**Concordia University's Proposed School of Health**

**Executive summary**

Concordia University has a long history of high-impact research and training in a wide array of health areas and is uniquely positioned to pioneer new approaches to health research and education through the creation of an interdisciplinary **School of Health.** The following proposal outlines the background and consultation process around the original Health Initiative leading to the School's proposed areas of concentration, which are based on existing strengths and capacity in a wide range of health fields and focuses on a proposed structure and governance model.

The School will build on, leverage, and enhance our existing base of high-quality and wide-ranging research expertise that has resulted in federal, provincial, and philanthropic funding. The School will focus on and benefit from federating our existing areas of health research expertise. The School proposes the creation of three Hubs in order to promote and enhance collaboration across multiple fields. These Hubs would be: (1) **Community Health Hub**, (2) **Clinical Research and Prevention Hub** and (3) **Biomedical Science and Engineering Research Hub**. A sampling of Now stories about health-related research activities are included in Appendix B.

Of Concordia's 24 university-recognized research units, nine are in health (see attached org chart for list), or health-related, fields. Additionally, 27 active research chairs (CRC, CURC, Professorships) and five Honorary CURCs identify with health fields. The proposed structure anticipates the active involvement of these units and chairs in order to leverage the opportunity for additional collaborations, funding, and benefit from the School's resources. Further, affiliating or aligning with the proposed School will in no way impact the current university resources devoted to supporting any research centre or academic unit. In addition to recruiting some new research support personnel, the School will also leverage the important staff expertise and outstanding infrastructure capacity at the PERFORM Centre so that these resources can be more widely deployed in support of all health researchers at Concordia.

The School will focus on training the next generation of researchers while empowering individuals and stakeholders with new knowledge in order to be valued as solutions-oriented partners in community and user-centred approaches to addressing health challenges. Further, the School will be a leader in core fundamental health sciences, medical technology development and will influence health policy to the benefit of our health-care system and ultimately our society and economy.

**Background and consultative process**

The proposal to create a Health Institute was a key recommendation linked to the "Double our Research" Strategic Direction in 2015. An extensive consultation was started in 2016 and led by the Office of the Vice-President, Research and Graduate Studies. Building on the known research excellence and capacity of departments such as Psychology and Health, Kinesiology and Applied Physiology (then Exercise Science), a wider net was cast through both individual and group meetings with researchers

who identified as having health-related research interests across all four Faculties. The health research community grew to more than 100 faculty members and ongoing conversations amongst those researchers and with the OVPRGS resulted in 11 possible research themes for an Institute. We examined comparable structures at other universities and found that the Institute, as conceived by Concordia, had few comparators. The University of Northern British Columbia Health Research Institute and the McGill University Health Centre Research Institute, both outlined in Appendix A, were the closest.

These initial meetings were then followed by mapping exercises, focus groups and networking opportunities all designed to identify Concordia's research and teaching strengths in health across all four of the university's Faculties. These consultations resulted in the identification of over 150 faculty members and consensus on six transdisciplinary clusters, under the umbrella of the Health Initiative, that best represented Concordia's expertise: **Biomedical Fundamentals, Preventive Health, Health and Technology, Health Policy and Governance**, **Health and Wellbeing,** and **Health Interventions.** The Health Initiative's primary focus was to capitalize on the interdisciplinary nature of the clusters in order to showcase expertise and build new collaborations.

Momentum to continue building the Initiative into the more formal Institute led to more informal consultations, with approximately 20 of the university's leading and most heavily-funded health researchers. These consultations were useful in further refining and narrowing the vision for health research at Concordia. This consultation also reinforced the enthusiasm within the community for a major Concordia initiative around health linked to the six themes previously identified but with a bolder vision and structure. In summer and fall of 2020, the Interim Provost and Vice-President, Academic and the Interim Vice-President, Research and Graduate Studies led a series of meetings with the Deans of the four Faculties, the Dean of the School of Graduate Studies and the University Librarian at Academic Cabinet. These discussions produced a strong consensus across the university's academic leadership team in favour of the creation of a School of Health led by a Dean.

In February 2021, a broad community wide consultation process was launched about the concept of creating a School of Health. This consultation process included 2 town halls, joint meetings of Senate Research Committee and Academic Planning and Priorities Committee, all faculty councils and the council of SGS as well as special meetings requested by the departments of Psychology, Biology and Health, Kinesiology and Applied Physiology. A web site was available with the original proposal document and an email address was available for sending feedback. Feedback from all of these activities was compiled, synthesized and then incorporated into this proposal where appropriate. Throughout these consultations we heard both support for the proposed School of Health as well as concerns around structure, financial sustainability, research and administrative support, and the consultation process itself. The current document reflects, and has been enriched by these discussions, as well as the questions and comments received over the past three months.

**Orientation and Structure**

Considering the contrasting depth of expertise associated with each of the six proposed clusters, the important investments that the university has made to build capacity in targeted areas of health

research, and the value of having a focused approach, the School proposes a structure built around three transversal Hubs:

**Community Health Hub**

This hub examines factors that contribute to healthy lives and healthy living, along with research that evaluates the effects and impact of public policies that address health issues.

This Hub will play to Concordia's demonstrated strengths around community-based research work that takes place in all four Faculties and many research centres and will promote collaboration with the newly-launched Next Generation Cities Institute as well as the Sustainability Action Plan and the UN Sustainable Development Goals. This Hub will include researchers from a wide range of disciplines in the social sciences, humanities and fine arts as well as business and some science and engineering researchers..

**Clinical Research and Prevention Hub**

This hub will focus on interdisciplinary research that improves and sustains long-term health, including the study of measures to prevent disease as well as research that investigates specific health problems and behaviours, mechanisms and interventions, in order to assess and intervene to improve them.

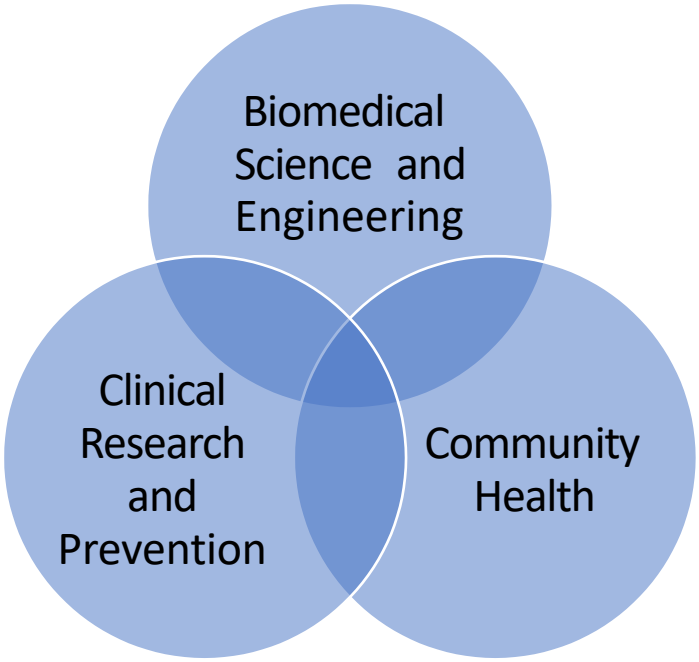
This Hub will build on the success of PERFORM, which has prevention-related research at its core while also benefiting from the outstanding research and training of centres such as CCRH and CRDH and of the Department of Health, Kinesiology and Applied Physiology. Researchers linked to this Hub will be from departments such as HKAP, Psychology, Applied Human Sciences, Biology, Chemistry and Biochemistry, Physics, Creative Arts Therapies, Electrical and Computer Engineering, Computer Science and Software Engineering, and CIISE.

**Biomedical Science and Engineering Research Hub**

The research in this hub examines the underlying health mechanisms to inform and guide health research and research that advances new technologies to optimize health care and health research.

This Hub will give visibility to the importance of Concordia's fundamental science and technology research in the health sphere. It will greatly facilitate external communication to stakeholders about the scope and depth of the university's profile in biomedical science and engineering, as well as entrepreneurship. This Hub will include researchers from departments such as Psychology, Biology, Physics, Chemistry and Biochemistry, Electrical and Computer Engineering, Computer Science and Software Engineering, Mechanical, Industrial and Aerospace Engineering, CIISE, Design and Computational Arts, Studio Arts, Music, and Finance.

The Hubs are designed such that overlap in potential research areas exists and should be pictured as a Venn diagram. Seed research funding and other activities will be available to encourage collaborations across Hubs.




**Academic Programs**

The School of Health will support existing PhD programs in the Faculties including the PhD in Psychology and the PhD in Health and Exercise Science. The School will develop and offer its own PhD programs. Programs that have emerged as the most likely interdisciplinary programs to be hosted at the School include: a PhD in Biomedical Sciences and Engineering, and a PhD in Community Health. Following approval of the School, a full analysis and mapping will be conducted in order to develop the most appropriate programs with the regular curriculum approval process to follow. Well-designed PhD programs in the specific areas of the three Hubs are essential in order to bring new FTE funding to the university and to allow the research activities of the School to flourish. Biomedical Sciences and Engineering and Community Health have been initially identified as areas where there is an important niche opportunity for Concordia to develop new PhD programs that can adequately train the next generation of researchers and scholars in health. Combined with existing PhD programs in the Faculties, Concordia will then be able to provide a comprehensive suite of options for future students. In addition, a new pool of Horizon postdoc positions will be created to support talent recruitment and research. Conservatively, we anticipate each PhD program to operate with a cohort of 10 incoming students per year. Students will take core courses delivered by each program within the School as well as elective courses from departments outside the School. For revenue-generating purposes, we will also take advantage of the ability to allow registrations to Senate-approved programs while the government approval process is ongoing.

**Administrative, operations and governance**

The goal is to keep the School of Health administratively light and nimble. The School of Health will be led by a dean with dual reporting to the Vice-President, Research and Graduate Studies and the Provost and Vice-President, Academic without departments or its own faculty members. Models at York University and Simon Fraser University were reviewed and both are led by a dean, however, SFU has no departments and most closely represents how Concordia's School of Health is envisioned (see Appendix A). The proposal to create a new dean is not made lightly and is meant to emphasize the critical importance of health in both research and training. The dean will have a voice at Academic Cabinet along with the Faculty deans, the Dean of Graduate Studies, and the University Librarian and increase the visibility of health research at that level.

The creation of the School of Health means that the PERFORM Centre as a separate operational unit will cease to exist as it is absorbed into the School. This includes the current position of Scientific Director as each of the Hubs will have a dedicated scientific director appointed and its own coordinator. All current structures and processes in place at PERFORM, including membership and application to conduct research, will be reviewed and assessed in order to retain what is most advantageous to the School's operations. PERFORM's staff and infrastructure will be maintained as the foundation of the School and will be available to all School of Health members as additional resources to existing departmental and research centre infrastructure and personnel.

The responsibilities of the current staff complement of PERFORM will be assessed and reassigned, as appropriate, to support the overall operations of the School. While the PERFORM Centre infrastructure will be available for all researchers who choose affiliation with the School of Health, the Hubs are expected to operate virtually and without walls as the interdisciplinary and cross-Faculty nature of the research and collaborations will be one of the School's greatest strengths. Additionally, all existing support offered to academic programs will be maintained.

Operationally, the PERFORM Centre's infrastructure platforms and staff are key resources for the successful implementation of a new School of Health. While PERFORM's existing platforms naturally lend themselves to specific Hubs, they can nevertheless benefit the research that will emerge from all three Hubs. The same is true of the existing staff who already support the research of faculty members from all four Faculties and several research units. Further, the six research clusters are naturally interdisciplinary and fluid and the expectation is increased collaboration promoted through consolidation in the School.

The School will benefit from a health-specific research mobilization platform, which at first will involve assessing the capacity and expanding the current mandates of existing staff in several units to include support to the School. An assessment will be conducted in order to determine where new positions should be added. These will be staffed by individuals with health and/or medical backgrounds and expertise. They will support both the research operations of the School and its new PhD programs. Areas currently identified include business and research development, knowledge mobilization, and fundraising. The School expects to also take advantage of closer collaboration with units such as the Office of Community Engagement, SHIFT and District 3.

The proposed structure includes support and guidance by both an Executive Committee and an External Advisory Board. The Executive committee would be composed of the dean, the scientific directors of each hub, the graduate program directors as well as cluster and graduate student representation. This will be a critical body to ensure that the interdisciplinary activities, directions, and goals of the School are mapped out and monitored. The External Advisory Board will include senior administrators and the scientific directors, and be complemented by external leaders in various aspects of the health ecosystem. The exact composition of both bodies would be decided following the appointment of the dean. More details on the proposed structure can be found in the attached organizational chart.

**Financial implications**

The start-up phase of the School will be supported through PERFORM's existing operating budget. There are substantial human resources and research support envelopes available to support the School. The main new cost will come with the appointment of the dean and appropriate compensation to administrative appointments. Expected financial support will come from increased enrolments and the overhead from increased success in research funding.

The academic and research missions of the School will be supported by faculty members who will maintain their home departments in our existing Faculties while becoming affiliates in the School. To avoid the perception that the School is negatively affecting existing programs, the home departments with faculty members teaching in the School will be compensated financially for teaching activities that occur outside the department. In addition, a portion of the FTEs associated with graduate supervision will be assigned to the home departments of the supervisors. Researchers will be compensated for their graduate student supervision in the School by their faculty consistent with their own practices.

The full assessment of the operational needs and related costs will start following approval and will be further developed with the arrival of the dean. We can expect costs related to the School to come from several quarters, including enhanced Library resources. However, the overarching goal is to respect the autonomy of existing departments and research units as well as their resources. A summary of the provisional budget is presented in an appendix to this document.

**Ambition and objectives**

The goal of the proposed School of Health is to sustainably enhance the quality of life for people and communities by innovating collaboration-driven, high impact health research and training that harnesses Concordia's unique transdisciplinary strengths and rich, cross-sector partnerships. The School is an important manifestation of Concordia's commitments to the UN Sustainable Development Goals and its efforts to deliver well-being and social justice for all. In particular, the School of Health will contribute directly to the 3$^{rd}$, 4$^{th}$, 5$^{th}$ and 10$^{th}$ sustainable development goals, respectively Good Health and Wellbeing, Quality Education, Gender Equity and Reduced Inequalities.

The School is to be a global reference point for next-generation approaches to health research and training focused on enhancing the quality of human life and the innovative design of healthy communities, including for the majority of the world's population who live in urban areas and those who live in more remote locals. In this way, the orientation of the School is complementary to another important Concordia initiative, the Next-Generation Cities Institute.

The School of Health is expected to have a major impact on Concordia's recruitment efforts of highly-talented students, faculty and personnel and is expected to have an extraordinary impact externally by helping Concordia to become a real presence in the health sphere, creating new opportunities to develop meaningful partnerships and take existing ones to a new level.

**Next Steps**

Senate and Board of Governors approval of the structure and the position of dean is the first step in the School's development. Following approval, critical consultations with the research community will be conducted that will start to build a robust vision and mission for the School.

To guide this next phase, interim scientific directors will be named from within the Concordia health research community for initial mandates of two years. This allows the dean to join Concordia with a stable team in place as well as provide continuity at the start of the dean's appointment. The interim scientific directors will create and lead working groups tasked with driving the School's priorities and fully-defining its goals and how these are best-represented structurally. As these groups work to define and demonstrate the interdisciplinarity of the School, the traditional, linear structure may be replaced by a more graphic image such as the Venn diagram presented earlier symbolizing the fluidity of the School's activities.

The initial consultation period that resulted in the six clusters was extremely useful in identifying the range of Concordia's health expertise. We fully expect this next phase to further build on this as increased interest has become apparent from additional faculty members in JMSB, Fine Arts and the Social Sciences and Humanities in Arts and Science. It is expected that the existing clusters may be expanded or refined and that new research themes, or potential research centres, will be identified that more fully incorporate all faculty members who see the benefits of affiliating with the School of Health.

The approval also means that the search for the dean, following the provisions of the Policy on Senior Administrative Appointments (BD-5), may begin. The search committee will most likely be modeled on that for the Dean of Graduate Studies, which has cross-institutional representation, thus ensuring the interdisciplinary nature of the School is top-of-mind in the search process and would begin sometime in Fall 2021.

The strong support of the university's academic leadership team, including the President, Provost, Vice-President, Research and Graduate Studies, all Faculty Deans, the Dean of Graduate Studies, and University Librarian, is an important impetus behind this project, which has the potential to become one of the most transformative initiatives Concordia has undertaken in its history.

## Appendix A: Institute and School Models

**University of Northern British Columbia Health Research Institute (**https://www.unbc.ca/health-research-institute)

The UNBC Health Research Institute (HRI) is designed to enable UNBC's health researchers to join together for the purpose of furthering health research and innovation. The Institute provides a venue for collaboration among this diverse of group of researchers from many disciplines, who undertake various forms of health research, including research on the determinants of health. The Institute encompasses researchers working in the areas identified in the UNBC Strategic Research Plan (Determinants of Health, Health Services and Policy, Population and Public Health, Aboriginal Health, Health and Environment), as well as others who engage in health research at UNBC.

**McGill University Health Centre Research Institute (**http://rimuhc.ca/)

**Our Vision**

- bridge the gap between **biomedical research and clinical medicine**
- **speed up innovation** and **accelerate the translation of basic discoveries** to public uses
- bring together **pediatric and adult research programs**
- focus on **improving the health of individual patients** throughout their life cycle
- set the stage for the **transition to patient-centred medicine**

**York University Faculty of Health** (https://www.yorku.ca/health/)

The Faculty was created in 2006 and is led by a dean. It regroups four existing schools and departments (eg: nursing, health policy & management, psychology, kinesiology) with a health focus into a separate faculty that offers six undergraduate degree programs. The Faculty clusters 6 areas of research linked to various research units and infrastructure labs under the banner 'Healthy Lives, Healthy Communities.'

**Simon Fraser University Faculty of Health Sciences** (https://www.sfu.ca/fhs.html)

The Faculty is led by a dean but has no departments. The Faculty has its own tenure-track lines and new recruits become designated as members of the Faculty in terms of affiliation. The Faculty of Health Sciences offers five academic programs: PhD in Health Sciences; MSc in Health Sciences; Master of Public Health; Bachelor of Arts in Health Sciences; Bachelor of Science in Health Sciences. The research orientation of the Faculty is defined by three themes and six challenge areas across a wide spectrum. Various research units and infrastructure labs are listed in the faculty.

There are also a number of departments and a few **Schools of Public Health** in Canada, including Université de Montréal, and at University of Alberta. Indeed, they are the only two accredited schools in Canada. The accreditation unit is the Council on Education for Public Health (CEPH)**.** SFU has the only Canadian program in public health which is accredited by CEPH.

George Mason University created a **College of Health and Human Services** by bringing together six academic units (nursing, social work, health admin and policy, global and community health, nutrition and food studies, rehabilitation science). GMU is now transitioning to become a College of Public Health.

## Appendix B: NOW stories related to health research (2018-2021 ytd)

**2021 ytd**

**Concordia undergrad student develops an app to ease the anxiety of living with multiple sclerosis**
*Donya Meshgin is using augmented reality to alleviate the stress of self-administered medication*
https://www.concordia.ca/news/stories/2021/04/01/concordia-undergrad-student-develops-an-app-to-ease-the-anxiety-of-living-with-multiple-sclerosis.html?c=/news/archive

**Land-based learning reconnects Indigenous youth to their cultures, says Elizabeth Fast**
*A 4-day retreat emphasizing knowledge-sharing, survival skills, ceremony and inclusivity builds a sense of belonging*

https://www.concordia.ca/news/stories/2021/03/30/land-based-learning-offers-indigenous-youth-ways-of-reconnecting-to-their-cultures-says-concordia-prof-elizabeth-fast.html?c=/news/archive

**Psychology professor plays a key role in a new study of severe COVID-19 cases in Quebec long-term care facilities**
*Jean-Philippe Gouin will examine psychosocial issues*
https://www.concordia.ca/news/stories/2021/03/11/psychology-professor-plays-a-key-role-in-a-new-study-of-severe-covid-19-cases-in-quebec-long-term-care-facilities0.html?c=/news/archive

**Problematic internet use and teen depression are closely linked, new Concordia study finds**
*Horizon postdoc István Tóth-Király says adolescents who spend too much time online might be at risk of depressive symptoms, substance abuse and poor grades*
https://www.concordia.ca/news/stories/2021/03/09/problematic-internet-use-and-teen-depression-are-closely-linked-new-concordia-study-finds.html?c=/news/archive

**Nursing home staff responses to the pandemic reveal resilience and shortcomings, new Concordia study shows**
*Patrik Marier and PhD student Daniel Dickson compare how U.S. and Canadian workers handled outbreaks in long-term care facilities*
https://www.concordia.ca/news/stories/2021/02/16/nursing-home-staff-responses-to-the-pandemic-reveal-resilience-and-shortcomings-new-concordia-study-shows.html?c=/news/topic

**Concordia researchers find hormone treatment can be effective against polycystic kidney disease**
*Melatonin can help reduce cysts in fruit fly renal tubules, according to Cassandra Millet-Boureima and Chiara Gamberi*
https://www.concordia.ca/news/stories/2021/01/26/concordia-researchers-find-hormone-treatment-can-be-effective-against-polycystic-kidney-disease.html?c=/news/topic

**2020**

**Wearable technology offers a promising avenue for pain treatment in childhood cancer survivors, new Concordia paper shows**
*A study led by Nicole Alberts suggests small devices could have a big impact on remote therapy in the future*
https://www.concordia.ca/news/stories/2020/12/15/wearable-technology-offers-a-promising-avenue-for-pain-treatment-in-childhood-cancer-survivors-new-concordia-paper-shows.html?c=/news/topic

**Intelligent buildings will make us healthier, more productive and greener, according to Concordia researcher**
*Hashem Akbari says the technology exists but policies need to catch up*
https://www.concordia.ca/news/stories/2020/10/27/intelligent-buildings-will-make-us-healthier-more-productive-and-greener-according-to-concordia-researcher.html?c=/news/topic

**Naomi Azar is awarded the $100K Miriam Aaron Roland Graduate Fellowship**
*The PhD student in clinical psychology is researching the impacts of prenatal exposure to chemicals in our daily environment on child development and mental health*
https://www.concordia.ca/cunews/main/stories/2020/10/09/naomi-azar-is-awarded-the-miriam-aaron-roland-graduate-fellowship-worth-100-k.html?c=/news/topic

**Global COVID-19 study finds a strong link between health messaging and behaviour**
*Montreal researchers say data can help authorities reach certain groups to improve safety guideline adherence*
https://www.concordia.ca/news/stories/2020/09/15/global-covid-19-study-finds-a-strong-link-between-health-messaging-and-behaviour.html?c=/news/topic

**Concordia researcher discovers more natural compounds that could reduce the effects of aging**
*Biology professor Vladimir Titorenko hopes his work will help bring down the incidence of diseases like cancer and Alzheimer's*
https://www.concordia.ca/news/stories/2020/09/09/concordia-researcher-discovers-more-natural-compounds-that-could-reduce-the-effects-of-aging.html?c=/news/topic

**Concordia's Natalie Phillips examines the link between sensory acuity and cognition in aging**
*Social factors do not explain how they are connected, new research shows*
https://www.concordia.ca/news/stories/2020/08/11/concordias-natalie-phillips-examines-the-link-between-sensory-acuity-and-cognition-in-aging.html?c=/news/topic

**Two international postdocs are finding ways to defeat the virus that has left them stranded in Montreal**
*MITACS scholars Gurudeeban Selvaraj and Satyavani Kaliamurthi switched the focus of their studies from cancer to COVID-19*
https://www.concordia.ca/news/stories/2020/07/24/two-international-postdocs-are-finding-ways-to-defeat-the-virus-that-has-left-them-stranded-in-montreal.html?c=/news/topic

**Concordia master's student investigates the health risks posed by e-cigarettes**
*Florent Larue wants the public to realize just how much researchers still don't know about vaping*
https://www.concordia.ca/news/stories/2020/06/04/concordia-masters-student-investigates-the-truth-behind-e-cigarettes-and-associated-health-risks.html?c=/news/topic

**Concordia engineers help develop an emergency response drone**
*APRIL 15: Learn how Ambular could save lives during a pandemic*
https://www.concordia.ca/news/stories/2020/04/14/concordia-engineers-help-develop-an-emergency-response-drone.html?c=/news/topic

**Montreal researchers lead an international study of global prevention behaviours and responses to COVID-19**
*Concordia's Simon Bacon says data will be used to improve strategies and messaging to help flatten the curve*
https://www.concordia.ca/news/stories/2020/04/09/montreal-researchers-lead-an-international-study-of-global-prevention-behaviours-and-responses-to-covid-19.html?c=/news/topic

**Concordia PhD candidate uses AI techniques for improved ultrasound imaging**
*Bahareh Behboodi aims to make tumor detection and segmentation faster and more accurate*
https://www.concordia.ca/news/stories/2020/03/04/concordia-phd-candidate-uses-ai-techniques-for-improved-ultrasound-imaging.html?c=/news/topic

**Concordia-led researchers study pathological hand tremors in patients to develop a machine learning-based treatment framework**
People suffering from Parkinson's and other neurodegenerative diseases will benefit from smarter, more accurate technology
https://www.concordia.ca/news/stories/2020/03/03/concordia-led-researchers-study-pathological-hand-tremors-in-patients-to-develop-a-machine-learning-based-treatment-framework.html?c=/news/topic

**New study shows the effects of obesity mirror those of aging**
*Concordia researchers identify a shared list of health issues, from DNA damage to cognitive decline*
https://www.concordia.ca/news/stories/2020/02/25/effects-of-obesity-mirror-those-of-aging-new-study-shows.html?c=/news/topic

**Researcher Maryse Fortin investigates cause and treatment of lower back pain**
*The alumna returns to Concordia to advance her studies using PERFORM Centre technology*
https://www.concordia.ca/news/stories/2020/02/21/researcher-maryse-fortin-investigates-the-cause-and-treatment-of-lower-back-pain.html?c=/news/topic

**Concordia researchers develop a noise measuring framework for modular construction factories**
*Smart sound management can improve off-site worker safety, health and productivity*
https://www.concordia.ca/news/stories/2020/02/18/concordia-researchers-develop-a-noise-measuring-framework-for-modular-construction-factories.html?c=/news/topic

**Concordia researcher leads a team of 94 undergrads to explore gut health**
*Professor Chiara Gamberi co-wrote a published study on intestinal microbiota with her entire biology class*
*https://www.concordia.ca/news/stories/2020/02/04/concordia-researcher-leads-a-team-of-94-undergrads-to-explore-gut-health.html?c=/news/topic*

**Concordia's Natalie Phillips examines the link between cognition and hearing or vision loss**
*Social factors do not explain how they are connected, new research shows*
https://www.concordia.ca/news/stories/2020/01/28/concordias-natalie-phillips-examines-the-link-between-between-cognition-and-hearing-or-vision-loss.html?c=/news/topic

**Concordia's engAGE Centre launches the Creative Living Lab at a local storefront**
The grand opening of the interactive space for collaborative research with older adults is January 16 at the Cavendish Mall
https://www.concordia.ca/news/stories/2020/01/13/concordias-engage-centre-launches-the-creative-living-lab-at-a-local-storefront.html?c=/news/topic

**Size, shape and charge matter when it comes to nanoparticle drug delivery, new Concordia research shows**
*Montreal scientists identify properties that could help nanoscopic vehicles enter cancer cells using light*
https://www.concordia.ca/news/stories/2020/01/07/size-shape-and-charge-matter-when-it-comes-to-nanoparticle-drug-delivery-new-concordia-research-shows.html?c=/news/topic

**2019**

**Concordia grad student researches secondary lymphedema among breast cancer patients**
*Jesse Whyte compares the results of healthy women with those who have developed the side effect following treatment*
https://www.concordia.ca/news/stories/2019/12/05/concordia-grad-student-researches-secondary-lymphedema-among-breast-cancer-patients.html?c=/news/topic

**Concordia researchers use deep learning to detect anorexia in social media posts**
*Algorithms can sift through the online chatter to get help where it is needed fast, says computational linguist Leila Kosseim*
https://www.concordia.ca/news/stories/2019/10/29/concordia-researchers-use-deep-learning-to-detect-anorexia-in-social-media-posts.html?c=/news/topic

**Concordia researcher investigates how cannabinoids affect the immune system**
*Master's student Norhan Mehrez studies the impact of the drug on healthy T cells*
https://www.concordia.ca/news/stories/2019/10/02/concordia-researcher-investigates-how-cannabinoids-affect-the-immune-system.html?c=/news/topic

**Concordia researcher investigates the real risks of e-cigarette use**
*Master's student Tasfia Tasbih is studying the prevalence of cardiorespiratory illnesses among men and women who vape*
https://www.concordia.ca/news/stories/2019/10/01/concordia-researcher-investigates-the-real-risks-of-e-cigarette-use.html?c=/news/topic

**Concordia researcher investigates lower back pain in hockey players**
*Maryse Fortin recommends preseason screening to assist teams with their injury prevention programs*
https://www.concordia.ca/news/stories/2019/09/25/concordia-researcher-investigates-lower-back-pain-in-hockey-players.html?c=/news/topic

**Music helps women survivors of violence heal and challenge sexism, Concordia professor says**
*Sandi Curtis caps off her career as a researcher and music therapist with a new interactive eBook*
https://www.concordia.ca/news/stories/2019/09/10/music-helps-women-survivors-of-violence-heal-and-challenge-sexism-concordia-professor-says.html?c=/news/topic

**Stress and screen time are closely connected, new Concordia research shows**
*A wide-ranging survey reveals a complex relationship between addiction to technology and mental health*
https://www.concordia.ca/news/stories/2019/08/27/stress-and-screen-time-are-closely-connected-new-concordia-research-shows.html?c=/news/topic

**Concordia researcher uses radiomics to improve cancer prediction and prognosis models**
*Parnian Afshar hopes her data analysis will help physicians get more from their medical imaging*
https://www.concordia.ca/news/stories/2019/08/27/concordia-researcher-uses-radiomics-to-improve-cancer-prediction-and-prognosis-models.html?c=/news/topic

**Concordia researcher uses gold ash to uncover means for slowing the progression of cancer cells**
*Subhathirai Subramaniyan looks to 'bridge the gap between traditional and modern medicine'*
https://www.concordia.ca/news/stories/2019/08/07/concordia-researcher-uses-gold-ash-to-uncover-means-for-slowing-the-progression-of-cancer-cells.html?c=/news/topic

**Concordia researchers receive more than $1 million for interdisciplinary explorations on aging**
*Support from the Fonds de recherche du Québec goes toward studies on sleep, memory and creative community engagement*
https://www.concordia.ca/news/stories/2019/08/01/concordia-researchers-receive-more-than-1-million-for-interdisciplinary-explorations-on-aging.html?c=/news/topic

**Concordia professor investigates how microbubbles can improve drug delivery**
*Brandon Helfield's groundbreaking research is supported by a $500,000 (USD) grant from the Burroughs Wellcome Fund*
https://www.concordia.ca/news/stories/2019/07/24/concordia-professor-investigates-how-microbubbles-can-improve-drug-delivery.html?c=/news/topic

**Concordia researchers develop a new method to evaluate the health of artificial heart valves**
*The technique can help physicians detect blood flow blockages in recipients*
https://www.concordia.ca/news/stories/2019/06/19/concordia-researchers-develop-a-new-method-to-evaluate-the-health-of-artificial-heart-valves.html?c=/news/topic

**Concordia PhD candidate is developing a way to improve hospital care in Canada**
*Zahra Yousefli's research identifies more cost-effective and efficient maintenance management scenarios*
https://www.concordia.ca/news/stories/2019/06/12/concordia-phd-candidate-is-developing-a-way-to-improve-hospital-care-in-canada.html?c=/news/topic

**Memories are strengthened via brainwaves produced during sleep, new study shows**
*Concordia's Thanh Dang-Vu and his team use medical imaging to map areas involved in recalling learned information while we slumber*
https://www.concordia.ca/news/stories/2019/05/15/memories-are-strengthened-via-brainwaves-produced-during-sleep-new-study-shows.html?c=/news/topic

**Growing up in poverty doubles diagnoses of psychosis-spectrum illnesses like schizophrenia, research says**
*A study by Concordia and UC Davis followed families across 3 decades*
https://www.concordia.ca/news/stories/2019/04/26/growing-up-in-poverty-doubles-diagnoses-of-psychosis-spectrum-illnesses-like-schizophrenia-research-says.html?c=/news/topic

**Researchers investigate the benefits of sleep on memory, mental health and overall quality of life**
*From insomnia to narcolepsy, the Sleep Lab team at Concordia is getting to the bottom of common problems*
https://www.concordia.ca/news/stories/2019/03/12/Researchers-investigate-the-benefits-of-sleep-on-memory-mental-health-and-overall-quality-of-life.html?c=/news/topic

**Making Toronto more friendly to seniors is a big-city challenge, new study says**
*Concordia researcher Meghan Joy finds that municipal policies toward aging populations often come up short*
https://www.concordia.ca/news/stories/2019/01/22/making-toronto-more-friendly-to-seniors-is-a-big-city-challenge-new-study-says.html?c=/news/topic

**Anxiety about close relationships can affect your health, new research shows**
*A Concordia study involving international students reveals that insecure attachment can lead to harmful physical side effects*
https://www.concordia.ca/news/stories/2019/01/15/anxiety-about-close-relationships-can-affect-your-health-new-research-shows.html?c=/news/topic

**Antibiotics and E. coli: Concordians publish research with major implications for public health**
*Undergrad students Nour Ghaddar and Mona Hashemidahaj co-authored the paper with their professor, Brandon Findlay, detailing a new technique for testing drug resistance*
https://www.concordia.ca/news/stories/2019/01/04/antibiotics-and-e-coli-concordians-publish-research-with-major-implications-for-public-health.html?c=/news/topic

**2018**

**Prize-winning PhD candidates examine Fascist cinema in Ethiopia and heart valve diseases**
*Giuseppe Di Labbio and Giuseppe Fidotta are the latest recipients of the Concordia Stand-Out Graduate Research Award*
https://www.concordia.ca/news/stories/2018/12/04/prize-winning-phd-candidates-examine-fascist-cinema-in-ethiopia-and-heart-valve-diseases.html?c=/news/topic

**New autism-related research expands our understanding of cognitive function in preschoolers**
*Young children who prefer social stimuli have better "mind-reading" skills, a new study shows*
https://www.concordia.ca/news/stories/2018/11/27/new-autism-related-research-expands-our-understanding-of-cognitive-function-in-preschoolers.html?c=/news/topic

**Stressed out seniors cope better by practicing self-compassion, new research shows**
*A Concordia study finds that treating oneself kindly leads to lower cortisol levels in older adults facing challenges*
https://www.concordia.ca/news/stories/2018/11/21/stressed-out-seniors-cope-better-by-practicing-self-compassion-new-research-shows.html?c=/news/topic

**Indoor play keeps child obesity away, new research shows**
*Organized sports are not the only activities that benefit children's health, according to PERFORM Centre researcher Caroline Fitzpatrick*
https://www.concordia.ca/news/stories/2018/11/13/indoor-play-keeps-child-obesity-away-new-research-shows.html?c=/news/topic

**Measuring metabolites at the molecular level can have profound implications on patient care, says a Concordia researcher**
*Analytical chemist Dajana Vuckovic is guiding the young field of metabolomics through its growing pains*
https://www.concordia.ca/news/stories/2018/11/06/measuring-metabolites-at-the-molecular-level-can-have-profound-implications-on-patient-care-according-to-concordia-researcher.html?c=/news/topic

**Concordia researcher Aurore Perrault explains how to minimize the effect of turning back our clocks**
*The neuroscientist says we can adapt relatively quickly to the time change*
https://www.concordia.ca/news/stories/2018/10/31/concordia-researcher-aurore-perrault-explains-how-to-minimize-the-effect-of-turning-back-our-clocks.html?c=/news/topic

**Concordia master's student is developing treatment protocols for breast cancer patients**
*Researcher Jesse Whyte works with patients to understand the effects of secondary lymphedema*
https://www.concordia.ca/news/stories/2018/10/16/concordia-masters-student-is-developing-treatment-protocols-for-breast-cancer-patients.html?c=/news/topic

**The Concordian who researches your fight-or-flight response**
*Ghazal Mohammadi measures how people's immune systems react when their hands are placed in cold water.*
https://www.concordia.ca/cunews/main/stories/2018/10/09/the-concordian-who-researches-your-fight-or-flight-response.html?c=/news/topic

**Concordia researcher investigates how diabetes leads to vascular disease**
*Master's student Dana-Rae Yadao looks at how exercise can protect patients' cardiovascular systems*
https://www.concordia.ca/news/stories/2018/10/01/concordia-researcher-investigates-how-diabetes-leads-to-vascular-disease.html?c=/news/topic

**Concordia PhD student lands $100,000+ scholarship from CIHR to study eating disorders in adolescents**
*Concordia researcher Jessica Di Sante investigates the physical and mental health factors that may contribute, including early adversity*
https://www.concordia.ca/news/stories/2018/09/11/concordia-phd-student-lands-100000-scholarship-from-cihr-to-study-eating-disorders-in-adolescents.html?c=/news/topic

**Senate report on obesity uses inappropriate terminology, according to recent critical review**
*Concordia researcher argues not enough focus on "foundational and fundamental" determinants instead of lifestyle choices*
https://www.concordia.ca/news/stories/2018/09/11/senate-report-on-obesity-uses-inappropriate-terminology-according-to-recent-critical-review.html?c=/news/topic

**Concordia researchers create a miniaturized cancer killer**
*Professor Steve Shih and his team developed a method to fight the disease at the genetic level — one that may lead to a revolution in patient care*
https://www.concordia.ca/news/stories/2018/09/05/concordia-researchers-create-a-miniaturized-cancer-killer.html?c=/news/topic

**Concordia grad researcher Kerri Delaney sheds light on obesity and diabetes**
*STEM SIGHTS: The PhD student studies the connection between metabolic diseases and fat cells*
https://www.concordia.ca/cunews/main/stories/2018/09/04/concordia-grad-researcher-kerri-delaney-sheds-light-on-obesity-and-diabetes.html?c=/news/topic

**A new literature review may help reveal the mechanisms behind kidney disease**
*Concordia researchers spotlight how Drosophila melanogaster – aka the common fruit fly – can be used to model human renal function*
https://www.concordia.ca/news/stories/2018/08/30/a-new-literature-review-may-help-reveal-the-mechanisms-behind-kidney-disease.html?c=/news/topic

**Three Concordians land $1.8 million in federal health research funding**
*Christophe Grova, Lisa Kakinami and Michael Sacher investigate issues related to epilepsy, health inequality and membrane trafficking diseases*
https://www.concordia.ca/news/stories/2018/08/13/three-concordians-land-1-8-million-in-federal-health-research-funding.html?c=/news/topic

**Students' depressive symptoms peak at certain times of the year, new research shows**
*A Concordia study will help universities identify and assist young people at risk*
https://www.concordia.ca/news/stories/2018/06/13/students-depressive-symptoms-peak-at-certain-times-of-the-year-new-research-shows.html?c=/news/topic

**$2.4 million for Canada Research Chairs at Concordia**
*Federal funding supports areas of biology, psychology, management and Indigenous visuals arts*
https://www.concordia.ca/news/stories/2018/05/03/2-4-million-for-canada-research-chairs-at-concordia.html?c=/news/topic

**NEW PUBLICATION: How little-known cells tie into mental health**
*Concordia researchers shine the spotlight on the role of glia in depression and anxiety disorders*
https://www.concordia.ca/cunews/main/stories/2018/04/24/new-research-how-the-nervous-system-ties-into-mental-health.html?c=/news/topic

**New research shows light smokers aren't as concerned about health risks**
*Concordia study ranks reasons to quit among young adults*
https://www.concordia.ca/news/stories/2018/04/10/new-research-shows-light-smokers-arent-as-concerned-about-health-risks.html?c=/news/topic

**STE(A)M SIGHTS: The Concordian who uses art to reinterpret illness**
*Grad student Darian Stahl examines how our sense of self changes when we interact with medical technology*
https://www.concordia.ca/cunews/main/stories/2018/03/19/stem-sights-Darian-Stahl-grad-research-art-reinterpret-illness-MRIs.html?c=/news/topic

**Grad student automates gene editing to detect indications of cancer**
*Concordian Hugo Sinha has created a fast and affordable tool to study the disease*
https://www.concordia.ca/news/stories/2018/02/14/grad-student-automates-gene-editing-to-detect-indications-of-cancer.html?c=/news/topic

**Interdisciplinary study finds Ayurvedic medicine may improve chemotherapy**
*Gold ash, known as swarma bhasma, has potential as a drug-delivery vehicle*
https://www.concordia.ca/news/stories/2018/01/31/interdisciplinary-study-finds-ayurvedic-medicine-may-improve-chemotherapy.html?c=/news/topic

**Cancer-patient wait times could be reduced by 44%, new research shows**
*A Concordia-Jewish General Hospital collaboration improves the flow in oncology treatment centres*
https://www.concordia.ca/news/stories/2018/01/16/cancer-patient-wait-times-could-be-reduced-by-44-percent.html?c=/news/topic