blurb my book, she said: "Liboiron is really busy—everyone wants them to blurb their books these days." Discard studies and environmental justice studies have a great deal of overlap. Other than Kyle Whyte and Robin Wall Kimmerer, I can't think of a more cited Indigenous scholar today." (this is not the case, by the way: Indigenous scholars such as Kim Tallbear, Vine Deloria Junior, and Greg Cajete are all cited more, though they are also senior to my position. I do have more citations than Zoe Todd somehow, but the margin is less than 100 citations).

I will end this section with a final note on **breadth of interdisciplinary impact**. One survey respondent from the UK described how my work in discard studies was being brought into disciplines of **business and management**:

"The University of St Andrews School of Management is - according to the Times Good University
Guide 2022 - the top Management School in the UK. Dr Liboiron's work is included on the syllabus of
3 modules in our School of Management (2 Core and 1 Option) and, as a consequence, students from
5 programmes (approx. 250 students per year) - MLitt in Human Resource Management; MLitt in
Marketing; MLitt in International Business; MA (Hons); BSc (Hons) - are taught to critically evaluate
the concept of the circular economy through the framing of discard studies. Dr Liboiron's blog post
"The what and the why of Discard Studies" has been core reading for the past 2 years, in the
upcoming semester the newly published Discard Studies book by Liboiron and Lepawsky will be used
in its place. "

#### Research foci 5: Pollution is Colonialism

I have left a discussion of *Pollution is Colonialism* to the end as it is the keystone work that brings all my other foci together, weaving into a sophisticated argument about land relations in research. The book (published since becoming Associate Professor) is **one of the most significant research contributions to date** with far reaching and ongoing impacts for the developing of fields/areas of Science and Technology Studies, anticolonial methodologies in research generally and STEM specifically, and in the ethics of research on Indigenous land. I have included the introduction of the book in the appendix (Appendix 1).

### Manuscript framework

Pollution is Colonialism presents a framework for understanding how land relations are central to all research methods, and thus how research can align with or against colonialism. Even when researchers are

working toward benevolent goals, I demonstrate that environmental science and activism are often premised on a colonial worldview and access to land. Focusing on plastic pollution, the book models an anticolonial scientific practice aligned with Indigenous, particularly Métis, concepts of land, ethics, and relations, both through the case study of CLEAR and through the medium of the book itself. As such, the **book is as much a theory text as a methodological text**—a heavy use of footnotes annotates the way the text is written to discuss issues of accountability, citational politics, peer review, gratitude in research, extractive reading practices, positionally, and other usually unmarked or under-described methods and ethics in writing. In that way, *Pollution is Colonialism* is a media experiment in making arguments through the content *and* the medium of writing.

#### Reviews of the book

Pollution is Colonialism has had 15 positive reviews. They are not on my CV, so I list them here:

- 1. Stanley, Anna, for *Antipode* (2021). (Appendix 3)
- 2. Arsenault, Kerri, for Orion (2021).
- 3. Bell, Joshua, for Smithsonian Magazine (2021)
- 4. Burke, Katie, for American Scientist (2021)
- 5. Garaerts, Michelle, for Etnofoor (2021).
- 6. Kramer, Caecilie, for Ethnos: Journal of Anthropology (2021) (not open access)
- 7. Stagner, Jacqueline, for International Journal of Environmental Studies (2022)
- 8. Wiebe, Sarah Marie, for Environmental Politics (2022).
- 9. Chhotray, Vasudha, for Contributions to Indian Sociality (2022).
- 10. Fox, Liam, for Social & Cultural Geography (2022).
- 11. Zuroski, Eugenia, for Interdisciplinary Studies in Literature and the Environment
- 12. Jones, Madison, <u>for the Environmental Communication Division of the National Communication</u>
  <u>Association blog</u> (2022)
- 13. Rodineliussen, Ramus, for Anthropology Book Forum (2022).
- 14. Svoboda, Michael, for Yale Climate Connections (2022).
- 15. Macklin, Rebecca, for The Year's Work in Critical and Cultural Theory (2022).

The UK-based *Journal of Landscape Research* is **hosting a special review forum on the book**, with reviews by Drs. Rosie Alegado (Oceanography, USA), Emma Lee (Indigenous Leadership, Australia), Deondre Smiles (Geography, Canada), and Tim Waterman (Architecture, UK) and a response from me. It should be published in 2022/23.

Other reviews are less formal. In her blurb for Duke Press, Indigenous scholar Candis Callison states, "There are exceedingly few texts like this that ask from an Indigenous perspective: how might we consider relations between science and land and water and still practice 'good' science? *Pollution Is Colonialism* is at the leading edge of a significant turn in science and technology studies toward thinking with settler colonialism as a structure and terrain, and by bringing Indigenous studies into conversations with pollution, plastics, and lab sciences, this book makes a major contribution."

It is hard to gauge the direct impact of a book on scholarly thought, particularly when it has been in circulation for just over a year. While the book has been **cited 207 times** already (via Google Scholar), I think some of the comments from the informal survey of scholars who teach my work are a better indication:



"Pollution is Colonialism has fostered some of the **most generative discussions in an undergraduate course in almost a decade of teaching** Japanese literary and media studies in the department of East Asian Studies at Princeton University. The relational orientation of Max's writing truly invites and inspires students to examine the settler colonial epistemologies that we typically bring to questions of environmental harm."

"I teach Max's work (specifically, Pollution is Colonialism) in two environmental studies courses in the School of the Environment at University of Toronto. Max's work is, for many students, **nothing short of a paradigm shifter** in the best possible way."

"I taught \*Pollution is Colonialism\* in an advanced level graduate seminar on "Narratives of Development and Globalization." In this class we mostly read recent monographs and literary works that take up the afterlives and current iterations of regimes of colonization and development -- Prof.

Liboiron's text was **one of the most original, groundbreaking, and grounding texts we read all semester** and became a touchstone for the works we read after."

"This year we set Pollution is Colonialism (and the two Media Indigena podcast episodes discussing it) as one of the **primary textbooks** for University of Vermont's Environmental Studies 001 course (~250 students), **replacing an older textbook that has been used since the course's inception a decade or so ago.** We felt like the combination of subject matter (including examples and stories) and the way the text was written would be a great way for students to be engaged with learning about these complicated issues. We also hope that the openness with which the text is written, including explanations of why the book is the way it is, editorial choices, and footnotes, offers an introduction to broader ethical themes outside the 'hard curriculum' of the course, and encourage students to consider what it means to relate ethically within science and academia."

"I am an Associate Professor at Colby College in Waterville, Maine, and I assign Pollution is Colonialism as one of the foundational texts for an upper level anthropology and STS seminar. Students have found the book to be **transformational** in the way they think about pollution, land, research and environmentalism."

#### Book awards

Pollution is Colonialism was published in May 2021 and has already won two international book awards:

- The Labriola Center American Indian National Book Award for book that "focus on topics and issues
  that are pertinent to Indigenous peoples and nations." Authors can be academics, independent
  researchers, or work for tribal offices and government agencies.
- 2. The Clay Morgan Award for Best Book in Environmental Political Theory from the Western Political Science Association (WPSA), whose purpose is "to recognize outstanding scholarship, published in a book-length monograph, which utilizes the resources, literatures, and approaches of the field of political theory to address intersections between contemporary or historical environmental challenges on the one hand and the philosophical and ideological concepts, principles, and debates animating political life on the other."

# Comparative success of the book (Duke University Press)

Duke University Press is in the **top tier of North American University Presses**, as designated by the AUPresses, specializing in **theory** in the humanities and social sciences. Duke Press is best known for cutting edge theory in queer and Black studies that change the state of academic fields (see the <u>write up of Duke Press's Senior Editor in *The New Yorker* on the topic (2022)). *Pollution is Colonialism* has **sold out twice** from</u>

Duke Press. It is the second **top seller for any book published in the Spring at Duke Press in memory**, behind Sarah Ahmed's *Living a Feminist Life* (Appendix 2). This is nearly unheard of for a first book. It has **sold over 7,500 copies** in print (more than most academic books sell in their lifetimes), and many more in electronic formats (not tracked), with nearly 400 in library holdings around the world. Ken Wissoker is the Senior Executive Editor of Duke University Press and has written a letter detailing the specific successes of *Pollution is Colonialism* both in raw numbers and in comparison to other books at Duke University Press (Appendix 2).

# New projects: Indigenous quantitative & collective methodologies

Since April 2022, I have begun a series of new projects with funding from SSHRC and NSERC to collaboratively investigate Indigenous methodologies in quantitative research and in creating research collectives. Both projects deepen my research on the theory and practice of compromise—the condition of working to be in good relations within dominant cultures and infrastructures characterized by colonial relations.

### Indigenous quantitative methods (NSERC funded)

I am working with ten Indigenous quantitative researchers based mainly in the United States to create, describe, test, document, and share Indigenous approaches to quantitative research. To date, most (though certainly not all) work on Indigenous and decolonial methodologies have focused on qualitative methods in the social sciences and humanities, to the point where it can seem as though quantitative methods are antithetical to Indigenization or decolonization. Despite this, there are increasing calls from scientists, Indigenous peoples, and members of the public to recognize the colonial legacies in Western science approaches to research, and to do science differently. This requires not just numerical literacy, but the ability to (re)bring quantitative methods deeply into Indigenous cosmologies, communities, and accountabilities.

We have started this work with a literature review and series of interviews with practitioners, and the project as a whole will include lab exchanges, methods briefs for teaching and research, a strong professional network, and academic publications.

#### Ethnography of Indigenous-led labs (SSHRC funded)

Some of the researchers in the Indigenous quantitative methods project are also part of a new SSHRC Insight grant using collective ethnographies of work in Indigenous-led academic laboratories, to describe and theorize the tensions of doing Indigenous sciences in non-Indigenous spaces (including Drs. Carrol Russo, David-Chavez, and Gomez, whose letters of support are Appendices 13-15 respectively). The project team of myself and five US-based Indigenous researchers will analyze two intersecting spheres of Indigenous methodologies: everyday practices of doing science, since it is in action where decoloniality happens; and collectives, as collectivity is central to most Indigenous cosmologies, ethics, and theories of change as well

as Western science. **Duke University Press has solicited a multi-authored monograph on the project** (see Wissoker's letter in Appendix 2).

# IndigeLab Network (SSHRC Partnership Grant)

The participants in these two projects, plus others, are also the basis for an in-progress SSHRC Partnership Grant entitled *IndigeLab Network*. We have won the LOI stage and are now applying for Phase 2 funding. This seven-year, \$2.5 million grant would enable 20 international co-applicants and eight partners (First Nations Information Governance Centre, Native BioData Consortium, ORCID Inc., The Carpentries, *Engaging Science, Technology, and Society* Journal, ArcticNet, University of Arizona, and University of Toronto) to focus on theories of change methods for changing research cultures at multiple scales (from the lab to the university to the discipline) based in Indigenous feminist thought. The full phase two application is due in October 2022.

### Integrity

### Methodologies for integrity

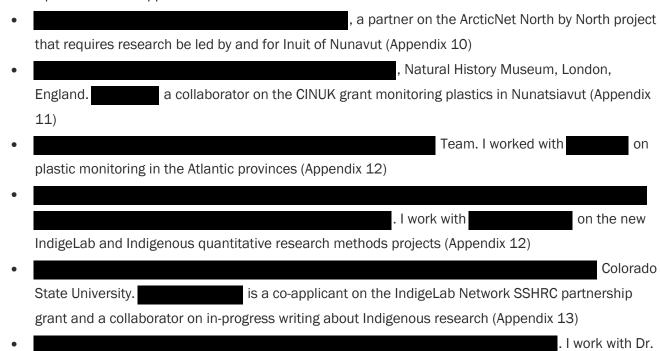
The MUNFA Collective Agreement highlights integrity as a core component of the intellectual maturity required for promotion (applicants shall "demonstrate intellectual maturity, characterized by depth and breadth of teaching and scholarship, and academic integrity" 12.17.a.). Integrity can refer to a range of moral principles, but in my work, integrity can be understood as accountability, a

"short-hand for 'accountability to relationships.' It names the actions that enact our beholdenness to our partners, collaborators, and other CLEAR members, both as individuals and as a collective, as well as relationships we don't choose, don't like, don't desire, and that are not successful. In the words of Cree researcher Shawn Wilson, 'right or wrong; validity; statistically significant; worthy or unworthy; value judgements lose their meaning. What is more important and meaningful is fulfilling a role and obligations in the research relationship — that is, being accountable to your relations' (2008: 77). Accountability means that we do not focus on the intent of actions, but in the actions and their effects, acknowledging responsibility when there is a gap between intent and effect" (CLEAR lab book, 2022: 11)

Many of the research methods I've created and/or used with CLEAR can be understood as methods in accountability, particularly equity in author order, community peer review, participatory statistics, participatory budgeting, Indigenous data sovereignty, and only working with Indigenous groups or on Indigenous land with permission. The way CLEAR is run using anti-oppressive facilitation and consensus-based decision making is likewise about accountability. The lab book even has a protocol for making apologies based on principles of restorative justice and a section on how to write proper thank you notes to show gratitude—both actions central to accountability in team research.

#### Testimonies of research integrity

Tooting my own horn about accountability is a bit odd, since legitimate accountability can only be recognized by those to whom you are accountable, so I request that the committee consult the letters of support from research partners in the appendices:



Below are some of the comments from the informal survey:

"Liboiron's work is **some of the most important work currently being carried out with regard to the vital topics of accountability to and review by the community**, putting into question the academic processes and to whom we are accountable."

on the new IndigeLab and Indigenous quantitative research methods projects (Appendix 14)

"I am a physics education researcher, meaning that I study the teaching and learning of physics along with physics disciplinary culture and practices, from a physics perspective (I am in a physics department at the University of Washington). I work with university faculty and high school teachers on integrating physics teaching with social justice and ethical decision-making. Dr. Liboiron's work is the best example I have ever seen of how to conduct laboratory science with full awareness of the sociopolitical decisions that this entails at every turn. Dr. Liboiron provides straightforward guidance

and clear distinctions (e.g., of Indigenous vs. anticolonial science). Their work is brilliantly challenging while also being joyful and actively inspiring to me. Now when I put on my lab coat, I think: How can I be in good relationship to land and people in the science I do today? How can I guide others to be in good relationship? I only read Pollution is Colonialism a few weeks ago and I am profoundly influenced. I have already shared it with many colleagues."

"Max's work has proven transformative for so many of my students – and for so many reasons. Not only is Max a globally renowned and valued \*subject\* expert on waste, plastics, and related topics; but their \*way of being\* a researcher, colleague, and mentor helps my students appreciate that the ways we produce knowledge in relation with one another are just as important as the knowledge we produce. Max is a model of what, and how, so many of my students want to be."

# Summaries of key metrics

#### Publications

	Books	Refereed Articles	Invited Articles	Book Chapters	Writing for Public Audiences	White Papers	Special Issue Co-Editor	Films	Total
All time	2	34	18	13	~120	12	4	4	83
	2%	39%	21%	15%	not included	14%	5%	5%	100%
Since Assoc Prof	2	9	5	4	~15	7	0	4	31
	6%	29%	16%	13%	not included	14%	0%	13%	100%

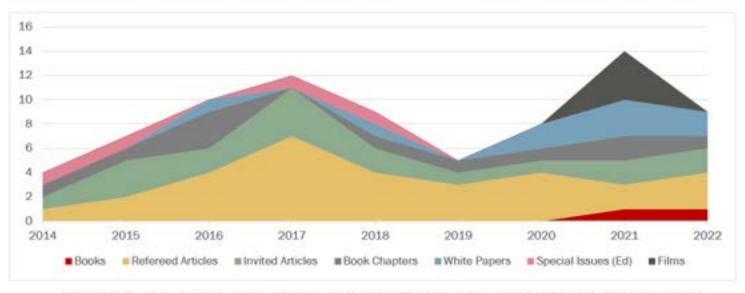


Figure 3: Number and types of publications over time. The dip in outputs from 2018 to 2020 was during my time as a full-time administrator (AVPIR).

I have 87 publications, of which 34 are peer reviewed articles and two are peer-reviewed books. More than a third of those (n=31) have occurred since becoming Associate professor, including two manuscripts. The MUNFA Collective Agreement stipulates that "Greater weight shall be placed on refereed products of scholarship than on those that have not been refereed" (12.13.b.). Since becoming Associate Professor in 2020, I have published 31 items, with most (29%, n=9) being peer reviewed articles. Most of my white papers are also refereed, particularly the one for the World Health Organization, which underwent three rounds of peer review. MIT Press did one round of peer review with four reviewers, and Duke Press does two rounds of review.

#### Co-authors

I have 230 co-authors (counted per paper, not as individuals across papers), including some massive collaborations with as many as 22 co-authors on a single paper. I have worked with more than half of them (n=122) since becoming Associate Professor. These two metrics together show that I am publishing more large-authored, collaborative pieces since my promotion.

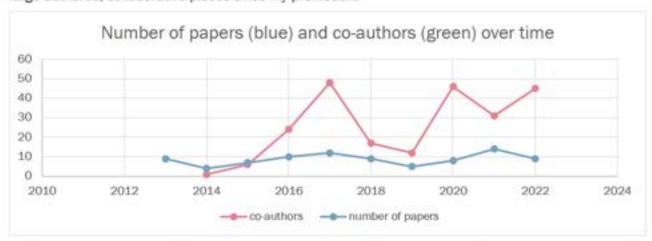


Figure 4: comparison of the number of outputs published (in blue) versus the number of co-authors (in green). In 2013, I published only solo-authored texts, From 2018-2020 I was a full time administrator.

Overall, across my co-authors, over 65% are women or gender minorities. 32% are students, and when I am first author the student portion rises to 57%. 12% of the papers I'm co-author on have a student as first author. Nearly half of my co-authors are international (or non-Canadian), attesting to the international scope of my collaborations and networks.

### Notable publications

In late 2020, I was **invited by Nature editors** to write an article about decolonization for **Nature Geoscience**.

The resulting publication, "Decolonizing geoscience requires more than equity and inclusion" (2021) is rated in the top 5% of all research outputs scored by Altmetrics and the 99th percentile for impact. It is ranked in

the top three articles (out of 46) from *Nature Geoscience* of the same age (Appendix 5). Likewise, a unique publication in *Science of the Total Environment* that argues for considerations of Inuit sovereignty in Arctic research *within* a classic scientific baseline study ("Abundance and types of plastic pollution in surface waters and the case for reconciliation science in the Eastern Arctic (Inuit Nunangat)" (2021)) is also **ranked** in the top 5% of all scored papers and in the 94th percentile for attention by Altmetrics (appendix 7).

White papers for decision making bodies are another important type of publication.

- Most recently, the WHO Health Evidence Network synthesis report: Cultural contexts of health: how
  do the cultural contexts of waste practices affect health and well-being? was published (2022)
  through the Health Evidence Network, the European organization that advises the World Health
  Organization (WHO). Authorship for this publication was by invitation from HEN, and the paper was
  heavily peer reviewed.
- 2. I was also part of a large team of authors who published a suite of three white papers on monitoring and assessment of microplastics in the Arctic for the Arctic Monitoring and Assessment Programme (AMAP) led by the international Arctic Council (this has also resulted in several peer reviewed papers with the same team in the last two years).
- 3. I have another paper under community peer review Comparative Food Pricing in Newfoundland and Labrador using Citizen Science with 32 community co-authors at the request of the Nunatsiavut Government. All white papers specifically address governance needs and priorities by the bodies who requested them.

### Impact of publications

#### International distribution of citations

Web of Science metrics based on 30 of my peer reviewed publications provides an overview of citations to my articles. The vast majority of articles that cite my work come from outside of Canada, which accounts for only 17.2% of my citations. The largest share is from the United States, which accounts for 30.4%, followed by the UK at 17.8%. Australia, China, Germany, Norway, France, and Italy account for between 5-10% each. This map below is produced by Web of Science and includes a count of countries for peer reviewed articles that cite my work.

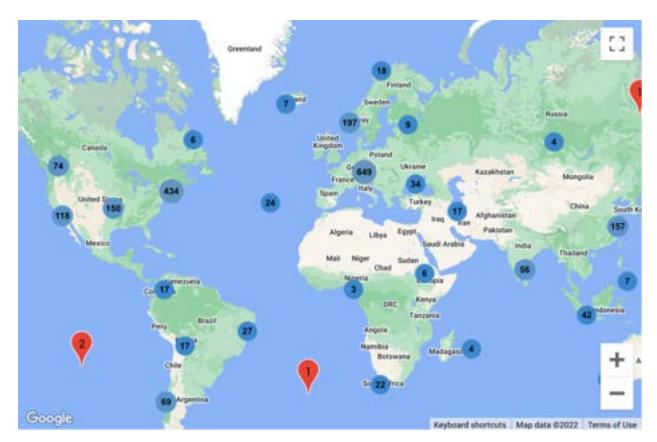


Figure 5: Geographical distribution of where citations to my work originate, based on lead author's affiliations.

### Tripling H-index

While I do not bank on standardized metrics such as H-Indexes as a reflection of impact, I do wish to **use my** H-index for comparison against myself. When I went up for promotion and tenure as an assistant professor, I had an H-index of 8 and an average citation rate of 8.5 citations per article, which also happens to be the average citation rate for all Memorial University authors (not weighted by discipline) based on SciVal metrics. Today, my H-index is 25 and I have an average citation rate of 34.6. Publishing more is different than publishing well—that is, publishing to meet pressing research needs or address knowledge priorities—and this acute acceleration of the degree to which my research circulates rather than merely grows is important for understanding its impact.

# International and disciplinary distribution of instructors teaching my work

Survey respondents included the countries in which they taught my work as well as the discipline their course(s) were registered with. The results show a wide breadth of distribution, both geographically and disciplinarily.

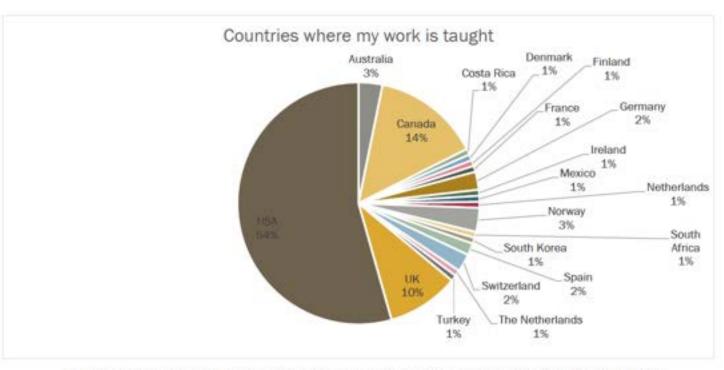


Figure 6: The comparative share of countries where my work is taught, based on informal survey respondents. Canadian classrooms make up only 14% (n=18) of the total.

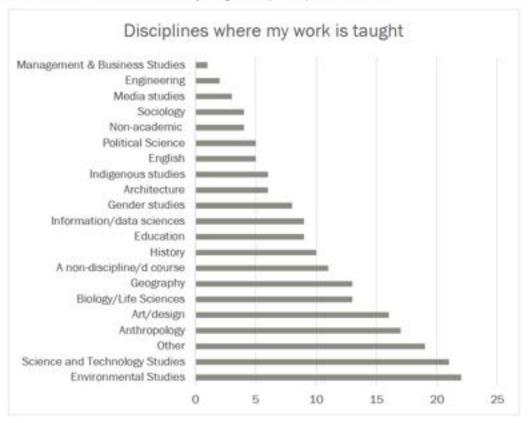


Figure 7. Survey respondents who teach my work identified which disciplines the course was based in (crosslisted courses are represented twice).

# Genres of publications being taught vs cited

The different types of publications have different audiences and different uses—it is why I have turned to film and magazine articles in the last few years and have always written blog posts. Informal respondents selected which types of my publications they used in the classroom:

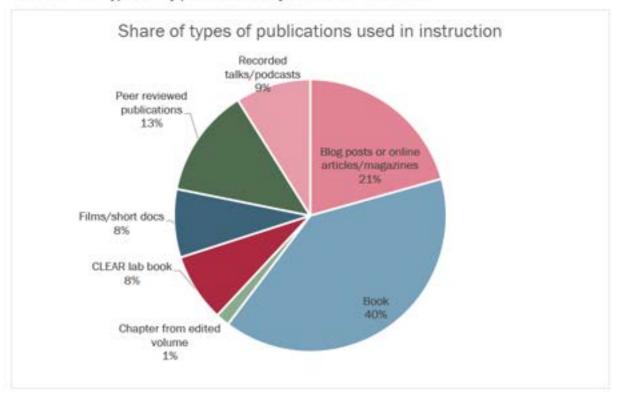


Figure 8: Of 247 submitted instances of teaching a type of publication, the largest share of respondents (40%) taught one of my two books, with the second largest share being online blog posts and magazine articles. Peer reviewed articles accounted for just 13% (n = 32) of publications in the classroom.

This differs from which types of publications are being cited. 59% of my citations are from peer reviewed articles, which is not surprising, while only 12% of the work in classrooms are those same articles. While my films, presentations, and the CLEAR lab book are never or rarely cited, they are often taught. While the MUNFA Collective Agreement stresses peer reviewed publications, this underemphasizes impacts of research on young researchers and learners.

	Book	Peer reviewed	invited articles	book chapters	blog posts & magazine articles	films	presentations	CLEAR lab book	Total
Count of citations	205	1256	360	156	137		000000	1	2115
% of citations	10%	59%	17%	7%	6%	0%	0%	0%	
Count of what is being taught	108	32		4	51	20	22	20	257
% of what is being taught	42%	12%	0%	2%	20%	8%	9%	8%	

<sup>\*</sup>Note some differences between figures in the chart and graph are due to leaving the formal survey open and having more responses come in. The count of citations is from Google Scholar, which includes more grey literature than other aggregators.

### Writing for public audiences, instructors, and students

A significant amount of my writing is dedicated to public audiences. This work circulates far more than other genres—for example, a blog post on "Firsting in Research" from 2021 has over 5.9k views, and that's on only one of the three blogs where it has been posted. A blog post on decolonizing syllabi from 2019 has 35.7k views. All of my blog posts combined, which number over 60, have had nearly 200k unique views, and those are only the posts I have metrics for (and do not include articles in Teen Vogue, Science for the People, or Orion, for example).

In 2020, I began working with *Orion Magazine*, "America's finest Environmental Magazine." I wrote "Plastics in the Gut" for them in 2020 and have been commissioned for several more texts in the next few years. My dedication to mobilizing knowledge in more publicly accessible forms lead me to work with Couple3 Films under a MEOPAR grant to create three short film episodes in a series on anticolonial and feminist methodologies called "Laboratory Life" (2021), each with between 600-3000 views, and a short film called *SuliaKaKatigelluta* on my plastic pollution work. One instructor noted that, "Their shorter blog posts are also a really valuable add to my undergraduate classes on the cultural politics of climate change: accessible, direct, and thought provoking to students in both the sciences and humanities."

While the collective agreement is clear that "Greater weight shall be placed on refereed products of scholarship than on those that have not been refereed" (12.13.b.), it also notes the importance of "diverse...forms of communicating knowledge." To that end, I provide two metrics for understanding how my work circulates. While peer reviewed articles are certainly cited the most (59% of all citations), they account for only 12% of my work that is taught in classrooms. 42% of survey respondents who taught my work taught from one of my two books, and mainly *Pollution is Colonialism*, which accounts for only 10% of all citations (though both books are less than two years old, so this will likely shift). 20% of teachers taught my blog posts or magazine articles, which constitute 6% of all citations. Finally, I note the different countries where my publications are taught: more than half of respondents taught in the USA (54%), followed by Canada (14%) and the UK (10%), a trend that mirrors the geographical locations of viewers on the CLEAR website as well as the top three locations for articles that cite my work.

#### **Funding**

Since arriving at Memorial, I have obtained **\$4.6 million in funding** as a Principle Investigator (**95% of which is external**) and an additional **half a million as a Co-Investigator or Collaborator.** Note that the figure for Collaborative funding only reflects projects for which I am an active member with regular contact with the main research team. I have removed over ten million dollars of collaborative grants from my CV where I am a named as a co-investigator or collaborator at the application stage only.

Of my PI funding, \$3.7million has been obtained since I became an Associate Professor—about 80% of my total funding. Roughly half of my PI grants are for research in the social sciences (48%) and the other half from the natural sciences or multidisciplinary funding from NSERC (49%), with a minute fraction for public engagement. This includes grants from SSHRC Insight (\$499k), NSERC Horizon Discovery (\$497k), CINUK from the National Research Council, a new international Arctic collaboration fund based in the natural sciences and Inuit knowledges) (\$450kCAD & £543), the Ocean Frontier Institute (\$480k), POLAR (\$295k), and ArcticNet's North by North program (\$1.2 million), among smaller amounts from the Northern Contaminants Program, the Nunatsiavut Government, the NunatuKavut Community Council, the Smallwood Foundation, and others. This range—from some of the major funding agencies in Canada to international competitions to contracts with small community councils, as well as social and natural sciences—reflects very different adjudication values, including what counts as merit. This indicates that my work is strong in terms of methods (Tri-Agency grants), collaboration (CINUK and Nunatsiavut funding), impact (public engagement grants), and integrity (local contracts).

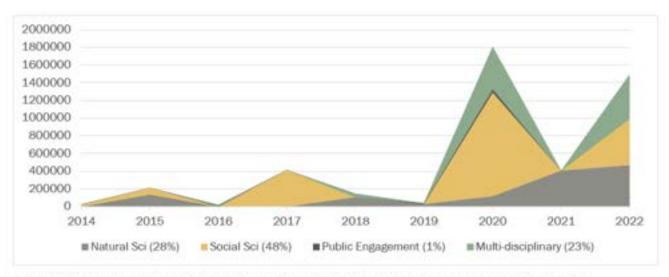


Figure 9: Count of total funding dollars per year of award as PI, by disciplinary focus, over time.

In the graph above, you can see the rise and fall of my funding success over time, with a low point while I was AVPIR doing full time administration (2018-2020), and an acute rise in finding after becoming Associate Professor in 2020. Notice also how explicitly multidisciplinary funding becomes a major stream at this stage, due in part to an NSERC Discovery Horizons grant (2022) and an OFI grant (2020).

#### Awards

Competitive awards are a key form of external recognition, particularly for superior research. MUNFA's Collective Agreement specifically lists "national or international awards [as] indicative of a high level of academic recognition" and a basis for "promotion at any time" (12.17.a.).

### University Awards

While the information is still embargoed (please do not share beyond the confines of this document). I am a recipient of Memorial's President's Awards for Outstanding Research (2022), which "recognizes early career faculty who have made exceptional contributions to their disciplines and have demonstrated a potential to become international research leaders." Happily, this year I share the award with Dr. Carissa Brown, also in Geography. The award is the highest research award for "early career" faculty at Memorial (defined in the PAOR as holding our first academic appointment within 10 years of the application date) and is "adjudicated based upon the quality, innovation, and impact of their research. The applicant's national and international stature, as assessed by their peers, will play a major role in the adjudication committee's recommendation" (award Terms of Reference)

In 2022, I also received Memorial's sole award recognizing research ethics; the Marilyn Harvey Award to Recognize the Importance of Research Ethics, which is awarded "to a student, staff or faculty member.

retiree or alumni who has distinguished themselves by their actions and contributions to scholarly research and embodies the institution's commitment to excellence in research ethics...based on evidence of continued distinction, in excess of the required level of performance" in their normal employment (Terms of Reference). The selection committee includes:

- Vice-President (Research)
- Associate Vice-President (Research)
- Provost or delegate
- Representative from the Deans and Directors group
- Representative from the Office of Research Ethics

#### National Awards

In 2021, I was inducted into **Royal Society of Canada's (RSC)** College of New Scholars, Artists, and Scientists. This is **one of the most prestigious awards in in Canada**, recognizing "leaders in research and innovation and mobilizing them in open discussion and debate about complex and timely issues in the headlines or on the horizon. Their integrated interdisciplinary knowledge and understanding is a valuable national resource. This is a lifetime recognition.... Fellows are those with exceptional and original publications, intellectual achievements, and creative activities" (RSC nomination form, 2022).

During my sabbatical (2020-2021), I was a **Distinguished Visiting Indigenous Faculty Research Fellow at the Jackman Humanities Institute, University of Toronto**. This is an **invitation-only** award, and included an office, stipend, research funding, and weekly obligation to work with other Fellows on research themes.

#### International Awards

In 2022, I became one of the inaugural members of **Data & Society's Scholars Council** (two-year term). The council of eleven international experts study technology and data's role in society help the organization chart a path forward in their research, including rethinking research practice, developing new research areas, and working with Data & Society staff on existing projects.

In 2019, I received a **Circle Holder award from Science for the People**, a US-based organization "dedicated to building a social movement around progressive and radical perspectives on science and society" (SftP website). The "Circle Holder is an honor granted to individuals and groups whose work at the intersection of power, ideology, and equity in science is paving the way for diverse and just scientific futures. Circle Holder awards reward those whose actions and practices are impacting how science is done and used. Carefulness, ethics, accountability, and good relations are prioritized in selection alongside exceptional content and action. Circle Holders are appointed for life, and are responsible for recruiting, mentoring, and

apprenticing future SftP Circle Holders with the end goal of creating a robust network of radical scientists across generations, disciplines, and nations" (SftP magazine, volume 2, no. 2).

As an author, I received **two international book awards for** *Pollution is Colonialism:* The Labriola Center American Indian National Book Award in 2022 and Clay Morgan Award for Best Book in Environmental Political Theory in 2021. These are mentioned above.

Finally, in 2021 I was a finalist for Victoria Davion Award for Intersectionality in Environmental Ethics from International Society for Environmental Ethics. "The award honors scholars engaged in intersectional work that describes, considers, or responds to overlapping forms of exclusion, discrimination, or injustice" (ISEE website, 2021).

Other awards from before I became Associate Professor, including from the Canadian Museum of Nature, the Society for the Social Studies of Science (4S), and the Computer-Human Interaction, among others, are outlined in my CV.

### Panels and presentations

Exper Witnes	κ Δι/ηστας	Juried Presentations	Invited Presentations	Public Presentations	Workshops	Total
1	13	38	27	25	28	128
1%	10%	30%	21%	20%	22%	100%

Since arriving at Memorial, I have given over 150 presentations. Of my 14 keynotes, roughly half have been since my appointment to Associate Professor in fields as diverse as discard studies (NYU), the arts (Leeds Art University), STS (RPI), science communication (Inclusive SciComm Symposium), and environmental science (Yale). As Associate Professor, nearly all my juried presentations are with Liz Pijogge, my research partner in Nunatsiavut, and my focus has shifted from conference presentations to invited presentations (18 of my 45 invited talks since 2014 have been in the last two years). I have begun to refer all paid invitations to speak about CLEAR to students and staff in CLEAR, so while those requests have increased in number over the last few years, I personally have been given fewer of them—a mark of success in a training setting at a university where the goal is not to just reproduce yourself and your work, but to support the work and networks of emerging and junior scholars. This is a place where mentoring and research outcomes are one and the same.

#### Presentations of note

A few speaking invitations since I became Associate Professor are of particular note: The Global Partnership on Marine Litter (2022) is a program of the United Nations Environmental Programme, and I was speaking to hundreds of UN delegates for that presentation. The talk on "Waste Colonialism" for the European Zero Waste Alliance (2021) was similarly for an audience of European Union environmental ministers and the talk for the Tribal Science Council of the Environmental Protection Agency was the same for the United States (2020). Finally, the 2021 panel on the Futures of Feminist STS for Catalyst's 10th anniversary was a panel organized by Donna Haraway and Banu Subermanian, who spoke on the "foundations" of feminist STS, and I was one of four speakers on the "future" of feminist STS; there were over 400 people in attendance.

### Editorial and refereeing duties

#### Peer review duties

I do not track which bodies I review for by year to maintain blind review. Thus, I have only my total metrics for review, The graph below includes counts of reviewer engagements (n=58), not total individual applications reviewed, since grant and conference reviews can encompass 20-50 applications at a time.

Figure 10: Distribution of refereeing duties across disciplines and type of review

	Social Sciences		Natural Sciences		
	Count	%	Count	%	
Grants	2	5%	6	35%	
			-		

Articles 30 73% 9 53% Manuscripts 7 17% 0 0% 2 Conference subs 5% 2 12% Total 41 100% 17 100%

As you can see from the list of journals and funding organizations I review for in my CV, my refereeing duties include a wide range of disciplines, from STS to ocean science to visual culture to Indigenous studies to engineering. This diversity attests to the breadth of my expertise. Some of my grant reviewing, particularly for international organizations such as the Natural Environment Research Council (NERC) in the UK and the National Science Foundation (NSF) in the United States are for specific niches of expertise, such as interdisciplinary sciences or Indigenous sciences. While I review more articles in the social sciences, I review more grants in the natural sciences. More than half of my review activities are for articles in the social sciences by count (though by number of individual applications, it would be grant applications in the sciences).

Since becoming an Associate Professor, I have been contracted (invited) to review for more Non-governmental Organizations (NGO) and Community-based Organizations (CBO), focused on documents such as vision statements, ethics guidelines, research reports, and policy reports. Nationally, this has included the Assembly of First Nations (AFN). Internationally, I have reviewed for the Inuit Circumpolar Council (ICC), the Health Evidence Network (HEN) at World Health Organization (WHO) (which is how I later came to co-author a white paper for them), and the Protection of the Arctic Marine Environment (PAME) committee of The Arctic Council. See my CV for the full list.

#### Editorial duties

For a decade between 2011 and 2021, I was the Managing Editor of *Discard Studies*. The blog has been credited with the articulation of the field of Discard Studies (now formalized as a keyword in journals, a conference, and our new book). I am also on the editorial boards of *Engaging Science, Technology, and Society* and on the International Advisory Board of the *Journal of Open Hardware*, Ubiquity Press. All three are open-source publication venues (these last two are detailed in the service dossier).

### Research collaboration and partnerships

My work is characterised by collaboration and partnerships, which are summarized in the chart below. The chart includes only those that have/are occurring since being promoted to Associate Professor and do not include collaborations with students and members of CLEAR.

Memorial	Josh Lepawsky (Faculty, MUN): mainly on topics related to discard studies, including our
University	co-authored book. Not funded.
	<ul> <li>Alex Zahara (PhD Candidate, MUN): co-editor of Discard Studies blog in 2020. Funded by SSHRC.</li> </ul>
	,
Newfoundland	Nunatsiavut Government and Liz Pijogge: together we run plastic monitoring projects in
and Labrador	Nunatsiavut, including holding grants together. Funded by NCP, ArcticNet, CINUK, and POLAR.
	homelands for plastics. Funded by NCC.
Atlantic region	Bluenose Coastal Action Network: partnership on monitoring plastics in Atlatnic
	Canada. Funded by ECC (held by Bluenose) and GradSWEP.
	AAROM Group (14 Indigenous nations/councils): collaboration on Indigenous
	environmental infrastructure and data sovereignty. Funded by OFI.
Canada	Nunavut Arctic College/Nunavut Research Institute: partnership on research
	capacity building and Inuit Traditional knowledge. Funded by ArcticNet.
	Assembly of First Nations (AFN): contract to review Indigenous-led research on
	climate change and pollution. Funded by AFN.
	CLEAR AIR program: Hosted four artists in CLEAR. Funded by SSHRC.
International	Alex Bond (Curator of Birds, UK Museum of Natural History): Collaborator on Nunatsiavut
	plastic work. Funded by CINUK.
	Jan Wouter Streinsman (Netherlands): Collaborator on Nunatsiavut plastic work.
	Funded by CINUK.
	Imari Walker (Duke University): Collaborator on plastics and justice paper. Unfunded.

- Win Cowger and his team (US eNGOs): Collaboration on harmonization of plastic methods. Unfunded.
- AMAP/Arctic Council: Collaborative team work on monitoring knowledge, guidelines, and methods for plastics in the Arctic. Unfunded.
- Global Partnership on Marine Litter (GPML) (UNEP): a consultant on how to approach Indigenous user groups and rights-holders around plastic pollution data. Unfunded.
- IndigeLab Network: I convene an increasingly formal network of 20-30 Indigenous gender minority researchers from mainly the US and Canada to support one another in our professional work and research. Funded by NSERC and SSHRC.

### Media/public intellectualism

The Collective Agreement notes that "contributions as a public intellectual" are part of the evaluation of scholarship (12.13.b). I have already described my writing for public audiences in the publication section above, so here I will highlight engagements with the media about my research.

Number of media interviews and feature coverage since 2012								
Feature film/	International	National	Local	Total				
television								
2 (~1%)	57 (~32%)	41 (~23%)	79 (~44%)	179 (100%)				

A full list of my media appearances is included in my CV. Here I highlight a few notable cases:

# Third party documentaries

My research has been the subject of two external documentaries.

- 1. This August (2022), CBC Gem premiered niKet (Food), a full-length episode on my and Liz Pijogge's plastic work on Nunatsiavut foodways as part of their Mi'kma'ki collection (Nunatsiavut is not in Mi'kma'ki, but these are their titles). Directed by Wendell Collier or Wanderer Entertainment, the all-Indigenous film crew came to St. John's and Nain to film our work.
- 2. In 2019, Couple3 Films, based out of New York City, did a mini-documentary on my plastic work and anticolonial methods entitled *GUTS*, which was featured on *The Atlantic* and in *Labocine*. Noah Hutton, one of the filmmakers, wrote an article about his experience working with us: "Our time with CLEAR showed us how a group of people, aligned by a shared set of values, could actively deconstruct the entrenched power dynamics and models of hierarchy all around them in this case, in academia. So hoping to avoid replicating the exploitative labor practices many of us had experienced before on non-union, low-budget filmmaking, we decided to try to adapt CLEAR's *Lab Book* which articulates their shared values, rules, and protocols for use in the making of *Lapsis* [his feature length film]" (*TalkHouse*, 2021).

I later worked with Couple3 on the four films we produced together (detailed in publications section).

### Collaboration with national reporter

In 2020, I began working regularly but informally with reporter Marc Fawcett-Atkinson, who covers the environmental beat for *The National Observer* and *Mother Jones*. I both taught him about the state of knowledge about plastic pollution generally and the history of the plastic industry to better inform his journalism, as well as provided expert quotes and reviews for particular legislation, new research findings, and events. I am quoted directly in **14** of his articles in 2021 while Canada announced a ban on some single use plastics and the Global Treaty on Plastics was being planned. I also provided background information on several similar stories without being quoted.

### Key provincial interviews and coverage

I worked with several reporters on a series of interviews related to **Newfoundland and Labrador's plastic bag ban in 2020**, including *CBC Newfoundland and Labrador* (television), *CBC News (radio and print), NTV News (television), CBC Newfoundland and Labrador Morning Show (radio)*, with earlier coverage in 2016 and 2017 from *CBC Cross Talk (radio), VOCM (radio), CBC St. John's Morning Show (radio), CBC News* (TV and radio), and *The Independent* (print).

### Key national interviews and coverage

I was a guest on **CBC's Quirks and Quarks** in 2022 to discuss the UN Plastic Treaty (along with **nine** interviews with *The National Observer* and two with *Mother Jones*).

Rick Harp's *Media Indigena*, an Indigenous current affairs podcast, **did two hour-long episodes** on my book *Pollution is Colonialism* in 2021 (ep 258 & 259)

Within a month of becoming Associate Professor in 2020, Memorials' Research Impacting Indigenous Groups (RIIG) policy came into effect and I did a series of interviews on the policy syndicated by CBC News (Newfoundland and Labrador), Academic TopTen, CBC Indigenous, Indigenous Land and Resources Today, Nation Talk, Yahoo!News, and The Canadian News.

#### Key international interviews

My international interviews tend to be more about CLEAR and our methods in general, or plastics in general, rather than clustering around issues like in local and national media highlights. These are selected because of the publication venues or public responses:

- In 2020, I was interviewed for a piece in *The New York Times* on the impact of COVID lockdowns on lab-based research.
- A piece on "Why Trying to Clean Up All the Ocean Plastic is Pointless" in *Gizmodo* (a US-based tech and science magazine/news outlet) on why reducing plastic production rather than clean ups is a

- more impactful strategy resulted in a high number of personal emails, online comments, and editors reaching out to comment that "it was one of the most fascinating discussions we've run in my 4+ years at the site."
- Public broadcasting from Australia Broadcasting Corporation (ABC) and New Hampshire Public Radio (NHPR) did a total of three segments on CLEAR's research protocols (two of these were on the overrepresentation of sandy beaches in shoreline plastic research)
- A piece in American Scientist ("How Climate Science Could Lead to Action") used CLEAR as an
  example of what action-oriented scientific research could and should look like

#### Conclusion

As this dossier demonstrates, I am involved in a wide range of intellectual activities, fields, and outputs. Most of my research activities are guided by direct requests from partners, collaborators, NGOs, audiences, and reporters. Writing accessibility leads to more requests for accessible writing, for example, and the more researchers use anticolonial, lab-based, and open-source methods and tools, the more we are asked to expand on those methods. I believe (and have been told by audience members, press editors, and reporters) that one of the core reasons my work is so successful in terms of circulation and particularly international circulation, is that I am addressing these very real needs. In other words, I am not looking for an audience for my work; diverse audiences are waiting for me to respond to their inquiries. In the next phase of my work, I am looking to radically expand the teams working towards those inquires through the IndigeLab Network, and my funded projects on Indigenous quantitative methodologies while continuing my environmental assessment work with Nunatsiavut Government and new partners.

#### Appendix

- Introduction to Pollution is Colonialism, Duke Press (2021)
- 2. Letter from Duke Senior Executive Editor Ken Wissoker on Pollution is Colonialism
- Review of Pollution is Colonialism in Antipode by Anna Stanley (2021)
- Article in Nature Geoscience, "Decolonizing geoscience will take more than equity and inclusion" (2021)
- Altmetric report for "Decolonizing geoscience will take more than equity and inclusion"
- Article in Science of the Total Environment, "Abundance and types of plastic pollution in surface waters and the case for reconciliation science in the Eastern Arctic (Inuit Nunangat)" (2021)
- Altmetric report for Abundance and types of plastic pollution in surface waters and the case for reconciliation science in the Eastern Arctic (Inuit Nunangat)"
- Altmertric report for Cowger et al. (2020) "Reporting guidelines to increase the reproducibility and comparability of research on microplastics" in Applied Spectrosocopy
- 9. Altmertric report for Liboiron, Tironi and Calvillo (2018), "Toxic Politics" for Social Studies of Science
- Partner letter of support:
- 11. Partner letter of support:
- 12. Partner letter of support:
- Collaborator letter of support:

- 14. Collaborator letter of support:
- 15. Collaborator letter of support: (USA)
- 16. Letter from Senior Acquisitions Editor Beth Clevenger, MIT Press on Discard Studies
- 17. Full informal survey responses

(USA)