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%

Photo: Cedric Plutoni
Photos: Christian Brault
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.

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.
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
27 research teams

400+ dedicated individuals

150+ young scientists in training annually

1000+ scientific publications thus far, close to 80 per year

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

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:
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:

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### Donations of $10M or more

- Fondation Marcelle et Jean Coutu

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### Donations of $1M or more

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

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To consult the detailed list of institutional grants
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

Etienne Gagnon: Cancer Immunobiology
Arrived in 2011

Trang Hoang: Hematopoiesis and Leukemia
Arrived in 2003

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

Sébastien Lemieux: Functional and Structural Bioinformatics
Arrived in 2005

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

Michel Bouvier: Molecular Pharmacology
Arrived in 2005

Sébastien Lemieux: Functional and Structural Bioinformatics
Arrived in 2005

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

Louis Gaboury: Histology and Molecular Pathology
Arrived in 2005

David Knapp: Cellular Engineering
Arrived in 2020

Photos: Justine Latour
François Major: RNA Engineering
Arrived in 2004

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

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
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)

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

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

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