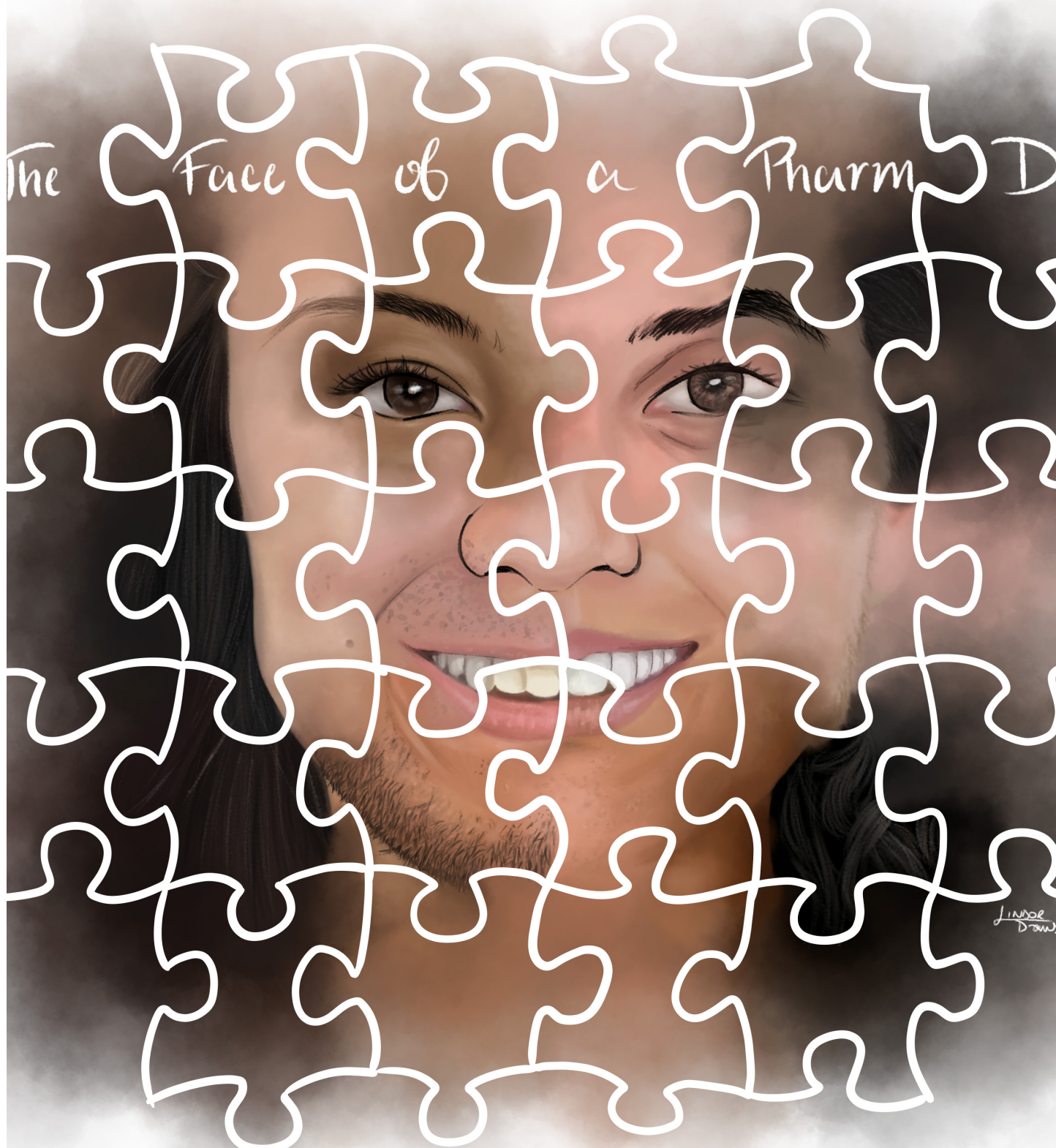


Monograph

Volume 21, Issue 5

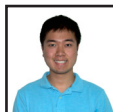


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EDITOR'S ADDRESS

Hey Phamilly !

As we move into the warm spring weather and the 2019-2020 school year comes to a close, we would like to present our final issue of The Monograph. In light of recent changes this year, this issue will only be available online. Nevertheless, the quality of submissions has been amazing as always and we will be ending the year off strong. As this school year ends, the next will begin soon, and we would like to welcome our new co-editors for the 2020-2021 year: David and Amar. We are confident that they will do a great job with continuing The Monograph for next year.

In this last issue, our articles feature a variety of topics including Pharmacist's Awareness Month, IPSF exchange reflections, clubs corner, video games, and many more. Last but not least, we are proud to feature our lovely puzzle, artwork, and photography submissions one last time this year. We hope you enjoy this issue as we approach the end of the semester and exams.

As our time as Monograph co-editors is nearing its end, we would like to thank our class reps: Joe, William, David, and Henry for your articles each issue and for promoting The Monograph to your respective classes. Thank you to our layout team: Kylin, Calvin, Brandon, Stephen, and Michael, for helping make the pages of each issue look impressive and neat. Thank you to Stephanie and Sunny for helping us edit featured articles. Thank you to all our writers, artists, and photographers for contributing content for The Monograph. Lastly, thank you to Pharmakon for providing high quality pictures for every issue and to our UPS webmaster Sunny for making each issue available online. The Monograph would not have been possible this year without you all.

Best of luck with the rest of the school year,



Shelby and Andrew
The Monograph Co-Editors
monograph@uoftpharmacy.com

UPS ADDRESS

Hey Pharmacy!

Although our time in the Pharmacy Building for the year has been abruptly cut short, we wish to thank you for all the support this year! It has been an honour to serve as your UPS President and Vice-President for the year 2019-2020.

It's been a busy year but we're so glad many students have participated in our numerous events throughout the year. Highlights from this year include the Back To School Mixer, Boat Cruise, Halloween and Holiday Socials, Semi-Formal, Lunch and Learns, PAM, our intramural teams, the many club events, and the beautiful Monographs!

First, we want to thank our faculty advisors Kenny Tan and Lachmi Singh for their support this year. Support from our faculty advisors and from the rest of the Faculty has made many of the events and initiatives this year possible. Fabian and Samantha have also shown impressive dedication and enthusiasm in their role as the next UPS President and Vice-President. As we pass down the torch, we can't wait to see what they will bring next year. We are proud, and have full confidence in them.

We also wish to thank every single UPS general council member who has made this year special. Every highlight of this year could not have been possible without the passion and dedication from our entire team. Thank you again for the most amazing year, and good luck on all your future endeavours!



JP and Gigi

UPS President and Vice-President
ups@uoftpharmacy.com

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CAPSI CORNER

Elaine Nguyen, 2T1 and Kristina Miclat, 2T2



As March comes to an end, it is hard not to think about how different this Pharmacist Awareness Month (PAM) has been in comparison to previous years. While we may not have been able to celebrate PAM with each other throughout the entirety of March in the way that we had planned, there was certainly a lot of pride in the pharmacy community this month. We are inspired and proud of the actions we have seen from practicing pharmacists and from you, our fellow pharmacy students, amidst this pandemic. Whether it be through encouraging proper social distancing, making it a point to share accurate COVID-19 information online, informing your friends and family about how to get their medications during this time, or taking on more shifts at the pharmacy, we have all contributed to raising awareness about the role pharmacists play in our healthcare system, and this is what PAM is all about.



CAPSI • ACEIP

To start off PAM, CAPSI and UPS hosted our second PAMBurgers Kickoff! Our newly appointed Dean, Lisa Dolovich joined us for the ceremonious ribbon cutting ceremony, with Allan Malek (Executive Vice-President and Chief Pharmacy Officer of the Ontario Pharmacists Association) and Nancy Lum-Wilson (Registrar and CEO of the Ontario College of Pharmacists) present to motivate students to advocate for the profession of pharmacy. We were also fortunate to have booths hosted by the OPA committee and EVOLVE, which educated students on pharmacy advocacy efforts and expanded scope, respectively.

We were excited to see so many students interested in participating in outreach events this year. If you did not get the chance to participate, we sincerely hope you will volunteer with us next year! The focus of these outreach initiatives was for students to educate the community on the role of the pharmacist and show how pharmacists play an important role in managing patient health. We hosted two main outreach initiatives:

1. Pharmacy Outreach Days (PODs): Pharmacy students ran educational booths at local pharmacies which educated patients on topics such as osteoporosis, diabetes, naloxone, blood pressure, and travel medicine. We were also excited to add a new topic this year – Asthma, with an emphasis on proper inhaler technique!
2. Kids in Medicine (KIM): Pharmacy students ran presentations on handwashing, allergies, and the dangers of smoking at Toronto elementary schools. Sexual health presentations at high schools were also offered, and our KIM subcommittee even developed a new presentation on Flu season, which we will be able to use in future years!

Other notable events included our annual Mock OSCEs for the third-year class, and our online Facebook cover photo contest! Thank you to all of the 2T2s who volunteered to help us run the Mock



OSCEs and ensure the experience was valuable to our participating 2T1s! We also loved hearing your answers to the question “What does pharmacy mean to you?” throughout the month. We hope you continue to use this enthusiasm to advocate for our profession and raise awareness about pharmacy, beyond Pharmacist Awareness Month.

Each year the International Pharmaceutical Students’ Federation (IPSF) runs a public health campaign during PAM! This year we were raising awareness for Diabetes and Healthy Living. In collaboration with the Pharmacy Muslim Student Association (PhaMSA) we had the unique opportunity to host an online speaker series about diabetes management during Ramadan. At this event we had the pleasure to hear from a local pharmacist and nutritionist who taught us how we can help support patients who fast during Ramadan. In particular, we learned about various healthy meal options and strategies to tailor medication and lifestyle management to each individual patient. We also ran an online health campaign where we gave students resources on how to maintain their physical and mental health while still practicing social distancing. We also asked students to contribute ideas on ways they work towards improving their physical/mental well-being while staying at home! Despite moving many of our activities to an online platform, we still learned a lot about helping patients with their diabetes management and promoting a general healthy lifestyle!

Thank you to everyone who contributed to this year’s Pharmacist Awareness Month campaign by helping us with promotion, attending events, participating in our online initiatives, and planning in the months leading up to March. Several students from a diverse group of pharmacy clubs have been hard at work over the last few months planning for UofT’s PAM campaign. While we were not able to execute our PAM campaign in its entirety, it was amazing to witness the hard work and unity of so many students and clubs. A special shout-out to all our PAM outreach volunteers and subcommittee members – with your help, we were able to expand on our existing outreach initiatives! All of the planning efforts that went into this year’s PAM will continue to make a huge impact for years to come!

We are so excited for Kristina Miclat to lead next year’s 2020-2021 Local CAPSI Council as Senior Representative, alongside Michelle Chaung as the Junior Representative. Finally, we would also like to acknowledge our class CAPSI representatives Aileen Liu (2T3), Michelle Chaung (2T3), Simran Sharma (2T2), Helen Huynh (2T2), Michelle Yee (2T1), and Bonnie Lam (2T1) for their extreme dedication and tireless work throughout the year.

Thank you for an amazing year and we hope you enjoyed all of the CAPSI events as much as we did!

♥ Your CAPSI Team

UPS ATHLETICS



*Matthew Lau, 2T1
Jonathan Ko, 2T2*

Hey Pharmacy! With the year coming to an odd end, we wanted to have a brief recap of this year's events. The tug of war at the UPS mixer saw a great turn out as usual with the 2T3s putting in the spirit. Soccer Cup was yet another success this year as the U of T team dominated the Waterloo side on their home field for the 3rd straight win in a row – a threepeat! The curling bonspiel was a ton of fun with a lot of new faces and the 2T2s showing the most spirit that day in terms of turn out. Last but certainly not least, the OPA Cup in Waterloo saw U of T taking home the cup for the first time in a number of years! This dramatic performance was led by our 2T0 veterans who won the cup for their first time! With a dominating 3-1 victory, it was surely a dream ending for the many fourth years on the team.

There were a number of events, the faculty vs. student basketball game and interclass dodgeball tournament, that were cancelled due to the current circumstances but the year was still great for athletics. Intramurals also had a strong turn out with a number of teams successfully making it to playoffs and inner tube water polo winning the championship overall!



As the Athletic Directors, we would like to thank everyone for coming out to our events and playing intramurals. We plan these events to give students a chance to meet their classmates and try something new. Most importantly, we want to make sports fun and help everyone find an activity they enjoy. With everyone staying home, we want to ensure that everyone stays relatively active as well. Pharmacy Athletics is posting a public google doc that allows you to track your activity each day and compare with other people in the faculty. Be sure to check it out on FB if you're interested! Stay safe and study hard, with the school year winding to an unusual close, we look forward to seeing you all back in the fall!

2019-2020 ATHLETES OF THE MONTH

October: Maddy Powers (2T1) - Women's Basketball Division 1

November: Perry Wyslobicky (2T3) - Co-ed Basketball Division 1

January: Anthony Van Osch (2T1) - Co-ed Volleyball Division 2

February: Vanessa Bisson (2T2) - Co-ed Volleyball Division 2

March: John Iovino (2T0) - Hockey

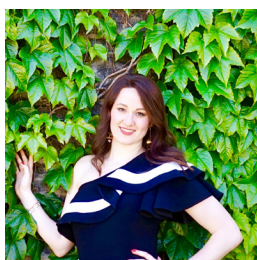
CSHP: A Year in Review



Hey everyone! This year, I had the pleasure of writing articles about hospital pharmacy for you. Let's have a recap of this year's articles. First, I spoke to Alysha Prata, a pharmacist at CAMH. Alysha was kind enough to give me a rare insight into pharmacy practice at a mental health facility. Alysha told us what she liked about her job and disclosed some challenges. Alysha also discussed some of the project work she has undertaken as a pharmacist at CAMH. Furthermore, she touched upon CAMH undergoing additions to its campus by adding new buildings and facilities. Little is still known about mental health as it has only recently become a popular topic of conversation, but Alysha gave us a glimpse of the pharmacist's role in mental health.



My second interview was with Cheyenne Matinnia, a current resident at SickKids and a graduate of the Leslie Dan Faculty of Pharmacy. Throughout our interview, the topic of hospital residency was heavily discussed. Cheyenne encouraged students to pursue interests you love and not interests that you feel pressured to pursue. She addressed the challenges of the increasing difficulty of the curriculum and the air of uncertainty that comes with being a resident. We also touched upon stress and how to mitigate it with intramurals, sleep, and conversations with friends. The takeaway from my conversation with Cheyenne was to never be discouraged from applying to a hospital residency program.



Matthew Lau, 2T1

Last but not least was my interview with 2T0 Andrew Henry. Andrew has accepted a residency offer at LHSC in London, Ontario and gave a student perspective of the application process. Andrew mentioned his adjustment to hospital APPE blocks, something we likely will all have to deal with to a certain extent. He also emphasized the importance of open house nights and residency info sessions. Andrew was heavily involved with UPS and played on many intramural teams while simultaneously captaining some. His advice to 1st years was to do the same, get involved. His advice to 3rd years was to attend residency info sessions.



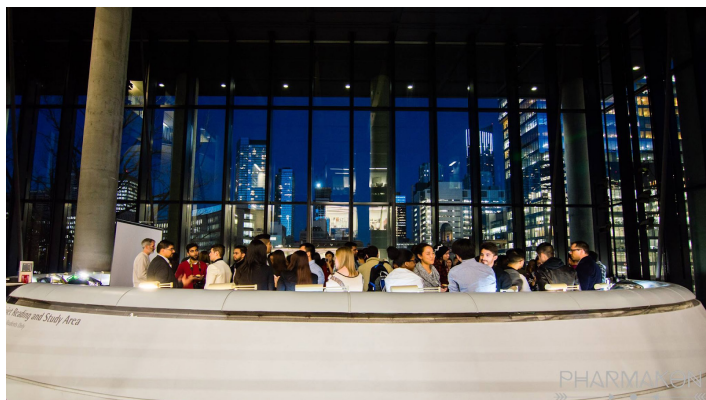
This article comes at a very strange time for everyone. With COVID-19 being at the top of news channels for the better part of 2020, almost everyone who is part of the faculty is staying home. While staying home is important, it is equally important for individuals to take care of themselves. Exercising regularly is crucial, and finding activities such as reading, music or gaming can provide invaluable sources of entertainment. We are all in uncharted territory when it comes to social distancing but it is important that we continue to practice it. The sooner everyone can work together, the sooner we can begin to speak about COVID-19 as a past memory instead of a present dilemma.



CSHP: In a Nutshell



Peter Zhang, 2T1



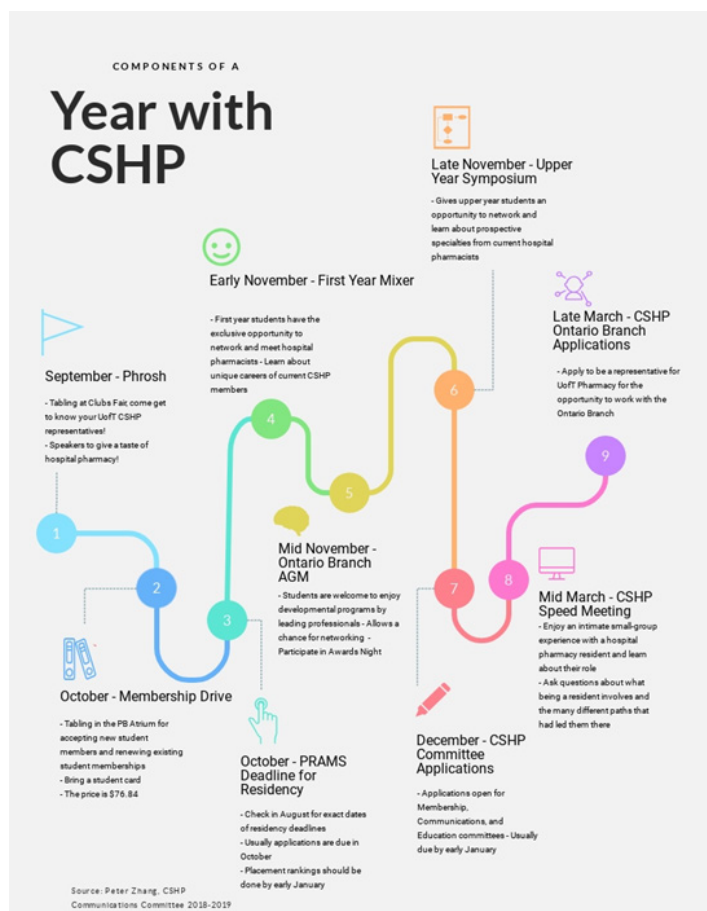
As this semester comes to a close, it is a good time to reflect back on the year. For the final article that I will be writing to the Monograph in my role with the CSHP, I feel that a great way to wrap up the year is to provide a general overview of CSHP in a nutshell.

CSHP student members can benefit from increased exposure, an expanded network, and the opportunity to make a difference in their profession. Some of these benefits come from attending the many events CSHP hosts throughout the year, which provides students the opportunity to network, and to ask questions to pharmacists who work in an institutional setting.

These events also facilitate a sense of mentorship and community within our profession. Students can acquire knowledge from these mentors who can teach us through their own experiences. While many people find networking difficult, or impractical at times, CSHP is a welcoming organization that focuses heavily on the professional development of its members and building meaningful relationships between professionals in the field of pharmacy.

An important question many pharmacy students have on their mind is, “where is pharmacy going as a profession?”. There have already been shifts in what it means to be prepared as a pharmacist working in an institutional setting. Some examples include the emphasis on BPMHs in MTM3 and the gradual movement towards providing institutional care in EPE2 where there had been an impressive expansion in hospital placements for second year students. Part of the motivations behind these changes come from advocacy at multiple levels. Even as students, there is room to engage in discussion and look for meaningful opportunities to shape how the profession will look five or ten years from now, when we are out there in our practices.

So, get involved, talk to your CSHP representatives, apply to sit on CSHP committees, apply for CSHP Student Awards, and apply for summer jobs with CSHP. The information to do so is definitely out there and even a shallow dive can provide pharmacy students with knowledge to benefit their career as a professional. Lastly, as this year concludes, think about what the next year may bring you and plan out where your next endeavour may lead you.



Learn From Home: OPA Professional Development Programs



ONTARIO
PHARMACISTS
ASSOCIATION

By: Arnold Ruste, 2T3

The Ontario Pharmacists Association (OPA) is passionate about the advancement of its members' careers with the provision of professional development programs that they can use in their daily practice as pharmacists. It is rooted in their mission to advance the pharmacy profession as a vital healthcare provider by providing such services to ensure excellence in pharmacy practice and patient care.

They are reliable providers receiving Accredited Provider status by the Canadian Council on Continuing Education in Pharmacy (CCCEP). Their programs are provided in various formats, such as in-class, online, or blended. Having these options promote accessibility for those with busy schedules, and those practicing far and wide across Ontario. In addition, they provide the opportunity of bringing in-class sessions to a particular region through an email request with the association. They offer many learning opportunities from a wide range of topics that include:

- Addictions
- Chronic Conditions
- Injections
- Medication Therapy Management
- Minor Ailments
- Pharmacy Management
- Professional Pharmacy Services
- Travel Medicine

While the target audience for a majority of their professional development programs are designed to support practicing pharmacists, they are open to those interested, depending on the prerequisites per program.

For pharmacy students, they provide programs through their Student Education Series. On February 10, 2020, I was able to participate in a session with

Kathleen Leach, RPh, leading the topic, We Are People First – Approaching Patients with Opioid Agonist Therapy with Dignity. It was an enriching session that explored myths about substance use disorders and opioid agonist maintenance therapy. They also explored the destigmatization and empathy required for patient interactions to ensure the comfort of patients with opioid dependence and substance abuse.

For pharmacists and pharmacy students that have found themselves with more free time during the COVID-19 pandemic, OPA has several free online programs that can be accessed through their website. Their online programs incorporate useful tools, such as case studies and reflective exercise questions. It is a great opportunity to enrich and equip ourselves with the knowledge required of practicing pharmacists in the frontlines of healthcare.

Online Programs Currently Available:

Introduction to Caring for Trans Patients in the Pharmacy: Provide information on key concepts and LGBTQ+ terms, empathy and understanding, healthcare disparities and barriers, and accessibility for trans patients. Register Here At:

<https://www.opatoday.com/224231>

Assessment and Management of Patients with Migraines: Provide insights on patient assessment, acute migraine treatment, and prophylaxis therapy options. Register here at:

<https://www.opatoday.com/224210>

Take-Home Naloxone Program at Community Pharmacies: Provide education on naloxone in the treatment of opioid overdose and opioid-related harm reduction strategies. Register Here At: <https://www.opatoday.com/224122>

Pharmacists as Invaluable Frontline Practitioners during COVID-19

By: Sera Lee, 2T1

These are unprecedented times, but it's also been a time where pharmacy professionals have provided essential services as invaluable frontline practitioners during the crisis. COVID-19 presents different challenges for the healthcare system and the pharmacy profession - from stockpiling of prescriptions that has caused drug shortages, to controversies around pharmaceutical cures, to lack of resources for healthcare workers. But in the face of this pandemic, pharmacists and staff continue to show up each day and provide crucial patient care, to each patient whose chronic and acute health requires attention.

Organizations like Shoppers Drug Mart introduced seniors-only hours to promote safe access for elderly patients. Many pharmacies also implemented reduced opening hours to allow pharmacy staff to sufficiently prepare their workspaces, including sanitation. Underlying the continued operation, there remained a tension around protecting patients while concurrently protecting pharmacy personnel from transmission of the virus. Being accessible providers in the community allowed for an influx of panicked patients visiting crowded pharmacies needing advice on their symptoms, without protective equipment or barriers to protect pharmacy workers from potential transmission. Some creativity introduced installation of plastic covers around the pick-up and drop-off areas, which has now evolved into plexiglass at many pharmacies to limit contact. These measures have allowed for pharmacies to continue caring for patients without a heightened risk or threat to their own wellbeing.

In line with the pharmacists in the community setting, we also recognize the hardwork of institutional pharmacists involved in the screening and treatment of COVID-19. They've similarly been at the frontlines of the pandemic planning, from human resource planning to ensuring adequate updated protocols and supplies for the pharmaceutical management of the disease. More hospital pharmacists have also been preparing to provide intensive care to critically ill COVID-19 patients. Overall, pharmacists have continued to care for patients already

in hospitals while preparing for the many more patients anticipated and many contingency plans. Furthermore, we acknowledge the hard work of all of the students at this faculty and others who have continued to learn and practice at the frontlines during this pandemic, and we are ever grateful for your commitment.

Practicing in the midst of a pandemic

For the purpose of this article, we reached out to all of you (our Leslie Dan family) to share your experiences, whether positive or negative, and any hardships or challenges endured. We believe that sharing our stories will unite and encourage us as a profession to acknowledge our critical role along with the sacrifices we make in these difficult times for our community and patients.

"The biggest difference that I have found has been how we interact with patients. Many patients we come in contact with are sick, but only now have we put in place procedures in place for how to interact with patients in order to protect ourselves (wearing gloves, masks, making patients stand a certain distance from the counter, scheduled disinfecting). It makes me wonder if some of these procedures will stay in place after this is all over."

(Chelsea Alder 2T3)

"At such challenging times in our society, it is our professional obligation as pharmacy students to be on the front-line, helping our patients and our pharmacy teams. It is also the responsibility of our health authorities and advocacy bodies to ensure pharmacies receive appropriate PPE so they can continue to safely operate and provide care. Furthermore, pharmacy owners must take appropriate measures to ensure the safety of employees who are providing care to unwell patients."

(Ghazaleh EA 2T1)

"I'm currently not working on the frontlines but I feel disheartened by that. I feel I should be out there in the community, helping the efforts of all the healthcare workers battling this pandemic. I wonder how many other people are in this same boat, of wanting to help but being unable to for one reason or another. I'm inspired by all those that go in each day and thank them for their service. "

(Anonymous)

"When a patient says, "Thank you all for being here and continuing to help us." It provides you the worth to bounce back from exhaustion and work! "

(Anonymous)

"A caregiver told me how much she appreciated that I took the time to answer her OTC questions instead of making her feel rushed. Then, she asked for my name :o. When she came into the pharmacy to pick up the OTC products, she asked for me to personally thank me!"

(Linda Pham, 2T1)

How OPA is supporting Pharmacists in light of COVID-19

Since day one when the coronavirus first came onto our radar, the Ontario Pharmacists Association has been acting proactively to ensure the best possible course for Ontario's pharmacy professionals no matter the light of the situation. They have been participating in daily calls with the Ministry of Health (MOH), discussing consistent updates and action plans regarding COVID-19. On top of this, OPA has been tirelessly advocating for practice changes in these unprecedented times. Through their advocacy work, the MOH Executive Officer has announced 2 policy changes:

1. Emergency Virtual MedsChecks, to safely and effectively resolve urgent medication problems

2. 30-day Limit on Prescriptions, to ensure the safety of our drug supply

Moreover, many pharmacists and technicians have been anxious due to the lack of PPE access in their working environments, as this is a crucial necessity considering the risks they place themselves in serving patients every day. Nonetheless, OPA has been able to secure adequate PPE supplies through a retailer for pharmacy professionals in Ontario, enabling them to share their vital knowledge and services, while recognizing their safety as a significant priority.

Considering the healthcare needs of Ontarians in this current situation, OPA continues to advocate for the accelerated implementation of pharmacist common ailment prescribing, point-of-care testing for pandemic and infectious diseases, prescriptive authority for emergency chronic medications, and for the sharing of patients' laboratory test results to pharmacies. Lastly, OPA is also supporting our pharmacy professionals through their creation of a comprehensive COVID-19 Pandemic Guide for Pharmacists, their Practice Support Network, and Pharmacists' Matters OPA Podcast discussing hot topics surrounding pharmacy's landscape, such as COVID-19.

COVID-19 transformed into a matter so unimaginable at exponential timeframes, completely flipping our world upside down. Although to different extents, every one of us is being affected in our lives by this disease, and we do not know how long this pandemic will last or whether we have even experienced the worst of it all. Being frontline providers, pharmacists are inspiring and encouraging each other through these challenging times, and not hesitating to reach out a (gloved) hand to those who need it. If there is one positive aspect, we can foresee that by the end of this pandemic, pharmacy as a profession will be united like we have never seen before, which will only strengthen us to successfully advance our profession and capably face any future challenges to pharmacy that may arise in the future.

CAPSI OUTREACH: Kids in Medicine

Duresameen Zahoor, 2nd Y1
 Edited by Jeremy Rousse-Grossman, 2nd Y1



Through CAPSI's Kids in Medicine Program, two pharmacy students give a presentation to an elementary or high school class on various topics including the hazards of smoking, allergies, hand hygiene and sexual health. These topics are important for kids or teenagers to be aware of so they can make informed choices at the right time. Although I am sure these topics are touched upon during their curriculum, I feel like health care providers have a unique role in health promotion. We are experts in health topics, and I am passionate about promoting them.

This year, I participated in an Allergies outreach to a class of grade 4/5 students. I found the first question we were asked quite memorable. When we asked students if they had any questions about pharmacists, several hands immediately shot up. When I chose a student, the question they asked was: "How much money does a pharmacist make?!" My partner and I attempted to tiptoe around the question at first, figuring it might not be appropriate to engage that type of question. However, the teacher was adamant about us answering, explaining that they wanted the class to have an idea of the information and that they were trying to instill economic literacy in all their students from a young age. The entire experience was quite eye opening. It amazed me how advanced these elementary students were. Looking

back, I don't think I was nearly that advanced at their age; it really made me appreciate our current education system. During the presentation, we explained the signs of an allergy and we handed out an EpiPen demonstration for the kids to see what it looked like. A lot of them wanted to know how to use the EpiPen, so we encouraged them to pay a visit to their local pharmacist. A lot of the students did not know what an EpiPen looked like, so I am glad that we could be the first people to show them.

Outreach is a great way for us (pharmacy students and soon-to-be pharmacists) to become involved within our communities. It is hard to make time to fit these into our busy schedules, but it is highly rewarding. The Kids in Medicine program provides schools with an interactive activity that will help students make healthy choices. Pharmacist Awareness Month in March is a great opportunity for us to advocate for our profession. By reaching out to the general public, we can explain our role in the healthcare system and make the community aware of our expanded scope practices. I had a good experience and I highly encourage other pharmacy students to give it a chance. Each presentation comes with a presenter's guide and a video so it isn't as high pressure as it may sound.

Volunteering at CAMH

Edwin Cheung, 2T1



MARCH IS Pharmacy Awareness Month

In the midst of Pharmacy Awareness Month, growing concerns of COVID-19 eventually led to the announcement of a pandemic. Unfortunately, upcoming events with PAM would be cancelled among all the other chaos upturning our lives. Luckily, I had signed up for an earlier date to volunteer at CAMH. To be honest, I really just signed up on a whim for the UPS point. I never had a particular interest in mental health, but at the end of the day it was a great experience. Essentially, our event involved educating the public and advocating for pharmacy. We had pamphlets on 7 topics such as schizophrenia, cannabis use, and anxiety. Anyone who passed by could join and spin our wheel to land on a random topic. Then they would play a bit of trivia and win some prizes for participation. The key point really was spending time with the public. Plenty of normal people struggle with mental health under the surface. There was a great sense of community in that patients wanted to share their stories and achievements. The pharmacists explained that after patients finished their programs, they would miss the team and familiar faces. They would often come back just to hang around the café and talk to their peers. Chatting in itself is thera-



peutic and those motivational interviewing skills really are important! During the event we were able to speak with other staff as well as several pharmacists. They were all so friendly and open to sharing their experiences. By working in mental health, you get to work with familiar patients long term and really see the impact of your work.

For me personally, getting to chat with enthusiastic professionals helped change my perspective and spark some interest in the field. As a final message, I would urge everyone to volunteer for these kinds of events. It's not a UPS point experience like attending another lunch & learn but it's a fresh and immersive experience.



"MOMMA"

BEARS:

APPE MEMORIES

by Tom Wang, 2T0

My most memorable APPE experience occurred during my first rotation at Princess Margaret Cancer Center. I was assigned to the leukemia floor and handled hematologic cancer patients. It was a very challenging rotation working with so many complex patients especially as a first rotation, but with much hard work and a wonderful preceptor I was able to make the most of the rotation.

The event in question occurred during my final week. I was called on to do a BPMH by a pharmacist on the unit adjacent to the one I normally worked on. This was not a new experience for me as I had done it countless times throughout the rotation. What was new however, was the age of the patient, an 18-year-old girl with Burkitt Lymphoma. All the patients I had interacted with up to that point had been older adults.

The patient was not awake during the BPMH, so it was her mother who I spoke to. She looked very tired, and I later found out that she had not slept for 2 days staying with her daughter overnight during her treatment. She was clearly very distressed due to the whole ordeal.

During the BPMH she would occasionally glance at her daughter and then fight back tears. We would take a little break every time she did so. During one of those breaks I would look around the room, I saw get well cards written by the girl's friends, balloons, pictures and memorabilia cheering on the Raptors (this was during their championship run). During the end of the BPMH I asked about her daughter's insurance coverage for her medications to which she told me that she had none. OHIP+ had recently been amended and because of her University benefits, she no longer qualified to get her medications covered. It was when her mother told me this that she finally broke down. All the tears that she had previously held back had come out at once and before I knew it, they were running down my face as well.

This had hit quite close to home for me as I was also in a similar situation with this girl when I was her age. When I was 19, I had major surgery and was hospitalized for about a week. Like this young girl, my mother stayed with me overnight at the hospital as well, sleeping on a small couch that the nurses had brought in. Like her, I also had received get well cards and balloons that were sent by my friends. It was at this moment that I realized that this woman crying in front of me was the exact same as my mother 4 years before. Like my mother, she had also received the earth-shattering shock of her child being afflicted with a life changing diagnosis. Like my mother, she had also experienced the agonizing torment of waiting while the life of her child was on the line. Like my mother, she had also felt the uncomfortable sensation of the loss of normalcy.

I had always been appreciative of my mother's support through my ordeal, but it was on that day that I truly began to understand the full extent of what was done for me. After the BPMH was finished I told the girl's mother of my own experience and the support that my mom had given me. As I left the room we exchanged goodbyes and she said, "Us mamma bears always look out for our kids".



As I reflect back on that day, I hope that young girl was able to overcome her situation as I had mine. I hope that she had the support of her family and friends through that difficult time as I had with mine. I hope that she is able to have the same opportunities and experiences in life that I had. I hope she is able to leave a lasting impression on the world during her lifetime as I want to leave with mine. Finally, I hope that one day she will understand and appreciate the full degree of her mother's love.

LETTERS TO MONOGRAPH

A FINAL FAREWELL

Narthaanan Srimurugathasan ,2T0

And that's a wrap. 3 years, 6 months and 27 days after officially entering the program, my journey as a pharmacy student has come to an end. It's been quite the roller-coaster ride, with many unexpected twists and turns along the way, but it was precisely these experiences that made my time in pharmacy school truly remarkable.

A few years ago, I would have never imagined I'd be here today. I remember attending the MMIs, feeling underdressed in a shirt and tie amongst the plethora of applicants in suits. I was nervous even after getting an offer of admission as I hardly knew anyone entering the program. That all changed during the CPR session in August. There, I met some of the closest friends I have to date.

In many ways, I felt like I was back in high school once the program started. I had all my classes with the same 240 individuals, a stark contrast to undergrad. We all sat in cliques in the lecture halls, just like the average high school lunchroom. Yet, despite these setbacks, most of us still got to know each other, either through labs, extracurriculars, or because someone sat in "your seat" by accident.

There were many unforgettable moments during my time in this program. In fact, I thought of well over fifty while brainstorming for this article. While I wouldn't necessarily say these are my top memories (as each experience was uniquely special), here are some highlights:

1. Printing out chapters of CTC and CTMA to bring to Derm/Endo panels.
2. Spending countless hours videotaping yourself fake-administering an IM injection, only to realize that you still don't know how to administer the flu-shot.
3. Molecular pharmacology. Need I say more?
4. Having a false sense of reality after acing the first midterm of first year because the prof had gone through all the questions in class prior to the exam.
5. Guessing what pathways to draw on the Toxicology exam.
6. Failing an MTM lab because you deviated from the CTC.
7. menti.com.
8. Meeting a new person from your class that you didn't know existed each time you write an exam.
9. Tilting your head to view the lecture slides because the guest lecturer decided to use portrait orientation.
10. Listening to the introductory remarks on the Pharmacotherapy Process online modules.

Recently, these memories and many more, were put to a sudden halt. Rotations have been cancelled, leaving some of my classmates with a mere three weeks of hospital experience. PEBC exams have been postponed, forcing us to seek temporary employment as student loans continue to accumulate. And there will be no opportunity to walk across Con Hall or take pictures in gowns with your friends and families.

While this may seem like a tragic end to an era, none of this will matter in a few years. Rather, I will cherish the fond memories from the program, the friends with whom I intend to stay connected with, and my hard-earned degree which will hopefully keep me employed. Farewell PB – you will be missed. But this is not an end, merely a new beginning... as a pharmacy intern.



Compounding Opportunity & Mentorship Program for Pharmacy Students (COMPPS)

Chelsea Chow and Stephanie Lau, 2T2
COMPPS Co-Presidents

As this school year comes to a close, we find ourselves in unusual times. Many of the events that clubs had planned for PAM have been cancelled, PB is closed, and there is nary a lunch and learn in sight. Certainly, it was not how we imagined the year going when we took on the roles of COMPPS co-presidents last summer. While we did anticipate that there would be challenges, a global pandemic did not make the list of potential obstacles.

In all aspects of our lives it feels like everything has been thrown off, and for us, COMPPS is no exception. Though it is easy to focus on everything that has been disrupted by COVID-19, the days at home have also provided us with the opportunity to reflect on what the year so far has been.

It has been a year of new relationships; this year we found a new contact with whom to organize tours at Patheon Fisher Scientific, and forged a new partnership in industry and co-hosted a workshop with Galenova. Through these new relationships, we were able to have students see pharmaceutical manufacturing at the industry scale, and compound a new workshop formulation in an interprofessional environment with our future pharmacy technician colleagues. We were also able to have Peter Davies from St. Michael's Hospital come in and teach us about how the implementation of new NAPRA Compounding Standards are affecting real practices in our first ever dinner-and-learn event.

It has been a year of many workshops; this year we created two new workshops for compounding gummy bears, and capsules, and adapted our suppositories workshop for making rectal rockets. Students in our workshops, and much of the executive team themselves, delighted in discovering new colour combina-

tions for gummy bears and agonized in finding out how frustrating it is to break your rectal rocket in your mold. (But when you finally get one out of the mold intact, it's the most satisfying thing in the world!)

It has been a year of expanding COMPPS online; for the first time we are holding our Compounding Expert Q&A panel as an online webinar-style event that is open to everyone, everywhere. We also loved seeing students boast about their compounding workshop products in our Facebook photo contests and enjoyed sharing an insider's view of our formulation testing on our new Instagram page. It has been a year of planning multiple events at the same time, dealing with new space restrictions, and trying not to run the club into debt. It has also been a year of having the best executive team you could ask for backing you up through all of it. We're grateful for all the hours that executives have put in for club meetings, lab inventories, formulation testing, Monograph articles, event promotion and planning, registration management, and other demanding tasks. To our team: thank you for making this an amazing year for COMPPS - none of this would be possible without your hard work, dedication, and passion.

And to everyone else, thank you for coming out to all our events this year and showing how much passion you have for learning about compounding. We hope to return next year (in PB, preferably with pizza, in a group of 50 or more) to bring you what we couldn't this year: a spotlight event on sterile compounding, a compounding mentorship program, and (of course!) more workshops. Until then, we hope you stay safe (and sane) and enjoy your summer!



CLUBS CORNER

Embracing Ventures and Orienting Leaders to Value Expanded scope (EVOLVE)

Rami Al Khouri, 2T2



The Fight Against Opioids

The opioid crisis has become a critical epidemic in Canada and the United States over the last decade. The national death toll from opioid-induced overdoses reached a record high last year. The United States and Canada rank first and second highest for consumption of opioids per capita worldwide. In August 2017, President Donald Trump officially declared the opioid crisis a “national state emergency”. Rising rates of opioid abuse carry a heavy burden for patients and healthcare providers alike. In light of such a crisis, it is crucial that all healthcare providers contribute to executing specialty-specific strategies to reduce, educate, and aid in opioid misuse-related incidents.

The impact of opioid misuse has caused serious clinical and economic complications on patient management and public health. In order to develop a robust system to counter opioid misuse, one must examine the implications. Firstly, and perhaps most importantly, adjusting opioid accessibility regulations. It can be very difficult to limit the supply of prescription opioids in circulation while balancing patients’ needs for pain treatment. Secondly, addressing the economic burden due to opioid misuse incidents resulting in poor health outcomes. A study conducted in the United States in 2013 demonstrated that the aggregate costs associated with cases of opioid abuse/dependence and fatal overdose were over \$78.5 billion. Lastly, reducing the frequency of unintentional opioid addiction and overdose. In 2016, over 21 million prescriptions for opioids were issued in Canada. Pharmacists, in particular, are major players in combating opioid misuse. Pharmacists possess the knowledge and the skills necessary for assuming an important role in substance abuse prevention, education, and assistance. In a systematic type of organization, every member of the healthcare community employs their area of expertise to develop a patient-centered approach to better serve the public and improve the quality of life of opioid misuse victims.

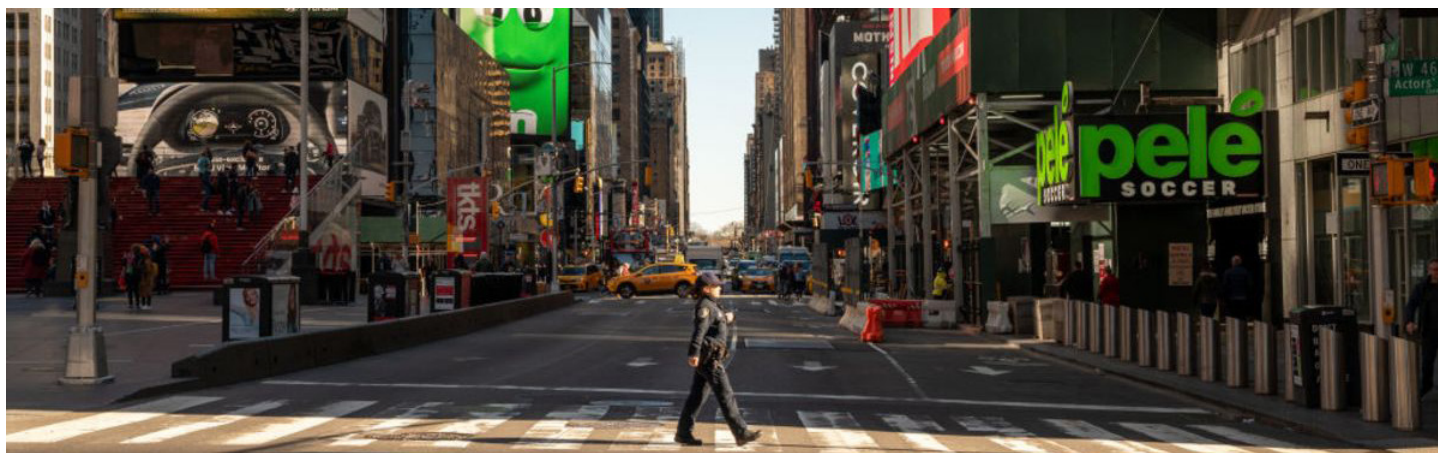
The healthcare system instated many changes to existing policies and regulations to better accommodate the interprofessional approach. For instance, pharmacists are the most accessible healthcare professionals and are experts in the field of opioid handling. Pharmacists can advise on reducing risks, overdose treatments, and addiction management. Pharmacists also have access to patients’ medication records, thus allowing them to identify high-risk patients earlier than other health care professionals. A breakthrough in the fight against opioids took place in March 2016, when Health Canada announced the decision to change the accessibility of the drug naloxone to a schedule II drug. Naloxone is an approved antidote for opioid overdose. Increased access to Naloxone for individuals who have increased exposure to opioids has effectively decreased the frequency of opioid overdoses. More importantly, pharmacists discuss personalized therapeutic plans for opioid addiction and pain management with patients individually selecting the best treatment option and ensuring patient safety and reduced risk of opioid misuse. Now that naloxone does not require a prescription, facilitating access to naloxone beyond community pharmacies and health centers, especially in rural and remote areas, is a vital next step.

The opioid crisis has become a state of emergency, and health professionals from different specialties have to be part of the solution. Growing concerns over therapeutic and economic burdens has shifted the scope of the healthcare system to a more systematic individualized interprofessional approach. Recent efforts and regulations reinforced regulatory colleges on the various healthcare disciplines to combat opioid misuse and have led to a significant improvement in mortality rates and economic spending. Likewise, the expanded role of pharmacists and the increased access to naloxone makes me confident that a systematic-personalized approach is most suitable in combating the opioid crisis.

HEADLINES IN HEALTHCARE

Thoughts about the COVID-19 Pandemic – A Pharmacy Student's Perspective

William Nguyen, 2T1

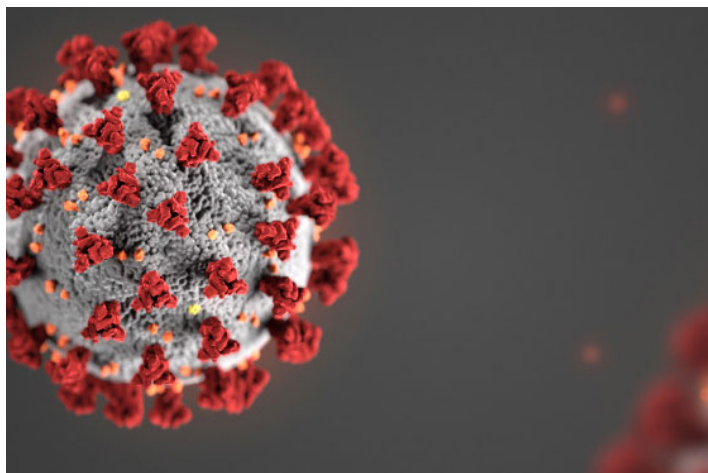


From March 16 until April 3, the University of Toronto cancelled all undergraduate and research-stream Masters and Doctorate courses across all three campuses. This decision came as no surprise after the closure of all publicly funded elementary and secondary schools in Ontario following the declaration of COVID-19 as a pandemic by the World Health Organization. Professional programs were a notable exception.[1] As a 3rd year student currently in the PharmD program, not knowing if classes would be suspended on Monday was stressful. I am always worried about the potential of contracting the virus because it can affect family, friends, social and work life.

The decision by the University of Toronto was the current move from a public health perspective.[2] First and foremost, it is a pragmatic approach to controlling COVID-19. The ideal way to control the infection is to stop its transmission as quickly as possible.[2] Treating a large number of cases at once overwhelms the healthcare system. [2] Doctors, pharmacists, nurses, and other healthcare practitioners are finite resources that need to be healthy in order to provide excellent care. More importantly, slowing down the transmission gives healthcare workers, pharmaceutical companies, and authorities time, resources, and better treatment options to prepare for dealing with the outbreak.[2] Currently, no vaccines are available and the earliest human trials would occur in July or August with trials occurring in 2021 at the minimum, making it critical to slow down the transmission.[3][4]

A second major reason for social distancing stems from solid evidence in the scientific literature related to such practices, collectively known as social distancing. For example, during the H1N1 flu pandemic in 2009, widely known as “Swine flu” by the media, mandatory school closures and cancelling events lead to a 37% decrease in the transmission of the virus in Mexico.[5] In China where COVID-19 first originated, social distancing has been observed to reduce transmission, especially in areas outside of Hubei Province where COVID-19 first originated.[6] New infection rates have been declining for more than 2 weeks.[6] This was shown in a study published in Nature where Wang and colleagues found that COVID-19 had a R_0 value of 2.6 in China before their strict quarantine measures were implemented and R_t of 0.9 after implementation.[7] R_0 and R_t are reproduction numbers that measure the average number of people that an infected person can infect without control measures (R_0) and after control measures (R_t) respectively to determine how effectively the virus can spread.[7] Therefore, one can compare these values to determine the effectiveness of control measures. If R_0 or $R_t > 1$, it means that the infected person can infect more than 1 person, making it a self-sustaining infection. Because the researchers found that R_t decreased to less than 1, the virus could no longer self-sustain and will subside, as illustrated by the decrease in the new number of cases in China. These studies illustrate that social distancing measures such as closing down the University of Toronto, are effective strategies. It would be unfair to solely focus on the negatives of the quarantine in

China; there is a balance between protecting the public and minimizing adverse effects.



With the recent declaration of COVID-19 as a pandemic by the World Health Organization on Wednesday, March 11, and closure of schools, I believe that the university gave students and faculty enough warning of a potential closure. However, this was not communicated well since I only knew about their contingency plans through word of mouth from a professor during one of my lectures. A better method would have been to provide a notice to students about contingency plans such as online learning to prepare students for a better transition to it. Despite preferring the face-to-face contact that in-person lectures provide, safety is of high concern and I am optimistic that the course contents will still be taught properly using online platforms. My only concern would be that there could be some inequities for some students that either do not have a computer or laptop at home or have unreliable internet connections. I feel that clear communication, standards, and procedures between students and professors is crucial during this time.

As a pharmacy student, I was initially afraid of COVID-19, much like the general public. There was a lack of communication from healthcare authorities and institutions and I feel that my support was mostly from friends and family. This was particularly notable in the media where the COVID-19 cases are dramatized. They failed to include statements from public health or universities and did not mention where to consult reliable sources with the proliferation of false reports and news on social media. However, as pharmacy students and future healthcare providers, it is crucial that I and other pharmacy students educate the public about this. We need to use our specialised knowledge that we learned in pharmacy school to help the

public. It is our duty to educate the public; pharmacists and pharmacy students work in pharmacies and they are the most accessible healthcare providers. After all, the biggest threat of COVID-19 is fear and panic. COVID-19 is not an individual problem. It is a global health problem that transcends boundaries and therefore requires a global, coordinated, evidence-based solution at all levels, from individual to provinces and countries.



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A COVID-19 Isolation Diary

David Czosniak,
2T2



Day 1: Today the university has officially decided to cancel classes due to Coronavirus. It makes sense, it's important to protect the students and class attendance has been poor recently. It was poor before COVID-19, but it's poor now as well. I'm glad I finally get to sleep in though! I can now get some decent hours of sleep with all those late nights pretending to be productive. I think I'm going take today off though. It was a tough midterm season and I deserve a break.

Day 2: Oh my god, I am so far behind on school! I have all those care plans to catch up on, all my courses have posted lecture recordings, and now I have new assignments to do to replace the exams that have been cancelled. How am I ever going to finish all this work? So much stress and so little time! I'm feeling a little tired though, I think I'll take a nap.

Day 5: I actually turned up to the live recording of class on time today. The best part is that I don't need to get out of my pyjamas to listen to it. I wonder if the professors are also still in their pyjamas? Can they see me in my pyjamas? I should probably put a cover over my webcam.

Day 7: All that time spent on Facebook not studying has finally paid off. I decided to make a recipe from one of those tasty videos today. It took twice the time they

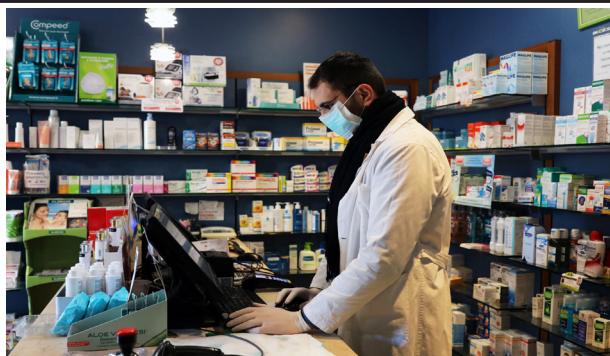
said it would, was pretty impractical to make, and tasted mediocre, but at least I have a nice picture for my Instagram.

Day 10: I've become pretty productive these days. I caught up on most of my work and have even started studying for exams! Now I just need to start memorizing the antibiotic spectrum again. This should only take another month or two this time around.

Day 12: I've started to run out of food. All I have left is some stale bread, some peanut butter that I don't remember buying, and a can of soup that expired in 2017. I also have a bunch of Corona that I bought ironically at the start of the pandemic. I don't know what to do now, I don't want to go outside to get food (mostly because I'm super comfortable right now), but I'm starting to get desperate.

Day 15: I have run out of paper to write my notes on. All is not lost though; I've started writingw out my notes on the excess toilet paper that I have. At this rate I'll be able to make notes for the next five years, so things are fine.

Day ∞: They have finally announced that isolation is over tomorrow. It couldn't come at a more perfect time. I have finally mastered mol pharm.



A Pandemic: Why we need Pharmacists!

Julia Giannini, 2T3

Coronavirus; a household phrase. Everywhere you turn, news and mass media coverage from around the world fill our screens. The world is at a standstill. People are in their homes. Businesses are closed. Health, handwashing, and social distancing have become our main topics of conversation. Through it all, most of us think of the incredible work by health care professionals around the world. As the pandemic evolves, the hard work and sacrifice by these heroes has remained constant—but throughout this entire ordeal, essential players that may have been overlooked are the pharmacists. Pharmacists are considered primary care, first line health care workers. With pharmacies being considered an essential service, drug stores around the world are staying open and pharmacy staff are working day in and day out to meet the increasing demands of their patients. Now more than ever, with clinics and hospitals being overwhelmed, people are frightened and uncertain of what will come next and are instead turning to their local pharmacists. Pharmacists are providing first line care through increased prescription fillings, the sale of essential hygienic and disinfectant products including hand sanitizers, soap, masks and gloves, and through answering a surge of health-related questions. With many people unable to see physicians, pharmacists have taken on this increased role to ensure necessary prescriptions are refilled or adapted, as well as providing readily available advice and support to patients with nowhere else to turn.

This is no small task. With pharmacies experiencing increasing traffic, pharmacists have had no cutbacks on hours, no breaks, and no choice but to remain working. With the government urging us to self-isolate, pharmacy staff are unable to do so, and are putting themselves at risk of exposure to the virus every single day at work.

Because of this the Canadian Pharmacists Association is asking the Government to consider the major gap pharmacists face as front-line workers in this pandemic and ensure their safety is a priority. The association is urging provincial governments to provide pharmacists with the support they need to continue to serve the public safely. Although personal protective equipment (PPE) is scarce, pharmacists should be recognized as another top priority for PPE allocation. If pharmacists become ill and are forced to close their stores, this could impact thousands of Canadians.

It is also quite clear that the most frequented customers of pharmacies are the elderly, and notably, our most vulnerable population. The association is also urging governments to consider expanding their testing protocols to pharmacy staff, to prevent transmission between both staff and patients.

A last impact that most people fail to consider is that of mental health, to which pharmacists are among the most vulnerable to suffer. Every day, pharmacists are putting in long hours, risking potential exposure for themselves, their loved ones, and their patients, which can be quite terrifying. We depend on these professionals to step up right now, to be resilient, and to continue to work despite these fears, and now they need the Government to be there for them. Simply providing mental health support in these times may go a long way.

During times like these, pharmacists have stepped up and taken on a huge and daunting role in the fight against the Coronavirus, and, as with all other health-care professionals, they should be increasingly recognized and supported for their efforts.



COVID-19

Amar Deonandan, 2T3

If you asked me in September how I'd be "enjoying" April, I would've said the exact same thing as last April. I would have told you how I would be enjoying longer daylight hours, enjoying the warm weather, and wrapping up classes just before exams start. Well the good news is, I can still do those things. The bad news is—I'm stuck indoors. But, it's a necessary inconvenience to slow the spread of COVID-19 as you can see around the world, and some parts of the world don't have it as well controlled as us.

Most of my days have remained pretty well...unchanged. However, I don't have to wake up early in the morning to catch the GO train, I don't have to drive unless I'm going to work, and I can spend a lot more time now studying for class. If I actually use that time to study for class is another story.

When I'm not studying for class, I usually spend my time either on Youtube watching 10-year old videos the algorithm thought would be good to watch today, gaming on Battlefield 3 or Minecraft (shoutout to Misha for running a server for us), or working out (I do mainly cardio if anyone's curious).

While finding the motivation to study for class is a lot harder than when life was more normal, it is nice having greater access to recorded lectures to study from. The comfort of listening to lectures in bed is great, provided I don't fall asleep 5 minutes in, and yeah.

I know these aren't the most comfortable times for any of us. Without many places to meet with friends, shop, or eat, the next few weeks aren't going to be easy for us to sit through. But when looking at the big picture, it's to make sure we're all safe and healthy and hopefully we all have our ways to make the most of this.

As Uncle Iroh says, "Life happens wherever you are, whether you make it or not."



I will admit I was painfully unaware of the global implications of COVID-19. I went to Puerto Rico with my friends during Reading Week, with no worry. COVID-19 was only on my radar at the end of my trip when we had to go to customs and declare we did not have any cold or flu symptoms. It was not until the third week of March when I began to worry. I will admit at first it was a selfish worry. I was worried about how my schooling would be affected and upset that I had to cancel my club's event we have been planning for months with the Peer Mentorship Program. It was the last month of my academic career that I could spend in class with my friends. I had many plans; I was supposed to go to OPSIS, do Kids in Medicine with my friend Jason, and volunteer with another friend Rosa at CAMH.

As time went on, it became evident how selfish I was being. I started to worry about my grandparents who live in Markham alone, and my father who is a senior and a working pharmacist. That Friday after class was cancelled I had one last meal with my friends. It was a hard pill to swallow, knowing I would not see the people I learned to love, and who supported me through hard times over the last 3 years.

The week after was chaotic. My little sister had been kicked out of her university dorm, so we had to move her out the next Saturday, and I had to move my stuff out from Toronto. On Sunday my two other sisters picked up my eldest sister and her cat from Montreal, while I worked with our father.

Things have really changed. Many of our classes are online. Many of the professors have continued to hold classes online. This is the most I have ever slept through class. I am constantly bored. However, some good things have come out of this. Many of our professors have been both kind and accommodating. My family has gotten closer, and my sister and my dad have started to talk to each other again. All in all, I just hope as a world we grow together and learn from this pandemic and everyone is doing okay.

COVID-19 and the Movie Business

By: Joseph Correia, 210

Let me preface by saying that I am aware that COVID-19 is affecting a lot more serious issues in the world than the movie industry. However, since those have all been addressed in other news outlets and to be frank, I don't know much about the economical implications of all of this, I would just like to discuss its effect on the movie industry. Let's start with movie theatres. At the time of writing this article, Cineplex and all of the independent movie chains have closed. This has detrimental effects on theatres because despite the "big box office" numbers we hear about each week, the theatre industry does not necessarily reap the benefits of these billion dollar movies. In fact, its margins are very thin. Only about 52-56% of the price of a movie ticket goes to the theatre with the remainder going to the movie studio during the first few weeks with that percentage rising in the later weeks to compensate for the smaller audiences. Since the dawn of streaming, much of the remainder goes to sustaining and improving the movie-going experience (ex. reclining chairs, high picture quality) leaving little left for a theatre's bottom line.



lag time between when theatres open and when they can expect to reach a high volume of ticket sales.

While many movies are contractually obligated to stay off streaming services, or hardcopies for an agreed upon time frame (usually around 3 months), this rule is no longer applicable since movie theatres have shut down. For example, the film *Onward*, a huge Pixar name, has gone to Disney+ after less than one month of a theatrical run thereby bypassing this arrangement. This not only has negative consequences for theatres, but also for movie studios. For example, the last Pixar film *Toy Story 4* made 1.073 billion dollars at the box office. This is a profit margin of around 800 million given that it was made for around 200 million dollars. I am not including distribution and advertising costs so this is a rough estimate. *Onward* was made for approximately the same amount of money, but instead of gaining revenue from box office, Disney must rely on *Onward* to be able to increase subscriptions in order to cover their losses. This is an unlikely situation given that the average moviegoer is not likely to subscribe to a streaming platform for one film. For Disney, this isn't that big of an issue given that they are easily one of the most profitable studios in the business, but it can be catastrophic for other studios that are facing the same challenges.

The impact of this virus on the economy will likely be felt not only by movie theatre chains, but by the thousands of businesses across Canada. Hopefully, when all is said and done, we can go about our lives and support our local movie theatres and businesses in the not-too-distant future. While streaming has kept me sane during these isolated times, nothing quite compares to the communal experience of watching a film on the big screen.

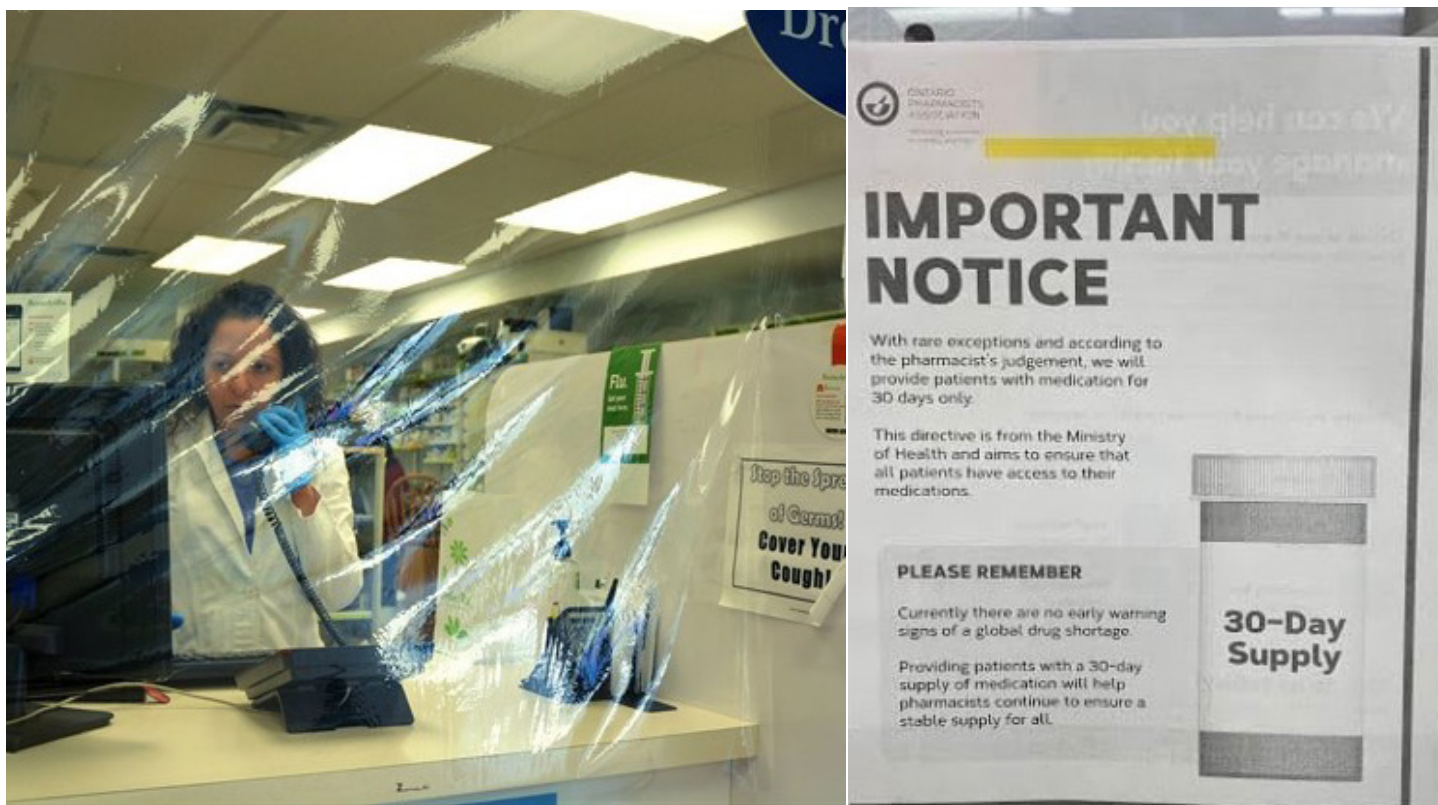


Of course, there are other means of generating revenue such as those expensive concession stands, but these are contingent on ticket sales. Many movies are also changing their release dates. For example *Wonder Woman 1984* has moved its release date from June to August. Theatres rely on these big box office movies to generate most of their revenue. This means that the financial struggle theatres are facing right now won't come to an end once social distancing is deemed unnecessary. There will likely be a

Opinion

Prescription change meant to safeguard supply in COVID-19 crisis triples fees for some patients – What this article means to us as a profession

Yifan Zhou, 2T1



While we are all working hard and risking our safety to be accessible healthcare professionals during this pandemic, an article titled Prescription change meant to safeguard supply in COVID-19 crisis triples fees for some patients was published on CBC. My first response was anger: it disproportionately featured aspects that portrayed pharmacists as profit-seekers, and it was extremely disheartening to read. This powered me through writing a long Facebook post to refute some of its baseless claims.

The article gave readers the false impression that pharmacists are seizing the opportunity to profit from multiple dispensing fees in this time of crisis, and that patients would suffer financially from this. We could all say a million things to refute its claims, so I won't

waste the space to talk about it here. The problem is not about our knowledge of the profession; it is the public's.

But what is really the problem?

We're frontline healthcare professionals, but we're often not recognized as such. This article is a sign that there is a knowledge gap between what we do and what the public thinks. If you look at the comments section, it is even more demoralizing, but it reflects how some people view us as a profession.

So, here are the 'DTPs' for us as a profession – we are underappreciated because we don't speak up, and we're not united.

As Professor Zubin Austin taught us, compared to medical students, pharmacy students tend to avoid conflicts and do not speak up. Out of all the patients, friends and family who had misconceptions of what pharmacists do, how many of them did we clarify those misunderstandings for? Oftentimes, we just tell ourselves to 'not let it get to you' and move on, but this does not help with the public perception of us.

We're also not very united as a profession. The last paragraph of the CBC article mentioned that although there is a general 30-day supply limit, some pharmacies still offer 90-day supply to their patients. This inconsistency not only encourages patients to shop around for pharmacies, but it also gives the public an excuse to question our true motive behind the 30-day supply limit. How can we advocate for the profession when some of our own are sabotaging it?

What happens when we do speak up?

We need to speak up, and here are two great things that happened when we did. McDonald's was offering free coffee to frontline healthcare professionals, but when a pharmacist asked if we could get them as well, their response was sorry, we're only offering it to frontline healthcare professionals. However, they've since changed their policy and included us in the promotion because several pharmacists contacted them to inform them that we are healthcare professions at the frontline of this crisis.

Another example is the very article we're talking about. It was previously titled "Green light to gouge: Prescription changes due to COVID-19 lead to higher costs". What a biased and misleading title! Many pharmacists flooded the CBC's inbox with emails clarifying the misinformation the article had, and that led to the change of the article's title.

So, what can we do?

We are a part of this professional community, and we should do our part to advocate for it. Voice your opinions! If we don't, no one else will do it for us. Instead of brushing the misconceptions off, we can try to explain it to others – I even had to argue with my mom to make her realize that pharmacists are frontline

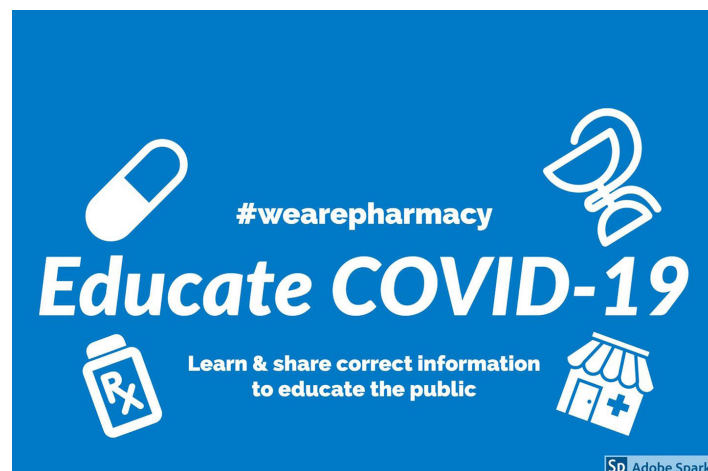
healthcare professionals.

Along with some classmates, I started a Facebook group called Pharm-COVID-19 Social Media Education Initiative dedicated to sharing COVID-19 information that can educate both us and the public. It is a group held up by all its members, because sharing well-written posts and articles is part of advocating, too.

There are also great community outreach opportunities offered by clubs and CAPSI, especially during Pharmacist Awareness Month: Pharmacy Outreach Days, Kids in Medicine, and Pharmacy Awareness for Geriatrics outreach events. By actively participating in these activities involving people of all age groups, we can slowly change our professional image.

Lastly, most of us by now have realized that our government doesn't appreciate us. The Advisory Council on the implementation of National Pharmacare does not even have a pharmacist on board. We are severely underrepresented in the government. We cannot just hope for someone to miraculously discover our values and make our lives better. We have to fight for that right ourselves. If any of you are considering a career in the government, you have my vote.

The one thing that all pharmacists could agree on, is that we were valued more in the past than we are now. We are constantly being underappreciated, so please, let's not wait until we hit rock bottom before we start doing something.



SNAC TIME:

DOES ORAL SEMAGLUTIDE (RYBELSUS) USHER IN A NEW ERA FOR BIOLOGICS?

Michael Vu, MD

A lot of things about Rybelsus, the new Type 2 Diabetes drug scheduled for Canadian launch in Spring 2020, are NOT new. The active ingredient semaglutide is not new, it is the same GLP-1 agonist used in Ozempic, which is administered as a weekly subcutaneous injection. The absorption-facilitating technology used in its formulation, called SNAC, has been around since the 1990s. What is new about Rybelsus is that it is the first oral biologic medication approved for diabetes.

How does it work?

Biologic drugs are poorly absorbed and quickly degraded when administered via the oral route. Because of this, most are delivered via injection or intravenous infusion. The unique needs of biologics spurred the creation of lucrative specialty pharmacies which built the infrastructure needed to deliver these drugs to patients. Over time, the complexity of infusion protocols has decreased, and many new injections can be self-administered. However, there still are significant barriers for patients who wish to access biologic medications such as the need for cold storage. The holy grail that many pharmaceutical companies are seeking is a biologic medication in pill form.

The journey to an oral biologic therapy has been long and winding. SNAC, which stands for sodium N-[8-(2-hydroxybenzoyl) aminocaprylate], is a small fatty acid derivative that when used as an excipient, enhances the permeation of macromolecules. SNAC is thought to act by buffering the local pH around the tablet to prevent enzymatic degradation. In addition, SNAC can facilitate transcellular absorption at the level of the stomach (Buckley, 2018).

In the 1990s, serious attempts were made at using SNAC to develop an oral heparin, however, initial tests had very low bioavailability. Eventually, novel compounds called DOACs came onto the scene for anticoagulation, and oral heparin development was halted. SNAC has also been tested with insulin, cyclosporine, calcitonin, and desmopressin

with limited results (Twarog, 2019). Currently, the most popular product on the market today using SNAC is an oral form of Vitamin B12 (Eligen). It turns out that SNAC offers only partial protection from degradation, so higher doses must be given compared to the injectable route. In addition, the SNAC formulation is finicky and success in formulating with one active ingredient does not guarantee success with another. The fact that Novo Nordisk was able to make a successful SNAC formulation for semaglutide is a significant achievement.

As a pharmacist, what do I need to know?

Oral semaglutide should appeal to patients who wish to gain the benefits of GLP-1 agonist therapy (A1C lowering, cardiovascular protection, and weight loss) but are hesitant towards or non-adherent to an injection regimen. It is important to note, however, that oral semaglutide (Rybelsus) has a LOWER efficacy compared to subcutaneous injection of semaglutide (Ozempic) at recommended doses (Davies, 2017).

Rybelsus is a once daily tablet. The starting dose is 3 mg daily, however, this is not a therapeutic dose and is only used to minimize the initial adverse effects. After 30 days, patients start 7 mg daily, with the option of increasing the dose to 14 mg daily if needed for glycemic control.

Rybelsus has poor bioavailability (around 1%). Because of this, patients must take this medication in the morning on an EMPTY STOMACH along with a sip of water. In addition, patients should not eat or drink anything besides water for 30 minutes after taking Rybelsus. Although the tablets are uncoated, they should still be swallowed whole.

Common adverse events include GI disturbance (nausea, abdominal pain, diarrhea, vomiting, and constipation) as well as decreased appetite.



Is it worth the hype?

Hopefully, with this technical barrier overcome, more biologics will become available in the more convenient oral dosage form. While patients stand to benefit from more accessible oral biologics, perhaps this is not good news for specialty pharmacies that have developed expertise in delivering injections and infusions. Only time will tell.

The place in therapy for Rybelsus has not yet been determined. Rybelsus is more convenient compared to Ozempic, but Ozempic is more effective in lowering A1C and reducing weight (Davies, 2017). And, on second thought, how convenient is Rybelsus anyways? Would you rather take a single injection once a week, or wake up early every single morning to take a pill half an hour before breakfast? Not to mention that Ozempic is now covered by ODB, while Rybelsus will certainly NOT be covered in the near future.

If I had a patient currently tolerating Ozempic once weekly with no issues, would I even bother recommending a switch to Rybelsus? Or, if my patient was taking a DPP-4 inhibitor such as sitagliptin (Januvia), is the efficacy that much better to recommend a switch? Again, we shall have to wait and see. While I applaud the scientists who worked hard to develop this technology and bring it to the market, sometimes the destination pales in comparison to the journey.

Disclosures: I attended a Dinner & Learn on diabetes management sponsored by Novo Nordisk, the makers of Ozempic and Rybelsus. I am not coordinating with them in any way, but thank you for the food!



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My Pharmacy Exchange

Gigi Lai, 2T1

This past summer, I had the amazing opportunity to live out my anime/manga dreams and go on an exchange to Japan through IPSF's Student Exchange Programme!

Going to Japan had been a long-time goal of mine because of its rich history and culture and how it's preserved and mixed in with modern developments, not to mention the delicious food as well! This practice of combining old & new is reflected through their way of pharmacy practice and this exchange allowed me to gain more insight into how pharmacy differs from us in a country halfway across the world.

For my exchange, I had the opportunity to visit various pharmacy sites in the Kanto region (where Tokyo is), but the Japan IPSF exchange also offers placements in the Kansai (where Osaka is) and Tokai (where Nagoya is) regions as well. The itinerary of the exchange consisted of 2 weeks of visiting pharmacy sites, participating in workshops, visiting sightseeing spots, and free time for your own exploration.

In the pharmacy-related portions of the exchange, we visited different sectors of pharmacy including an independent community pharmacy, a large hospital pharmacy, and one of Japan's leading pharmaceutical companies. In addition to site visits, we also had the opportunity to visit Meiji Pharmaceutical University, where we had the chance to compound herbal medications, and participate in a workshop on pediatric care led by the Japanese students. Through my time at these sites, I learned that community pharmacists function similarly to doctors in that each patient is assigned a pharmacist who they will regularly interact with, and that traditional herbal medications (kanpo) are regularly mixed with modern western medicines to enhance their effects and increase

compliance in Japan's aging population.

For the fun parts of the trip, the Japanese students organized sightseeing trips for us that included nearby cities such as Yokohama, Ikebukuro, and Kawagoe, where we visited the Cup Noodles Museum (and got to make our own too!), experienced VR activities at the top of an observatory, and dressed up in traditional yukatas while trying out all the food in the street stalls! For our other days, my new-found international exchange friends and I visited various places across Tokyo including the Tokyo Skytree, TeamLabs Borderless, and the Odaiba onsen, and tried out all three Michelin star-rated ramen restaurants and all the alcohol found in convenience stores, and hit up the karaoke bars as well! If you have time, Kamakura and Enoshima Beaches are short distances outside of Tokyo and I highly recommend visiting these areas and enjoying a drink on the beach at sunset! Since the exchange is only 2 weeks, I also planned my own trip with a friend of mine before the exchange started where we travelled to Osaka, Kyoto, Nagoya, and explored more of Tokyo as well!

Overall, this exchange was one of the best experiences in my life and I honestly wish I had just bought a one-way ticket instead. Through this exchange, I was able to learn more about pharmacy practice around the world from the Japanese students but also from the other exchange participants as well. We all still keep in touch regularly and I can't wait to work with them in the future as pharmacists!

If you're interested in the SEP exchange or have any questions, feel free to hit me up!



My Unforgettable IPSF Exchange

Yifan Zhou, 2T1

I'm just going to start this off with a statement – I broke my leg in France and had to end my exchange 1.5 days into it, but I bonded with an incredible French family. I decided that doing a pharmacy exchange in France would be the best way to spend my last summer before APPEs and work hit. I got matched to a community pharmacy in Angers, France, but on just my second day there, I went on a lunch break and never came back. (Yes, they have a 1 hour and 45 minute lunch break and they close the pharmacy for it!) I rented a bike and wanted to explore during the break, but I fell, and my leg caught between the bike and the curb. It wasn't too painful, so I wanted to stand up. But when I looked at my leg, my ankle was twisted, and I couldn't move it. "Oh my god, I dislocated it?", I thought to myself. Two young ladies came to me and asked if I was okay. I used my broken French to say that it hurts, and that I might need to go to the hospital. They agreed and called an ambulance for me. While I was waiting for the ambulance, several people also came to ask me if I was okay. There was a policeman on a bike, a doctor, and a few pedestrians. Then the ambulance arrived and took me to the hospital. It was the longest ride because my leg started swelling up and bumpy roads certainly did not help with the worsening pain. I overheard the paramedics say that my leg might be broken. What? I only fell from a bike.

When I arrived at the hospital, I was given ketamine that knocked me out, so they could put a cast on. I woke up a few hours later and realized that it was already 5PM. Arthur was the local IPSF student officer, but he was doing his rotation in another city, so he could not be in Angers during my exchange. I messaged Arthur explaining the situation and asked him to let my pharmacy know what



happened. I dozed off again. When I checked my phone again, Arthur's last message was "The only fun fact of today...". What fun fact could there be when I broke my leg? I opened the message and it said, "The only fun fact of today is that it was my mom who was waiting with you". "Was she the doctor who was waiting for the ambulance with me?" As fate would have it, in the second largest city in this province, this was how I met Arthur's mom.

She came to the hospital to visit me every single day and brought me essential things. My surgeon wanted to discharge me not even 24 hours after the surgery. Though my surgery saw me getting 10 nails and a metal plate placed in my leg, since I had broken both my tibia and fibula, my surgeon was confident I could use crutches and be able to go up 2 flights of stairs at home. Arthur's mom disagreed and said that she would pick me up the next day to stay at her house. That was a great decision because I almost fell to my death trying to use the crutches to get up 2 staircases in her house. I stayed with Arthur's parents for a few days before returning to Canada. We added each other on WhatsApp and have been in touch since.

Arthur's little sister is also in pharmacy and went on an exchange at University of Montreal later that year. His family came to Canada to visit and planned on a road trip to visit the east coast cities, including Toronto. We met up in Toronto, of course. It was my first time meeting Arthur and his two siblings, but we all had a great time chatting, in Franglais. It was really 80% English and 20% French because 1.5 days in Angers wasn't enough for me to pick up my high school French again. I'm planning on returning to Angers in the future, to visit this adorable family and the famous castle there that I didn't get to see.



RAMADAN: WHAT IS IT?

WHAT IS OUR ROLE AS PHARMACISTS DURING THIS TIME?

Noorulla Syed, 2T1

Ramadan is the 9th holy month of the Islamic calendar, which is spent fasting by Muslims across the globe. The Islamic calendar is based off the Lunar calendar, so the dates change with respect to the Gregorian calendar every year. Fasting is one of the five pillars of Islam. During Ramadan, Muslims don't eat food, drink water, have sexual intercourse or smoke. This month is ideally spent improving one's relationship with god, family and friends. The duration of the fast is from Dawn to Sunset which can range from 11 to 18 hours. Glucose is maintained in the body, during fasting, via the food eaten before dawn and from the glycogen reserves throughout the day. If someone is too ill, old or frail, they may be exempt from fasting. It's best to consult with an Imam before missing a fast due to an exemption just to confirm. If missed, the fast can be done another time. Alternatives may include giving food to the less fortunate or one may consider paying a certain sum of money (as dictated in the Islamic literature) to the needy. Medication given orally will break the fast but if given via injection, patches, or drops via the eye or ear, the fast may not break since these options aren't considered food since they don't nourish the body ^(1,2 and 5).

FASTING: WHAT IS THE PATHOPHYSIOLOGY?

Having a meal stimulates the secretion of insulin inside the body which then induces the storage of glucose as glycogen in the liver and muscles. Since glucose levels fall during fasting, insulin levels decrease. This leads to increased levels of glucagon and catecholamines being released inside the body that play a role in breaking down glycogen. As glycogen gets depleted, fatty acids are released from adipose tissue that are broken down by oxidation to produce ketones which are used by the liver, kidney, muscles (skeletal and cardiac) and adipose tissue as fuel. This allows the body to preserve glucose use only by the brain and erythrocytes for fuel. Dehydration is

also a factor during fasting because of fluid volume depletion which will lead to hypotension, therefore adjusting doses of antihypertensive medication is recommended while avoiding diuretic medication. There is evidence that restricting calories via fasting decreases the incidence of cardiovascular diseases, cancers and immune deficiency disorders in experimental studies done on rodents, and this in turn can lead up to a 50% increase in lifespan in both rodents and primates ^(5 and 6).

DRUG THERAPY: HOW TO MANAGE IT?

Safety is always the number one concern before initiating a fast. Muslims should verify with their doctor if it is safe for them to go from dawn to sunset without food, drinking, or their medications. If possible, oral drug therapy can be modified to be given 1 or 2 times a day (preferably once at dawn and/or sunset). If modifying the dosing regimen isn't an option then the treatment may be changed. For instance, changing the current antibiotic to another antibiotic that is given once or twice daily. Exempted fasts can be done during short winter days if long summer days are impractical. Certain disease conditions that need extra caution are conditions such as hypertension, diabetes and migraines. Muslims should eat well before dawn and always stay well hydrated ⁽¹⁾.



DIABETES

Diabetes is a condition which is extra concerning during Ramadan because it can cause complications such as abnormal blood glucose levels (BG). This requires regular checking of BG during the fast (checking will not break the fast). The range to maintain is within 4mmol/L to 10mmol/L. If the BG is outside this range, consider breaking the fast (with the approval of an imam). Unnecessary activities that are physically exhausting should be avoided since it will lower BG, the riskiest times being late afternoon to sunset. Exercise can be done after sunset because food and water intake become permissible during this time and BG can be maintained more effectively. In terms of food intake, certain foods that should be limited are foods high in sugar or fat. Foods that are preferred are those that have lean protein, complex carbohydrates, unsaturated fats, foods rich in fibre, whole grains, and desserts that are primarily milk based. To lower fat content, foods can be baked, grilled or fried shallowly as opposed to deep frying. To prevent dehydration, non-fasting hours are the

best time to intake fluids to stay hydrated (avoiding beverages with sugar). If sweeteners must be used, then it's preferable to use alternatives like Splenda rather than sugar. It is preferred that total calories during non fasting hours are divided among 3 to 4 smaller meals as opposed to one big meal to prevent large increases in BG ⁽³⁾.

In terms of specific drug therapy, high risk drugs for hypoglycemia (low BG) are Sulfonylureas and Insulin therapies. BG should be monitored when using these medications. Most of the sulfonylureas available for diabetes are unsafe during Ramadan and require extreme caution. Older agents such as chlorpropamide and glyburide should be completely avoided as they are considered even more unsafe. Medications such as Metformin, Dipeptidyl peptidase-4 inhibitors, and thiazolidinediones appear to be safe and don't require any modifications. The ideal medications that are preferred during Ramadan are those that can keep the blood glucose levels under control without putting the patient at risk of hypoglycemia ⁽⁴⁾.



Muslims lining up for Burbur Lambuk, a classic Ramadan porridge in Kuala Lumpur, Malaysia

PARKINSON'S DISORDER

Parkinson's Disorder is a difficult disease to treat during Ramadan since it requires multiple dopamine replacement medications to be given daily and this could lead to withdrawal symptoms, if stopped. If possible, the medications can be changed to a dopamine agonist regimen given once daily, assuming the dosing is equivalent to the original treatment, or a transdermal patch regimen. This recommendation

is only realistic for low to moderate level Parkinson's disorder treatment regimens with the additional requirement that the patient can tolerate dopamine treatment ⁽⁵⁾.

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Pharmacy Cyber Arts Week

A Virtual Showcase of Student Talent

Andrew Tu, 2T2

Earlier in March, with the announcement of the COVID-19 pandemic, the University of Toronto had cancelled in-person gatherings on campus and encouraged its students to remain at home. Classes, exams, and extracurricular events were all impacted by this decision. One of these events included Pharmacy Arts Night, which was scheduled to be held on the evening of March 31. Pharmacy Arts Night is hosted every year by the Pharmacy Choir in Hart House. Artwork produced by pharmacy students is displayed and performances are put on by pharmacy students for the faculty to enjoy. This year, Arts Night moved from the Hart House theatre to an internet theatre over the course of a week. Despite the need for physical distancing, the power of the internet made it possible to have an alternative way of continuing with daily life. In fact, many classes, exams, and pharmacy events have made their way from the U of T campus onto our computer screens.

For the first time ever, Cyber Arts Week was held online from March 30 to April 4. On each day of the week, artwork and performance videos by pharmacy students were posted on the Facebook event page for people to view and enjoy. It was amazing to see the diversity in art pieces everyday, from paintings, to life drawings, to sculptures, to poetry. Performances included singing and featured instruments such as the harp, ukulele, piano, and trombone. The performances were closed by the pharmacy choir and the ADR band. Last year, I had the opportunity to perform in-person at Arts Night and although the event took a different approach this year, it was still an amazing experience being able to share music with the pharmacy community. Special thanks to Michael Vu and Rosa Del Giudice from the pharmacy choir for planning the alternative event.

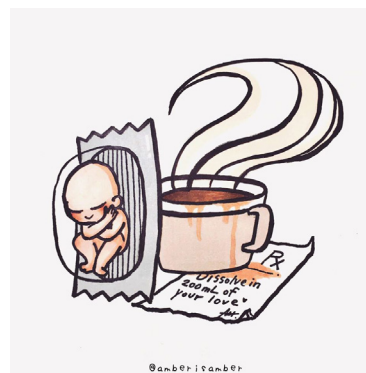
This event was a positive contribution and helped keep up the morale of our phamily despite the current situation. Even when faced with a pandemic crisis, we can still express the spirit of life using whatever tools we have and together, we will make it through this difficult time.

Yimin Liang,
2T1



"The Shattered Night"
Stephanie Lau,
2T2

A Walk on Daytona
Beach"
Dian Han,
2T1



Amber Wang,
2T2

Ran

Oluwadamilola Sogbesan, 2T3

She ran.

She always ran.

Away from the harsh words and even harsher hands.

Away from the double talk, the fake smiles and even faker friends.

Not once in her life had she faced up to anyone or anything.

Whenever things got hard, she ran.

Whenever things got painful, she ran.

Whenever she was embarrassed, hurt, or scared.

She ran, she ran, she ran...

Until, one day, she stopped.

She was tired of it all. She was tired of them. Most of all she was sick and tired of her cowardly self, always running away.

Never meeting her troubles head on.

No more, NO MORE. She looked to the heavens and screamed.

She wouldn't run anymore, she wouldn't hide anymore. She would be free even if it killed her.

It almost did.

She marched, not ran, back to where she had come. Shouting a challenge at those who had since birth brought her low, made her hurt, made her bleed. All the frustrations, bottled up feelings and things that she had for so long left unsaid were yelled out, tears of fury leaking down her face through it all.

At the end of her tirade they stood stock still, shock evident on their faces. Shock quickly turned to anger and soon the blows rained down.

Through it all she stood her ground. She was defiant through and through, giving as good as she got, until she took one blow too many and it all went black.

The next time she opened her eyes she saw white. White floors, white ceilings, white everything. Belatedly she had noticed she was also in white. A kind voice broke her from her thoughts and she couldn't help but ask if the owner of the voice was an angel. A pause before the man in pink shook his head, smiled, and touched her shoulder, saying everything would be fine now. She smiled too.

That smile stayed on her face when the people in blue came to question her, when the people in black came to take her away promising her she wouldn't have to go back again. Things would change.

She smiled through it all, she hadn't ran, she hadn't hid and now she was finally free.

Just as the people in black had said, things did change.

And it was hard, it was so very hard. But, not once did she turn away. Not once did she hide, not once did she run as she once did.

Years passed, hard years, good years.

She was happy. She had good friends, she had worked hard and she was successful. She also had him.

But, can one really change so easily?

She ran until she couldn't run anymore. Behind her she could hear them coming after her, voices asking if she was ok, voices asking if all was well. The loudest voice of all had a pleading tone to it, it was one she was intimately familiar with, the voice she had just left at the altar, the kind voice from so many years ago.

Behind her were the voices, to the sides of her were steep rock faces, in front of her was a crystal clear lake, a thing of beauty. She coughed as she tried to gain her breath, she cried at what she had just done, she laughed bitterly as she had thought that she had put this all behind her before.

She had panicked, she had realized but she was also just so... tired. Tired of it all. Of that voice, of the running, of being herself.

She thought she had changed. She thought she was stronger now.

She had thought wrong.

Now there was no running. The dress she found herself in wouldn't let her traverse the lake without sinking and she had no time to tear it off as the voices were fast approaching, the head start from their shock at her quick flight decreasing, they had only known her as one who would face all her problems head on, not as her old cowardly self.

She looked to the lake and realized that she just had to run once more, one more time and she would always be free, eternally free. She looked behind and knew that if she did not run she would have to face what she had just done. It would be the hardest thing she would ever do.

She ran.

Or not.



Parsnip Purée

Jake Roddy,

270 (and aspiring food writer)

When I was on one of my clinical rotations, my preceptor invited me to a special continuing education dinner at a restaurant whose name, unfortunately, I cannot remember at the time of writing this. At this dinner, we learned about something – even what this is, I don't recall – but what I DO remember was my appetizer. The option I chose from the set menu was the parsnip purée (I thought: “hm, I've never tried parsnips... looks fancy, let's give it a shot.”) All in all, it was a great night without the soup, but this parsnip concoction really made it a night to remember. So, in the midst of my self-isolation, since I've been practicing some cooking techniques, I figured I'd try to make my own. It was also an excuse to use my new immersion blender for the second time!

I like to think of a parsnip as a spicier cross between a carrot (texture) and a banana (same color when cut!). It's a common root vegetable used in many cuisines, but I've only ever seen it on the menus of swankier restaurants. You prepare them the same way as carrots! Peel and chop. Unfortunately for those watching their sugar intake, parsnips are one of the higher glycemic index vegetables – at 56, it is higher than rice, pasta, and bread – BUT it is self-isolation time, so treat yourself.

This dish could be an appetizer, a side soup for any sandwich or salad combo, or a main with something

like a nice crunchy piece of ciabatta. I, personally, had it alongside canned sardines and crackers for a protein/carb kick. #QuarantEats

It is likely that this soup could be changed to a carrot purée, or a purée of any similar root vegetable. Try it out and let me know.

Total Time: 1-1.5h depending how fast you are

Prep time: 30 mins

Cook time: 30-35 mins

Servings: Depends how you eat it. I'd say this makes 4 side servings or two meal-sized servings. Or one serving if you're feeling particularly peckish. Also feel free to play around and scale up or down.

Ingredients:

3 cups “whatever-you-want herb stock” – put 1 onion root; 2 smashed cloves of garlic; handful of fresh parsley; a bit of any, all, or none of sage, rosemary, and thyme; a few bay leaves; WASHED carrot rind shavings; and some black peppercorns in about 3 cups of water in a medium stock pot – bring to a light simmer and let stew for 15 mins – strain.

1-2 tbsp butter, unsalted or cultured works well

1 stalk celery, chopped/diced

1 medium carrot, chopped/diced

1 small or medium yellow onion, diced

A sprig of fresh rosemary

A small bunch of fresh sage

Freshly ground black pepper, a pinch or more to taste and for garnish

A pinch of salt – I used sea, use whatever you like – its sodium chloride for god's sake (salt type DOES matter sometimes though!)

About 5-6 parsnips, cleaned and finely chopped

A pinch of cayenne (optional)

A bit of olive oil for topping

1. Melt butter in a pan over medium heat, be careful not to let it burn. When melted, add in onion, celery, and carrot and stir to coat. Let them cook for 2-3 mins or until soft and onions are transparent. While this is going, throw in the (WASHED!) sprigs of rosemary and sage. Stir and let it cook for 1 more minute.

2. Add chopped parsnips to the pot, stir and cook for

1-2 mins. Add a pinch of salt and pepper while the parsnips cook to help them start to break down.

3. Add your herb stock until mixture is covered with stock with about a centimetre of liquid above the parsnips. Stir to get things moving. (If you need more liquid, add a bit of water – it should be fine! If you need half a pot of water, then you just didn't make enough stock. Luckily, it's a 15 min stock – make more! Don't add too much liquid because it will take too long to simmer down and the purée will be too watery)

4. Let the soup come up to a simmer, but NOT a boil, and turn heat to low. Add a generous pinch of cayenne if you'd like (this will add a nice little kick but if you are spice-averse... don't add it.) Leave to simmer for at least 25 mins – the timing will depend on how finely you chop your parsnips. Try one – if a fork slides right in with no resistance, they are ready.

5. At this point, remove the rosemary and sage. Some pieces of rosemary may have come off, this is fine, leave them in or fish them out, whatever you like.

6. Prep your immersion blender (you can also use a standing blender, just be careful when you pour the soup in!!!), dunk it into the mix, and turn it on low speed. Submerge and blend, increasing speed as you feel comfortable, and blend until homogeneous (no chunks!).

7. At this point, the soup is ready to serve. Pour it into your favourite soup bowl, top with some freshly ground pepper, and a drizzle of olive oil – an extra rosemary sprig as garnish is optional. Serve hot.



If you have any questions at all about this recipe, please feel free to reach out. I'll happily answer your questions or discuss cooking techniques!!!- **Chef Jake**



Mango Pudding Recipe

Henry Cheung, 273

"I don't know anything about baking and making desserts, but here is a really simple recipe for mango pudding I learned thanks to my mom. It is basically like making Jello but with extra steps. It's great to eat with some fruits, enjoy"

Ingredients:

1 can of mango pulp 850 g
35% whipping cream 473 mL
Gelatin 28 g
Sugar ½ cup
Hot water 3 cups
Water 3 cups

Directions:

1. Mix 28 g of gelatin with ½ cup of sugar.
2. Pour the mixture slowly and in increments into the 3 cups of hot water while stirring. Stir until it is all dissolved.
3. Pour in 1 can of mango pulp and stir.
4. Pour in 473 mL of whipping cream and stir thoroughly until you don't see streaks of whipping cream. This step can take a while.
5. Pour in 3 cups of water and stir while waiting for everything to cool down.
6. After it has cooled, pour the contents into a container or mould and place it in the fridge overnight.

House Hunting in Toronto:

Finding The Apartment That Exists

Misha Krivyyh, 2T3

A common concern among pharmacy students that can oftentimes be overlooked is the search for housing. It can be a daunting and frivolous task, filled with scammers, dangerous neighbourhoods, houses that look like they will fall apart any minute, and, as per Toronto expectations, rents as high as the CN Tower itself. To give an idea of what the search can be like, I decided to tell the short story of my own experience looking for a roof over my head in “The Six”.

I set my max budget at \$900 per month. I also wanted an eight-month lease, or a month-by-month, but definitely not a year-long lease. I also wanted something within walking distance (max 30 mins) of the faculty, a place that wasn't falling apart, and a place that actually exists. I am

sure that you would agree with my friend when I told him about my criteria: I was looking for a unicorn – a nonexistent majestic entity, and unless I compromised somewhere, I would be homeless for the school year. I, being the naïve and inexperienced boy in the housing market, did not take this too seriously at the time. Life decided to impress this understanding on me the hard way.

My first option turned out to be a scam, and the same is true for my second one. Both “landlords” requested via e-mail that I send them e-transfers of first and last months' pay + security deposit. They claimed to be unable to show me their respective apartments as they were both out of the country for various reasons.



One was in Texas for contradictory reasons, the other in Saudi Arabia for work. They said they would send me the house keys by mail once they received the deposit. When I said I would fly to them and do the exchanges in person, they claimed the apartments were rented out already.

As ridiculous as my exchanges may seem, it is not uncommon for students to fall prey to these scams. The individuals organizing and running these schemes typically target inexperienced or international students, who may be new to the rental market in Toronto and may not realise that somethings are too good to be true. It is crucial that students, especially new incoming ones, are aware of the dangers posed by scammers and their nonexistent apartments.

Once I found a few existing options that fit my criteria and picked one out, I felt like I hit the jackpot. I was close to campus, the rent was within budget, the lease was only 8 months, the place looked shabby but not like it was falling apart, and it existed. Everything seemed great until winter knocked on the door and the heating did not answer. The place turned out to be so old that the heating system was barely functional. Fortunately, the landlord was willing to reimburse for a space heater.

The housing market in Toronto is challenging, but with the right attitude and a willingness to compromise where necessary, you can land yourself a (sort of) dream pad that will be close enough for you to get to your MTM labs in no-time!

非、
そして反。

I can (not) wait

Suffy

When the clock struck midnight and 2020 officially arrived here in Canada, I was ecstatic. This wasn't because I was planning anything; there were no grand plans, no mischevious machinations in play. Instead, it meant that I was one step toward June 27, 2020. This was the release date of *Evangelion: 3.0 + 1.0*, a movie that I've been anticipating since around 2007...13 years ago.

As a genre fan, I'm no stranger to waiting long stretches of time for the next entry in my favorite franchises. *Harry Potter* started with a tale of a boy living under the staircase and 10 years later, uh, a lot of stuff happened but the good guys won. The *Marvel Cinematic Universe* started with a movie about a millionaire playboy philanthropist learning what it meant to be a responsible adult, ended with a teaser about superhero teamups, and then 10 years later, uh, a lot of stuff happened and then the good guys lost...and then a year later they won!

Evangelion however, started in 1995 with a 26 episode television series in Japan. It got localized to western shores in 1998, and has been re-released multiple times. Last year, Netflix acquired the license for home release and officially released all 26 episodes plus two movies on its streaming service. Judging from the trailer, it's a show about giant robots, monsters, violence and really dated animation.

And judged on its trailer alone, it doesn't look very good? Apart from the dated animation, it looks like a very generic anime involving kids, adults, giant robots and monsters.

The thing about *Evangelion* is that looks are deceiving. Yes, the first episode basically says "here's a whiny 14 year old kid that gets called to go into a giant robot to save the city and he doesn't want to," which gave rise to a host of anime fans that laugh and say "get in the robot Shinji" in both fervor and hilarity.

Except if you give it a chance and keep watching, you start peeling off layers off the "giant robots fight monsters" stereotype. Shinji is the 14 year old main character that acts bratty, and also suffers from anxiety and depression. Asuka is the 14 year old girl with tons of bravado, but is actually really insecure. Rei is...Rei. Misato is the commander that serves as a role model for Shinji, but is actually a horribly selfish person that uses him for her own reasons. The list goes on, and this isn't some psychoanalytical deep dive, these character traits are worn on the sleeve and made for the audience to bare. What starts as a giant robot anime quickly turns into an anime about depression and what it means to find your place in the world, to find your own self-worth and learn to live for yourself.



And then they made an alternate episode 25+26, titled *The End of Evangelion*. The 1997 “movie” (western release 2002) answered some lingering questions from the television series and gave a very...different ending. It still sought to have Shinji overcome his depression, and it does, sort of...

Fast forward to around 2006 and a new tetralogy of *Evangelion* films are announced, said to be a retelling of the story but with an all new ending. The first film, *Rebuild of Evangelion: 1.0 You Are (Not) Alone*, released in 2007 and was a recut of episodes 1- 6 with superior animation. The second film, *Rebuild of Evangelion: 2.0 You Can (Not) Advance*, released in 2009 and was effectively episodes 7 to 18, heavily streamlining things and started to veer differently from the source material.



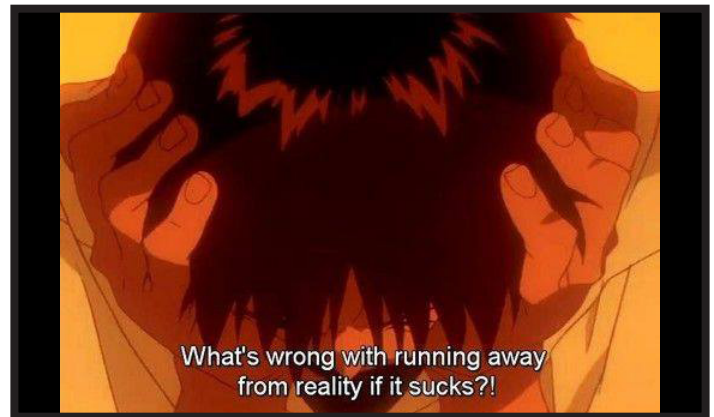
Films 3 and 4 were supposed to be released together in 2008, but instead were split, with *Rebuild of Evangelion: 3.0 You Can (Not) Redo*, being released in 2009. It was strikingly new but also tread very familiar themes, specifically tripling down on the “depression” aspect of *Evangelion*. The film ends on a very...bitter note, with many questions being raised and left unanswered. The most important question, to me, is...what now?

you for things you never knew you did. What happens when you put your trust in people, only for that trust to be broken and they don’t want anything to do with you anymore? What happens when, despite the best of intentions, you end up losing someone you care about and find yourself at rock bottom, again?

The original television series (on Netflix!) said to seek harmony with others, ask for help and rely on them to help with your own inadequacies. The alternate ending said that life, despite being painful, is also full of wonder and we each have to learn to cope with it in our own way. What will the “all new” ending say?

I don’t know, but I can’t wait to find out on June 27, 2020.

Note: the show has a lot of religious symbolism, with terms like “Angels, Adam, Eve” and a lot of crosses being tossed around. It has no meaning, it’s just window dressing.



Also there’s two “movies” on Netflix, but one of them, *Evangelion: Death (true)* is just a recut of the first 24 episodes. Skip it if you’re watching the show, go straight to *End of Evangelion*.

Finally, if you’re curious about the show but don’t want to wade through 26 episodes and 1 movie, you can just jump straight to the new movie series without issue, it’s a remake after all.



TAKE YOUR heart

HOW A CRITICALLY ACCLAIMED JRPG INSPIRED MY FRIENDSHIPS, ACADEMICS, AND VIDEOGAME PICKINESS IN PHARMACY SCHOOL

-Rolan Vaisman, 2T2

I've got a weird thing going on with video games right now.

If you know me even by the slightest, you'd know that playing video games is one of my most important hobbies. My first two games were Mario Kart 64 and Super Smash Bros. I wish my family kept the cartridges as relics to look back to instead of trading them into the then-existing RadioShack for a PlayStation 2. But I digress – the point is, I've grown up playing video games, and as I grew, so did my collection of consoles owned and games played. Of course, when I was younger and less aware of how the wheat market works (along with other peculiar economic idiosyncrasies such as income tax and grossly, money), it never occurred to me just how much my family spent on these niche time sinks.

Fast forward to now, where I am aware of fiscal responsibility (and the wheat market) but still very much like video games. Sprinkling on top the demands of pharmacy school and a 9-to-5 part-time job has created what I think is the stupidest yet impenetrable impasses of the millennium: **should I play/buy [this video game]?** I mean, what kind of question is that, Rolan? You like video games, and you just spent two whole paragraphs talking about video games and how they're kind-of-sort-of related to the wheat market. YES! Why not buy/play [this video game]?

Well, it's complicated. Despite having more time to potentially play video games thanks to COVID-19

keeping us homebound, I find myself encountering an inexplicable inertia, stopping me from reaching into my backlog of shrink-wrapped games and giving them their much-warranted attention. Is it because I feel guilty “wasting time” on these games when I could be studying the antimicrobial spectrum*? Is it because I'm worried I'll disappoint my parents or myself when they see me fiddling with game controllers instead of pens and paper (even though they consistently plead why I never take a break)? Or am I just lazy and would rather spend the next half hour watching something on Netflix or Funimation/Crunchyroll?

It could be all these reasons. But it can also be that I've been spoiled. Spoiled by having played some of what I think are the best video games ever made.

You see, once in a while, I come across a game that will leave me talking about it for weeks if not months. I just won't shut up about it. I'd make them my top-subscribed topics on Reddit, my phone or PC wallpaper, or my profile pic on Discord. Catch me in an opportune moment and I'd probably be humming something from that game's soundtrack. Few games have made me feel this... happy, knowing I exist in a timeline where this game coincides. Many years ago, Super Mario Galaxy and Deus Ex did this to me (the latter of which I talked about in the Holiday 2018 issue of The Monograph). More recently, Bayonetta 1 and 2 did this to me (and hopefully I'll be back to freak out over Bayonetta 3 once that game comes out of development purgatory).

But right now — like, RIGHT right now — there's a new kid on the block, occupying whatever manic brain cell that's causing me to go gaga over it.

And that's



...just kidding.

It's



Persona 5 is a Japanese RPG set in modern-day Tokyo, Japan. The protagonist — whose name you decide or is better known for their code name, Joker — is a second-year high school student who gets expelled from his current school after being wrongly accused of physical assault. Despite his best efforts, he is forced to relocate to Tokyo to serve a one-year probation at Shujin Academy while living under the supervision of a family friend (who, as far as he's concerned, believes in Joker's delinquency). On the night of his move-in, his conscience is teleported to the "Velvet Room," a prison-like setting where he encounters its proprietor: a bizarre long-nosed man, granting him the power needed for his emancipation: the power to enter the "Metaverse," a parallel dimension that manifests people's true psychologies and desires they'd otherwise mask in real life.

The gameplay thus splits itself into a Sailor Moon-like duality. In daylight, you are to live an honest student life while overcoming the stigmas inflicted with your wrongful accusation. In moonlight, you're a dapper-dressed vigilante using your granted power to explore the Metaverse and wipe societies from the same corruption that got you into this mess in the first place. Your power: the ability to wield a Persona, which for the sake of simplicity, is what you'd expect to happen if you combine Pokémon with Stands from JoJo's Bizarre Adventure.

It's... a lot. It's interesting, it's weird, and jumping into it blindly, it's a bit overwhelming.

But it's also amazing.

The game is one of the most visually appealing masterpieces to date. To quote Luke Plunkett from Kotaku's article *The Art of Persona 5*, "[the game is] an absolute feast for the senses, with a strong, confident art style that runs from its character design all the way through to its menus." A simple google image search for "Persona 5 art design" will quickly reveal that this game is surely one of a kind.

And while the game grabs your attention from its visual appeal alone, that's just the tip of the iceberg. Its near-100-hour story immerses you into a faithful replica of real Tokyo hotspots, including Shibuya, Akihabara, and Sangenjaya (referred to as Yongenjaya in-game). To progress through the story, you'll find yourself immersed in these bustling environments while acquainting yourself with those who share different yet similar misfortunes as Joker: being misunderstood, mistreated, or exploited by others for their own selfish benefit. As you continue through the game's events in the "real world" and the Metaverse with your acquaintances-turned-confidants, the protagonist develops new relationships, forming a new family away from his actual family.



That last point is probably my biggest reason why I love Persona 5. Playing it on-and-off between Summer and Holiday 2019, I was able to strongly relate with the game's focal point of making the protago-

nist a better version of themselves. Pharmacy school encourages us to do the same; as many people have mentioned several times, our courses are just a piece of the pie. The friendships you make, the extracurricular opportunities you take, and the initiatives you start, will define you more than any course grade or transcript ever will. I personally struggle with shaking off the bad habit of disparaging myself when my midterm results come back and they're less than stellar. I'm sure many of you can relate as well, and the current pandemic certainly doesn't help with how it flipped our world upside-down.

But that's why *Persona 5* is so important to me. Through its use of rebellious Noir-like themes mixed with inspiration from heist genre movies like the *Ocean's* film series, *Persona 5* conveys a simple message: **you're more than just your history. You are a person of great potential, limit-**

ed not by what happened, but what you're going to make happen, using your friends, family, and phamily as the steppingstones to your success. So, the next time you feel stuck or discouraged about anything, I encourage you to – maybe not necessarily play *Persona 5* (the game is 100-hours long and you need a PS4) – but to take to heart the message conveyed in the game's opening title sequence: Wake Up, Get Up, Get Out There (<https://youtu.be/0jm8nnHqx80>).

But hey, if you are interested in playing the game (perhaps this summer), its remastered edition, *Persona 5 Royal*, comes out March 31st, 2020. I look forward to hearing your experiences with this 5-star masterpiece.

*(By the way, I still don't know my I.D. spectrum and at this point I'm too afraid to learn it. Pray for me.)





Animal Crossing: New Horizons really could not have launched at a more perfect time. During an anxiety filled spring, New Horizons provides a well needed escape, a sense of routine and accomplishment, comfort and a means of visiting your friends even while social distancing.

-Vivian Ho, 2T2

New Horizons is the latest entry in the Animal Crossing series. It follows the usual premise of the previous games where you, the human player, move into an animal inhabited town and become indebted to a talking raccoon, Tom Nook. The difference is, instead of moving into a bustling town, Tom Nook drops you off on a deserted island. The town square is simply a tent on a patch of dirt and Tom Nook gives you a tent to call your new home. The rest of the island is covered in trees and many weeds. It's not exactly what you would imagine from the island getaway package advertised.

On the bright side, your island won't look this way forever. You will eventually be able to turn your depressing tent into an extraordinary mansion. The endless supply of weeds can be collected and fashioned into succulents or other elegant floral decorations. Furthermore, the island is truly at your disposal and I really do mean truly. Gone are the days when chaos would ensue from a new villager moving in and ruining your town layout, because now you can force villagers to build their homes exactly where you want them to be built. With the exception of the town square, you can build and place just about anything wherever you want. If you're still not satisfied, you can later unlock the ability to relocate buildings and even change the island terrain. After all, despite being a low-pressure life simulation game, there is nonetheless an implicit challenge of making the best island possible.

For creators and designers, New Horizons provides endless possibilities. For others, this may seem daunting and that's perfectly okay. You can spend each day the way you want it, and that's the beauty of the Animal Crossing series. Whether it's fishing and bug

catching to fill up the museum, finding and DIY-ing cute furniture, or playing strategically to become as rich as Tom Nook, there really is something for everyone. Even those who feel they need to be driven by objectives now have a task system that allows them to collect stamps and "Nook Miles" to exchange for new items and upgrades.



For me, New Horizons has been the perfect escape from the current state of the world. Nothing else matters as I go through my daily routine of collecting fossils, greeting villagers, and planning my next island project. Furthermore, the sense of community that the game has fostered has been well needed. It's about helping each other by sharing tips and island fruit or saving furniture and clothing that you know your friends will love. It's about being able to plan trips to each other's islands, especially in a time where you can't meet physically.

Every feature, new and old, comes together to create a charming and heartening experience. I highly recommend this game to anyone who hasn't already started playing. As for myself, I will be eagerly awaiting the new surprises each day holds.

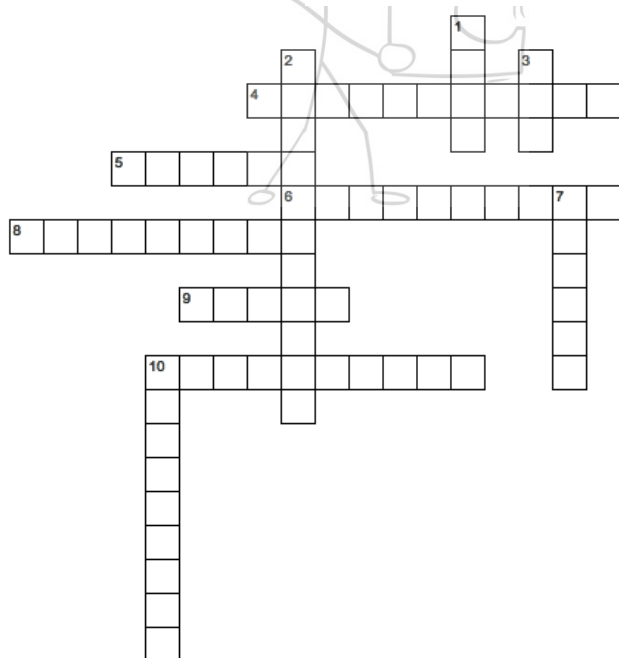


Puzzles



CROSSWORD: CORONACATION QUARASTINATION

-Jessica Attalla, 2T2



Across

- 4 The cure to COVID
- 5 The only friend I'm legally allowed to be near but shouldn't
#socialdistancing #summerbod
- 6 Don't understand quarantine memes because this is #dailylife
- 8 Going in to get ____, not sure if I'll make it out alive
- 9 In our dearest prayers m :(
- 10 Sell your stocks while you can

Down

- 1 The heroes of today
- 2 Mark deserved better
- 3 D.O.N.A.T.E. if ya got pls
- 7 Renegade et. al.
- 10 'Mamma made me watch this to prove why I shouldn't leave the house' #stayhome

SELF-ISOLATION SCRAMBLE

UofT has closed. The students have all returned to their hometowns to self-isolate. Use the following clues to match each student to their hometown, a new hobby they've picked up, and the one item they don't currently have in their household.

-Chloe Chau, 2T2

Name	Hometown	Hobby	Household good
Amelia			
Edith			
Isaac			
Olive			
Umberto			

	Barrie	Hamilton	Ottawa	Sudbury	Windsor	Disinfectant wipes	Hand sanitizer	Rice	Rubbing alcohol	Toilet paper	Bake cookies	Calligraphy	Learn Latin	Paint	Play guitar
Amelia															
Edith															
Isaac															
Olive															
Umberto															
Bake cookies															
Calligraphy															
Learn Latin															
Paint															
Play guitar															
Disinfectant wipes															
Hand sanitizer															
Rice															
Rubbing alcohol															
Toilet paper															

1. Isaac is learning Latin.

2. Of Amelia and the person learning calligraphy, one is from Hamilton and the other has no disinfectant wipes.

3. The one lacking toilet paper is not learning a language.

4. Of Olive and Umberto, one lives closest to Toronto and the other lives closest to the U.S.

5. The painter's name comes after the Latin learner's in the alphabet (but neither are Umberto).

6. Of Umberto and the one lacking hand sanitizer, one is from Hamilton and the other plays guitar.

7. The painter has no rice and the baker is from Sudbury.

8. Of Amelia and Edith, one lives the furthest north and the other is from the nation's capital.

Artist Spotlight



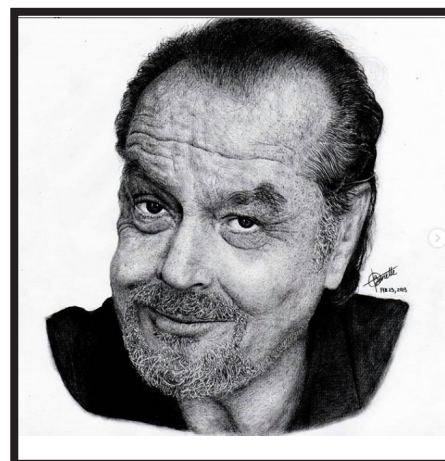
Pooja Patel, 2T1



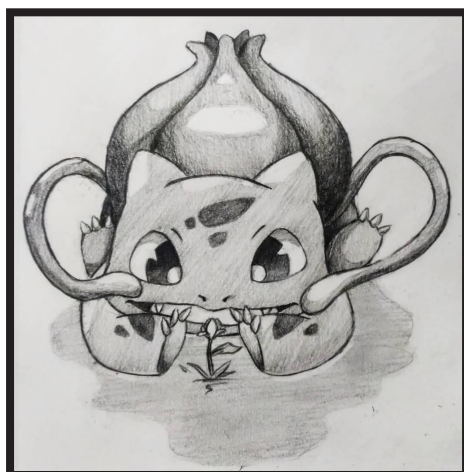
Yimin Liang, 2T1



Shradha Madur, 2T1



Ben D'Mello, 2T2



Stephanie Lau, 2T2



Hebah Arabi, 2T1



Behind the Lens



Harshan Gill, 2T1



Ann Chang, 2T2



Donna Hoang, 2T3



Michelle Yee, 2T1



Kevin Leung, 2T2



Belle Li, 2T1