The Lung Cancer Network: Collaborate to Cure

McGill

Centre de recherche sur le cancer
Rosalind & Morris Goodman
Cancer Research Centre

A massive challenge like lung cancer can only be effectively battled by bringing together the greatest minds, big data, the best technology and the highest quality research in a networked model without silos.

Our vision

We envision a **Lung Cancer Network** that brings together local clinical and research institutions dedicated to treating this disease. Each of the collaborating institutions has a unique and privileged role in this mission. Through collaboration, we are able to **leverage knowledge, expertise, resources and strategies, and multiply successes**. A first in Montreal, this initiative is poised to be a best in class case in Canada, indeed, the world.

The Lung Cancer Network will:

_ **facilitate collaboration** among basic and clinician scientists, clinicians and patients leading to new approaches to understand lung cancer in the non-smoking population;

_ **improve prevention, diagnosis and treatments** for lung cancer;

_ become **one of the premier lung oncology networks** with local, national and international partnerships;

Through our collaborative efforts, we aim to **double the number of survivors** over the next 10 years.

Why lung cancer?

_ Despite being the **leading cause of cancer death worldwide**, lung cancer is still underfunded and understudied.

_ In 2017, some 28,600 men and women will have been diagnosed and 21,000 men and women will have died from lung cancer in Canada.

_ The current investment in lung cancer research is the lowest relative to the number of cancer diagnoses and deaths.

_ The low investment in research is correlated to the heavy stigma around the disease. We know that ~15% of lung cancer patients have never smoked and 50% stopped smoking prior to diagnosis, in some cases decades earlier.

_ Low funding of lung cancer research also results from the fact that **there are few lung cancer survivors** and, hence, few advocates for lung cancer research.

Collaboration

The **Goodman Cancer Research Centre** exists at the core of an emerging lung cancer network based in Montreal. The GCRC focuses on delivering research outcomes supported by advanced technological platforms and highly trained research professionals. Its goal is to improve our understanding of lung cancer, which in turn will lead to new therapeutic strategies and improved patient outcomes.

The GCRC is under the direction of **Morag Park, Ph.D.**
Director Rosalind & Morris Goodman Cancer Research Centre
Diane and Sal Guerrera Chair in Cancer Genetics
James McGill Professor

The key GCRC scientists are:

Logan Walsh | Expert in genomic and immune changes in lung cancer and new therapeutic targets for lung cancer.

Sidong Huang | Expert in understanding mechanisms to overcome resistance to therapy.

William Muller and David Dankort | Experts in novel pre-clinical animal models of lung cancer.
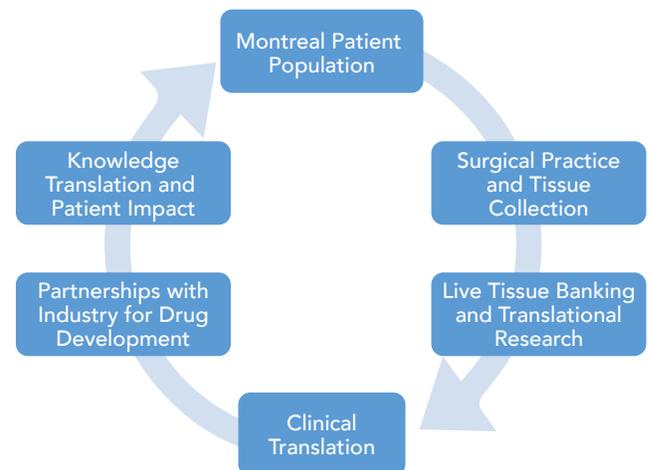
The network's core activities include state-of-the-art diagnosis and treatment, specialized diagnostic tests, cutting-edge translational research in lung cancer treatment and expanding the cancer biorepository, as well as crucial clinical trial networks and metrics centered on improving outcomes.

When you Collaborate to Cure, your gift helps support advancements that benefit the entire Lung Cancer Network.

$1M

Immune Phenotyping platforms

A new technology to study immune cells in lung cancer, needed for researchers to understand why some patients respond to immunotherapies and others do not. The GCRC will be the only centre in Canada with this technology dedicated to cancer research and it will be available to be used by all institutions in the network.

$700K

Imaging platform

This is an animal MRI, to be located at the GCRC, which will make it possible to image lung cancer growth in preclinical models.

$600K

Human lung cancer preclinical model platform

This core is needed to develop human preclinical models of lung cancers, which will be developed for use in automated experiments to identify new drugs for lung cancers using platforms at GCRC and IRIC. This gift supports two years of costs for developing and testing patients' lung cancers for response to therapies.

$500K

Lung cancer metabolomics platform

New technology to identify lung cancer cell growth dependencies. This research will lead to clinical trials using new imaging modalities.

$200K
yr./5 years

Talent attraction and recruitment

The research pursued by investigators in the GCRC is driven, in large part, by passionate, talented and dedicated graduate students and post-doctoral fellows. Given the highly competitive landscape for talent, it is crucial that we attract and retain the next generation of biomedical researchers to the Centre. This gift supports studentships and fellowships.

$100K

Interdisciplinary Research Projects

The Centre's vision is to forge new and exciting collaborations with other research disciplines. The GCRC and the prospective local, national or international partners will contribute collaborating investigators.

$25K

Signature Series Seminars

Exclusive seminars featuring the highest calibre of provincial, national and international speakers. Invitees will meet with GCRC scientists and trainees, give a seminar on their work and be taken to dinner with scientists from the Centre. 10 guest speakers per year.

$10K

Connect and Exchange Series

A seminar series designed to promote the exchange of ideas and report scientific findings amongst scientists within the Centre. These events are crucial for fostering cohesion and collaboration within the GCRC.

$10K

The Cancer Care Continuum and You

The GCRC plays a crucial role in promoting and educating the public about basic biomedical research and its impact on the lives of patients and their families on the cancer care continuum.