

Ottawa Hospital Research Institute

OHRI



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Institut de recherche de l'Hôpital d'Ottawa

Tomorrow's Health Care Today

Ottawa Hospital
Research Institute

Strategic Directions

2011-2014

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Dr. Duncan Stewart leads the OHRI while running a regenerative medicine laboratory and treating patients with heart and lung disorders.



The OHRI is the research arm of The Ottawa Hospital and is also affiliated with the University of Ottawa. With more than 1,500 scientists, clinical investigators, trainees and staff, and total revenues in excess of \$100 million, OHRI is one of the foremost hospital-based research institutes in Canada.

Message from the CEO

I came to Ottawa in 2007 because I recognized the unique opportunity that existed for the Ottawa Hospital Research Institute (OHRI) to be a world leader in turning exciting research into tangible benefits for patients. Like many other research institutes, we were making important discoveries about human health and disease, but at OHRI we were also taking this to the next level, and translating our findings into new treatments and better approaches for delivering health care.

Over the last few years, we've built on this success, with many examples of research at OHRI improving care for patients at The Ottawa Hospital and around the world. Our new strategic directions, presented here, are designed to take us even further. Our new vision and strategic research priorities are aimed at encouraging our researchers to take their discoveries from the bench to the bedside and from evidence into practice. Our finance, facilities and training plans will make sure they have the tools and support to do so.

I would like to thank everyone who contributed to the development of our strategic directions, including our scientists, our board members and our partner organizations, especially The Ottawa Hospital and the University of Ottawa and its Faculty of Medicine. As we move forward, I believe we can be leaders together in making ground-breaking discoveries, providing world-class care and training the next generation of scientists and health professionals.

Dr. Duncan Stewart
CEO & Scientific Director, Ottawa Hospital Research Institute
Vice-President, Research, The Ottawa Hospital
Professor of Medicine, University of Ottawa

Vision

OHRI's vision is **to give our patients and their loved ones new hope through research that is making tomorrow's health care possible today.**

This vision expresses our commitment to research that is focused on patients and inspired by patients. It draws on the compassion and dedication displayed every day at OHRI, by researchers who know that every question they answer and every problem they solve could eventually impact many people, including their loved ones.

Our new vision is closely aligned with The Ottawa Hospital's vision, which is "To provide each patient with the world-class care, exceptional service and compassion we would want for our loved ones". It also fits well with the University of Ottawa's inspiring goal of being "Canada's University" and a destination school for research.

Strategic research priorities

Research at OHRI is focused on answering important health questions and translating new findings into benefits for patients and society. We have had

particular success in this translational aspect of health research, with several innovative therapies developed in-house now showing promise in clinical trials, and many examples of OHRI-led studies transforming health care around the world. To capitalize on this success and guide further translational research efforts, we have developed the following two strategic research priorities:

- **Regenerative and Biological Therapeutics**

This priority is designed to foster bench to bedside research – turning basic discoveries in cellular and molecular biology into new regenerative and biological therapeutics to improve health. Examples of our success in this area include stem cell therapies for cardiovascular disease and multiple sclerosis and oncolytic virus therapies for cancer.

- **Practice-Changing Research**

This priority is designed to put knowledge to work – performing high quality clinical research that can inform health decisions and ensuring that results are optimally applied to improve health. We have developed a unique Ottawa Methods Centre to enable practice-changing research, and we are known around the world for our expertise in underlying research areas such as knowledge translation, clinical decision rules and patient decision aids.

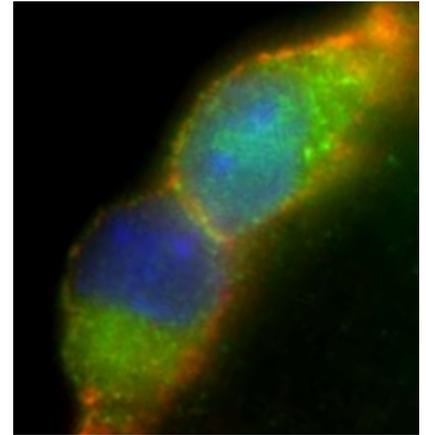
These strategic research priorities are designed to cut across our existing research programs and foster collaboration and the translation of research findings into practical applications. They are also aligned with external funding opportunities and with areas of strength at our partner institutions.

In addition to these strategic research priorities, we have adopted **Vascular Health** as a strategic research theme. Increasing evidence suggests that our vascular (blood vessel) system may be at the root of some of the most common chronic diseases that affect the heart, brain, kidneys, lungs and eyes. With an integrated approach to vascular health, our researchers will be able to develop new therapies and better ways of managing some of the most pressing health challenges affecting Canadians.

Key success factors

To support our new vision and strategic research priorities, we are aligning our activities with the following key success factors:

- Excellence in our priority research areas, as measured by international standards.
- Recruitment and retention of outstanding scientists, students and staff in our priority research areas.
- A research-conducive environment where research is valued and supported.
- Financial stability to support the scientific enterprise for the long term.
- Integration with The Ottawa Hospital and the University of Ottawa for innovative health care and research training.
- Knowledge transfer and commercialization of results for the benefit of Canadians.
- Excellence in training the next generation of health researchers.



OHRI researchers are deciphering the secrets of stem cells (shown above) to develop new therapies to regenerate and repair damaged organs. Photo courtesy of Fabien Le Grand.



Members of OHRI's Ottawa Methods Centre help clinicians translate their ideas for improving care into rigorous research studies that have the potential to change medical practice.



OHRI recently opened a new Centre for Innovative Cancer Research on the third floor of The Ottawa Hospital's new Cancer Centre expansion. The facility is designed to reduce the time it takes to translate laboratory discoveries into new therapies for patients.



The Centre for Practice-Changing Research will consolidate our clinical and knowledge translation researchers onto one floor and facilitate the transfer of research knowledge into clinical practice.

Building world-class research facilities

OHRI is in the midst of the largest expansion in its history, thanks to two major grants from the Canada Foundation for Innovation's Research Hospital Fund.

The Translation of Innovation into Medical Excellence (TIMEx) grant is a partnership between The Ottawa Hospital, CHEO, the University of Ottawa Heart Institute, the University of Ottawa and the Heart and Stroke Foundation Centre for Stroke Recovery. It is primarily geared towards developing new therapies and health technologies. The Knowledge Translation Canada (KT Canada) grant is a partnership between six research centres that is aimed at getting research evidence into clinical practice. With additional support from The Ottawa Hospital and the community, these grants are expected to generate nearly \$90M for new state-of-the-art facilities and equipment over the next few years.

The new facilities will include laboratories for cancer, regenerative medicine and neuroscience research, as well as a new building to consolidate our clinical and knowledge translation researchers. Specialized equipment will allow researchers to perform advanced studies on the molecular biology of disease, while also manufacturing and testing new therapies under clean room conditions.

Researchers throughout OHRI and at our partner institutions will have access to this new equipment through a Shared Core Facilities Initiative.

Attracting and supporting top talent

The OHRI is composed of an outstanding group of researchers, including world renowned scientists and investigators, innovative graduate students and postdoctoral fellows, and dedicated research and support staff.

We plan to recruit and retain top talent by working with the University of Ottawa and The Ottawa Hospital to provide exceptional facilities and services, unique programs for learning and collaboration, and competitive salary support. Examples include:

- Our **Ottawa Methods Centre**, which helps clinicians translate their ideas for improving care into rigorous research studies that have the potential to change medical practice.
- Our **Translational Research Observership Program**, which allows basic science trainees to shadow clinicians who are treating patients in their area of research. Clinicians also have the opportunity to gain training in basic science.
- Our many opportunities for **scientific and social interaction**, including the annual OHRI Research Day, the annual OHRI Scientist Retreat, several weekly seminar series' and many social events.

- Our commitment to providing **matching funds** for infrastructure grants and salary awards for scientists and trainees.
- Our streamlined **researcher-focused administrative services**, which make it easy for scientists to prepare and manage grants, hire staff, explore commercialization options, launch clinical studies and communicate results to the public. Our web-based Integrated Research Information System speeds up many administrative tasks, allowing researchers to focus on research.
- Our location in Ottawa, the capital of Canada and **one of the world's most beautiful and livable cities**.

We plan to expand and promote these and other unique OHRI features to facilitate recruitment and retention of exceptional researchers.

In particular, we aim to attract a number of outstanding new scientists in our priority research areas over the next few years. Scientists serve as our core team leaders in both basic and clinical research. The planned recruitments will likely be balanced by retirements so that our total number of scientists will stay close to the current level of just over 100.

In addition to our scientists, OHRI also includes more than 300 investigators who maintain significant clinical practices, while also devoting substantial time to research. Over the next few years, we anticipate that this group will grow by 5-10%.

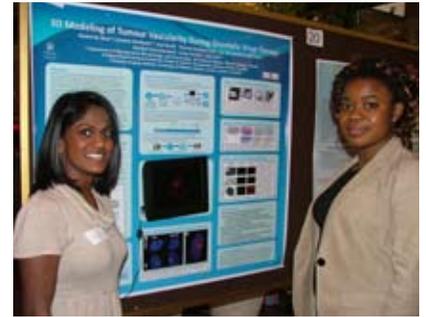
Trainees also play a crucial role within the Institute, as they conduct much of the hands-on laboratory research and come up with many innovative ideas. OHRI currently has nearly 400 trainees, including graduate students, postdoctoral fellows, undergraduates, summer students and volunteers. In partnership with the University of Ottawa, we aim to increase the number of trainees at the Institute and facilitate the recruitment of high quality trainees from around the world.

Research and support staff form the largest group of OHRI employees, numbering approximately 700. These staff have highly specialized skills in areas such as laboratory research, clinical trials and research administration. We will continue to try to attract top research and support staff, with the amount of growth determined by our growth in peer-reviewed funding.

Funding our research

As with other research institutes, scientists and investigators at OHRI are responsible for securing external funding for their research activities, while the Institute is responsible for funding scientist salaries, facilities and core services such as training, financial administration, information systems and commercialization.

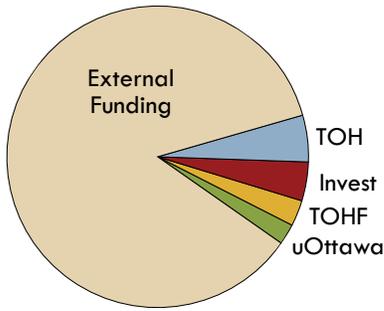
Top sources of external funding include peer-reviewed government granting agencies such as the Canadian Institutes of Health Research, the Canada Foundation for Innovation and the Ontario Ministry of Research and Innovation. Health charities such as the Heart and Stroke Foundation of Ontario are also a major source of peer-reviewed research grants.



OHRI's Annual Research Day provides a unique opportunity for trainees to share results, develop collaborations and practice presentation skills. Held at a top conference facility, the event typically features more than 120 posters and platform presentations.



Ottawa is a great place to live as well as research. The Rideau Canal provides the world's longest outdoor skating rink in the winter, and is lined with recreational trails for use throughout the year. Photo courtesy of the Fairmont Château Laurier.



OHRI had revenues of \$104.9M in 2009-10, with 86% of funding coming from external grants, contracts and salary awards. Other sources of funding include: The Ottawa Hospital (TOH, 5%), Investment income (4%), The Ottawa Hospital Foundation (TOHF, 3%) and the University of Ottawa (2%).



The Ottawa Hospital Foundation's 100 km Ride the Rideau event is a crucial fundraiser for research at OHRI. Dozens of our researchers participated and many more volunteered and donated.



Visit www.ohri.ca for more information.

Some government grants come with additional funding to support the base budget of the Institute, but the Institute is responsible for making up the difference through fundraising, overhead on contracts, licensing fees, interest on grant funds and partner support. Partner support comes in the form of parking and other ancillary fees from The Ottawa Hospital, as well as matching funds from the University of Ottawa for research chairs and awards. Fundraising is done through The Ottawa Hospital Foundation.

Like almost all other organizations, OHRI was affected by the recent economic downturn, but our success in grant competitions helped us weather the worst of the storm, and in fact, we passed the \$100M mark in our revenues for the first time in 2009-10. We also became the #4 research institute in the country for funding from the Canadian Institutes of Health Research.

While this is a challenging time from a financial perspective, the pieces are in place for a bright future over the long term. In recent years, The Ottawa Hospital Foundation has focused on raising the matching funds for our large research infrastructure grants, but now that this is nearly complete, the Foundation will be able to direct more support towards the non-capital portion of our activities, which puts us on a solid financial footing following the challenges of the recent economic downturn. New research-focused fundraising events such as Ride the Rideau should also help us broaden our investments in research over the long term.

The Institute is also well-positioned to take advantage of trends in external funding, with strategic research priorities that are closely aligned with the priorities of our major funding sources. We are also continuing to work with others in the health research sector to ensure stable, balanced government health research funding in Ontario and across the country.

Looking to the future

OHRI is one of Canada's foremost hospital-based research institutes, with an ambitious vision and a solid record of translating research into benefits for patients. Our goal is to be a leading translational health research centre, not only for Canada, but for the world. As we work towards this goal, we will make new therapies and better treatment approaches available to patients at The Ottawa Hospital and beyond, while also training the next generation of scientists and health professionals, in partnership with the University of Ottawa.

For more information

Please visit the OHRI website (www.ohri.ca) for more information on our strategic research priorities and research programs. Career and training opportunities are also posted online, along with corporate details including a complete list of our Board of Directors and Senior Management Team.