WISC hosts 18th annual Pow Wow. P5
A time to reflect: The National Day for Truth and Reconciliation

September 30 marks the first National Day for Truth and Reconciliation in Canada — a federal holiday created by the Canadian government in June 2021.

The announcement of the holiday came after the findings of 215 children buried at the former Kamloops Indian Residential School in May.

Established in the late 1870s, residential schools were an effort by the Canadian government to assimilate Indigenous children and erase their culture. Many people dismiss these atrocities as ‘ancient history’, while in reality, the schools were open as recently as 1996. It is estimated that more than 150,000 First Nations, Inuit and Métis children attended these schools, where rates of abuse were high and many children never saw their families again.

Sept. 30 also marks Orange Shirt Day, a day of recognition based on the story of residential school survivor Phyllis Webstad. Webstad was sent to St. Joseph Mission Residential School at six years old. The only item she had to remember her family by was an orange shirt that her grandmother had given her, and it was quickly taken away. For many Indigenous people, the colour orange has come to represent how their culture and way of life was stolen.

“This holiday is not new — it’s elevated from a grassroots movement,” said Robin Stadelbauer, Indigenous initiatives coordinator at the University of Waterloo. “But now it has momentum, it has recognition.”

The National Day for Truth and Reconciliation has been placed on the same day as Orange Shirt Day to honour Webstad’s story and increase awareness.

“Some people already know a lot about the residential school system, but others don’t really pay attention. Making this a federal holiday can encourage those people to learn and reflect,” Stadelbauer said.

Stadelbauer is Anishinaabe from Neyasongin (Chippewas of Nawash Unceded First Nation). She emphasized the importance of the holiday as a call to action and an opportunity for education, particularly for students.

“Students are future leaders, especially at a school like this. They’re going to take this knowledge home with them, to their families, to their communities,” she said. “I can’t emphasize enough the need for reflection, not only for the Indigenous people, but for everyone. History continues. It affects us all.”

Even today, many Indigenous communities are still experiencing unfair treatment. On average, they suffer from higher poverty rates and lower levels of education. Some argue that this holiday is an unnecessary symbolic gesture, and instead, the government should be taking more concrete action to help Indigenous people. Stadelbauer said she believes that the holiday is still important as a means of spreading awareness and recognition.

“It’s a slow progression,” Stadelbauer said. “Of course, the government — and Canadian society — could be doing more to help Indigenous people. But it’s a start.”

The holiday is statutory only at the federal level, meaning that most Ontarians will not have the day off school or work to reflect. This puts the onus on employers to provide time off or activities for personal reflection.

At UW, students who are interested in learning more about Indigenous history have several options available to them on Sept. 30. The Decolonizing UW Health Collaborative Speaker Series will be hosting a talk titled, “A Brief History of Colonization, Intergenerational Trauma and Genocide of Indigenous Peoples in Canada.” Additionally, the Kitchener non-profit group Healing of the Seven Generations is running a Community Walk to spread awareness. The following week, UW is holding a KAIROS Blanket Exercise (KBE) on Oct. 5. The KBE is an event in which participants step on blankets that represent the land of the First Nations to explore the historic and contemporary relationship between Indigenous and non-Indigenous peoples.

“I would recommend [students] engage in any sort of learning to deepen their understanding,” Stadelbauer said. “It’s different for everyone. It could be through conversations with each other, or attending the Community Walk, or anything that helps them to reflect.”

Stadelbauer also discussed the importance of personal responsibility. She mentioned that it’s easy to blame the government for what happened in the past and ignore the current struggles of the Indigenous people, but one of the goals of the holiday is to avoid this attitude. Reconciliation is all about acknowledging what happened, correcting mistakes, and looking for ways to move forward.

“This day sets the tone for Canadian society. Ultimately, the responsibility isn’t just on the government — it’s on all of us.”
Students have mixed reactions to UW’s return to in-person instruction

Alicia Wang
Reporter

On Sept. 20, University of Waterloo students and faculty received a memo from administration proclaiming the return of in-person classes for the winter 2022 term. Now entirely in-person, UW will return to a form not seen for nearly two years. The promise of a return to "normal" came with a mixed bag of reactions from students, whose feelings ranged from excited to apprehensive.

First-year arts student Ethan Blakey voiced worries regarding the sudden shift. "I’m totally down, but I bet there’ll be a lot more of a workload, and I’m not really excited for the in-person logistics," he said, the latter regarding the new concern of navigating UW’s campus.

Janetka Bolenthiran, a first-year health sciences student, expressed concerns about going back to the classroom as well. "I’m not used to it anymore because of COVID, and things like exams are also gonna [sic] feel so different because of the new environment," she said. "I think already living on campus makes it feel not that much more different."

Throughout the pandemic, the lines between home and work or school became increasingly blurred, with many people reporting feelings of decreasing productivity or worsening mental health. A survey by the Pew Research Center found that just over half of workers from the ages of 18 to 29 felt a lack of motivation to complete their work, stemming from several issues including a blurring of their home and work environment and feeling a lack of proper communication with peers.

Although UW began re-introducing in-person classes and hybrid models throughout the fall 2021 term, this next step represents the most ambitious leap back to "normal" for many. Despite the news, the memo emphasized the importance of adhering to public health safety guidelines in order to continue this trend. "To make this happen, we must remain vigilant as the fourth wave of the pandemic unfolds and plan our part in limiting the spread of COVID-19. Please continue to follow mask-wearing, physical distancing and other public health instructions throughout this fall term," it stated.

For the fall 2021 term, UW required those in residence to be fully vaccinated by Oct. 17, and continues to implement mandatory COVID-19 symptom screenings via daily check-ins. Campus visitors must be vaccinated or present recent negative COVID-19 tests.

First-year math student Sebastian Milewski’s statement reflected common complaints throughout the online learning era. "I’m excited as long as everyone’s safe and as long as I don’t have to take any more asynch [sic] classes," he said. Several students also expressed their excitement at the turnaround for other reasons. Ana Mahana, a first-year arts and business student, mentioned that being on residence without any in-person classes made being on campus feel rather pointless. Mahana stated, "I want to have a class in person because all the classes are online, so it’s like I’m in res [sic] for no reason."

Jenny Hu, a first-year architecture student, also pointed out the confusion online classes can bring, stating, "We’re already doing hybrid, and sometimes it’s hard to find information about class online. But it’s nice being in person and having access to school materials."

As students begin to weigh their choices and prepare for course selection for the upcoming term, there will no doubt be a range of emotions in the air over the choice to move to in-person classes for the winter 2022 term. Overall, despite some concerns, many students are looking forward to getting back in the classroom and taking the next step in their university careers.

AOC’s ‘Tax the Rich’ Met Gala dress designed by Guelph native Aurora James

Nicole Howes
Assistant News Editor

This year’s America-themed Met Gala featured celebrities walking up the steps in extravagant gowns and suits made by exclusive designers. Though there were many outfits that stood out, it was United States Representative Alexandria Ocasio-Cortez’s (AOC) dress that sparked controversy online — a white gown adorned with red letters that spelled out “Tax the rich,” designed by Guelph native Aurora James.

James is a Ghanaian Canadian designer, who is known for starting the 15 Percent Pledge following the passing of George Floyd. The pledge asks American retailers to reserve a minimum of 15 per cent of their shelves for Black-owned businesses. Recognizing the same discrimination north of the border, James aims to also create the 15 Percent Pledge Canada.

James explained to Vogue, "In the early pandemic, we already knew 40 per cent of black-owned businesses were closing which was far and above any other group." To combat this statistic, she provided the simple solution, saying "15 per cent of the population should consider 15 per cent of the shelf space."

Although James’s work has made a positive impact in the Black community, it is also worth noting that a week after the Met Gala, the New York Post published an article claiming James currently owes debt in multiple states and has three open tax warrants from New York state resulting from “failing to withhold income taxes from employees’ paychecks.”

“Tax the rich” is a slogan made famous by AOC that reflects her current work advocating for changes to the tax code by raising taxes on the ultra-wealthy to help support more social services and to narrow the ever-growing wealth gap between America’s rich and poor.

AOC received large amounts of backlash and criticism about her dress and appearance at the Gala, as many thought it was hypocritical of her to be at such an exclusive event, with the dress thus having an “inauthentic” message.

Anna Drake, a political science professor at UW explained, "I think a lot of the time when people critique something like AOC’s dress being out of place, what gets lost is the fact that design and politics are connected; it’s just whether or not people think of it that way."

She also emphasized that this critiquing and need for separation between the topics is "a way to silence talking about politics that people who have power don’t enjoy talking about."

Although this combination of politics and design was new for some, many agreed that the conversation of wealth and taxes is one that needs to be included in the Met Gala and is part of "who we are."

Each year the Gala’s theme is chosen in coordination with the Met’s spring exhibition which aims to tell a story and remember history. Many celebrities were scrutinized for not following this year’s theme of “In America: A Lexicon of Fashion,” but many would argue that AOC’s dress perfectly represented the theme.

Drake commented on AOC’s adherence to the theme. “Her wearing that ‘Tax the rich’ dress was making a deliberate point about what, according to her, America ought to do and then used all the publicity to talk about what we could do with money from taxing the rich, which is to address climate change, education, healthcare and then bring it right back to the focus on America.”

The Met Gala is known to have an exclusive guest list. However, in an interview with Vogue, Ocasio-Cortez said, “The Met is an institution that belongs to the people. What are we doing if we aren’t giving that table and bringing more people into that conversation? This year’s Gala is the opportunity to have conversations about the communities we are from."

She also explained that she hoped to send a message by debuting her Met dress and tell the youth from all over that “they belong here and they belong everywhere.”

Ocasio-Cortez describes how James’ story of moving to New York with $3,000 while selling clothes at the Brooklyn Flea market to now being a guest and designer at the Met Gala is “really the story of our city.”

The choice of a sustainability driven, black immigrant designer, who strives to uplift the Black community further reinforced Ocasio-Cortez’s message that “everyone belongs at the Met” and that “this is America and our story.”
UW students eligible for free transit to blood donor clinics

Yousuf Afzal
Reporter

Blood donation is a practice that pays its dues tenfold, but has seen a remarkable decline during the pandemic. With a donation of a mere pint of blood capable of saving up to three lives, it is undoubtedly an act that requires very little effort in return for a remarkably rich reward.

The process of donating blood sweetens the deal even further. Donors are required to undergo a free blood screening at the donation site that serves a variety of purposes; while the intention of the test is to ensure blood is of fit quality for donation, it also doubles as an impromptu wellness check. With donation centre staff checking pulse, blood pressure, hemoglobin levels, body temperature and screening for a whole host of diseases, donors are kept aware of some of the key aspects of their general wellbeing while simultaneously contributing to the survival of multiple patients with their blood.

As expected, the COVID-19 pandemic had a marked effect on blood supply across the country. With donors, donation staff and doctors in increasingly short supply, the Canadian Blood Services (CBS) were reporting drops of around 15,000 donors between March and May of 2020. However, with humanitarian organizations and political figures such as recently re-elected Prime Minister Justin Trudeau rallying donors by directing public service announcements detailing the issue, numbers rebounded to near-pre-pandemic levels by the end of 2020.

A representative for the CBS, Gina Leyva, spoke to Imprint about an upcoming blood donation initiative in the Kitchener-Waterloo region that she hopes students at both Waterloo and Laurier University will take part in.

Leyva works as one of the organization’s territory managers, recruiting donors across Kitchener, Waterloo and Cambridge. With hospitals setting out annual predictions for the amount of donors they will require, it is up to her to ensure the blood supply goals are met.

“Typically, we come to the University of Waterloo several times throughout the academic year — even in the summer — for a three-day stretch, because the campus is fantastic. There are so many blood donors, but because of COVID we had to stop those clinics, and I’m not sure if we’ll be able to return,” Leyva went on to outline how lockdowns and social distancing have heavily altered blood donation procedures.

“What’s happened over the course of the pandemic was that we had to shut a lot of our clinics down, as schools, high schools, those were all closed. We had to decide how we were going to meet those targets knowing we weren’t going to locations we’d previously gone to.”

In the end, the CBS decided to simply trust in their permanent, dedicated clinics, increasing the amount of donations those blood centers were capable of handling.

Speaking on the Waterloo centre, located at the intersection of Bridgeport Road and Weber Street in close proximity to both university campuses, she explained that in order to maintain social distancing, the only option they had was to extend the hours at the clinic as well as the days of the week it was open.

The organization and territory managers like Leyva are doing their best to take advantage of the fact that while they can’t yet begin opening up their three-day clinics again, the growing student population on campus is a familiar wealth of blood donors.

“Even though we can’t come to campus anymore, our permanent centre is so close by that we’re really hoping students will come by and donate.” It is to this end that the CBS are initiating what they call their Blood Drive.

An event that they have used to great success in the past, the Blood Drive entails the CBS paying the taxi fares for blood donors to and from their clinics, wherever they are located. Students are encouraged to sign up for a donation appointment online on the Canadian Blood Service’s website and to contact their territory manager to organize the free taxi fare.

The event would normally run for a short period of time, but with the pressing need for donors, Leyva and the CBS are encouraging students to book an appointment at any point throughout the year with the promise of free transport.

“This really demonstrates how imminent our need for blood donors is. Normally when we do an event like this it’s a lot more organized and structured, but this year we’re saying anyone that wants to come and support us can volunteer their time to donate, and we’ll cover the costs.”

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**imprint**

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**OCTOBER 2**

**NORTH CAMPUS**

**BASEBALL**

**SEPTEMBER 20 7:00 PM**

**VS LAURIER**

**JACK COUCH PARK**

**OCTOBER 1**

**12:00 & 3:00 PM**

**VS BROCK**

**JACK COUCH PARK**

**WATERLOO INVITATIONAL**

**OCTOBER 3-5**

**CAMBRIDGE GC**

**FIELD HOCKEY**

**OCTOBER 3 7:00 PM**

**VS GUELPH**

**WARRIOR FIELD**

**FIRST AID**

CBS - Health Care Provider with AED

Oct 2

Emergency First Aid w/ CPR-C, AED

Oct 17 & Nov 14

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Oct 30

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WISC Pow Wow highlights Two-Spirit creatives, Indigenous youth

Alexandra Holyk
Executive Editor

The Waterloo Indigenous Student Centre (WISC) held its 18th annual Pow Wow on Sept. 24, emphasizing the importance and inclusion of Two-Spirit people within LGBTQ and Indigenous communities.

The event was organized by Bangishimo Johnston — a co-founder of Land Back Camp and Two-Spirit Anishinaabe originally from Couchiching First Nation — in partnership with WISC and hosted by Amy Smoke, Two-Spirit Mohawk Nation, Turtle Clan from the Six Nations of the Grand River.

Despite plans to host the Pow Wow in-person on the grounds of St. Paul’s University College, Johnston said they decided to host the event online for a second year in a row due to the ongoing pandemic.

"We weren't even actually planning on having a Pow Wow this year," Johnston said in an interview with Imprint. However, just over a month before the Pow Wow was set to take place, Johnston was brought on to help organize an in-person event, then had to re-organize the whole thing again for the virtual setting.

Johnston also mentioned that when planning the event, the committee was looking to create opportunities for Two-Spirit and queer Indigenous folks to be involved in the Pow Wow, particularly amongst the next generation.

"Two-Spirit folks, queer folks have always been here," Johnston said. "But for a long time, spaces like Pow Wows weren't accessible to us, so to be able to create that space for the Indigenous Two-Spirit community was amazing."

"We wanted to be able to invite other people to get involved...we have to let the younger generation have the spotlight and give them an opportunity to be heard."

The Pow Wow featured Two-Spirit elder Blu Waters, whose family is from Big River, Sask., Star Blanket Reserve and Brandon Lake, Eskasoni First Nations, Cape Breton, N.S. and the Red River.

"You've finally arrived back where you should've always been," Waters said in their opening remarks. "We are all connected here today and I welcome each and every one of you here and ask that Creator takes care of you, your families, your families of the heart, your friends, and most of all, you."

Waters went on to explain the meaning of being “Two-Spirited,” saying that the concept is not new and that gender became binary along with colonization.

Waters explained how the term was created by Dr. Myra Laramée in the 1990s at an LGBTQ gathering, before the acronym included other letters. "As you can see our letters are expanding because our gender is personal to us. We are the ones who get to define our gender and our identity and also express our Indigeneity," Waters said.

"What [being Two-Spirit] really comes down to is someone that maintains the balance and someone that exists in this in-between place," Calderón said. "As Two-Spirit people, when we go to ceremonies or when we go to Pow Wows or gatherings...because Creator gifted the men the fire, if we go and we see that the men need help with that fire keeping, we can offer that...and the same thing goes with the women. They were gifted that water from Creator and we can go see if they need help."

The last performers of the event were Alicia Birole and Megan Southwell, showcasing Métis jiggling and fiddle music. Johnston mentioned that in previous years when the event was held in-person, Pow Wow attendees would be able to participate and learn how to jig. This year, Southwell and Birole still made a point to engage with audience members by teaching jig steps virtually.

Looking forward to next year, Johnston said they are eager to hold the Pow Wow in-person again in Waterloo Park.

“It might not be the number that we usually have next year in Waterloo Park, it’ll probably be fenced. But still, I’m hoping that we can gather again in a big public space,” Johnston said.
On Aug. 23, Ryerson University’s Board of Governors voted in favour of changing the university’s name. Egerton Ryerson, the University’s namesake, was a key figure in the creation of the residential school system. As such, Indigenous activists have called for the university, often referring to it as “X University,” to change its name and remove references to Ryerson for several years. Following the discovery of unmarked graves at various residential school sites, the statue of Ryerson at the university was torn down by protesters and the university formed the Standing Strong (Mash Koh Wee Kah Poo Win) Task Force, which eventually advocated, among 21 other recommendations for reconciliation, for the university to change its name.

In light of the controversy at Ryerson University, the community might be curious about where the names on the University of Waterloo campus come from. So here it is — a brief overview of the people behind the names on campus.

B.C. Matthews Hall (BMH) – Burton Clare Matthews (1926-2004) served as president and vice-chancellor of UW from 1970 to 1981. He was a trained soil scientist who also served as president and vice-chancellor of the University of Guelph from 1983 to 1988.

Carl A. Pollock Hall (CPH) – Carl Arthur Pollock (1905-1978) was a successful local businessman, the founder of CKCO – a local TV station that’s on the air since 1954 — and one of the founding members of the UW Board of Governors.

Caudette Millar Hall – Caudette Millar (1935-2016) served as mayor of Preston from 1969, at the time the youngest mayor in Canada at 35 years old, until 1973 when Preston, Galt, Blair and Hespeler municipalities were amalgamated into the city of Cambridge. Millar was elected Cambridge’s first mayor. Millar served as mayor of Cambridge from 1973 to 1974 and again from 1978 to 1988. She was then elected to the Ontario Municipal Board, where she served until her retirement in 2014.

Conrad Grebel University College – Conrad Grebel (1498-1556) is considered one of the major founders of Swiss-South German Anabaptism.

Dana Porter Library (DP) – Dana Porter (1901-1967) served as UW’s first chancellor from 1960 to 1966. Previously, he fulfilled several roles in provincial government during his time as an Ontario MPP in the Conservative Party of Canada from 1943 to 1958. He stepped down in 1958 to become chief justice of the Ontario Court of Appeals under John Diefenbaker’s federal government, a post he held until shortly before his death.

The Davis Centre – William “Bill” G. Davis (1929-2021) was Minister of Education under John Roberts from 1961 to 1971, and succeeded him as the 18th Premier of Ontario from 1971 to 1981.

Douglas Wright Engineering Building (DWE) – Douglas Tyndall Wright (1927-2020) served as UW’s first dean of engineering from 1959 to 1966 and UW’s third president and vice-chancellor from 1981 to 1993. He was a trained civil engineer and was awarded the Order of Canada in 1997.

Ira G. Needles Hall (NH) – Ira George Needles (1895-1986) helped to found UW in 1957. During the development of the university’s programs, Needles, a successful local businessman, put forward the ideas that would become the co-operative education program in a 1956 presentation. Needles further served as chairman of the university’s Board of Directors from 1956 to 1966, following which he succeeded Dana Porter to become UW’s second chancellor from 1966 to 1975.
the names on campus come from

J.G. Hagey Hall of the Humanities (HH) – Joseph Gerard “Gerry” Hagey (1904–1988), along with Ira Needles, founded UW. The two men were previously colleagues at B.E. Goodrich Canada, and they reunited in 1956 to found UW and bring their view for co-operative education to life. Before co-founding UW, Hagey was elected president of Waterloo College (now Wilfrid Laurier University) in 1953. He was part of plans to open a new science campus for the college in 1957, which, coincidentally, occurred around the same time as Needles’ 1956 speech. After the newly completed science and engineering facilities became independent from Waterloo College, Hagey became UW’s founding president from 1957 until 1969, when he lost his larynx in the battle against cancer. Hagey was awarded the Order of Canada in 1986.

J.R. Coutts Engineering Lecture Hall (RCH) – J. Roderick Coutts earned his bachelor’s degree in electrical engineering in 1964, one of UW’s first graduates from the program. He went on to co-found Teklogix, a tech company focused on automation and real-time wireless data capture, in 1967. UW’s engineering lecture hall building was renamed in his honour in 2000, following a $7 million donation to UW from Coutts, whose company had just been sold to Psion PLC, a manufacturer of mobile computers based in London, England.

Lyle S. Hallman Institute for Health Promotion (LHI) – Lyle Shantz Hallman (1922–2003) was a successful real estate developer and philanthropist, in particular toward education and healthcare. He served as Governor of the Kitchener-Waterloo Hospital Foundation and was a founding member of Conrad Grebel College’s Board of Directors. He donated $65 million to the construction of what would become the LHI building.

Mackenzie King Village (MRV) – William Lyon Mackenzie King (1874–1950) grew up in Kitchener, Ont., and was the leader of the Liberal Party from 1919 to 1948, and served as Canadian prime minister from 1921 to 1930 and again from 1935 to 1948.

Mike and Ophelia Lazaridis Quantum-Nano Centre (QNC) – Mikhail “Mike” Lazaridis and Ophelia Wai Fong Lazaridis have both volunteered their time with UW leadership committees and have provided funding for several cutting-edge research institutions on campus. Mike dropped out of UW two months before graduating and ultimately received an honorary degree in 2000. Ophelia graduated in 1985 with a bachelor’s in math. Mike founded BlackBerry (Research in Motion) in 1984, as well as the Perimeter Institute for Theoretical Physics and the Institute for Quantum Computing, both of which are housed within the Quantum-Nano Centre.

Renison University College – The Most Reverend Robert John Renison (1875–1957) immigrated from Ireland to Canada in 1880. He spent much of his career as a missionary in Northern Ontario and was fluent in Cree. He served as Bishop of the Diocese of Moosonee from 1944 until 1952 and as the ninth Metropolitan (Head Bishop) of the Ecclesiastical Province of Ontario from 1952 until 1954.

Ron Eydt Village (REV) – Henry Ronald North “Ron” Eydt (1932–2018) was a trained botanist who had several roles within UW’s biology department and served as UW’s warden of residences from 1964 to 1996.

William M. Tatham Centre for Co-operative Education and Career Action (TC) – William M. “Bill” Tatham graduated from UW with a bachelor’s of applied science degree in 1983 and has long credited co-operative education as the foundation for his professional success. Tatham founded Janna Systems in 1990, which he sold to Siebel Systems for $1.76 billion in 2000. He is also the founder and executive chair of Nexi Systems Inc. Tatham has been a regular financial supporter of UW, including donating $4 million to the co-op program, and is a vice-chair for Campaign Waterloo in addition to being a member of the advisory board of the Waterloo Institute for Health Informatics Research.
Artificial intelligence: Invaluable in the fight against COVID-19

Sarah Hammond
Reporter

Researchers at the University of Waterloo have developed artificial intelligence (AI) technology to help doctors determine the severity of COVID-19 cases.

The initiative, named COVID-Net, has become a world-wide tool for institutions and doctors to better treat COVID cases. It was launched by the Vision and Image Processing research group in conjunction with startup company DarwinAI.

“We have launched a new initiative called COVID-Net, which is an open-source, open-access, global initiative,” said systems design engineering professor Alexander Wong, co-director of the Vision and Image Processing lab and co-founder of DarwinAI. “The goal is to accelerate the development and deployment of AI to help doctors in the clinical decisions support process for COVID-19 ranging from initial screening all the way to risk assessment, triaging, as well as patient treatment planning and resource allocation.”

The clinical AI can be used to determine the severity of COVID-19 cases by analyzing the opacity of patient chest x-rays. If the lungs are more opaque, this indicates a more severe case of the infection. The AI’s diagnosis has been found to be in good alignment with assessments from expert radiologists.

At the start of the pandemic, CT scanning was being used to assess the severity of the infection. However, it quickly became clear that this technique was not practical due to the unavailability of the large, expensive machine in many countries. It was also problematic since patients that needed to be isolated weren’t able to travel to the machine. Using x-rays instead provides a much better solution, since the device is mobile and easily cleaned between patients.

However, as Wong explained, the lack of qualified radiologists to analyze the x-ray photos is the real issue, which is where AI can help.

"It is quite difficult for a non-expert radiologist, for example a standard nurse practitioner or an ER doctor, to be able to look at chest x-rays and identify the nuances of COVID-19 since they are not trained as radiologists. This is where AI can really come in and aid them in making better decisions," said Wong.

When AI is used in clinical situations, it is essential that doctors are able to trace the AI’s thought process for accountability, a trait not common to all AI models. This allows health practitioners to make informed decisions and trust and collaborate with the AI.

"The goal of DarwinAI is to accelerate the development and deployment of real-world trustworthy AI solutions," Wong said.

Assessing the severity of a COVID-19 patient is essential to determine the best course of treatment, whether or not they have to be hospitalized, given oxygen, or put on a ventilator. These decisions can immensely affect the health of the patient, which is why technological solutions that can help doctors around the world make these decisions are of high importance.

"The COVID-Net initiative has spread around the world," said Wong. "Hundreds to thousands of different institutes are leveraging our research."
Why children are better protected from COVID-19 than adults

While universities are preparing for a cautious return to in-person activities following the COVID-19 pandemic, many young children have already found themselves back in schools and classrooms. What allowed young children to make a return to in-person learning as quickly as they did? The answer may lie in science.

A new study by Irina Lehmann of the Berlin Institute of Health at Charité seeks to understand why children are better protected from COVID-19 than adults. Nearly 270,000 cells from samples taken from both children and adults were compared.

Researchers examined the composition of mucous membranes lining children’s airways to determine the reasons behind their higher immunity. They noted two key factors: A greater number of immune cells—cells that fight viruses—in the mucous membranes of children compared to adults, and quicker production of type I interferons.

“It’s the interferon response that causes the greatest change in the cell’s genetic activity,” said Marco Binder, a co-author of the study. “When the interferon system is stimulated, the cell produces proteins that fight the virus.”

“The defense against viruses works on two levels. First, you get the antiviral response within the cells through receptors that, for example, induce the production of interferons,” Lehmann explained in an interview with Spektrum der Wissenschaft. “The second level is the immune cells in the tissue, such as activated killer cells and neutrophils.”

Type I interferons help the body fight viruses, and their quick production is essential in defending against COVID-19, which is scientifically referred to as SARS-CoV-2. “SARS-CoV-2 multiplies very quickly in cells, and this means that the virus proteins are also formed very quickly,” said Binder. “They suppress the interferon system dramatically and inhibit interferon production in cell cultures.”

Through rapid production of these type I interferons, children are better able to fight the SARS-CoV-2 virus. The presence of immune cells in the mucous membranes of airways in children is another factor that better protects children from infection.

“The fact that the immune cells are already in the tissue gives you a head start, because all these cells do not have to be called up by signaling substances,” Lehmann explained. “So why aren’t adult immune systems the same as children’s? If the bodies of adults were as effective in fighting immune responses as children, viruses would have adapted to overcome the immune system.”

“If the body had always activated this [process], it would of course create an incredible selection pressure on the pathogens,” Binder said. Additionally, this response would be difficult for the body to maintain over a long time and affect cell activity in the body.

“Of all signaling systems, the interferon response causes the greatest change in the cell’s genetic activity,” Binder explained. As universities students make their way back to in-person classes, it is necessary to understand the limitations of our immune systems and the risks we face from COVID-19.
Time to grind: Why UW gym slots should be longer

With the fall term in full swing, the University of Waterloo’s two fitness centres at the Physical Activities Complex (PAC) and Columbia Icefield (CIF) have become popular places for students to get some physical activity into their days. There’s just one problem: the slot time. 45 minutes is not nearly long enough to put in a good workout, especially when warm-up times are considered, which according to Harvard Health, should last between five and 10 minutes to avoid injury. One result is that some students have resorted to buying memberships to other gyms within the Waterloo area, as they currently do not require reservations. Instead they allow for free-flowing access and simply monitor overall capacity restrictions. However, it is unfortunate that students have felt the need to go elsewhere, with limited opportunities to be a part of the campus community, the gym offers a source of connection that is desperately needed. But there is a solution.

I believe that gym slot times should be a minimum of one hour in order to encourage students to use these university facilities, which have been updated with new equipment and are included in our tuition fees. One hour gym slots would allow for an adequate warm-up time while helping to ensure that students are able to use all of the desired equipment for their particular workout. As someone who frequents the gym often, I know how busy the squat racks can get.

Additionally, in terms of the available equipment, both the PAC and CIF fitness centres have been filled with rows of new dumbbells, treadmills and other weight lifting equipment all embellished with the Waterloo Warrior logo. In this way, it is not just the location of the gym at the university which help foster a sense of community, but also the fact that every time you go for a PB (personal best) you are reminded that you are a Warrior. All this black and gold has already been paid for through student service fees, and as a result, students should be able to take full advantage of these facilities.

Now, some may point out that the shortened gym times are a necessary COVID-19 precaution, as they allow time for cleaning before the next time slot begins. Yet I would disagree, and so would science. COVID-19 is a respiratory virus, and according to the CDC, is not primarily transmitted by touching surfaces like a doorknob or dumbbell. Additionally, the term “hygiene theatre” has been used to describe the sanitation measures many public facilities have been using to make them appear safe. Such measures include but are not limited to: wiping down counters, spraying seats, and so on. Presently, students are also encouraged to wipe down their own equipment after use, which many frequently do, making the 15-minute transition period particularly fruitless. Further, if you really wanted to be nit-picky about COVID-19 precautions at the university gyms, students shouldn’t be allowed to take off their masks when using a piece of equipment away from others, though this is currently allowed. However, all gym-goers are required to be vaccinated anyway, so even this practice isn’t as much of a concern.

In light of this, why not allow gym slot times to be one hour? Students would be happy to get in a few extra squats and I’m sure trainers would gladly surrender their sanitation duties, as well as their need to remind students to leave.

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distractions

Imprint crosswords | On campus

Across
1. Bring goggles; not a lab
4. Easiest place to slip and fall
6. Faculty of Health former acronym
8. See The Great Lakes in action
9. Popular in flu season
13. Find yellow handrails here
14. Home of a room with many functions
17. Resembles something sweet
18. Covered in a 6-sided shape
20. Student work is on display
21. An ovoid water structure
22. Visitors start here
23. Press the lever to hear explosion
25. Plants stay warm here
26. “Tell me about yourself”
27. Former name preceded by S

Down
2. Named after UW’s first astronomer
3. Former farmhouse
5. Oldest residence
7. A boar and two cows live here
10. One of its walls is alive
11. Place to say “I do”
12. Wears accessory prone to theft
15. Go-to place for financial help
16. Even upper years get lost in this maze
19. Largest lecture hall
21. As seen on LinkedIn
24. Only engineering students allowed here

LAST WEEK’S ANSWERS