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WE-SPARK Health Institute acknowledges that we are on the traditional territory of the Three Fires Confederacy of First Nations, which includes the Ojibwa, the Odawa, and the Potawatomi. We honour and respect the longstanding relationships that exist between these Indigenous Peoples and the wider community in the 100-mile Windsor-Essex Peninsula and the Straits of Detroit, also known as Les Détroits.

We express our gratitude to the keepers of this land, recognizing the deep connection and stewardship of the First Nations, Métis, and Inuit peoples who have resided here for generations. We are committed to fostering an environment of respect, understanding, and collaboration, as we continue to learn from and work alongside Indigenous communities.

WE-SPARK Health Institute also acknowledges the ongoing contributions and resilience of Indigenous Peoples in our community. We strive to integrate knowledge and perspectives into our research, education, and health initiatives, aiming to create a more inclusive and equitable future for all.



WE-SPARK HEALTH INSTITUTE

WE-SPARK Health Institute is supported by an innovative research partnership between Erie Shores HealthCare, Hôtel-Dieu Grace Healthcare, St. Clair College, the University of Windsor, and Windsor Regional Hospital. WE-SPARK brings together research strengths, expertise, and infrastructure across the Windsor-Essex region. Since our formal launch in March 2020, we have grown to over 1,200 members. We accelerate and strengthen collaborations and provide tools and resources needed for local health research and training to excel.

THE MISSION

Enhancing the health, well-being, and care of people through transformative research, evidence-based interventions, and knowledge translation.



Memorandum of **Understanding** signing (April 28, 2025)

WE-SPARK is committed to providing equity, diversity, inclusivity, and support all components of an environment that enhances excellence, innovation, and creativity. We aim to develop and support policies and practices that strengthen the research community, as well as the quality, social relevance, and impacts of research.

Igniting discovery, elevating excellence, living better.



HIGHLIGHTS



RESEARCH EXCELLENCE*

*Based on self-reported member metrics



\$15,918,449

New funding from all core members



New research projects initated



Adjunct appointments facilitated







Total studies in research registry added

COMMUNITY ENGAGEMENT



126,945 Engagements (Social Media & Website)



Events hosted



Student volunteers



224 Media stories



6,230 Event attendees (outreach & hosted)



822+ Volunteer hours

MEMBER SUPPORT



258 CITI Memberships



19

HIGHLIGHTS



458 Active REDCap Users



Igniting Discovery Grants awarded



113 Total fresh tissue samples acquired for research



\$374,000

Funds raised at Cheers to Hope



165

Health Research Conference presentations

Elevating Excellence

OUR RESEARCH ECOSYSTEM

Everyone in our community has a role to play in health research. WE-SPARK members are a network of people dedicated to improving the health and wellness of our region. Our research activities are driven by our Core Members, people who work in the research field and are actively engaged on a daily basis. Essential to our progress are those working behind the scenes to elevate research activities including healthcare providers, educators, students, volunteers and supporters.

41

Core Principal*

funded by provincial or national health projects, or lead a clinical trial

184

Core Associate*

actively engaged in research but do not yet hold provincially or nationally funded projects or are leading clinical trials

296

Affiliate Researcher

associated with health research or healthcare locally or beyond; including administrative support

617

Affiliate Students

post-secondary students in any discipline with an interest in health research

113

Community Members

individuals or organizations interested in the health landscape in Windsor-Essex, including people with lived experience

Ambassadors

individuals or organizations that provide a donation/support for health research

1,261 Members







^{*}Researchers who have a formal affiliation with one of our five partner institutions

CORE PRINCIPAL MEMBERS*

Core Principal Members (CPMs) are researchers who are currently supported as a PI/Co-PI by a provincially or nationally funded health project, or an investigator initiated clinical trial. They also possess a formal affiliation with one of the five WE-SPARK partner institutions.

*Metrics provided on behalf of our Core Principal Members are based on self-reported successes and submitted curricula vitae (CV).

180Reviewed Journa

Peer-Reviewed Journal
Publications

203

Presentations (Posters/Oral/Other)

\$31.5M

Currently Held Funding for Year 6

1753

Active Collaborations on Research Projects

**Involvement on projects and publications

21

Awards & Accolades
Celebrated

532

Students Supervised



Biomedical Sciences

Dora Cavallo-Medved Jeffrey Dason Brian DeVeale Phillip Karpowicz Lisa Porter Munir Rahim Andrew Swan

Chemistry & Biochemistry

Drew Marquardt Kenneth Ng Simon Rondeau-Gagné Yufeng Tong John Trant Panayotis Vacratsis Nicholas Vukotic

Computer Science

Pooya Moradian Zadeh Alioune Ngom Luis Rueda

Education

Lindsey Jaber

Electrical & Computer Engineering

Aerzoo Emadi Mitra Mirhassani

Kinesiology

Anthony Bain Francesco Biondi Cheri McGowan Sara Scharoun Benson Kristoffer Romero Paula van Wyk

Mechanical, Automotive & Materials Engineering

Jalal Ahamed Jill Urbanic

Nursing

Edward Cruz Kathy Pfaff

Cancer Program

Caroline Hamm Mina Pan

Psychology

Alexander Daros Jessica Kichler Dana Menard Lance Rappaport Charlene Senn Kendall Soucie

Social Work

Adrian Guta Jayashree Mohanty

St. Clair College

Kyle Jackson

OWE-SPARK GRANTS A PROGRAM

Cheers to Hope (C2H) is WE-SPARK's signature fundraising event, dedicated to advancing the Grants Program and providing meaningful support for local researchers at all stages of their careers. C2H celebrates the spirit of discovery by showcasing local research, recognizing the generosity of supporters, updating the community on progress, and raising vital funds, all while expressing heartfelt thanks to those who make it possible.



110

Total Attendees



C2H Sponsorships Received

Thank you to our sponsors!



The Tayfour and Emara **Research Grant**





University of Windsor Innovation Odette School of Business

Faculty of Human Kinetics | Nursing

Faculty of

Science

Grants Awarded

Grants Program Sponsors

\$412,714

Grant Funding Awarded

Learn more about our 2024 recipients in our <u>Y6 Mid-Year Report!</u>

\$6.1 Million

Over the course of 6 years, our local investment of \$1.8M has successfully attracted and secured additional national grant funding.

20 HEALTH RESEARCH 25 CONFERENCE

The WE-SPARK Health Research Conference is an annual event that brings together the local research community to share discoveries, build meaningful connections, and celebrate achievements. Designed to showcase the depth and diversity of health research in our region, the conference highlights student contributions, fosters collaboration. honours individuals making a local impact, and actively engages our partners and broader community.



Participant Testimonials

"...To learn about diverse perspectives and ongoing health-related research and programs, this is the conference for you"

"We are lucky to have such a high-quality scientific conference so easily accessible, affordable, and relevant."

"Worth attending and inspiring to see all the young researchers"







Overall Rating:



4.2/5

330

Total Attendees

120

Poster Presentations



\$2,000

Student Awards Given



Thank you to our sponsors!























COMMUNITY ENGAGEMENT





*Across all social media platforms (X, Instagram, Facebook, and LinkedIn)

29
Events Hosted

20Outreach Events
Attended

WE-SPARK Interns Trained

In year 6, WE-SPARK hosted 29 events and supported 20 outreach events advocating for the importance of research and translating its impacts on the community. These efforts reached over 6,200 people. On social media, @wesparkhealth continued to engage the community across platforms, with a combined reach of over 195,000. Critical to our success are the student interns who created new outreach activities, advanced knowledge translation, and worked collaboratively to establish a community newsletter.













Event photos can be found at: wesparkhealth.com/gallery



TRANSFORMING YOUTH MENTAL **HEALTH CARE THROUGH OUTREACH**

A new model of intensive care supports complex mental health needs of children in Windsor-Essex

Research Team: Hôtel-Dieu Grace Healthcare

Dr. DJ MacNeil Dr. Jennifer Voth Leslee Ward Kyle Williamson

Kara Hayes Rame Marie Heidi Cox Kelly Massender Tammy Calic Stacy Slobodnick Tammy Drazilov

The Regional Children's Centre at Hôtel-Dieu Grace Healthcare has launched Ontario's first Assertive Community Treatment program for children (ACT-C), piloting a new model of care for youth aged 6 to 12 with complex mental health needs. This first-of-its-kind program delivers intensive, individualized support in the home or community offering multiple weekly visits from a transdisciplinary team of therapists and child and youth workers.

ACT-C is addressing urgent local needs. With Windsor-Essex facing high waitlists for institutional care, ACT-C has already supported over 50 families and helped children re-integrate into school settings, reducing reliance on emergency services. The program aims to expand access, improve functioning, and transition families to less intensive care while keeping children connected to their homes, schools, and communities.

To learn more, visit: https://www.ctvnews.ca/windsor/article/hotel-dieu-grace-healthcare-expands-youth-mental-health-care-with-first-of-its-kind-program/

IMPROVING BREAST CANCER TREATMENT RESISTANCE

Local pilot tests early intervention to boost treatment response in breast cancer

Research Team:

Windsor Regional Hospital University of Windsor

Dr. Rasna Gupta Dr. Caroline Hamm Dr. Kristen Gyetvai Alexandra Shoust

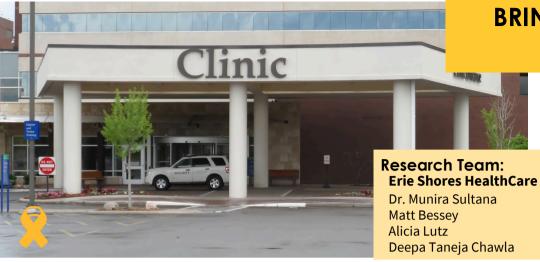
Dr. Munir Rahim Dr. Elizabeth Fidalgo da Silva

Dr. Lisa Porter Dr. Bre-Anne Fifield



Hormone receptor-positive (HR+) breast cancer represents a large share of breast cancer diagnoses. While endocrine therapies have improved outcomes, resistance remains a significant challenge. In this WE-SPARK-funded pilot project, WE-SPARK members from Windsor Regional Hospital and the University of Windsor are collaborating to test whether starting treatment with ribociclib, a CDK4/6 inhibitor typically used in advanced stages, earlier in care can enhance sensitivity to other therapies and reduce resistance.

The study involves 5–10 local patients who received ribociclib prior to surgery. Post-surgery tumour tissue and blood samples are analyzed to evaluate changes in immune cell infiltration and cellular senescence. The findings will provide crucial early data for future clinical trials and may lead to new combination therapies that improve long-term outcomes for HR+ breast cancer patients.



BRINGING CANCER CARE
CLOSER TO HOME

Rural satellite clinic improves access and reduces treatment burden for cancer patients

University of Windsor Huzafa Hyde McMaster University Nahiyan Sayeed University of Limerick Nusaibah Tahsin

Transform SSOKyle Shafer

To address the challenges rural patients face when traveling long distances for cancer treatment, Erie Shores HealthCare, in collaboration with the Erie St. Clair Regional Cancer Program, established a satellite systemic therapy clinic in Leamington, Ontario. This fully integrated model allows patients to receive chemotherapy and supportive care closer to home, significantly reducing travel time, psychosocial stress, and caregiver burden.

Since its launch, the clinic has provided timely treatment, enhanced patient comfort, improved quality of life, and strengthened continuity of care. Patients report high satisfaction, describing the clinic as "life-changing" for both themselves and their families. This model offers a sustainable, scalable solution for rural cancer care delivery that could be adapted to other communities facing similar geographic and resource challenges.

To learn more, visit: https://www.fortunejournals.com/articles/cancer-care-closer-to-home-erie-shores-healthcare-experience.html

ADVANCING UNIVERSAL SCHOOL NUTRITION

Local project supports Canada's move toward national school food programs

Research Team: St. Clair College

Dr. Kyle Jackson Beckie Berlasty Dr. Kathryn Markham-Petro Dr. Alexandra Frabotta AnnaMaria Lopez



After securing a NSERC CCSIF grant, St. Clair College's Research & Innovation team partnered with Immaculate Conception Catholic School and community organizations to pilot the Healthy and Hot School Lunch Program. Over three months, approximately 300 students received hot, nutritious lunches every Tuesday and Thursday, paired with bi-weekly food literacy lessons. Early feedback—including classroom cheers at meal delivery and family "food passports"—shows improved student engagement, cultural inclusivity, and enhanced focus in class.

As part of a broader province-wide initiative, this project provides a real-world model of multi-sectoral collaboration that supports student wellbeing, academic success, and long-term health equity. With the federal government launching consultations on a pan-Canadian school food policy, researchers hope this locally-driven model will contribute valuable evidence to inform national policy development.



Research Team: Windsor Shelter Health Dr. Jennifer Bondy **Erie Shores HealthCare** Neelu Seghal

Hôtel-Dieu Grace Healthcare Dr. Jennifer Voth St. Clair College **Rose Plantus** Hali Sitarz

HOUSING IS HEALTH CARE

A Windsor physician brings health services directly to the shelter system

University of Windsor Dr. Adrian Guta Dr. Kathy Pfaff Dr. Debbie Sheppard-Lemoine **Windsor Regional Hospital** Jonathan Foster

Grace Park

Schulich School of Medicine & Dentistry Temitole Akintola Karen Michael Alex Zhou **AbbVie** David Hallett

In response to rising homelessness in Windsor-Essex, Dr. Jennifer Bondy launched a collaborative research initiative to address the intersection of housing and health. By convening local frontline workers and service providers through a WE-SPARK Think Tank, the team identified a key gap: the need for accessible, on-site healthcare in shelters.

With \$200,000 in provincial funding secured through the Canadian Mental Health Association Windsor-Essex, the team is embedding medical professionals directly into local shelters—reducing access barriers, improving continuity of care, and supporting clients with complex needs such as wound care, mental health, and harm reduction. The project is transforming how healthcare is delivered to people experiencing homelessness, emphasizing dignity, trust, and long-term impact.

To learn more, visit: https://www.wesparkhealth.com/news-609/housing-is-healthcare-this-physician-thinks-she-has-the-key-to-solving-homelessness-in-windsor-essex

A SMART SENSOR THAT TREATS CANCER

Windsor researchers are developing implantable technology to detect and treat brain cancer

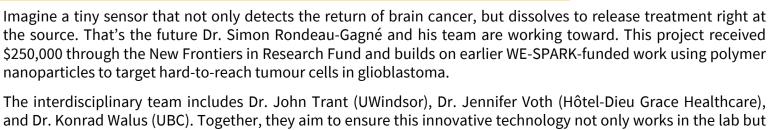
Research Team: **University of Windsor**

Dr. Simon Rondeau-Gagné Dr. John Trant Dr. Balraj Jhawar

Hôtel-Dieu Grace Healthcare Dr. Jennifer Voth **University of British Columbia** Dr. Konrad Walus

University of Victoria Stephanie Willerth

The interdisciplinary team includes Dr. John Trant (UWindsor), Dr. Jennifer Voth (Hôtel-Dieu Grace Healthcare), and Dr. Konrad Walus (UBC). Together, they aim to ensure this innovative technology not only works in the lab but can be adopted in real clinical settings—offering a new, targeted approach to one of the most aggressive forms of brain cancer.



BUILDING A STRONGER RESEARCH ECOSYSTEM

Five-year renewal amplifies WE-SPARK's impact across the region





On April 28, 2025, WE-SPARK Health Institute renewed its partnership with Erie Shores HealthCare, Hôtel-Dieu Grace Healthcare, St. Clair College, University of Windsor, and Windsor Regional Hospital through a five-year Memorandum of Understanding. Since our launch in March 2020, WE-SPARK has become a central hub for health research excellence in the region, catalyzing numerous research collaborations and supporting innovative projects across sectors.

This renewal ensures continued momentum for discovery, innovation, and enhanced patient care, strengthening the region's capacity to contribute to transformative health research that benefits both local communities and the broader Canadian health landscape.

To learn more, visit: https://www.wesparkhealth.com/news-667/we-spark-partnership-renewal-paves-the-way-for-continued-health-research-excellence

YEAR IN REVIEW





OUR TEAM

Our team is comprised of dedicated and passionate people who are committed to working together to enhance the health, well-being, and care of people in our community.

STAFF & RESEARCH ASSOCIATES

Dr. Dora Cavallo-Medved

Interim Director

Karen Metcalfe

Assistant Director

Kristin Bradshaw

Administrative Assistant

Jillian Calandra

Translational Research Associate

Mohamed Farjalla

Research Associate - REDCap

Jessica Flammia

Health Research Associate

Genesis Flores

Knowledge Translation Research Associate

Dr. Danielle Gvemi

Research Associate - NUCLEUS

Cathy Mombourguette

Special Projects - Media Relations

INTERNS/STUDENTSHIPS

Sophie Crowe

Community Health Research Associate

Selina Grado

Health Research & Community Engagement

Sarah Khan

Community Health Research Associate

Vanessa Riolo

Patient & Community Engagement

Nikita Rybkin

REDCap Intern

Muhammed Saad Anaikar

Master of Applied Computing Intern

Norah Tracy

Social Media Content Developer



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Bill Marra

Hotel-Dieu Grace Healthcare President & CEO

Karen Riddell

Windsor Regional Hospital Acting President & CEO

Michael Silvaggi

St. Clair College President





















Statistics reflect the WE-SPARK 2024/25 fiscal year ending on April 30, 2025.

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