# 2013/2014 Annual Report

IVEY INTERNATIONAL CENTRE FOR HEALTH INNOVATION





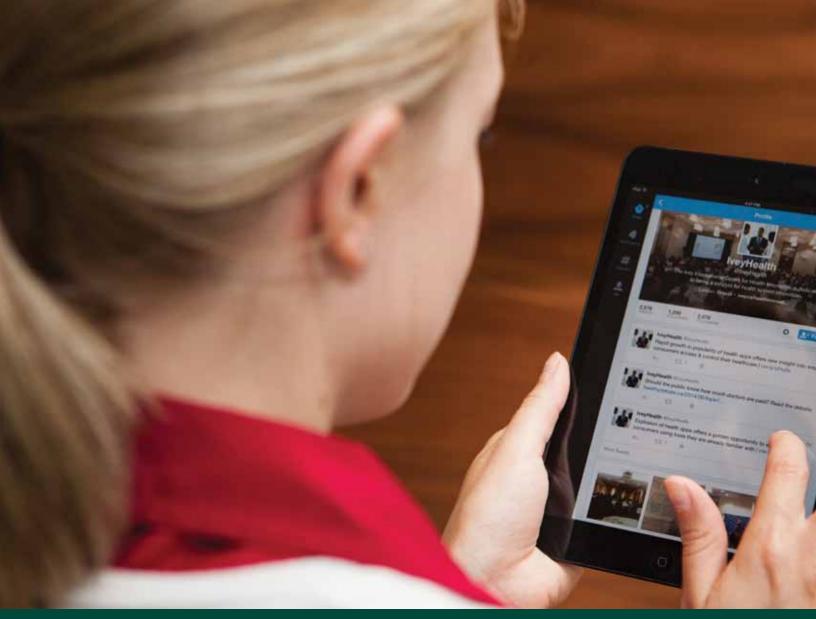
Western University) "Through a mix of its global partnerships, forwardthinking leadership and strength in research and education, the Ivey International Centre for Health Innovation at Western University continues to contribute meaningfully to the transformation of health systems in Canada and on the world stage" ~ Dr. Amit Chakma (President & Vice-Chancellor, Western University) "The Centre brings a neutral and objective lens to Deputy Minister, BC Ministry of Health "The Centre brings forth the unique perspectives of various stakeholders, including clinicians, policy makers, industry and research, that challenges the norm in innovation adoption. These collaborative approaches are required to affect change in healthcare globally." ~ Dr. Paul Walker, President and CEO Spectral Diagnostics Inc. ~ Ms. Dale Weil, Senior Advisor to the President, McKesson Canada"Ivey's Health Sector MBA goes beyond the basics of the Canadian health system. On a daily basis, we were put in the role of healthcare leaders tasked with making improving processes, technologies, and services, in order to build bottor organizations improve nations outcomes and reduce healthcare

# Who We Are

We bring together entrepreneurs, clinicians, researchers and policy makers to address the challenges in the health sector and support the growth of the Canadian economy through innovation adoption.

# What We Do

We identify, assess, commercialize, and drive the adoption of innovative health technologies, systems, and processes that will make real change for healthcare providers, patients, and the healthcare system.



# A look back: Reflecting on our achievements



\$5 million grant from Industry Canada marks the inauguration of the Centre



novation Takes Leadership

Launch of first research project, an electronic cognitive screening test Graduation of the first class of the MBA Health Sector Stream



2009

2010

2011

First annual Ivey Global Health Innovation

Conference



Rel Wh Inn Tak Lea

Release of first
White Paper
Innovation
Takes
Leadership



Invited to present at the *Biopharmaceutical Conference* in Cannes, France, launching the Centre's global presence in the bio-pharma sector.



#### Inside The Ivey International Centre for Health Innovation Annual Report

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#### Reflections & Foreword

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Our Community

# over five years



Partnered with B'nai Brith to create a *Living Laboratory* to examine and test innovative
technologies and approaches that provide support
to Alzheimer's patients and care providers



The Centre celebrates the five-year anniversary of its inception

2012

2013

2014



The findings and recommendations from the Centre's 5th White Paper, Strengthening Health Systems Through Innovation: Lessons Learned profiled by CBC outlets across the country



Launch of Colour Outside the Lines: Reverse Innovation Challenge, which invited students to submit innovations from emerging markets that have the potential to improve Canada's health systems



# A Message From the Academic Chair

This year marks the five-year anniversary of the Centre, a pivotal point in the history of our organization. While this hallmark presents the opportunity to look back and reflect upon all we have achieved, it is also a critical time to set the path forward.

Our journey to innovation adoption has spanned from consumer engagement to system-level conditions that enable and drive change. We began our journey by recognizing that "Innovation Takes Leadership" and requires leaders to act as change agents within their organizations. Along the way we have been developing the conditions for change, whether through policy recommendations or evaluations of provincial strategies, to ensure that innovations can be successfully adopted and scaled across the country. We have collaborated with industry, government,

healthcare providers and academia to drive adoption. I take pride in our multidisciplinary hands-on approach to train current and future entrepreneurs and health system leaders.

We challenged Canadians to think about innovation differently through our Colour Outside the Lines: Reverse Innovation Challenge. It brought together partners from across sectors, all of whom share the common goal of fostering a culture of innovation within the Canadian market. The Challenge urged us look beyond our borders for novel solutions to healthcare challenges, ultimately with the goal to select one innovation from the developing world and test the innovation in Canada. From the submissions, one winner emerged and we are excited to test the concept by adopting the innovation into the Canadian healthcare setting.

This past winter, we launched our seventh white paper "It's All About Me: The Personalization of Health Systems". It identified 10 steps that health systems can take to personalize their structures. services and care delivery models to healthcare consumers. The success of achieving a personalized health system will depend on sectors' ability to implement these steps. We look forward to continuing to challenge the thinking and create a dialogue that drives change in global health systems.

As we look to the next five years, we have our eyes set on impact as leaders in health systems innovation adoption. Our work will focus on supporting the personalization of health systems through the adoption of mobile and digital tools, and will continue to identify health system processes and



#### A Year in Review



Launch of Rise London, a collaborative partnership providing a path to self-employment for people with mental health and addiction challenges



The Hon. Deb Matthews, Minister of Health and Long-Term Care announces the Ontario Health Innovation Council. Dr. Anne Snowdon and the Centre's **Advisory Council Members** Mr. Neil Fraser, Dr. Rafi Hofstein and Ms. Shirlee Sharkey invited to be members.



Hosted the annual Ivey Global Health Conference on Reverse Innovation in Health

tools to support these changes. Through the expansion of global partnerships and projects we are confident that the work we have started will continue to grow and scale in different markets. Building on our strengths of promoting multi-disciplinary, crosssectoral innovation adoption, we continue down the path we forged five years ago.

We recognize that while we have accomplished much, the road to innovation adoption in Canada is long. Along the way we are guided by partner organizations and collaborators in innovation who serve as beacons of light, as we all recognize that change does not occur in isolation. As our capabilities, partnerships and possibilities grow, I look forward to seeing all that we accomplish in the next phase of our journey.



Announcement of the winning submission to the Centre's Reverse Innovation Challenge, 3nethra: A non-mydriatic eye



Launch of the Centre's Thought Paper, It's All About Me: The Personalization of Health Systems

and W. Snowb



### A Message from the Advisory Council Chair

Over the past five years, I have witnessed first-hand how the International Centre for Health Innovation has grown and continually evolved. The Centre was founded on the idea that there is a gap between Canada's wealth of knowledge and the uptake of this knowledge to improve our health systems.

As a Canadian leader committed to ensuring a strong medical devices and health sector in the country, I have seen how this innovation gap can stop progress in its tracks. As the Chair of the Centre's Advisory Council since its inception, I have also seen how this gap can be overcome.

By operating at the intersection of government, business, academia, and the health sector, the Centre's projects bridge the gap between ideas on paper and tangible results on the ground. This important work must continue into the future.

The Centre's approach to addressing this gap also relies on developing leaders to champion the adoption of innovation going forward. Leadership means bringing life to ideas, rather than just articulating them. By providing our students with hands-on learning opportunities at the undergraduate, graduate and executive levels, we ensure that current and future leaders have the skills they need to promote innovation. I have had the privilege of meeting and supporting future healthcare leaders at Ivey, and as a member of industry I am confident in the human resources pipeline developed by the Centre. As a Canadian, I am excited about how these future leaders will transform our health systems.

"By operating at the intersection of government, business, academia, and the health sector, the Centre's projects bridge the gap between ideas on paper and tangible results on the ground. This important work must continue into the future."

The accomplishments of the Centre are made possible by putting collaboration at the heart of everything we do. Our Advisory Council brings together leaders with diverse backgrounds spanning industry and the health sector. As a Centre of the Ivey Business School, our partnership with research brings academic rigor to our work. Our collaboration with government organizations and the health sector allows us to test new innovations in various health settings. Finally, this year we have looked beyond our borders for innovative healthcare solutions through the Reverse Innovation Challenge, which was made possible by teams of students and support from industry partners. We learned early on that innovation takes collaboration, and I look forward to the new and exciting partnerships the Centre will forge going forward.

The Centre has come a long way in a short time, however the past five years have been just the beginning of a longer journey. By moving forward on the path of collaboration, learning, and innovation, the Centre will continue to improve healthcare for Canadians.

### A Message from the Executive Director

We have celebrated significant milestones over the past five years that have positioned the Centre as a leader in health innovation. The Centre has built a dynamic model of innovation adoption through the development and evolution of our three core lines of business: Research, Education and Thought Leadership. This work has resulted in significant achievements and impact to date including the more than \$1.2 million of financing received by our partners as a direct outcome of our collaboration.

A key component of our success lies in developing meaningful collaborations with a diverse network of national and global partners. The Centre's work focuses on partnering with innovative organizations to support and drive the adoption of products, technologies and devices in Canadian health systems. These collaborations have already led to 19 health demonstration projects across five Canadian provinces. Beyond these existing projects, the Centre's national reputation as a nexus for health innovation has created a wealth of opportunities going forward.

To build Canada's pipeline of health leaders, the Centre has created and implemented health innovation education and leadership programs. These programs are delivered through a variety of ways, including interdisciplinary university undergraduate and graduate classes, executive



development programs embedded within partner organizations, presentations for health system leaders and online webinars reaching stakeholders across the country. To date we have trained, educated and supported over 4400 individuals in health innovation. Our alumni are assuming leadership positions in industry, business, government and health systems, where they are leveraging their learning from the Centre to lead the implementation of new innovations that create value.

The Centre has led the way in knowledge creation to inform our peers in health innovation. The Centre's thought leadership has achieved significant reach and our work has been featured on every major media outlet across Canada. The Centre has held numerous conferences and symposia, published Ivey business cases, developed white papers and

contributed to the debate through social media, blogs and traditional media. Our Reverse Innovation Challenge has drawn international attention, including that of the World Health Organization, and has created opportunities for global collaboration.

As the only Centre of its kind, the International Centre for Health Innovation has become a key voice in the health innovation landscape. The astounding pace at which the Centre has developed its projects, education and thought leadership is testament to the commitment of our partners, networks, and team – all of whom share the same passion for improving our health system and driving economic growth. At this juncture, there is an even greater opportunity to leverage our assets and work with our peers to transform our health system for todays and future generations.



"The Ivey International Centre for Health Innovation is committed to understanding innovation in the health sector and to applying that knowledge in healthcare settings. By operating at the intersection of academia and practice, the Centre champions innovative approaches to solving complex healthcare challenges."

**Dr. Robert Kennedy**Dean, Ivey Business School,
Western University

"Through a mix of its global partnerships, forward-thinking leadership and strength in research and education, the Ivey International Centre for Health Innovation at Western University continues to contribute meaningfully to the transformation of health systems in Canada and on the world stage."

Dr. Amit Chakma President & Vice-Chancellor. Western University



# Research

# Health Innovation Projects:

We strive to accelerate the adoption of innovative technologies, products, systems, and devices in health systems

Through collaborative partnerships between governments and policy makers, industry partners, clinicians, health leaders, researchers, and academia, we accelerate the adoption of innovative technologies, products, systems, and devices in health systems with the goal of achieving value for health systems and patients.

Our process starts by identifying innovations that add value at the system level. Then, we bring together partners to create an innovation project. We place an interdisciplinary team of researchers on the project, who work in a living lab or live environment to test, evaluate, and assess the innovation. Finally, we disseminate the knowledge from our research projects to promote the adoption of innovations globally. The following pages provide an overview of our research projects.

#### The impact of our work on our project partners

The Evidence Network measured the direct and indirect impacts of the Centre's work on our partner's resources, capabilities and performance. Here are the results:

\$1.2

In financing received by the partners was attributed directly to the Centre

\$352.5

Total revenues attributed directly to the Centre

100 per cent

Of partners anticipate the Centre will have a positive impact on their ability to introduce new products, processes, or services to the market in the next 3 years

\*Impact assessment conducted in December 2013

# A Snapshot of the Centre's Research Portfolio







Implementing Multiple Technologies at the Alzheimer's Centre of Excellence to Innovate in Dementia Care



Investigating the use of Wireless Infection Control Management System to improve patient safety



Evaluating a Virtual Care Management Program for Patients with Chronic Heart



Developing an Expanded Pharmacy Care Health and Wellness Approaches in the Retail Environment



Excellence's Long-term Ventilation strategy











Developing an Innovative Youth Mental Health Strategy in Canada



Bringing a Reverse Innovation to Canada Through the Reverse Innovation Challenge



Investigating the Use of Sensors for Non-Intrusive Monitoring for Situational Awareness and Fall Risk Reduction



Assessing the Impact of an Electronic Patient Tracking Board on Organizational Performance



#### What our project partners have to say:

• "The Centre brings a neutral and objective lens to evaluating the BC Innovation Strategy. Our provincial partners appreciate being engaged in an open dialogue."

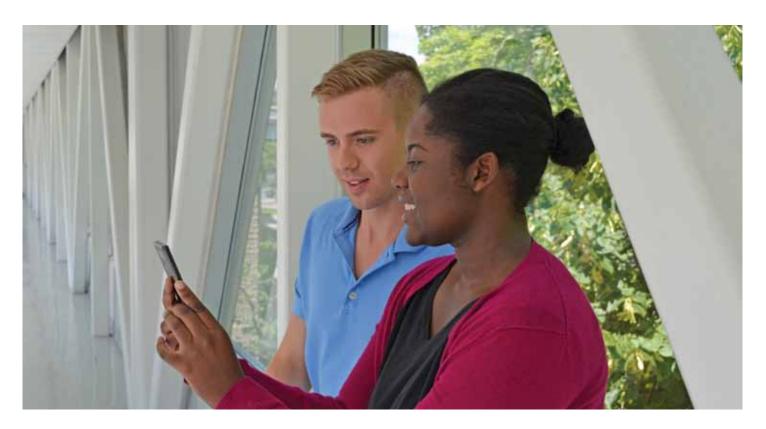
Ms. Heather Davidson, Assistant Deputy Minister, **B.C. Ministry of Health** 

• "The Centre brings forth the unique perspectives of various stakeholders, including clinicians, policy makers, industry and research, that challenges the norm in innovation adoption. These collaborative approaches are required to affect change in healthcare globally."

Dr. Paul Walker. President and CEO, **Spectral Diagnostics Inc.** 

• "We have partnered with the Centre to demonstrate and assess the value of innovation on the ground in healthcare settings. This type of research is imperative to help bring together industry and the health sector to support the adoption of new innovations that will improve healthcare for Canadians."

Ms. Dale Weil, Senior Advisor to the President. **McKesson Canada** 



### A Closer Look at Two of Our Projects

Models and Strategies for a Smart Mobile Mental Health System

"Smart" technologies are rapidly expanding the capacity for innovation tools to increase the access, integration, quality and efficiency of health care and social care services globally and in Canada. This project will investigate how technology-enabled innovations can be utilized in order to build a vision for a more integrated and collaborative mental health system in Canada for both adults and youth. The project is divided into three phases: Phases One and Two will focus on developing the vision and designing alternative models of care; while Phase Three will focus on defining system enablers and developing a roadmap for Ontario to transition to one or more of the "smart" mental health system models for adults and youth. This is the first ever exploration of a "smart" mental health system redesign of this scope and scale in Canada. The project has significant potential value to our health care system as the smart models will be designed based on demonstrability to offer highly effective, efficient, and patient-centered approaches to adult and youth mental health care in communities.

Provincial Innovation Strategy: Assessing the Impact of the Innovation and Change Agenda

Like many provinces in Canada, B.C's population is aging. Seniors currently make up one sixth of the total population and this is projected to increase over the coming years. In 2010, the British Columbia Ministry of Health implemented the Innovation and Change Agenda which was designed to "help people stay healthy and live active lives, to provide networks of services in communities that best manage changing health care needs and to ensure high quality hospital care for those that need it". The Centre is examining the impact of the Innovation and Change Agenda on the provincial health system and the health service delivery system. Ultimately, this project will establish a comprehensive strategy evaluation, informed by and developed through consultation with key stakeholders. Recommendations for means of catalyzing provincial innovation at the health system level, including future opportunities to strengthen B.C's innovation strategy, will be identified.



# Education

# Developing the Healthcare Leaders of Tomorrow:

# We build Canada's human capital of leaders trained in health innovation

Transforming the health system of tomorrow requires developing the young leaders of today. Gone are the days where medicine and management can operate in separate silos, and the Centre's approach to education reflects the collaborative and multi-disciplinary approaches required to address health system challenges. That's why our health education platform is delivered across business, health sciences, and medical faculties, and our curriculums blur the lines between medicine and management to foster a culture of innovative thinking.

### Inside the Classroom with Dr. Murray Bryant



In his course, *The Physician As Leader*, Dr. Murray Bryant, Associate Professor of Managerial Accounting and Control, Ivey Business School (above) teaches medical students about the importance of leadership, a role traditionally not taught to physicians. The course, unique to Canadian medical schools, is designed to provide the students with basic foundational skills to establish the competency of leadership. The curriculum creates a stimulating environment that challenges pre-conceived notions to promote new, collaborative ideas in healthcare.

### The MBA Health Sector Stream

Each year, the Centre trains a class of MBA students as part of the Ivey Health Sector Stream.

Through a series of elective courses and real-world experiences, students become equipped with the skills necessary to take on the challenges facing the healthcare industry. Over the past five years, 325 students have graduated from the Health Sector Stream.

• "Ivey's Health Sector MBA goes beyond the basics of the Canadian health system. On a daily basis, we were put in the role of healthcare leaders tasked with improving processes, technologies, and services, in order to build better organizations, improve patient outcomes and reduce healthcare costs."

Ashley Clerici, MBA 2014



MBA Health Sector students get a personalized tour of the London Health Sciences Centre Operating Rooms



MBA Health Sector students meet with the Hon. Deb Matthews. Minister of Health and Long-Term Care

### **Health Studies:** Bringing the Classroom to Life



Health Studies Student Team. Left to Right: Bridget Shaver, Ashleigh Davis, Joseph Tropiano, and Dilshaan Panjwani

Earlier this year, Health Studies students Ashleigh Davis, Bridget Shaver, Dilshaan Panjwani, and Joseph Tropiano joined together to work on an assignment for Dr. Anne Snowdon's Health Innovation and Leadership Class. According to Dr. Snowdon, the purpose of the assignment was for the students to gain an understanding of the challenges health organizations face and approaches that they take to develop and implement tangible solutions.

The group was partnered with SickKids Hospital to develop a proposal that answered: "How can SickKids Hospital engage the public to help solve the various challenges a hospital faces on a day-today basis?" Their innovative solution, The SickKids Innovation Challenge, was wellreceived by the organization, resulting in a summer internship for the entire group to implement their project.

• "The opportunity to exercise my entrepreneurial and creative skills within the health industry is what drew me to this course"

Joseph Tropiano, BHSc 2014

• "Knowing that our group could come up with something that could actually be implemented was powerful and inspiring"

Dilshaan Panjwani, BHSc 2014

### The Centre's Interns

Each year, the Centre hires a cohort of students from across faculties and schools to work alongside the Centre's project managers, postdoctoral fellows and executive leadership team on research projects, communications, and corporate affairs. This year's interns came from diverse backgrounds of business, science, health studies, and psychology, and got hands-on experience implementing the Centre's Reverse Innovation Challenge, Innovatexchange, and other research projects.



The Centre's 2013 Summer Interns. Back row, from left to right: Stephanie Kovala, Andrew Scarffe, Alex Schembri, Alex Smith, Alexander Kunsch, Thiv Parasmothy. Front row, left to right: Akuwa Baidoe-Ansah, Patti Wang, Tori Stone, Christal Huang

#### **Tori's Internship Experience**

The summer internship provided by The Centre allowed me to develop new skills and experience unique learning opportunities while working alongside a talented group of young leaders. We had the chance to work on several ongoing projects, participate in dialogue sessions, and attend thought-provoking lectures hosted by both peers and mentors. We were constantly encouraged to step outside of our comfort zones and the senior staff provided the structure and the support necessary to succeed. Just enough guidance to get us pointed in the right direction; but enough freedom and independence to really allow for understanding of process and outcome. I am confident that as this intern program develops it will continue to provide students with an unparalleled summer of growth and mold students into young leaders with a passion for health innovation.

Tori Stone, BHSc 2013, is currently in the first year of her Masters in Clinical Audiology at Western University.



Mr. Fraser (right) presenting the Jim Hatch Scholarship to Christopher Jackson (left)

### The Jim Hatch Scholarship

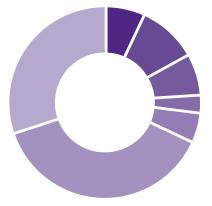
The Jim Hatch Scholarship is awarded annually to a candidate entering the MBA Program at the Richard Ivey School of Business who is enrolled in the Health Sector Stream.

The recipients demonstrate a dedication to making a positive impact in the areas of pharmaceuticals, biotechnology or medical devices. Impact is defined not only as developing great ideas, but also as facilitating the implementation of those ideas to benefit the public or private sectors. This year, the scholarship was awarded to Christopher Jackson.

• "My vision is to apply business management principles to solving issues in the Canadian health care system – receiving this scholarship will help me get there."

Christopher Jackson, MBA 2014

### To date, we've educated:



- HBAs (7%)
- Undergrads (10%)
- MBAs (7.5 %)
- PhD (3%)
- Graduate Students (5%)
- MDs (37.5%)
- Executives (30%)



INDIVIDUALS IN HEALTH INNOVATION AND LEADERSHIP.



CONFERENCES & SYMPOSIA HOSTED

STUDENTS COMPLETED THE CENTRE'S **SUMMER INTERNSHIP** 

**KEYNOTES & PRESENTATIONS DELIVERED** 

# Thought Leadership

# Contributing New Knowledge:

Our research projects and education initiatives create a wealth of information that we disseminate through our publications, events and presentations, and through traditional and social media

Through our experiences on the ground in health innovation projects, the Centre has gained significant insights into how innovations can be successfully adopted. We believe in sharing this learning with the world through our leadership initiatives. We produce knowledge that health care leaders need to drive change and improve the productivity of our health systems and industries.

The Centre's primary areas of focus lies within the health system including both the public and private sectors. We also explore a diverse set of topics, from governance and performance measurement, to management and leadership techniques and public policy. There are many wide-ranging opportunities for advancement in health, and we strive to reflect this in our thought leadership.

Highlighting our Reach		
1.2 million	Media impressions of the Centre's thought paper on the Personalization of Health Systems	
7,000	Copies of the Centre's cases have been purchased	
2,000	Unique online views of the Centre's student blog series	
327	Downloads of the Centre's Thought Paper on the Personalization of Health Systems	

### Global Health Conference



At the sold-out Ivey Global Health Conference 2013, we looked beyond borders and across sectors to unearth innovative solutions to the health system challenges we face.

The conference focused on reverse innovation, a term used to describe the application of innovations from emerging markets to the developed world.

The following speakers shared their insights during the conference:

- Dr. Ravi Ramamurti, Professor of International Business and Strategy and Director at the Center for Emerging Markets at Northeastern University
- Dr. Heidi Behforouz, Attending physician at Brigham and Women's Hospital; Assistant Professor of Medicine, Harvard Medical School
- Dr. Max von Zedtwitz, Managing Director of a Tongji University-based think tank on global R&D and reverse innovation
- Dr. Therdchai Jivacate, Orthopedic surgeon and inventor
- Dr. Joel Selanikio, Former Wall Street computer consultant, and epidemiologist



Conference Panelists, from left to right: Dr. Mike Evans, Dr. Paul Garfinkle, Jeff Ruby, Richard Bartlett, and Jocelyn Mackie

"When you talk to doctors in emerging markets about reducing costs in healthcare, you find they get their inspiration from McDonald's, Toyota, Southwest Airlines and Walmart. These are the names you hear over and over again. I wonder how many hospitals in the U.S. or in Canada think of these companies as their role models for innovation."

#### Dr. Ravi Ramamurti



Conference speaker, Dr. Ravi Ramamurti.

#### **Spotlight:** The Reverse Innovation Challenge Winning Submission, 3nethra

As the culmination of the Centre's Reverse Innovation Challenge, the winning submission, 3nethra: A non-mydriatic eye device, was announced at the conference and the team was awarded \$50,000 to research and test this reverse innovation project. The team will also receive research support and guidance from the Centre.

This project examines the applicability of a low-cost, highly sensitive and minimally invasive tool in the Canadian marketplace. This technology was developed by Forus and is a prescreening tool that can detect glaucoma, diabetic retinopathy and corneal disease. To date, Forus has screened over 500,000 patients in the developing world, mostly in primary care settings. Armed with this device, primary care providers in Ontario could revolutionize eye disease screening, improve health outcomes, and create substantial savings for health systems in Canada.



Hon. Deb Matthews (right) speaking with RIC winners Jeff Martin (middle) and Mohan Pandit (left)

**Thought Paper** 

# 'It's All About Me': The Personalization of Health Systems

The Centre's most recent Thought Paper, "All About Me: The Personalization of Health" was presented to the Economic Club of Canada on February 26th, 2014. Dr. Anne Snowdon presented exciting new research that identifies the emerging trends in technology and consumer behaviours that are increasing demand for the personalization of health systems outlining the 10 steps health systems can undertake towards a personalized health system.



Dr. Snowdon presenting the 10 Steps to achieving a Personalized Health System at the Thought Paper launch event.



Mr. Paul Marcus (left) speaking with Mr. Richard lvey (right) at the launch.



Dr. Dave Williams, President and CEO, Southlake Regional Health Centre, at the Thought Paper launch event

#### The Ten Steps to Achieving a Personalized Health System

- 1. Reframe the Dialogue
- 2. Define Success What Matters
- 3. Put the Person in Charge
- 4. One Size Fits "One"
- 5. Incentivize Outcomes, not Transactions
- 6. Connect to the Digital World
- 7. "Open the Vault" of Health Records
- 8. Customize Options
- 9. Engage the Shareholders
- 10. Measure what Matters

To learn about the steps in detail visit: www.ivey.ca/healthinnovation



8.3

Million people that learned about the paper through radio, t.v. and media.

### Sharing Knowledge Through Cases

One of the ways the Centre builds its knowledge advantage is through the development and dissemination of Ivey Case Studies (cases).

The cases produced by the Centre discuss critical challenges faced by health leaders, such as pharmacy services, provincial models of hip and knee care, and medical technology, by offering insights to how these issues can be solved. The cases are all based on the real experiences of health system leaders. The cases offer the opportunity to take on the role of the decision maker and discuss timely real world health care problems from various perspectives.

Over the past 5 years:

Cases published

Countries bought cases



### Post-Doctoral Fellows



Dr. Nicole Chabot, Post-Doctoral Fellow

Over the past five years, the Centre has trained 14 post-doctoral fellows in the adoption of innovative health care technologies, systems, and processes. The post-docs apply their knowledge to the research projects they work on while learning how to work with industry partners to bring their research to life.

### Presentations and Conferences



This past year, the Centre participated in over 30 presentations, conferences, and research days where we shared our work and knowledge with fellow health innovators, physicians, administrators, and academics.

Karin Schnarr, Senior Research Analyst, presenting the Personalization in Healthcare: Lessons from Industry, at the Institute for Healthcare Improvement's 24th Annual National Forum on Quality Improvement in Health Care, in Orlando, Florida.

### The Bright Ideas Student Blog Series

In a partnership with National Health Watch, an online curator of health news in Canada, the Centre helps students promote their innovation ideas through the Bright Ideas blog series. The blogs are published on National Health Watch's site alongside top stories, studies, and reports. This past year, the students' blogs received over 2000 unique online views.

To read the blogs visit: www. nationalhealthwatch.ca/bright-ideas

# Our Community

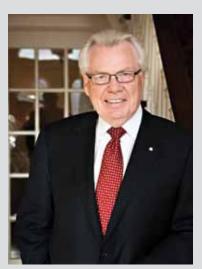
# Innovation Takes Collaboration: Celebrating our network of partners

Over the past five years, the Centre has collaborated with individuals and organizations to establish a vast network of partners in the health innovation community.

Our partners have been invaluable supporters in all aspects of the Centre's activities, from research projects to education and thought leadership, and share our passion for improving health systems.

The next few pages of the report highlight a community of people that have become a part of our global network.

### A Special Thanks to Dr. Calvin Stiller



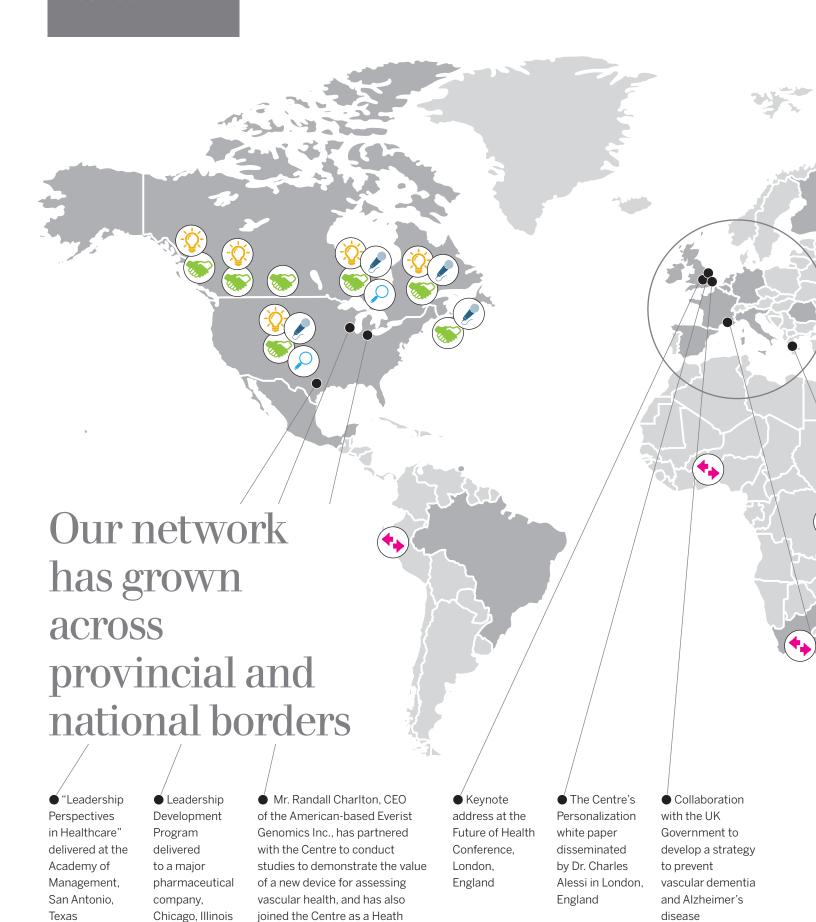
The Centre would like to recognize the significant contributions of Dr. Cal Stiller who has brought us the combined perspectives of a scientist, physician, and entrepreneur which has shaped the development of the Centre.

"It is with great personal satisfaction that I have seen the Ivey International Centre for Health Innovation evolve and grow over the past five years. Through its strong and visionary leadership it is fast becoming a strong catalyst for health system innovation and thought leadership across Canada."

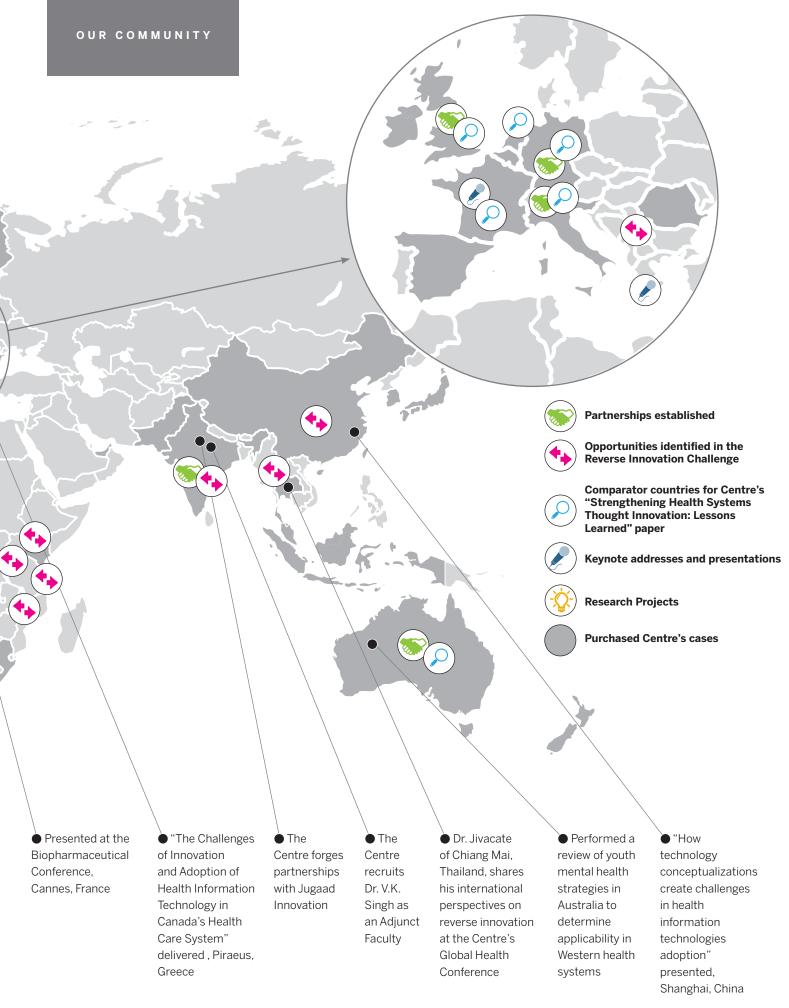
**Dr. Calvin Stiller,** Chair, Ontario Institute for Cancer Research; Chair, Bioquest Innovations Inc

We would like to extend our greatest appreciation to the outgoing members of our Advisory Council for their outstanding service over the past five years.

Bonnie Adamson | Henry Freisen | Frank Gleeson | Dale Patterson | Dr. Calvin Stiller | Dale Weil



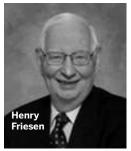
Innovator in Residence



# **Our Advisory Council**

Our Advisory Council helps further the vision and goals of the Centre and acts as a credible and visible body of leadership, influence, and support.



















Lisa Purdy















#### **Advisory Council:**

#### Chair: Mr. Neil Fraser,

President, Medtronic of Canada Ltd. & Regional Vice President, Medtronic of Canada Inc.

#### Ms. Bonnie Adamson,

President and CEO, London Health Sciences Centre

#### Mr. William (Bill) Charnetski,

Vice President, Global Government Affairs & Public Policy, AstraZeneca Inc.

#### Dr. Henry Friesen,

Founding Chair, Genome Canada

#### Mr. Victor J. Garcia,

Senior Fellow, Bell Business Markets, Bell Canada

#### Mr. Frank Gleeson,

Executive in Residence, Ontario Institute for Cancer Research

Dr. Raphael Hofstein, President & CEO, MaRS Innovation

#### Mr. Robert Kennedy,

Dean, Ivey Business School

#### Mr. Paul Kirkconnell,

Managing Director, Kirchner Group

#### Mr. Paul Lepage,

President, TELUS Health and Payment Solutions

#### Mr. Terrence McCool,

Former Vice President and Corporate Affairs, Eli Lilly Canada

#### Dr. H. Brent Norton,

President and CEO, MedCurrent Inc.

#### Ms. Sue Paish,

Sue Paish

CEO, LifeLabs

#### Mr. Dale Patterson,

President, The Bourton Group

#### Mr. Domenic Pilla,

President and CEO, Shoppers Drug Mart Corporation

#### Ms. Lisa Purdy,

Partner, National Health Consulting Leader, Deloitte Canada

#### Ms. Catherine Seguin,

Vice President, International Affairs, The Hospital for Sick Children

#### Mr. Graham Scott,

President, Graham Scott Strategies Inc.

#### Ms. Shirlee Sharkey,

President & CEO, Saint Elizabeth Health Care

#### Dr. Calvin Stiller,

President, Stilco Corporation

#### Dr. Michael Strong,

Dean, Schulich School of Medicine & Dentistry

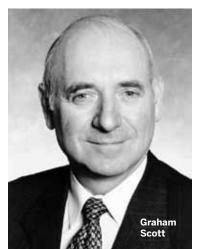
#### Dr. Paul Walker,

President & CEO, Spectral Diagnostics Inc.

#### Ms. Dale Weil,

Senior Vice President, Integrated Healthcare Solutions and Pharmaceutical Solutions, McKesson Canada





Shirlee Sharkey













### **Adjunct Faculty**

Our adjunct faculty provides support to the International Centre for Health Innovation through increasing our knowledge advantage and disseminate the work of the Centre both national and internationally.



Dr. Charles Alessi, Chairman, National Association of Primary Care, NHS Confederation



**Dr. Peter Armstrong**, Chief Medical Officer, OrthoPediatrics



Dr. Heidi Cramm, Owner, Compass Occupational Therapy Solutions



Dr. Abdul Hussein, Chair, Graduate Studies Program, University of Windsor



Dr. Robert Kent, Professor, School of Computer Science, University of Windsor



Dr. Zayna Khayat, Senior Advisor, Health System Innovation, MaRS Discovery District



Dr. Kathleen MacMillan, Director, School of Nursing, Dalhousie University



Dr. Nicole Mittmann, Associate Scientist, Sunnybrook Research Institute



Mr. Edward (Ted) Petroff, Chief Operating Officer, Pharmax Research Inc.



Dr. Vijai Kumar Singh, Director, Healthcare Asia, Simpler Consulting

### Health Innovators-in-Residence

Health Innovators-in-Residence provide support to the International Centre for Health Innovation by acting as advisors, ambassadors and critical sources of influence and impact. They help shape the future of the health sector nationally and globally.

Randal Charlton, Director, Everist Genomics
Dr. Pierre-Gerlier Forest, Director, Institute for Health and Social Policy, Johns Hopkins University
Dr. Pankaj Gupta, Partner, Taurus Glocal Consulting
<b>Philip Hassen</b> , President, International Society for Quality in Health Care/President, Canadian Network for International Surgery
Bob Kayser, President, RHK Consulting Inc.
<b>Dr. Jo Kennelly</b> , Principal/Owner, Global Health Systems
<b>Terrence McCool</b> , Director and Vice President, Corporate Affairs (Retired), Eli Lilly Canada Inc.
<b>Dr. Tom McGowan</b> , Physician Director, Radiation Oncology, Trillium Health Partners
Dr. Sarah Muttitt, Chief Medical Information Officer, Alberta Health Services
Dr. Frank Plummer, Chief Science Advisor/Scientific Director General, Public Health Agency of Canada
Vania Sakelaris, Senior Director, Health System Integration Design & Development, Toronto Central LHIN
Dr. Jeffrey Scott, Manager, Preclinical Affairs, C.R. Bard, Inc. (Davol)
Amit Sharma, President, Sharma Consulting Group Ltd.
N. Arthur (Art) Smith, President and CEO, GS1 Canada
Liz Snelgrove, Director, EMBA Recruitment and Program Services, Ivey Business School
Jacqueline Valmont, Principal, Jacqueline Valmont & Associates
Catarina Versaevel, Independent Management and Health Care Consultant
Anne Marie Wright, Managing Director, A.M. Wright and Associates Inc.

## Partnerships

The Centre has partnered with the following organizations in the past year:

3nethra	
Academic Medical Organization of Southwestern Ontario	
Canadian Broadcasting Company	
Canadian National Transplant Research Program	
Canadian Occupational Performance Measure	
Cancer Care Ontario	
Cerner Corporation	
Change Foundation	
Conifer Health Solutions	
Consolidated Health	
Council of Academic Hospitals of Ontario	
Dublin City University	
Enterprise Ireland	
Facebook Canada	
Forth Valley Royal Hospital	
Fraser Health	
Gamma-Dynacare	
Innovation Learning Network and Kaiser Permaner	nte
International Partnership for Innovation in Healthcare Delivery	
Joint Motion Program (JuMP)	
Jugaad Innovation (Dr. Simone Ahuja)	
London Community Foundation	

MaRS Innovation Centre
MediaMed Technologies
NexJ
Niagara Health System
Ontario Renal Network
Optum International
PricewaterhouseCoopers
ProResp Inc.
PurThread Technologies
RISE Asset Management
Royal Bank of Canada
Sisters of St. Joseph, London, Ontario
SRH University Heidelberg (POLIKUM tour)
St. George's University, England
Taurusglocal
TransForm Shared Service Organization
Trudell Medical
UCLA Center for Health Innovation
Weight Watchers



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Canada

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#### INDEPENDENT AUDITOR'S REPORT

To the Management of the University of Western Ontario (the "University") and Her Majesty the Queen in Right of Canada, as represented by the Minister of Industry (the "Ministry")

We have audited the accompanying schedule of contributions and expenditures of the Ivey Centre for Health Innovation and Leadership of The University of Western Ontario and notes comprising significant accounting policies and other explanatory information for the year ended March 31, 2014 (the "Schedule"). This schedule has been prepared by management based on the financial reporting provisions in the Agreement dated October 7, 2009 and amended February 17, 2012, between the University and the Ministry (the "Agreement").

Management's Responsibility for the Schedule

Management is responsible for the preparation of the Schedule in accordance with the financial reporting provisions in the Agreement, and for such internal control as management determines is necessary to enable the preparation of the Schedule that is free from material misstatement, whether due to fraud or error.

#### Auditors' Responsibility

Our responsibility is to express an opinion on the Schedule based on our audit. We conducted our audit in accordance with Canadian generally accepted auditing standards. Those standards require that we comply with ethical requirements and plan and perform the audit to obtain reasonable assurance about whether the Schedule is free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the Schedule. The procedures selected depend on our judgment, including the assessment of the risks of material misstatement of the Schedule, whether due to fraud or error. In making those risk assessments, we consider internal control relevant to the entity's preparation of the Schedule in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of accounting estimates made by management, as well as evaluating the overall presentation of the Schedule.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

#### KPMG Confidential

KPMG LLP is a Canadian limited liability partnership and a member firm of the KPMG network of independent member firms affiliated with KPMG International Cooperative (RYMG International), a Swiss entity, KPMG Canada provides services to KPMG LLP.



#### Opinion

In our opinion, the financial information in the Schedule is prepared, in all material respects, in accordance with the financial reporting provisions in the Agreement.

#### Basis of Accounting

Without modifying our opinion, we draw attention to Note 2 to the Schedule, which describes the basis of accounting. The Schedule is prepared to provide information to the Ministry. As a result, the Schedule may not be suitable for another purpose.

#### Restriction on Use

LPMG LLP

Our report is intended solely for the University and the Ministry and should not be used by parties other than the University and the Ministry.

Chartered Professional Accountants, Licensed Public Accountants

July 2, 2014

London, Canada

# Schedule of Contributions and Expenditures

#### Year ended March 31, 2014

	Total
Contributions from Funding Agency	\$ 1,197,875
Expenditures:	
Salaries and benefits	543,821
Demonstration project costs	178,050
Materials and supplies	293,403
Outreach activities	119,083
Dissemination of knowledge and results	56,626
Administration of the agreement	6,892
	1,197,875
Excess of contributions over expenditures	\$ -
See accompanying notes to the schedule of contributions and expenditures.	

International Centre for Health Innovation

Notes to Schedule of Contributions and Expenditures

Year ended March 31, 2014

#### 1. Basis of presentation:

The Canadian Government created Industry Canada to foster a growing, competitive, knowledge-based Canadian economy. Industry Canada works with Canadians throughout the economy and in all parts of the country to improve conditions for investment, improve Canada's innovation performance, increase Canada's share of global trade and build fair, efficient, and competitive marketplace.

Industry Canada's program areas include developing industry and technology capability, fostering scientific research, setting telecommunications policy, promoting investment and trade, promoting tourism and small business development, and setting rules and services that support the effective operation of the marketplace.

The University of Western Ontario (the "University") signed an agreement dated October 7, 2009 and an amendment dated February 17, 2012, with the Ministry of Industry for funding of The Ivey Centre for Health Innovation and Leadership (the "Project"). In accordance with this agreement, the Minister agrees to provide \$5,000,000 in contributions to fund Eligible Project Expenditures. The Project is for a five year term and is anticipated to be completed March 31, 2014.

This schedule presents the contributions received and the eligible expenditures incurred for this Project for the year.

#### 2. Basis of accounting:

This Schedule is prepared in accordance with the financial reporting provisions in the agreement dated October 7, 2009 and amended February 17, 2012, between the Recipient and the Funding Agency.

The Agreement requires the Schedule to be prepared in a manner consistent with generally accepted accounting principles ("GAAP"). Management of the University has interpreted GAAP to be the recognition and measurement principles in the CPA Canada Handbook – accounting standards for not-for-profit organizations related specifically to revenue and expenses, and not the presentation principles or the presentation of all of the financial statements and note disclosures required by GAAP for a complete set of financial statements.

#### 3. Significant accounting policies:

#### (a) Contributions:

Contributions are recognized on an accrual basis as they are earned. Contributions are considered to be earned once the related eligible expenditures are made on the project in accordance with the Agreement.

#### (b) Expenditures:

Expenditures are eligible under the Project if they were incurred in the period of the Project and are directly related to the completion of the Project.

costs." ~ Ashley Clerici, BSc., MBA 2014 "Knowing that our group could come inspiring" ~ Dilshaan Panjwani, BHSc 2014 "The opportunity to exercise my entrepreneurial and creative skills within the health industry is what drew me to this course" ~ Joseph Tropiano, BHSc 2014"My vision is to apply business MBA 2014 "When you talk to doctors in emerging markets about reducing costs in healthcare, you find they get their inspiration from McDonald's, Toyota, Southwest Airlines and Walmart. These are the names you hear over and over again. I wonder how many hospitals in the U.S. or in Canada think of these companies as their role models for innovation." ~ Dr. Ravi Ramamurti"It is with great personal satisfaction that I have seen the Ivey Chair, Bioquest Innovations Inc "The Ivey International Centre for Health Innovation is committed to understanding innovation in the health sector and to applying that knowledge in healthcare settings. By operating at the intersection of academia and practice, the Centre champions innovative approaches to solving complex healthcare challenges." ~ Dr. Robert Kennedy (Dean, Ivey Business School, Western University) "Through a mix of its global

#### **International Centre for Health Innovation**

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