AYEAR OF IMPAC

Women's Health Research Cluster

Annual Impact Report







2022

Land Acknowledgement

The Women's Health Research Cluster recognizes that we live, work, play and participate in community on the unceded, ceded and traditional territories of the 203 First Nations, along with 38 Métis Chartered Communities, each of which possesses their own unique traditions and history here on this land that we now refer to as British Columbia. We acknowledge the importance of the Truth and Reconciliation Commission of Canada's Call to Action, the United Nations Declaration on the Rights of Indigenous Peoples and the BC Declaration on the Rights of Indigenous Peoples Act. In all of our work, we are committed to ensuring Indigenous women's rights to health and safety, and the equal opportunity to participate in a manner that recognizes and respects Indigenous cultures and traditions. This annual report was written in Vancouver which is part of the unceded homelands of the Coast Salish Peoples and the traditional territories of the xwməθkwəýəm (Musqueam), Skwxwú7mesh (Squamish), Stó:lō and Səlílwəta?/Selilwitulh (Tsleil'- Waututh) First Nations.

Clarity, Community, and Commitment

Clarity

With the creation of the Women's Health Research Cluster's (WHRC) 2022-2025 Strategic Plan last year, we have been able to focus our efforts on crucial levers of change. This plan mapped out a course for us to strategically progress our mission - to bring together a multidisciplinary collaborative network of researchers and stakeholders to promote, expand, and catalyze impactful women's health research - across our four pillars - research facilitation, capacity development, knowledge translation and advocacy. The inclusive method of developing the plan and the clarity of direction has enabled the WHRC to deliver substantial and measured progress, organizational efficiencies, greater partnership opportunities and a deeper level of engagement with our community who are dedicated to enabling its implementation.

Community

Our mission focuses on collaboration and community to progress women's health research. We believe that by unlocking the great potential of our member community to address the gaps in women's health, we can achieve sustainable growth in the field and improve women's lives worldwide. This year, our free and low-barrier membership has facilitated significant progress across our portfolio. With a growth in

membership of nearly 30%, representing a breadth of countries, institutions, career stages, and backgrounds, we are collectively accelerating the pace of change for women's health research.

Committment

Our work this past year has not been without its challenges. Operating in a society where women's health is undervalued, women's health researchers are overlooked and women's health research is inexcusably underfunded, means there are significant barriers to our work. But despite challenges in funding, operations and capacity, we are undeterred. We know unwavering commitment is critical if we are to have a future where women and girls can live equitably healthy lives across their lifespans. Our membership spurs us every day to dig in, raise our voices together, and drive forward progress for sex-and-gender health equity.

We hope you will join us as we continue our collective efforts.

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Dr. Liisa Galea, Co-Lead of the Women's Health Research Cluster; Treliving Family Chair for Women's Mental Health; Senior Scientist, Centre for Addictions and Mental Health, Department of Psychiatry, University of Toronto

A year of Connecting the Community

We cannot create a future of sex-and-gender health equity alone. We believe that by unlocking the great potential of our member community to address the gaps in women's health, we can achieve sustainable growth in the field, and improve women's lives worldwide. We are committed to deepening and broadening our research focus to span the breadth of the women's health discipline and associated fields, and the depth of knowledge in these fields internationally with a goal of 700 engaged members by 2025.

This past year we saw a 29% increase in membership reaching a total of 445 members. Our membership is spread across a wide variety of countries, career stages and disciplines.

Geography and Institution

We have representatives from 23 counties across some of the most prestigious, innovative, and diverse universities. From Harvard to Cambridge, Berkeley, University College London and McGill to Jadavpur, Haramaya and Tabriz University.

Career stage

Our members are made up of scientists, practitioners, students, and community members.

Fields

We have representation across a diverse range of fields including social sciences, computer science, medicine, neuroscience, psychology, nursing, and engineering.

445 members

23 countries

253 trainees 127 faculty 65 community members

Multidisciplinary

A year of Connecting the Community

This breadth of expertise creates unique conditions to facilitate the development and exchange of knowledge that will accelerate the discipline of women's health. It creates opportunities for cross-country and institutional collaborations, knowledge sharing, and global impact. Collaboration across this community has led to numerous academic achievements in 2022.

\$42 million of research funding was awarded collectively by WHRC members in 2022.

Publications of **979 journal articles**, **91 white papers**, green papers, reports and/or policy briefs, **5 book chapters** and **1 book**, and **350 presentations** at conferences this past year.

33% of our member publications were in the top **10**% of journals and all publications have been cited 73% more than expected in the field.

151 awards and honours received by members.

Being a member of the WHRC's Perinatal Mental Health Working Group has enabled me to make valuable connections with key stakeholders, provider-clinicians, and researchers who share common views on the importance of promoting perinatal mental health as a strategic public health priority.

Dr. Tina Montreuil, Associate Professor, McGill University & Perinatal Mental Health Working Group Co-Chair



A year of Enabling Researchers to Do Their Best Work

We know that the most effective research is supported from conception to application by a diverse network of funders, research institutions, researchers, statisticians, voices from people with lived experiences, communicators, and policymakers working cooperatively and collaboratively. Research facilitation is the practice of supporting all parts of the research cycle. It helps the discipline to grow in terms of research quantity, quality, and community while ensuring knowledge can be uncovered, translated, and mobilized into improved women's health outcomes. This year we made great strides in enabling researchers to do their best work.

Broadening the Discipline

Seven members of the WHRC's Socioeconomic Status Working Group created a mini-podcast series called Field Trip this year. The series aimed to discover what every woman's health researcher needs to know about the influence of socioeconomic status on women's health. Five episodes were released in 2022 that feature experts in the arts and humanities who discussed topics including The Impacts of Gender and Intersectionality on Health Policy and How Migration Status Impacts Health and Healthcare of Refugees. Made possible by operational and funding support from the WHRC and led by Dr. Marina Adshade, this series created new perspectives from adjacent fields to recognize the influence of their research on women's health outcomes.

National Developments for Perinatal Mental Health

This year with 21 members, the WHRC's Perinatal Mental Health Working Group, co-led by Dr. Nichole Fairbrother and Dr. Lianne Tomfohr, added mental health to the national Canadian research agenda by organizing the first perinatal mental health theme for the Canadian National Perinatal Research Meeting. Perinatal mental health has been overlooked for decades. With almost one in five mothers globally experiencing a mental health condition during the perinatal period, we must deepen our understanding of the causes, symptoms, efficient diagnoses, treatment, and consequences to support birthing parents during this critical transition period. Doing so will build healthy families and communities. Our working group also hosted a networking event, bringing 278 community members, researchers and clinicians together to drive forward this important issue.

We are relying on 1960's science to affect reproductive function, and science can do better.

Dr. Emily Jacobs, Guest on the Women's Health Interrupted podcast.

A Year Of

Enabling Researchers to Do Their Best Work

Driving Change Through Data Analysis

While several funding agencies have mandated the collection of sex and gender data, few researchers are analyzing this data, preventing crucial discoveries that could influence women's health through discovery of effective diagnoses, treatment, and outcomes. Recognizing the need for improved understanding and practice in this area, the 13 members of the WHRC Sex- and Gender-Based Analyses (SGBA) Working Group, co-led by Dr. Elizabeth Rideout and Jennifer Williams, organized a How to SGBA Workshop about Analyzing and Disseminating Your Data that had 100 registrants and over 200 views on YouTube. Furthermore, we created an SGBA Grant Support Service that will be piloted in 2023 to improve SGBA integration in grant applications alongside enhancing SGBA skills of our members.

A Platform for Collaboration

Linking like-minded researchers who are pursuing better health with sex and gender equity in mind is one of our goals. With a membership of 445 researchers and community advocates, we needed to develop tools to support connection and collaboration across this network. Our Expert Database, launched in February of 2023, was developed this year to facilitate browsing of our Cluster faculty and trainee member profiles to enable users to identify and connect with potential collaborators or knowledge experts. Searchable across names, career stages and areas of expertise, this is a significant component of driving collaboration amongst our community.

Data Sharing at its Best

Considering the time lag between conducting health research to clinical use, we need ways to accelerate new discoveries. Data sharing is one of the cornerstones of open science and has huge potential to stimulate new ideas and maximize knowledge. However, as many of us have discovered, numerous databases have not collected crucial variables with sex, gender or women's health in mind. How can we determine whether hormonal contraceptives influence our health long term if these data are not represented within databases? The WHRC took several steps this year toward highlighting and enabling greater awareness of these missing variables in databases. From funding applications to solidifying a partnership with Dr. Emily Jacobs, of the University of California Santa Barbara, who has fostered a Women's Brain Health Initiative in the United States. It is crucial to support efforts to add variables important in researching women's health to these open databases across the world.

Considering the time lag between conducting health research to clinical use, we are dedicating time and resources to accelerate new discoveries.

A year of Building the Next Generation of Researchers

Supporting the next generation of researchers is critical for the sustainability of any field of study. For women's health research, this is even more important due to both the lack of awareness about the field and the limited funding available. When trainees have the opportunities for funding, training, knowledge translation, and the space to explore ideas and concepts with a diverse community, they will inevitably become sophisticated researchers with greater impact. This year we reached new heights in building capacity within the next generation of researchers.

Fostering Foundations in Research Competition

Women's health research is critically underfunded. Not only do we need to increase the amount of funding dedicated and available for women's health researchers, but we need to create opportunities for researchers to practice skills for competitive research opportunities. We held three awards this year: two Conference Awards and one People's Choice Poster Award. These opportunities represented financial rewards totalling over \$9,000 (thanks to our sponsors Elsevier & Dr. Elizabeth Rideout, CIHR Sex and Gender Chair in Genetics), whilst also honing knowledge translation and presentation skills for the 44 trainees involved. Additionally, we provided \$1,000 sponsorships to the Canadian Organization for Gender and Sex (COGS) Research meeting in Montreal and the Organization for the Study of Sex <u>Differences</u> (OSSD) meeting in Calgary. These organizations have been allies in advancing sex and gender science, and our WHRC Co-Lead — Dr. Liisa Galea — works closely with them as President of OSSD and Co-Vice President of COGS.

Skills Training for the Next Generation

Through a series of events and competitions with associated support services, we have invested in the skills development of our members. For example, we are dedicated to improving the way that sex-and- gender-based data is collected, analyzed and disseminated, and this year created opportunities through our SGBA Working Group, Women's Health Seminar Series (WHSS), blog, and podcast to enhance these skills in our membership. Our WHSS featured 8 seminars on how to incorporate SGBA into cancer, exercise, clinical and big data research. We published two blogs (>200 views), two podcast episodes and held two talks in our Trainee Research Presentation Series about SGBA integration in health research, health policy through a gendered lens, and mixed methods in SGBA research. We also worked alongside the Canadian Consortium for Neurodegeneration and Aging (CCNA) in launching a survey that aimed to understand perceived SGBA barriers facing researchers.

A Year Of Building the Next Generation of Researchers

Collating Resources for Core Skills and Best Practices

As part of our agenda, we strive to bring our membership up-to-date material on core skills and best practices. This year we built out our <u>General Resource</u> page on our website to host a multitude of useful information and toolkits, such as an inclusive language guide and <u>sex and gender-based analysis</u> resources. With hundreds of page views each year, we are continually working to keep this updated and iterate upon this resource.

Building Shared Knowledge

Presenting research to colleagues, peers and wider audiences is an essential component of an academic research career. Presentations create an opportunity for trainees to communicate crucial aspects of their research, consider their research in its entirety, elicit feedback through probing questions, and open up multidisciplinary collaborations that are essential for solving complex problems. In 2022, we held three virtual Trainee Research Presentation events. This provided opportunities for 15 trainees from 6 institutions to present to live audiences in low-pressure and friendly environments, while viewers learn about what trainees are working on, join in engaging discussions and network with peers.

Building Capacity From the Outset

To truly build capacity in women's health research and improve women's health outcomes, we need to start training early. This year we made



progress towards developing a multidisciplinary graduate course on women's health research at the University of British Columbia (UBC). It is intended that this will launch as a course within the Women+ and Children's Health Sciences program in the Obstetrics and Gynaecology (FoM) department at UBC soon.

Generating Dialogue Around Women's Health

If we are to eliminate inequities in health, we need to ensure that there is a greater appreciation of women's health as unique and important, in addition to a deeper understanding of women's health experiences. We need to translate new research findings into digestible information and impart the power of research to directly improve health outcomes. This year we facilitated dialogue around women's health research globally.

Expanding Our Reach

Women's health inequities are global and as an international organization, we are committed to expanding our knowledge translation opportunities and content globally. Our Women's Health Interrupted Podcast released 10 episodes featuring 15 guests in 2022. Our episodes have been downloaded over 2,000 times by listeners across Canada, the US, the UK, Australia and Germany. In 2022, we also published 26 posts on our Women's Health Blog and our blog ranked #7 in the Top 100 Women's Health Blogs worldwide by Feedspot.

Sharing Knowledge in Public Spaces

Steadfast in our commitment to sharing knowledge beyond academic and medical settings, we dedicate time to public outreach in topics related to women's health. This year this included a Science Communication Careers Workshop event with the <u>Djavad Mowafaghian Centre for Brain</u> Health, which encouraged and supported young professionals to pursue a career in science communication. Five WHRC members also gave a free public talk for <u>UBC's Health Dialogue Series</u> about their vision for advancing women's health. Lost in Translation: Why Studying Sex/Gender <u>Differences is not Enough to Move the Dial on</u> Women's Health outlined why science needs to define and value women's health by demonstrating that it is a distinct field of research.

3,603 registrants 51 posters
30 events 10 episodes
58 speakers 2,131 downloads
5 countries #7-rated

Generating Dialogue Around Women's Health

Creating Inclusive Opportunities to Share

Inclusivity is one of the WHRC's five core values: through intentionally and actively addressing inequities in power while building a diverse community and allowing our work to be driven by that community. In driving forward knowledge translation, we have created opportunities for diverse speakers across all disciplines within the broad spectrum of women's health, including talks focussing on health in gender-diverse groups. Our 2022 Mind the Gap: Hormonal Contraceptives and Brain Health conference, brought 58 speakers (13 from outside Canada) and international attendees. Our Women's Health Seminar Series focused on a range of topics in 2022 including speakers from neuroscience, animal sciences, medicine, physical therapy, biology, Indigenous public health, and psychology. Some of our topics this past year included Sex- and Gender-based Analyses of Chronic Stress and Allostatic Load, Walking for Brain Health: The Role of Biological Sex and

Reproductive Experience on Exercise Efficacy, and Decolonizing Research: Collecting Two-Spirit Data in a Culturally Affirming Way.

Fostering Multi-Disciplinary Exchange

Conferences create a multi-disciplinary setting to foster knowledge exchange and networking between trainees, academics, and other professionals. In 2022, the WHRC hosted the Mind the Gap: Hormonal Contraceptives and Brain Health conference, which was comprised of keynote talks, trainee-mentor networking sessions, symposiums (including a trainee symposium), workshops, and a roundtable discussion. And, as part of the Canadian National Perinatal Research Meeting conference, our Perinatal Mental Health Working Group organized a one-day perinatal mental health program and networking event reaching nearly 300 people.



A year of Driving Equity in Policy and Investment

Women's health researchers face compounding inequities that affect the ability of the discipline to drive forward. This is felt in disparities in funding awarded for women's health projects, difficulty publishing in high-end journals, representation within academic institutions, additional ethics approvals, and greater questioning of research methodologies. We are committed to our role of uncovering evidence of these inequities and collectively advocating to change the policies and practices that are impeding women's health research. This year we built the foundations and partnerships to drive forward our advocacy in women's health research.

Uncovering More Evidence

WHRC-led research into the limitations of funding mandates for sex and gender-based analysis (SGBA) continued in 2022. The WHRC hired three trainee members to conduct an investigation of SGBA uptake in CIHR-funded research under the supervision of Dr. Liisa Galea. Published findings suggest that grants focusing on female-specific health haven't changed in quantity across 2009-2020. Out of all the abstracts examined, only 5.92% investigated female-specific outcomes. This study also revealed that the number of funded sex or gender differences projects has remained largely unchanged across 12 years (1.57% increase for sex differences research), and the total funding awarded to sex or gender differences research either stagnated or declined across this period. This work lays the foundation for future advocacy projects that aim to increase the number of women's health research projects funded in Canada and across the world. In combination with this evidence, this project created the opportunity for three trainee members to hone their investigative skills with expert supervision, construct a compelling paper and publish a highprofile manuscript.

Centring Women's Health Researchers

To better target advocacy efforts, we are committed to understanding women's health researcher experiences. This year we worked with Jennifer Williams (WHRC Trainee Co-lead & SGBA Working Group Co-Chair) to develop plans to launch a new study in 2023 that will investigate what barriers and enablers exist for trainees interested in incorporating SGBA into their research. Findings from this project will help us understand what policies, tools and practices we need to encourage institutions to adopt.

The WHRC has adopted the Belonging, Dignity and Justice Advisory Committee's recommendations to disrupt Western ideas of women's health and knowledge by producing content about the intersecting nature of systems of power and social determinants of health, and to engage diverse people in the process.

Ismália De Sousa, PhD Candidate, UBC & Belonging, Dignity and Justice Advisory Committee Member

A year of Driving Equity in Policy and Investment

Partnering to Elevate Women's Health

We recognize that we need to work in collaboration to effectively advocate for the changes to women's health research we need. Partnerships are central to this. This year we partnered with a suite of organizations across sectors and geographic areas to collectively advocate for better funding for women's health and intersectional research. For example, the WHRC became an Associate Partner of the Partnership for Women's Health Research Canada, facilitating three new relationships with other women's health research organizations across Canada.

Raising Awareness About the Need for Change

Five of our members conducted research that investigated how sex is incorporated into the design and analysis of neuroscience and psychiatry papers published in 2009 and 2019. They found that although there was a 30% increase in the percentage of papers reporting the

inclusion of both sexes in 2019 compared with 2009, only 19% of papers reported using an optimal design for the discovery of possible sex differences in 2019, and only 5% analyzed sex as a discovery variable. This research was published in Nature Communications and was picked up by numerous media outlets including UBC News, TriCity News, and CTV News. Moreover, this paper resulted in numerous Nature journals committing to incorporate SGBA into journal submissions.

To raise public awareness about how women's health has been historically neglected, an <u>Op-Ed</u> was written for the Toronto Star this year and published in 2023 . This was accompanied by an <u>Editorial</u> published in The BMJ, which emphasizes the cost of neglecting funding for women's health research and calls for increased investment from governments and funding agencies.

The WHRC has represented an important and valuable partner in helping to refine and implement EDI initiatives at the BC SUPPORT Unit as part of Canada's Strategy for Patient Oriented Research (SPOR)

Dr. Erin Michalak, Equity, Diversity and Inclusion Champion for the BC SUPPORT Unit.





A year of Centring Equity, Diversity, and Inclusion

The Women's Health Research Cluster is committed to embedding equity, diversity, and inclusivity best practices into our activities and processes as well as helping our network do the same. In 2020, we formed a <u>Belonging, Dignity and Justice Advisory Committee</u> comprised of 11 individuals that bring professional and/or personal expertise to the table from a wide variety of backgrounds. The Committee includes students, faculty and individuals from the community who are both WHRC members and non-members.

This past year, the Committee has been heavily involved in guiding data collection and reporting practices. They have contributed to key resources related to inclusion, helping to inform and upskill our members, and supported our efforts to increase the representation of diverse speakers in our Women's Health Seminar Series. They also recommended that the WHRC raise awareness about the historical context of modern-day healthcare practices and women's health, to show how different groups of people were oppressed in the process of getting to where we are today. This has resulted in us publishing the blog post Mastectomy, Then and Now: The Cases of Frances Burney and Marie-Claude Belzile, with plans to publish more on the historical forces that shaped the nursing profession and the historical roots of present-day healthcare inequities as it relates to the treatment of women's pain. We are grateful for the continued support of this dedicated team.

Making This Possible

This has all been made possible through our partnerships. A wide range of cross-sectoral sponsorships and partnerships have created the conditions for us to make this impact. We are grateful to all our partners, allies and collaborators. Additionally, we thank our community for their generous donations, including Dr. Liisa Galea, Dr. Elizabeth Rideout and Owen Moore who are major gift donors.







































Bringing Together a Multidisciplinary Collaborative Network of Researchers and Stakeholders to Promote, Expand, and Catalyze Impactful Women's Health Research

In addition to our partners, the WHRC would not be functional without our devoted team and members.

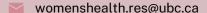
We are indebted to our WHRC Co-Leads Dr. Liisa Galea, Dr. Marina Adshade, Dr. Lori Brotto, Dr. Suzanne Campbell, Dr. Travis Hodges and Dr. Elizabeth Rideout.

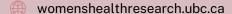
We extend our gratitude to our Trainee Co-Leads Alex Lukey, Shie Rinat, Jennifer Williams, Romina Garcia de Leon and Bonnie Lee.

We give special thanks to our staff Katherine Moore, Avani Dhunna, Amy Thachil, Bonnie Lee, Negin Nia, Chhavi Mehra, Damara Featherstone, Sarah Williscraft, Jessica Stewart, Tori Stranges, Amanda Namchuck, Tallinn Splinter, Romain Garcia de leon, and Shayda Swann who worked with us in 2022.

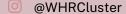
And we are forever appreciative of our members who are creating the conditions for women's health to be elevated and prioritized so that we will have a future where women and girls can live equitably healthy lives across their lifespans.

Join us.





Women's Health Research Cluster



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2022