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TRANS AWARENESS WEEK

The Glow Centre for Sexual and Gender Diversity will host events and offer resources from Nov. 16 to Nov. 22.



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news

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Trans Awareness Week at the University of Waterloo

Alexandra Holyk Executive Editor

Week is observed by the transgender community and allies from Nov. 13 to 19. The days lead up to Transgender Day of Remembrance (TDoR), an annual observance on Nov. 20 that honours the memory of the transgender people whose lives were lost in acts of anti-transgender violence that year.

According to the Human Rights Campaign, 2021 marks the deadliest year for transgender folks, with at least 46 homicides to date — most of them Black or Latinx people.

TDoR was founded by transgender advocate Gwendolyn Ann Smith as a vigil to honour her memory of Rita Hester, a transgender woman who was killed in 1998. The vigil commemorated all the transgender people lost to violence that year and began an important memorial that has become the annual Transgender Day of Remembrance.

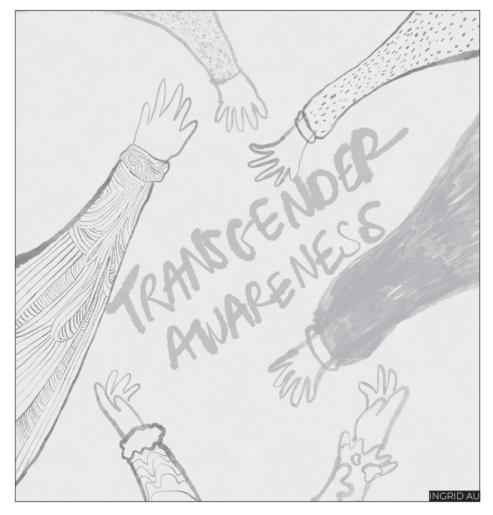
During Transgender Awareness Week, transgender people and supporters strive to educate the public about who transgender people are through sharing stories and experiences. They also advocate around issues of prejudice, discrimination and violence that affect the transgender community.

The Glow Centre for Sexual and Gender Diversity at the University of Waterloo will be observing Transgender Awareness Week starting Nov. 16 until Nov. 22. This year, the centre's theme for Transgender Awareness Week is "belonging," inspired by GLAAD's (Gay and Lesbian Alliance Against Defamation) annual theme around the documentary, Disclosure.

"Belonging means inclusion. It means community. This word fits into Trans Awareness Week because trans folks just want equal access to programs; they want to feel like they belong," wrote Glow service coordinators Sarah Mather and Midas Beglari in an email to *Imprint*.

According to Beglari, Glow plans to provide the UW community with various resources including suggestions for documentaries and books as well as trans-specific resources that can also be found online.

Some of these resources include the Trans Student Bursary program, which allows those students in need of assistance,



potential access to funding for a legal name change in their home province and/or a sex designation change on their birth registration or certificate. Glow also offers support in record changing procedures once students are enrolled in UW, including changing their name or to accurately reflect their gender identity.

Other services Glow assists with are: ensuring medical coverage under the student health plan, providing a map with all of the gender-neutral washrooms on campus, and offering advice for on- and off-campus housing.

On Nov. 20, in partnership with Spectrum — Waterloo Region's Rainbow Community Space, the AIDS Committee of Cambridge, Kitchener, Waterloo & Area (ACCKWA) and Shore Centre, Glow will be holding a vigil and healing circle to honour the memories of transgender folks whose lives were lost this year. The names of those individuals

will be read aloud and community members can choose to attend the event virtually or in-person, however, tickets are limited in adherence to COVID-19 guidelines.

The event will also feature four guest speakers that were selected based on representation and community connections. These include Cait Glasson, the former president of the board of directors at Spectrum; TK Pritchard, the executive director for SHORE Centre, a reproductive rights and sexual health non-profit; Teneile Warren, the co-founder of insideWaterloo and the equity and inclusion officer at the Waterloo Region District School Board; as well as Sam Jones, a UW student and co-founder Ottawa-based trans youth group, SAEFTY.

Students who are interested in attending the vigil and/or want to get involved with Glow are encouraged to follow the centre on social media.

How to observe Transgender Day of Remembrance

Transgender Day of Remembrance (TDoR) is observed annually on Nov. 20. It is a day for transgender people and allies to honour the memories of trans folks who lost their lives due to anti-transgender violence.

If you are interested in participating in TDoR, consider attending or organizing a vigil — either virtual or in-person — in your community. Vigils are typically hosted by local transgender advocates or LGBTQ2S+ organizations, and held at community centres, parks, places of worship and other venues. The vigil often involves reading a list of the names of those who died that year.

In the week leading up to Nov. 20, folks are also encouraged to educate themselves as well as others about transgender people and share stories and experiences. For instance, the Glow Centre for Sexual and Gender Diversity will be showcasing various boards with resources and terminology in the Student Life Centre from Nov. 16 to 22 in an effort to raise awareness about the services available to trans community members at the University of Waterloo.

There are several documentaries and books that are recommended for those interested in learning more about the transgender community. These include *Disclosure*, a documentary available on Netflix that explores the history of trans representation in TV and film in unprecedented form, revealing how Hollywood simultaneously reflects and manufactures people's deepest anxieties about gender.

Additionally, QTPOC KW will be holding a virtual screening of *Lingua Franca* on Nov. 19 at 8 p.m. The film follows an undocumented Filipina transgender woman who falls in love with the adult grandson of the elderly woman for whom she works as a caretaker. The film is directed and acted by Isabel Sandoval, a Filipina transgender woman and award-winner. Those interested in attending the screening can register through the link in QTPOC KW's Instagram bio at @qtpoc.kw.

Ultimately, if you are interested in observing TDoR, it is vital that you honour the trans lives lost with care and respect. Don't just share infographics on Instagram — do some research and educate yourself and others about trans folks and the trans community. For additional resources and information, visit Glow online.

Vivek Goel installed as UW's president

Nicola Rose Managing Editor

n Nov. 8, Vivek Goel was installed as the seventh president and vice-chancellor of the University of Waterloo.

Goel is a distinguished physician, researcher and academic who was appointed as a Member of the Order of Canada in December 2020 in recognition of his career-long commitment to public health and the valuable contributions he made to the Canadian government's COVID-19 strategy.

Goel has previously served as the founding president and CEO of Public Health Ontario and has held a number of senior leadership roles at the University of Toronto, including as vice-president and provost and as vice-president research and innovation.

The installation, which was attended virtually and in-person in Engineering 7, came three months into Goel's tenure, which began on July 1, 2021, when he succeeded former president Feridun Ham-

The ceremony began with a

Unity Song performed by John Somosi, a Métis Knowledge Keeper, drum-maker, and singer. Jean Becker, the associate vice-president, Indigenous relations at UW shared an Indigenous Welcome.

Messages of congratulations were offered by Elizabeth Dowdeswell, the Lieutenant Governor of Ontario; Paul Davidson, the president and CEO of Universities Canada and Goldy Hyder, the president and CEO of the Business Council of Canada.

Goel began his address by thanking those who came before him. "It is an enormous privilege to be here with you today to be installed as the University of Waterloo's seventh president and vice-chancellor. I am humbled and honored to now carry the mantle previously worn by such an esteemed group of predecessors."

In his address, Goel spoke about the university's history and its purpose going forward, including the contributions he hopes UW will make to creating a more equitable and sustainable post-pandemic world. "As we look to build back after so much disruption, universities are and will continue to play an



important role in economic recovery and ensuring society is more resilient in the future," he said.

"We must continue to build on our successes in innovation and entrepreneurship. We need to work to ensure that our entrepreneurs can build enterprises that benefit us all. We also can embed the spirit of innovation in the minds of our graduates, wherever they go," he added.

In closing, Goel emphasized his desire to continue the legacy of those who came before him and reaffirmed his commitment to the university going forward. "I am grateful for the opportunity to join your community and to continue the legacy of those who came before me. I am honoured to join you all to build on our unique strengths, and as we take the University of Waterloo into bold new futures."

What UW climate experts have to say about COP26

Nicole Howes Assistant News Editor

The annual United Nations Cli-mate Change Conference recently revealed ambiguous environmental goals and sparked a sea of climate protesters in the streets of Glasgow, Scotland.

The summit was held from Oct. 31 to Nov. 12 to continue work toward the goals of the Paris Agreement set in 2015. Over the two weeks many countries brought forward new plans to limit the rise in average global temperature.

During the conference, Canadian Prime Minister Justin Trudeau strongly pushed for a global price on carbon with an aim to send a signal to the private sector, transform the economy and encourage cleaner choices.

"My understanding of the reason behind a global carbon tax is that the Canadian government doesn't want Canadian companies to be at a disadvantage against companies that are located elsewhere where carbon tax

doesn't exist. So those companies with a lower cost would benefit and ours would suffer," said Sarah Burch, a professor in the Department of Geography and Environmental Management at the University of Waterloo.

Ultimately, this could significantly reduce emissions, but with no true global government each country would be responsible for implementing these restrictions within their own framework.

The cap on oil and gas emissions was also a point Trudeau touched on as it equates to about a quarter of the country's greenhouse gas emissions.The goal of this cap is to allow Canada to achieve net-zero emissions by 2050 as outlined by the Paris Climate agreement.

"Net zero is a funny phrase — it isn't complete decarbonization, really it means we reduce emissions as much as we can and then offset by capturing and storing the rest, which is an incredibly ambiguous goal," Burch said. "The fact that it is not only on the table but generally agreed upon is an incredible mark of progress in terms

of our level of ambition and also our understanding on the scale of climate change impacts and what we are trying to avoid."

With transportation being linked to the production of fossil fuels, Canada also aims to move



toward greener vehicles in the form of electric cars and buses.

"Moving rapidly to change our vehicle fleet is crucial. We've done a few good things by expanding bicycles lanes and keeping IONS running, but charging stations for

> vehicles and more bike racks and thinking more seriously about how to do urban transit in non-fossil fuel loads is crucial," said Simon Dalby, CIGI Chair in the Political Economy of Climate Change at the Balsillie School of International Affairs in Waterloo.

While these goals may be feasible for develcountries, oped developing countries are asking for financial help to create clean transportation and energy production.

"We have a situation where they [developing countries] need to simply skip over a substantial part of the development trajectory from the North, they need to skip on big electrical grates powered by coal plants, they need to move past vehicle fleets based on internal combustion engines and go straight for systems that are far more efficient," Dalby said.

However, even with all these plans on the table activists are not seeing meaningful progress and have been protesting against 'climate inaction' from government leaders in the streets of Glasgow and around the world.

"Various politicians have been telling young people that they have to keep the pressure on if change is going to happen, clearly making it obvious that pressure matters and that the opinion of your own people matter, but they have to heard long, loud, cearly and persistently because political pressure only works if it is consistent and persistent," Dalby said.

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The value of an artistic education

Nicola Rose Managing Editor

Research has long suggested that an artistic education offers numerous benefits to students. Arts training has been found to improve spatial reasoning, linguistic and mathematical skills, and even social development.

In 1994, the Royal Conservatory of Music in Toronto established a Learning Through the Arts (LTTA) program, which sought to include artistic methods of education in core academic subjects — language, mathematics and science. LTTA connected artists and teachers to develop teaching methods that incorporated the arts, such as physical movements or dance to help young students learn the basics of geometry.

The research involved almost 7,000 students from grades one through six in both LTTA schools and schools without similar arts programming.

A 1999-2002 national study

found that students who participated in an LTTA program scored higher on computation and estimation tests than students who were not taught with similar artistic methods, including students at schools with other specialty programs like technology.

Similarly, in a 2010 study, over 1,200 students and teachers reported that LTTA programming had a positive effect on students' engagement in learning, collaboration skills, open-mindedness and overall enjoyment of school.

The late Elliot Eisner, a former professor of art and education at the Stanford Graduate School of Education, argued that an artistic education helps students improve important cognitive skills. He found that learning art helps students improve their attention to detail, their perception and understanding of nuance, and their inquisitiveness and creativity.

Additionally, Eisner argued that learning art helps students understand the interrelated nature of form and content — the idea that how something is presented affects

what it means and how an audience will interpret it.

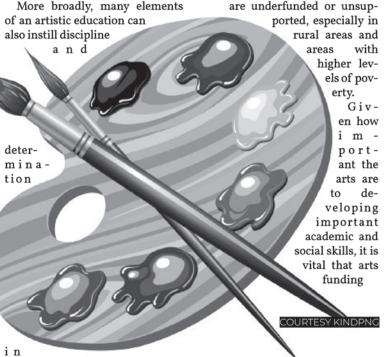
An education in the arts can also teach technical skills that will serve students in many environments. The performing arts, which include music, dance and drama, provide students with skills like public speaking, improvisation and confidence in front of

These skills are important in academia, where students are often required to demonstrate their knowledge through presentations and other audio or visual formats like podcasts. Public speaking abilities can also help students during interviews and on co-op jobs.

Musical education specifically can also have a distinct benefit on students' language skills. Studies show that children who take music lessons are more linguistically advanced than their peers who do not learn a musical instrument and that musical training helps people learn new languages throughout their lives.

Learning to play an instrument, draw, paint or sculpt can help students develop motor skills, especially fine motor skills that are important for many day-to-day tasks.

The arts are a necessary part of a well-rounded education. However, arts programs across the province



students, both of which are vital to success in the academic world.

remains a priority in education budgets for students throughout their academic lives.

UW Sustainability Book Club

Abhiraj Lamba Arts and Life Editor

In April 2021, the University of Waterloo sustainability office started the Sustainability Book Club as part of its Green Office program.

"The overall goal of the book club is just to sit down and facilitate these discussions between staff and students and outline steps going forward because it's always about pushing the conversation of sustainability forward, especially how we're integrating it into our everyday life," said Aleks Spasevski, the sustainability engagement coordinator for the sustainability office.

While initially the club was open only to staff, it has been open for students since September of this year.

Spasevski talked about how the club's reading list for this year was created to include different experiences, ideas and thoughts on sustainability. For next year's list, she wants to continue these goals as well as get more diverse points of view.

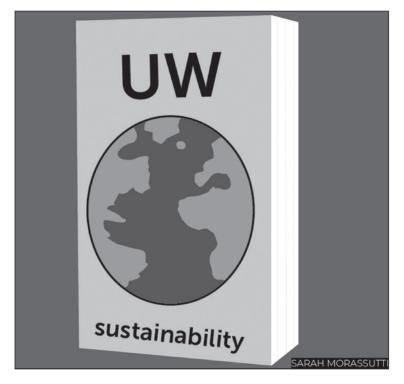
"I'm hoping to bring more of that into it and more diverse perspectives and we have a lot of books that are talking about climate justice, and environmental racism. We especially want to highlight these voices since a lot of us are not from a diverse background," she said.

The club reads books from different time periods, analyzing their relevance to the present day and examining how the ideas and debates surrounding sustainability have changed over the years.

"A lot of the discussions that they were having at the beginning of the 2000s or in the 90s are actually quite similar to what we're kind of discussing now. Sure, some things have changed, but overall, the arguments in the discussions that are being had are quite similar," Spasevski said. "One of our books at the beginning of the year was Rachel Carson's Silent Spring [published 1962], which is an environmental classic, and I think it's interesting to see how ideas have changed over time and how you know even ideas haven't changed over time."

The club is having its last meeting of the year on Nov. 18, where they will explore the book Staying Alive: Women, Ecology, and Development by Vandana Shiva.

Interested students can find the signup link on UW sustainability office's website and email sustainability@uwaterloo.ca for more information.



Artist Process: From Idea To Creation



Sharanya Karkera Head Designer

y first essay was published when I was in the first grade. It was in my yearly school magazine, and my mum had it framed on the mantelpiece. The essay was about how I wanted to travel the world but didn't want to leave my mum behind.

Back then, I didn't know any technicalities we think are necessary to write a worthy essay or poem. I just wrote what I felt, and it turned out to be something my teacher liked. Interestingly, she'd picked up the essay from my English exam — which I'd written in 20 minutes in my worst handwriting. I hadn't edited it, hadn't even had the time to proofread it once before my time was up.

A lot of my drafts today are like that too. This goes against every piece of advice I've ever received. but I find that when I write from my heart, I'm better off without making revisions. With my academic essays, if by some miracle I've managed to get it done before the eleventh hour, I wait till the eleventh hour to edit and proofread it. I find that pressure fuels my mind like nothing else. Compare an essay I've had a week to write to one I've had two hours and I guarantee, you'd like the one written in two hours better. I know that many acclaimed writers will wrinkle their noses at this, but they also say to find what works best for you. And for me, nothing works better.

For my non-academic essays, poems, letters and musings, my inspiration is as reliable as the weather in London, England; I never know when I will get a sunny day and when there's going to be a downpour. Inspiration can be a shapeshifting anomaly: it can come in the form of a song, or in wind moving the clouds you're watching. Sunrises, sunsets, a conversation, a TV show — absolutely anything. The thing with writing when inspiration strikes is that it's sometimes next to impossible to get something down. Whereas other times, my pen might run out of ink (or laptop may run out of battery), but the lines won't run out.

When it comes to actually sitting down to write, I usually do my best work in the dead of the night when it's quiet and I can write uninterrupted. Sometimes, I like playing slow music or tunes without lyrics. If I get stuck in the middle, I try doing something monotonous drawing circles on a paper, staring at the sky or out of the window, doing laundry — the possibilities are endless. It allows my mind to run free and gives it space to work without the pressure.

Over the years, a strategy I've learnt is to not fixate on a certain part. When I'm in the mood, I write the bits I'm confident about or know I want. A crucial scene between the protagonist and antagonist, for instance. The filler bits or other scenes I might struggle with, I leave for later. That way, it's easier to get through a whole piece more easily, and have bits you're proud about.

They say it's hard to understand a writer. The truth is, sometimes we don't understand ourselves. But the times we do, that's when we create magic. There are situations where I know I won't be able to keep myself from writing — when it's raining outside and there's good music playing, long hours on the road, when I'm excessively happy or excessively sad, after I've read my old poems or reminisced upon old pictures. It's about knowing yourself, and what clicks for you.

Sometimes these ideas might turn into whole productions; sometimes they'll end up just ideas. Sometimes it's a line or a paragraph. For all the ideas in production, I store them in a separate folder in EverNote. On sunny days when there's no idea in sight, I open the folder and try and see if there's anything I can use. Seven out of 10 times, I find something. It's the same with the darlings in my pieces. If you're a writer, "kill your darlings" is not foreign advice for you — i.e. remove the bits that might be your favourite, but don't add value to the piece. I don't kill my darlings, I simply change their story. A darling that's not right for one story most often is right for another one.

sports & health



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The importance of sports

Khalid Safdar Reporter

₹rom the era of the ancient Greeks to modern competitions, sports have remained a cardinal element of human civilization, bringing people together all over the world. Throughout the early ages, sports have been a form of reconnection, discipline, team building and a way to unite and build similarity among each other.

Sports have quite the impact on one's life; physical health, mental health, psychosocial benefits and valuable life skills just to name a few. According to the Centers for Disease Control and Prevention, sports have a positive effect on individual health as regularly engaging in physical activities boosts blood flow to the brain and benefits the heart. This lowers the risks of cardiovascular diseases, diabetes and even some cancers. Practicing sports regularly also benefits one's muscle strength and movement, providing stability to the overall body structure.

Aryaman Guleria, a first-year accounting and financial management student, said swimming helps him relax.

"By swimming, I can keep my body active and in a healthy shape especially after sitting all day and working," Guleria said.

For a vast majority of students, the pandemic has curtailed many physical activities and has hindered the balance of life. Anoja Kanagaruban, another first-year accounting and financial management student, said she realized the detrimental effects of students sitting and working all day with no physical activity.



"Exercising after sitting all day with so much work brings a good balance in life," Kanagaruban said.

Sports have also been a primary source of inspiration for many individuals as they're able to apply the qualities and ethics that sports teach them to their everyday life from applying the discipline of teamwork in playing basketball to embodying a system of moral values in martial arts.

Hunzala Shahid, a first-year physics student, said there was a connection between sports and his academic life.

"Sports have always been a part of my life, it's something that resonates with me as a student who's involved in group projects," Shahid said.

For him, it helps him collect his thoughts

and bring out the best version of him in front of his peers. "It helps me articulate my ideas and enables me to present them efficiently."

Professional athletes are important figures in the sports industry as they motivate many young adults through the attributes that they embody. For others, professional athletes are role models that redefine society and its norms through the work they do.

Emaan Sikander, a first-year accounting and financial management student, said she feels empowered by women in sports.

"For me, Serena Williams is particularly inspiring because she's very strong and has redefined the image of women in sports," Sikander said

An important term with relevance to sports is the importance of sportsmanship. According to Stanford's Children's Health, sportsmanship refers to the fair, equal and generous treatment of others in a game or athletic event. Learning from all outcomes is the key essential lesson - whether losing a game or winning one everyone needs to be respectful.

Where many take the ideology of losing quite lightly, for some it's something difficult to accept. This is where the concept of sportsmanship is integral; knowing the real reason why one indulges in sports and competition, is above the fact that one loses and the other wins.

"The beauty of sportsmanship is that it reminds players that above all, we play the game because we enjoy the game. Regardless of the outcome, it's important to remember our love for the sport," Sikander said.

Parleen Bhatia, a first-year accounting and financial management student, said good sportsmanship is when people who are playing or watching a sport treat each other with respect.

"Building the spirit and a positive environment for growth is what defines good sportsmanship," Bhatia said.

According to Sport Law Canada, good sportsmanship is also understanding the cultural and socioeconomic factors behind every individual. It is about understanding the term cultural competence where one acknowledges the values and beliefs of others. Sports are a medium that brings people and cultures together, whether it's rooting for the same team or bonding over shared interests.

For Sikander, the way sports unite people of all kinds together is a very special feeling. "As we cheer, laugh, eat, and grip the edge of our seats together, we're amplifying our shared love for the game together," she said.



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Recipe: Tomato poached fish with chili oil

By Ingrid Au

his week, we are honouring one of the most talented food writers I know, Alison Roman. One of my most vivid memories includes recreating her recipe — tomato poached fish with chili oil. It was night-in where my best friend and I seeked comfort in this warm and flavourful dish amidst all the troubles in our lives. Do not let the name of the dish deceive you — I promise you nothing more complex than a comforting bowl of fish in tomatoey-goodness. And if your life has been hectic lately, I can guarantee you that this dish will bring you the comforts of simplicity, so enjoy.

In addition to Roman's recipe, I decided to add some anchovies for extra flavour, which I strongly recommend.

Ingredients:

Chili oil

2 shallots

2 tbsp of olive oil

1/2-I tbsp of dried red peppers flakes

Optional: anchovies

Tomato base

1/2 tbsp of olive oil

Black pepper

Salt

1/4 tsp of brown sugar

2 tsp of fish sauce

I onion or 2 shallots, sliced

3-4 garlic cloves, finely chopped

5-6 tomatoes

2-3 frozen fish fillets eg; cod, salmon

Fish alternatives: shrimp, firm tofu

Fish sauce alternatives: soy sauce, mirin, Worcestershire sauce

Optional toppings:

Mint

Cilantro

Scallions

Fennel

Instructions:

Chili oil

Heat up the olive oil at medium to high temperature, and toss in the sliced shallots. When the texture of the shallots becomes slightly fried (light brown), add in the dried pepper flakes and optional, but highly recommended, anchovies. The key to getting the perfect colour is to lower the heat once the aromatics turn a light golden brown — they will continue to cook in the oil and gradually become golden brown without the high heat. When the anchovies melt into the oil and the shallots become golden brown and crisp, remove from the heat and let the chili oil cool down.

Tomato base

Heat up the olive oil at medium to high temperature and toss in the sliced onions or shallots with the finely chopped garlic, and stir until golden brown. Lower the heat and add in the tomatoes and begin mashing the tomatoes until a soup-like consistency has formed from the tomato juices. By cutting the tomatoes prior, you will save yourself time and energy smashing a whole tomato. Make sure to leave tomato chunks in there. Season with salt, black pepper, brown sugar and fish sauce or fish sauce alternative. Cover the fish fillet in the liquid and let it sit for about 15 minutes or until the fish can be easily pulled apart and its colour is no longer translucent.

Note that cooking time will vary with the type and thickness of fish used — 15 minutes is a good guide for a two- to three-inch cod fillet.

If you want to incorporate carbs into this dish, I recommend orzo, quinoa, rice or toast. This dish can be easily made in bulk and stored in your fridge for up to a week and a half so, throughout the weeks, you can pair it with the carbs of your choice to spice it up and you will not be bored of it.

Winter can be emotionally tough and cold at times but, this dish can warm you up and enlighten you with all the simple things you can be grateful for. From the first snow fall to the delicate designs of a snowflake that landed on your fingertips to staying in with a warm bowl of tomatoey goodness. This dish will snuggle you like a warm blanket and take you to your comfort zone and I promise you will love it.

Recipe: Banana anything pancakes

By Ingrid Au

There comes a point in the year where the mornings are too dark and cozy, and if you are like me, you will turn your alarm off and lie there tricking yourself into thinking you're about to get up. In reality, you will fall back to sleep — but hey, it's the effort that counts. So, to motivate yourself out of bed, I introduce to you the cure: banana anything pancakes. The base batter is banana and the rest is your choice, so choose your adventure and include any flavours that will get you looking forward to the hazy mornings. If you are a waffle person, I sincerely apologize because this recipe may not be for you. Maybe another day.

Here are some recommendations for flavours you can combine with this banana recipe:

- Strawberries
- Blueberries
- Cinnamon
- Nut butter eg; almond, pecan, peanut (or use the coffee nut butter from the previous recipe to make banoffee flavour!)
- Chocolate
- · Coconut shreds

Ingredients: (yields 2-3 pancakes)

*measurements can vary depending on the size of your banana and eggs

I large banana

I medium-sized egg

2 tbsp of honey, maple syrup or brown sugar

1/2 tbsp of coconut oil for cooking (per pancake)

A small pinch of salt

34 cup of oat flour or flour of your choice

*To make oat flour, simply blend oats in a blender

Optional ingredients:

Chia seeds

Flaxseeds

Instructions

Mash your banana and combine it with egg, salt, sweetener and flour. Optionally, you can add chia seeds or flaxseeds for extra fibre and fat. The right consistency will resist your mixing tool a little when smoothing the surface of the batter. If the consistency is too thick (too resistant), add about I-3 tbsp of the milk of your choice. If consistency is too runny (not resistant), add more flour. After the batter has been mixed, fold in the toppings of your choice.

Scoop a ladle's worth of batter into a preheated pan with about half a tbsp coconut oil (per pancake) and cook each side until golden brown. Pancakes should be served immediately while they're still hot and can last for about two days in the fridge.

The process of making pancakes is a metaphor for life. Even with great practice, no pancake will be perfect. So, go with the flow because no matter how funky the shape is, every bite deserves your enjoyment! Not every day will be perfect. Some days feel energetic and you wake up to an early start, some days feel draining and you'd rather sleep in. So, live with the flow of time— if you feel productive, conquer the world but, if you feel drained, sleep in that extra hour, you deserve it.



science & tech



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UW researchers develop AI to detect virus mutations before they occur

Mahek Kaur Reporter

esearchers at the University of Waterloo created an artificial intelligence that is able to predict the most likely mutations that may occur in a virus.

The team of three researchers began working on the project about a year and half ago, when the COVID-19 pandemic began. The team includes two math professors, Amirhossein Darooneh and Michelle Przedborski, and was led by Mohammad Kohandel, who is also a professor and head

of Mathematical Medicine Laboratory in Applied Mathematics at UW.

Kohandel told The Record that the team knew mutations in viruses are really common and they were sure that SARS-CoV-2, the virus that causes COVID-19, was sure to mutate at some point in the future.

When variants of a virus appear, it negatively impacts the efficacy of vaccines and diagnostic tools. This new technology could enable researchers to create more effective vaccines by accounting for future variants.

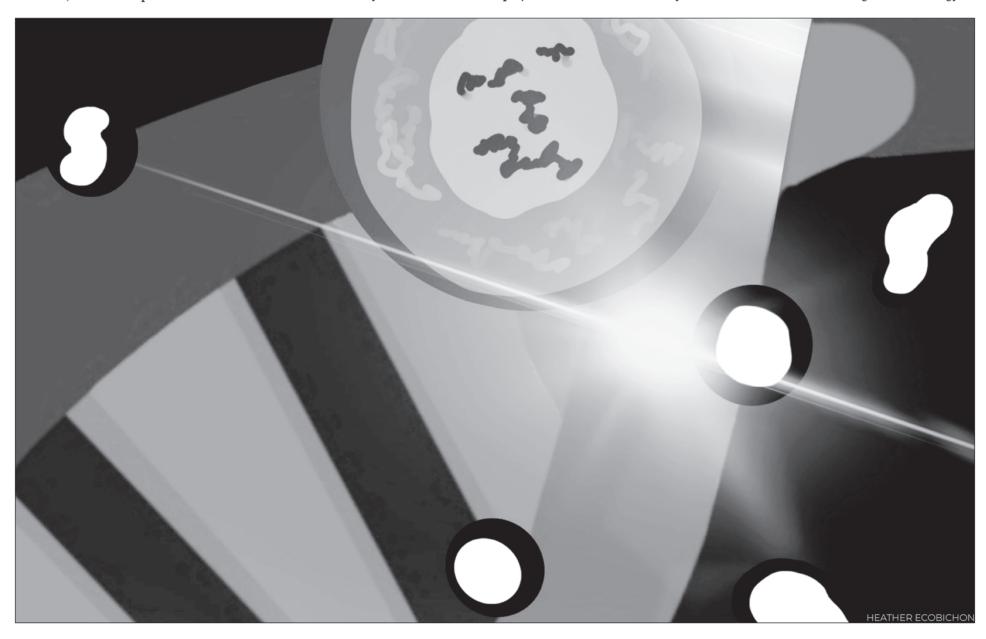
The artificial intelligence technology was tested on an early strain of the SARS- Cov-2 virus and was able to accurately detect the alpha, beta, delta and gamma vari-

Using data from the first SARS-CoV-2 genome identified in China, the researchers identified the conserved region within the genome. A genome is an organism's complete set of genetic instructions — it contains all the information that is necessary to allow the organism to grow and develop. A conserved region is the part of the genome that always remains the same and is not impacted by mutations.

Kohandel said one of his goals for the project was to be able to identify the conserved regions of the virus with the little data that was available when the pandemic first began. This information would have been very valuable for researchers early on when developing diagnostic tools and vaccines, as conserved regions can be a target even as the virus continues to mutate.

Using all the data now available for the SARS CoV-2 virus and its mutations, the team was able to train a neural network to predict the most likely mutations of the genome with a high degree of accuracy.

With the assistance of the UW Commercialization Office, the team is working toward commercializing their technology.



Waterloo startup performs world's first autonomous robotic needle-less injection

Sarah Hammond Reporter

¬or the first time ever, a company terloo's Velocity has performed a completely autonomous robotic intramuscular injection.

The needle-less injection is possible by using a narrow, high-pressure fluid stream to inject the drug into the tissue of the patient. The robot can also scan documentation, give instructions and determine the best point of entry on the arm all autonomously and without the need to be monitored.

The company, Cobionix, founded by UW mechanical engineering graduates in 2019, used their Cobi platform to perform this robotic needle-less injection.

"Cobi is a versatile robotics platform that can be rapidly deployed to complete tasks with 100 per cent autonomy," said Tim Lasswell, co-founder and CEO of Cobionix. "We outfitted Cobi to use a needle-free injection technology and to demonstrate that patients could receive intramuscular injections, such as vaccines, without needles and no involvement from a healthcare professional."

Lasswell, along with co-founder and CTO of Cobionix Nima Zamani, used their Cobi platform to develop the robot in response to the need for a high volume of vaccine injections during the COVID-19 pandemic and a lack of nurses to perform them. The robot would drastically reduce these labour shortages and reduce the risk of infection for those administering vaccines.

With the start of the pandemic, manufacturing the robot was difficult due to lack of access to a suitable workspace. Zamani's solution was to transform his garage into their office space, and therefore the first prototype of the robot was fully built in his garage using 3D printers and an electrical solder system.

The robot is equipped with LIDAR sensors, artificial intelligence position tracking and 360-degree depth perception, all which make the platform very versatile. The technology will be extended to be used for many purposes other than vaccinations.

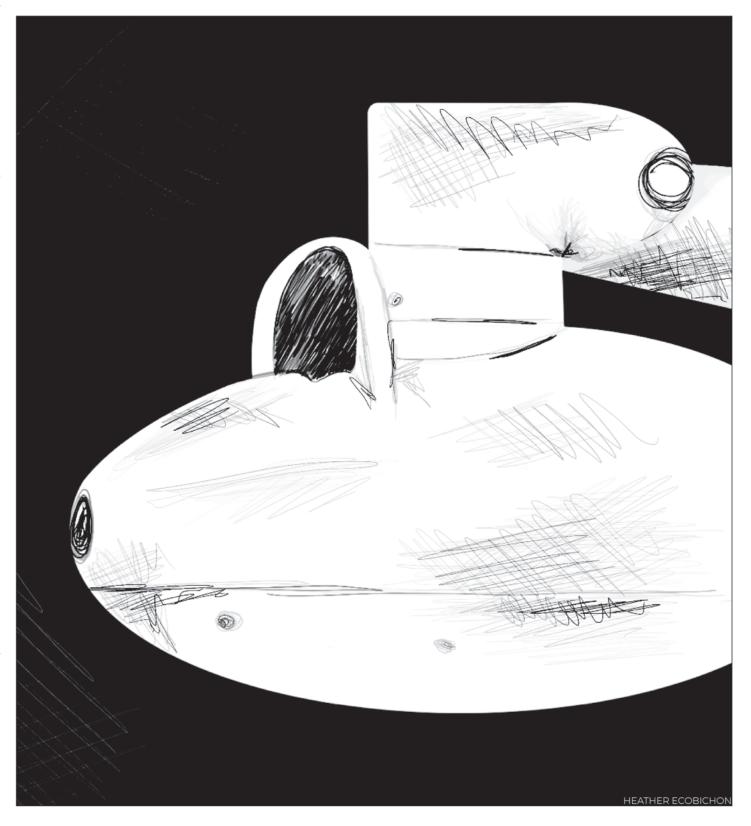
"Initially, we are targeting applications in healthcare, cleantech and hospitality for two reasons," Lasswell said. "Firstly, all of these industries suffer from labour shortages and low efficiency and secondly, because our founding team has a significant amount of experience in these industries."

Having autonomous systems able to perform tasks such as vaccinations will free up

time for healthcare workers to do other important tasks.

Since the technology and software for the Cobi robot are so complex, it will be a few years before the robot can be available on the market. A lot must be considered before they are used with the public, but they provide a very desirable alternative to needle

injections and will help drastically reduce the workload for healthcare providers daily. Certainly, in the case of another pandemic, this technology would be invaluable.



imprint

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Next scheduled post-mortem meeting: Virtual due to COVID-19

Next scheduled board of directors meeting: Virtual due to COVID-19

Imprint acknowledges that the University of Waterloo is situated on the traditional territories of the Attawandaron (Neutral), Anishnaabeg, and Haudenosaunee Peoples. The University of Waterloo is situated on the Haldimand Tract, land promised to Six Nations, which includes six miles on each side of the Grand River. Therefore, Imprint recognizes and respects this land that it is situated upon.



opinion



HAVE YOUR SAY

Submit your letter to the editor or your community editorial to opinion@uwimprint.ca. Find more opinions at uwimprint.ca.

From the Archives: Transgender Day of Remembrance 2018

This article has been re-printed from the Nov. 28, 2018 issue of Imprint. To read more of our archives, head to uwimprint.ca.

\intercal ultan Daiji accepted their non-binary identity on the Transgender day of Remembrance. "Our existences and identities are real and they hold great value. We are not delusional, irrational, unscientific, or making anything up."

Nearly 30 people joined the Glow Centre for Sexual and Gender Diversity on Nov. 20, 2018 to observe the Transgender Day of Remembrance (TDoR) with a vigil in the evening. A memorial of photos of transgender people who had lost their lives was laid out in the SLC lower atrium earlier in the day to raise awareness for TDoR.

TDoR brings the struggles transgender people face to the spotlight, including the extent of transphobia that still exists today.

"[Transphobia] is violence at multiple levels which strives to erase identities by denying they exist to outright murder. On TDoR, it reminds me of ALL the levels of violence that persists and ALL the levels of violence we have to face which means to force us out of existence in whatever way it can, if it is not outright murder or trauma driven suicide," Daiji said.

For Lee Mousa, an English student and president of the UW Drag Club, it can be a scary time reminding of how dangerous it still is for him to himself.

"It scares me slightly, because it also reminds me that being trans can be dangerous. Who you are can get you killed in this world...That's why it's important, it serves as a reminder of the cost of doing nothing," Mousa said.

For Amanda Fitzpatrick, co-ordinator of the Glow Centre, TDoR also provides an opportunity to remember transgender people that have passed but go unreported.

"[TDoR] is a really hard day for a lot of people. It's a time where we remember not only the lives lost but the violence that trans people face on a daily basis. Its really important to have this day because often the deaths of trans people slip through the cracks and aren't reported or seen on the news. Through deadnaming and misgendering by police and family members many trans deaths aren't accurately reported, making it up to grassroots LGBTQ+ organizations to properly report them and mourn them," Fitzpatrick said.

The day began with a memorial of flowers, candles and photos placed in the SLC lower atrium, along with a board for passers-by to sign. The vigil held in the evening was a more private event, where attendees lit candles while Fitzpatrick read a list of names of people lost this year.

Many tears were shed and attendees wrote confidential notes about their feelings on the day. They then returned to the Glow Centre to eat, talk, and find comfort in each other.

Transgender people still face discrimination on the campus. "Trans students can still face harassment from staff, faculty, and other students. They can be deadnamed and outed due to the difficult process of getting a name change on campus. We also still hear about issues at health services and counselling making it difficult for students to access necessary resources," Fitzpatrick said.

"A lot of my struggles fall past the radar and disappear, leaving me virtually alone to deal with the confusion in my head...it's a lonely experience...It's scary as all hell, but it shouldn't be that way," Mousa said.

'You know what I would like the most? I would like a therapist who can talk to me and advise me on matters of gender identity, with a specialization in it...please help us when we ask for it, and don't shut us out of your discussions and the general campus community."

Mousa emphasized the need for greater education on trans issues and rights, as well as representation in curricula and on campus.

"We need to be included in the curriculums our staff creates. We need to educate others, as unfair as that seems, because we have knowledge that they don't and we must take part of the responsibility for ourselves," Mousa said. "As a f*cking school, we need to f*cking educate people on the existence of minorities and marginalized people. Especially people of authority."

Despite the lack of resources on campus and the discrimination that still exists, Daiji said they see hope for the future.

"[TDoR also reminds me] how many people still love, survive, thrive, laugh, hope, and plan for the future. It means to me that being who I am is not a death sentence, it's a beautiful existence and it's a strong resistance," they said. "Since it is the day I chose my new name and asserted my non-binary gender, it is the day I remember how free I am from these gender constraints and all other constraints. It is the day I remember that as much violence there is facing us, there is also a lot of joy in being who we are.'

> Harleen Kaur Dhillon Former Editorial Assistant





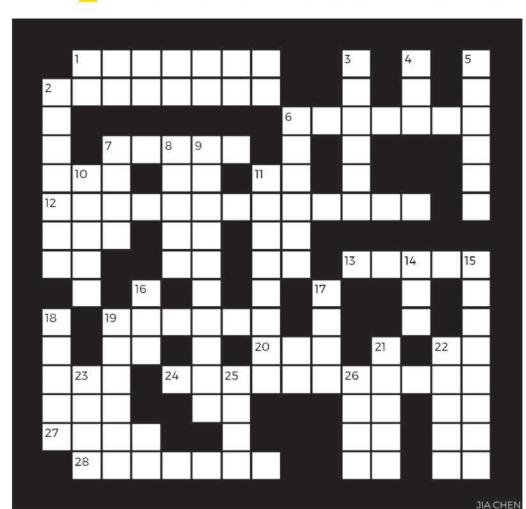
distractions



Q: WHAT DID ONE MELTING GLACIER SAY TO THE OTHER?

A: WELL, IT WAS ICE KNOWING YOU!

Imprint crosswords | Environment



Across

- Some are loved, some 2. In California, you'd hear "Shower less, we're in a are feared, some are eaten
- A metaphorical clock we don't want to strike 4. twelve
- The biggest Amazon there is, not affiliated 6. with Jeff Bezos
- "It's about drive, it's 7. about ____. We stay hungry, we devour."
- 12. Famously said "There is no Planet Blah. Blah, blah, blah, blah, blah, blah."
- Too much water too quickly
- 19. Responsible for mak- 14. ing most bottled water 15. in the world
- 20. These liquid levels are rising
- These don't include solar power, wind, or hydro
- Water ____ will only increase as supply becomes scarce
- 28. Cow farts

Down

- Number 12 is famous for these, specifically for
 - school Not used by Teslas
 - An outcome of irresponsible agriculture; -ification
 - An agreement signed by 195 nations is named after its capital
 - Some fruits have this natural biodegradable packaging
 - Animal who traps 33 tons of carbon for centuries when its dead body sinks to the bottom of the
 - We are in the midst of the 6th mass one
 - You'd find a lot of these in one of number 6 across
 - Number 12 critiqued COP26 calling it this "as usual"
 - Type of spill Dawn advertises they help clean
 - Natural but deadly; hurricane for one
 - Insect needed for food production
 - Naughty children receive this
 - Widely disliked utensil after hurting a turtle in 18. viral video
 - 19. Mother we share
 - 21. Delicious dish is one cause for overfishing
 - 22. Invasive species or space invader
 - 23. Naturally filters water; not mussels
 - 25. Statement piece in protest
 - 26. Wild ones worsen air quality

LAST WEEK'S ANSWERS



