WARRIOR #IRON

THE NEWSPAPER OF THE UNIVERSITY OF WATERLOO ENGINEERING SOCIETY

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Canadian Engineering Competition 2019

A Success on All Fronts



UWaterloo Organizing Committee Members After the Awards Gala



Four score and seven weeks ago (or something to that effect), Waterloo Engineering, with Steven Jia at the wheel, won the bid for the 2019 Canadian Engineering Competitions. Shortly thereafter competition leads were hired and the planning, over a full year before the event, began. Weekly meetings, group meet-ups from across North America and sometimes further, a last couple of panicked months, all of it culminated in the spectacular display at Waterloo the weekend of March 1st.

Friday afternoon, teams began to arrive from all over our great country, every province was represented. Aside from a few minor glitches with t-shirts and name tags for the judges, check-ins went pretty smoothly. That evening, there was an opening ceremony to welcome all competitors and the Governor General herself sent a few words by video! Teams got to mingle before their big competition day Saturday, and had a chance to meet some

of the judges and sponsors.

The CEC has in total 8 different competitions. Some of them, like Debate and Innovative Design, are presentation only. These comps would take place Sunday. Other competitions, like Sr. & Jr. Team Design, Programming, or Consulting have a design/preparation component as well as a presentation aspect. While teams in the first group had Saturday off to explore our lovely campus, go rock climbing, or rest up for their big day, teams in the latter group were given their problem statements early in the morning and had only 8 hours to come up with a solution.

Volunteers and all the preparation on the parts of the comp leads are to thank entirely for the smooth way the day progressed, from food and snacks to getting every question answered and translated in a timely manner. Although many teams at the competition were anglophone, some teams were francophone and all questions had to be translated into both French and English to ensure nothing could be lost in translation. If you went to the 7th floor of E7 on Saturday, you would have seen our busy hive of translators working like crazy to make sure everything was bilingual.

After their 8 hours were up, the or-

ganizing committee got to cleaning and prepping for Day 2, and the competitors headed to Bingeman's for bowling. Apparently even the judges and sponsors got

into it! Sunday dawned dark and far too early as OC members came to campus ahead of time to sort out potential issues (and you can bet there were plenty of lastminute fires). All too soon, competitors in the group who would be doing a day of presentations were on campus and ready to go. Briefings done, the competitions started. Judges were blown away by the caliber of the solutions, the inventiveness of designs, the quality of communications, and the ability of the debaters. There were many hard decisions made by judges throughout the day, and all gave amazing feedback to the competitors, we thank the judges immensely for dedicating their weekend to CEC.

At last, the 13th debate came to an end, deciding who would be on the podium at the evening's gala for the final debate. And with the conclusion of the debate came the conclusion of the on-campus competitions. A frantic hour was spent tidying up both rooms on campus and ourselves for the gala event. There's no

rest for the wicked, and the OC team had their work cut out handing out headsets for translation of the debate, sorting out last minute seating changes, and final logistics... as well as some rowdy guests!

After dinner and a talk from the founders of CEC (Waterloo grads!) it was time for the final debate. The topic: The House believes that West Coast is Best Coast. The teams: University of Manitoba arguing for, and Université de Québec à Trois Rivières against. It was the ultimate east versus west debate and the whole audience got involved; the teams did an amazing job of entertaining the audience and seemed to be having a good time themselves. While judges deliberated, the time came at long last for the announcement of awards!A rousing school chant followed many of the placements or a chorus of "East is beast" or "West is best". Before we realized it, Steven was giving his closing remarks, and just like that the year of planning came to an end and the torch was passed to the next school! Good luck Manitoba, I'm sure you'll do great! I think many of the competitors went home with a good experience, many memories, and (we hope) a pretty picture of this school we call home.

Letter From the Editor

Don't Fear Failure; You Can Do This!



Can you believe how fast the term is flying by? Wasn't it New Year's Day like a second ago? In this crazy fast paced environment, I want to talk to you all about taking care of yourselves. Usually, I like to pick a topic and go with it, but as the past few weeks have progressed, I really want to touch upon a few different things, and believe you me, it all comes from the bottom of my heart. We are at a point in the term where everything seems to have reached a lull. Midterms just went by and honestly, staying in bed through the class seems like the most tempting option. If you are like me and you love sleep, those 8:30 lectures seem like a real pain in the behind. So, here is the deal, this editorial is as much for me to write as it is for you to read. I am hoping for this to be a cathartic journey and we can come out of this together! Let's dive in, shall we?

First things first, we are spinning at a hundred and ten thousand kilometres per hour around the sun. Do you realize how fast that is? Let's put this into perspective. We walk at an average of 5 kilometres per hour. A cheetah, the fastest mammal on land, runs at only a hundred and twenty kilometres per hour. You do not have to match the pace of the earth everyday. My point is, the days will go by faster than you can catch up to them sometimes, but don't let that stop you from aiming high. Do not fear failure. I know professors are already distributing midterms and discussing everything with the class and telling you the class average on tests. It is possible that the class average is higher than your grade. But that is alright. The literal definition of a mean is the sum of all values divided by the number of values. Someone needs to be lower than the mean for the mean to exist. Hello? Math! What about the half of us who lie under mean? Yes, there are about half of us in every class and while class average is an estimate of how well the class performed as a whole, do we really need to slap ourselves against this standard wall to gauge our own, individual performance? I don't think so.

This is not to say that you shouldn't chase high grades! If that is what your goal is, then by all means, go out and kill it. I believe in you! But if that is not your goal, if you want to go out and take up extra curriculars, and if you want to have a better social life, and if you want to do anything more than just studying, then please, go out and do it as well. There are so many students out there who manage everything perfectly, or seemingly perfectly, with good grades and great

extra curriculars. But there are also other who "give some and get some." This isn't to say that any one of those groups is more valid than the others. I just want you all to know that you can do whatever you want, and the fear of failure shouldn't be stopping you from living your life the way you want to.

When I began this term, I had a specific goal in mind. I wanted to be a healthier person. I wanted to wake up every morning and grab a meal prepped lunch from the fridge and head to class with that everyday. Lo and behold, that lasted about a day into the new year. In fact, I barely wake up in time for me to wear actual pants to class. To all those people who are always dressed up in perfect clothes, with your hair all neat and tidy, I see you. I want to be you.

Needless to say, new year's resolutions have a very low success rate. This isn't just me talking, studies have shown that less than 25% of people actually stay committed to their resolutions after just 30 days, and only 8% accomplish them. Maybe pick a better time to begin something challenging for yourself. At the beginning of the year, all the gyms are crowded, all your friends are giving up their resolutions, how will you accomplish yours in that demotivating environment? Okay, maybe this is just a jab at myself. I have seen the face of a gym like five times since the new year. "I have been busy!" I keep telling myself.

Now that I have ranted about all the high expectations we have from ourselves, let me remind you all to take care of yourselves. Remember, this is as much of a learning experience for myself, as it is for you. So, take a seat, sit back and consume this class A media.

Number one. Consume good media (see what I did there?). This is not me judging you for your taste in media. This is me encouraging you to watch TV shows, or videos that you like. Listen to any podcasts that interest you. Read any kinds of books that you like. I am a softie for romantic comedies. I love comedy true crime podcasts. If you think that this is something you would enjoy, write back to me and I could give you some recommendations. Maybe you could recommend something to me! We need to take care of each other.

Number two. Create things. I cannot stress how accomplished you would feel if you complete a drawing, or one of those paint by number things. It doesn't have to be something artsy, you could even just get yourself a colouring book or go attend Paint Night (EngSoc is hosting one soon). You can even write a poem or a prose. Just create things that your mind tells you to. I promise, you will feel really great about yourself afterwards.

Number three. Join a team. A lot of us can feel really alone in this environment.

Joining a club or a team of some kind allows us to be engulfed by people who aren't necessarily people we see in class. This could be something you love to do (join The Iron Warrior if you love to write, or draw, or take pictures, or just talk). This could also be something you want to build your skills in, like a design team. You will see yourself grow, and discover your potential once you begin to contribute in a team of people.

Number four. Schedule fun! What I like to do is to go through the Engineering Society's Facebook page and browse through events that I may be interested in. I like to book my tickets in advance so that I can actually be hyped for the event for a couple of weeks before actually attending the event and they have always lived up to my hype. This also gives my friends enough time to latch on to my excitement and buy their own tickets as well. Really, you should try it.

Number five. Do you. No one really knows what they are talking about. You just have to take control of your own being and just roll with it. Want to wear make up to class? Great! Want to wear pajamas for pants? Also, great (maybe not in the cold, though)! Be proud of yourself in whatever you do. You have made it through so much and you will face many more obstacles. Be excited by that!

I don't mean for this to be a preachy editorial. Like I said, this is me trying to tell myself to take it easy and also hoping that you guys would too. We have quite a walk ahead of us. Do not let university grades get you down. I have been here for almost four years, and I still haven't recovered from the discrepancy between my high school and university grades. Just remember, that when failure does strike, and it will if you are on the right path, there is no shame in just getting up, dusting yourself off, and trying it all over again.

As always, if you want to send me any recommendations, or would like my recommendations from the limited amount of media I consume, or if you would just like to chat about the happenings of life, reach out to me at iwarrior@uwaterloo.ca.

Correction

In the issue dated February 20, 2019, the article titled "The Anti-Vaxxer Movement and The Measles Outbreak" had an outdated piece of information. In British Columbia, it is not mandatory to be vaccinated to attend public schools. In Ontario and New Brunswick, the vaccine is mandatory unless an exemption is issued. Manitoba no longer has legislation for school entry vaccination for measles. Vaccination is voluntary in Manitoba.

Any confusion caused due to this is deeply regretted.

IRON WARRIOR

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Send your submissions for the next issue to iwarrior@uwaterloo.ca.

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One Rocket Launch, One Giant Leap for Spaceflight



At 2:49 am on Saturday, March 2, Space X launched their Crew Dragon rocket capable of seating up to seven astronauts towards the International Space Station in what marked a historic first step towards commercial human spaceflight. Ever since humans launched the first man beyond the barrier separating our planet from the rest of the universe, we have always been captivated by the unknown expanse of space beyond this tiny blue orb we live on called earth. This launch signals a huge breakthrough for the future of space travel, particularly the future of travel to the International Space Station (ISS).

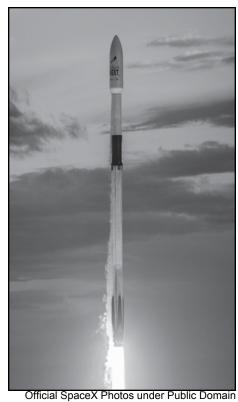
Crew Dragon, also known as Dragon 2, is a spacecraft specifically designed for cargo missions to the International Space Station, and is also able to carry up to seven people in its capsule. Launched on top of

the Falcon 9 rocket, the Crew Dragon was meant to show the ability for SpaceX to safely and efficiently transport astronauts to and from the International Space Station. Although this flight was unmanned, it did have a passenger in the form of a mannequin called Ripley. To examine the effects of the flight and simulate what it would actually feel like for an astronaut to fly in the Dragon spacecraft, Ripley was covered with several sensors around its head and spine to monitor how the flight would feel for an astronaut. Along with Ripley, the spacecraft also transported an anthropomorphic plushie toy in the shape of earth!

Normally when flying to the International Space Station, astronauts launch off of earth inside Soyuz rockets, so the fact that the Crew Dragon was able to successfully dock with the ISS with the use of a specialized docking adapter is a huge win for the future of transporting humans from the US to the ISS. In fact, it was the first successful autonomous docking of a commercial crew capsule at the ISS! The cap-

sule was able to guide itself into the docking area of the ISS without the help of the station's robotic arm, which is a huge accomplishment, and was also successful in transporting about 181 kg of crew supplies and equipment for future missions. If the remainder of the mission and further tests are successful, NASA would finally be able to launch astronauts to the space station from US soil for the first time since 2011. This is also a huge benefit when it comes to reducing costs and offering alternative means of transport for astronauts. Rather than having to rely on the Soyuz spacecrafts, astronauts could have a backup Crew Dragon shuttle to safely get them into space and back home.

In the end, this launch was only just the beginning of a series of tests before astronauts can safely be launched to the ISS from Crew Dragon spacecrafts. However, it does mark a significant milestone in the future of human space travel, and at this rate, SpaceX is on track to be the very first private spaceflight company to send astronauts to the ISS.



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Iridium-8 Mission

Data Centers Consume Vast Amounts of Energy

DAVID JIMENEZ
1B CHEMICAL

When people tend to navigate social media and websites, significant quantities of user information needs to be uploaded and preserved. Data centers are divided into several potential computers mostly known as servers which are dispersed along the virtual media; their main function is to gather and administer the data received from external users. The servers work with a special cooling feature that prevents the system from collapse due to overheating. Data centers workers are not usually aware that "Online companies typically run their facilities at maximum capacity around the clock, whatever the demand. As a result, data centers can waste 90 percent or more of the electricity they pull off the grid" (Glanz, 2012, p.1). Therefore, data centers consume incredible amounts of energy that has been managed inefficiently producing noteworthy economic waste and environmental pollution effects. The engineering measures that ensure the reduction of energy consumption in data centers are the consideration of air flows and the right-sizing technique.

The first measure comprises the efficiency of cooling systems that rely on the types of air flows that are normally used in data centers. According to Loper and Parr (2007), "Data centers should be wary of mixing servers that have different air flows (for example, placing the vents for exhaust air for one unit in front of another server) since this may result

in the mixing of hot and cold air". As a result, data centers can achieve a low tier of energy consumption when individuals consider the positioning of each piece of equipment so that the hot air expelled by one server does not contact another server.

Moreover, the other measure that significantly reduces the energy utilized in data centers through cooling systems is the "right-sizing" of servers, this term refers to adapting the size of the equipment according to the work load periods required by servers. For instance, the cooling systems may achieve a high-performance rate or switch to a power-saving mode depending on whether the work load periods are high or low; the efficiency of cooling systems depends on the structure and organization that

right-sizing provides. In other words, the energy consumed by data centers could be diminished considerably if the right-sizing technique is applied to the servers.

In conclusion, data centers tend to work with inappropriate techniques. As a result, the consumption of energy is significantly affecting not only the environmental contamination but also the financial sources required by data centers to keep functioning. The measures are focused on coding systems improvements such as air flow positioning and right-sizing which are demonstrated to be the most effective methods in order to reduce data centers energy consumption. In fact, data centers could be able to achieve high-performance standards without wasting significant energy sources.

Possible Cure for HIV in the Works



SAATVIK WALIA 3B COMPUTER

Human Immunodeficiency Virus, also known as HIV, is the virus that causes acquired immunodeficiency syndrome (AIDS). AIDS attacks a person's immune system, interfering with its ability to fight the virus and thereby establishing potentially life-threatening condition. HIV is a sexually transmitted infection and can spread by contact with virus infected fluids of an HIV positive person during sex,

blood transfusions, by sharing needles or can be passed to a child from mother during pregnancy or delivery or through breast-feeding.

HIV destroys CD4 T cells, the white blood cells that help the human body fight disease, and can turn into AIDS when the cell count falls below 200. There is no definitive cure for AIDS but currently the people with AIDS are treated with medications that dramatically slow down the progression of the disease. With that being established, I want to put some light on the case of "The Berlin patient", Timothy Ray Brown, who was the only person known to have had HIV cleared perma-

nently from his body. Before receiving the two stem cell transplants, the doctors had to use radiation and chemotherapy to eradicate acute myeloid leukemia from Timothy's immune system. The stem cells were donated by a patient who was immune to HIV and that made all the difference in the Berlin's patient game.

More recently another case of an anonymous "London patient" has come up, who might be the second individual to be cured of HIV infection. This anonymous "London patient" has now been free of the HIV infection for 18 months after undergoing a bone marrow transplant from a donor with a genetic mutation that makes him resistant to the virus. Now this might bring a question to everyone that "Is this a possible cure for HIV?"

According to a scientific team from several UK universities, the potential cure might only be a "long-term remission". Furthermore, the team added that "it is too early to say with certainty that he has been cured of HIV." Although the news about the London patient has raised hopes about the potential for a cure, experts have also highlighted some other reasons for caution – one being the radiotherapy and the chemotherapy that is required to clean the immune system before introducing the transplants and the other being the availability of the transplant itself from a donor with the rare protein variant, CCR5, which is found in the minority of people that are naturally resistant to AIDS. The potential treatment has only been carried out on patients with HIV who also need bone marrow transplant because they are suffering from cancer, all these factors result in a very low proportion of successful

In the past, there have been cases that were proposed to have been successfully cured of HIV/AIDS. The failed cases include the two "Boston patients" and the "Mississippi baby", in whom the infection returned after disappearing for long periods. Meanwhile finding a potential cure for the infection, there have been commendable achievements in the field of treating the infection. The conventional ART – antiretroviral therapy drugs that are taken by mouth once a day, have been remarkably successful in suppressing HIV to levels that are undetectable by normal clinical testing and have no effect on the patient's health.

From the most recent available global statistics, approximately 36.9 million people worldwide were living with HIV/ AIDS in 2017 out of which, 1.8 million were children (<15 years old) and an estimated of 1.8 million individuals worldwide became newly infected with HIV in 2017. AIDS-related deaths have been reduced by more than 51% since the peak in 2004 - in 2017, 940,000 people died from AIDS-related illness worldwide compared to 1.9 million in 2004. With all these facts in mind, it is reassuring to know while the cure of AIDS may not have been completely discovered, the treatment has come a long way.



Waterloo Housing Woes

A Guide to Off-Campus Housing



ALINA PAVEL 2T NANOTECHNOLOGY

Put plainly, searching for off-campus student housing sucks. Finding a place that suits all your needs, is clean, and within your budget is possible, but often times you have to lower your expectations or increase your budget to find good accommodation. Personally, student housing has caused me much frustration over the three years I've been in Waterloo, so I've decided to put together a list of stuff I wish I knew earlier.

Here are some tips so that you don't get swindled by 'big housing':

Looking for a sublet? The Student Housing groups on Facebook are your best bet – many students post here daily trying to find someone to take over their accommodations, often at discounted prices.

If you want a typical student apartment – 1 to 5 bedrooms with bathrooms and a living space, these are the easiest to find, just because of their abundance. Seriously, just look at the report from the Canada Mortgage and Housing Corp – there's already an oversupply of 5000+ beds of student accommodation

in Waterloo, and housing companies just keep building. This option is a mixed bag, and sometimes you don't even get what you pay for, namely when it comes to management. One search on the UW subreddit will bring up a multitude of horror stories of cockroach infestations and landlords blackmailing students. Good luck trying to get your \$200 key deposit back.

If you want a house for that traditional frat experience, or for a 'home-awayfrom-home' feeling, get ready to do some searching. Kijiji and UW Off-Campus Housing (OCH) are your best options. These are often cheaper than typical apartments, depending on their location and condition. Sometimes, you can find places for as low as \$300 a month. Be prepared to pay for utilities or furnishings though. The good thing about houses is that they're often managed a lot better than places owned by big companies. Landlords will treat you like an actual human being and reply to your maintenance requests in a timely manner, rather than leaving you without hot water or internet for a week

Negotiating can land you an even better deal, but be reasonable. It is way easier to try to negotiate housing with a fellow student than with a landlord or housing company. In fact, most of the big housing companies don't even allow for negotiations, especially when starting a new lease in the fall. They might offer discounts for early birds though, if you're ready to sign for fall accommodation at the beginning of the year (typically from Dec-Apr).

Also, I shouldn't have to repeat this after the ICON incident, but DO NOT sign for a place that is not fully built yet. Delays are very common and almost inevitable, and you don't want to be left with nowhere to call home as the school term starts.

To give a better idea of what to look out for, here's an outline of how the yearly student housing market works in Waterloo'

Fall (Sept-Dec): This is when most new leases begin. Housing companies and landlords mark up their prices to adjust to the growth of housing demand during this time, as fall is typically when the new school year begins for most students. During this time, 4-month sublets are pretty non-existent, so be aware. 8-month leases are uncommon but possible starting in September, but be prepared to pay extra for this convenience.

Winter (Jan-Apr): You have pretty good chances of finding a sublet for this time as many students are on co-op during the winter. Leases, however, are rare, especially from the big housing companies. You might find independent

landlords willing to lease at this time, but you might have to do a bit of extra searching. You might find lease takeovers for 8 months or longer from people who signed a new lease in September.

Summer (May-Aug): This is either the easiest term to find housing for, or the most difficult, depending on what you're looking for. Apparently, everyone and their mother is on co-op or off school during this period, so there's no lack of cheap summer sublets! You might even snag a luxury room at ICON or the like for a reasonable price. This sucks if you're also looking to sublet your place, there's a ton of competition and you'll probably end up losing money. Finding a lease, however, is a bit of a hassle. Yes – some companies do offer leases starting in May, but often for higher prices. If you're looking for 8 month accommodation starting in May, good

I've barely scratched the surface here, but you should get the gist by now. My most crucial piece of advice is this: be informed on what you're getting yourself into. Make sure to see what the place looks like before signing, or get a good idea from a video or picture tour if you can't see the place in person. Search for reviews or stories on r/uwaterloo or on Facebook. If something seems too good to be true, it probably is!

Actor Luke Perry Passes Away at Age 52

Riverdale Star Dies Unexpectedly from a Stroke



MRIDU WALIA MECHANICAL

Luke Perry, who played the part of Fred Andrews (Archie Andrews' dad) on the popular teen drama TV series Riverdale, has tragically passed away (at the age of 52) on Monday, March 4, 2019. Luke became really famous in the '90s after he played the role of Dylan McKay on the iconic 1990's TV show "Beverly Hills 90210". He was hospitalized on Thurs-

day, February 28, 2019, after suffering a major stroke and according to his representative "was under close observation at the hospital".

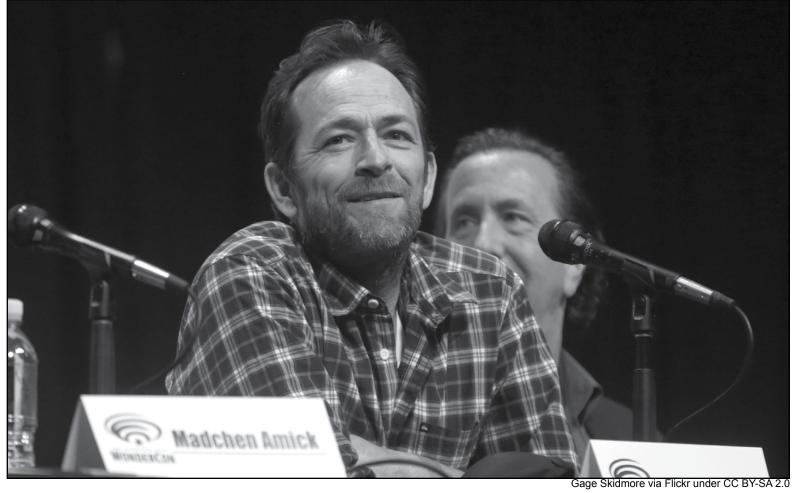
The news of Luke Perry being hospitalized broke out just one day after Fox News announced a "90210" reboot, featuring the original stars of the show with the exception of Luke Perry and Shannen Doherty. His publicist Arnold Robinson informed CNN, "He was surrounded by his children Jack and Sophie, his fiancé Wendy Madison Bauer, ex-wife Minnie Sharp, mother Ann Bennett, step-father Steve Bennett, brother Tom Perry, sister Amy Coder, and other close family and friends. The family appreciates the outpouring of support and prayers that have been extended to Luke from around the world and respectfully request privacy in this time of great mourning. No further details will be released at this time," The TV series Riverdale halted production

on Monday, to honour Luke's untimely demise. On the Wednesday following his death, March 6, 2019, Entertainment Tonight reported that the CW series included an in-memoriam message before airing the show's final credits that read: "In Memoriam Luke Perry 1966 - 2019." The show will continue to air the episodes he has already filmed but it is uncertain how the Riverdale producers plan on integrating his death in the following episodes and what they would do with his character, Fred Andrews.

The Riverdale cast took it to social media to express their love for Luke and

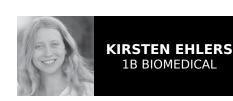
offered their condolences to his family. Lili Reinhart, who plays Betty Cooper on Riverdale, shared a beautiful poem in the wake of the news of Luke Perry passing. She later shared a tweet on Twitter expressing her disbelief. "I'm finding it hard to grasp that he will no longer be around to give long hugs and share his wisdom and kindness with all of us. I'm thinking of his family. His children. I pray for them to heal and find peace in this devastating loss." Her co-stars including Cole Sprouse (Jughead), Camila Mendes (Veronica), KJ Apa (Archie Andrews) all shared happy memories of Luke in their

Instagram posts. Cole appeared on "The Late Late Show with James Corden" and according to reports from The Hollywood Reporter and Entertainment Tonight, he said the cast of Riverdale is "recovering" and "going through the paces". "Luke was one of those guys that would much rather have us laughing and telling stories about his life than lamenting it," Sprouse reportedly said. "He was a good man. He was one of the guys that you never heard a bad word said about him." Cole Sprouse said he wanted to keep his comments brief "out of respect for the privacy of [Perry's] family."



SNC Lavalin in a Nutshell

The Latest Scandal to Hit Ottawa



The biggest scandal in Ottawa right now is the SNC Lavalin controversy. In January, it was revealed that now-former Attorney General and Justice Minister Jody Wilson-Raybould, was allegedly pressured by the Prime Minister's Office to intercede on the prosecution of SNC Lavalin. SNC Lavalin is a Quebec-based engineering and construction firm with several allegations of corruption in multiple countries including Bangladesh, India, Canada, and Mexico. More significantly, SNC Lavalin is a huge employer in Canada, particularly Quebec. The Quebec provincial government voiced its support for the engineering firm. The economic effect of a large company leaving Canada due to any large charges could be disastrous. Pierre Fitzgibbon, Quebec's Economy Ministers has previously stressed the government's wish to protect strategic companies for the economy.

However, SNC Lavalin hasn't exactly been the most ethical company in the nation either.

In 2011, SNC Lavalin's top construction executive, who had been bribing the Libyan government to win contracts, had to relocate after dictator Mohammed Gadhafi was ousted. This later led to the arrest of several individuals in Mexico who were

allegedly plotting to smuggle Gadhafi's son into hiding. Stéphane Roy and Cyndy Vainier were SNC employees among the individuals that were detained and then released. Roy had not been convicted in Canada due to unreasonable delays by the prosecution.

A month after, there was an internal revolt at the company after allegations that executives were paying bribes and laundering money for the Gadhafi government using Swiss banks. The executive Riadh Ben Aïssa, was detained for 2 and a half years in Switzerland when he plead guilty to bribery and laundering money. He is the only SNC Lavalin executive to be convicted. The company has maintained that Ben Aïssa was acting rogue against the company

In 2014, Sami Bebawi, another construction executive was caught in a sting operation revealing that he was covering up Ben Aïssa's involvement in Libya. He is still in court.

In 2015, SNC Lavalin was charged with corruption in Canada after SNC Lavalin allegedly bribed Libyan officials to win contracts, defrauding the Libyan government of 129.8 million Canadian dollars.

Later that year, Minster Wilson-Raybould inherited the case. Canadians praised Trudeau's appointment of Willson-Raybould because she was a woman and Indigenous leader. In January, Trudeau reassigned Wilson-Raybould from Justice Department to Veterans Affairs. This new position, she quit.

Why? It has everything to do with SNC Lavalin.

Trudeau allegedly used threats and interference to pressure Wilson-Raybould into settling the SNC Lavalin case. The goal was to make a prosecution agreement and avoid a trial. In Wilson-Raybould's testimony, she described meetings, conversations, and e-mails which she called inappropriate but not illegal. He desires to protect SNC Lavalin was based in the belief that the charges would result in job losses and SNC Lavalin leaving Montreal.

Raybould also cited her First Nations beliefs in her testimony. She concluded by saying: "I come from a long line of matriarchs and I am a truth teller in accordance with the laws and traditions of our Big House. This is who I am and this is who I will always be. Gila'kasla". By saying this, she highlights her belief in truthtelling and integrity.

Wilson-Raybould testimony has recently inspired a strong code of ethics amongst young Indigenous women.

The fallout has been detrimental to the Trudeau government. He has jeopardized his relationship with First Nations communities. Wilson-Raybould made history being appointed as Justice Minister. It was thought for a long time that Trudeau had really proved that he valued First Nations communities by appointing such an important position of power to an Indigenous woman. However, progress was slow.

There was no progress in changing the Indian Act and limited progress in bringing water to First Nations communities. That may have been fine, but the demotion of Wilson-Raybould may have been too far.

Also, Trudeau's gender-equality values have been perceived as less and less valid as the days go by. Countless female politicians have been backing out of support for Trudeau's governments. Jane Philpott, Treasury Board President, and star lawmaker quit the Cabinet last Monday due to ethical concerns about the SNC Lavalin scandal and citing a loss in confidence in the current government. Additionally, Celina Caesar-Chavannes had announced that she would not run for re-election. The sudden resignation of several high-profile female legislators has severely damaged Trudeau's equal representation cabinet that he was acclaimed for in 2015.

Now, with Trudeau's own party losing confidence in him, it is curious to see that Canadians say that it will likely not affect their vote in the upcoming election. In the CTV commissioned Nanos poll, 17.4% of Canadians said that scandals such as the SNC Lavalin case would influence their vote the most. In contrast, 72.5% of respondents said that issues like the economy would influence their vote more.

So perhaps, not all is lost for the Trudeau government in the fall elections. Maybe there is hope for another term in Ottawa. However, the SNC Lavalin scandal definitely isn't helping.

It's Not Easy Being Green

What's Up With the Green Party These Days?



Jagmeet Singh recently won the Burnaby-South byelection. The Conservatives and NDP are condemning the Liberal SNC Lavalin scandal. In other political news: the Green Party, is the most ethical.

Last week, A Nanos Research survey concluded that Canadians feel that Green Party Leader Elizabeth May was the most ethical federal party leader. The CTV news commissioned survey showed that 23.2% of Canadians felt May was most ethical. In the second place, it was Conservative leader Andrew Scheer with 21.4%. Scheer

was followed by Liberal leader Trudeau with 16.9%, NDP leader Jagmeet Singh with 6.1% and Maxime Bernier with 3.0%.

The results were similar with parties. Green Party was declared the most ethical party by 23.1%. This was followed by 21.4% for the conservatives, 13.9% for the Liberals, 3% for Bloc Quebecois and 2.4% for People's Party of Canada.

Now, many Canadians may look at these results and think: "it doesn't matter, the Green Party won't win the election anyway". The Green Party has existed since 1983 but Elizabeth May has been the only Green Party MP ever elected to parliament.

However, the poll does beg the question: what's the green party up to nowadays anyways?

Last January, May and her party were clouded with controversy when three former Green party staffers accused the leader of workplace bullying. The workplace had been described as "toxic" due to May yelling and putting down her employees. The treatment had also been called emotional and verbal abuse. The Green Party backed May's statements that she was and continues to be a kind leader of the political party

In December, May and the Green Party celebrated a huge victory in the Leeds-Grenville-Thousand Islands and Rideau Lakes riding. They didn't get the seat, the conservative MP Michael Barrett had an easy win. However, the Green Party finished fourth, 24 votes behind the NDP.

The celebrations of this narrow third

place tie make Elizabeth May hopeful for two seats for the Green Party in the upcoming federal elections this fall.

Now, the environment has been a hot topic issue. There's been the carbon tax debate on how to reduce carbon emissions in Canada. Conservatives have very vocally opposed the Liberal initiative. The Green party has a more complicated opinion about the tax. The Green Party is pro carbon tax but believes more need to be done about the issue. The party believes that more needs to be done if the country is going to reach the goal or a 45% reduction in greenhouse gas emissions by 2030. In addition to the carbon tax, the Green Party wants to promote renewable sources of energy and individual actions like planting trees

The Green Party is the only federal political party opposing the trans-mountain pipeline. The pipeline project has been under fire by First Nations communities and environmental organizations.

However, other than the Green Party's usual environmental stance. It's hard to see what the Party is all about. There's not a whole lot of scandal surrounding the Green Party, especially if you compare them to the Liberal Party right now. That may mean that the Green Party is so ethical that they don't have scandals. Or maybe they're just not in the spotlight.

Additionally, the values of voters are changing. The environment is becoming a significant concern for young people. Ontario Green Party Mike Schreiner got a seat in the last Ontario provincial election. The trend could continually federally.

This poll, come the fall elections will probably be a blip on the political radar. However, it would be interesting to see if the Nanos poll will help the Green Party stay on the minds of the Canadians. It would be interesting to see the Green Party finally get official party status.



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The Momo Challenge

An Urban Legend or Fake News?



RATAN VARGHESE 3A COMPUTER

The Momo Challenge was an urban legend. To use more contemporary slang, it was fake news. It seems quite unlikely that any children actually watched a video featuring a wide-eyed, grinning sculpture and decided to harm themselves. Two charities in the UK, the Samaritans and the National Society for the Prevention of Cruelty to Children (NSPCC) have dismissed the hoax, and according to the Guardian, all the fuss about Momo was moral panic spread by adults. It has, at best, been an opportunity for parents to talk to their kids about the dangers of social media.

The lore of the hoax goes as follows: children are sharing videos of a creepy sculpture on social media. In the videos, the viewers and their loved ones are threatened, unless they commit violent, dangerous acts. However, there is scant evidence that any such videos even existed prior to the media picking up the

The hoax is not even particularly new: last year, there was a report of a 12-year old girl in Argentina committing suicide due to a "WhatsApp terror" game. Eventually, authorities in Columbia and Mexico joined in. During the transition to Mexico, "El Momo" apparently decided to switch from WhatsApp to Facebook. Reports in the United States followed in September.

This year's wave of Momo panic began in the UK. A mother in the small town of Westhoughton posted a warning on the "Love Westhoughton" Facebook page, which later went viral. Eventually, various media outlets, school boards, and even local police forces sent out statements about the wholly nonexistent challenge. Even Kim Kardashian weighed in on the story, pressuring YouTube to remove videos of Momo: and when Kim K acts, the media cannot help but comment.

YouTube initially could not find any videos to remove, since the whole challenge was a hoax from the start. Of course, at this point, it is possible that Momo videos were made in response to all the media hype. YouTube has opted to demonetize all discussion of Momo.

The Sculpture

Although the challenge was fake, the sculpture is real. Most images omit the sculpture's strangest feature: below its shoulders, the sculpture lacks a humanlike body and instead is supported by a pair of chicken feet.

It was created by Japanese artist Keisuke Aiso. An avid fan of horror movies, he has spent the last 20 years creating horrorthemed models and prosthetic limbs. In a statement to The Sun, he claims the sculpture began to rot away and had to be thrown in the trash, adding that "The children can be reassured Momo is dead she doesn't exist and the curse is gone." He didn't really consider the sculpture his best work anyway.

The work was originally titled "Mother Bird", and is inspired by a Japanese ghost story. In the story, a woman dies during childbirth and haunts the area where she died. She appears in front of strangers cradling a baby and tries to give the baby to the stranger. But then she disappears and the baby turns to rocks and

"Mother Bird" was hosted at the Vanilla Gallery in Japan in 2016, as part of a yearly exhibition about Japanese ghost stories. Normally photography is not allowed in the gallery, but "Mother Bird" had the dubious honor of being placed at the entrance. People were even allowed to

After the recent Momo Challenge hoax, artists in the gallery have been receiving death threats written in both English and Japanese. Keisuke Aiso himself has gotten several. Other artists in Tokyo mistaken for him have also been receiving threats.

Ologies Podcast

A Salacious Look into Different Fields of Study



"[Sea turtles] actually have a groove that the semen comes down through." "It's a groovy dick."

That is a quote from the "Ologies" podcast with Alie Ward: a salacious and informative look into various different fields of study. The premise is simple: each episode, Ward interviews someone engaged in a different "ology" and gets them to spill the beans.

Which specific beans? Well, Alie Ward alternates between questions about the subjects being studied and the life of being one of the people studying it. Late in each episode are rapid-fire questions submitted

by patrons. Usually, there are some cultural references interspersed, if not in the conversation through the use of editing. The editing is quite interesting actually: these are without a doubt some of the most heavily edited conversations in all of podcasting. Sometimes a culturally-relevant single-second audio clip is inserted in the middle of a sentence. Sometimes there are longer asides, educational or otherwise. They appear without warning and disappear nearly as fast.

Such chaotic editing would not suit the dry brand image of most interview podcasts. Alie Ward, however, is so energetic in conversation that the asides seem entirely in character. She is one of those people who is good at describing a mundane situation in the most entertaining way possible. Additionally, she pulls out so many of these asides that they become a natural feature of the podcast.

This was used to pretty good effect all the way back in the Primatology episode: Ward forgot to bring up an important question, so she emailed the guest about it and read the email as an aside. If there is a niggling detail she missed, as opposed to an important question, she digs deep into hyperlinks, video and scientific papers in a search for answers, as well as for anything else of vague interest.

So what fields of study are within the scope of the podcast? Many are specific areas of biology: indeed both Testudinology and Cheloniology have separate episodes. However, there is also coverage of Volcanology (pronounced Vulcan-ology if I recall correctly), Gizmology, Museology and even Horology (probably not what you think it is). The conversations can veer very far away from academia at times: the Gemology episode, for instance, included some

conversation of "crystal energy" and even "bad juju". It seems the only true constant is Ward herself, along with the production crew operating silently in the background.

The podcast has distinctive outro music: just one of those little features I appreciate. There is intro music as well, sometimes after a spoken introduction.

The guest of the show also gets to pick a charity of the week to receive a portion of some of the advertising proceeds.

"Ologies" updates every week or so, and each episode is between 45 and 90 minutes long. Given the production value, the fact that each episode is an interview with an actual academic, and the number of different fields being surveyed, this is a triumph. Not just a triumph for Ward personally, but for the medium of podcasting as a whole.

If you like learning, this is the podcast

Have You Been keeping Up with the Kardashians?

All You Need to Know About the Khloe-Jordyn-Tristan Scandal



MRIDU WALIA MECHANICAL

In case you missed it, a lot of drama has gone down in the Kardashian-Jenner household in the last few weeks, allow me to bring you up to speed. Tristan Thompson (27), the famous Canadian professional basketball player for the Cleveland Cavaliers of the NBA, has been implicated in a rumour about cheating on his girlfriend, Khloé Kardashian, who is also the mother of his daughter (True).

What made this news even more scandalous is the fact that he is said to have cheated on Khloé with Jordyn Woods, who is considered family to the Kardashian clan. According to TMZ and E! News, Tristan, Jordyn and a couple of mutual friends met up with Drake and his crew. Sources have reported that they two were "definitely hanging close to one another and were being very flirty". Later that evening, Tristan invited Jordyn and a few other guests to an exclusive afterparty at his house where no phones were allowed.

Sources for US Weekly reported that the two were spotted making out and were "all over each other". Jordyn Woods (21) who is best friends with Khloe's halfsister, Kylie Jenner, has been featured on the TV show "Life of Kylie". Khloé Kardashian was influential in giving Jordyn's career as a model a head start, when she hired her to model for her denim-apparel brand Good American. She also collaborated with Kylie Jenner in launching their makeup line KYLIE X JORDYN under Kylie Cosmetics on September 21, 2018. Jordyn was also one of the models featured in Kanye West's Yeezy Season 6 Campaign.

The headlines started emerging on Tuesday, February 19, 2019 after the rumour about Tristan cheating on Khloé surfaced. Following the rumours, Jordyn was cyber-bullied for weeks, she also "moved out" of Kylie Jenner's Hidden Hills estate in Los Angeles to go live with her mom. Jordyn finally appeared on Jada Pinkett Smith's Facebook Watch show, Red Table Talk on Friday, March 1, 2019 to share her side of the story and address the infidelity scandal. According to Jordyn, she had dinner with some friends on February 17 and went to a bar party house. She said at the moment she felt tweet from her fans as well as followers. okay about it because she thought it would be a "safe environment", however, later she told Jada that she realizes now "I should have gone home after the party. I shouldn't even have been there".

Jordyn did not deny that she was partying at his place till 6 in the morning and realized she needed to go home. In the interview, she denied ever having slept with Tristan, but she said Tristan kissed her when she was leaving the party. During the interview, Jada asked her if she felt responsible for Khloé and Tristan splitting up, to which Jordyn replied, "I know I am not the reason that Tristan and Khloé are not together. This situation may have made it harder for her to want to be with him, and I understand that, but I know I'm not the reason". Jordyn said she has been trying to make amends with Khloé and is willing to be put up to a liedetector test to prove she is speaking the

After watching Jordyn's interview on

the Red Table Talk, Khloé tweeted and after dinner. Following that, they were on called her out for "lying" and said she is their way to a house party when Jordyn the reason her family broke up. She rerealized the afterparty was at Tristan's ceived a lot of black lash following that Many people believe the conspiracy theory that has been circling around that the whole cheating scandal is actually fake and was orchestrated by the Kardashian family as a way to promote the new season of the popular TV series "Keeping up with the Kardashians" returning in March. Kim Kardashian came to her sister's defense when a Twitter user alleged that the scandal was fake because Khloé attended a public event the very next day. Kim tweeted "This was a professional commitment planned far in advance and you better believe she is not waiting on anyone to pay her bills or provide for her daughter". Khloé is taking her "time to heal" and is just focusing on her daughter True. Even though she has split up with Tristan and purged his pictures from her Instagram, she is reportedly trying to work out a way to co-parent her daughter with him because regardless of what happened with her, she wants True to have a loving relationship with both her parents.

Let's Talk About Eating Disorders



MRIDU WALIA MECHANICAL

HAKUNA MATATA

Hi everyone! Hope you all have been doing well, taking care of your health, both mental and physical, and looking out for the people around you. On a side note, Happy International Women's day. Just wanted to take a moment to tell you, you are beautiful, unique and strong and I hope you all celebrated yourself and the great women in your life. Earlier, we talked about depression and how you can help the people around you. We also talked about how an anxiety attack is different from a panic attack in terms of some observable physical and emotional symptoms, and some easy home remedies as well as lifestyle changes you can implement in your daily lives to help cope with them better. For this week's issue, I decided to talk about eating disorders, which is as serious a mental illness as any other but is very easily neglected and dismissed. It comes up very loosely in conversations and people can be dismissive of it. "That girl can't even finish a waffle and she is so thin, she is anorexic." To give you an overview, I will talk about some common eating disorders, the processes involved in diagnosing an eating disorder, symptoms characteristic to each type of eating disorder and lastly, I will share with you some stories of popular celebrities and public figures who have struggled with this mental illness. So, sit back and grab a nice warm cup of coffee because this is going to be a long article, and hopefully one you will enjoy reading and gain something from.

Generally speaking, eating disorders are a serious mental health issue. They can lead to complicated and life-threatening scenarios ranging from malnutrition, anemia, and in extreme cases to multiple organ failure if left unchecked. Some common myths I have come across surrounding eating disorders include: it is a "choice" or a "phase", or it is a "girl thing". These are completely untrue, and it upsets me that people fail to recognize this as a real problem or stereotype the hell out of it. It is definitely not a choice and it is most certainly not a "girl thing". To all of you, who are of the opinion that this is a girl thing, I hate to burst your bubble, but it really is not. According to the American Psychiatric Association, eating disorders are more prevalent in females as compared

to males, but another very important factor to consider is because of such stigmas surrounding this mental illness, people go years without a proper diagnosis because they are either in denial or simply because of the myth that this is a "girl thing". People don't acknowledge it to be a real mental illness because they are of the opinion that the people suffering are doing this for attention or as a phase they need to snap out of and "just eat". In fact, people suffering from depression, anxiety or obsessive-compulsive disorders are more likely to develop eating disorders. The National Eating Disorder Information Centre (NEDIC) is a Canada-based nonprofit that focus on spreading awareness about this particular mental illness through awareness campaigns, offering direct client support through their national helpline (1-866-633-4220) and providing local resources and referrals for people who are struggling with eating disorders. For more information, I would highly recommend you visit their website and if you are interested, check out the additional programs they have to offer. So, with the hopes that you will keep an open mind about this, I will proceed to talk about some common eating disorders and symptoms that characterize each.

Anorexia Nervosa (AN), simply put, is a disorder that is caused by a desire to lose weight, and this is generally characterized by thin appearances. Anorexic people tend to maintain a weight lower than the ideal weight because they have an extreme fear of weight gain. The two ways an anorexic person maintain a low weight are: restricting their diet or "binge and purge". These terms are pretty self-explanatory i.e. restrict their diet by not eating for hours or days; and "binge and purge" is when they eat large amounts of food within a short time-period and purge it out by abusing laxatives, enemas, diuretics etc. They have a distorted perception about themselves and no one can convince them otherwise. Don't confuse this with things like having a bad hair day or taking notice of the pimple on your cheek or forehead, that is normal self-consciousness. What I mean by distorted is that is an anorexic person would look into a mirror and see a morbidly obese person when in reality they could be severely underweight. Anorexia can cause serious and fatal health problems like organ failure, brain damage, cardiovascular problems and more, and needs proper medical attention.

Moving on, let's talk about Bulimia Nervosa (BN), which is a disorder that causes the people suffering to binge eat food and then leads to behaviours to compensate for the overeating such as feeling disgusted, excessive exercising or self-induced vomiting etc. They also try to compensate for the binge by not eating for a certain amount of days. Bulimic people often describe the desire to binge eat as an out-of-control experience i.e. something they cannot control or realize it is happening until it finally does. They tend to not eat socially because they are embarrassed by the binge eating. Even though bulimia is not always as fatal a mental illness as anorexia, however, it can cause serious physical consequences such as gastric rupture, ulcers, bulimia teeth (deterioration of the tooth enamel), dehydration, heart problems and more.

Lastly, I want to discuss Binge Eating Disorder (BED). This is by far the most "normalized" and common eating disorder. Allow me to explain what I mean when I say this is a "normalized" eating disorder. Even though it is just as harmful as any other eating disorder, people commonly associate it with over eating, obesity, laziness etc. I came across an article on Medium, by Emily Kate, and she talks about how common BED actually is. Here are some facts about BED that Emily highlighted in her article titled "The World's Deadliest Psychiatric Disorder". BED is three times more common than AN and BN combined. It is also more common than breast cancer, HIV, and schizophrenia and roughly half the risk of developing BED is genetic. BED is very similar to BN, however, there is one significant difference between the two. People with BED do not exhibit compensating behaviours like people with BN ex. purging, restricting their food etc. Instead, they are overwhelmed by disgust and guilt after over eating and have no way to cope. The physical symptoms can include constant weight fluctuations, stomach cramps, constipation to name a few.

Now that I have discussed the common eating disorders and some symptoms that characterize them, I am going to talk a little bit about how doctors use physical and psychological exams to evaluate the criteria for eating disorders and refer to the Diagnostic and Statistical Manual of Mental Disorders (DSM-5), published by the American Psychiatric Association (APA) to give a diagnosis to the patient. The physical evaluation is comprising of two parts: physical exam and laboratory tests. During the physical exam, the doctor checks the height, weight etc. Since, eating disorders can result in low/ high blood pressure, difficulty in breathing etc. doctors also check your heart and breathing rate. Doctors also examine the patient's teeth for signs of deterioration; brittle nails etc. The laboratory tests include X-rays to check for broken bones or bone loss that can be a result of AN and BN. Other tests include urine analysis, blood tests, thyroid tests, ECG exam to check for heart irregularities. The other part of giving a diagnosis is having a psychological exam done by a mental health professional. This allows the doctor to get an idea of your eating habits and how you perceive yourself. Finally, the doctor gives you a diagnosis based on the criteria you meet for a specific type of eating

If you made it to the end, pat yourself on the shoulder because you did a great job. That was indeed a lot of information to process, but in my defense, I tried to make it as concise and as informative as possible. I'll end my article by talking about a popular and young celebrity artist who recently opened up about her struggle with Bulimia throughout her high school and college life. Camila Mendes, who plays the part of Veronica Lodge on the TV series Riverdale, recently talked to SHAPE and said, "I was so scared of carbs that I wouldn't let myself eat bread or rice ever. I'd go a week without eating them, then I would binge on them, and that would make me want to purge." Camila worked with a therapist as well as nutritionist to address her eating disorder. She also discussed how opening up about her struggles with bulimia on social media made her feel very vulnerable but at the same time she realized that she had the platform and power to influence the younger generation and initiate a positive change by spreading awareness about eating disorders. Therefore, I hope you found this article informative and helpful. To those of you who are struggling with an eating disorder, I just want to say don't diminish your feelings or yourself, realize that you might be struggling and remember you are not alone in this. This is not something your brain might be concocting. People around you may not understand what you're going through or know your circumstances. But if you realize that you may be struggling with an eating disorder, then you are already on the road to recovery. Seek help from a doctor because it is as serious a mental illness as depression or anxiety, but with the combination of correct form of help (from a doctor or mental health professional), support system and patience, you can recover and come back to a healthy lifestyle!

Sandford Fleming Foundation



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John Fisher & Roy Duxbury Leadership Awards

The John Fisher Award and Roy Duxbury Award for Leadership are given to undergraduate students graduating in the Faculty of Engineering who have shown outstanding leadership throughout his or her academic career in activities that relate to Co-operative Engineering Education.

Nominations for these awards can originate from student groups, faculty members, or other individuals. Letters of Support from colleagues, faculty, and others familiar with the nominee's accomplishments are extremely important and form the major basis upon which the Executive Committee of the Sandford Fleming Foundation will form its decision. Nominations must be submitted to the Foundation by April 1, 2019.

The John Fisher and Roy Duxbury Awards consist of a Certificate plus a citation and an honorarium of \$2,000. The awards have been named in recognition of the outstanding contributions made toward SFF by its former Chairs, Dr. John Fisher & Dr. Roy Duxbury.

Nominations Must be Submitted to SFF Office Manager by April 1, 2019

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Coming Soon to a Classroom Near You

ROBBIE LOWLES

COURSE CRITIQUES DIRECTOR

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AJOY OPAL ASSOCIATE DEAN TEACHING

Hello there everyone! It's that time of the term: Course Critiques are almost here! Once again, they will be taking place on https://evaluate.uwaterloo.ca for the major-

ity of the population. Electronic submission for Course Critiques is great because it helps save us over 22,000 sheets of paper each term - that's almost three trees per term! Saving the environment, hooray! Beyond that, electronic critiques are excellent because they also give us an easy way to extract meaningful student feedback, filter out offensive responses, and help improve the quality of classes for everyone.

However, in order for this system to work, we need YOU to fill out your Course Critiques. Response rates have been gradually declining over the past several years, and low response rates mean that faculty members might not have the same confidence in the responses they get. Student feedback is critical to helping professors make improvements to their teaching & courses and guiding departments in making improvements

to programs, so please complete all your Course Critiques this term!

Between March 18 and 29, your professors & instructors should give you class time to complete Course Critiques electronically. Make sure you find out from them when you'll be given class time so that you can bring your web-enabled phone, tablet or laptop to class and complete your Course

Why YOU Should Run for EngSoc VP

Aren't By-Elections Fun?



Congratulations to Ellen McGee, who will be succeeding Katie as president. If you're keeping an eye on the EngSoc election news, you'll notice we are currently running the vice presidential election! Something you may notice about this election, is that there are 5 positions up for election, VP finance, VP student life, VP communications, VP academic, and WEEF. The issue, is that we only have candidates for 4 of these! And the reason, I, VP academic, am discussing this in this article, is that there are no candidates for VP academic!

So, should YOU run for VP academic? First let's talk about requirements. As per our by-laws, the president and the VP academic have to be in at least 2B when they start their term. So, that means you have to be in at least 2A to run. In this election, you'll have to have academic terms on Fall 2019 and Spring 2020. Can't make a term? You can run with a friend as long as one of you isn't on term for either of those terms! We haven't had a duel VP academic team in, (a very long time, I don't actually know) but that doesn't mean you shouldn't!

Now that we know you CAN run, why should you run? First off being executive for EngSoc has been awesome. You are immediately put in a term of awesome individuals on both A and B soc, with two sides to the executive team. Also you get an office desk with a computer on campus, with locker storage right next to it for free. You can use the orifice at any time for school work, engsoc work, just chilling with your fellow exec, any time! You also get a POETs key, which means all the foosball you want. Orifice and PO-ETs are closed but you and your buddy want to play foosball/pingpong/pool? No problem.

On top of that, being exec is sweet, as VP academic you also get to hear about important changes to Waterloo's operation as the first student in many cases. You also get to hear about the errors that

seemingly perfect faculty members make. Such as the time that science accidentally made a program, accepted one person into it by accident, moved that person to the program they were supposed to be in and then closed the program they made by accident? Have you heard about that? Probably not, but if you were VP academic you would have!

There is also a huge chance for you to

concerns of students forward. Sometimes profs/faculty even make meetings with you just to get a student's opinion. For example, Ajoy Opal recently made a meeting with me so he could hear a student's perspective on the new course structure he is researching. He is now coming to council to hear more opinions, and as VP academic you get to make those connec-



President-Elect Ellen McGee

members for a variety of reasons. Contacting profs/departments for anything from help with an initiative to bringing

features. First off you are the advocating voice for the society on campus in many committees. You can decide what you want to change about campus and you have the power of thousands of engineering students behind your name. I wanted to see calligraphy brought back on our class photos, and now it's happening in the best form that it could. I wanted to make communication between EngSoc and CECA better and now we have made a safety working group and are working on creating VPA reference docs on how to bring issues to CECA to better advocate for students. I wanted to protect o-week, and though that was an uphill battle, I held an audience with the VP academic of the university so that he could hear the views of the students. Many of these would have been much more difficult as just a regular student, but the power that is put behind you when you are elected is real. And you can use it to make real change.

Is it all sunshine and rainbows? Of course not. The VP academics behind me, the ones to come, and I all have failings. I wish I could have done more on mental health in my time, and I wish I had the ability to make better changes for it, but I'm doing what I can. Is o-week 5 days long? No, but boy did I make a stink about it, and I'm far from giving up on this issues even once I am done in this role.

The meetings take up lots of time some weeks, and the meetings aren't scheduled with students in mind. Often they are during class and often you have to pick between the two. But you learn to manage it, and the faculty is very accepting if you can't make a meeting because you have class. They are part of the reason you are in class after all.

Please come talk to me during my office hours (Mondays and Tuesdays 10:30-12:30 in CPH 1327-Orifice/Engineering Society Office) or email me with questions or to schedule a meeting at vpacademic.b@engsoc.uwaterloo.ca.

I implore you to consider this, even if you don't know much about University politics, EngSoc, or the histories of either, you can still succeed at this position as long as you care about making the experience of engineering students at Waterloo better. You future you will thank you, I will thank you, and even though you won't get told it, the students of Waterloo will thank you.

It's Time to Switch Gears

Conference Updates, Marketing Initiative, and More



GRANT MITCHELL VP COMMUNICATIONS

Hey everyone, just one last conference update before I finish up my term. This one is the last one I promise!

weekend Canadian Engineering Competition (CEC) came to Waterloo and was it ever a blast. This year Waterloo teams took home

Second in Senior Design and Third in LCD screens and working on getting Innovative Design. All sorts of Waterloo students showed up to volunteer and take part in the weekend and I think we all represented the university well. If you missed it, I encourage you to check out the CFES Facebook page or check out cfes.ca/cec to find out more and see what

Now that all of these conferences are over its time to really switch gears into working on increasing our marketing internally. That means updating our some new screens and boards in E5 and E7. This term, it looks like we're going to be experimenting with a new system that Science and Computing have implemented that is going to make changing the screens much easier in the future. If you have anything that you want to see on the LCD screens in the future please reach out and let me know. I'd love to hear your ideas.

Next up after that is getting more screens and boards in our brand-new

buildings on campus. Many of you have said that we need more and we've heard you! If you know a frequented spot r have any bright ideas for where a screen would fit right in, please reach out. The more we know about where you hangout the better we can put in the gear to reach

I look forward to hearing some of your comments and suggestions. Please don't hesitate to reach out to me at vpcomm.b@ engsoc.uwaterloo.ca or come by CPH

March Events are the Best Events



March is the month of big events here in the Engineering Society! Coming up this month we have two events that are very close to my heart, EngPlay and Semi-Formal.

The first of these, our Engineering Play (or EngPlay for short) will be happening

on March 14 and 15. The play is being held in the Modern Languages Theater, and doors open at 6:30 pm. Tickets are \$6 and are available online or at the EngSoc Office (CPH1327). EngPlay is a termly theatre production put on by the University of Waterloo Engineering Society. Some shows have been written by the directors for the term, while other shows have been purchased scripts from professional playwrights. There has been the occasional musical, but all EngPlays share a common theme: laughter. EngPlay is a tradition

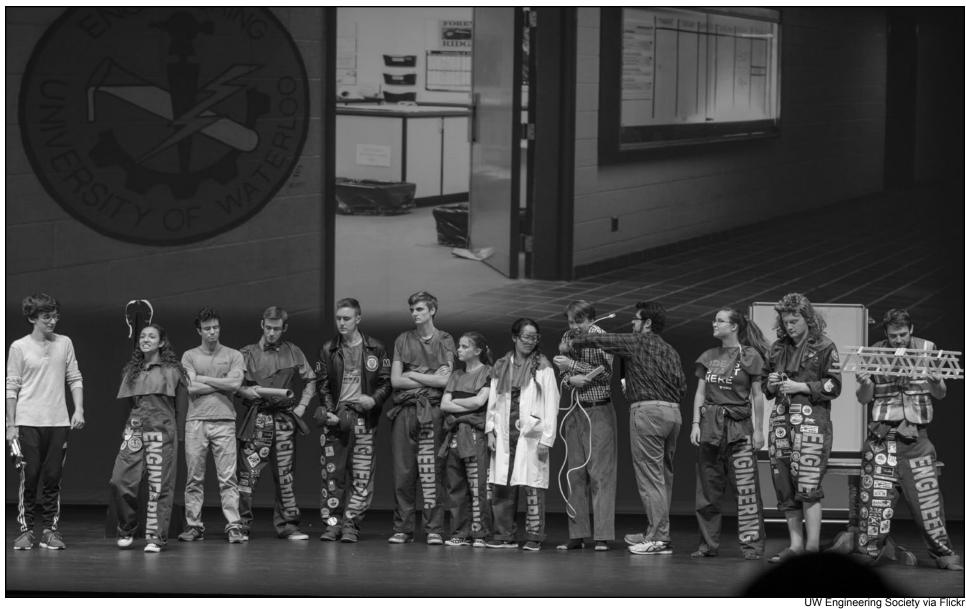
sits close to Waterloo's heart.

This term's play is a student written comedy and murder-mystery! Fifteen students are gathered at the remote home of an eccentric sponsor to find out the winner of a large grant. Their stay is interrupted by a winter storm, cutting them off from civilization. Just as the worst of the weather hits, a grisly death occurs. Who could've done it? Find out in this term's EngPlay!

The second event that is near and dear to my heart is our termly Semi-Formal dance.

shared amongst many schools, and one that This term the Semi-Formal will be on Saturday, March 23 at The Turret Nightclub on Laurier campus. Tickets are \$15 and are available online or at the EngSoc Office (CPH1327). The most exciting part of this term's Semi-Formal dance is that it is a joint initiative with AHS and their student society, AHSUM. Come out to this spacethemed dance for food, drinks and lots of fun with friends. There will be visits by the mascots of both EngSoc and AHSUM, as well as photobooths and more! Don't miss this awesome event!

Engineering Society 🏰



Summer 2018 Engplay: Arthur and the Sword in the Stone

Upcoming Ever								
Wednesday March 13	Thursday March 14	Friday March 15	Saturday March 16	Sunday March 17	Monday March 18	Tuesday March 19	Check out up-to-	
Blood Runs 3 - 6 PM CPH 1327 Patch Auction 6 - 9 PM POETS	EngPlay 7 - 10 PM ML 259	Fourth Year Friday 12 - 4 PM POETS EngPlay 7 - 10 PM ML 259	ESSCO Hockey Tournament MacEng Musical 4 PM - 12 AM MacMaster	ESSCO hockey Tournament	EngiQueers 6-9 PM POETS	Genius Bowl 7 PM - 9 PM DC 1350	the-day event postings on the EngSoc website at engsoc.uwaterloo. ca/event/calendar/	
Wednesday March 20	Thursday March 21	Friday March 22	Saturday March 23	Sunday March 24	Monday March 25	Tuesday Mar 5	-	
Coffee House 7-11 PM EngSoc Council Meeting #6	Drag Night 8-11 PM	Growing Hope Farm Visit 1-3 PM POETS	Semi Formal 8:30 - 11:30 PM Turret		EngiQueers 6 - 9 PM POETS	Course Critiques		
5:30 PM - 7:00 PM E7 3353								

Point Vs. Counterpoint

Parental Permission Should Be Required for Vaccination

POINT

AKANKSHA JOSHI 1B BIOMEDICAL

The society we live in today revolves around the idea of individualism and self-determination. As we get older, we drift closer and closer to independence and freedom. This drift is driven by the sudden ability to make decisions by ourselves without asking for help from our parents. The question, however, is "at what point are you still too young to make important decisions on your own?" This question can have multiple answers, with the obvious one being "once you reach the age of consent". The problem in today's world is that the perceived age of adulthood or maturity is lowering, which means that more and more children below the legal age of adulthood are gaining a sense of autonomy, and the belief that they are capable enough to make the right judgement when it comes to decision making, especially judgements regarding their own health.

The question of whether or not children should require parental consent before receiving vaccines involves careful consideration of both the responsibility of medical professionals and the responsibility of parents. Unlike other provinces, Ontario gives everyone, including children, the ability to choose whether or not to receive vaccinations without parental consent. However, there are problems that arise when it comes to having the freedom to make medical decisions autonomously as a minor, and these issues are ultimately what lead to the important conclusion that children should be required to receive parental consent prior to being vaccinated.

Try to step into the shoes of a primary school aged child. As a 12-year-old, making sound and rational decisions is a much more difficult process than it would be for an adult. If a medical practitioner were to describe the risks associated with being vaccinated to a child of this age, the child would likely be unable to fully understand the scope of what was explained to them. Although they may have a vague understanding

of the situation, it would be extremely difficult for them to make a sound rational "yes" or decision. The fact that children do not have complete decision-making capacity when it comes to complex medical decisions makes it clear that they should not be able to give assent or dissent on such decisions without their parents' permission.

Although minors should not be able to make decisions solely on their own, that does not mean that they should not be involved in the decisionmaking process. However, it would obviously be illogical to allow them to solely decide whether or not they choose to receive vaccinations given

the possible risks and complications associated with getting them. An important point to consider is the responsibility of the medical professionals involved in the decision-making process, such as doctors, nurses, and surgeons. It is the professional and legal responsibility of

health care providers to obtain informed consent prior to immunizing minors. An essential role of physicians and nurses is to communicate information to both the child as well as their parents, giving them a clear idea of the risks and benefits that go with each decision. As medical professionals, it should be their jobs to ensure that the patient has a complete understanding of any procedure or medication being administered to them and that if they are incapable of making a sound decision on their own, their parents or guardians can make the right decision on their behalf.

What is also equally important is the parents' perspective. Imagine finding out that your child was inoculated without your consent and without knowing his or her own medical history. As a parent, a situation like this would certainly be concerning, knowing the possibility that your child could have an adverse reaction to the vaccine, especially if their medical history shows past occurrences of negative reactions to medication. It's analogous to being served a meal at a restaurant and not knowing what ingredients it contains. What if you have a severe food allergy? Would you still want to eat the meal, knowing it could possibly cause a life-threatening reaction? Or, would you rather find out what the ingredients are before you take

In the end, this issue ends up being a matter of risk and benefit. Children consenting to receive vaccinations without fully understanding what the medication is and the risks associated with it are essentially placing themselves at greater risk, especially if they themselves do not have a clear understanding of their medical history. Therefore, no matter how important or beneficial the vaccine is, a minor should always attain their parent's consent before receiving it. The capacity of a minor to consent to vaccinations should depend on their ability to understand the relevance of the medication, as well as an understanding of the balance between risk and benefit, as it pertains to their own health.

KIRSTEN EHLERS 1B BIOMEDICAL

Let's start with a story.

Sally's friend Sami went home sick from class one day. He was sick with measles. Sally heard there was a shot so she wouldn't get it. Sally's mom said no. There were too many toxins in those

Sally wakes up the next morning with a fever. She is eight years old. She has a runny nose and a dry cough. Her mom thinks that it's the flu so she stays home with her child. Then. Sally's mom notices a rash. She immediately takes Sally to the

At the hospital, the doctor diagnoses Sally with measles and does everything he can. However, Sally gets a complication. She later dies from pneumonia.

Sally died from measles, a disease that was eradicated in 2000 due to a very effective vaccine program. However, it is still one of the leading causes of death in children. In 2016, 89 780 children died.

At least the toxins didn't kill Sally though. It was just a preventable disease.

This is a real problem. There are parents out there who don't want to vaccinate their kids against dozens of dangerous, contagious, and deadly diseases because of fake science. They're worried about a child's weak immune system. They're worried about toxins. It probably won't work anyways - why should you risk it?

Now, science proves all these misconceptions wrong. I agree that parents should be educated about vaccination but until then, what can kids do?

Kids are at the mercy of their parental beliefs. A child can get Diptheria which is just a fever and a sore throat until it's heart problems, paralysis or death. There's also mumps which is a headache and swollen glands until it's meningitis, deafness, or infertility. Those are two of fourteen deadly diseases that can be prevented by vaccines.

In B.C., with the measles outbreak, there is a surge of youth getting vaccinated against the measles so they don't die from a preventable disease like their friends.

COUNTERPOINT

They need to make the decision now because their parents didn't make it for them as a baby. These children are scared. In Ontario, a child must be over the age of twelve to consent to vaccination without parent approval.

What about those kids eleven and under?

I understand that serious medical decisions like experimental surgeries and treatment options should be decided by a mature parent. Treatment options have varying risks and there's not always one right answer. A child is not old enough to make the right decision.

In the case of vaccinations, there are no arguments. Why is the decision about such a simple procedure with negligible risk at debate?

If a child wants a vaccine, they should be able to get it without parental approval. Science backs vaccines. It is proven to work. The parent shouldn't have a choice in the matter at all.

Also, back to the analogy about serious medical treatment options. Do you know what the parents consider? The advice of the doctors. Therefore, if the parents ignore the advice of the doctors for vaccinations, should the child be able to veto their parents' decision because they are following the advice of not one doctor but the entire scientific community

Additionally, a parent's refusal to vaccinate their kids is a death sentence. Shouldn't a child have more rights to their life than a parent? Vaccination is such an easy fix.

This is a serious problem. Recently, Washington and British Colombia have been hit with serious measles outbreaks. Now, Scarborough has a confirmed case. Kids are making the smart choice and going to doctors to get vaccinated. If a parent does not give consent, does the doctors say "I'm sorry, but I can't give you your best shot at not getting a highly contagious and fatal disease". How is that fair to the child?

These parents are vaccinated because their parents grew up in an era where people were living in iron lungs with polio and dying from rubella. They

> didn't want their kids to go through that. Today's parents didn't go through that. Unfortunately, today's kids are, even though there is a perfectly sound medical

Now, let's look at this objectively. If society has any hope of eradicating these infectious diseases ever again, vaccination is key. From a utilitarian perspective, it is essential to do what is better for the most amount of people. In the case of infectious disease: it's herd immunity. So a few parents are upset about fake excuses. They're are making the wrong choice for the general good. Thus, the doctor and the child should have the right to veto the parent's decision and get

The Anti-Vaccination Society of America OTHERWISE An Association of "half-mad", "misguided" people, who write, and toil, and dream, of a time to come, when it shall be lawful to retain intact, the pure body Nature gave, sends GREETING to a "suspect". "Liberty cannot be given, it must be taken." You are Invited to Join Us Frank D Blue, Sec'y, Hon L H Piehn, President Terre Haute, Ind. Enclose 25c for certificate of membership.

Anti-Vaccination Society of America Advertisement from 1902

Editor's Note:

Point Vs. Counterpoint is a feature meant to stimulate discussion on thoughtprovoking topics. The views and opinions expressed here do not necessarily reflect those of the authors, The Iron Warrior, or the Engineering Society.

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The debate is: should there really be an age limit on one's ability to protect oneself from a preventable disease that could kill them? Should a child be at the mercy of their parent's possibly misguided beliefs until they turn twelve?

That's How They've Always Done It



How often in your every day life do you hear the phrase "That's what they say" and accept it as a valid reason for almost anything under the sun? I myself am guilty of using that phrase daily to justify a belief, solidify a point, or sway someone's argument. I think people tend to fall into traps of believing things have more veracity the more people have that same opinion or thought or whatever it may be. Truisms hold sway in our society because that's what they say, and if they say it then it can't be wrong.

I'd like to examine some of these longused axioms and see whether we truly need them in our lives or if they're actually hurting us. And I'd like to start with "That's how they've always done it". It's similar to the phrase "it's always been that way before", which we see as an invalid reason to not try something new, but because it relates to a person and their habits, people think it's fine not to challenge the way a person has always done something in the past.

We accept so many things that are bad, or inefficient, or wrong just because of inertia. This is something you will be especially prone to face in university, where at least once in your career you will experience a less than ideal professor about whom someone will tell you "Oh, they've always been like that, they're never going to change", and why? Well who knows why these people are the way they are, it's just what other people say about them so it must be true. This prof, who it seems has been complained about for generations, will never mend their ways because they haven't in the past. No matter how many great profs you have, you will always remember this one for how bad you thought they were. And you, too, will pass on the story that they are bad, have always been so, and will never change.

Now, I don't know about yourselves, but I subscribe to the goal of life-long learning which is supposed to be instilled in us as part of our accredited engineering education. I hope that there is never a point in my life where someone thinks I am so stuck in a rut of habit that I would not even try to attempt change if it was proposed to me. It's so horrifying to me that people could think I would refuse to adapt if it was hurting other people. And yet, this is a thing we perpetrate constantly about professors. I want to believe that I can help improve a course, that my voice has weight when I write my course critiques.

Saying a prof has never changed, allows that prof to stay the same even when it is detrimental to students. It makes the prof unpopular, it leads to lower grades, and sometimes it leads to collaborative assignments and students passing down answers from year to year. All of this is terrible in an institution which by its very nature must be innovating and improving how teaching and learning are done. It is true that many professors are content doing things the way they have done for the last decade or two, but I don't think any

of you have profs who use slide projectors anymore. I'm sure when PowerPoints were introduced, many profs thought "no thanks, I'll stick to my slides", but because change is inevitable, no one uses those anymore. And maybe that change was more rapid when students demanded it rather than when they sat passively by, reading faded wall-projected slides.

Students, professors, the university itself, we all lose when people choose to accept that something won't change because it hasn't before. Maybe faculties need to hold profs more accountable to their course critiques. I know some departments in engineering do more than others, and I know that engineering is in some respects better at holding profs accountable than other faculties. But they very fact that this belief of stagnation exists here is reason enough to sit down an make a change. So not only do I urge you to do your course critiques, but I urge you also to talk to your department about issues which seem never to change. Something can be done, we just need to make the effort.

The Newest Society of Engineering



If you have been to the fourth floor of E7 lately, you might have noticed a new addition to the Electrical and Computer Engineering department. They now have their own ECE society and legend has it that they are everything you would want your departmental society to be.

While most engineering departments in the school have had a society for years, ECE has just now created a society of its own. The conception of the Society took place about a year ago when after class one day, Kristopher Souza, an ECE undergrad decided approached Derek Wright, the professor who was teaching the class, who agreed that ECE needed a society. The whole department thought it was a good idea, but had no clue how to make it a reality. Souza took it upon himself to create polls on group chats to gauge how students would respond.

The idea was met with tremendous support and the people who founded the society ended up becoming the first executive team for the ECE Society, with Kristopher Souza as the A-Soc President. Executive elections for the next term are scheduled to happen at the end of this term. The executives are to

be spread across different years and streams in ECE. Through the elections, on and off stream executives will be elected. As an executive, the responsibilities, depending on the role, may include meeting with the department faculty, making ECE a more social program by holding events, updating the website, finding and recruiting people in the Society, and many more. Managing people is the main role of the President of the Society.

The Society runs a bunch of really fun events throughout the term. These included a kick off ceremony, a virtual reality night, bowling at Kingpin, and regular events called ECE Smashes where students can play Super Smash Bros in the ECE Society

lounge.

The Society also holds general meetings with the goals of ratifying big document changes, supporting events and getting feedback. These meetings are a great way to have your voice heard as an ECE student by bringing forward points of concern in the department.

The ECE Society is located in E7 4446 and their Facebook page is called UW Electrical and Computer Engineering Society. This is where they post all their events and announcements. The ECE society also wants to work with other societies and departments to build a community. If you want to get involved check out the Facebook page or simply go to the office!

Secrets of the Female Body



"I'm bringing booty back. Go ahead and tell those skinny bitches, 'Hey'." Do the lyrics ring a bell? It's none other than our favourite, Meghan Trainer, singing about how being skinny makes you a bitch. Now here is the deal, I am all about empowerment! Hell, bodies are beautiful in all shapes and forms and colours and you cannot convince me otherwise. But Meghan, let me ask you, did you really have to drag down other girls to feel better about yourself? I don't think so!

International Women's Day just went by last week and the biggest takeaway is this: we all need to stand together against them. By we, I mean us feminists, not us women. By them I mean sexist people. So, we can't be seen, or heard, dragging each other down, especially when it comes to body image.

We all have insecurities, we all want to change parts of ourselves and at some point, in our lives, we all look in the mirror and dislike what we see. Body positivity is a movement that enables us to be accepting of ourselves, and think what you may, it does not just apply to the female sex. Either way, I am here to tell you, that you may not know it, but you are beautiful.

Recently, a Tweet went viral about

a random (sexist) guy who decided to tell women how they should be. He said something about shaving, being skinny, being feminine, being submissive and whatnot. Now I do not want to give this person any credit or pay heed to him in any way, because mansplaining is an issue for another column. I just want to educate those of you who would listen. This may even be helpful to the people who have always thought of the opposite sex as somewhat of a mystery.

As a human identifying as a woman, I am going to break a little rule of mine and make this article real personal and talk about the seemingly taboo parts of the female body.

We have body hair. Some more than others. I know how women are portrayed in the media. The word shiny comes to mind. But seriously, you all, we could go the whole winter without shaving, barring events that require visible legs. Even then, we might just give you a glimpse of the gorilla that lives under these layers.

We have tummy rolls. Seriously, even the skinniest of us has tummy rolls, but so did Cleopatra, the most beautiful woman of her time. We are making peace with it.

We come in different shapes, forms and sizes. They have put us in different categories. I am told pear is a bad shape and an hourglass is almost perfect. So, whoever came up with this system, I am glad you did not go onto do better things because they would have sucked as well.



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The Iron Crossword

The Office

KIRSTEN EHLERS 1B BIOMEDICAL

				1_	I.					_	1			
		1		2	3				4	5				
				6		7	8	9						
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ACROSS

- 1: Greek God of war
- 4: Season 9 episode 10
- 6: What you serve ice cream with 10: With 36 down, paper company
- 11: Slithering reptile
- 15: Unit indicating workload of an employed person, acronym
- 16: What you eat ice cream with
- **21:** A rip
- 22: International organization based in Paris establish after 1973 oil
- 23: Regional director in charge of sale at Stamford branch
- **24:** There is do or do not. There is
- 25: Portion os nervous system with the brain, acronym
- developing a **26:** Organization

acronym

- **27:** Not all
- 30: File format that one may have for a textbook
- **33:** Sick
- 34: female sheep
- 35: Not a want, a
- **37:** Finish
- **38:** bristles growing from the ear of
- 40: Union for automobile labour in Canada and the US
- 42: Farming library in Tanzania, acronym
- **46:** Something that needs to be done 47: A division in Australia's Department of Industry, Innovation, and Science, acronym
- **48:** A shape in 1D
- 49: Choo choo
- economy, 51: Past tense of what ground hogs 55: Data plan for phones

do

- 52: Iron that supports the upper stone in a burstone mill, plural
- 53: Some people like the small of cut grass
- 56: Country singer famous for "You Ain't Woman Enough"
- **57:** Alter ego of Deadpool
- **58:** Green with

DOWN

- 2: Girl's name from the french to
- 3: short form of one of Waterloo's faculties
- 4: garland or wreath
- 5: Integrated Remote Neurosurgical System
- 7: The theme of this puzzle
- 8: Frequent
- 9: The magic word
- 11: Acute infection of the eye
- 12: Keanu Reevese in The Matrix 13: Musical recording made in
- analog before digital
- 14: Actor who plays Jim
- 17: Jim's love interest
- 18: Season with six episodes
- 19: Weird
- **20:** Where Ryan goes to work
- 28: Another way to say not new, slang
- 29: Estimating parameters of a statistical model, acronym
- Organization regulating
- engineers
- 32: Nevada Gold & Casinos **36:** With 10 across, a paper company
- **37:** The company's best salesman
- World's largest
- telecommunications company
- 39: Organization that supposedly spies on people
- 41: To have fun
- 43: Acronym for heavy metal band
- 44: In addition
- 45: Plural article in French 50: Short form of Canada's tenth
- largest province/territory
- 52: Starts as a temp for the office
- **54:** Fish eggs

Sudoku

#2019-04

MRIDU WALIA MECHANICAL

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	4						9
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		6	7				

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	1	4		3			7	
			1	4	7			
	7			9		1	3	
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			5	7				1
		2				3		

Very Hard

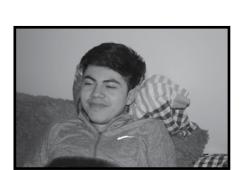
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		3					7	4
	4						3	
7	1					8		
5				4	9	3		2
4			1		3		9	
				7				5

Solutions for previous crosswords can be found on The Iron Warrior's website at iwarrior.uwaterloo.ca/distractions.

"How ready are you for spring?"



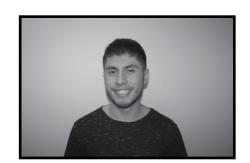
"Beyond ready!" Khloe Henderson, 1B SDS



"I already bought a bronzer." Xian Ghu, 1B Mechatronics



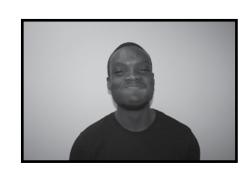
"Over the moon ready!" Sharon Tam, 1B SDS



"More than ready." David Acosta, 1B Mechanical



"My face says it all." Mateo Andrade, 1B Geomatocs



"Not ready, but excited!" Antonio Massina, 1B Arts