### **News Release**

For Immediate Release

Government of Canada invests \$5.7M in new research network to study deadly blood infections McMaster University-based network will bring together researchers and patients to tackle sepsis—a leading cause of death in COVID-19

July 23, 2020 - Hamilton, Ontario - Canadian Institutes of Health Research

Sepsis is a life-threatening condition that results from an out-of-control immune response to an infection that may lead to tissue damage, organ failure and death. Children, seniors, those with chronic health conditions like diabetes, cancer or immunodeficiency, and members of certain groups such as Indigenous Peoples, new immigrants to Canada, and those with unstable housing are especially vulnerable to sepsis.

The source of infection in sepsis can be a microbial pathogen such as a virus or bacterium. The new coronavirus that causes COVID-19 is now on the list of pathogens that cause sepsis. Most patients who are critically ill with COVID-19 develop sepsis, which becomes a major threat to their survival.

Today, the Honourable Filomena Tassi, Minister of Labour, on behalf of the Honourable Patty Hajdu, Minister of Health, announced an investment of \$5.7 million from the Government of Canada, through the Canadian Institutes of Health Research (CIHR), to support Sepsis Canada, a new national research network that will improve the treatment and recovery of sepsis patients. Sepsis Canada brings together 190 clinicians, scientists, and patients representatives across the country.

Led by Dr. Alison Fox-Robichaud at McMaster University and Dr. François Lamontagne at Université de Sherbrooke, Sepsis Canada will track and study treatments for septic patients, and develop a bank of evidence-based tools to educate the public and health care professionals about how to best prevent, diagnose and manage sepsis. The network will also collect data that will give a true understanding of the burden of sepsis in Canada. A recent global report published in the journal *Lancet* estimated that 75,000 cases of sepsis occur in Canada every year, likely causing 18,000 deaths.

Given the association between sepsis and severe COVID-19 infection, many members of the network are participating in COVID-19 research projects funded by CIHR and other agencies.

- Dr. Robert Hancock at the University of British Columbia is developing diagnostic tools to predict the severity of disease in patients with COVID-19 and guide the course of treatment.
- Dr. Margaret Herridge at the University of Toronto is part of team that will collect and analyze
  hospital and ICU admissions data to determine how hospital systems could be better organized
  to care for patients with COVID-19.
- Dr. Kirsten Fiest at the University of Calgary is leading a team that seeks to understand and manage the effects of COVID-19 restricted visitation policies on the families and healthcare providers of critically ill patients.
- Dr. François Lamontagne at Université de Sherbrooke is leading a clinical trial to determine the effectiveness of vitamin C as a treatment for sepsis, including sepsis in COVID-19 patients.

The results of these projects and others will be shared throughout the network and help improve the treatment of patients with severe COVID-19 infection leading to sepsis.



### Quotes

"The importance of understanding how to track and treat sepsis has never been as important as it is now. We are proud to help bring together this impressive group of clinicians, researchers, and patients from across the country. They will collaborate to produce knowledge that will improve the health of Canadians and contribute to a more sustainable health care system."

The Honourable Patty Hajdu

Minister of Health

"McMaster University is home to some of Canada's best researchers. As a researcher and a professor at McMaster and a critical care specialist at Hamilton Health Sciences, Dr. Fox-Robichaud has become a scientific leader and passionate advocate for the sepsis community while continuing to provide exceptional care for people living in our community. By working with her colleagues and partners in this new national initiative, she will improve the lives of many Canadians and their families."

The Honourable Filomena Tassi

Minister of Labour and Member of Parliament for Hamilton West – Ancaster – Dundas

"Sepsis is a serious and complex medical condition that is best addressed using a muti-disciplinary team approach. By bringing together health care workers, researchers, patients and advocates, the CIHR support for Sepsis Canada will help ensure that we find the most effective and enduring approaches to mitigate this critical and long-standing health challenge."

Dr. Brian Rowe

Scientific Director, CIHR Institute of Circulatory and Respiratory Health

"Canadians should be aware that sepsis, the life-threatening response to an infection, is a global health issue and never is this more apparent than during the current pandemic. Our team of scientists, knowledge users, patient and family members and partners are prepared to change the story within our country. We will do this by better understanding the epidemiological and financial burden of sepsis in Canada, by understanding and improving the long-term outcomes of sepsis survivors, by creating a culture of sepsis awareness in Canada, by working to assure standardized practices for sepsis surveillance, detection and prevention, by improving the understanding the complex interactions between predisposing conditions, the infections that cause sepsis and the response to those infections and by discovering new evidence-based cost-effective therapies."

Dr. Alison Fox-Robichaud,

Scientific Director, Sepsis Canada, and Professor, McMaster University

## **Quick Facts**

- Sepsis is a life threatening health condition. It is a serious challenge for patients and health care providers in Canada and globally.
- According to a recent global report published in the journal *Lancet*, an estimated 75,000 cases
  of sepsis occur in Canada every year, likely causing 18,000 deaths.
- The Government of Canada, through the Canadian Institutes of Health Research, is investing \$5.7 million in Sepsis Canada, a new national research network.
- Sepsis Canada will improve the identification, prevention, detection and management of sepsis
  in Canada through coordinated national research activities to generate new knowledge,
  technical and scientific expertise.

### **Related Products**

https://shared-assets.adobe.com/link/658368a4-31b8-4a0b-4e0c-912da223c260

High resolution photos:

- Portrait of Dr. Alison Fox-Robichaud
- Portrait of Dr. François Lamontagne
- Photos of Dr. Alison Fox-Robichaud in a lab at McMaster University

High quality b-roll video footage:

• Dr. Alison Fox-Robichaud in a lab at McMaster University

# **Contacts**

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At the <u>Canadian Institutes of Health Research</u> (CIHR) we know that research has the power to change lives. As Canada's health research investment agency, we collaborate with partners and researchers to support the discoveries and innovations that improve our health and strengthen our health care system.