

# THE IMPACT OF EXCELLENCE

FROM INNOVATION TO COMMERCIALIZATION TO BETTER PATIENT CARE



OTTAWA HEALTH INNOVATION EN SANTÉ HUB

PÔLE **D'INNOVATION** D'OTTAWA

# ADVANCING THE PACE OF MEDICAL RESEARCH FROM DISCOVERY TO COMMERCIALIZATION TO BETTER PATIENT CARE

Truly exciting and ambitious health science ventures are often those that capitalize on existing conditions to transform research, spark breakthroughs and generate broad and positive socioeconomic benefits for the communities they serve.

The Ottawa Health Innovation Hub is such a project.

Launched where the powers of Canadian government, academia, medical science and advanced technology converge, the Hub anchors the University of Ottawa's (uOttawa's) new Advanced Medical Research Centre (AMRC).

#### STATE OF THE ART. BILINGUAL. BUILT TO SUCCEED.

The Hub's world-class facilities are set to nurture generations of health science trailblazers, validate their discoveries and transform not only the city's diverse healthcare ecosystem, but also Canada's global leadership in smart health and precision medicine. "Having researchers, clinicians, industry and government located under one roof creates the right conditions to accelerate innovation to commercialization to better patient care."

 John Bell, Ph.D., Senior Scientist, Cancer Therapeutics Program, Ottawa Hospital Research Institute; Professor, Faculty of Medicine, Department of Biochemistry, Microbiology and Immunology, University of Ottawa; Founder, Turnstone Biologics

"Ease of access to early seed capital and corporate guidance are vital to creating an entrepreneurial environment led by innovators, risk-takers, disruptors and future-thinkers. This financial investment, coupled with the right facilities and access to talent, are the ingredients to innovation...

uOttawa's AMRC and Health Innovation Hub will significantly increase 'deal-flow' out of Ottawa and ultimately contribute to better healthcare outcomes in Canada."

— Jamie Stiff, Managing Partner, Genesys Capital Ventures

# A HIGH CALIBRE CENTRE OF HEALTH INNOVATION EXCELLENCE

BIOTECH AND BIOPHARMA

**FOCUS AREAS** 

MEDTECH AND DIAGNOSTICS

**DIGITAL HEALTH** 

The Ottawa Health Innovation Hub will be a vital part of the Alta Vista health sciences campus. The 300,000 square-foot AMRC will welcome hundreds of researchers and employees of uOttawa's faculty of medicine and partner organizations and private sector.

### **ACCELERATING INNOVATION AND COMMERCIALIZATION**

The Hub's design features include fully accessible and collaborative R&D facilities, discovery and translational research floors, and on-site incubation and accelerator facilities. The goal is to connect researchers with healthcare challenges, ideas with innovators, discoveries with entrepreneurs and new companies with the business support of mentors, advisors, strategic partners and venture capital firms.<sup>1</sup>

Our capacity for health research and clinical trials<sup>2</sup> will expand at a faster pace. We'll have critical new infrastructure to meet urgent healthcare needs. The Hub will help future-proof Canada's healthcare research capacity while its construction contributes to the region's post-pandemic economic recovery.

"The AMRC will provide a tremendous new capacity to work together from bench to bedside and back again to look at results from every angle."

Mary-Ellen Harper, Ph.D., Professor, Faculty of Medicine, University of Ottawa;
 Director of the Ottawa Institute Systems of Biology

"The AMRC and Hub will be transformational, allowing us to build a pipeline for drug discovery and scale up our clinical trials and commercialize our technology."

— Daniel Figeys, Ph.D., Professor, Faculty of Medicine, University of Ottawa; Co-founder and President of MedBiome

Companies that participate in business support programs, such as accelerators, go to market sooner than those that don't. These companies also build critical capacities at faster rates and see greater success increasing value growth and sales revenue. Source: Dalziel, M. (2016). Using survey respondent judgment of impact to evaluate business support programs. Schumpeter Conference, July 5, 2016, Montreal)

<sup>&</sup>lt;sup>2</sup> Ottawa is the fourth largest clinical trial centre in Canada. Source: clinicaltrials.gov



### **BY 2031**

INVEST IN 86 NEW TECHNOLOGY PROJECTS

INCUBATE 25+ BIOTECH COMPANIES

ACCELERATE 50 MEDTECH AND DIGITAL HEALTH COMPANIES

### **BUILDING FOR TOMORROW**

A leading health sciences facility must be built to the highest environmental standards. The AMRC measures up.

LEED-certified and constructed with the latest timber-frame technology, the building employs a passive design strategy to achieve a carbon-footprint reduction of as much as 75 percent. Recycled wood finishes and optimized window-to-wall ratios promote wellness, while a fully digital Internet of Things-driven building automation system limits energy consumption.

Building for tomorrow encompasses more than technology. The AMRC nurtures innovation with spaces that encourage creativity and multi-disciplinary collaboration. To foster community, the design upholds principles of inclusion in part by incorporating diverse cultural elements and biophilic design.<sup>3</sup>

# COMPELLING IMPACT BY 2031

7,400

FTE jobs supported in Ontario

7,900

\$522M

in salaries and wages generated in Ontario\*

\$557M

in Canada

in Canada

### THE OTTAWA ADVANTAGE

Ottawa's strengths are best exemplified by its status as a G7 capital and its impressive tech talent base. The city is home to key federal regulatory, funding and policy agencies while boasting the highest concentration of tech talent in North America at 11.3%, 4 which eclipses traditional global tech leaders such as the San Francisco Bay area, Toronto, Boston and Montreal.

#### **BUILDING ON A STRONG PRESENCE**

Ottawa is already firmly established as a centre for R&D, innovation and commercialization in smart health and precision medicine.

Even in the face of the COVID-19 pandemic, Ottawa's health and medtech sector remains resilient, adding new jobs and securing research funding as demand for new products and innovations increases in this space.

Building the Health Innovation Hub in Ottawa only strengthens the ecosystem, merging the city's dynamic high-tech and smart health innovation sectors. "We've got discoveries to make, jobs to create, a recovery to fuel and the Ottawa Health Innovation Hub is bringing together the hearts and minds to make it all a reality."

— Sylvain Charbonneau, Ph.D., Vice-President Research, University of Ottawa

"The Hub provides a tremendous opportunity for CHEO scientists and clinical investigators to collaborate, share resources and ultimately translate their discoveries to positively impact the lives of children, youth and their families."

— Jason Berman, MD FRCPC., CEO and Scientific Director, CHEO Research Institute/ Vice President Research, CHEO

<sup>4</sup> CBRE 2020 Scoring Tech Talent Report: https://www.cbre.com/research-and-reports/Scoring-Tech-Talent-in-North-America-2020



### A RESEARCH INTENSIVE LANDSCAPE

The University of Ottawa's faculty of medicine and its affiliated hospital research institutions rank among the top three nationally for research intensity.

The Hub's proximity to the federal government's research capacity and regulatory and policy bodies yields further benefits.

The Hub is supporting the development of national research platforms with institutional, governmental and industry partners including:

- Coronavirus Variants Rapid Response Network (CoVaRR-Net )
- Collaboration Centre for AI in Systems Biology (OISB/NRC)
- Collaboration Centre in Infection, Immunity and Inflammation (CI3/NRC)
- Center on Translational Microbiome in Health and Diseases (uOttawa, CHEO, St. Justin, Royal, Bruyère, TOH)
- Expansion of OHRI's Biotherapeutics Manufacturing Centre (immunotherapeutics [cancer], viruses, vaccines, cell therapies)

### STRONG ECOSYSTEM

140+
companies

6,000+

\$2B

employees



#### **CLOSING THE HEALTHCARE INNOVATION GAP**

The new Ottawa Health Innovation Hub is helping partners — including local post-secondary institutions — propel the city's transformation into a global smart health leader. Scaling Ottawa's health innovation capacity will bolster Canada's competitiveness, drive economic growth and address health ecosystem challenges. The AMRC and the Hub will add:

- Dedicated incubation or accelerator space with access to common and shared research and clinical infrastructure for new medical and life science ventures
- New space for collaborative research initiatives and private sector sponsored research activities
- New capacity to expand discovery and translational research facilities and infrastructure at key institutions
- · Increased access to venture capital and investment.

# CREATING EXCEPTIONAL OPPORTUNITIES FOR RESEARCHERS AND TRAINEES

The AMRC will provide a bilingual innovation space to accommodate up to 650 researchers, including more than 360 trainees and students. Between 2025 and 2030, the facility will provide opportunities for more than 800 trainees. Equity, diversity and inclusion are being factored into the building and program design. Hub programming will support francophone and indigenous culture and will include a women's health innovation entrepreneurship program.

### **POST-SECONDARY POWER**

6,500

clinicians and researchers in Ottawa attract more than

\$380M

in funding annually<sup>6</sup>

THE PROJECT IS SHOVEL READY.

CONSTRUCTION WILL BEGIN IN 2022.

OCCUPANCY IS PLANNED FOR LATE 2025.

### THE IMPACT OF PARTNERSHIP

The Ottawa Health Innovation Hub's economic and social impacts are clear and significant. Current Hub partners include a range of distinguished public, private and non-for-profit organizations. Now is the time to welcome new allies and funders who will add their potential to this exciting new endeavour. We want you to be part of it. Help us accelerate innovation to commercialization to better patient care.

Join us and tap into the synergy of a leading health and life sciences nexus that will:

- Align the resources of governments, academia, industry and the health sciences sector
- Help future-proof Canada's capacity to respond to urgent health crises
- Contribute improvements in patient care and healthcare delivery locally, nationally and internationally
- Enable rapid commercialization of promising health innovations to better impact patient care
- Accelerate the development of new high-growth companies on the leading edge of health science
- Play a key role in Canada's pandemic recovery: first, in construction, and then in the long term by creating high-income science, technology, engineering, math and medicine (STEM<sup>2</sup>) jobs
- Uphold diversity and inclusion to develop the next generation of leaders in research, business and healthcare



"Ottawa has never been a more vital and vibrant centre for science, technology and research. The Hub will take us to another level."

— Dr. Peter Liu, Chief Scientific Officer and Vice President of Research, University of Ottawa Heart Institute

"The Hub will be an important catalyst for building new partnerships with industry, government, academia, healthcare and the community to support improved care for aging Canadians and vulnerable populations."

 Heidi Sveistrup, CEO and Chief Scientific Officer of the Bruyère Research Institute and VP, Research and Academic Affairs



### HUB PARTNERS

University of Ottawa

Ottawa Hospital Research Institute

University of Ottawa Heart Institute

CHEO Research Institute

The Royal's Institute of Mental Health Research

Bruyère Research Institute

Savoir Montfort

Carleton University

Algonquin College

Collège La Cité

National Research Council

# **GDP CONTRIBUTION BY 2031**

\$0.88B

\$0.95B

Canada

70% attributable to new hires and impacts from incubator and accelerator companies

ECONOMIC IMPACT ECONOMIC IMPACT

### **GOVERNMENT RETURNS BY 2031**

\$32.7M

provincial personal income taxes paid

\$94.6M

federal personal income taxes paid

\$16.4M

provincial personal income taxes attributed to client companies

\$42.7M

federal personal income taxes attributed to client companies

**CLIENT COMPANIES' IMPACT BY 2031** 

\$385M

in revenues and investments

1,340



### **BE PART OF A BETTER TOMORROW**

Your support for the Ottawa Health Innovation Hub will help accelerate the quality and pace of research, innovation and healthcare delivery in Canada.



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For more information go to **Ottawa-Innovation.ca**. To get involved or become a partner, contact:

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### **METHODOLOGY**

The economic impact data presented in this report was developed in collaboration with The Evidence Network Inc. (TEN). TEN is internationally recognized as an industry leader in impact assessments. Private-sector employment figures are based on the Hub's budgetary estimates, and on benchmark data from similar North American and European Union accelerator and incubator programs. Building and construction data was sourced from uOttawa's AMRC Feasibility Study. The uOttawa faculty of medicine provided estimates and forecasting data for usable space allocations and staffing.

### **DEFINITIONS**

**GROSS DOMESTIC PRODUCT (GDP):** The unduplicated monetary value of all finished goods and services made within a region during a specific period; that is, value added to the economy. For the purposes of this study the identified regions are Ontario and Canada.

**JOBS:** Full-time equivalent (FTE) jobs supported; we use the term jobs in the interest of brevity. Jobs supported indicate those that are created and retained.

**WAGES AND SALARIES:** Wages and salaries include cash and in-kind earnings of employees generated in the production of the final goods or services.

**DIRECT IMPACTS:** Changes in operating, capital and other expenditures made by a front end company or institution in the production and sale of final goods and services.

**INDIRECT IMPACTS:** Changes in the incremental spending of suppliers to front end companies or institutions, representing business-to-business transactions stimulated by the direct effects.

**INDUCED IMPACTS:** A consequence of businesses or institutions experiencing increased revenue from direct and indirect effects.

**ATTRIBUTION:** The correlation between programs and funding and the resultant impact. Impacts attributable to the Hub's incubation and accelerator programs for client companies decline over time. Attribution rates used for this model were considered over a seven-year period based upon the model developed by StatsCan for measuring BDC's impact on its clients.

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