

YORK UNIVERSITY

Progress on Sustainable Development Goals 2019-2020





Introduction

York University is a leading international teaching and research university and a driving force for positive change. Since its inception in 1965, York University has been committed to crossing disciplinary boundaries, encouraging new ways of thinking that drive excellence for a sustainable future. Students have opportunities to create big ideas making an impact on the world and push limits, achieve goals and find solutions to the world's most pressing social, environmental and economic challenges.

11 faculties and 25 research centres strive for innovation in global partnership with 280 leading universities worldwide. Located in Toronto, York is the third largest university in Canada, with a strong community of 53,000 students, 7,000 faculty and administrative staff, and more than 300,000 alumni. York U's fully bilingual Glendon Campus is home to Southern Ontario's Centre of Excellence for French Language and Bilingual Postsecondary Education. The new Markham Campus (to be opened in 2023) will enhance the opportunities offering professionally relevant degree programs and micro-credentials with a strong focus on digital technologies, entrepreneurship and experiential education in high demand areas, such as business and entrepreneurship, data analytics, new media and communications.

While 2020 has been a year like no other, York University has taken extraordinary steps to supporting its students while fostering research and innovation and serving its local community during unprecedented times. Our current and future well-being on a healthy planet will only be possible by resolving the existing and emerging challenges in a sustainable way. As a community of change leaders, we are better together.

To further and ensure the University's commitment to the United Nations Sustainable Development Goals (SDGs), the University has released a new <u>Building a Better Future:</u> <u>York University Academic Plan 2020-2025</u>. The University Academic Plan (UAP) infuses sustainable development in general and the SDGs in particular in all aspects of York U.

Beyond stating "We uphold **Sustainability** - environmental, social, and fiscal - as a vital compass for decisions and initiatives" in its core values, the new University Academic Plan 2020-2025 (UAP) calls for advancing the United Nations Sustainable Development Goals (SDGs). This new UAP builds upon the <u>York Sustainability Strategy</u> that has guided York's own sustainability policies and practices. By embedding sustainability within every aspect of the whole institution through policy, programs and practices – be they teaching and learning, research or community service – York University will fulfill its mandate of making an impact on the world and finding solutions to the world's most pressing social, environmental and economic challenges.



For the second year in a row, York University has earned recognition from **Times Higher Education (THE)** in its <u>Impact Rankings</u>, placing an impressive 33rd out of 767 universities. **York ranked in the top ten in four key categories**, and top 100 in 15 of the 17 <u>United Nations Sustainable Development Goals</u> (SDGs) measured by **THE**.

"York's standing reflects the essential role we play in tackling serious economic, social and health challenges at home, across Canada and around the world" said Rhonda L. Lenton, President and Vice-Chancellor, York University.

This year's Impact Rankings have expanded, not only in the number of participating universities, up from 450 last year to 767 this year, but also through the increased number of SDGs, up to 17 from the 11 measured last year. This now includes goals such as: no poverty, zero hunger, clean water and sanitation, and affordable and clean energy. York was ranked first in Canada (fifth in the world) for <u>Clean Water and Sanitation</u>, first in Canada (ninth in the world) for <u>Reduced Inequalities</u> third in Canada (ninth in the world) for <u>Sustainable Cities and Communities</u>, and first in Canada (10th in the world) for <u>Gender Equality</u>. These rankings reflect our core values and continued commitment to academic and research excellence, programming and initiatives.

"In the era of COVID-19, it is more important than ever for universities to work with government, industry and community organizations to strengthen all facets of society," said Lenton.

An exceptional study by York University proposing new sustainable alternatives to manage stormwater runoff was one of the many research and community initiatives that placed York as a leader in the THE's ranking for Clean Water and Sanitation (SDG 6). With Toronto as a case study, the researchers looked at the infrastructure that is in place to manage stormwater runoff, showing the systems are no longer adequate to handle flooding.

Faculty of Environmental and Urban Change

The new Faculty of Environmental and Urban Change was created to address the world's most pressing issues. Environmental change and urbanization represent two of the most critical challenges facing people and the planet. York University is taking a leadership role to advance teaching and learning, research and scholarship, and multi-sectoral engagement

in environmental and urban realms. Envisioned to be an international leader in critical and innovative urban, environmental and geographical knowledges and skills, the Faculty of Environmental and Urban change will focus on advancing sustainability and justice. <u>https://euc.yorku.ca/</u>

Lassonde School of Engineering

The Lassonde School of Engineering was featured in the UN 75 Sustainable Engineering in Action book which was released on November 16, 2020. The book marks the 75th anniversary of the United Nations (UN) and details how engineering is tackling the most pressing challenges in the UN's 17 Sustainable Development Goals. Dean Goodyear speaks about Lassonde's unique approach to interdisciplinary collaboration, its foundation in Renaissance Engineering and its focus on tackling the challenges of the future. https://lassonde.yorku.ca/articles/lassonde-profiled-un-75-sustainable-engineering-action-book

Cross-Campus Capstone Classroom (C4) Project

The Cross-Campus Capstone Classroom (C4) Project, led by professors **Danielle Robinson** of the School of the Arts, Media, Performance & Design and **Franz Newland** of the Lassonde School of Engineering, brings together students from across York University to work in interdisciplinary teams to address real-life social challenges that benefit from a variety of perspectives. In 2020, the C4 received an international award from Airbus and the Global Engineering Deans Council in Toulouse, France.

In one project, eight students from the Lassonde School of Engineering, Glendon College, the Faculty of Environmental and Urban Change, and the Faculty of Liberal Arts & Professional Studies developed the Solar Floatie, a solar home system that provides affordable heating and electrical power for homeowners, farmers and workers in El Norte Chico, Chile. The system replaces conventional high-cost industrial components with lowcost, accessible materials.

The 2020-2021 academic year the projects all relate to the Sustainable Development Goals with issues of Sustainable Development, Equity/Inclusion, Circular Economy, Health & Well-Being; Smart/Safer Living. <u>https://www.yorku.ca/c4/what-is-c4/</u>

Two specifics capstone projects include:

- How might students take the lead on York's contributions to the United Nations' Sustainable Development Goals?
- How might corporate leaders effectively incorporate the SDGs into their business models?



SDG 1: End Poverty in All its Forms Everywhere

Research

- Dennis Raphael, Faculty of Health, *extensive research on the social determinants of health* is ground-breaking. The social determinants of health refer to the socio-economic conditions that shape the health of individuals and communities. These conditions, primarily a deepening class and income inequity, determine an individual's access (or lack of access) to vital resources. <u>https://health.info.yorku.ca/health-profiles/index.php?mid=162284</u>
- Stephen Gaetz Faculty of Education, York Research Chair in Homelessness and Research Impact Through a ground-breaking new brief, the Homeless Hub paints a vivid picture of youth homelessness and the child welfare system. Its findings will be relevant to decision- and policymakers at all levels of government. https://yfile.news.yorku.ca/2018/03/01/seminal-report-on-youth-homelessness-delivers-sound-policy-recommendations/
- **Making the Shift** is a **Youth Homelessness Social Innovation Lab** with a mandate to contribute to the transformation of how we respond to youth homelessness through research and knowledge mobilization specific to youth homelessness prevention and housing stabilization. <u>https://yfile.news.yorku.ca/2019/05/26/new-initiative-aims-to-address-youth-homelessness-by-emphasizing-prevention/</u>
- Don Dippo, Faculty of Education, leading Borderless Higher Education for Refugees (BHER) provides free undergraduate and graduate-level education for refugees on the Kenya-Somalia and Thailand-Burma borders https://www.bher.org/
- Obiora Okafor, Osgoode Hall Law School, York Research Chair in International and Transnational Legal Studies- research on Canada's human rights engagements with various African countries, including in the sub-areas of economic and social rights, judicial strengthening, institution building, democratization and poverty alleviation. <u>https://www.osgoode.yorku.ca/faculty-and-staff/okafor-obiora-chinedu/</u>

- **Osgoode Income Contingent Loan Program**: Promotes financial accessibility of the law school by providing support (e.g. food, housing, transportation, legal services) for students from low-income families to enable them to complete university <u>https://www.osgoode.yorku.ca/programs/juris-doctor/financial-services/fund-law-school/income-contingent-loan-program/</u>
- In 2020, York introduced a **Jane-Finch Student Innovation Hub on Keele Campus** to give students a space for study groups, tutoring and other services, to build upon the SBL programme in helping students to more successfully navigate university life. <u>https://yfile.news.yorku.ca/2020/02/12/new-social-innovation-hub-gives-jane-and-finch-students-a-space-to-call-their-own/</u>
- **Faculty of Education's Advanced Credit Experience (ACE)** was created in partnership with the Toronto District School Board (TDSB) and the York University Faculty Association (YUFA). Targeting four TDSB secondary schools in the Jane and Finch community, ACE aims to enhance access to university education. Participating students attend lectures on campus, receive open co-op credits, participate in volunteer placements, and can earn \$5,000 in scholarships (Faculty of Education n.d.). <u>https://www.yorku.ca/edu/community/advanced-credit-experience-ace/</u>
- **Professor Sapna Sharma, Tier 2 York Research Chair in Global Change Biology, founded SEEDS,** a program to engage Syrian and other refugee children new to Canada with additional educational opportunities in science and math. SEEDs has provided science outreach for more than 350 refugees from Asia and Africa. Engaging activities have included trips to the Zoo, Ripley's Aquarium, the Royal Ontario Museum, and participating in science experiments at Science Rendezvous (Faculty of Science 2019). <u>https://seedsatyorku.info.yorku.ca/</u>
- The **Department of Sociology at York University** in the **Faculty of Liberal Arts & Professional Studies** hosts a free bridging program for students with precarious immigration status (including no status), a pilot project for a university-wide initiative. <u>https://soci.laps.yorku.ca/dreamers/</u>

Administration/Operations

• York Cares United Way Campaign – Staff and faculty have raised an impressive amount for the campaign to support the United Way Greater Toronto which leverages research and policy insights to help meet immediate needs and tackle systemic issues. The United Way Greater Toronto is dedicated to creating opportunities that people need to improve their lives and build a better future including fueling youth for success through opportunities, connections and access. Working to help vulnerable members of our community facing crisis with shelter, housing, literacy, food, social isolation, legal and health services. <u>https://www.yorku.ca/alumniandfriends/united-way/</u>

 Emergency COVID-19 Student Relief Fund – A new Emergency Bursary for students who need urgent financial aid to cover the unexpected costs of the pandemic. <u>https://yfile.news.yorku.ca/2020/06/28/giving-from-the-heart-york-community-steps-up-in-a-big-way-to-help-students-face-pandemic-challenges/</u>



SDG 2:

End Hunger, Achieve Food Security and Improved Nutrition and Promote Sustainable Agriculture

Research

- Sheila Colla, Faculty of Environmental Studies and Urban Change was bestowed the York Research Chair in Interdisciplinary Conservation Science. She is an ecologist using scientific principles to address real-world conservation issues. Her research focuses on the conservation of lesser understood native species such as bees, butterflies and flowering plants, and considers the impacts on our food supply and overall nutrition. She works closely with environmental NGOs, landowners, academic partners and government agencies to implement conservation management based on the best available science. She wants her research to inform relevant environmental and agricultural policy. https://biology.gradstudies.yorku.ca/faculty/s-colla/
- Roderick MacRae, Faculty of Environmental Studies and Urban Change, research focuses on creating a national food agriculture policy for Canada, and the set of coherent and comprehensive programs required to support such a policy. The courses he teaches identify the problems of the food and agriculture system, its vulnerabilities, where change is possible in the short, medium and long term, and the strategies that could bring about effective change. <u>https://euc.yorku.ca/facultyprofile/macrae-roderick-j/</u>
- Dan Zhang, Lassonde School of Engineering, Department of Mechanical Engineering, is a leader in robots and automation, and has developed a robotic structure with a hybrid harvester that uses solar and wind energy. This research was funded by the Natural Sciences & Engineering Research Council of Canada (NSERC). Robotic harvesting could facilitate rapid and efficient food production and aid green farming. https://yfile.news.yorku.ca/2019/09/05/lassonde-researchersperfect-hybrid-reconfigurable-robotic-harvester/
- Christopher Caputo, Faculty of Science, Department of Chemistry, Canada Research Chair in Metal-Free Materials for Catalysis, has determined a way to test food to ensure its safety for consumption. He and his team of researchers have developed precise, accurate and consumer-friendly methods of indicating whether food is safe for consumers. The ramifications are sweeping from food security to consumer safety to healthcare resources – the prevention of hospital stays.

https://yfile.news.yorku.ca/2020/10/01/researchers-find-way-to-spot-food-spoilage-prevent-waste-aid-food-security/

• Katalin Hudak, Faculty of Science, Department of Biology, while researching highly toxic pokeweed, Professor Hudak's lab makes an important discovery that could bolster the survival and resiliency of agricultural crops by staving off viruses. This vital work, published in *Frontiers in Plant Science*, was funded by the Natural Sciences and Engineering Research Council of Canada (NSERC) and scholarships from the Canada Graduate Scholarships-Master's (CGS-M) Program. https://www.yorku.ca/research/category/news/2017/09/virus-resistance-in-plants-holds-promise-for-agricultural-crops/

Students

- Jade Crimson Rose Da Costa a grad student addresses food insecurity in Ontario as co-founder of a grassroots community initiative. <u>https://yfile.news.yorku.ca/2020/08/13/laps-student-addresses-food-insecurity-in-ontario-with-grassroots-community-initiative-note-use-they-their-pronouns/</u>
- The York Federation of Students operate the YFS Food Support Centre with the following goals: 1) goal to have food and basic needs available to students of York University who are in a position where they can no longer afford to purchase these items for themselves. 2) to provide healthy, balanced food choices and to ensure that the food provided can where possible, fit cultural and dietary needs. <u>http://www.yfs.ca/food-support-centre</u>



SDG 3: Inspire Healthy Lives and Promote Well-Being for All at All Ages

Research

Reproductive, maternal, newborn and child health:

• Reproductive: Chun Peng, Faculty of Science, Department of Biology, Tier 1 York Research Chair in Women's Reproductive Health. Peng's long-term goal for her research program is to understand the regulation of female reproduction and the mechanisms underlying the development of ovarian cancer and preeclampsia. Her proposed research will enhance the overall understanding of female reproductive health and reveal novel biomarkers for preeclampsia and therapeutic targets for ovarian cancer.

https://biology.gradstudies.yorku.ca/faculty/c-peng/

- Child Health: Rebecca Pillai Riddell, Faculty of Health, Department of Psychology, Associate Vice-President Research director of the Opportunities to Understand Childhood Hurt Laboratory (OUCH Lab). As a clinical psychologist and a basic-behavioural scientist, her research program over the past 20 years has focused on the critical role caregivers play in shaping the development of infant pain responding and what caregivers can do to reduce pain in young children. The OUCH lab focuses on understanding how caregivers and children interact within the context of pain. https://www.yorku.ca/ouchlab/
- Sarah Flicker, Faculty of Environmental Studies and Urban Change, York Research Chair in Community-Based Participatory Research, is an expert in community development, health promotion and adolescent well-being. Flicker's innovative program of research focuses on the engagement of youth and other allied actors in environmental, sexual and reproductive justice. She works across methodologies using participatory approaches for social change. https://euc.yorku.ca/faculty-profile/flicker-sarah/
- **Bullying: Debra Pepler, Faculty of Health, Department of Psychology,** has changed the way we think about bullying, aggression and other forms of violence, especially among marginalized and alienated young people. Professor Pepler was awarded a Network of Centres of Excellence: New Initiatives grant to establish

PREVNet – Promoting Relationships and Eliminating Violence Network, which brings together 62 researchers form 27 Canadian universities and 49 national organizations and is a world leader in bullying prevention. https://www.prevnet.ca/

Infectious Diseases

- Jianhong Wu, York University Distinguished Research Professor and a Tier 1 Canada Research Chair in Industrial and Applied Mathematics, and Director of the Advanced Disaster, Emergency and Rapid Response Simulation (ADERSIM). He has a record of exceptional scientific contribution in a number of fields relevant to nonlinear analysis and health research and won the 2019 CAIMS-Fields Industrial Mathematics Prize. He also organized a workshop on vaccine dynamics modeling and immunization program optimization in May 2019. More recently, Professor Wu has been widely featured in many media outlets across Canada over the last three months commenting on infectious disease modelling and his analysis of epidemic data in Wuhan, China, where COVID-19 was first detected late last year. https://yfile.news.yorku.ca/2019/06/09/faculty-of-science-profjianhong-wu-wins-coveted-math-prize/
- Steven Hoffman is the Director of the Global Strategy Lab, Dahdaleh Distinguished Chair in Global Governance & Legal Epidemiology, Professor of Global Health, Law, and Political Science, Director of the WHO Collaborating Centre on Global Governance of Antimicrobial Resistance, and Scientific Director of CIHR Institute of Population & Public Health. He is an international lawyer licensed in both Ontario and New York who specializes in global health law, global governance and institutional design. His research leverages various methodological approaches to craft global strategies that better address transnational health threats and social inequalities. Past studies have focused on access to medicines, antimicrobial resistance, health misinformation, pandemics and tobacco control. <u>https://www.globalstrategylab.org/</u>
- Shayna Rosenbaum, Tarra Penney, Mary Wiktorowicz, and Michael Rotondi among York faculty who have received almost \$1 million in funding from the Canadian Institutes for Health Research (CIHR) to do rapid research over the next year related to the COVID-19 pandemic.

https://yfile.news.yorku.ca/2020/06/28/researchers-at-york-university-receivefunding-for-rapid-research-on-covid-19/

• **Nursing Professor Nazilla Khanlou & colleagues** received CIHR funding for the project "COVID-19 pandemic guidelines for mental health support of racialized women at risk of gender-based violence."

Non-communicable diseases, mental health and environmental risks

- Alzheimer's: Ellen Bialystok, Department of Psychology, Faculty of Health, Tier 1 Walter Gordon York Research Chair in Lifespan Cognitive Development. Her research examines the effects of experience on cognitive function and brain organization across the lifespan, with a particular focus on bilingualism as an example of an intense and prevalent experience. In a five-year study in collaboration with Baycrest Health Sciences, they find that bilingualism provides the brain with greater cognitive reserve, delaying the onset of dementia symptoms. https://news.yorku.ca/2020/02/13/can-bilingualism-protect-the-brain-even-withearly-stages-of-dementia/
- Cardiac Diseases: Gary Sweeney, Department of Biology, Faculty of Science, Tier 1 York Research Chair in Mechanisms of Cardiometabolic Diseases. Sweeney is an expert on diabetes and cardiovascular disease, and his work focuses on understanding mechanisms of cardiometabolic diseases, such as heart failure. He received a project grant from the Canadian Institutes of Health Research in 2018 and his research is also supported by the Natural Sciences and Engineering Research Council of Canada (NSERC) and the Heart and Stroke Foundation. https://yfile.news.yorku.ca/2018/02/07/three-york-university-professors-receive-cihrproject-grants/
- Autism: Steven Connor, Biology Department, Faculty of Science, Tier 2 Canada Research Chair in Neurophysiology, studies specialized zones of communication between brain cells known as synapses, and the fundamental properties of synapses as mutations in genes that code for proteins involved in synapse organization that are heavily implicated in neurodevelopmental diseases such as autism spectrum disorders (ASDs). His research project, "Characterization and Targeted Reversal of Synaptic Mechanisms Contributing to Autism Spectrum Disorder," received the John R. Evans Leaders Fund from the Canadian Foundation for Innovation in 2019. https://yfile.news.yorku.ca/2019/08/14/york-to-receive-federal-funds-thatsupport-cutting-edge-research/
- Pain: Joel D. Katz, Department of Psychology, Faculty of Health, Tier 1 Canada Research Chair in Health Psychology, focuses on psychological, emotional, and biomedical factors involved in acute and chronic pain. He was recognized with a prestigious honour by the American Psychological Association (APA) in 2019 for his contributions to pain research, and was named a Fellow of Division 53, the Society of Clinical Child and Adolescent Psychology (SCCAP) of the APA. https://yfile.news.yorku.ca/2019/04/16/professor-joel-katz-earns-prestigiousdistinction-for-pain-research/
- Brain functioning: Joel Zylberberg, Department of Physics and Astronomy, Faculty of Science, Tier 2 Canada Research Chair in Computational

Neuroscience, is a core member of VISTA. He studies the way the brain represents information about the outside world, and the way in which those representations are learned. He was a co-author on a study led by Duke University which found a piece of the puzzle in improving retinal prosthetics, like bionic eyes in 2020. <u>https://yfile.news.yorku.ca/2020/09/16/research-finds-clue-to-decoding-retinal-signals-for-better-bionic-eyes/</u>

- Aging: The aim of the York University Centre for Aging Research and Education (YU-CARE) is to support and promote the work of its researchers and graduate trainees who study changes, challenges and policies to support aging at the individual, organizational, and societal levels. Members of YU-Care actively engage in efforts to translate their knowledge in the community with policy papers and lectures presented in the community. <u>https://yucare.info.yorku.ca/</u>
- Mental Health of Syrian Refugees: Farah Ahmad, Faculty of Health, and postdoctoral visiting fellow Nasih Othman analyzed the prevalence of depressionlevel symptoms of Syrian refugees at baseline and one-year post-resettlement in a study led by Michaela Hynie (Faculty Health) and Susan McGrath (Faculty of Liberal Arts & Professional Studies) from York University and Dr. Kwame McKenzie from the Center for Addictions and Mental Health and the Wellesley Institute.

https://yfile.news.yorku.ca/2020/06/07/study-indicates-importance-of-postsettlement-supports-to-address-depression-in-syrian-refugees/

• **Yvonne Bohr, Faculty of Health – Department of Psychology**, partnered with five communities and four agencies in Nunavut to develop an Indigenous-focused fantasy video game focused on supporting mental wellness in Inuit youth, who as a community experience high rates of stress, anxiety, depression and suicide. <u>https://www.yorku.ca/research/category/news/2018/11/qa-with-researcher-on-fantasy-video-game-to-help-inuit-youth-build-resilience/</u>

Health systems and funding

• Pat Armstrong, Department of Sociology, Faculty of Liberal Arts & Professional Studies, Distinguished Research Professor of Sociology, held a CHSRF/CIHR Chair in Health Services and Nursing Research and has published on a wide variety of issues related to long-term care, health care policy, and women's health. Funded by the Social Science and Humanities Research Council of Canada, she is Principal Investigator on "Reimagining Long-term Residential Care: An International Study of Promising Practices". In 2018, she was one of eight women recognized by YWCA Toronto for her outstanding contributions to and leadership in improving the lives of women. https://yfile.news.yorku.ca/2018/03/14/prof-pat-armstrong-among-ywcas-2018-women-of-distinction/

- Dahdaleh Institute for Global Health Research, led by James Orbinski, director, is committed to effectiveness, excellence and equity in global health. The Institute carries out projects in three areas: Global Health & Humanitarianism, Planetary Health and Global Health Foresighting. In partnership with Médecins sans Frontières (MSF/Doctors Without Borders), DIGHR launched the Safe Water Optimization Tool in 2020, which help aid workers ensure that water is safe to drink in refugee and internally displaced persons camps. <u>https://yfile.news.yorku.ca/2020/11/07/yorks-</u> <u>dahdaleh-institute-launches-novel-web-based-tool-to-ensure-safe-drinking-water/</u>
- Schulich School of Business established a new Centre of Excellence in Health Management and Leadership in June 2020. The Centre will become a leading global hub in industry outreach, education and research in the vitally important health sector. <u>https://yfile.news.yorku.ca/2020/07/01/schulich-receives-5m-gift-toestablish-centre-of-excellence-in-health-management-and-leadership/</u>
- **The Agents of Change Project in the Faculty of Health** provides up to \$500 in start-up funds, as well as training, for students to launch health promotion initiatives in the community. <u>https://ccscss.info.yorku.ca/agents-of-change/</u>

Administration/Operations

• **YUBetterTogether** – As York University works together to navigate the unanticipated challenges resulting from the COVID-19 pandemic, there are a myriad of ways the people of York U are mobilizing contributing to a better outcome of this global crisis. <u>https://yubettertogether.info.yorku.ca/</u>





SDG 4:

Ensure Inclusive and Equitable Quality Education and Promote Lifelong Learning Opportunities for All

Research

- Charles Hopkins holds the UNESCO Chair in Reorienting Education towards Sustainability. He coordinated the #Indigenous ESD participatory research project 2017-2020. #IndigenousESD is the first international network of researchers focusing on improving the education of Indigenous Peoples around the world in light of the 2030 Agenda, in particular SDG targets 4.5 and 4.7. The first research project of our network is entitled "Reorienting Education and Training Systems to Improve the Lives of Indigenous Youth" (2017-2020). It is designed to serve the 2030 Agenda for Sustainable Development with the Sustainable Development Goals (SDGs), in particular SDGEducation 2030 Agenda of SDG 4. https://unescochair.info.yorku.ca/research-and-expertise/
- Gillian Parekh, Tier 2 Canada Research Chair in Inclusion, Disability and Education (as of July 1, 2019) is an assistant professor in the Faculty of Education. She explores institutional and structural barriers related to equitable access to education, particularly for students with disabilities. She conducts both quantitative and qualitative research investigating demographic, programmatic and experiential trends between public and post-secondary education. With a focus on special education and academic streaming, her work explores how schools construct and respond to disability. Her research addresses current issues in education and will make a difference in the lives of young people in the GTA and beyond. https://edu.yorku.ca/edu-profiles/index.php?mid=732857
- Kate Tilleczek is a Professor in the Faculty of Education and a Tier 1 CRC in Young Lives, Education and Global Good. Tilleczek's research examines how education can better assist more young people and provides unique national and international data on critical risk and protective situations encountered by contemporary youth. Her work documents how marginal youth are affected by shifting global and local contexts such as digital technology and mental health challenges. It unearths the positive and resilient aspects of young lives and provides longitudinal and cross-cultural comparisons in Canada and beyond. Her research is mobilized to the academy, communities, and decision makers who are in positions to better support youth. The Chair also builds new global youth partnerships,

linking young people across countries and cultures to develop social innovations for the greatest challenges they face. <u>https://edu.yorku.ca/edu-profiles/index.php?mid=1459246</u>

- **Osgoode Hall Law School offers an Exam Preparation Program** for internationally trained lawyers who are looking to take their National Committee on Accreditation (NCA) exams. <u>https://www.osgoodepd.ca/graduate-programs-and-courses/internationally-trained-lawyers/online-nca-exam-prep/</u>
- York University Libraries hosted a virtual panel discussion on 'Honouring Indigenous Ways of Knowing' in October 2020, which discussed how, in a time of open research, research communities can navigate and balance openness while respecting indigenous knowledge and cultural expressions <u>https://yfile.news.yorku.ca/2020/10/13/libraries-hosts-panel-discussion-onhonouring-indigenous-ways-of-knowing/</u>
- York University Libraries hosted the Shades of our Sisters exhibit in March 2020, which challenged visitors to understand the breadth and depth of the loss of Indigenous women, girls, Trans and Two-Spirited Peoples in Canada: https://yfile.news.yorku.ca/2020/03/10/shades-of-our-sisters-exhibit-comes-to-the-keele-campus/
- Faculty of Science's annual public lecture series in 2019, Feasting at the Table of Elements presented how the elements were discovered and how they affect our daily lives, including the chemical elements in tattoos, the air we breathe, and how they affect making beer. This series was free and open to everyone at Toronto Public Library branches across the city. https://yfile.news.yorku.ca/2019/09/16/faculty-of-science-presents-feasting-at-the-table-of-elements-lecture-series-at-toronto-public-library/
- **SimXSpace Eva Peisachovich, Lora Appel, Celina Da Silva** Virtual Reality, Simulated Person Methodology (SPM) and Serious Gaming into an online resource to transform online learning. The mission is to establish a space which drives innovation and provides research opportunities to modernize and humanize curriculum; build capacity within and outside the university community; facilitate the translation of knowledge to improve experiential education through simulation across sectors; and provide products and services to strengthen experiential education outcomes. <u>https://yfile.news.yorku.ca/2020/06/07/simulations-offerimportant-advantage-in-remote-learning/</u>

Administration/Operations

• In March 2020, the International Association of Universities (IAU) appointed York University in their *Global Cluster of Higher Education for Sustainable Development* as Global Cluster Lead for SDG 4 with the UNESCO Chair as focal point. <u>https://unescochair.info.yorku.ca/networks/</u>



SDG 5: Achieve Gender Equality and Empower All Women and Girls

Research

- Linda Peake, Faculty of Liberal Arts & Professional Studies, is the director of the City Institute at York University. In 2017, she received \$2.5M/ 6 years SSHRC funding for Urbanization, gender and the global south: a transformative knowledge network researching how rapid urbanization is affecting the lives of women living in poverty and to inform public debate about sustainable and democratic urban change. She won the Canadian Association of Geographers Award for Scholarly Distinction in 2020. https://yfile.news.yorku.ca/2020/06/10/city-institute-director-receives-major-award-for-scholarly-distinction/
- Nazilla Khanlou, Women's Health Reseach Chair in Mental Health, School of Nursing, Faculty of Health. Her overall program of research is situated in the interdisciplinary field of community-based mental health promotion in general, and mental health promotion among youth and women in multicultural and immigrantreceiving settings in particular. She is the project lead of "COVID-19 Pandemic Guidelines for Mental Health Support of Racialized Women at Risk of Gender-Based Violence", which was funded by the CIHR operating grant: Knowledge Synthesis: COVID-19 in Mental Health & Substance Use. https://nkhanlou.info.yorku.ca/files/2020/11/Khanlou COVID19-Pandemicguidelines-for-mental-health-support-of-racialized-women-at-risk-of-

GBV.Nov2020.pdf?x68747

• Sarah Flicker, Faculty of Environmental and Urban Change, along with Jen Gilbert, Faculty of Education are co-lead investigators on the Healthy Relationships Project, a \$1M Planned Parenthood Ottawa and Ottawa Coalition to End Violence Against Women 5-year project (2019-24) aimed at preventing teen dating violence by teaching new skills with a focus on increasing awareness and understanding of healthy relationships.

https://yfile.news.yorku.ca/2019/05/15/york-researchers-to-lead-five-year-project-addressing-youth-and-teen-dating-violence/

- York University Centre for Feminist Research, an internationally recognized Center for research on gender, race, class, indigeneity, disability, sexuality, and women's issues https://cfr.info.yorku.ca/
- The Bridging Program for Women in the Faculty of Liberal Arts & Professional Studies offers academic bridging courses for women who want to upgrade their writing and speaking skills and explore the possibility of university study. https://bpw.gsws.laps.yorku.ca/
- The **Lassonde School of Engineering** held an event in 2019 for girls in Grade 7 and 8 across Ontario, and one parent/guardian, to learn about the world of engineering. https://lassonde.yorku.ca/go-eng-girl-2019

Administration/Operations

- **York University** also has several programs and activities which encourage women's application to fields where women are traditionally underrepresented.
 - <u>https://www.ontariocycling.org/women-and-girls-leadership-sports-</u> <u>conference-at-york-university/</u>
 - https://yfile.news.yorku.ca/2019/08/24/lassonde-launches-the-helencarswell-steam-program-for-women/
 - <u>http://im2c-canada.math.yorku.ca/wordpress/index.php/girls-explore-math/</u>





SDG 6:

Ensure Availability and Sustainable Management of Water and Sanitation

Research

- Lewis Molot, Faculty of Environmental Science, conducts research in the development and maintenance of harmful cyanobacterial blooms in freshwaters. These blooms remain a serious water quality problem globally, and can often produce nerve and liver toxins, and chemicals that alter the taste and odour of drinking water. <u>https://fes.yorku.ca/faculty-profile/molot-lewis/</u>
- Ahmed Eldyasti, Lassonde, Dept of Civil Engineering, research on new Generation of Wastewater Facility, Biological treatment processes for municipal and industrial wastewater, Biofilm technologies for wastewater/waste streams, Wasteto-Energy (WtoE) processes to transform "energy-consuming treatment processes" into "energy-saving and energy–positive systems" including Biomethane, Biohydrogen, and Biopower, Resources/Chemicals recovery from wastewater/waste streams, Modeling tools for novel biological biofilm technologies to facilitate designing, scale-up, and troubleshooting, and Greenhouse Gases (GHGs) emissions from wastewater treatment processes https://lassonde.yorku.ca/users/ahmedeidyasti
- Magdalena Krol, Lassonde, Department of Civil Engineering, research focuses on innovative groundwater remediation technologies. In 2020, she received Alliance funding from NSERC to study the effect of high temperature on soil and water remediation. This grant will examine nobel ways to clean up sites that have been contaminated with things like petroleum fuels, coal tar, and chlorinated solvents. https://yfile.news.yorku.ca/2020/10/14/lassonde-professor-works-todecontaminate-land-safeguarding-community-safety-and-environment/
- Usman Khan, Lassonde, Department of Civil Engineering, His research interests lie in Water Resources Engineering, focusing on urban hydrology, including flood risk assessment and uncertainty analysis, sustainable water resource management and infrastructure and the impacts of climate change on these systems. https://yfile.news.yorku.ca/2019/10/09/lassonde-professor-contributes-to-study-proposing-sustainable-alternatives-for-stormwater-management/

• Deborah McGregor, Osgoode Hall Law School, Faculty of Environmental Studies and Urban Change, Tier 2 Canada Research Chair in Indigenous Environmental Justice, is working to advance the theory and practice of environmental justice scholarship by engaging with Indigenous intellectual traditions. Her research program seeks to develop a distinctive environmental justice framework based on Indigenous knowledge systems and the lived experience of Indigenous peoples. Her research will provide a much deeper understanding of environmental injustices facing Indigenous peoples, and even more importantly, lead to viable approaches to addressing such challenges. Her Indigenous Environmental Justice Project offers unparalleled resource. It's a five-year initiative funded by the Social Sciences & Humanities Research Council of Canada (SSHRC).

https://research.info.yorku.ca/2018/01/indigenous-environmental-justice-projectoffers-unparalleled-resource/





SDG 7:

Ensure Access to Affordable, Reliable, Sustainable and Modern Energy for All

Research

 Hany Farag, Department of Electrical Engineering & Computer Science, Lassonde School of Engineering, Tier 2 York Research Chair in Integrated Smart Energy Grids. Farag has research interest including the integration of renewable generation, energy storage and electric vehicles, renewable hydrogen and natural gas, and smart grids. Since joining York, Farag has secured over \$500,000 in funding from NSERC and power utilities. He led the development of teaching and research laboratories in the new Electrical Engineering program, worth \$2 million. He received an Early Researcher Award from the Ministry of Research, Innovation and Science in 2018.

http://eecs.lassonde.yorku.ca/faculty/hany-farag/

- International Renewable Energy Academy (IREA): Professors Fred Schwartz and Jose Etcheverry, Faculty of Environmental Studies and Urban Change, established in 2017, the International Renewable Energy Academy- teaching community-focused renewable energy development and dissemination through community-based IREA Academies around the world. Participants received two days training on the Canadian government's RETScreen Expert system, that evaluates all the inputs needed for a potential project, from expert instructors. Three days of presentations followed from leading experts on wind, solar and related fields, visits to officials in Oxford County and the city of Woodstock, who are committed to going 100% renewable energy, and tours to manufacturing http://rea.info.yorku.ca/
- Mark Winfield, Faculty of Environmental Studies and Urban Change, is one of the country's leading experts on alternative energy futures, leads York's Sustainable Energy Initiative (SEI). SEI has several active research projects related to low-carbon sustainable energy transitions in the electricity sector. These include SSHRC funded research partnership development projects on Smart Grids and Community Energy Planning, leadership of the policy and regulation project within NSERC Network on Energy Storage Technologies (NEST); and research on policy frameworks for energy efficiency and conservation as a toll for low-carbon sustainable energy transitions. Prof. Winfield has published extensively on electricity, energy and climate change related issues in Ontario. https://euc.yorku.ca/faculty-profile/winfield-mark-s/

• Thomas Baumgartner, Department of Chemistry, Faculty of Science, is Canada Research Chair in Sustainable Organomain Group Materials (Tier 1). Baumgartner's research, focused on the design of novel materials that can be used to lower the anthropogenic carbon footprint, will provide knowledge crucial to the development of essential next-generation technologies for a sustainable future. His program targets several energy-focused topics by addressing the efficient and sustainable use, conversion, and/or storage of energy via advanced synthesis in a bottom-up approach.

https://www.chairs-chaires.gc.ca/chairholders-titulaires/profileeng.aspx?profileId=3916





SDG 8: Promote Sustained, Inclusive and Sustainable Economic Growth, Full and Productive Employment and Decent Work for All

Research

- Leah Vosko, Department of Politics, Faculty of Liberal Arts & Professional Studies, Tier 1 Canada Research Chair in the Political Economy of Gender & Work (Tier 1). Her research examines employment standards enforcement and deportability among workers labouring transnationally. She is currently principal investigator of Closing the Enforcement Gap: Improving Protections for People in Precarious Jobs, a SSHRC Partnership Grant concerned with employment standards enforcement; the Canada Labour Code-Data Analysis Infrastructure (CLC-DAI), an initiative involving a partnership with the Government of Canada's Labour Program, funded by the Canadian Foundation for Innovation and the Ontario Research Fund; and four research and teaching databases – the Gender and Work Database (GWD), the Comparative Perspectives Database (CPD), the Employment Standards Database (ESD) and the CLC-DAI. She received SSHRC's prestigious Impact Award (Insight Category) in 2019. https://yfile.news.yorku.ca/2019/09/08/york-u-professor-leah-vosko-recognizedwith-prestigious-impact-award-insight-category/
- Ethel Tungohan, Department of Politics, Faculty of Liberal Arts & Professional Studies, Tier 2 Canada Research Chair in Canadian Migration Policy, Impacts and Activism. One of Tungohan's current projects analyzes discourses that have underpinned the Canadian government's policies towards temporary foreign workers from 1973 until 2016 and the nature of these policies and their effects on different groups of temporary foreign workers. https://profiles.laps.yorku.ca/profiles/tungohan/
- Mark Thomas, Department of Sociology, Faculty of Liberal Arts & Professional Studies, is former Director of the Global Labour Research Centre at York and has been a Visiting Professor at the Institute of Political Economy, Carleton University, and a Visiting Researcher at Institut de Recherches Sociologiques, Université de Genève. He has several ongoing projects funded by SSHRC Insight Grants, including a project on working time patterns in contemporary labour markets, and the rise of populism and its implications for labour movements in North America. https://profiles.laps.yorku.ca/profiles/mpthomas/

• Eric Tucker, Osgoode Hall Law School, has published extensively in the fields of occupational health and safety regulation and labour law. Professor Tucker has been involved in law reform initiatives through his participation on the board of Injured Workers' Consultants, a community legal clinic, and as a member of the steering committee of the Bancroft Institute, a grassroots organization that aims to promote research responsive to workers' needs. He has co-authored a study of the legal definition of employment for the Law Commission of Canada and a study of reproductive hazards in the workplace for the Royal Commission on New Reproductive Technologies. He received the Sefton-Williams Award for Contributions to Labour Relations in 2019.

https://yfile.news.yorku.ca/2019/03/31/professor-eric-tucker-earns-seftonwilliams-award/

Marcia Rioux, Faculty of Health, Distinguished Research Professor, leads the Disability Rights Promotion International (DRPI) project- an international collaborative project to establish a comprehensive, sustainable international system to monitor human right of people with disabilities- and helps them participate in the workforce in Bangladesh, India and Nepal- and works with organizations of disabled persons that collaborate with employers to recognize the skills of disabled workers, instead of focusing on their disabilities and limitations. This project was selected as one of the recipients of the Zero Project Innovative Practice Award in 2017 for the DRPI Aware Project, which works with organizations of disabled persons that collaborate with employers to recognize the skills of disabled persons that collaborate as in the international system of disabled persons are project. Aware Project, which works with organizations of disabled persons that collaborate as of disabled persons disabled persons disabled persons disabled persons are project. Aware Project, which works with organizations of disabled persons that collaborate are project to recognize the skills of disabled persons that collaborate with employers to recognize the skills of disabled persons that collaborate with employers to recognize the skills of disabled persons that collaborate with employers to recognize the skills of disabled workers. https://yfile.news.yorku.ca/2017/02/27/york-project-that-improves-employment-for-disabled-persons-earns-award/

Students

• **ShopHERE Program** - Students from York University's Schulich School of Business are helping small businesses struggling due to the impacts of COVID-19 quickly gear up for online commerce. The students are participating in the City of Toronto's Digital Main Street (DMS) ShopHERE program, a major new initiative that is supported by a team of leading global technology companies committed to helping Toronto's main street independent small retailers and artist survive the COVID-19 crisis. <u>https://www.youtube.com/watch?v=sZ5mHLM2UzI&feature=youtu.be</u> https://programs.digitalmainstreet.ca/shophere-signup





SDG 9: Build Resilient Infrastructure, Promote Inclusive and Sustainable Industrialization and Foster Innovation

Research

- Vision: Science to Applications (VISTA)- York is world-leading institution in the field of vision research. York received over \$33 million from the Canada First Research Excellence Fund (CFREF), which is supporting a \$120 million project that brings together over 50 industry, public, and academic partners. VISTA drives discovery in a variety of applications of vision science including basic visual function, vision and aging, 3D media, computer vision and object recognition, and visual applications to the aerospace industry.
- Richard Wildes, Department of Electrical Engineering and Computer Science, Lassonde School of Engineering, Tier 1 York Research Chair in Computational Vision, is associate director of the VISTA project and a member of the Centre for Vision Research. He is the recipient of a Sarnoff Corporation Technical Achievement Award, the IEEE D.G. Fink Prize Paper Award for his Proceedings of the IEEE publication "Iris Recognition: An Emerging Biometric Technology." He has twice been invited to present lectures to the U.S. National Academy of Sciences. His research interests include computer vision, video understanding, machine vision applications and artificial intelligence.

http://eecs.lassonde.yorku.ca/faculty/richard-wildes/

• J. Douglas Crawford, Distinguished Research Professor, Department of Psychology, Tier 1 Canada Research Chair in Visual-Motor Neuroscience, joined the York Department of Psychology in 1995. For over 20 years, his work at the York Centre for Vision Research has focused on the control of visual gaze in 3D space, eye-hand coordination, and spatial memory during eye movements. Crawford has numerous publications and awards including the 2004 Steacie Prize and the 2016 Canadian Physiological Society Sarrazin Award. He founded the York Neurophysiology Labs, the York Graduate Diploma Program in Neuroscience, and the Canadian Action and Perception Network (CAPnet)-a consortium of six research centers which he continues to lead. Most recently he co-founded the 'Brain in Action' International Research Training Program, which he leads on behalf of Canada. http://www.yorku.ca/jdc/Biography.html • John K. Tsotsos, Distinguished Research Professor of Vision Science, Department of Electrical Engineering & Computer Science, Lassonde School of Engineering, NSERC Tier 1 Canada Research Chair in Computational Vision, holds Adjunct Professorships in the departments of Computer Science and of Ophthalmology and Vision Sciences at the University of Toronto. In 2014 he became the founding Director of the Centre for Innovation in Computing at Lassonde. His research efforts span the areas of computer vision, computational neuroscience, human vision, artificial intelligence and robotics. He is the recipient of the 2006 Canadian Image Processing and Pattern Recognition Society Award for Research Excellence, and Service and of the 1st President's Research Excellence Award by York University in 2009. He was elected Fellow of the Royal Society of Canada, Academy of Sciences, Division of Mathematics and Physical Sciences in 2010 and was awarded their 2015 Sir John William Dawson Medal for excellence in multidisciplinary research.

https://www.eecs.yorku.ca/~tsotsos/Tsotsos/Biography.html

- Michael Brown. Department of Electrical Engineering & Computer Science, Lassonde School of Engineering, Tier 1 Canada Research Chair in Computer Vision. Brown's research aims to improve the understanding of the physical world through camera images by: investigating image formation models that describe how incoming light (i.e., physical scene irradiance) is converted to camera sensor responses under different imaging scenarios; and designing novel in-camera imaging pipelines that produce image outputs suitable for both photographic and scientific tasks. His program is strongly aligned with York University's \$33.3 million Canada First Research Excellence Fund program, Vision: Science to Applications (VISTA), which focuses on research in biological and computational computer vision. He was granted \$300,000 by NSERC to further his research in modeling image formation and in-camera imaging pipelines in 2017. https://yfile.news.yorku.ca/2017/11/01/lassonde-professors-earn-more-than-2-2m-in-discovery-grants/
- James Elder, Departments of Electrical Engineering and Computer Science and Psychology, Lassonde School of Engineering and Faculty of Health, Tier 1 York Research Chair in Human and Computer Vision, is a member of the Centre for Vision Research. His research interests include the development of novel and useful computer vision algorithms and machine vision systems through a better understanding of visual processing in biological systems. Intelligent Systems for Sustainable Urban Mobility (<u>ISSUM</u>) project lead by James Elder and funded by the Ontario Research Fund (ORF), private sector partners and University of Waterloo. <u>https://www.elderlab.yorku.ca/jelder/</u>
- Nikolaus Troje, Department of Biology, Faculty of Science, Tier 1 Canada Research Chair in Reality Research, is a core member of Vision: Science to Applications (VISTA) team within York's Centre for Vision Research. In his BioMotionLab, he uses motion capture and 3D scanning technology to generate individualized avatars

to be used in mixed realities. Using virtual reality (VR), he studies how we perceive objects and communicate with other people, how we experience and take ownership of our own body, and how we situate ourselves in the space that we seem to occupy. https://biology.gradstudies.yorku.ca/faculty/n-troje/

- Dan Zhang, Department of Mechanical Engineering, Lassonde School of Engineering, Tier 1 York Research Chair in Advanced Robotics and Mechatronics, is a professor and Kaneff Research Chair in Advanced Robotics and Mechatronics. He was a founding Chair of the Department of Automotive, Mechanical and Manufacturing Engineering with the Faculty of Engineering & Applied Science at University of Ontario Institute of Technology. Zhang's research interests include robotics and mechatronics, high performance parallel robotic machine development, micro/nano manipulation and MEMS devices, and rehabilitation robots and rescue robots. In a project funded by NSERC, Zhang and a student Zhingxing Yang perfected a hybrid reconfigurable robotic harvester in 2019, which is powered by solar and wind energy. https://yfile.news.yorku.ca/2019/09/05/lassonde-researchers-perfect-hybridreconfigurable-robotic-harvester/
- Gunho Sohn, Earth and Space Science Engineering, Lassonde School of Engineering, was awarded a NSERC Collaborative Research Development grant in 2020 for his project which seeks to update Canada's critical infrastructure- the independent network of utilities, transportation and facilities. In collaboration with Teledyne Optech, Sohn's project will develop an advanced data processing system using a specific type of artificial intelligence (AI), called deep neural network, which has recently achieved remarkable success in computer and robotic vision and machine learning. This work will allow for the autonomous recognition of infrastructure assets using high-quality 3D models of critical networks, thus contributing to the field of infrastructure management and improving urban sustainability as a whole. <u>https://yfile.news.yorku.ca/2020/01/12/two-york-university-professors-receive-largenserc-grants-for-research-and-development/</u>
- **Christina Hoicka's Social Exergy + Energy Lab** conducts research on renewable energy, community energy, gender and energy, Indigenous energy, energy justice, and participation, innovation and diffusion in low-carbon energy transitions <u>https://cehoicka.lab.yorku.ca/</u>
- **OcularAI**, established by York University, focuses on designing and developing custom AI solutions for businesses with AI problems. It provides businesses with software and services that help unlock the true value of their data or automate their tasks. With a flexible deployment model, OcularAI offers embedded, in-premise and cloud-based architectures for its AI solutions.sed architectures. <u>http://ocular.ai/</u>

 York University's Food Accelerator Program – The program is led by York's YSpace the first of its kind in Ontario to help Canadian business owners with products in market scale up rapidly, giving them a much-needed jumpstart in food industry challenged during the COVID-19 pandemic. https://news.yorku.ca/2020/08/21/food-accelerator-program-gives-entrepreneurs-a-boost-during-covid-19/

YORK



SDG 10:

Research

Centre for Refugee Studies is an interdisciplinary community of researchers dedicated to advancing the well-being of refugees and others displaced by violence, persecution, human rights abuses, and environmental degradation through innovative research, education, and policy engagement. Sean Rehaag, Osgoode Hall Law School, Director of the Centre for Refugee Studies at York University. He frequently contributes to public debates about immigration and refugee law, and he engages in law reform efforts in these

Reduce Inequalities Within and Among Countries

areas. https://www.osgoode.yorku.ca/faculty-and-staff/rehaag-sean/

- Local Engagement Refugee Research Network (LERRN), team of researchers and practitioners, as well as a partnership of universities and non-governmental organizations (NGOs), committed to promoting protection and finding solutions in collaboration with refugees around the world. https://yfile.news.yorku.ca/2020/01/22/york-faculty-generate-new-research-onresettlement-of-refugees-in-global-south/
- Jennifer Hyndman, Department of Social Science and Geography Faculty of • Liberal Arts & Professional Studies, focuses on 1) conflict, human displacement, and the geopolitics of humanitarian response and refugee protection; and 2) refugee settlement, participation and social inclusion in Canada. Current research projects probe a) how private refugee sponsorship is sustained over time in Canadian communities; 2) the motivations of sponsors and the meanings they attach to the work they do https://jhyndman.info.yorku.ca/
- Christopher Kyriakides, Department of Sociology, Faculty of Liberal Arts & • Professional Studies, Tier 2 Canada Research Chair in Socially Engaged Research in Race and Racialization. Kyriakides' 'Racialized Reception Contexts' research program focuses on configurations of racialization in relation to the meaning of 'East/West', 'South/North' and articulations of racism and nationalism in the reception of refugees in Europe, North America and the Middle East. His research is guided by the understanding that racialization, particularly in light of the post-9/11 'war on terror,' works with the historical conditions of racism specific to a given national formation, but in a dynamic global context. The initial five-country analysis, including Canada, the United States, Italy, Greece and Jordan, will examine the extent to which policy instruments and media discourses related to the 'global refugee crisis' negatively impact on racialized communities in each reception

context. https://profiles.laps.yorku.ca/profiles/ckyriak/

- **Sylvia Hsu, Schulich School of Business,** led a six-person team of researchers from Yale University on a study that discovered racial/ethnic differences in end-of-life care, which suggests that local practice patterns may be influencing decisions around this care. The researchers have policy-based suggestions for improvement that will be of interest to those in the healthcare sector in both Canada and the United States. <u>https://research.info.yorku.ca/2019/04/york-yale-research-finds-racial-differences-in-end-of-life-care/</u>
- Jen Gilbert, Faculty of Education, launched a ground-breaking venture, The Beyond Bullying Project, which offers a repository of real-life experiences that will shed light on this vital topic as well as offer support and resources. This could inform educators, school administrators, government policy-makers, LGBTQ youth, parents and more. https://yfile.news.yorku.ca/2019/05/02/anti-bullying-project-on-lgbtq-youth-a-vital-resource-in-schools-and-beyond/
- Susan McGrath, School of Social Work, Faculty of Liberal Arts & Professional Studies Professor Emerita, past Director of the Centre for Refugee Studies (2004-2012). Her academic and research interests include: developing a global refugee research network, refugee resettlement, community development, communitybased mental health programs, and transnational social work. <u>https://profiles.laps.yorku.ca/profiles/smcgrath/</u> <u>https://refugeeresearch.net/</u>
- Brent Lyons, Schulich School of Business, Tier 2 York Research Chair in Stigmatization and Social Identity. Lyons studies stigma in organizations and how individuals with stigmatized social identities, such as disability, navigate their work and interpersonal relationships to reduce consequences of stigmatization. He has published his work in numerous journals, such as Academy of Management Review, the Journal of Applied Psychology and the Journal of Management. He serves on various editorial boards, including that of the Journal of Applied Psychology and Organizational Behavior and Human Decision Processes. https://research.info.yorku.ca/2018/11/how-disability-is-disclosed-in-

job-interview-affects-hiring-research-finds/

• Carl James, Faculty of Education, Jean Augustine Chair in Education, Community & Diaspora, Faculty of Education, is also the university's Affirmative Action, Equity & Inclusivity Officer. He holds cross-appointments in Graduate Programs in Sociology, Social and Political Thought, and Social Work. James' research interests include: examination of how race, ethnicity, gender, class and citizenship/immigrant status intersect and mediate accessible and equitable opportunities and outcomes in education and employment for racialized youth – Black youth in particular. In 2017-2018, he was one of six education Advisors to the Ontario Minister of Education and Premier. Professor James led the 2017 report Towards Race Equity in Education, which found Black students are disproportionately being streamed into applied instead of academic programs, often times below their ability, and are being suspended at a much higher rate than their counterparts. James led the report which followed consultations with 324 parents, community members, educators, school staff and trustees and identified that Black students face an achievement and opportunity gap in GTA schools. Recently the Ontario government has implemented some of the report recommendations and has taken steps to end the practice of academic streaming and ban suspensions for young students - expected to take effect by the 2021-2022 school year. https://www.yorku.ca/edu/2020/11/09/the-social-political-and-moral-crisis-of-anti-blackracism/

- Visual artist **Andil Gosine, Faculty of Environmental Studies and Urban Change,** assembles a non-sentimental and multilayered exhibition that reconsiders his immigration to Canada as a teenager and early encounters with racism. He skillfully interlaces this charged personal narrative with themes of both servitude and hope. <u>https://research.info.yorku.ca/2019/01/solo-exhibition-on-identity-andbelonging-a-powerful-gift-to-visitors/</u>
- Patrick Alcedo, School of the Arts, Media, Performance and Design, is an acclaimed filmmaker whose focus is on groups of people who are underprivileged as a result of class disparity, ethnocentrism, and myopic understanding of the complexity of gender formation and choices. His 2019 film "Dancing Manilenyus" earned an Award of Recognition from the Hollywood International Independent Documentary Awards and was selected to be in competition at the 2019 Diversity in Cannes Short Film Showcase during the Cannes Film Festival. https://www.yorku.ca/research/category/news/2019/11/empowering-the-powerless-ga-with-acclaimed-filmmaker-patrick-alcedo/
- Magdalena Kazubowski-Houston, School of the Arts, Media, Performance and Design, is an anthropologist, performance theorist and theatre director. Her research explores experimental, imaginative and performance ethnography; political/activist performance; gender and ethnicity; migration; socialism/postsocialism; and the Roma people. She is co-founder of York University's Centre for Imaginative Ethnography (CIE), a project committed to advancing critical and politically conscious research. She has worked on performance ethnography projects with Romani minorities in Poland, Nazi-Holocaust survivors in Canada and Poland, and low-income residents in Vancouver's Downtown Eastside. In 2019, she won two prestigious awards for her research one from the Canadian Association for Theatre Research and the other from the American Anthropological Association.

https://yfile.news.yorku.ca/2019/09/17/theatre-professor-magdalenakazubowski-houston-wins-two-prestigious-awards/

- Laura Levin, Associate Dean of Research in School of the Arts, Media, Performance and Design, is the Principal Investigator for the SSHRC Partnership Grant, Hemispheric Encounters: Developing Transborder Research-Creation Practices. She is also Director of the Canadian Consortium on Performance and Politics in the Americas. Levin's partnership project will develop a network of universities, community organizations, artists, and activists across Canada, the United States, and Latin America working together to develop performance-based methodologies for addressing growing hemispheric rights emergencies. Among others the human rights and environmental justice issues they will address include: the dramatic rise in nativism and populism and related spread of anti-immigrant sentiment; the growing expulsion of refugee migrants from Central America; the displacement of Indigenous communities by mining and pipeline projects; and record-high rates of sexual, racial and gender-based violence. https://ampd.yorku.ca/profile/laura-levin/
- Marlis Schweitzer, Department of Theatre, School of the Arts, Media, Performance and Design, York Research Chair in Theatre & Performance Histories, explores urgent questions about the relationship between historical casting practices, theatre's role in the circulation and perpetuation of racist stereotypes, and the onstage representation of Black, Indigenous and People of Colour (BIPOC) individuals in contemporary Anglo-American performance.
- Saptarishi Bandopadhyay's, Osgoode Hall Law School, research and teaching interests are in the areas of intellectual property (particularly, copyright), disaster management, environmental law and politics, as well as issues related to risk, technology and society. Bandopadhyay's work often integrates historical, socioscientific and humanities research into legal analyses. He is currently at work on two projects: the first studies the status of photography in copyright law, while the second attempts to retell the history of international refugee protection through the lens of environmental history and science and technology studies. https://www.osgoode.yorku.ca/faculty-and-staff/bandopadhyay-saptarishi/

Administration/Operations

• Sheila Cote-Meek, Vice-President, Equity, People and Culture appointed in the inaugural role, for the development and execution of a progressive and effective Equity, People and Culture strategy and structure that will advance the University's mission and cultivate and equitable, inclusive, respectful and healthy work environment.

https://yfile.news.yorku.ca/2019/06/12/announcement-of-the-appointment-ofthe-inaugural-vice-president-equity-people-and-culture/

York's Key Accessibility Facts

• More than 71% (\$59 million) of York's total scholarships were distributed at least in part on the **basis of need** in 2018-19.

• In 2018-19 alone, **more than 4,600** individuals benefited from access, bridging and pathway programs.

• 22% of first-generation students reference diversity and inclusion as having "made York University uniquely attractive or possible to attend compared to any other university."

• Asked to identify whether York's reputation for inclusivity was an important factor in whether to study at York, **42.2% of first-generation students** responded that it was "**very important**" or "**extremely important**."





SDG 11:

Make Cities and Human Settlements Inclusive, Safe, Resilient and Sustainable

Research

- ADERSIM Advanced Disaster, Emergency & Rapid Response Simulation, ADERSIM is a facility, as well as a suite of programs created by an interdisciplinary team of 30 outstanding researchers from across Canada. Building on expertise at York and our long history of operating Disaster & Emergency Management (DEM) programs, we are developing the latest modelling and simulation technology within a state-of-the-art DEM centre. The goal is to evaluate and enhance disaster and emergency planning and rapid emergency response strategies by governmental, non-governmental and private sector organizations in Ontario, across Canada and around the world. The facility and research program are improving the efficiency of Ontario's emergency management systems, enhance Ontario's investment environment, and is contributing to the health and safety of Ontarians. <u>https://adersim.info.yorku.ca/</u>
- Ali Asgary, Faculty of Liberal Arts & Professional Studies, is the associate director who developed an agent-based simulation to help people understand how COVID-19 spreads within family units and how they can work to flatten the curve. https://yfile.news.yorku.ca/2020/03/25/york-u-prof-develops-simulation-model-to-help-families-understand-how-to-flatten-the-curve/
- Professors from the Faculty of Environmental and Urban Change, Jennifer Foster, Gail Fraser, Justin Podur, and Nyssa Trip are working with the Toronto and Region Conservation Authority (TRCA) on conserving and preserving the biodiversity of Toronto's Leslie Street Spit/Tommy Thompson Park (TTP). The project team is assembling a database of existing research on the Leslie Street Spit and conducting a multi-disciplinary analysis of human uses of TTP. It is also constructing a publicly-accessible digital portal that will provide essential information about the Leslie Street Spit and support development of a strategy for the human uses of TTP that responds to diverse human needs while protecting its rich ecosystem. <u>https://euc.yorku.ca/research-spotlight/from-rubble-to-refugeadvancing-sustainability-of-the-leslie-street-spit/</u>

- **The Major Collaborative Research Initiative (MCRI)**, led by Roger Keil, on Global Suburbanisms has over 50 researchers from around the world that studied the emerging processes of urbanization and suburban ways of life capped in 2019. Global Suburbanisms laid the foundation for a growing research network of global scholars who continue to build upon the project's existing work, further pushing empirical and theoretical understandings of the urban into the realm of the suburban <u>https://suburbs.info.yorku.ca/</u>
 - The collaborative project further generated a major international cooperation on "The role of social, cultural and environmental factors in improving ebola virus disease (EVD) response and resilience." This 3-year IDRC-supported project (2019-2020) headed by Harris Ali, Faculty of Liberal Arts & Professional Studies with Roger Keil and Ellie Perkins as project team members are exploring the potential of community-based initiatives to improve understanding of social and environmental factors that increase vulnerability to EVD outbreaks and applying this knowledge to mitigate the outbreak potential and to improve response strategies.
- The **City Institute at York University (CITY)** engages in leading-edge urban research and critical analyses of the city by bringing together the university's urban scholars and working with community groups, NGOs, and policymakers within Toronto, across the GTA, and globally.<u>https://city.apps01.yorku.ca/</u>
- **Michael Rotondi, Faculty of** Health, initiated research on the undercounting of urban Indigenous peoples and found that the population is severely undercounted in Toronto, based on the Canadian census. Correctly counting socially marginalized groups ensure the receipt of appropriate health and social services. The low participation of Indigenous people in the Canadian census suggest that factors such as poverty, mobility, and historical distrust of government may play a role. https://yfile.news.yorku.ca/2019/05/02/toronto-has-twice-as-many-urban-indigenous-people-than-previously-believed/
- Anna Hudson, Tier 2 York Research Chair in Inuit Cultural Mobilisation, led the six-year \$3.5 million SSHRC-supported collaboration *Mobilizing Inuit Cultural Heritage* (MICH), alongside a host of partners including Qaggiavuut, the Nunavut Arctic College, and the Nunavut Department of Education. MICH aims to recover, preserve, document, facilitate and disseminate Inuit knowledge, culture and creativity through a multi-media multi-platform project which employed a dozen Inuit and non-Inuit community members. MICH helped in the launching of *SakKijâjuk*, the first Inuit Fine Art and Craft Exhibition from Nunatsiavut, as well as *Ahqahizu* a granite sculpture by artists Ruben Komangapik and Koomuatuk (Kuz Curley) on the York Keele Campus. <u>https://mich.info.yorku.ca/about/</u>
- Peter Park, Lassonde School of Engineering, expertise in transportation safety and security, intelligent transportation systems Smart Freight systems and transportation

planning has research study looks at measures of social distancing on sidewalks as a result of the COVID pandemic with recommendations for building more resilient cities to better accommodate pedestrians. <u>https://www.ctvnews.ca/video?clipId=2087658</u>

Administration/Operations

- School of Continuing Studies construction of a new building aiming for LEED Gold status as well as meeting the City of Toronto's new Green Standard for new GTA buildings. The building design explores the potential for Net-Zero Energy and Net-Zero Carbon. Strategies include a building envelope that is designed using Passive House standards, heat recovery ventilation, and integrated photovoltaics to generate electricity on site. https://continue.yorku.ca/groundbreaking/
- Markham Centre Campus construction has begun with on opening in Fall 2023 and will be an urban campus connected and integrated with local and global communities. Target LEED Gold Status with state-of-the-art sustainability features. <u>https://www.yorku.ca/markham/community-benefits/</u> <u>https://www.yorku.ca/markham/</u>

Students

• Nadha Hassen – a York PhD student is researching how urban green spaces affect the mental health of nearby residents, especially during the pandemic. https://www.cbc.ca/news/canada/toronto/finding-a-patch-of-green-covid-19-highlights-inequities-in-toronto-park-space-experts-say-1.5640852



SDG 12: Ensure Sustainable Consumption and Production Patterns

- The Centre of Excellence in Responsible Business (COERB) at the Schulich School of Business is a global leader in creating and disseminating new knowledge about the social, ethical, environmental and political responsibilities of business. It is one of the reasons why Schulich is ranked number two in the world in teaching responsible business by such publications as Corporate Knights. Drawing on over 40 faculty experts from across the school, COERB is one of the world's largest and most influential academic centres dedicated to triple bottom line thinking. Programs offer unparalleled opportunities for stimulating new thinking about the key management challenges involved in building a sustainable future. https://schulich.yorku.ca/faculty-research/coerb/
- For five years now, Professor Emerita Deborah Barndt, along with co-editor and PhD alumna Lauren Baker and co-director and PhD students Alexandra Gelis and Chandra Maracle, has coordinated an intergenerational and intercultural exchange on food justice and food sovereignty through their SSHRC-supported Earth to Tables Legacies Project. Applying participatory research-creation methods and popular education, the collaborative process has generated a book (to be published by Rowman & Littlefield in 2021) and a multimedia educational package that offers schools, universities, and community groups 10 lively videos and 11 photo essays, inspiring stories of its collaborators working toward food sovereignty in rural Quebec and Ontario, in Indigenous communities in Ontario, in Michoacán and Yucatán, Mexico; and in urban agriculture projects in Guadalajara, Mexico, and Toronto, focusing on food justice in Black Creek Community Farm https://earthtotables.org/
- Environmental and Urban Change post-doctoral fellow Calvin Lakhan is a coinvestigator (with Mark Winfield) of "<u>Waste Wiki</u>," an open access project for data, research and information pertinent to Canada's waste management sector at York University devoted to advancing understanding of waste management research and policy in Canada. Waste Wiki is home to more than 6,000 studies on waste and provides users with the ability to interface with data so that they can make more informed decisions about waste management <u>https://wastewiki.info.yorku.ca/</u>

Administration/Operations

- **Social Procurement Policy** in December 2019 the Board of Governors approve one of Canada's first universities to have a comprehensive social procurement policy. The policy considers how procurement can positively impact the social wellbeing of our surrounding communities and assist to reduce poverty, promote economic and social inclusion, and support local economic development and social enterprise. <u>https://secretariat-policies.info.yorku.ca/policies/social-procurement-policy/</u>
- **Sustainable Event Planning Certification** a guide for community members was developed to plan sustainable events on campus to reduce waste, emission and improve accessibility. <u>https://sustainability.info.yorku.ca/what-you-can-do/sustainable-event-planning/</u>





SDG 13:

Take Urgent Action to Combat Climate Change and its Impacts

- Carla Lipsig-Mummé, Department of Social Science, Faculty of Liberal Arts & Professional Studies, is a professor of work and labour studies. She is currently principal investigator of the "Adapting Canadian Work and Workplaces to Respond to Climate Change" project, which brings together 56 individual researchers and 25 partner organizations and unions in seven countries. Its ground-breaking work has been recognized by the Secretariat of the United Nations Framework Convention on Climate Change (UNFCCC). <u>https://yfile.news.yorku.ca/2018/10/03/york-u-professor-carla-lipsigmumme-recognized-with-prestigious-sshrc-impact-award/</u>
- Dayna Nadine Scott, Osgoode Hall Law School, Tier 2 York Research Chair in Environmental Law and Justice in the Green Economy, is cross-appointed to York's Faculty of Environmental Studies and Urban Change. She has a teaching focus on environmental law and justice, risk regulation and international environmental governance. She is a co-director of Osgoode's Environmental Justice and Sustainability Clinic, with research interests that focus on contestation over extraction, the distribution of pollution burdens affecting marginalized communities and vulnerable populations, and the justice dimensions of the transition to a greener economy. Impact: https://yfile.news.yorku.ca/2020/02/12/feds-seek-osgoode-environmental-justicesustainability-clinics-help-in-ring-of-fire/
- Brenda Longfellow, Cinema and Media Arts, School of the Arts, Media, Performance & Design, is an acclaimed filmmaker and environmental activist with an award-winning interactive documentary, "Offshore", on oil exploration, potential hazards and profit, and the catastrophic consequences when something goes wrong. . https://yfile.news.yorku.ca/2018/02/12/ampd-honours-offshore-documentary-creatorat-inaugural-research-celebration-feb-14/
- The Centre for Research in Earth & Space Science facilitates collaborative, interdisciplinary research activity within the areas of planetary exploration, climate and environment, and space technology. Research areas include the ozone, asteroids, and atmospheres and surfaces of other planets. <u>https://cress.info.yorku.ca/</u>

- The **Lassonde School of Engineering** presented a Climate and Severe Weather Symposium in 2019 with the Canadian Meteorological and Oceanographic Society, which featured researchers from York University and discussions around the human impact on climate change. <u>https://yfile.news.yorku.ca/2019/11/22/lassonde-hoststhree-climate-experts-at-a-climate-severe-weather-symposium/</u>
- Idil Boran, Department of Philosophy, Faculty of Liberal Arts & Professional Studies, co-hosted an official side event of the Bonn Climate Change Conference in 2019, titled "Taking Global Climate Action Beyond 2020 Accelerating the Sustainable Future We Want." The event sought to bring together researchers and practitioners to discuss priorities for strengthening climate action, and to take stock in what has been achieved thus far and recommendations for moving forward. https://yfile.news.yorku.ca/2019/06/16/professor-idil-boran-holds-official-event-at-bonn-climate-change-conference-as-primary-delegate-from-york-u/
- Huaiping Zhu, Department of Mathematics and Statistics, Tier 1 Research Chair in Applied Mathematics, and director of Lanoratory of Mathematical Parallel System, led the development of the Ontario Climate Data Portal, an open source of climate change information. It includes more than 10 terabytes of data available for researchers and open to the public, as well as a set of probabilistic projections for climate indices for various regions. https://yfile.news.yorku.ca/2018/12/19/new-online-portal-details-how-climate-

change-will-impact-ontario/

• Ian Garrett of the School of the Arts, Media, Performance and Design has created a thoroughly original way to approach the subject and raise awareness: Climate Change Theatre Action (CCTA), funded by Canada 150, the Arctic Cycle and the Center for Sustainable Practice in the Arts. CCTA is an ambitious, multi-year project. In 2016-17, it commissioned 50 playwrights to produce short pieces about climate change. This resulted in a series of worldwide readings and performances that ran from Oct. 1 to Nov. 17, 2017, to support the 23rd Conference of the Parties to the United Nations Framework Convention on Climate Change (COP23).

https://yfile.news.yorku.ca/2018/09/06/visionary-project-leverages-theatre-to-raiseclimate-change-awareness/

Administration/Operations

• **Carbon Neutrality 2049** – Advancing the Sustainability Strategy to reduce our carbon footprint and set a commitment to Carbon Neutrality by 2049 https://sustainability.info.yorku.ca/what-york-is-doing/carbon-neutrality/



SDG 14:

Conserve and Sustainably Use the Oceans, Seas and Marine Resources for Sustainable Development

- Sapna Sharma, Department of Biology, Faculty of Science Research Chair in Global Change Biology, is interested in predicting the effects of environmental stressors, such as climate change, invasive species, and habitat alteration, on lakes. Under Sharma's supervision, York students Miranda Chen and Lianna Lopez, and the sportfish contaminant group at the Ontario Ministry of Environment & Climate Change study rising mercury levels in predatory fish in Ontario and try to untangle the web of causation to better assess how changing environments are impacting wildlife and, ultimately, people consuming fish. https://yfile.news.yorku.ca/2019/02/28/research-finds-climate-change-contributes-to-rising-mercury-levels-in-fish/
- Norman Yan, Faculty of Science, Department of Biology, professor Emeritusresearch focuses on understand the impacts of multiple environmental stressors on the million lakes of the Canadian Shield, one of the world's foremost freshwater resources. His focus is on the key pelagic herbivores of these lakes - the animal plankton, seeking to understand the current and future threat of non-indigenous species to the lakes of the Canadian Shield. <u>http://www.yorku.ca/nyan/research.html</u>
- Raymond Kwong, Assistant Professor in the Department of Biology, Faculty of Science, is Canada Research Chair in Environmental Toxicology (Tier 2), examines the molecular and physiological effects of environmental stressors (e.g., anthropogenic and natural stressors), and the fundamental mechanisms regulating homeostatic processes in fish. The research, integrating environmental toxicology, molecular physiology, and functional genetics, will advance understanding of the mechanisms of toxic action, animal function, and physiological responses to contaminants. This information is critical for improving environmental risk assessment and monitoring, and for identifying sensitive biomarkers in the evaluation of aquatic health in contaminated waters. https://kwong.lab.yorku.ca/
- Andrew Donini, Faculty of Science, Department of Biology, research area of salt and water regulation and Ammonia Excretion in Aquatic Insects; How does salinity affect the ion and osmoregulatory physiology of freshwater insects? <u>https://biology.gradstudies.yorku.ca/faculty/a-donini/</u>



Research

SDG 15:

Protect, Restore and Promote Sustainable Use of Terrestrial Ecosystems, Sustainably Manage Forests, Combat Desertification, and Halt and Reverse Land Degradation and Halt Biodiversity Loss

- Dawn Bazely, Department of Biology, Faculty of Science, is an arctic and temperate forest ecologist. Her research has expanded to focus on the science-policy-politics space. Her lab examines plant-animal interactions, along with invasive species, climate change impacts, forest dynamics, and fungal endophytes of grasses. Professor Bazely has devoted her 30-year academic career to understanding invasive plant species and how these species are impacted by climate change. She has done extensive field work in temperate forests, grasslands and arctic ecosystems. https://dawnbazely.lab.yorku.ca/third-page/
- Centre for Bee Ecology, Evolution and Conservation (BEEc) is composed of an interdisciplinary group of researchers at York University who will study the health, behaviour, biodiversity, genomics and conservation of bees, with the goal of enhancing their long-term sustainability, and that of the important crops and plants that rely on bees for pollination. It includes biologists, social scientists, and mathematicians. https://yfile.news.yorku.ca/2020/07/01/york-university-creates-new-hive-of-interdisciplinary-bee-research/
- Amro Zayed, Department of Biology, Faculty of Science, Tier 2 York Research Chair in Genomics, is a member of the BEEc. Zayed's research group sequences the genomes of thousands of bees to identify mutations that influence their economically and ecologically relevant traits. His program aims to improve the health of Canadian honeybees, which will increase the sustainability and security of Canada's food supply. In 2019, Amro Zayed of York University, along with Professor Leonard Foster of the University of British Columbia, launched \$10-million project to develop a new health assessment and diagnosis platform, supported by Ontario Genomics and Genome Canada https://yfile.news.yorku.ca/2019/09/18/scientists-set-to-start-10m-project-tocreate-health-diagnosis-tool-for-bees/
- Sheila Colla , Faculty of Environmental Studies and Urban Change, is a member of BEEc and researches native bees tounderstand their decline and develops conservation efforts with a special focus on at-risk bumblebees. She leads the Native Pollinator Research Lab at the university, which focuses bumble bee ecology and conservation, public education, and collaboration with NGOs and government agencies. <u>https://www.savethebumblebees.ca/</u>

- Laurence Packer, Department of Biology, Distinguished Research Professor, is a member of BEEc and conducts research on the world's 20,000-plus species of bees. He oversees one of the most diverse bee collections in the world, and his bee reference collection is the largest in Canada, with more than 10,000 species. https://yfile.news.yorku.ca/2019/09/05/meet-the-researcher-who-singlehandedly-built-canadas-largest-bee-collection/
- Bridget Stutchbury, Department of Biology, Faculty of Science, leads research on the behavioural ecology and migration of songbirds- understanding the impacts of insecticides and pesticides on migrating songbirds. He was featured in the film "SongbirdSOS" on 2015, which is a story about the mass depletion of songbirds in the Americas. <u>https://www.yorku.ca/bstutch/research.htm</u>
- Gail Fraser, Faculty of Environmental Studies and Urban Change, focuses on colonial waterbirds in foraging, management, population dynamics, and the application of behavioural ecology to conservation issues. In 2018, she joined forces with a professor at the University of Waterloo in a research study on issues with environmental governance structure of Newfoundland's offshore oil industry, which put seabirds' lives at risk due to their attraction to lighting on oil rigs. https://yfile.news.yorku.ca/2018/11/01/seabird-deaths-result-of-regulatory-failure-in-

https://yfile.news.yorku.ca/2018/11/01/seabird-deaths-result-of-regulatory-failure-inthe-offshore-oil-industry/

• <u>Justin Podur,</u> Faculty of Environmental Studies and Urban Change, researches problems of urban landscape ecology. His scientific research background has been focused on forest fires in Ontario – their spatial and temporal patterns, increases in their numbers and area burned, balancing their role as part of the landscape with the fact that they can threaten people and things of value. <u>https://euc.yorku.ca/faculty-profile/podur-justin-j/</u>

Administration/Operations

- **WWF Living Planet Leader Certification** World Wildlife Fund Canada is the country's largest conservation organization, with a mission to reverse the decline of wildlife. WWF Living Planet @ Campus program encourages students in practice of sustainability and the protection of nature on campus and beyond. <u>https://sustainability.info.yorku.ca/wwf-living-planet-leader-certification/</u>
- **Glendon Community Garden** involving staff, faculty and students, launched in 2020, offers a space to grow and harvest vegetables, right on campus: <u>https://www.glendon.yorku.ca/glendongarden/</u>



SDG 16:

Promote Peaceful and Inclusive Societies for Sustainable Development, Provide Access to Justice for All and Build Effective, Accountable and Inclusive Institutions at All Levels

- John Greyson, School of the Arts, Media, Performance and Design, is an awardwinning filmmaker and video artist, who works tirelessly to give underrepresented groups a voice on screen. Greyson's productions stand out in Canadian media art for the range of social justice issues they address with sensitivity and courage; and for their internationalism. His advocacy work extends beyond his creative outputs. He has worked extensively on social justice campaigns with community activist groups on issues such as police entrapment (Right to Privacy Committee), censorship (Six Days of Resistance Against Ontario's Censor Board, with Toronto's Law Union), AIDS Activism (AIDS Action Now, ACT UP), artists rights (Artists Union), queer rights (Toronto Pride, QuAIA) and indefinite detention (Project Threadbare, No One Is Illegal). https://ampd.yorku.ca/profile/john-greyson/
- Karen Bridget Murray, Department of Politics, Faculty of Liberal Arts & Professional Studies, challenges the image of residential schools as well-intentioned but misguided institutions. She illustrates, instead, that state-sanctioned violence was etched into the system's foundational logic and operations from the very start. In 2018, she was nominated for the John McMenemy Prize for her article, "The Violence Within: the Canadian Modern Statehood and the Pan-territorial Residential School System Ideal." https://www.yorku.ca/research/category/news/2019/01/canadas-residential-schoolhistory-includes-state-sanctioned-violence/
- Ruth Koleszar-Green, School of Social Work, Faculty of Liberal Arts & Professional Studies, is the co-chair of the Indigenous Council at York University and the Special Advisor to the President on Indigenous Initiatives. She is an expert in Indigenous education and social issues that impact Indigenous communities, as well as anti-racist education and income security reform. Koleszar-Green is also one of the authors of the Indigenous Framework for York University: A Guide to Action, a document that calls for an inclusive, pan-University Indigenous strategy. <u>https://profiles.laps.yorku.ca/profiles/ruthkg/</u>
- **Celia Haig-Brown, Faculty of Education, Associate Vice-President Research,** major research interests are based in work with Indigenous communities, nationally

and internationally. She has published several books, numerous articles and reports, and co-directed three films including, Pelq'ilc (Coming Home), based on interviews with the children and grandchildren of the original participants from the Kamloops residential school. In 2018, she screened her latest documentary film, *Listen to the Land*, which is a lyrical look at the complexities of the Naskapi Nation's commitment to the land and their culture in the contemporary economic reality of their involvement with open pit mining. It was funded by a Social Sciences & Humanities Research Council of Canada Insight Grant and was an official selection at the Irvine International Film Festival in California.

https://yfile.news.yorku.ca/2018/09/26/screening-q-and-a-for-prof-celia-haig-browns-film-listen-to-the-land/

- Jessie Thistle, Department of Equity Studies Humanities, Faculty of Liberal Arts & Professional Studies, is a P.E. Trudeau and Vanier doctoral scholar, as well as a Governor General Silver Medalist. Jesse was the Resident Scholar of Indigenous Homelessness at the Canadian Observatory on Homelessness where he drafted the National Definition of Indigenous Homelessness in Canada. His historical research has been published in numerous academic journals, book chapters, and featured on CBC Ideas, CBC Campus, and Unreserved. In 2019, he published a memoir entitled *From the Ashes, My Story of Being Métis, Homeless and Finding my Way*, where he chronicled his life on the streets and how he overcame trauma and addiction to discover the truth about who he is. Jesse sits on the executive board of Raising the Roof homeless foundation and the Canadian Alliance to End Homelessness. https://profiles.laps.yorku.ca/profiles/m6l1l4/
- Estair Van Wagner, Osgoode Hall Law School, researches and teaches in the areas of land use planning, natural resource and property law and is co-director of Osgoode's Environmental Justice and Sustainability Clinic. Professor Van WagnerShe is currently involved in a project examining government consultation with Maori under New Zealand mining law. She is also a collaborator on a SSHRC insight grant "Consent & Contract: Authorizing Extraction in Ontario's Ring of Fire" with Osgoode Professors Dayna N. Scott (Primary Investigator), Andrée Boisselle and Deborah McGregor. https://www.osgoode.yorku.ca/faculty-and-staff/van-wagner-estair/
- **Trevor Farrow, Osgoode Hall Law School**, is the Chair of the Canadian Forum on Civil Justice and was the founding Academic Director of the Winkler Institute for Dispute Resolution and the Director of the York Centre for Public Policy and Law. His teaching and research focus on the administration of civil justice, including access to justice, legal process, legal and judicial ethics, advocacy and globalization. His scholarship is published widely in Canada and around the world. He has led and collaborated on numerous major research projects, including a \$1 million SSHRC CURA grant – the "Costs of Justice" – for which he was the Principal Investigator.

https://www.osgoode.yorku.ca/faculty-and-staff/farrow-trevor-c-w/

- The Centre for Indigenous Knowledges and Languages (CIKL) supports research involving both traditional and contemporary knowledges, as care-taken, shared and created by Indigenous scholars located in York University and Indigenous knowledge holders from communities. The aim of CIKL will be to facilitate research and knowledge production and dissemination, by Indigenous and non-Indigenous scholars, that re-centers Indigenous knowledges, languages, practices and ways of being. In doing so, it will affirm Indigenous knowledges as vital sources of insight for the world and for future generations. (comes into effect on July1, 2021) https://yfile.news.yorku.ca/2020/06/10/senate-approves-two-new-orus-bee-ecology-and-indigenous-knowledges-languages/
- The Jack and Mae Nathanson Centre on Transnational Human Rights, Crime and Security focuses on the development and facilitation of a cross-disciplinary programme of research and project initiatives that enhance knowledge of issues related to a variety of transnational phenomena that are rapidly changing society, law and governance. https://nathanson.osgoode.yorku.ca/
- Deborah McGregor, Osgoode Hall Law School and Faculty of Environmental Studies & Urban Change, Canada Research Chair in Indigenous Environmental Justice, focuses on Indigenous knowledge systems and their applications in areas such as environmental governance, justice, and sustainable development. She is the Principal Investigator of the Indigenous Environment Justice Project, a five-year SSHRC-funded initiative (2015-2020), which was renewed for another 5 years (2020-2025). It offers support to communities currently fighting environmental injustice and provides resources to teachers or schools interested in educating students about environmental justice. The project provides a variety of opportunities for dialogue, learning and exchange and organizes special events and symposia creating a forum to share ideas, knowledge and experiences to help people understand what environmental justice means. https://iejproject.info.yorku.ca/
- **The Toronto Centre**, founded by the Schulich School of Business, was established to promote financial stability by providing practical training to financial sector regulators and supervisors, particularly in emerging markets and low-income countries <u>https://www.torontocentre.org/</u>
- Schulich School of Business is a founding partner in the Sustainable Infrastructure Fellowship Program, a G7 initiative designed to provide academic and practical training for senior public-sector infrastructure managers from emerging markets https://www.investorleadershipnetwork.org/en/sustainable-infrastructure-fellowship-program/



SDG 17: Strengthen the Means of Implementation and Revitalize the Global Partnership for Sustainable Development

Research

• Ecological Footprint Initiative consists of a group of scholars, students, researchers, and collaborating organizations who work together to advance Ecological Footprint and Biocapacity accounting to inform sustainability. Beginning in 2019, York became the site for the production of the National Footprint Accounts, which the measurement of our "ecological footprints", the amount of land and natural resources we need to live our lives and deal with our wastes. Going back to 1961, the Accounts are updated annually using UN data and help us determine if countries are on track to meeting the UN Sustainable Development Goals. The Accounts are now being produced by York University teachers and students as part of a graduate experiential education program, and York researchers are building an international partnership to make the National Footprint Accounts even more scientifically robust and widely used.

https://yfile.news.yorku.ca/2018/10/04/ecological-partnership-furtherestablishes-york-university-as-global-leader/

- Las Nubes EcoCampus's programs in Costa Rica offer research and experiential education courses which contribute to the local economy by diversifying the income of rural families who seek to improve their livelihoods in ways that are compatible with and contribute to environmental conservation. They run a community resource centre, an annual festival and our students stay in home-stays with local families, and their research engages with numerous Costa Rican partners, including businesses, universities and government, and offers experiential learning opportunities for students. https://yfile.news.yorku.ca/2019/10/17/york-universitys-las-nubes-ecocampus-is-a-living-learning-lab/
- Designating Making the Shift Youth Homelessness Solution Impact Accelerator as a United Nations Economic Commission for Europe (UNECE) as a Charter Centre on Homelessness. Received the MOU with the UN in March 2020 will be finalized shortly.

• Dahdaleh Institute, with the <u>Global Strategy Lab</u>, has signed an MOU for a World Health Organization Collaborating Centre on Antimicrobial Resistance, focusing on global governance strategies. WHO site: <u>https://apps.who.int/whocc/Detail.aspx?n4pXw5v7G6nYUM3hg02FSA==</u>

Administration/Operations

members

• York University is a member of the **Sustainable Development Solutions Network (SDSN)**, which brings world class initiatives in sustainable development to our communities. The SDSN works with universities and other knowledge centers to help them activate sustainable development initiatives through knowledge mobilization, problem-solving partnerships with governments, business, and civil society, and encouraging local social entrepreneurships. https://uwaterloo.ca/sustainable-development-solutions-network-canada/network-

• **CIFAL York - A UN Institute for Training and Research** – was established in 2020 to provide a range of learning opportunities and facilitate knowledge sharing between public servants and leaders of the Western Hemisphere to strengthening their capacities, improving the decision-making process and focus on the sustainable development goals, diversity, inclusion, health, development, entrepreneurship and economic development. <u>https://unitar.org/about/offices-training-centres-around-world/cifal-york</u>

Students

• As part of the partnership with the Sustainable Development Solutions Network, York launched a new student-driven initiative, which is designed to help students of all disciplines learn about York's SDGs and take action to help achieve them—oncampus and in our communities. <u>https://www.sdgstudent.org/sdg-hub-members</u>

