# REPORT MPACT











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#### A MESSAGE FROM OUR PRESIDENT:

## LEADING WITH MISSION, ADVANCING RESEARCH.

#### Research. Understand. Cure.

It is my privilege to share with you the remarkable progress that Canadians for Leading Edge Alzheimer Research (CLEAR) has achieved in 2023, only made possible thanks to the unwavering dedication of our supporters.

CLEAR's mission is to eradicate all forms of dementia, including Alzheimer disease, by funding research towards a cure. We remain steadfast in our 100% commitment to directing all funds raised towards promising scientific research into the cause, prevention, and treatment of Alzheimer disease and related disorders.

#### **Our Research:**

This past year, we proudly funded nine world-class scientists in Canada. Through our rigorous selection process, our research has made notable advancements in understanding the underlying mechanisms of dementia, exploring new treatment modalities, and identifying factors that may contribute to the prevention of dementia.

I'm thrilled to see how CLEAR's research has already played a significant role in advancing our understanding of dementia. With the ongoing support of our donors, our work will continue to make strides towards a future without Alzheimer disease and related disorders.

#### **Our Connections:**

CLEAR's collaborative efforts fostered connections with our partners and research community, driven by a shared passion for advancing research and bonded by personal lived experiences.

Successfully hosting four in-person events, we facilitated interdisciplinary collaboration and promoted research excellence, while accelerating the translation of scientific discoveries into tangible benefits.

#### **Our Future:**

On behalf of CLEAR's Board of Directors, cherished volunteers and employees, I express my sincere gratitude for the generosity, advocacy and dedication of our supporters, who bring us closer to our mission of finding a cure through research.

With over 1 million people in Canada projected to be living with dementia by 2030, thank you for standing with us on our journey towards a brighter future for those affected by this horrific disease in our country and beyond.

Sincerely,

Bhynn Beattie

B Lynn Beattie, CM MD FRCPC President



#### **STATISTICS:**

### THE CRITICAL STATE OF DEMENTIA IN CANADA

733K+

People in Canada are estimated to have dementia.

350+

People develop dementia in Canada every day.

+188%

Projected increase of care partners between 2022-2025.

6.3M

People in Canada projected to develop dementia by 2050.

Source: Alzheimer Society of Canada



61.8%

Of people living in Canada with dementia are estimated to be female.

16.1B

Is the estimated cost of dementia to the Canadian healthcare system.

470M

Of care hours provided by Canadian Care Partners for people living with dementia.

## OUR MISSION

Fund groundbreaking research aimed at advancing the understanding, prevention, and eradication of Alzheimer disease and related disorders.

CLEAR is committed to supporting Canadian scientists in their pursuit of innovative solutions, ultimately striving to improve the quality of life for individuals affected by dementia.

Like most of our supporters, we are motivated by lived experiences and personal connections to memory loss disease.

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TOTAL DEMENTIA FUNDED SCIENTISTS

+\$16M

TOTAL DEMENTIA RESEARCH FUNDED

+\$26.3M

TOTAL FUNDING LEVERAGED THROUGH PARTNERSHIPS

## A WORLD WITHOUT ALZHEIMERS

Our goal is a world where Alzheimer disease and related disorders are preventable, treatable, and curable. We envision a future where individuals and families no longer suffer from the devastating effects of these conditions, where memories are preserved, and where hope thrives.

By directing 100% of all donations to funding scientists in Canada, we are dedicated to accelerating research progress and driving transformative change in the fight against dementia. Together, we aspire to create a brighter tomorrow for generations to come.

#### **RESEARCH:**

#### **OUR 2023 FUNDED SCIENTISTS**

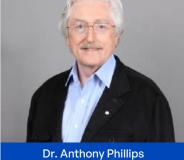


#### FINDING THE MISSING PEICE

The research we fund could lead to the breakthrough the world has been waiting for. Or it could become a missing piece in other research - a catalyst to another lab's groundbreaking discovery here in Canada or somewhere else in the world.

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Researchers funded in 2023, made possible by the support of our donors.



Dr. Anthony Phillips d-Govadine: A promising treatment for targeting cognitive deficits in Alzheimer disease



Dr. Amanda Orr 3D bioprinting patient-derived neural tissues for screening potential treatments for Alzheimer disease



**Dr. Manu Madhav** Quantifying navigational impairments in preclinical Alzheimer disease



Our research has attracted world-class scientists to British Columbia.



**Dr. Brian MacVicar**Therapeutic targets for alleviating
neuroinflammation in Alzheimer disease



**Dr. Freda Miller**Therapeutic targets for alleviating
neuroinflammation in Alzheimer disease



**Dr. Michael Adachi**Developing sensors for rapid detection of biomarker proteins for Alzheimer disease



**CLEAR** proudly funds:

- Early career researchers
- Postdoctoral scholars
- Operating grants for world-class scientists



**Dr. Jordan Hamden**Quantifying navigational impairments in preclinical Alzheimer disease



**Dr. Katherine Elvira** Building bespoke artificial cells and tissues on a chip for drug discovery



Dr. Nárlon Silva
The effects of resistance training on myelin
and blood-based biomarkers of
neuroplasticity in older adults

#### **PROGRESS:**

## HIGHLIGHTS FROM OUR LATEST ADVANCEMENTS IN ALZHEIMER RESEARCH



#### DR. JORDAN HAMDEN UNIVERSITY OF BRITISH COLUMBIA

Inflammatory bowel disease (IBD) has no cure, and also increases the risk of dementia six times for sufferers. Current IBD research primarily only focuses on adult IBD, ignoring the 25% of those diagnosed who are adolescence and their critical period of immune and nervous system development.

Using a life-long model of human IBD, Dr. Hamden is studying mechanisms that may cause IBD and lead to an increased risk of developing Alzheimer disease. The goal of his research is to uncover intervention methods that can decrease both IBD and AD in individuals.





#### DR. MICHAEL ADACHI SIMON FRASER UNIVERSITY

Biomarkers are measurable indicators that determine if a person may have or be at risk for developing a disease. Research has identified that (p-tau) and other small proteins are promising biomarkers for Alzheimer disease. To detect these biomarkers in blood samples, detection methods are used, which are expensive and time-consuming.

Dr. Adachi has developed a new sensor that can detect these proteins at ultra-low concentrations with a simple and rapid test. His research will now focus on creating an easy-to-use tool for clinicians to help diagnose Alzheimer disease.





#### DR. BRIAN MACVICAR & DR. FREDA MILLER UNIVERSITY OF BRITISH COLUMBIA

It is believed that a key difference between those who suffer from Alzheimer disease and those who don't is brain inflammation. Stem cell approaches are being investigated to uncover why certain aspects of brain inflammation triggers the changes of a brain with features of Alzheimers.

A breakthrough in this research has already been made: successfully creating cell cultures and proteins that mimic Alzheimer disease. Now Dr. MacVicar & Dr. Miller seek to discover new prevention methods through therapeutic targets to reduce brain inflammation.



#### **COMMUNITY:**

#### CONNECTIONS IN SCIENCE



















#### **HIGHLIGHTS:**

#### **OUR 2023 YEAR IN REVIEW**



#### MILESTONES TOWARDS OUR MISSION



#### Trailblazing Scientific Research

CLEAR proudly funded nine researchers in 2023, in the pursuit of understanding, preventing and ultimately finding a cure for Alzheimer disease and related disorders.



#### **Connecting our Dedicated Community**

In 2023, CLEAR hosted several in-person engagements, fostering a stronger connection between our dedicated medical community and passionate supporters.



#### Coast to Coast: Expanding our Mission

By extending our reach nationally, CLEAR amplified its impact and commitment to dementia research by engaging new supporters, partners and organizations across Canada.



#### **Bringing Awareness to Government**

CLEAR had the opportunity to host Members of British Columbia's Legislative Assembly to discuss the critical state of dementia in Canada and the need for increased research funding.



#### A Future Focused on Greater Impact

CLEAR's 2023 achievements reflect our commitment to future-focused philanthropy, allocating 100% of all funds raised to our singular mission of funding research.

#### RESEARCH. UNDERSTAND. CURE.



#### May

#### **GOVERNMENT CONNECTIONS**

We illustrated the critical need for dementia research with BC's provincial goverment



#### September

**NEW MINDS TO DEMENTIA** 

We announced Dr. Orr and Dr. Madhav as CLEAR's newest funded-scientists



#### **December**

**DOUBLING OUR IMPACT** 

We launched our matching gift campaign, allowing the generosity of our donors to make twice the impact.



#### **January**

**ADVANCING NEW RESEARCH** 

We announced our 2023 Operating Grant recipients, Dr. MacVicar & Dr. Miller



#### **June**

#### **MAKING RESEARCH CLEAR**

We hosted our first annual donor research event with behind-the-scene lab tours



#### November

**CONNECTED BY OUR CAUSE** 

We hosted a Fall reception bringing together our supporters, partners and researchers



## A TOMORROW ALZHEIMER FREE

Continued funding for dementia research is critical for understanding, treating, and ultimately finding a cure for Alzheimer disease and related disorders.

By 2030, over 1 million people are projected to be living with dementia in Canada.

Planned giving empowers individuals to leave a lasting impact by funding dementia research for their loved ones and the next generation, with the assurance that 100% of their investment will be directed towards life-saving research.

#### **LEARN MORE:**

legacy@clearalzheimers.ca



#### **NUMBERS:**

#### **OUR 2023 FINANCIAL SUMMARY**

~\$563,885

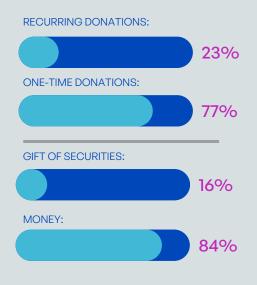
TOTAL DONATIONS RECEIVED THANKS TO OUR DONORS IN 2023 +\$290,375

FUNDING COMMITTED TO DEMENTIA RESEARCH INITIATIVES IN 2023 \$760,688

PROJECTED INVESTMENT IN DEMENTIA RESEARCH FOR 2024

#### OUR 100% COMMITMENT

100% OF CLEAR DONATIONS ARE DIRECTED TO PROMISING SCIENTIFIC RESEARCH INTO THE CAUSE, PREVENTION, AND TREATMENT OF ALZHEIMER DISEASE AND RELATED DISORDERS.



#### **OUR GROWTH IN FUNDING, OUR GROWTH IN RESEARCH.**



## OUR PROGRESS IS ONLY MADE POSSIBLE BY THE GENEROSITY OF OUR SUPPORTERS.

#### **ACKNOWLEDGMENTS**

CLEAR extends its heartfelt gratitude to all donors, organizations, and partners whose unwavering support and dedication propel our mission forward. It is the commitment and dedication of our supporters that truly fuel our groundbreaking research initiatives, bringing hope to those affected by dementia.

To our esteemed scientists and collaborators, thank you for your tireless efforts and invaluable contributions toward advancing the frontiers of Alzheimer disease and related disorders research.

Lastly, we express our sincere appreciation to our dedicated volunteers, staff members, Board of Directors, and Marketing Committee for their passion and commitment to our cause. Together, we are forging a path toward a future free from the burden of dementia, and your support continues to be the cornerstone of our success.

ACCELERATE A RESEARCH BREAKTHROUGH FOR ALZHEIMER DISEASE RIGHT HERE IN CANADA.

WWW.CLEARALZHEIMERS.CA/DONATE

Thanks to the generosity and commitment of our Board, our 100% commitment would not be made possible.

#### **BOARD OF DIRECTORS**

**Dr. B. Lynn Beattie**President

Robert J. Hastings

Vice-President

Pam Prior
Director & Treasurer

James Bruce
Director

**Una de Boer** Director

**Dr. Dean Forti**Director

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