

CONCORDIA

PROVIDING
**CREATIVE
SOLUTIONS**
TO TODAY'S
CHALLENGES

PRESIDENT'S REPORT
2021

next-generation university



PROVIDING CREATIVE SOLUTIONS TO TODAY'S CHALLENGES

Because of the extraordinary challenges we've all faced, I'm extremely proud to highlight our community's outstanding accomplishments as we continue our impressive trajectory as one of the world's top-ranked young universities.

Beyond showcasing momentous research contributions by faculty and students, this year's report describes initiatives that anchor Concordia's commitment to social responsibility. The report captures our ambition and ability to think and act across sectors and disciplines to offer novel solutions to today's challenges.

One symbol of this is the new, LEED-certified Applied Science Hub that we opened on Loyola Campus in the midst of the pandemic. A state-of-the-art collaboration space, the hub is home to our new Department of Chemical and Materials Engineering, clusters leading research centres in the natural sciences, wet labs for our District 3 Innovation Hub and a bioprocessing facility that will bring industry partners to campus.

Another major initiative is our new Next-Generation Cities Institute. Unique in North America, it mobilizes 14 research centres and more than 100 researchers, artists and their graduate students from all four faculties to support research on smart, sustainable, resilient cities. The institute will play a pivotal role as we deliver on our commitment to the Decade of Action advancing the UN's 17 Sustainable Development Goals.

Finally, this year's report contains a section on the immense contributions Concordians have made to the welfare of our city throughout the pandemic. We're an anchor institution in Montreal. Whether it's mobilizing our research, delivering high impact digital tools or curating award-winning community programming, we should all take pride in how our university has made a positive difference for society in a disruptive, disconcerting time.

GRAHAM CARR
PRESIDENT AND VICE-CHANCELLOR



message from the president



NEXT GEN NOW

FINDING ANSWERS TO SOCIETY'S FAR-REACHING QUESTIONS

AS A NEXT-GENERATION UNIVERSITY, CONCORDIA SETS ITS SIGHTS FURTHER AND MORE BROADLY THAN OTHERS. WE ALIGN THE QUALITY OF LEARNING OPPORTUNITIES TO LARGER TRENDS AND SUBSTANTIAL CHALLENGES FACING SOCIETY. WE PURSUE TECHNOLOGY WITHOUT LOSING SIGHT OF OUR HUMANITY. WE FIND INSPIRATION THROUGH NARRATIVE AND DIALOGUE.

WE DIG DEEPER FOR SOLUTIONS.

PANDEMIC AGILITY

Pivoting to adapt to COVID-19 disruption

ENGAGEMENT

Bringing our insight, understanding, expertise and commitment to the public

DISCOVERY

Performing innovative and dynamic knowledge creation across disciplines

LEARNING

Reconfiguring the traditional classroom with new concepts

SPACES

Using buildings to their fullest potential to foster multidisciplinary collaboration

INNOVATION

Adopting novel approaches, judicious risk-taking and purposeful experimentation

PANDEMIC AGILITY

**Ablly responding
to the crisis — with care**

HIGHLIGHTS

CU Cares community outreach initiative makes a difference

The COVID-19 crisis has shown Concordia's deep connection to the community. Early in the pandemic, the university launched CU Cares, a collaboration between the Concordia LIVE Centre — the on-campus volunteer resource — and University Advancement. CU Cares connects students, alumni, faculty and staff volunteers to community organizations across Montreal, with a special outreach program for elderly alumni.

The response was heartwarming. More than 400 Concordians, including many students, registered to donate their time, offer support and make much-needed social connections.

Katie Broad, coordinator of Concordia's LIVE Centre, says CU Cares focuses on virtual volunteering, such as letter writing, wellness calls and food preparation. As Broad said after the initial volunteer call, "With everything they are dealing with — the end of term, exams, uncertain summer employment — students are still thinking about what they can do to contribute to our communities."

CU at Home helps move Concordians from isolation to connection

To bring personal connection during the COVID-19 pandemic, Concordians came together to create CU at Home — a virtual support network designed by the community for the community.

CU at Home offers students, alumni, faculty, staff and partners and their families a regular lineup of online programming spanning self-care workshops, family-friendly activities, fitness classes, art sessions, research webinars and more.

"These are challenging times for everyone. The health and well-being of our community and their families are a top priority," says Nadia Bhuiyan, Concordia's vice-provost of partnerships and experiential learning. "With activities related to coping with the crisis, keeping our kids entertained, adapting to working from home and learning new skills — there's something for everyone."

For instance, studio arts major Liza Isakov led a virtual workshop on how to make paint from natural pigment from vegetable skins. Gillian Leithman, BA 00, MSc 05, PhD 16, a corporate trainer and assistant professor of management, led a four-part Happiness Lab series. "The experience of fun, what the science of happiness would define as positive emotions, is not only essential to our happiness, but greatly contributes to resilience," Leithman explains.



▼ **Concordia-based research network ready to make surfaces safer for frontline workers**

The Green-SEAM (Surface Engineering for Advanced Manufacturing) Network based at Concordia has stepped up to promote antiviral metallic and ceramic coatings as a way to slow the transmission of the viruses — including the coronavirus — on surface materials.

“We have a unique network of experts in surface engineering from 11 universities across Canada, 14 industrial companies and government laboratories who specialize in coating materials,” says Christian Moreau, director of Green-SEAM and Canada Research Chair in Surface Engineering. “We want to do everything in our power to connect frontline workers with industrial coating companies and research laboratories who have solutions.”



► **Bringing chemistry labs to students**

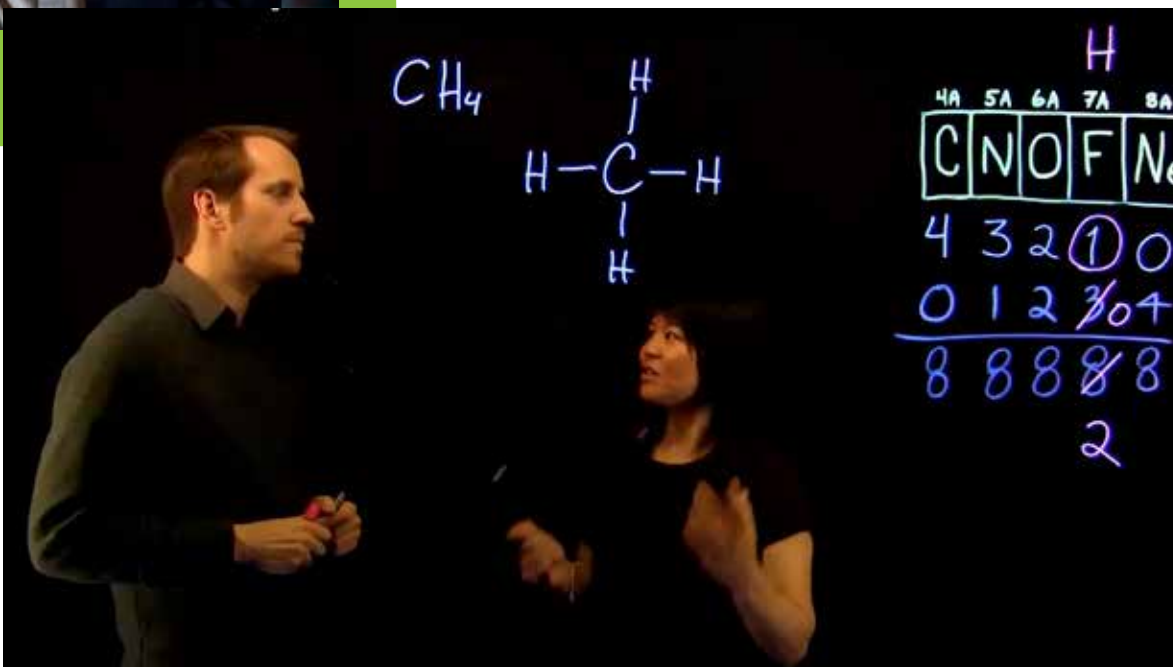
To give students the ability to experience hands-on science during a fully online course, the Department of Chemistry and Biochemistry provided at-home chemistry kits for the General Chemistry 1 class.

The kits contain lab-grade glassware, including beakers, flasks and graduated cylinders. They also have a weighing balance and a burette, the equipment that gives students the ability to measure mass and volume with reasonable accuracy and precision, which differentiates them from most recreational-use chemistry kits.

► **Virtual conference on the healing power of stories**

Award-winning documentary filmmaker, author and drama therapist Yehudit Silverman, professor emerita and former chair of Concordia's Department of Creative Arts Therapies, recently published *The Story Within – Myth and Fairy Tale in Therapy*. The book is geared for therapists or anyone seeking to use her therapeutic methods and offers a distinctive and creative process for transformation.

In October, Concordia's 4TH SPACE hosted The Story Within Conference, facilitated by Silverman. The online half-day conference, free and open to all, featured nine panellists who are leaders in the field of creative arts therapies and social sciences, and breakout groups for participants.



▲ **Web-based tool will reduce risk of indoor SARS-CoV-2 transmission**

A team of researchers led by Leon Wang, associate professor in the Department of Building, Civil and Environmental Engineering, built a web-based tool to estimate the risk of indoor airborne transmission of the coronavirus in Montreal's buildings.

Wang, alongside PhD students Ali Katal and Maher Albettar, developed the City Reduced Probability of Infection site, which calculates the probability of infection through aerosol transmission in indoor spaces and offers best practices to improve building air quality, which could help slow the spread of the virus.

◀ **Lightboard studios assist faculty with online instruction**

The COVID-19 pandemic forced Concordia to find innovative ways for professors to record and share lectures online. Luckily, the Centre for Teaching and Learning (CTL) had already set up two lightboard studios, one on each campus, prior to the current crisis. Lightboards are writable glass panels equipped with LED lights that illuminate the content written or sketched onto the surface.

“They give faculty a unique space to create visual learning content that makes them feel like they’re teaching in their own studio classroom,” says Rob Cassidy, CTL’s director.

► **The engAGE Living Lab Digital Era Response virtually connects to older adults**

Concordia's Centre for Research on Aging, engAGE, rose to the challenge of the COVID-19 crisis with support from the Fonds de recherche du Québec — Santé. Led by Janis Timm-Bottos, associate professor in the Department of Creative Arts Therapies, engAGE aims to combat social isolation among older adults through conversation, art making and media creation.

The team created the engAGE Living Lab Digital Era Response (ELLDER), which was adapted to bring creative engagement to elders. ELLDER documents cost-effective, health-promoting models to bring isolated seniors, university students and researchers together.

THE NEXT-GENERATION ENGAGEMENT

Fulfilling our pledge to create a better world

HIGHLIGHTS

Commitment to the UN Sustainable Development Goals

Concordia has pledged to advance the United Nations' Sustainable Development Goals (SDGs), which provide a call to action and game plan for promoting prosperity while protecting the planet.

Along with environmental sustainability, the 17 global goals cover sustainability relating to social justice, inclusivity, the economy, strengthening institutions and fostering collaboration on development across sectors and organizations.

Concordia will use the goals as a framework for continued action in support of sustainable development in the community and throughout the world. The university will undertake a broad range of SDG-related teaching, research, engagement, innovation and operational activities.

Concordia launches its Sustainability Action Plan

In the fall, the university unveiled its Sustainability Action Plan, which includes a long-term vision as well as five-year plans around five stream topics: food, waste, climate, research and curriculum.

"The streams allowed for a diverse set of voices to be represented and removed the sense of silos between operational and academic units," says Michael Di Grappa, Concordia's new vice-president of services and sustainability.

The plan's long-term goals will guide short-term actions and priorities. It will combine with other efforts to support Concordia's commitment to accelerate solutions to the UN's SDGs.

Black Perspectives Initiative kicks off

Concordia's Black Perspectives Initiative (BPI) launched in February through the Faculty of Arts and Science. BPI connects and supports activities related to Black perspectives, initiatives and scholarship on campus and within the broader Montreal community. It offers funding, mentorship, programming and research dissemination.

"At its core, this project was informed by Black student activism, which has been very strong at Concordia since the university's inception. The BPI allows for those perspectives to be heard, respected and supported from within the university's structure," says Annick Maugile Flavien, BSc 13, GrDip 15, MA 18, founding coordinator.

Concordia launches the Task Force on Anti-Black Racism

As part of its responsibility to the community, Concordia launched its President's Task Force on Anti-Black Racism in October.

"Over summer 2020, I began meeting with Black faculty, staff, students and alumni," says Anne Whitelaw, interim provost and vice-president, academic. "It was clear that the university experience was not one of equitable access for many of our Black students, faculty and staff."

The task force's mandate is to oversee and coordinate the work needed to generate recommendations that will address systemic anti-Black racism as it occurs across the university — in employment, policies, teaching and learning practices.



ANNICK MAUGILE FLAVIEN

Indigenous personas initiative seeks to achieve more inclusive digital environments

As part of Concordia's Digital Strategy, the university partnered with Leger to run a series of public consultations with Indigenous students and faculty. The collaboration produced Indigenous student and faculty personas to help highlight important considerations when planning inclusive digital environments.

"The public consultations with Indigenous students and faculty have provided a better understanding of the specific challenges related to Concordia's digital environment," says Guylaine Beaudry, vice-provost of digital strategy and university librarian. "This information will help shape the university's digital priorities to ensure more respectful, reciprocal and mutually beneficial relationships with Indigenous members of our community."

Who is responsible for protecting communities facing the impacts of COVID-19?

"We are in this together. We care." An overwhelming number of businesses communications expressed this sentiment early on in the COVID-19 pandemic — but not for long.

Department of Marketing faculty Zeynep Arsel and Aya Aboelenien and York University's Charles Cho note in their published article that "care" reached a ceiling — and, eventually, the responsibility to limit the virus's impact shifted from organizations to consumers. Their research findings reveal that when there is ambiguity of scientific knowledge, such as with COVID-19, organizations should "not wait for government or organizational directives to try and 'act right,'" Arsel says.

Groundbreaking exhibition celebrates past, present and future Inuit art

Heather Igloliorte, associate professor of art history and Tier 1 Concordia University, was one of the INUA exhibition's co-curators, who represented the four regions of Inuit Nunangat, the homeland of Inuit in Canada.

INUA virtually launched Qaumajuq, the new centre at the Winnipeg Art Gallery dedicated to Inuit art and culture. The show features approximately 100 works from over 90 Inuit artists from across northern Canada, as well as some in the urban south and from circumpolar Indigenous artists.

Tainted H₂O project earns national recognition

Tainted H₂O, a project coordinated by Concordia's Institute for Investigative Journalism, won the Radio Television Digital News Association Dan McArthur Award for investigative journalism. The nationwide collaborative investigation exposed dangerous lead levels in Canada's drinking water.

Tainted H₂O was a yearlong investigation conducted by more than 120 journalists from nine universities and six media groups. The investigation reviewed thousands of undisclosed results and tested water from hundreds of homes in 11 different cities. One-third of tests exceed the national safety directives.

Concordia initiative will direct Canadian component of the World Values Survey

The new Center for Research on Values, Attitudes and Societies will give researchers access to data from the World Values Survey, to help them better understand how principles and attitudes evolve. The survey observes human values, beliefs and behaviours in up to 80 countries.

The centre is co-directed by Department of Political Science professors Guy Lachapelle, who will also supervise the project in Canada with the help of collaborators, and Antoine Bilodeau. The centre received \$350,000 in funding from the Secrétariat du Québec aux relations canadiennes and Concordia.



Community Service Initiative connects business students with non-profits

Dave McKenzie, GrDip 93, MA 03, is coordinator of the MBA Community Service Initiative (CSI), which he founded in 2008. The initiative, embedded in the John Molson School, creates opportunities for experiential learning by connecting faculty resources to the needs of the wider community.

As pressures on resource-strapped community organizations intensify, McKenzie oversees the CSI's role to help ensure that agility-boosting business techniques are paired with a recognition of communities as experts on their own requirements. He asks, "How can we really help, and what do they want us to do?"

Professor partners with Cree to protect 30,000+ square kms of Indigenous territory

A SSHRC-funded research partnership explored ways to protect land of the Cree community of Wemindji, located on the coast of James Bay, Quebec, in the context of growing pressure from extensive development.

Members of the Cree community worked with Monica Mulrennan, associate professor in the Department of Geography, Planning and Environment and associate vice-president of research, development and outreach in the Office of Research and Graduate Studies, and a multidisciplinary team of natural scientists and social scientists. Mulrennan also co-edited *Caring for the Eeyou Istchee: Protected Areas Creation on Wemindji Cree Territory*, a book that documents the decades-long project.



GENNEXT. GENO. DISCOVERY



CARLY ZITER

CARLY ZITER

HIGHLIGHTS

Breakthrough investigations for tomorrow

\$1.65M grant will advance research toward environmental goals

Concordia has partnered with global sustainability network Future Earth to launch a scientific training program for students at the intersection of environmental science and digital innovation. The program received \$1.65 million over six years from the Natural Sciences and Engineering Research Council of Canada's Collaborative Research and Training Experience program to further scientific research on climate, biodiversity and other critical sustainability goals.

Damon Matthews, Tier 1 Concordia University Research Chair in Climate Science and Sustainability and professor of geography, planning and environment, is spearheading the Leadership in Environmental and Digital Innovation for Sustainability project.



NATALIE PHILLIPS

Helping 5G technology become a reality

The expected surge of connected objects is a major hurdle to the deployment of fifth-generation wireless technology — known as 5G.

Recent Gina Cody School doctoral graduate Mohaned Chraiti, PhD 20, found an innovative approach to this challenge. "Because there will be millions of devices connected to the network, there is a good chance that many of these will be accessing the same information," he says. He adds that his work aims to "exploit the similarities between the data transmitted to the users. This way, the same information doesn't need to be sent out multiple times."

Natalie Phillips examines the link between sensory acuity and cognition in aging

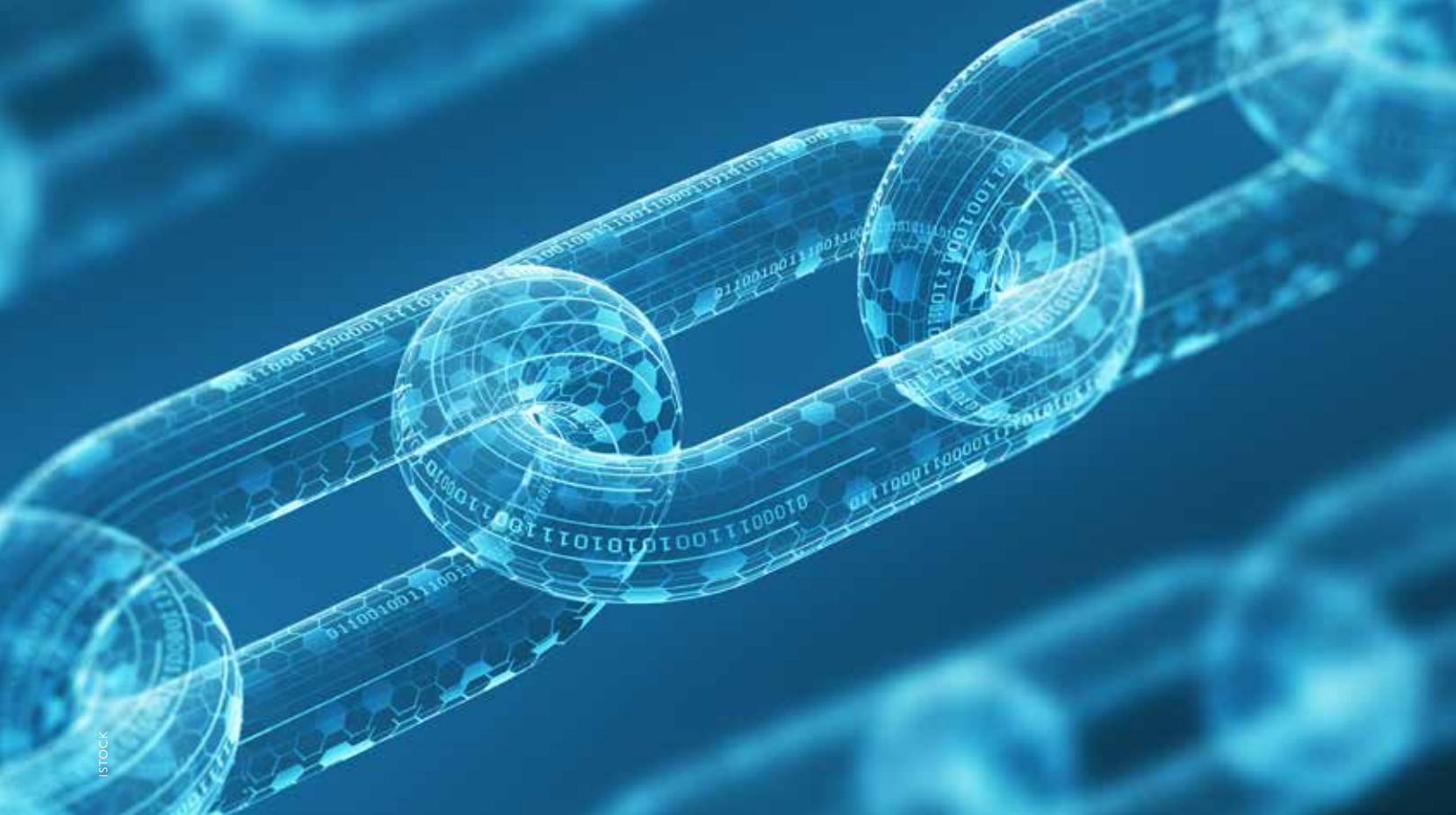
A paper co-authored by Natalie Phillips, professor in the Department of Psychology, found that sensory acuity — especially poor hearing — is linked to declines in memory and executive function in otherwise relatively healthy, autonomous, community-dwelling older adults.

Their paper asks if social factors — loneliness, depression and so on — also play a role in cognitive decline. "All we can say at this point is that individuals who have poorer sensory abilities have poorer cognitive abilities, and we can't explain it by more restricted social networks or social functioning," she says.

NDG residents asked to measure the trees in their own backyards

The NDG Tree Project, led by Carly Ziter, assistant professor in the Department of Biology, invited residents of Montreal's Notre-Dame-de-Grâce neighbourhood to explore and document urban trees — in their own backyards. They use everyday tools to collect simple trunk measurements and photos and submit them to the research team.

"Montreal is fortunate to have an excellent public tree inventory, but many of the city's trees are actually located on private land, and we know very little about them," says Ziter. Her work as a member of the Smart Sustainable Resilient Cities and Communities team finds nature-based solutions to ensure the health and well-being of urban residents.



ISTOCK

Tinder provides an example of how people use technology for more than expected

Tinder has become the go-to app to facilitate hookups and casual dating. However, some of the app's estimated 50 million-plus worldwide users are employing it quite differently — from multilevel marketing to political and health campaigning to promoting local gigs.

This so-called “off-label use” is explored in a paper published by Stefanie Duguay, assistant professor in the Department of Communication Studies. “When people encounter a new technology, whether it’s a hammer or a computer, they use it in ways that fit their needs and lifestyle,” Duguay says.

\$2.25M to develop next-generation cybersecurity, AI technology and policy

Teams at Concordia are improving how unmanned autonomous vehicles operate through groundbreaking multidisciplinary research — now with support from Canada’s Department of National Defence (DND).

Khashayar Khorasani, professor in the Department of Electrical and Computer Engineering, has received \$2.25 million over three years from the DND. Khorasani will lead two interdisciplinary, collaborative networks to develop innovative defence technologies and define the policies that govern them.

The two grants focus on the improvement of autonomous systems for unmanned aerial vehicles — think drones — by applying next-generation cybersecurity and artificial intelligence principles.

The effects of obesity mirror those of aging

According to the World Health Organization, more people are dying from being overweight than underweight.

In a published paper, a research team led by Sylvia Santosa, associate professor in the Department of Health, Kinesiology and Applied Physiology, argue that obesity should be considered as premature aging. The paper looks at how obesity predisposes people to acquiring the kinds of potentially life-altering or life-threatening diseases normally seen in older individuals: compromised genomes, weakened immune systems, decreased cognition, increased chances of developing type 2 diabetes, Alzheimer’s disease, cardiovascular disease, cancer and other illnesses.

Concordia-led collaborative research looks at deindustrialization

Twenty-four researchers and dozens of partner organizations will collaborate on a transnational investigation into working-class job loss and its political consequences in the West due to deindustrialization. The project is based at Concordia’s Centre for Oral History and Digital Storytelling under the direction of Steven High, professor in the Department of History.

The Social Sciences and Humanities Research Council of Canada (SSHRC) provided extensive financial support for the seven-year-long project. Much of the research will focus on oral histories, which will allow researchers to see the consequences through the eyes of communities and individuals.



SYLVIA SANTOSA

How corporations can shield themselves from local corruption

The problem of corruption, or rent-seeking, is endemic in most countries to varying degrees. A published paper co-authored by Lawrence Kryzanowski, professor in the Department of Finance, shows how corporations can adopt ways to avoid being the target of corrupt high-ranking officials.

“Managers and CEOs of firms can either go along with rent-seeking by political actors, or they can take certain strategies to make themselves less attractive,” Kryzanowski says. For example, if a business opts to spend or borrow cash on an acquisition, it will lack the funds to pay off a predatory official.

Former right-wing extremists can help counter recruitment into violent organizations

Two Concordia researchers present in-depth analyses in their published interviews with former members of right-wing extremist groups who departed for a variety of reasons — usually at significant personal risk. Their candid interviews reveal ways to prevent and counter recruitment into these groups and options available to those who want to leave.

The papers’ lead authors are Ryan Scrivens, a former Horizon Postdoctoral Fellow at Concordia and now an assistant professor at Michigan State University’s School of Criminal Justice, and Maxime Bérubé, a SSHRC Postdoctoral Fellow working with Concordia’s Project Someone.

NEXT- GEN LEARNING

**Outstanding faculty and programs
deliver knowledge and expertise**

HIGHLIGHTS

Jonathan Wener Centre for Real Estate opens

The Jonathan Wener Centre for Real Estate opened at Concordia's John Molson School of Business in September. The centre will be a hub for teaching and research on commercial and residential real estate, a first of its kind in Canada.

"Real estate is a very sophisticated industry, requiring an awful lot of talent and knowledge from the people who enter the workforce," says Jonathan Wener, BComm 71, chairman of Canderel and Concordia chancellor, whose \$10 million gift to the Campaign for Concordia: Next-Gen. Now created the centre. "My hope is that our centre will provide the education and backing that our students need in a very demanding world."

Expanding experiential learning opportunities

The Experiential Learning Office launched the Beat the Odds Program in the summer to support those most likely to face barriers to employment and career advancement. The program helps foster greater equity among students who will benefit most from a paid professional experience in their field of study.

"The program helps ensure inclusiveness and actively promotes these opportunities to address challenges often encountered by international, Black and Indigenous students, peoples of colour, students with significant financial challenges, students who are parents and students with disabilities," explains Nadia Bhuiyan, vice-provost of partnerships and experiential learning.

Scholar receives major Universities Art Association of Canada award

Martha Langford, distinguished university research professor in the Department of Art History and research chair and director of Concordia's Gail and Stephen A. Jarislowsky Institute for Studies in Canadian Art, received the 2020 Universities Art Association of Canada (UAAC) Recognition Award. The award recognizes association members or non-members who have demonstrated unselfish and devoted service to the UAAC and a commitment to the ideals of the profession.

"I am touched beyond words to be recognized by UAAC, an organization that truly encourages the interaction between established and emerging scholars — that is the lifeblood of our field," Langford says.



Centre for the Study of Learning and Performance receives \$1.8M award

Concordia's Centre for the Study of Learning and Performance (CSLP) received a \$1.8 million infrastructure grant from the Fonds de recherche du Québec – Société et culture. The grant, spaced over seven years, is intended to allow organizations to coordinate the efforts of interdisciplinary research groups.

The CSLP aims to have a positive social impact through research on teaching and learning processes, working especially to develop educational tools and strategies. Pursuing these goals, the centre carries out research at the intersection of cognitive science, instructional design, educational technologies and social pedagogy.

Concordia literacy programming adapted for school closures in Kenya

The CSLP has collaborated for the past five years on a project to improve early primary students' literacy in a remote part of Kenya. The partners had been using ABRACADABRA, an interactive instructional software that teaches foundational literacy skills, and READS, an organized catalogue of free digital stories, part of Concordia's Learning Toolkit software.

When schools closed due to COVID-19, the partners initiated a pilot project called ABRA@Home to transform the digital literacy approach so students and parents can use it at home. In all, they reached more than 100 students.