

INSTITUTE FOR RESEARCH  
IN IMMUNOLOGY  
AND CANCER



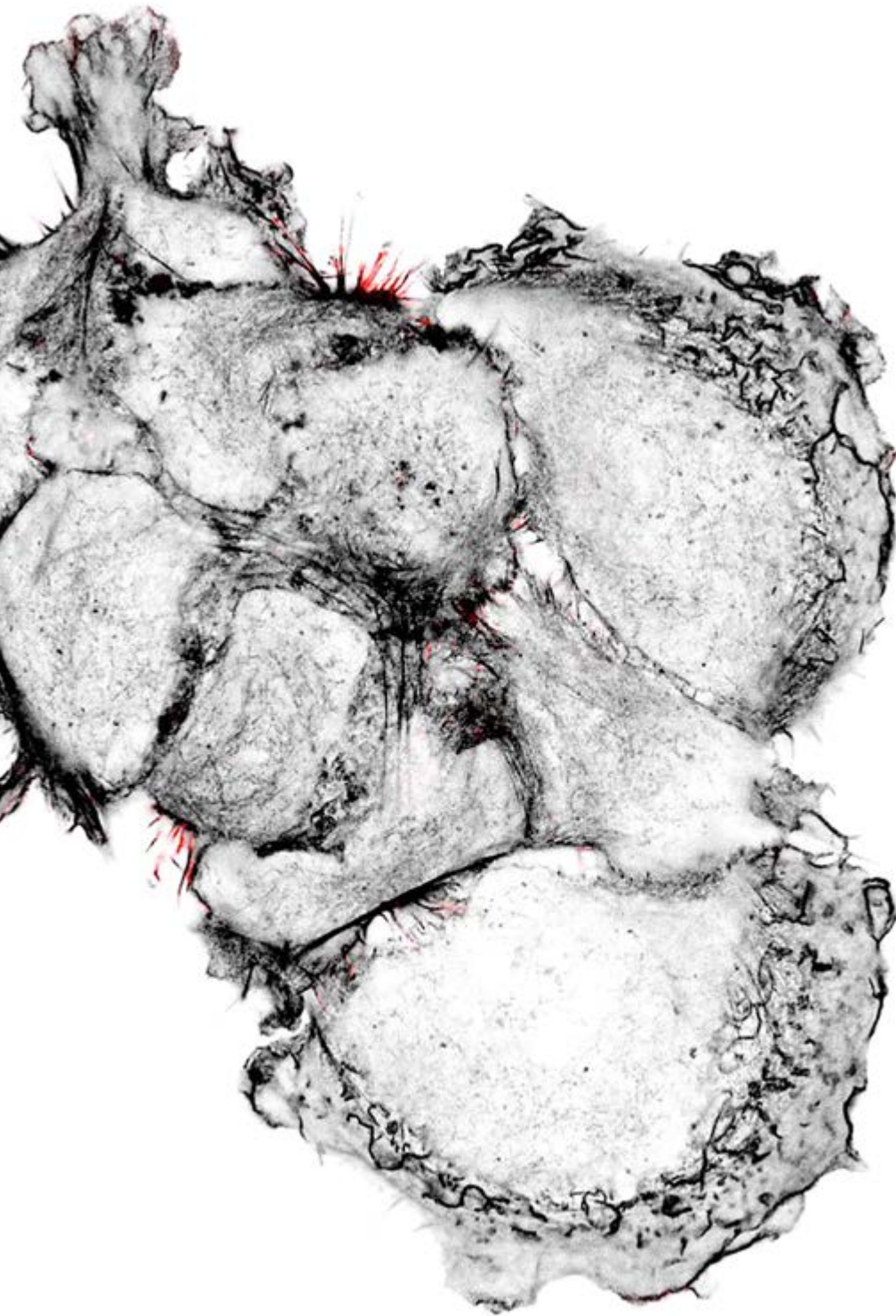
Université   
de Montréal

Press  
Kit



# In Canada:

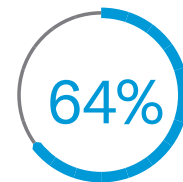
Cancer is the leading cause of death



1 out of 2 people will receive  
a cancer diagnosis during  
their lifetime



1 out of 4 people will die  
from cancer



The cancer survival rate after five  
years is approximately 64%



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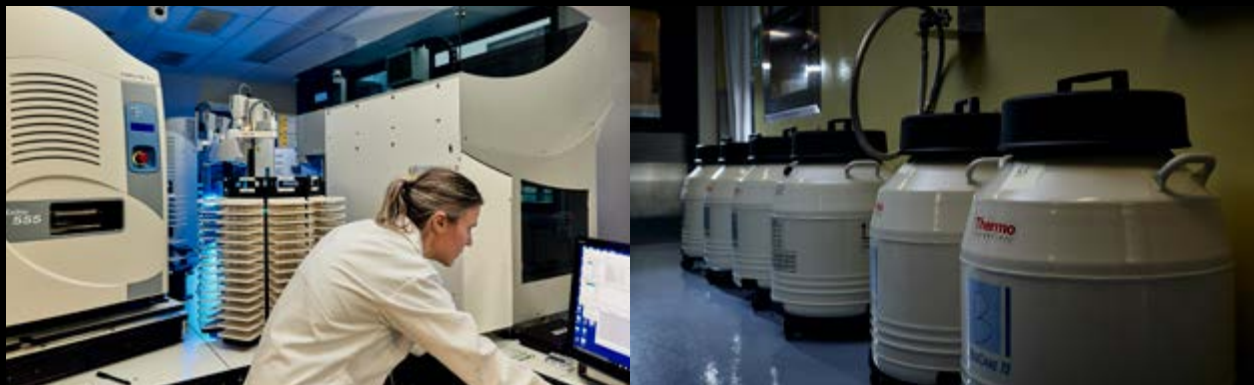
All cancers are the result of genetic alterations in one cell of the body, which render that cell abnormal, leading to a disorderly cell proliferation and tumor formation.

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More than 200 different types of cancers can be caused by a number of mutations producing specific anomalies at the molecular and cell level.

Traditional therapeutic chemotherapy and radiation approaches are non-specific and often accompanied by extremely adverse side effects.

Investigators are working towards acquiring new knowledge to better understand the mechanisms of cancer and to develop personalized therapeutic approaches.



Vision

Be a global standard bearer  
in basic and applied research  
to vanquish cancer



## Threefold mission

### Research

Enabling investigators to better understand and demystify the mechanisms of cancer

### Training

Training tomorrow's scientists

### Valorization

Accelerating the discovery of new drugs and new therapies

**400+**  
dedicated individuals

**60+**  
scientists devoted to drug discovery  
(including medicinal chemists and biologists)

**150+**  
young scientists  
in training annually

**1 000+**  
scientific publications thus far,  
close to 80 per year

**27**  
research  
teams

**1**  
Drug Discovery Unit



**10 Core Facilities serving the  
scientific community**  
(more than 300 user research groups)

- Bio-imaging
- Bioinformatics
- Biophysics/NMR (Nuclear Magnetic Resonance)
- ChemoGenix
- Flux cytometry
- Genomics
- High-Throughput screening
- Histology
- *In vivo* biology
- Proteomics

**Close to \$17.5M  
in research grants**  
(annual average over 3 years)

**Close to \$11.7M in  
industrial research contracts**  
(annual average over 3 years)

Discover our corporate video :



## History of IRIC



Since its creation, IRIC has made giant strides and positioned itself as a leader in the cancer field thanks to many institutional grants and major donations, particularly from our generous philanthropists:

### Donations of \$10M or more

- Fondation Marcelle et Jean Coutu

### Donations of \$1M or more

- Richard and Edith Strauss Foundation
- Fondation Famille Godin
- Fondation Famille Diane et Léon Gosselin
- Fondation Marcel et Rolande Gosselin

To consult the detailed list of institutional grants





## Principal Investigators

IRIC's investigators form a group of elite scientists with multiple expertise, including medicine, genetics, cell biology, molecular biology, immunology, pharmacology, biochemistry, chemistry, physics and informatics.

These 27 luminaries are from Canada, the United States and Europe. Their recruitment was targeted to complement the range of expertise present at the Institute, thus resulting in a multidisciplinary approach to basic research as well as research with a more applied focus, which will have a determining impact on the treatment of the disease.





Vincent Archambault:  
Cell Cycle Regulation  
Arrived in 2009



Katherine Borden:  
Structure and Function of  
the Cell Nucleus  
Arrived in 2004



Delphine Bouilly:  
Design and Application of  
Electronic Nanobiosensors  
Arrived in 2017



Michel Bouvier:  
Molecular Pharmacology  
Arrived in 2005



Sébastien Carréno:  
Cellular Mechanisms of  
Morphogenesis during Mitosis  
and Cell Motility  
Arrived in 2008



Geneviève Deblois:  
Metabolic and Epigenetic  
Alterations in Cancer  
Arrived in 2020



Gregory Emery:  
Vesicular Trafficking and Cell Signalling  
Arrived in 2007



Louis Gaboury:  
Histology and Molecular  
Pathology  
Arrived in 2005



Etienne Gagnon:  
Cancer Immunobiology  
Arrived in 2011



Trang Hoang:  
Hematopoiesis and Leukemia  
Arrived in 2003



David Knapp:  
Cellular Engineering  
Arrived in 2020



Jean-Claude Labbé:  
Cell Division and Differentiation  
Arrived in 2005



Sébastien Lemieux:  
Functional and Structural Bioin-  
formatics  
Arrived in 2005



Julie Lessard:  
Chromatin Structure and Stem  
Cell Biology  
Arrived in 2007



Sylvie Mader:  
Molecular Targeting in Breast  
Cancer Treatment  
Arrived in 2005



François Major:  
RNA Engineering  
Arrived in 2004



Anne Marinier:  
Drug Discovery  
Arrived in 2007



Sylvain Meloche:  
Signalling and Cell Growth  
Arrived in 2003



Philippe Roux :  
Cell Signalling and Proteomics  
Arrived in 2006



Claude Perreault:  
Immunobiology  
Arrived in 2004



Vincent Q. Trinh:  
Digital Histology and  
Advanced Pathology  
Arrived in 2022



Guy Sauvageau:  
Molecular Genetics of Stem Cells  
Arrived in 2003



Matthew Smith:  
Cancer Signalling and  
Structural Biology  
Arrived in 2016



Marc Therrien:  
Intracellular Signalling  
Arrived in 2003



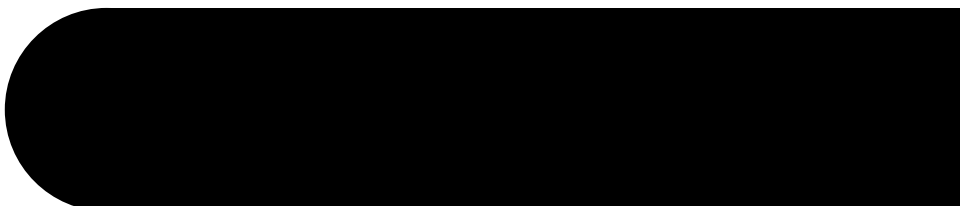
Pierre Thibault:  
Proteomics and  
Mass Spectrometry  
Arrived in 2004



Alain Verreault:  
Chromosome Biogenesis  
Arrived in 2005



Brian Wilhelm:  
High-Throughput Genomics  
Arrived in 2010





## Next generation of scientists

IRIC actively takes part in training the next generation of scientists by offering multidisciplinary training focused on research, personalized monitoring and privileged access to cutting-edge facilities.

## A multitude of programs available

IRIC welcomes Master's and Ph. D. students from various programs of the Faculties of Arts and Sciences, Medicine and Pharmacy of the Université de Montréal.

- Intensive Master's in Molecular Biology (1 year)
- Traditional Master's (2 years)
- Ph. D. (5 years)

### Programs offered

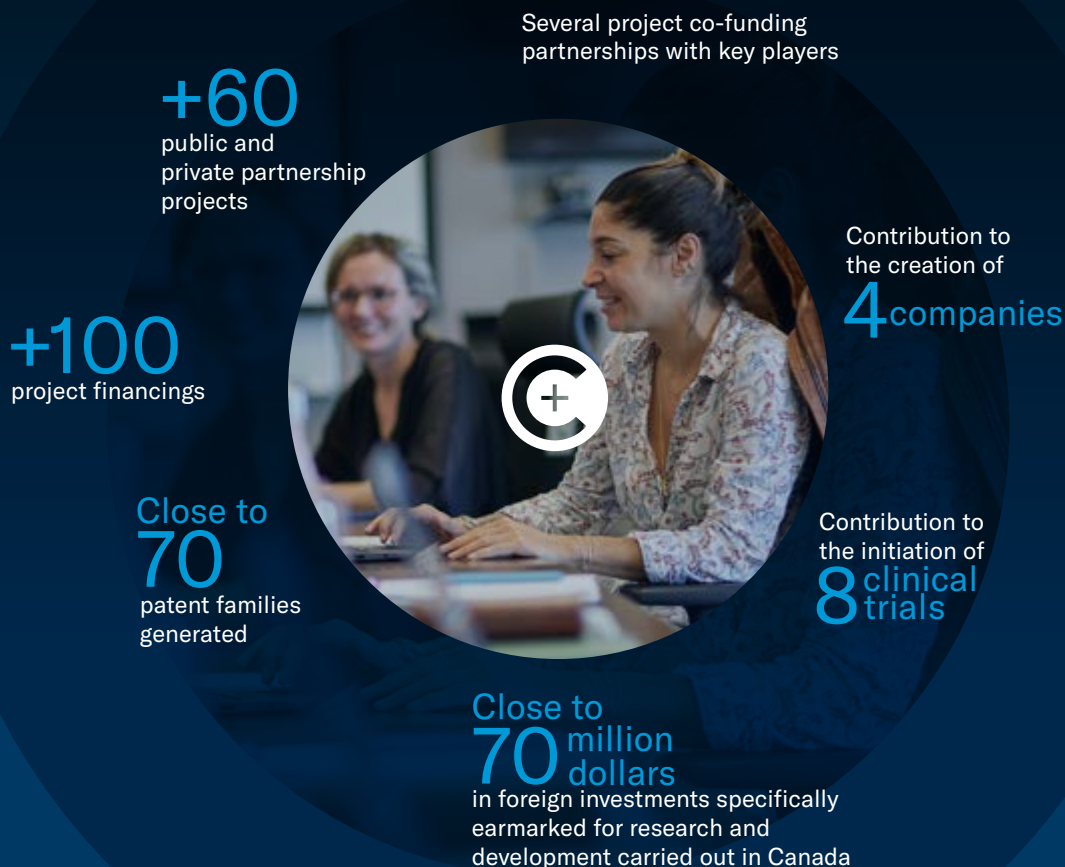
- Bioinformatics
- Biochemistry
- Molecular Biology
- Chemistry
- Biomedical Engineering
- Informatics
- Microbiology and Immunology
- Pathology and Cell Biology
- Pharmacology
- Physics
- Pharmaceutical Science

# IRICoR

IRICoR is a Centre of Excellence in Commercialization and Research, based at the Institute for Research in Immunology and Cancer (IRIC) of the Université de Montréal. IRICoR brings together research in academia and the biopharmaceutical sector in order to accelerate the transformation of drug discovery projects into new therapies, for the benefit of patients.

As a collaboration partner, IRICoR provides a link between stakeholders, improves access to resources and ensures support at all levels.

IRCoR has had many high-impact achievements. Its pan-Canadian activities contribute to its international visibility.



Discover our corporate video:



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Université   
de Montréal

IRIC

## IRIC - UNIVERSITÉ DE MONTRÉAL

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