YORK UNIVERSITY STRATEGIC RESEARCH PLAN SUMMARY KNOWLEDGE FOR THE FUTURE: FROM CREATION AND DISCOVERY TO APPLICATION 2023-2028

1.0 RESEARCH VISION

This plan seeks to advance York University's research vision – to better understand the human condition and the world around us, and to employ the knowledge gained to benefit society and improve the health of the planet. York is committed to excellence in research and scholarship in all its forms. Informed by a strong commitment to shared values, including the promotion of social justice, diversity, equity, the public good, social engagement, and global citizenship, York's intensive engagement in research is a core institutional value that permeates the fabric of the University, and is the foundation on which York's vibrant and exciting academic environment is built.

2.0 RESEARCH EXCELLENCE

York University is committed to excellence in research and scholarship in all its forms. This aspiration is reflected by one of York's longstanding strengths -- how we do research. At York, research is conducted through building trusting relationships with local and international communities and pursuing community-led research; critical analyses of social, political and economic realities; contributions to the knowledge-based economy of the region through knowledge mobilization, innovation and entrepreneurship; and a focus on trans- and interdisciplinary research. Fundamental and theoretical research is essential and so is applied research, just as decolonizing research paradigms is vital to all knowledge production. Coinciding with these principles, this plan reaffirms York's long-standing commitment to the values of equity, diversity, inclusion, and social justice, as well as to the diversity of thought. York pursues inclusive excellence through research committed to a global mindset, ethical judgment, and critical interrogation of accepted worldviews to produce new insights and innovation.

To enable research excellence, the Strategic Research Plan identifies six areas of existing research strengths and six areas of opportunity for the University to direct its focus and resources towards in the years ahead.

3.0 RESEARCH AREAS OF STRENGTH: COMPREHENSIVE RESEARCH ENGAGEMENT ACROSS THE INSTITUTION

Each area includes scholarship and is built upon several research strengths where York maintains research excellence. York is committed to ongoing investment that will support these broad segments of scholarship across the institution, which, in turn, will enhance the influence and recognition of the University's scholarship and creative activity more widely.

ADVANCING FUNDAMENTAL, DISCOVERY, AND THEORETICAL RESEARCH AND SCHOLARSHIP

- York recognizes that fundamental scholarship, systematic examination, and the
 development of creative works and scholarly activities remain essential to the evolution of
 knowledge. Fundamental research provides an essential base of knowledge on which
 applied research depends to find practical solutions to existing problems
- Advancement of fundamental discovery research and theoretical research at York is sought through exploration of critical questions that push the boundaries of traditional modes of inquiry and scholarship. York prides itself in contributing to addressing scientific and societal

- challenges as well as collaborating with private and public sectors through applicationoriented research
- Critical scholarship at York is a hallmark of the institution and is embedded in the research conducted in the natural sciences, engineering, arts, humanities, and social sciences

ILLUMINATING CULTURES AND CULTIVATING CREATIVITY

- York is an emerging leader in the conception of new media and design of digital technologies and a ground breaker in cultural production and creative research
- York's significant breadth and scope of scholarship in communications and cultural studies, fine arts, design, interactive arts and other digital humanities, computing science and engineering, philosophy and environmental studies, literature and linguistics and creative writing, draw together a community of researchers who cut across traditional disciplinary boundaries to facilitate dynamic collaborations in arts-and-culture-related research creation
- This scholarship is further complemented by the critical study of cultural traditions, production and performance practices, including Indigenous narratives and storytelling

BUILDING HEALTHY LIVES, COMMUNITIES AND REIMAGINING FUTURES

- York researchers are improving the understanding, prevention and treatment of disease and injuries, with an emphasis on advancing the most promising practices for access to care, cost, accountability, administrative efficiency and effectiveness, while focusing on advancing equity, improving health care outcomes, and seeking to keep healthier people longer
- York has a growing reputation as a leader in global and transdisciplinary health research, reflected in the establishment of strong global health links and health-specific Organized Research Units that seek to both inform and transform policy, planning and practice
- Research is further advanced through capacity-building partnerships that seek to inform policy and improve outcomes by bringing together clinicians, patients, health industry, and researchers

REACHING NEW HORIZONS IN SCIENCE, TECHNOLOGY AND SOCIETY

- Taking an interdisciplinary approach, York researchers are exploring the complexity and impact of science and engineering, and technological innovation and the fundamental challenges facing our world today
- York's researchers are developing solutions that address complex problems, ranging from environmental sustainability, water sanitation, and clean energy to youth homelessness prevention, modelling and mitigating disease outbreaks, and disaster and emergency management
- York scholarship informs social decision making by recognizing that solutions to complex contemporary grand challenges have multiple interacting natural, social, scientific and technical features with the responsibility of introducing new technologies in a socially responsible way

PURSUING JUSTICE, EQUITY AND SUSTAINABILITY: FROM URBAN DYNAMICS TO GLOBAL CHALLENGES

- York researchers are pursuing collaborative, integrative and solution-oriented research on environmental issues at multiple campuses in various countries through international research partnerships that traverse borders and span social sciences, humanities, arts, natural sciences, law, business, and engineering
- Research extends from understanding the global and international environment to sustainable cities, including the Global South, and exploring identity, human rights, citizenship and the movement of peoples

 Researchers are drawing on the strengths of York's diverse community to approach justice, equity, reconciliation, and sustainability through a holistic lens of collaboration, innovation and knowledge mobilization, forging new understandings of the natural world

ELEVATING ENTREPRENEURSHIP THROUGH SOCIALLY RESPONSIBLE INNOVATION

- York researchers are fostering breakthrough innovations that enhance society's capacity to sustain livelihoods and contribute to economic growth, while supporting the public welfare
- Scholars from across the humanities, social sciences, law and business are engaged in tackling evolving organizational environmental, social and corporate governance (ESG) issues and examining how ESG factors and climate risks intersect with relevant policies and laws in Canada, including the impact on Indigenous communities and the duty to consult
- We are establishing a strong collaborative approach to knowledge creation and social and commercial innovation through the Office of the Vice-President Research & Innovation, YSpace and discipline specific innovation centers, and Research Impact Canada, delivering unique entrepreneurial programming and initiatives creating impact from research

4.0 RESEARCH OPPORTUNITIES: COMPELLING OPPORTUNITIES FOR THE STRATEGIC DEVELOPMENT OF RESEARCH

These opportunities represent emerging areas of research that underpin a strong vision for research at York to help solve some of the world's most compelling challenges. They have the potential to further enhance the University's profile and reflect the progress of York's scholarship in a constantly evolving world.

DIGITAL CULTURES AND DISRUPTIVE TECHNOLOGIES

- The integration of disruptive technologies into society is a critical area for accelerated research, including guiding the ethical, legal, sociological, and technical development of rapidly expanding technology, such as AI, high-performance computing, and neuroscience, that is associated with big data as well as technological literacy
- York will extend its leadership in development of new disruptive technologies as well as their applications in AI and beyond including social sciences, humanities, health and other STEM fields; interfaces and content creation, scientific inquiry, design, policy development and critical discourse in digital media
- Researchers will advance the development and implementation of digital technologies to ensure their equitable and ethical adoption, as well as exploring how the increasingly digital world influences the way we live, interact and conduct business

HEALTHY COMMUNITIES, EQUITY AND GLOBAL WELL-BEING

- Over the next five years, York is committed to expanding research that focuses on the social determinants of health, health care regulations, digital health, health outcomes and the promotion of wellness
- York will pursue new partnerships across health care, social services, natural sciences, engineering and global health sectors to extend the leadership and influence of its research
- York maintains its aspirations for a new kind of medical school to focus on integrated, interdisciplinary, team-based family primary care, community health, preventive healthcare, and wellness through the lifespan

INDIGENOUS FUTURITIES

 York is publicly committed to ongoing efforts to address barriers to Indigenous research, and further building community partnerships and collaborations with local and global Indigenous

- communities that will contribute to improving community life while enhancing cultural, economic and environmental sustainability
- The intent of this opportunity is to ensure that Indigenous-related research includes a commitment to listening to and learning from Indigenous people's knowledges, laws, ecology, spiritual practices and experiences
- Investments in Indigenous futurities will further support and enhance contributions to the scholarship of Indigenous and other community-based ways of knowing and foster deeper engagement with the development of research projects and initiatives

CLIMATE ACTION FOR A SUSTAINABLE PLANET

- York will invest in research to concretely address the climate crisis, building on and expanding its knowledge and experience related to climate change, applying its expertise on disaster response and humanitarian emergencies to acute weather events caused by global warming here in Canada and abroad
- Research will also focus on issues of equity, justice and sustainability whether food insecurity, global warming or species demise – major environmental challenges do not affect everyone or everything equally
- York will continue to take a whole-institution approach to sustainability and has developed a new Sustainability Framework to ensure sustainability is a critical part of both the scholarly and social and cultural sphere of York's campus and community

SOCIAL JUSTICE, PEACE, AND EQUITABLE RELATIONS

- York was founded on a mission of social justice, and is active in supporting emerging Black and Indigenous researchers as well as addressing structural barriers in research
- York is continuing its efforts towards decolonizing research and research administration, foregrounding the voice and needs of Indigenous communities within Indigenous research, facilitating research that is relevant to Indigenous life and respects Indigenous approaches to knowledge and learning
- York is dedicated to expanding collaborative research and programming that is relevant to the historical, cultural and creative productions of Black and other racialized communities

INTER- AND TRANSDISCIPLINARY RESEARCH INNOVATION

- York is committed to fueling and scaling novel transdisciplinary research approaches that will help drive innovative solutions to address increasingly complex societal challenges
- With increased funding and support for transdisciplinary research clusters, researchers will be able to accelerate the capacity of their fully launched research projects and initiatives and expect to pursue larger-scale external research funding
- York will seek to expand more meaningful participatory engagement with aligned stakeholders and partners and pursue new research partnerships and alliances with industry, government, community, and other organizations

5.0 ENABLING RESEARCH SUCCESS

- York continues to prioritize resources in support of the development of its research enterprise with strategic initiatives that will continue to improve the institutional support of individual scholarship and collaborative research activities and programs, through:
 - Supporting programming that will foster interdisciplinary and transdisciplinary collaboration, global research excellence and world-class training opportunities
 - Targeted investments to raise the recognition and profile of York's Organized Research Units (ORUs) as internationally leading research hubs

- Continuing to build a variety of research grant development supports and programming, offering effective grant and research mentorship to York's researchers
- Digitalizing research services, where helpful, to enhance research services

York will continue to support the pursuit of discovery and innovation, knowledge mobilization and social innovation by:

- Working to realize its full partnership potential through individual and conjoint collaboration with partners from the non-profit, public and private sectors, and academia
- Supporting multidirectional connections between researchers and research partners and encouraging the development of evidence that informs decisions about public policy and professional practice through the Knowledge Mobilization Unit at York
- Growing the provincial and national reputation of York University as a leading entrepreneurial university with YSpace its entrepreneurship hub
- Advancing York's renewed commercialization strategy, with support from the Government of Ontario, to streamline the University's support of innovation and intellectual property services to facilitate cost-effective commercialization opportunities for the York community and its partners

6.0 TOWARDS THE FUTURE

Research, scholarship and creative activity are integral to the fabric of York. Their growth and development are among the highest priorities for the University. With a strong commitment to quality, social justice, responsibility and academic freedom, York delivers research that advances critical inquiry and scientific discovery, challenges our beliefs and perceptions, and affects the social, cultural and economic development of our country and beyond. This plan reflects York's commitment to research excellence and to the development of new knowledge and creative activity. Success will be measured through demonstration of growth in national and international recognition of York's research, scholarship and creative activity, further acceleration of the strong pace of growth of research funding and outputs, the success of York's students, the recognition of York's faculty for their scholarly achievements, and most importantly the benefits delivered to communities and society at large.