



# The Monograph

Volume 22, Issue 5

My GSK Experience  
by Hebah Arabi

Specialty Coffee  
Shop Reviews  
by Runyang Yin

• Lockdown Listens  
and Movie Reviews  
by Isabella Fortuna  
• and Moid Shah

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*The Monograph*

WOULD LIKE TO SAY:

THANK  
YOU

**For all your contributions this year. From articles, to art, to photography, to puzzles none of this would be possible without you!**



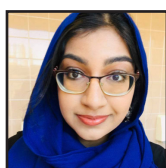
# The Monograph Team



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David Czosniak



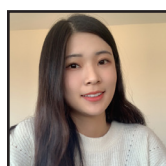
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## EDITORS' ADDRESS:

# Hey Pham!

As we come to a close at the end of this academic year, we're here to present our fifth and final issue of this year's Monograph!

We have plenty in store this issue including music and movie recommendations by Isabella Fortuna (2T3) and Moid Shah (2T3), highlights from this year's White Coat Ceremony by 2T4 Class President Al-Amin, and plenty of Snappy APPE interviews from Hebah Arabi (2T1), Alex Dominigues (2T1), and Duresameen Zahoor (2T1). If you're feeling hungry, Neil Patel (2T3), and Alissa Kong (2T4) have great recipes you can try during exam time!

We'd also like to congratulate and welcome the new incoming 2021-2022 Monograph Co-Editors; Eulaine Ma (2T3) and Sally Jeon (2T4). We're also excited to welcome our incoming Monograph representatives Joham Ahmad(2T4), along with Moid Shah (2T3), and the return of Shaista Malik (2T2)! We're excited to have all of you on board and are looking forward to all you will accomplish next year!

Finally, it has been a pleasure serving as your 2020-2021 Monograph Co-Editors! We hope we did a great job representing the voice of our student body through this different year and thank you for all the support you've given us in making The Monograph such a success! Best of luck with final exams and have a safe and fun summer! We're both definitely excited to see what's in store for The Monograph next year!

Until next time,

*David Czosniak and Amar Deonandan*  
The Monograph Co-Editors 2020-2021  
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*Thanks to  
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*Joy Wang, 2T4*



*Maryen Lieu, 2T4*



*Sally Jeon, 2T4*

# UPS Address



## *Hello Pharmacy!*

As this school year comes to an end, we would like to take a moment to reflect on the highs and lows that we've faced together throughout this unique year.

There are many highlights that we will fondly look back on including the Back to School Picnics, Halloween and Holiday Socials, Phollies, Athletic Challenges, Charity Week, Lunch and Learns, PAM, Monograph publications, and the countless other initiatives UPS, Class Council, pharmacy clubs, and students organized and took part in so that we were able to stay connected despite being distanced! We know this is not how any of us imagined this year would go or that we would miss

the Pharmacy Building so much, but we are incredibly proud of all our student leaders for stepping up to the challenge this year. Your hard work smoothly transitioned the pharmacy experience online and brought unique and positive experiences to our family which could not have been possible without you!

We would like to give a special thank you to the 2020-2021 UPS Faculty Advisors, Kenny Tan and Lachmi Singh, for their constant support and assistance to UPS. With their help, we were able to seek guidance on various activities, including implementing a new goal-setting system for the UPS Council. Our incoming UPS President and Vice-President, Christine and Chelsea, have shown their incredible dedication and enthusiasm to the student body this year and we can't imagine a more dynamic duo to take our place! We can't wait to see what they will bring to the UPS Council in the upcoming year and wish them all the best!

And finally, we owe a HUGE thank you to the members of our UPS General Council. This year has been challenging in so many ways, yet every single member has stepped up to exceed our expectations. They helped UPS adapt and move forward through this unprecedented year which allowed us to continue the UPS mission of enhancing the student experience in our faculty. We couldn't have done it without their hardwork and dedication!

It has been an honour to serve as your UPS President and Vice-President through it all! Thank you for an incredible year and best of luck on your future endeavors!

*Fabian Cretu and Samantha Cesario*

UPS President and Vice President

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# PHARMACY APPRECIATION MONTH (IN REVIEW)

March 2021  #UofTPAM2021

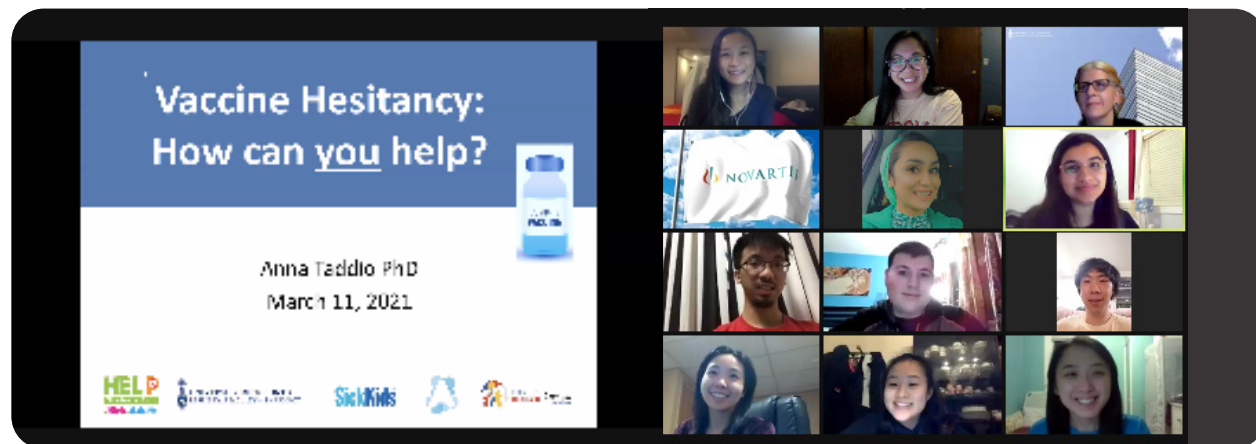
CAPSI CORNER

It is hard to believe that March has already come to an end, and with it another successful PAM! For PAM 2021, we saw a transition from what was previously Pharmacist Awareness Month, to what is now Pharmacy Appreciation Month. This appropriately set the stage for a month-long celebration of the many accomplishments our profession has achieved within the past year. We are inspired by the resiliency displayed by our fellow pharmacy students this month and this past year, as they have continued to embrace the challenges posed by the COVID-19 pandemic.

## WEEK 1

To start off PAM, CAPSI and UPS held a PAM Kick-Off Week featuring videos from pharmacy leaders throughout the week, and daily challenges on the Pharmacy Appreciation Month UofT Facebook Page! Throughout the week's videos, students heard from Dean Lisa Dolovich, Angeline Ng (VP Professional Affairs of the Ontario Pharmacists Association) and Nancy Lum-Wilson (Registrar and CEO of the Ontario College of Pharmacists) to motivate and celebrate with students.

## WEEK 2



On the anniversary of WHO's declaration of the pandemic, CAPSI held a Symposium titled "COVID-19 Vaccine Hesitancy: How can you help?" featuring Professor Anna Taddio, where students learned how to improve the acceptance of COVID-19 vaccines and increase vaccine uptake. We were impressed with the amazing turnout and engagement we saw at this event, and it is evident that UofT pharmacy students are embracing the role our profession plays in COVID-19 vaccine rollout and education.



Each year the International Pharmaceutical Students Federation (IPSF) runs a public health campaign during PAM! This year, our IPSF representatives Jenna Melanson and Aileen Liu ran the Tobacco Awareness campaign. For PAM, we hosted an interactive workshop on how to lead a successful smoking cessation interview. In this event, participants were given three unique cases and worked in small groups to act out scenarios in a pharmacist or patient role. Throughout the workshop, our speaker highlighted techniques and clinical pearls in how to support patients along this process. The goal for our workshop was to give students the tools to confidently conduct these interviews in their community. To bring further awareness of tobacco use, we collaborated with Pharmacy Awareness of Indigenous Health (PAIH) to educate students on tobacco use in Indigenous communities. Tobacco use is twice as high in Indigenous communities compared to the general Canadian population as tobacco is a sacred medicine used in cultural ceremonies. For this collaboration, we have put together an infographic for students to recognize the cultural role of tobacco as well as learn how pharmacists can get involved in developing personalized smoking cessation interventions.

## WEEK 2 (continued)

### WEEK 3

We were excited to see so many students interested in participating in outreach events this year, despite the limitations of the online environment. 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. Our outreach subcommittee members worked hard this semester to adapt our previous outreach initiatives to accomplish this in a virtual environment. We hosted two main outreach initiatives:

- Kids in Medicine (KIM): Our Outreach Subcommittee created two presentations for Pharmacy student volunteers. Pharmacy students ran virtual presentations on Sickness Prevention for Toronto elementary schools and Sexual health presentations at high schools.
- Pharmacy Outreach Days (PODs): Our subcommittee reformatted PODs to a public-facing social media campaign, with a focus on the topics of Pharmacists' Role in management of Diabetes as well as Opioids and Naloxone.

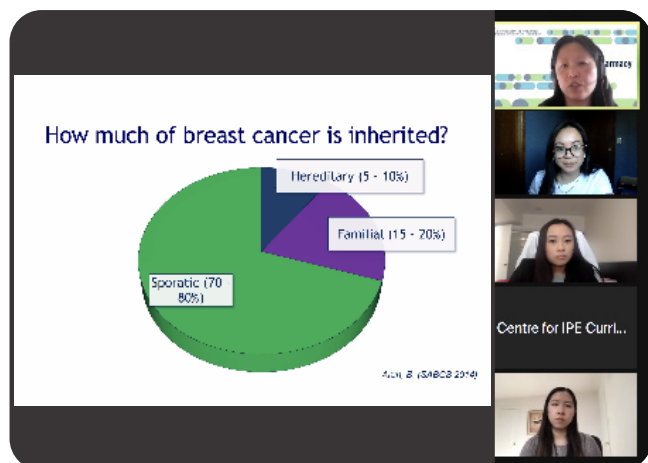


For PAM, CAPSI also collaborated with our American counterpart, Pharmacy Legislative Week (PLW), on the month-long social media campaign “Health Disparities of Marginalized Communities”. Week 1 covered Racism and Discrimination in pharmacy, Week 2 covered Health Disparities of Indigenous Communities, Week 3 covered Health Disparities of LGBTQ+ communities, and week 4 focused on how COVID-19 impacted various marginalized communities such as homeless communities and Asian Americans/Canadians. It was an amazing opportunity to collaborate with American pharmacy students, and through this campaign, we hoped to ignite conversations surrounding these difficult topics and get students thinking about how they can help address these health disparities.

### WEEK 4

We were also excited to offer an IPE event this month in collaboration with the Institute of Healthcare Improvement and UofT's NCODA Chapter on “An Interprofessional Approach to Oncology Care”. We had 80+ participants from various professional faculties such as social work, dentistry, medicine, pharmacy, occupational therapy, nursing, physician assistants, and physiotherapy in attendance. Students heard from

## WEEK 4



Professor Kathy Vu, who provided students with an introduction to breast cancer and her expertise in delivering safe and high-quality care to cancer patients. Students also heard from a guest speaker and breast cancer survivor to provide the patient perspective on her experience receiving treatment from an interprofessional team. Lastly, students worked together to determine interprofessional strategies for oncology assessment, management and follow up for a breast cancer patient case in the context of COVID-19. Thank you to all attendees for your participation and we hope you enjoyed it as much as we did!

CAPSI was also excited to once again host Toronto's Next Top Pharmacist! This year we saw our two contestants Al-Amin Ahamed (2T4) and Laura Guirguis (2T2) battle it out for the title of TNTP 2021, and the chance to represent UofT at Canada's Next Top Pharmacist at PDW 2022 here in Toronto! Both contestants gave it their all through each of the surprise challenges and in their performance in the talent competition. Our judges certainly had the incredibly difficult job of having to crown the winner, but ultimately, Laura Guirguis (2T2) came out victorious and was crowned Toronto's Next Top Pharmacist 2021! We thank both contestants for the efforts they put into the show and their performance, and we can't wait to watch Laura represent us at PDW 2022!



Thank you to everyone who contributed to this year's Pharmacy Appreciation Month campaign by helping us with promotion, participating in our online initiatives, and the planning in the months leading up to March. Student leaders from a wide range of pharmacy clubs have been hard at work over the last few months planning for UofT's PAM campaign. We were amazed by the diverse events offered by student groups and the participation of so many students in PAM initiatives, despite students' busy schedules and online fatigue. A special shout-out to all our PAM outreach volunteers and subcommittee members – with your help, we were able to execute outreach initiatives online! We would also like to thank the 2T3s who volunteered to help us run the first ever online Mock OSCEs, ensuring the experience was valuable to our participating 2T2s!

We are so excited for Michelle Chaung to lead next year's 2021-2022 Local CAPSI Council as Senior Representative, alongside Theodora Udounwa as the Junior Representative. Finally, we would also like to acknowledge this year's class CAPSI representatives Aya Akrawi (2T2), Aleena Aslam (2T2), Julia Saragosa (2T3), Isabella Fortuna (2T3), Alissa Kong (2T4), and Theodora Udounwa (2T4) for their extreme dedication, adaptability, and tireless work throughout the year. Thank you for an amazing year and we hope you enjoyed CAPSI events as much as we did! Congratulations to the new elected CAPSI representatives and we are excited for the new year to come!

# UPS Athletics Update



*Pictured: Logan - white, Kevin - black*

“Opening with the inverted bongcloud was self-destructive but I was happy that I was able to discover a winning a line” “My opponent, Kevin was an excellent chess player and I look forward to practicing with him the future” - Logan Groves, 2T3

Hey Pharmacy!

In the beginning of March, we successfully hosted our first ever Chess Tournament and live streamed our final on Zoom! The match was a best of 3 series between Kevin Li (2T4) and Logan Groves (2T3). Many fellow students logged on to watch as these two advanced chess players faced off in an invigorating match! We had students ranging from absolute beginner to advanced level enter the tournament to try and claim the title of our next Beth Pharmon! With the turnout of this year's event, we are hoping to keep this tradition going.

With Spring finally upon us, we hope you take some time to get some sunshine, whether it's going for a walk to grab a coffee or doing a quick workout outside to get your heart rate going.

Best of luck with all your exams, phamily!

Jonathan Ko  
Senior Athletics Director

Cindy Tran  
Junior Athletics Director



**Logan Groves, 2T3**  
**2020-2021 Chess Tournament Champion**



# Are you Covered? Insurance by UTSU

**By:Shaon Parial,  
UPS/UTSU Director**

Hello, Pharmacy. Look at your private insurance, now back to me, now back at your insurance, now back to me. Sadly, your private insurance isn't me, but if they stopped over charging and cut costs, they could seem like me. Look down, back up, where are you? You're on a boat with travel insurance that your current plan doesn't cover. What's in your hand, back at me. I have it, it's an oyster with a ticket to the relaxing massage that you know you need badly. Look again, the tickets are now orthotics to support your feet as you stand in the pharmacy all day. Anything is possible when your insurance provides extensive coverage at half its valued cost. I'm on a pill.

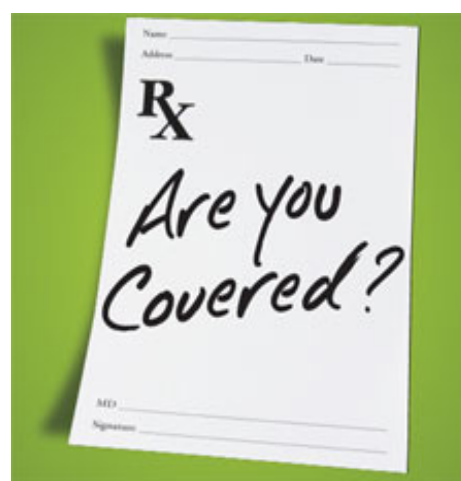
The University of Toronto Student's Union (UTSU) provides you with a comprehensive plan. Claims are filed directly online through the Studentcare app or to the UTSU Office. Your health plan includes prescription drugs and vaccines with up to 80% coverage on prescription drugs, to a maximum of \$5,000 per policy-year (PY) and up to 100% for vaccinations (\$200/PY). Oral contraceptives and devices are covered at \$250/PY and diabetic testing agents at \$1000/PY.

You also get hospitalization & home care (semi-private hospital room and tutorial service), medical equipment, accidents & emergencies (ambulance to the nearest hospital, accidental death & dismemberment) and diagnostic services (lab tests used to diagnose an illness and performed in a commercial lab). Orthotics are covered to a maximum of \$350/PY, custom-made orthopedic shoes are covered to a maximum of one-pair/PY and podiatric orthosis or arch supports are covered up to one pair per 36 consecutive months. Hearing aids, repairs, or replacement parts are covered up to \$500 every five years when approved by a medical practitioner.

You receive mental health coverage to a maximum of \$100 per visit, with coverage including psychologists, psychotherapists, Master of social work, and clinical counsellors (15 visits max). You can also visit registered massage therapists & acupuncturists, naturopaths & homeopaths, podiatrists/chiropractors, speech therapists, and physiotherapists (maximum of \$30 per visit).

Dental care is covered up to a maximum of \$800. Oral examinations, polishing, and fluoride treatment are covered once every 12 months. Bitewing x-rays are covered once every 9 months. Periodontal scaling is covered up to 2 units/PY. Finally, dental accidents such as repair/replacement of healthy teeth damaged by accidental blow to mouth are covered. Your vision plan covers eyeglasses, contact lenses and eye exams at \$150/24 months.

Your travel coverage includes hospital, physician, and other services for emergency treatment of an injury or illness while travelling outside the province in which you reside (including international travel). You're covered up to 120 days per trip for unlimited trips, if you're going on exchange or internship. The maximum coverage is \$5,000,000 per lifetime. Trip cancellation is covered up to \$1,500 per trip for prepaid, non-refundable trip expenses in case of a medical emergency. Trip interruptions are covered up to \$5,000 for each trip taken during the policy year in case of a medical emergency.



In these trying times, it is important to take care of yourself. So, take advantage of these opportunities available to you! Whether you are just looking to pass your courses, get the best marks or score some brownie points with the profs, I personally wish you the best year you can possibly have.



## CSHP Interview with Cynthia Lam

UofT Graduate and Current UHN Resident

*Interview by: Wei Wei, CSHP Communications Rep*

**H**i reader, this is Wei Wei from CSHP at UofT. As another year approaches its conclusion, I am excited to present the final interview of this school year with UofT PharmD program graduate and current resident Cynthia Lam! Graduated from the PharmD program at our Faculty in 2020, Cynthia has been undertaking a pharmacy residency program at the University Health Network (UHN) in Toronto. I invite you to continue reading to see the experiences and insights she is eager to share with us regarding her residency program, the path that took her here, and her outlook on her future practice of pharmacy.

***WW: What was your experience of the PharmD program at our Faculty?***

CL: I enjoyed the 4-year PharmD program at U of T. I especially enjoyed the pharmacotherapy courses which were very helpful and foundational to helping me in clinical practice. I also appreciated the many opportunities to explore various practice areas, particularly during 4th year APPEs.

***WW: When and why did you choose to pursue a residency program?***

CL: I am not in a general residency program, but a primary care residency program at the University Health Network. At the time of residency application, I actually did not have any inpatient hospital experience. It was after completing an elective Family Health Team rotation in Hamilton, that I decided to pursue this specific residency program. During this elective, I realized the potential positive impact a pharmacist could have on a patient's care as a part of the interprofessional team. The opportunity to build deeper relationships with patients, to advocate for them, and to work closely with the interprofessional team were very rewarding.

***WW: What is the general structure of your residency? Did you take on any elective rotations?***

CL: Since my residency program is primary care focused, ~ 24 weeks of my year is dedicated to a family health team. Other mandatory rotations include longitudinal project, leadership, drug information, and general internal medicine. The electives I took this year were Hemodialysis at Toronto General Hospital and Musculoskeletal and Geriatric rehab at Toronto Rehab Institute.

***WW: Would you mind sharing a bit about the project you're doing/have done as part of your residency?***

CL: My research project is titled: "Physician and Nurse Practitioner Perceptions of the Routine Opioid Outcome Monitoring (ROOM) Tool." The ROOM Tool was originally developed and validated in Australia. It is used by community pharmacists to screen and complete a brief intervention regarding an individual's opioid use for chronic pain. An adapted version has been implemented across University Health Network. I am doing a qualitative research project which will be using focus groups to gather physician and nurse practitioner perspectives on this adapted ROOM Tool.

**WW: Is there anything you particularly love about your residency?**

CL: I have been very grateful for the residency program and it's definitely difficult to narrow down to one thing. Amongst the many positive things about residency, I love the numerous challenging opportunities that allow me to further develop my soft skills & clinical skills. The countless opportunities have helped me to develop confidence in being a stronger and independent pharmacist.

“

*I love the numerous challenging opportunities that allow me to further develop my soft skills & clinical skills. The countless opportunities have helped me to develop confidence in being a stronger and independent pharmacist.*

”

**WW: Is there anything you find particularly challenging in your residency?**

CL: Despite the numerous opportunities being one of the things I appreciate most in the residency program, it also has its challenges. For example, because there are so many rotations, I am frequently switching from one rotation to the next after ~4-6-week blocks. This makes it difficult to become “fully independent” by the end of each rotation. I find that once I have become more confident and comfortable in one rotation, I'm moving on to the next and starting from the beginning again. However, this challenge has taught me how to adapt quickly and to be more systematic in my pharmacotherapeutic work-up regardless of the rotation I am in.

**WW: What's your plan after completing residency?**

CL: I hope to pursue a job either in a family health team-like setting or an ambulatory care setting. I also hope to be engaged in teaching as a preceptor in the next couple years.

**WW: Finally, is there any advice you would give to current students who also wish to pursue a hospital residency?**

CL: I would suggest attending residency information nights and speaking with past residents about their experiences. Speaking with past residents helped me to better understand the nuances between programs. This helped me to better understand what I wanted and which programs might be a better fit for me. Lastly, don't be intimidated by the application and competition, do your best and you never know where that might take you! (I never would have imagined being here today).



**CSHP**

I would like to extend my warm thanks to Cynthia for interviewing with me and providing her insights to the student body at UofT. CSHP at UofT would also like to thank all of you for your interest in our work through your readership, your participation in our events, and your CSHP membership. Hope your interest in the various practices of pharmacy will keep your mind inquisitive and your heart passionate, and whether you're studying for your final exams, or finishing up your last APPE rotations and preparing for PEBC, we wish you all the best in your academic and professional pursuits.



CSHPA External Affairs Student Writing Award winner:

# Virtually TOGETHER at the CSHP conference

Huy Pham, 2T4



Due to the current pandemic, an in-person professional conference would be ill-advised. However for the 2021 year, the Canadian Society of Hospital Pharmacists worked around that issue by combining three of their professional events into one singular, virtual conference. Held from March 20 to 27, this virtual conference allows you to attend and explore a wide array of topics pertaining to hospital pharmacy in the comfort of your own home at a reduced rate for members. These subjects include but definitely are not limited to:

- Approaches to meta-analysis
- Vaccine acceptance
- Pharmacotherapies for COVID-19
- Pharmacist as opioid stewardess
- Beta-lactam allergy delabeling
- The impact of climate change on physical and mental health

One crucial and helpful event for any pharmacy students, whether they're a first-year exploring their options or a third-year interested in residency, is the Student and Resident Networking Event. This two-hour session allows pharmacy students and residents to connect with and discuss with hospital pharmacy practitioners such as directors and coordinators. Having attended the event myself, I can say that it was a fulfilling experience having to talk with a variety of individuals with diverse backgrounds. I learned a lot about hospital pharmacy, primarily about the diverse paths one can take in hospital pharmacy with specializations such as oncology, general surgery, and neurology. One key lesson to take away from this event was the necessity of being adaptive and saying "yes" to any opportunities that come my way (obviously, in moderation to minimize burnout).

Some of the seminars in this hospital pharmacy conference are also applicable to other branches of pharmacy. For instance, the first day of the conference had a session dedicated to the issue of pharmacy burnout, how to identify it and strategies to address it. One interesting approach mentioned in the session was the concept of and need to shift towards the adoption of energy management rather than just time management. The speaker, Roxane Carr, argues that managing our energy (which she compartmentalizes into the body, spirit, mind, and emotions) can help prevent and heal from burnout, where one could, for instance, ensure adequate nutrition and create a personal mission statement. The conference also has a session of how to work with people you don't like, which would be helpful if one were a community pharmacist who is dealing with an aggressive physician or patient. A notable take-away from that seminar, other than the fact that in response to being asked to describe in one word how one feels about working with people one doesn't like, someone wrote "kill", was the concept that conflict should be treated as a dance rather than a tug-of-war.

In addition, the conference provides an excellent virtual exhibit hall that allows attendees to chat with representatives from pharmaceutical companies (Novartis, Sanofi, Apotex, etc.) the Canadian Pharmacy Residency Board, and the CSHP themselves. This enables any curious students to explore their possibilities in post-graduate residency, either in the hospital or industry.

Overall, the conference is a very amusing and mental-stimulating experience and I highly encourage my fellow pharmacy classmates curious about hospital pharmacy, if possible, to attend next year's CSHP conferences. The annual conferences by the CSHP provincial branches are also an option.

## OPA External Affairs Student Writing

Award winner:

### **LGBTQ+ Toolkit of OPA: The Significance of Continuing Education for Pharmacists and Accessible Resources for Pharmacists and LGBTQ+ Patients**

*By: Mansi Sheth, 274*

Perhaps an emerging and an increasingly valuable service provided by the Ontario Pharmacists Association (OPA) is a LGBTQ+ “toolkit”, consisting of continuing education courses for pharmacists and pharmacy technicians, and accessible resources for pharmacists and LGBTQ+ patients. The lesbian, gay, bisexual, transgender or queer/questioning (LGBTQ) community showcases multiple ethnicities, religions, races, socioeconomic positions, and mental health statuses. Addressing the healthcare needs of LGBTQ+ patients is important for optimizing patient outcomes, reducing healthcare inequalities, and providing cultural competency training to pharmacy staff to create an inclusive environment for all patients. Compared to the general population, LGBTQ+ patients are at a greater risk for substance use, cancers, sexually transmitted diseases (STDs), HIV, cardiovascular diseases, depression, and suicide. Stigma, lack of awareness of LGBTQ+ needs from healthcare professionals and insensitivity lead to LGBTQ+ patients fearing discrimination due to their gender identity, sexual orientation and gender expression, and receiving suboptimal quality of care.

The Ontario Pharmacists Association offers a paid education course on “Providing LGBTQ+ Inclusive Care at Your Pharmacy”, aiming to address the unique needs of LGBTQ+ patients to foster an inclusive pharmacy environment. Recognizing and celebrating the cultural differences of LGBTQ+ patients demand a different skill set than clinical expertise. The OPA’s education course lays out a comprehensive guidance on providing inclusive care for the LGBTQ+ community for pharmacists and pharmacy technicians through introducing LGBTQ+ healthcare, terminology associated with the LGBTQ+ community, structural stigma, characteristics of a welcoming pharmacy environment, resources for recommending programs, referrals, or services to serve the needs of LGBTQ+ patients, and pharmacotherapy for HIV/AIDS, patient care management and transgen-

der care. This course is 3.25 hours long and requires completion of online modules and a score of 70 percent on a multiple-choice assessment. In addition to assisting pharmacists with treatment plans for LGBTQ+ patients, the course emphasizes the importance of patient interactions, inclusive pharmacy environments, and policies and training to provide culturally competent services.<sup>1</sup>

Additionally, as part of the LGBTQ+ “toolkit”, OPA offers a free education course on “An Introduction to Caring for Trans Patients in Pharmacy” for pharmacists looking to improve their knowledge and skills on providing inclusive care for trans patients. Many studies have depicted a knowledge gap when provision of inclusive care for LGBTQ+ patients is considered by pharmacists and other healthcare professionals, emphasizing the significance of improving training to optimize the health outcomes of patients who are part of this community. Many times, LGBTQ+ patients report the necessity of them having to educate their pharmacists or family physicians about the unique trans health needs and issues. This presents an optimal opportunity for pharmacists to act as advisors for LGBTQ+ patients who may require transition therapy or puberty suppression therapy. This course allows pharmacists to build empathy and bridge the knowledge gap on LGBTQ+ issues by getting trained on optimizing inclusive care for transgender patients and fostering a welcoming environment. This introductory course allows pharmacists to learn about LGBTQ+ terms and concepts, healthcare disparities and barriers to optimization of LGBTQ+ care, the pharmacist’s role in trans pharmaceutical care, and trans resources for use by staff in the pharmacy to increase accessibility. Offered by the OPA, this education course is 1.25 hours long and requires completion of online modules and attainment of a score of 70 percent on a multiple-choice assessment.<sup>2</sup>

To complement OPA’s LGBTQ+ advocacy service through education, OPA also provides a toolkit of LGBTQ+ professional resources for pharmacists and patients. It lists the Human Rights Campaign (HRC) “Providing LGBTQ-Inclusive Care and Services at Your Pharmacy” resource, which is available in preferred languages, addresses health disparities as they pertain to transgender patients, and provides guidance on creating an inclusive environment for transgender patients.

OPA lists the National LGBT Health Education Centre's "Providing Inclusive Services and Care for LGBT People" resource, which offers strategies and resources for healthcare professionals to foster a more welcoming environment for patients. OPA also promotes the World Professional Association for Transgender Health resource for pharmacists, which showcases standards of care, therapy criteria, guidance for follow-up, and other important information.<sup>3</sup>

The Ontario Pharmacists Association promotes resources tailored for LGBTQ+ patients, such as a Sex Reassignment Surgery information webpage, which displays the requirements for OHIP-funded sex reassignment surgery and contains documents to be completed by healthcare providers. On the OPA website, LGBTQ+ patients can also find OHIP Schedule of Benefits – Appendix D, which lists insured and uninsured services and requirements for coverage. LGBTQ+ individuals can also visit the OPA website to learn more about Northern Travel Grants through referral to a webpage that provides information about a travel grant program which may cover accommodation and travel expenses for patients who must travel for treatment. Patients older than 18 years of age, aiming to further explore their gender identity and obtain therapy and support for their mental health, can refer to the Gender Identity clinic (CAMH) after receiving physician referral, as listed as a resource by the OPA.<sup>3</sup>



Lack of formal training for pharmacists and pharmacy technicians hinders the ability of the healthcare workforce to address the unique healthcare needs of the LGBTQ+ community and to provide inclusive care in a safe environment. LGBTQ+ patients may face homophobia and heterosexism in their homes, schools, and community. They are more likely to engage in high-risk sexual behaviours, partly due to peer victimization and abuse, and are at a greater risk for depression and

substance abuse, including cannabis and methadone. An additional significant issue is discrimination in the healthcare delivery in hospitals and clinics, where the potential to develop a therapeutic alliance with a healthcare professional, such as a pharmacist, may be strained. Suboptimal disease-related education and screening for communicable diseases, and insufficient interventions for preventing sexually-transmitted diseases are only few instances that show the detrimental consequences of the lack of cultural competency in the provision of care for LGBTQ+ patients.

OPA's toolkit of continuing education courses for pharmacists and pharmacy technicians about caring for LGBTQ+ patients, and accessible resources that pharmacists and LGBTQ+ patients can utilize on the OPA website is the stepping stone for the OPA advocating for the provision of inclusive care for patients from different communities. This form of advocacy and continuing education training may extend to customizing pharmacy practice for Indigenous patients and the elderly population in the near future, as pharmacists have an opportunity to address the unique cultural needs and discrimination faced by these populations, similar to the LGBTQ+ patient population. Student interest groups at the University of Toronto, such as PharmaPride, engage pharmacy students in promoting LGBTQ+ visibility, activism and education, addressing topics of blood donation in Ontario by LGBTQ+ individuals, special considerations in the provision of care for people living with HIV, and submission of an OPA resolution to improve LGBTQ education. Engaging in the initiatives of PharmaPride and being part of the executive council of Pharmacy Awareness of Indigenous Health (PAIH) allows myself, along with other pharmacy students, to understand the implications of cultural competency in pharmacy, in addition to exploring OPA's LGBTQ+ toolkit of continuing education opportunities and accessible resources for LGBTQ+ individuals and pharmacists to identify ways of creating an inclusive and safe pharmacy environment.

#### References

1. Ontario Pharmacists Association. (March 19, 2021). Providing LGBTQ+ Inclusive Care at Your Pharmacy. Retrieved from <https://opatoday.com/product/lgbtq-care/>
2. Ontario Pharmacists Association. (March 19, 2021). An Introduction to Caring for Trans Patients in Pharmacy. Retrieved from <https://opatoday.com/product/caring-for-trans/>
3. Ontario Pharmacists Association. (March 19, 2021). LGBTQ+. Retrieved from <https://opatoday.com/lgbtq/>



# Clubs Corner: PSFCA

## A Flashback of 2020-2021

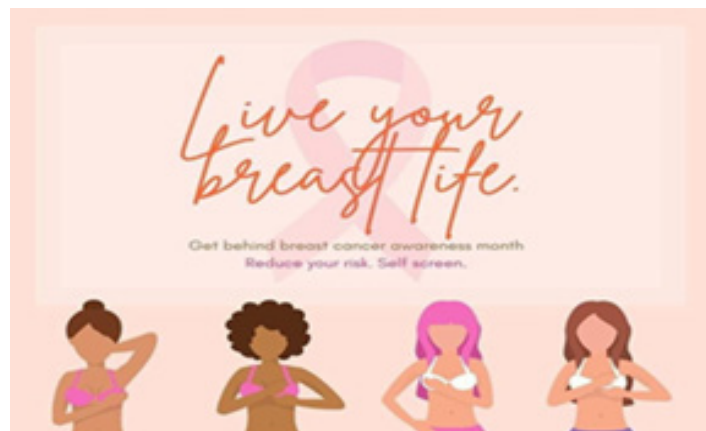
*By: Mansi Sheth,  
PSFCA Events  
Co-Ordinator*

Pharmacy Students for Cancer Awareness (PSFCA) is a student-led club with the goal of raising awareness for cancer, its lifestyle factors, the role that pharmacists have in cancer care, and potential career opportunities in oncology. Over the past school year, PSFCA supported many campaigns to achieve these goals!

In October, PSFCA engaged pharmacy students during their breast cancer awareness campaign through the creation of infographics focused on delivering the facts and statistics of breast cancer. This included the various types of breast cancer, risk factors, signs and symptoms, and the importance of self-examinations. As a prevalent form of cancer affecting millions of women globally each year, understanding more about breast cancer can help pharmacists improve their level of patient care. PSFCA invited students to raise awareness for breast cancer by sharing a photo of themselves wearing a pink shirt or pink manicure!

During the month of November, PSFCA hosted their Movember campaign, raising awareness for prostate cancer, testicular cancer, and men's mental and physical health. Through a series of infographics, pharmacy students were given the opportunity to learn more about the statistics, diagnostic parameters, signs and symptoms, and monitoring of prostate cancer and testicular cancer. Students were encouraged to show their support by posting a photo of themselves with a fully grown moustache or with a paper cutout of a moustache and an accompanying fact about prostate or testicular cancer! They were further encouraged to host a Mo-moment by rallying their friends to raise money for the cause. At the start of the second semester, PSFCA engaged the

student body to share their views and perceptions on the role that pharmacists have in cancer care. Students were able to learn more about the various roles that oncology pharmacists have in cancer care and how they actively collaborate with oncologists and nurses to determine the best course of action to treat each patient, manage their side effects, monitor their therapy, and counsel them on their new medications.



To build on the goal of educating pharmacy students on the role that pharmacists have in cancer care, PSFCA organized and hosted a Q&A Panel with two oncology pharmacists and an oncology pharmacy resident. Students had the opportunity to ask questions and learn more about how each panelist developed their interest in oncology, what working in oncology is like, the opportunities that exist for pharmacy students to gain oncology experience, and how they can network with professionals in the field.

In the past, PSFCA has hosted many events, such as "The Great Pharmacy Bake-Off" and Cancer Awareness Week. PSFCA has also raised money for various organizations, such as The Movember Foundation, Canadian Breast Cancer Foundation, and Terry Fox Foundation. We hope to engage more pharmacy students next year with educational and interactive events that take place in-person! Through our events, we hope to empower pharmacy students with the experience they need to demonstrate the "care" in cancer care.



# CLubs Corner: COMPPS: Veterinary Compounding



By: Nick Li, 2T2

## & Pharmacist's Role

As many people treat pets as part of their families, many owners are willing to spend the time and effort to find good veterinarian care for their beloved pets. Medication use has always been a crucial part of veterinarian care, which is also moving towards being more patient-centred and personalized.<sup>1</sup> Pharmacists, as well as veterinarians, have been contributing towards the growing trend of personalized veterinary medicine.

Veterinarians have to treat a broad range of animal species of all different shapes and sizes, so commercially available medications are not always the most appropriate option for each specific animal. Thus, many veterinarians highly value veterinary compounding due to its therapeutic flexibility and the availability of different formulations for personalization of veterinary medicine. To prescribe a compounded medication, veterinarians will take into account the animal's species, size, conditions, and behaviors, to ensure the dosage form, flavor and efficacy of the drug fit the unique needs of the animal. Some common examples of veterinary compounding include mixing two or more injectable drugs to increase convenience, preparing oral suspensions from crushed tablets to enhance the ease of administration, and preparing transdermal or topical application from crushed tablets to alter the route of administration. One of the biggest reasons to compound is to increase animal's compliance; for example, fish flavouring may be used to cover the taste of pills for cats, crunchy biscuits may have a better texture than oral suspensions for dogs, and small doses of seedlike compounds can be better for delivering medications to birds than large volumes of liquid.<sup>2</sup>

The Canadian Veterinary Medical Association emphasizes that only a licensed veterinarian or a licensed pharmacist can compound and dispense drugs for veterinary use.<sup>3</sup> Having pharmacists on board to participate in veterinary compounding is advantageous because many animals may have similar medication-related issues to humans, such as side effects, dosage restrictions, and drug therapy problems. Moreover, pharmacists generally have a good understanding of different dis-

ease states, as animals often have variations of the same diseases humans can have.<sup>2</sup> Involving pharmacists provides veterinarians opportunities for interprofessional collaboration that can be beneficial to the (animal) patient. Since many pet owners express concerns of the challenges of feeding medications to their pets, involving pharmacists who have profound knowledge in compounding can be the solution for many pet owners.

As outlined by each provincial regulatory body for veterinary medicine, veterinarians and pharmacists share different roles and responsibilities in terms of compounding. As required by the College of Veterinarians of Ontario, veterinarians are responsible for providing pharmacists with instructions to fill a compounded drug, and responsible for all consequences arising from drug administration to adverse events.<sup>4</sup> Veterinarians are also responsible for reporting adverse drug reactions to the Veterinary Drugs Directorate at Health Canada, the federal regulatory body of veterinary medicine responsible for monitoring the safety and efficacy of approved veterinary drugs.<sup>4</sup> On the other hand, pharmacists are responsible for the preparation of prescriptions in accordance with the veterinarian's instructions and responsible for the knowledge of pharmacokinetics of different ingredients. They must also comply with Ontario College of Pharmacists' requirements to follow good manufacturing practices (GMPs) when compounding for veterinary use and hold a drug establishment license in order to import, package, and test APIs for veterinary use.<sup>5</sup>

### References:

1. THE PCCA BLOG: How to get started in veterinary compounding. [Internet]. Retrieved March 15, 2021, from <https://www.pccarx.com/Blog/how-to-get-started-in-veterinary-compounding>
2. Longevity Pharmacy. Veterinary Compounding. [Internet]. Retrieved March 15, 2021, from <https://longevitypharmacy.ca/veterinary-compounding/>
3. Canadian Veterinary Medical Association. Will stronger stewardship practices mean changes to compounding guidelines? [Internet]. Retrieved March 15, 2021, from <https://www.canadianveterinarians.net/documents/compounding>
4. The College of Veterinarians of Ontario. Guidelines for the Compounding of Veterinary Drugs. [Internet]. Retrieved March 15, 2021, from <https://www.cvo.org/CVO/media/College-of-Veterinarians-of-Ontario/Resources%20and%20Publications/Position%20Statements%20and%20Guidelines/CompoundingofVeterinaryDrugs.pdf>
5. Pharmacy Connection. Health Canada introduces new rules for pharmacies that compound APIs for veterinary use. [Internet]. Retrieved March 15, 2021, from <https://pharmacyconnection.ca/compound-apis-vet-use-spring-2018/>

# Clubs Corner: EVOLVE Opioid Stewardship and Chronic Pain Management

Rachel Ma, 2T4

Chronic pain is a prevalent issue that affects approximately 18.9% of Canadians. There is increasing recognition that chronic pain is a multifaceted disorder often associated with considerable disability, and is a burden to the patient, healthcare system, and society as a whole. In recent years, more and more Canadians are using opioids and current research indicates that Canada is the world's second-largest consumer of opioids. However, along with the increasing use of opioids, there has been a corresponding and dangerous increase in harm from opioids. 16 million individuals worldwide have had, or currently suffer from, opioid use disorder. Accidental opioid overdose is preventable with correct monitoring and precautions. Prior opioid overdose is a major risk factor for subsequent overdose and overdose death. To put it into perspective, a patient who has previously overdosed is 6 times more likely to overdose in the subsequent year. Pharmacists play a central role in healthcare teams and are in a strategic position to promote effective opioid stewardship.

As pharmacists we contribute to opioid stewardship through:

- Overseeing dosing
- Conducting medication reviews
- Optimizing patient's opioid therapy through pain assessment
- Facilitating patient education
- Scheduling targeted monitoring of treatment outcomes and timely identification of patients at risk

## Education

Before pharmacists can take part in opioid stewardship, proper education and training must be given. Although pharmacists must be confident that they have sufficient clinical knowledge, relevant training and skills concerning any medication, special considerations must be made for opioid therapy. Pharmacists should have the resources to provide the knowledge of best evidence and relevant clinical practice guidelines specific to opioid therapy.

## Assessment

Pharmacists must then assess, within their scope,

whether the prescribed opioid therapy is appropriate for the patient's clinical therapy. While conducting this assessment, pharmacists should consider:

- Complete patient history, including allergies, medical conditions, non-prescription medications, life-style factors, etc
- Possible alternative and appropriate non-opioid and non-pharmacological treatment options (ex. Life-style change, physical therapy, dietary change)
- Patient's risk for opioid use disorder
- Monitoring plan parameters such as withdrawal symptoms and pain scale

## Communication with Patients and Caregivers

Once the patients begin opioid therapy, the pharmacist should ensure that patients and caregivers are active participants in their care. Proper communication with the patient about the potential harm and cautions associated with opioid therapy will ensure that they are properly educated. Patients and caregivers of the patients' prescribed opioids should be educated on the following:

- Realistic expectations regarding the benefits and outcomes from opioid therapy
- Signs of substance use disorder
- Potential adverse effects and risks associated with opioids
- Monitoring parameters to ensure continuous appropriateness of opioid therapy
- Safe storage and appropriate return and disposal of unused opioid medications
- 

## Communication with Prescribers

The pharmacist and the prescriber play another important role in providing care of a patient on opioid therapy. Pharmacists should establish regular communication with prescribers to ensure continuity of care, reduce the risk of opioid misuse, and optimize patient outcomes. When appropriate, pharmacists should actively communicate information to prescribers such as:

- Potential drug therapy problems with evidence-based recommendations and solutions
- Patients with potential substance use disorder and diversion



- Patients who would be interested in and benefit from opioid tapering or alternative therapy
- Relevant NMS alerts

### Documentations

Similarly, to all other medications, pharmacists must record relevant details with regards to opioid therapy in an accessible and standardized manner following OCP Documentation Guidelines. As well, if faced with a decision that requires professional or clinical judgement, documentation should include: the decision, its rationale, expected patient outcome and a monitoring plan and follow-up. Communication with patients and other healthcare providers surrounding the decision should be documented.

### Maintenance Monitoring and Follow-up

To ensure continuity of care, pharmacists should continue to monitor and follow up with patients that are prescribed ongoing opioid therapy. Monitoring should include a reassessment of the effectiveness and appropriateness of opioid therapy, such as thorough pain assessment, and reassessment of the safety of therapy including identifying and addressing any adverse events the patient may be experiencing. Pharmacists should also work with patients to develop a follow-up plan to address any concerns and recognize early identification of opioid misuse. Updates should be then documented and provide prescribers with recommended next steps, as appropriate.

Pharmacists are involved in a wide range of opioid stewardship activities in various settings around the world. We recommend focusing and emphasizing education, therapy adjustments, medication reviews and opioid agonist therapies where evidence is most abundant.



## THE EYES OF THE WORLD ARE UPON YOU

Kevin Galido, 2T3

WHAT  
IS COMING  
IS BETTER  
THAN  
WHAT  
IS GONE

QuotesBook.com

*"What is coming is better than what is gone. Let this belief aim you in the direction you need to go."*

– Karen Salmansohn

There are a lot of articles published in this issue about the school year ending and how sad it feels for it to be over; this isn't one of them. Let's be honest with ourselves here, this school year and this pandemic has been incredibly grueling, unforgiving, and taxing to our mental & physical health. We have been running a full marathon without any shoes. So as much as I am glad for this year to be over, we should also be excited for this amazing opportunity that lies at our feet. Pharmacists, pharmacy technicians, and students are needed now more than ever to carry an increased workload. Pharmacy students are even being called to participate in this mass vaccination campaign in community & institutional settings and in larger vaccination clinics run by various public health units. This is a once-in-a-lifetime (hopefully only once) opportunity to contribute to (likely) the world's largest coordinated public health effort. Regardless of what you're doing in the summer, whether working or whether doing placements, you should know and believe that you are genuinely making a difference in the lives of each and every person or patient you interact with. There will be many days when the face-to-face interactions will not be pleasant. There will be some days where we question our choice in vocation. But there will be many more experiences and times to see how our actions this summer, whether dispensing or vaccinating or counselling, will forever change the course of people's lives. It's not fair to ask everyone to be altruistic in this profession, many of us are here for many other reasons. Yet, I promise that all of us will never forget our choices or actions from this summer. The finish line is on the horizon, one more mile to go, let's give it our all. (305)



# SNAPPY APPE Interview

## ft. Duresameen Zahoor

Interviewed By Hebah Arabi, 2T1 Monograph Rep



**The fourth year UofT PharmD students are wrapping up their APPE or advanced pharmacy practice experiential rotations this April 2021. My name is Hebah and I interview our senior students in my SNAPPY APPE Interviews series to understand what a day in the life of an APPE student is like in their unique practice sites. Today I am joined by Duresameen Zahoor, one of our talented senior students who completed her non-direct patient care experience rotation within Anti-Microbial Stewardship at UHN. Personally, I know Dure as we met almost four years ago in Phrosh! I cannot believe how time has flown by and now we are here speaking about our APPE year!**

**Dure:** Yeah, pharmacy school has really flown by especially the last year of APPEs with the COVID pandemic. I still remember that first day of phrosh so

clearly and how much fun it was doing those outdoor challenges. Anyways, I am currently on my last APPE right now in the pharmaceutical industry, working part time and studying for PEBC/OSCE. I am working at a public health unit administering COVID-19 vaccines and it has helped me realize how much I am interested in working in public health and healthcare policy. I am passionate about using preventative health tools like vaccines and lifestyle changes to help patients prevent serious health outcomes. I try to use my down time to get in more home workouts and try new healthy recipes.

**Hebah:** That is amazing and sounds like you have a lot of cool projects going on at the moment! I would like to start like all of my SNAPPY APPE interviews, with a bit about you. What is your favourite quote and why?

**Dure:** My favorite quote would be “no pressure no diamonds”. It is a bit cheesy and it was my high school graduation quote but it really resonates with me. The metaphor reminds me of the greater picture when I am in a stressful situation and has allowed me to become more outcome focused.

**Hebah:** I love that! Next, what are your top 3 must haves during your APPE rotation?

**Dure:** Since my rotation was completed virtually, I'd say a functional laptop, internet and private space. Although, there were a handful of times my family would walk in during a video call or my internet would stop working. I was able to make this work. I believe a good foundational knowledge in infectious disease management and a good understanding of the role of an ASP pharmacist would be a must have. It's hard to study before the rotation with the short turn over time but that pre-studying really steps up the APPE hospital DPC experience.

**Hebah:** Those are all key must have and now I am eager to find out about your ASP (antimicrobial stewardship) APPE rotation! First off, have you taken the ASP elective in your third year and is that what motivated you to pursue a rotation in ASP or another reason?

Dure: I did not take the ASP elective. I tried molecular pharmacology 2 but it brought back a lot of buried memories from the first molecular pharmacology so I eventually switched and stayed in the industry elective. I was motivated to pursue ASP because I wanted to strengthen my understanding of infectious disease management and I found it very interesting.

**Hebah:** So what exactly is antimicrobial stewardship (or ASP)?

Dure: The ASP pharmacist role is quite different from my other hospital APPE experience in internal medicine. There were no BPMHs or medical reconciliations. An ASP pharmacist oversees patients in different units and assesses antimicrobial therapy for indication, dose, duration, frequency, etc while following antimicrobial stewardship principles. At UHN, there is an antimicrobial stewardship team consisting of an infectious disease doctor, nurses and pharmacists who work together to ensure antimicrobials are used appropriately.

**Hebah:** That is fascinating! What do you think is the importance of ASP in healthcare?

Dure: Well, as we know antimicrobials are a precious resource and resistance is on the rise. There are many powerful antibiotics such as pip-tazo which are often

given to patients who are doing poorly despite a lack of evidence of a bacterial infection. It is difficult to identify the organism responsible prior to cultures and sensitivity results let alone if there is bacteria present. There are so many bacteria, viruses, fungi etc. which can cause diseases and so many differential diagnoses, so an ASP pharmacist is highly knowledgeable in these topics. The coolest part of ASP is that it is a mix of science and psychology. The ASP team supports and encourages clinicians to apply ASP principles in their overall practice by building relationships.

**Hebah:** Was this a virtual or in person rotation?

Dure: This rotation was done virtually. It started the week after the new lockdown rules in Toronto were put in place. All employees who could work from home had to work from home. Fortunately, I had VPN access to charts and communicated to the rest of the health-care team over Zoom or Teams.

**Hebah:** Who was your preceptor?

Dure: Mark McIntyre was my preceptor. He taught us UTIs in ID and teaches in many other courses in the faculty too.

**Hebah:** I remember him from ID! And who did you work with on your team?

Dure: I worked a lot with Mark and the other APPE student (Shoutout to Hillary!). As well, we had one-on-one meetings with various ASP team members and attended rounds weekly.



**Hebah:** What daily activities were you involved in?

Dure: I would pick up a new patient every day while continuing to follow up on my previous patients. I would present my patient and a plan to my preceptor and the other student. Also, I attended a lot of educational presentations by pharmacy residents, APPE students, and ID doctors from across the GTA.

**Hebah:** What are your top learning points from your ASP rotation that you would like to share with your peers and future pharmacists?

Dure: In the first half of the rotation,



I worked on patients in the COVID-19 teams. I learned that although many people survive COVID-19, it can cause so much inflammation and long-lasting damage to the human body. During my rotation, the guidelines for COVID-19 management were updated which speaks to how fast pharmacotherapy for COVID-19 is changing. In critically ill hospitalized patients in the ICU with COVID-19, empiric antimicrobials are no longer recommended unless strongly suspected. This update in the Ontario guidelines was a result of ASP findings in these patients. In the second half of my rotation, I was working on patients in the ICU. I learned a lot about interpreting vitals in the ICU.

**Hebah: With minor ailments coming soon, what role do you think ASP will play in pharmacists prescribing practices?**

Dure: The first step of assessment is always looking for an appropriate indication for pharmacotherapy. In ASP, this is important because there is not always a clear indication for antimicrobials. For example, it is hard to tell if a productive cough is caused by a bacterial or viral infection. This rotation has taught me the importance of timeline of onset of symptoms, baseline status of the patient, and probable sources of infection to identify the cause however it is not always an exact science.

**Hebah: Would you recommend a rotation in ASP to our junior students?**

Dure: Yes, I liked having my APPE at a teaching hospital. There is a great environment that is conducive to learning. They are used to having students around, so they are comfortable teaching and answering questions. Also, it was nice to have another student on the same rotation to work together with.

**Hebah: Do you have a better idea of where you would like to practice in the future?**

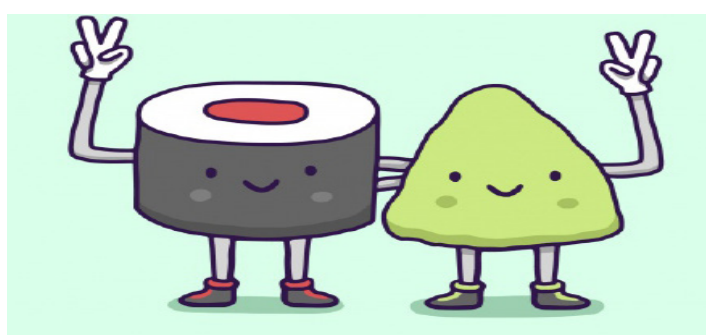
Dure: Yes, I do not have the heart to work in an ICU or critical care unit. The patients are a lot sicker than I was used to seeing in community pharmacies. However, my role vaccinating individuals at a mass immunization clinic has really opened my eyes to the great role pharmacists can play in public health and I hope to pursue this further throughout my career!

**Hebah: That is wonderful and I wish you all the best pursuing your new found interests and goals! I'd**

**like to conclude with: what sushi roll would you be and why? ...just asking because I'm having a sudden craving :D**

Dure: My favorite sushi roll would be the spicy crab roll with spicy mayo. It's a spicy, more laid back type of sushi but it's so good and addictive. This sushi has all the characteristics I can only aspire to be.

**Hebah: So good, I cannot handle right now! Maybe once this pandemic dies down you can share your spicy crab roll with me and I can share my spicy shrimp tempura roll, which is my absolute fav! :D Girls night!**



Well on that delicious spicy mayo note, I'd like to conclude this episode of the SNAPPY APPE Interview. We learned about Dure, the crucial role of an ASP pharmacist, and that we share an addiction to sushi! :) A big thank you to Dure for sharing her unique experiences with us! I can't help but feel nostalgic from our phrosh days together to becoming pharmacists soon. I wish you the best Dure in your journey forward!



*-Hebah Arabi, 2T1 Monograph Rep*



# Snappy APPE Interviews with Alexandra Domingues

Interviewed by Hebah Arabi,  
2T1 Monograph Rep



Hello pharmacy crew! In this final issue of the Monograph, I am excited to present not one, but TWO Snappy APPE Interviews! *\*screams\** My name is Hebah and I'm very excited to share my last interview of a fourth year pharmacy student with Alex Domingues. Alex shares her experiences at:

## St. Michael's Hospital - Family Health Team!

**Hebah:** Hello Alex, wonderful to have you on the SNAPPY APPE Interviews! I always start with a random question to get to know you better: Did you, like myself, cut your own hair or let it do its own thing during the pandemic?

Alex: Not yet, but I'm definitely close to chopping off a lot of hair so hopefully salons open up before I make any bad decisions.

**Hebah:** The struggle is real, my twin brother cut my hair twice already during the pandemic! Let's jump into your APPE rotation! Where did you complete your direct patient care rotation?

Alex: I was at 2 locations of the St. Michael's Family Health Team (FHT) with Brenda Chang.



...I think FHTs are a great way of utilizing healthcare and consolidating various professions under one clinic to ensure everyone is given the opportunity to ACCESS those services with minimal challenges in navigating the healthcare system.



**Hebah:** How long was your rotation and was it a work from home combo?

Alex: I was lucky to be there for 10 weeks, with a mix of DPC and NDPC. Typically, I followed the same hours as my preceptor, so we worked from home Tuesday to Thursday while Monday & Friday were in person at the various clinics she supports.

**Hebah:** That sounds like a great mix of virtual and in person experience! What is a family health team? What important role do FHTs play in the Canadian healthcare system?

Alex: A FHT is a collective of family physicians that practice interprofessional care within their clinic setting to ensure their patients get the best care by collaborating with various HCPs. The allied health included nursing, psychology, podiatry, social work, dentistry, dietetics, pharmacy and chiropractors. I think FHTs are a great way of utilizing healthcare and consolidating various professions under one clinic to ensure everyone is given the opportunity to access those services with minimal challenges in navigating the healthcare system.

**Hebah:** What patient population was your FHT focused on?

Alex: The patient population was predominantly from downtown Toronto, so very diverse. Many of their services are reserved for those that cannot afford treatment elsewhere.

**Hebah:** What tasks were you involved in on a daily basis? How important did you feel your contributions were to the team? Why?

Alex: Daily tasks included working up patients, speaking with doctors about recommendations and calling patients to discuss their treatment. It was a good variety of work and allowed me to explore different therapeutic topics in a primary care setting. I definitely felt my contributions were important because I would have meaningful discussions with HCPs and was able to see my recommendations be implemented and conduct monitoring as well. I honestly felt that my thoughts and knowledge were respected by the whole team.



**...The PHARMACIST is the go-to person for any MEDICATION related questions, no matter how small...**



**Hebah:** Were there any projects you were involved in?

Alex: Yes! My NDPC was a quality improvement project focusing on improving documentation and adherence to Prolia treatment, since the pharmacists had identified that many elderly patients were missing doses due to the pandemic. It was a very new experience for me but was happy with my result of creating a documentation template for the EMR to enhance adherence and follow-up with future appointments. It was a unique opportunity to learn how different HCPs use technology to make their workflow more efficient.

**Hebah:** How do pharmacists collaborate with other members of the team?

Alex: The pharmacist is the go-to person for any medication related question, no matter how small. At times it can be as 'simple' as figuring out coverage or as complicated as doing a complete review of medications and being responsible for modifications.

**Hebah:** How did COVID-19 impact your site?

Alex: Most appointments were conducted virtually, although I was still able to have a few in-person consultations which I enjoyed. Many of the family physicians were working remotely as well so discussing patients mostly occurred over the phone but the interactions were still meaningful.

**Hebah:** Were there other learners on site? How was your collaboration with them?

Alex: St Mike's is very learner friendly. It was a little difficult interacting with them in person; however, I was able to complete a mini project with a dietetics student about the evidence behind COVID and vitamin D. I was also able to discuss the care of a complex patient with a medical student moving forward.

**Hebah:** Where are you headed next in the last few blocks of APPE rotations?

Alex: My last couple of blocks were at Hamilton Health Sciences at an adult outpatient clinic that focused on infusion medicine. And I'm currently wrapping up a community rotation at Costco in Etobicoke which has been a great experience to wrap up APPEs with.

**Hebah:** Do you have a clearer understanding of where you want to be in the future?

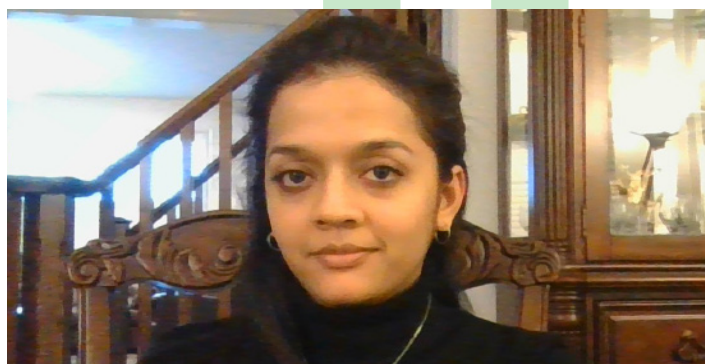
Alex: Clear as mud. I definitely don't know where I'll end up in the future or even after getting licensed but, I know there are lots of different opportunities available as long as I keep on looking.

**Hebah:** You are so right, pharmacists are equipped to practice in so many unique areas and it is exciting to see what the future holds! I wish you all the best Alex in your journey and excited for your bright future. A big thank you to Alex for this interview as we got to know her better, her family health team patient care, and project work at St. Mike's Hospital.

I'd like to wrap up our interview with Alex and the end of the SNAPPY APPE Interviews era! :'(



A big thank you to all of the wonderful 2T1 students who have taken time out of their crazy APPE rotations to share their experiences with us and YOU for reading them! It is clear that our class of 2T1 is full of talented individuals who have stepped up to complete their rotations in the face of a pandemic. As we are in our last block of rotations and PEBCs/OSCEs are looming, I wish the 2T1s all the best as they wrap up this chapter and move onward! We have encountered several challenges and setbacks so far and will continue to in our careers, no doubt, but one quote keeps me going and I hope it inspires you too, "Why do we fall Bruce? So that we can learn to pick ourselves up." Thank you and best wishes!



*Hebah Arabi, 2T1 Monograph Rep*

# *My GSK APPE Experience*

By: Hebah Arabi,  
2T1 Monograph Rep



I had the unique opportunity to gain fourth year advanced pharmacy practical experience (APPE) in the Medical Affairs Consumer Health (CH) Department at GlaxoSmithKline (GSK) in Block 8, January to February 2021. Even though my rotation was five weeks long and virtual due to the COVID-19 pandemic, I was able to make the most of my experience with the help of my encouraging preceptors Dr. Walid Aldoori (Country Medical Affairs Director), Dr. Geoffrey Saroea (Country Medical Affairs Senior Scientist), Dr. Lingxi Li (Medical Manager), and colleague Dr. Peter Gao (Senior Scientist).

I was introduced to the idea of pharmacists working within the pharmaceutical industry in my third year elective with Dr. Monica Gautam, PHM321 Selected Topics in Pharmaceutical Industry. I gained interest in the impact pharmacists can make at the systems level which motivated me to pursue this rotation within the pharmaceutical industry.





During my rotation at GSK, I learned about the vital role the Medical Affairs CH department plays within the pharmaceutical industry and our Canadian health care system at large! The Medical Affairs team are the go-to scientific experts who understand the complex science behind the medications and disease states and are able to train sales teams and others in the company. Medical Affairs works cross functionally with Marketing, Pharmacovigilance, Regulatory, and Legal departments to support product development and launches to the Canadian market. Not only does the team work on projects on a national level but also with international colleagues, such as the United States. In addition, the Medical team supports Medical Information in addressing drug information questions on products already on market from health care providers and consumers. I also had the chance to attend several meetings on developing continuing medical education events for health care providers on disease states.

I was involved in several projects throughout my rotation which gave me a better understanding of the daily Medical Affairs activities. First, I worked with Dr. Geoffrey Saroea to understand the science behind the topical diclofenac gel, Voltaren Extra Strength. I studied the product monograph to understand the clinical trials and to help address frequently asked questions by pharmacists on Voltaren, such as any contraindications to use, comparison to other topical pain relief products, and oral NSAIDs.

Next, I worked alongside the international US colleagues to support a new product indication. This involved a thorough literature review and critical appraisal of clinical trials to support the use of a particular GSK product in a disease state. The clinical trials had to provide strong evidence to support use of the

product in a new indication in order to obtain Health Canada approval and to be included in the product monograph.

I also worked closely with the marketing team to generate patient education animations that will be consumer facing. I enjoyed bringing my various interests including love for therapeutics, patient education, creativity, and business into these graphics to help consumers understand how to optimally use GSK and other products to manage a common ailment experienced by millions of Canadians. The videos have undergone extensive review and I am excited to share these with Canadian consumers soon!

Lastly, I had the opportunity to understand the important role of real world evidence (RWE) within pharma. Recently, randomized clinical trials have become the gold standard for evidence, however they present several challenges in applying to the real world as RCTs are conducted in specialized environments that differ from reality in clinic and home. RWE is data collected in a non-randomized setting from sources such as patient medical records, claims data, social media, and wearables. The use of RWE raises concerns about privacy, uneven quality of evidence, and lack of consensus regarding the benefits and applicability of RWE. It will be interesting to see the use of RWE in the future to support indications in populations excluded from clinical trials, in rare diseases, and in situations where it is otherwise unethical to conduct clinical trials.

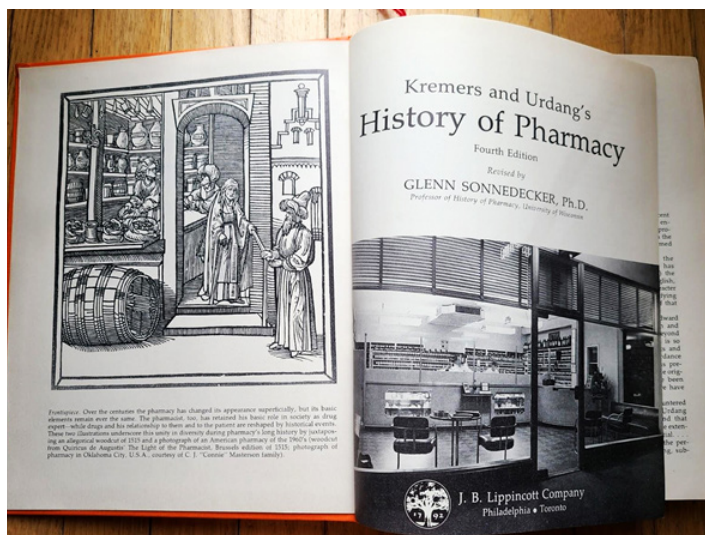
I thoroughly enjoyed being immersed within the activities of Medical Affairs, learning, and collaborating with many wonderful and talented individuals at GSK. I hope the projects that I have been a part of at GSK will benefit patients in Canada and internationally and allow them to manage their care effectively. I would like to thank my preceptors, the Medical team, and other GSK colleagues for believing in my projects, collaborating, and for the wonderful learning opportunity!

*-Hebah Arabi, 2T1 Monograph Rep*

# THE WESTERN PHARMACY TRADITION: HIGHLIGHTS FROM KREMERS AND URDANG

*By Michael Vu, 271*

I have always been a history buff, so naturally after I got into Pharmacy School I looked for books on the history of our profession. One book available in English is “History of Pharmacy” by Kremers and Urdang, first published in 1940. It focuses mainly on the United States, however there is an interesting opening section on the ancient origins of the Western Pharmacy Tradition. The book is a good reference, but you should probably look elsewhere to learn about pharmacy traditions of Indigenous Americans, Africa, China, and India.



## *History of Pharmacy, by Kremers and Urdang, 1940*

The preparation of medicines is a practice older than known history. This is because disease is older than history. To combat against the horror and mystery of illness, humans have alternatively turned to magic, medicine, and religion, and often all three at the same time. Cultures passed down empiric observations to the next generation, and accumulated knowledge of different medicines into compendiums or “materia medica”. These compendiums are the ancestors of the CPS. With our current pandemic, maybe we can start to imagine how helpless against disease people must have felt, and how important it was to preserve their knowledge of medicines.

Here are highlights from the first section, focussing on the ancient roots of pharmacy:

**Babylonia and Assyria (from about 1900 B.C.)**

In ancient Babylon, there was a class of people called “pasisu” who prepared remedies and cosmetics and sold them in the market. They had formulas and recipes for compounds like ointments, enemas, and fumes. They used ingredients such as opium, cannabis, and mandragora (as well as animal excrements). At the time, knowledge of medicines was evolving with other fields such as astrology and mathematics, and these were all combined into a magical-medical belief system. What we know of this time is derived from inscriptions on clay tablets.

**Egypt (from about 1400 B.C.)**

Ancient Egypt was a theocratic society run by priests, who also served the role of doctor and pharmacist as they were responsible for preparing and administering medicines. Documents survive which show formulas passed down through generations. They made perfumes, suppositories, and lotions among other formulations. They used natural ingredients (acacia, wormwood, garlic, honey), minerals (alum, sulfur, limestone), and well as processed goods (beer and wine). Images from tomb walls show an organized pharmaceutical production system, with each step of the process assigned to “pharmacy assistants” using balances, mortars, and hand mills.



## *Ointment workroom portrayed on an Egyptian tomb painting (from before 1400 B.C.)*

**Greece - Rome (from around 300 B.C.)**

The Greeks and Romans inherited a lot of their knowledge from the Egyptians, notably through the Library of Alexandria. Medicines were prepared mostly at temples. The symbol of pharmacy in the Western world, the “bowl of Hygeia”, comes from this period of temple medicine. Still intertwined with astrology, formulas would not only tell you which plants to pick, but also

when to pick them according to the movements of the stars. There was not a clear distinction between doctors and pharmacists, and many different roles existed such as compounders, pigment makers, importers, and botanists. Several influential schools of thought appeared during this time including Hippocrates and Galen. Most important however, was the compiling of the *De Materia Medica* by Dioscorides (around 50 A.D.). This pharmacopeia was translated from Greek to Arabic and Latin, and helped transfer ancient knowledge about the storage, collection, and processing of medicines to European and Arab countries. It also helps to remember that most treatments at this time were not very effective, so a significant number of people believed that there was no use in treating illness at all.

Arabs (from around 700 A.D.)

It is in Baghdad, the medieval centre of learning, that we first see what is recognizable as a modern “pharmacy” beginning in the 9th century. “*Sayadillah*” or “*قلاي ص*” as they were called (and are still called today), were distinct from doctors and specialized in dispensing medications. Pharmacists were examined and licensed and their shops were inspected. They often had botanical gardens next to hospitals, and adjacent labs to manufacture syrups. Pharmacists viewed their role as “knowing the materia medica formulas and their species, types, and shapes”. The role of pharmacists was able to evolve in the Arabic world because of the development of a public health system, leading to a division of labour between doctors and pharmacists.

Pharmaceutical knowledge from Greece, Rome, Persia, and India were all compiled by the Arabs, adding new ingredients such as senna, camphor, musk, and nutmeg. Important contributions to pharmaceutical knowledge were also made by Arab scholars such as Rhazes, Avicenna, and Masawaih. These included writings on side effects, dose adjustments, interactions, toxicology and instruments.

Europeans (from around 900 A.D.)

Much pharmaceutical knowledge reached Europe via the Arab conquest of Spain. Classic Greek texts such as *De Materia Medica* by Dioscorides survived in their Arabic translations. In medieval Europe medical knowledge was confined to monasteries and not widely available to the public. Much scholarship was focussed on reconciling medical knowledge with Christianity, and

more focus was put on the power of faith to heal disease. The first pharmacies in Europe appeared in southern Italy and France, modelled after the pharmacies in the Arab world. The first regulations for pharmacies in Europe appeared around 1200 A.D. in Germany, and one of its main goals was to distinguish legitimate pharmacists from “quacks” who exploited the sick.



***Triple strainer used for pharmaceuticals, from the Arabic manuscript of Abu-l-Qasim al-Zahrawi of Cordova (10th century).***

Taking a historical perspective, it is interesting to realize that before the 1800s, the “professions” we take for granted did not exist in any meaningful way. In Ontario, pharmacy did not become a self-governing profession until 1871, a relatively recent invention. At this time, a wave of “professionalization” transformed previously unregulated and informal health practices into legally protected in-groups (this was mostly done to reduce competition). And even then, practice was nothing like what it is today. The first randomized controlled trial of a drug was not published until decades later in the 1940s! Pharmaceutical care was not defined until the 1990s! We forget sometimes that modern health care is a very recent (and fragile) thing.

All this to say that pharmacy has changed greatly over the centuries, even as its essential function has persisted. As the nature of our societies and technologies have changed, so have our roles. The things we take for granted about our practice and our profession are not permanent, and we, as players in history, can shape our futures.

#### Reference:

Kremers and Urdang's History of Pharmacy, fourth edition, revised by Glenn Sonnedeker. J. B. Lippincott Company (1976).



## Comparison of Monographs of Health Canada Approved COVID Vaccines (as of Mar 6, 2021)

By: Pooja Patel, 2T1

			
Indication: active immunization to prevent COVID-19 caused by SARS-CoV-2 in individuals 16 years of age and older.	Indication: active immunization against COVID-19 caused by the SARS-CoV-2 virus in individuals 18 years of age and older.	Indication: active immunization against COVID-19 caused by the SARS-CoV-2 virus in individuals 18 years of age and older.	Indication: active immunization against COVID-19 caused by the SARS-CoV-2 virus in individuals 18 years of age and older.
Contraindication: individuals who are hypersensitive to the active substance or to any ingredient in the formulation.	Contraindication: individuals who are hypersensitive to the active ingredient or to any ingredients in the formulation, including any non-medicinal ingredient, or component of the container.	Contraindication: individuals who are hypersensitive to the active substance or to any ingredient in the formulation.	Contraindication: individuals who are hypersensitive to the active ingredient, any other adenovirus-based vaccines, or to any ingredient in the formulation, including any non-medicinal ingredient, or component of the container.
Dosing: 2 doses (0.3mL each) 21 days apart (range 19-23 days in the trial)	Dosing: 2 doses (0.5mL each) 28 days apart	Dosing: 2 doses (0.5mL each) 4 to 12 weeks apart*	Dosing: 1 dose (0.5mL)
Supplied: 0.45mL (6 dose) vial	Supplied: 5mL (10 dose) vial	Supplied: 4mL (8 dose) or 5mL (10 dose) vials.	Supplied: 5 dose (3.1mL) vial.
Storage: ultra-low temperatures -80°C to -60°C until expiry OR frozen -25°C to -15°C for 2 wks Thawing: Do not refreeze once thawed. Refrigerator (2°C to 8°C): Thaw for 2-3 hours. Store undiluted for up to 5 days (120 hours) OR Room temp (up to 25°C) Must be reached before diluting. Thaw for 30 min for immediate use. Store undiluted for no more than 2 hours. Diluting: with 1.8 mL of sterile 0.9% Sodium Chloride Injection, USP. Must be diluted within 2 hours of exposure to room temperature. Must use within 6 hours of diluting.	Storage: frozen between -25° to -15°C OR refrigerated 2° to 8°C for up to 30 days prior to first use OR unpunctured vials between 8° to 25°C for up to 12 hours Thawing: Do not refreeze once thawed. (1) Thaw in refrigerator (2° to 8°C) for 2.5 hours then room temp for 15 min OR (2) Thaw at room temperature (15° to 25°C) for 1 hour. After opening: use within 6h refrigerated or at room temp. No dilution	Storage: refrigerated between 2°C to 8°C until expiry. No reconstitution or thawing. After opening: use within 6 hours at room temp (up to 30°C), or 48 hours refrigerated (2 to 8°C).  The vial can be re-refrigerated, but the cumulative storage time at room temp must not exceed either of the above limits.	Storage: refrigerated between 2°C to 8°C until expiry. Stable for 12h at room temp (9°C to 25°C). No reconstitution or thawing. After opening: use within 6 hours refrigerated (2°C to 8°C) or 3h at room temp (up to 25°C)
Warnings/Precautions: Anaphylaxis. Postpone in acute severe febrile illness. Weigh risks and benefits in anticoagulant/bleeding disorder. Immunocompromised may have diminished response.	Warnings/Precautions: Anaphylaxis. Postpone in acute severe febrile illness. Weigh risks and benefits in anticoagulant/bleeding disorder. Immunocompromised may have diminished response. Syncope	Warnings/Precautions: May not protect all vaccine recipients. Anaphylaxis. Postpone in acute severe febrile illness. Weigh risks and benefits in anticoagulant/bleeding disorder. Immunocompromised may have diminished response. No data on fertility.	Warnings/Precautions: May not protect all vaccine recipients. Anaphylaxis. Postpone in acute severe febrile illness. Weigh risks and benefits in anticoagulant/bleeding disorder. Immunocompromised may have diminished response. Syncope. No data on fertility.
Special Populations: Pediatrics: safety/efficacy not established for under 16-year-old Geriatrics: studies included ages 65 and up Pregnancy: safety/efficacy not established Breastfeeding: data not available, consider risks vs benefits	Special Populations: Pediatrics: safety/efficacy not established for under 18-year-old Geriatrics: studies included ages 65 and up Pregnancy: safety/efficacy not established Breastfeeding: data not available, consider risks vs benefits	Special Populations: Pediatrics: safety/efficacy not established for under 18-year-old Geriatrics: limited information for ages 65 and up Pregnancy: safety/efficacy not established Breastfeeding: data not available, consider risks vs benefits	Special Populations: Pediatrics: safety/efficacy not established for under 18-year-old Geriatrics: studies included ages 65 and up Pregnancy: safety/efficacy not established Breastfeeding: data not available, consider risks vs benefits

1. PRODUCT MONOGRAPH INCLUDING PATIENT MEDICATION INFORMATION PFIZER-BIONTECH COVID-19 VACCINE [Internet]. Kirkland: Pfizer Canada ULC; 2021 [revised 3 Mar 2021, cited 21 Mar 2021]. Available from: <https://covid-vaccine.canada.ca/info/pdf/pfizer-biontech-covid-19-vaccine-pm1-en.pdf>

2. PRODUCT MONOGRAPH INCLUDING PATIENT MEDICATION INFORMATION COVID-19 Vaccine Moderna [Internet]. Cambridge: Moderna Therapeutics Inc.; 2021 [revised 19 Feb 2021, cited 21 Mar 2021]. Available from: <https://covid-vaccine.canada.ca/info/pdf/covid-19-vaccine-moderna-pm-en.pdf>

3. PRODUCT MONOGRAPH INCLUDING PATIENT MEDICATION INFORMATION ASTRAZENECA COVID-19 VACCINE [Internet]. Mississauga: AstraZeneca Canada Inc; 2021 [revised 26 Feb 2021, cited 21 Mar 2021]. Available from: <https://covid-vaccine.canada.ca/info/pdf/pfizer-biontech-covid-19-vaccine-pm1-en.pdf>

4. PRODUCT MONOGRAPH INCLUDING PATIENT MEDICATION INFORMATION JANSSEN COVID-19 VACCINE PRODUCT MONOGRAPH [Internet]. Toronto: Janssen Inc; 2021 [revised 5 Mar 2021, cited 21 March 2021]. Available from: <https://covid-vaccine.canada.ca/info/pdf/janssen-covid-19-vaccine-pm-en.pdf>

			
Common AE: injection site pain (84.1%), fatigue (62.9%), headache (55.1%), muscle pain (38.3%), chills (31.9%), joint pain (23.6%) and fever (14.2%). Usually mild or moderate in intensity.	Common AE: injection site pain (92.0%), fatigue (70.0%), headache (64.7%), muscle pain (61.5%) and chills (45.4%). Lasting around 1 to 3 days.	Common AE: injection site tenderness (75.3%), injection site pain (54.2%), fatigue (62.3%), headache (57.5%), muscle pain (48.6%), malaise (44.2%), fever (33.6%), chills (31.9%), joint pain (27.0%), and nausea (21.9%).	Common AE: injection site pain (48.7%), headache (39.0%), fatigue (38.3%), Muscle pain (33.2%), nausea (14.2%). Mild to moderate in severity, lasting 2 to 3 days.
Nonserious AE: Vaccine vs placebo: 23.8% vs 11.7% (including lymphadenopathy, in addition to above)	Nonserious AE: Vaccine vs placebo 23.9% vs 21.6% (including lymphadenopathy, in addition to above)	Nonserious AE: Vaccine vs placebo 37.8% vs 27.9% (including hyperhidrosis, decreased appetite, lymphadenopathy, dizziness, somnolence, in addition to above)	Nonserious AE: Vaccine vs placebo 13.1% vs 12% (including those listed above)
Serious AE: Vaccine vs placebo ages 18-64: 0.4% vs 0.3% ages 65 and up: 0.8% vs 0.6% (hypersensitivity)	Serious AE: Vaccine vs placebo Dose 1: 0.6% vs 0.6% Dose 2: 1% vs 1% (facial swelling, nausea, vomiting, fever, headaches)	Serious AE: Vaccine vs placebo 0.7% vs 0.8% (pyrexia, transverse myelitis vs. autoimmune hemolytic anemia, myelitis)	Serious AE: Vaccine vs placebo 0.4% vs 0.6% (fever, headache, asthenia, injection site pain nonresponsive to analgesics, hypersensitivity)
Mechanism: mRNA encoding SARS-CoV-2 spike protein delivered via lipid nanoparticles	Mechanism: mRNA encoding SARS-CoV-2 spike protein delivered via lipid nanoparticles	Mechanism: recombinant vector vaccine using a chimpanzee adenovirus to express the SARS-CoV-2 spike protein	Mechanism: recombinant vector vaccine using a human adenovirus to express the SARS-CoV-2 spike protein
Study Population: 43,651 participants ages 12 and up (only 16 and up included in analysis)  Excluded: Immunocompromised Previous COVID	Study Population: 28,207 participants 18 years of age and up Excluded: Pregnant/breastfeeding Previous COVID Immunocompromised Asplenic Recurrent severe infections	Study Population: 11,636 participants 18 years of age and up** Excluded: Hx of anaphylaxis/ angioedema Severe/uncontrolled cardiovascular, gastrointestinal, liver, renal, endocrine/metabolic disease, or neurological illnesses pregnant/breastfeeding Previous COVID Severe immunosuppression	Study Population: 44,325 participants 18 years of age and up Excluded: Known or suspected allergy or a history of anaphylaxis or serious adverse reactions to vaccines or excipients
Primary endpoint: any symptomatic COVID-19 case confirmed by Reverse Transcription-Polymerase Chain Reaction (RT-PCR). Only screened symptomatic individuals.	Primary endpoint: any symptomatic COVID-19 infection confirmed by Polymerase Chain Reaction (PCR). Only screened symptomatic individuals and pre-dose 2.	Primary endpoint: virologically-confirmed symptomatic cases of COVID-19. Actively screened on a weekly basis (which would have detected asymptomatic carriers)	Primary endpoint: symptomatic moderate to severe COVID-19 case, confirmed by Polymerase Chain Reaction (PCR). Only screened symptomatic individuals.
Efficacy: 95% effective overall 94.7% effective in age ≥65 (2 months post 2nd dose)	Efficacy: 94.1% effective overall 86.4% effective in age ≥65 (2 months post 2nd dose)	Efficacy: 70.42% effective (primary analysis, approx. 63 days post dose 2) 62.1% (subgroup analysis) 59.2% (updated analysis)***	Efficacy: 66.1% effective (at least 28 days after vaccination, including against variants)
Confirmed COVID-19 cases: Vaccine vs placebo: 8 vs 162	Confirmed COVID-19 cases: Vaccine vs placebo: 11 vs 185	Confirmed COVID-19 cases: Vaccine vs control: 27 vs 71 (Control: meningococcal vaccine and placebo)	Confirmed COVID-19 cases: Vaccine vs placebo: 66 vs 193

Notes regarding AstraZeneca Trial:

\*due to a difference in concentration determination between two analytical methods, some patients received a low dose of the vaccine followed by a standard dose, both are included in primary analysis. The interval between doses for participants in the primary analysis ranged from 3 to 26 weeks, but 75.5% had an interval between 4 to 12 weeks.

\*\*11,636 participants were included in the primary analysis based on prespecified criteria; however this only includes 51% of randomized participants, and studies are ongoing.

\*\*\*The 70.42% efficacy is for primary analysis with a data cut-off of Nov 4, 2020 (median 63 days, range: 16-94 days post second dose). The efficacy in the subgroup receiving 2 standard doses 4 to 12 weeks apart was 62.1%. The efficacy in the updated analysis with a data cut-off of Dec 7, 2020 was 59.5%.

# Just the Right Dose of Information

Huy Pham, 2T4



*(The views expressed in this article are solely those of the author and do not reflect the opinions of the OPA)*

Some core values that the Ontario Pharmacist Association (OPA) strives for include innovation and excellence and one way the association is promoting these values is through their professional development programs. This comes in many forms: continuing education courses on a variety of subjects, their annual conferences (with this year's conference occurring June 4-5), and, as of last year, the Right Dose series.

The Right Dose is a series of live webinars that enables Ontario pharmacists to be up-to-date on the pertinent issues and trends affecting pharmacy practice. In these webinars, the OPA brings in experts to discuss topics such as the COVID-19 vaccines, recent changes in asthma management, and methods of supporting those with diabetes management. The webinars are very informative and also provide an opportunity for the audience to connect with these experts in the Q & A sessions.

For the naive pharmacy student, these webinars can serve as a good introduction to an aspect of pharmacy practice. On a personal note, I tuned into the Right Dose held on December 9, where the speaker, Jane Ling, discusses the methods regarding the effective implementation of smoking cessation services in pharmacies. It was a very intriguing and educational experience as I learned a lot from this webinar, especially regarding

the pharmacotherapies involved in smoking cessation, the pharmacist barriers that might impede implementing these services and ways to overcome them. In addition, the webinar got me interested in enrolling in and completing the *Implementing Smoking Cessation Services in the Pharmacy* course on the OPA website.

If you can't attend a webinar due to prior commitments, no need to fret. A recording of the webinar is available on the OPA website for future viewing. In addition, some of these webinars have associated educational courses provided by the OPA for those with free time or those who want to learn more about the subject. I assure that these webinars and courses will be enriching.

## **Links to the some of the webinar recordings:**

### **The Science of COVID-19 Vaccines: Answering Common Questions**

<https://opatoday.com/the-science-of-covid19-vaccines-answering-common-questions/>

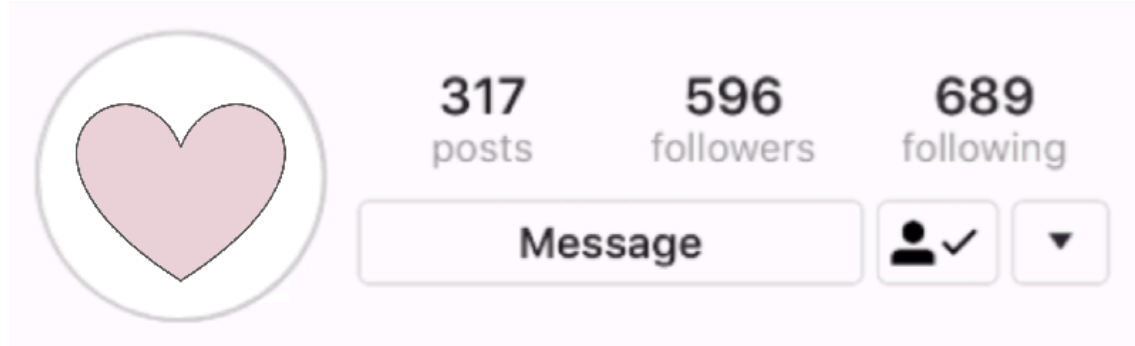
### **Create a Successful Smoking Cessation Service**

<https://opatoday.com/create-a-successful-smoking-cessation-service/>

### **The Positives and Negatives of COVID-19 Testing in Pharmacies**

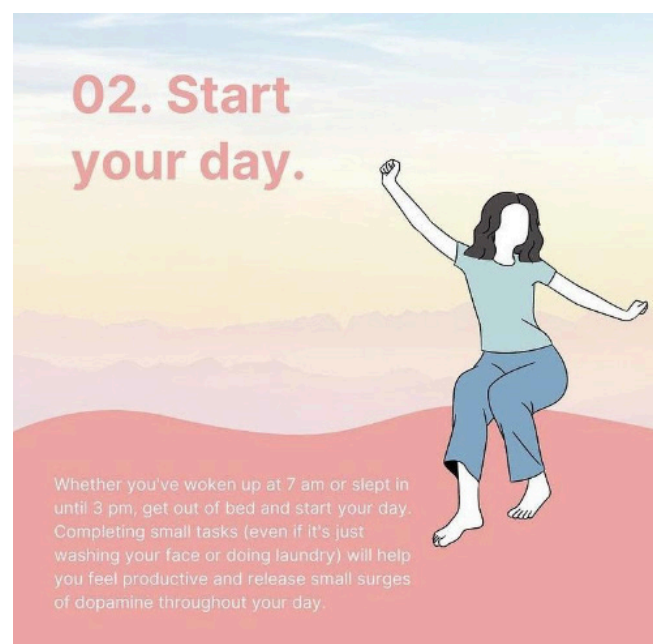
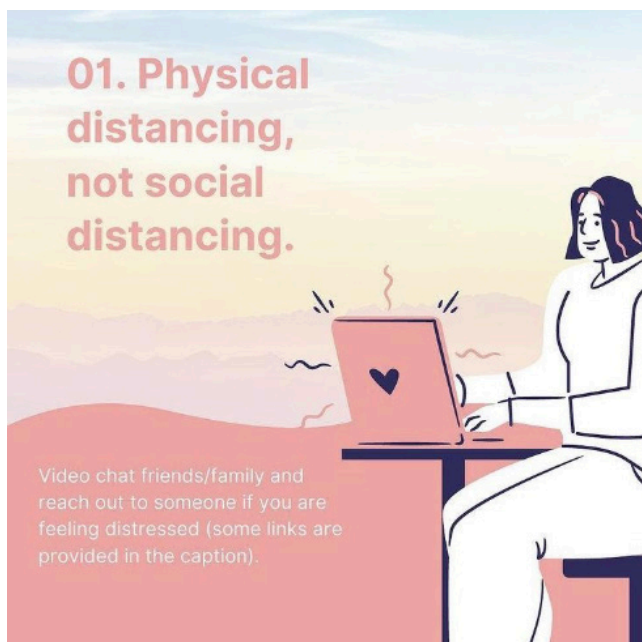
<https://opatoday.com/the-positives-and-negatives-of-covid-19-testing-in-pharmacies/>





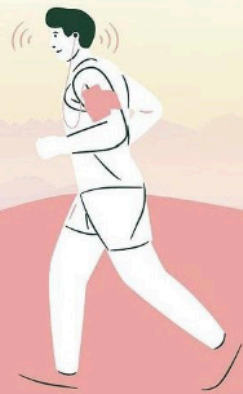
## Self-Care During Lockdown

*Laura Guirguis, 2T2*



### 03. Exercise!

Bundle up and go for a walk/hike or do your favourite at-home workout. Whether it's spinning, yoga or weight-lifting, you'll be sure to release some happy endorphins.



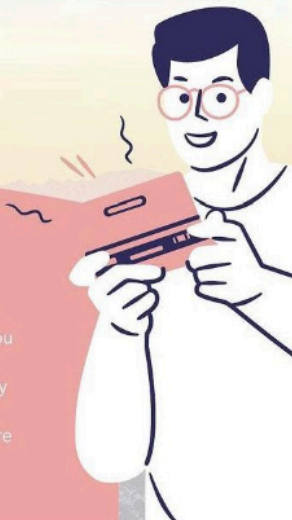
### 04. Invest yourself in your passions.

Perfect that song on the guitar you've been wanting to learn or listen to your favourite spiritual podcast. Nourish your mind - you might even pick up a few new hobbies along the way!



### 05. Balance is key.

Be intentional with how you spend your time. Mindfulness can help you feel aware of what you're sensing and feeling in the moment. It's okay to spend some time on Netflix or playing video games, but make sure you're still taking care of yourself.



### Gentle Reminders:

Mental health IS health.  
You are deserving of love.  
Simply reaching out can make a huge difference in someone's life.



@livemorewithlaur

Follow @livemorewithlaur on Instagram  
for more fantastic content like this!



# Advice for a Better Night's Sleep

*Shaista Malik, 2T2 Monograph Rep*



Hey Pharmacy,

If you're anything like me, you have spent nights tossing and turning in bed, trying to fall asleep. Or worse, you've been walking around the house at 3am because you just can't sleep. We've all been there; from 2007 to 2015 nighttime insomnia symptoms amongst Canadians aged 18 years or older increased by 42%. Getting a good night's sleep is crucial, because nighttime insomnia can have a detrimental impact on your mental/physical health and overall quality of life. Insomnia is very common and whether you or a friend is experiencing it, here are some tips I have found to be helpful!

## Do not consume caffeine late in the day:

Don't get me wrong, I love coffee whether it be in the morning or evening. I could have a drink at any time of the day! However, if you ever catch me drinking a cup of coffee after 3pm, you'll know I'll be lying in bed awake at 3am. It is very important to control the timing of your coffee intake. Caffeine works to block your adenosine receptors, making you feel more alert. It peaks in the blood within 30-60 minutes; however, its effects are long-lasting due to its 6 hour half-life. A good strategy may be to avoid caffeine intake after 12pm. Nonetheless, keep in mind that everyone is different, it's important to listen to your body and to adjust the timing of your caffeine intake accordingly.

## Working Out:

Getting in a workout during the day can help you fall asleep faster at night and allows for improved sleep quality. Getting moderate aerobic exercise, whether that be walking, or biking can help you increase the amount of deep sleep you get at night. However, the timing of exercise is important. Aerobic exercise causes the release of endorphins and increases body temperature, both of which signal your body to become alert. Therefore, it is best to get in at least 30 minutes of aerobic exercise earlier in the day, either in the morning or afternoon. It is even better to exercise outside since exposure to daily sunlight can improve both sleep duration and quality.

## Stop using electronic devices at least 30 minutes before bed:

This one is a really tough one! Living in the age of technology, our phones have become like a digital pacifier. Scrolling through your phone before bed can be very tempting. It has become part of a routine for so many of us to get dressed into our pajamas, turn off our lights and reach for our phones. However, its effects can be harmful for your sleep cycle. Your screen emits blue light which restrains melatonin production, making it harder to fall asleep at night and even more difficult to get out of bed in the morning. Scrolling through your



phone can make your brain more alert. Seeing a text or comment that upsets you can make it difficult to relax and fall into a slumber. The extra time looking at your screen at night leads to less time sleeping compromising your alertness the next day. Keeping your phone next to you at night can disturb your sleep cycle and interrupt deep sleep. For these reasons, it is so important to put your phone away at least 30 minutes before bed or even better, place your phone into another room to prevent you from looking at it. Instead, try reading a book!

### Have a sleep schedule (and stick to it):

It is very important to set a sleep schedule of waking up and going to bed at the same time of the day to help your internal clock to develop a regular cycle. After adjusting to a sleep schedule, you will find that you naturally start to feel sleepy at your set bedtime and wake up in the morning feeling refreshed. When setting your sleep schedule, be sure to set 7-9 hours per day devoted to sleep.

### Meditate, Relax, Pray:

Before going to bed, set aside 30-45 minutes to wind down. This can mean setting a nighttime routine consisting of skin care, journaling, deep breathing exercises, praying and reading. These actions allow your mind and body to relax as you prepare for sleep. I recently started journaling where I write down three things that I am grateful for. Sometimes, I journal about a particular event from my day which made me happy. Visualization is the process of focusing on calming thoughts and images. It can help you relieve stress and unwind before.

### Avoid naps during the day:

Power naps can do wonders for productivity; however, naps longer than 30 minutes can interfere with your internal sleep clock and cause difficulties in falling asleep. Therefore, when napping, set a timer for 30 minutes and get up afterwards, you will not only feel refreshed but also be able to sleep better at night.

### Chamomile tea:

Although strong evidence is lacking, some studies suggest that chamomile tea may help you fall asleep sooner. Chamomile contains apigenin which binds to GABA receptors in the brain and subsequently leads to a sedative and relaxing effect, inducing sleepiness. You can try drinking a cup of chamomile tea 45 minutes prior to sleeping to see if it will help you fall asleep sooner.

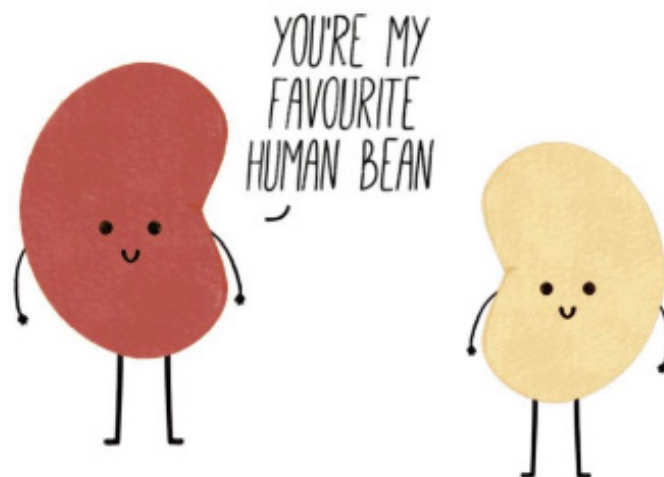
### Get comfy: pillows, weighted blankets

Ensure that your room is comfortable for sleeping at night. Try to make your room as dark as possible, using black-out curtains or a face mask can help you achieve this. Moreover, ensure that your pillow is comfortable for sleeping at night. Investing in a high-quality orthopedic pillow can make a huge impact on your sleep quality. Weighted blankets are also popular in promoting sleep as they can stimulate serotonin through the blanket's deep touch pressure, thereby helping you fall asleep more rapidly, and staying asleep for longer.

**I hope that these tips help you out!**

**Wishing you sweet dreams and a good night!**





## *Sally Jeon, 2T4*

It has already been one full year with the COVID-19 pandemic. For many of us, it has been quite draining to go through continuous lockdown and quarantine. Especially with involuntary social isolation, I have recognized the significance of human-to-human interaction and its impact on our mental and physical health.

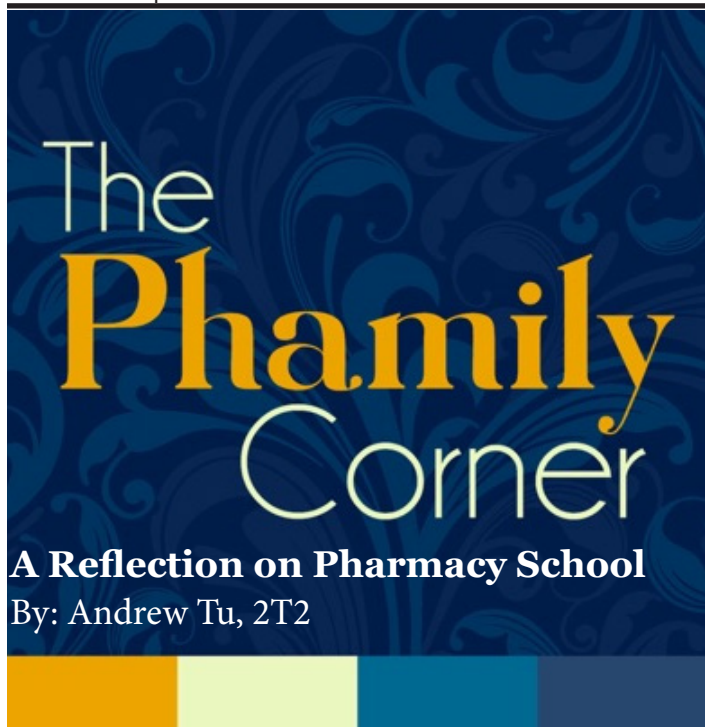
You may have once pictured a completely virtual world where people don't need to leave their houses at their convenience and everything is accessible at your fingertips. Technological advancements benefit us, allowing us to communicate with physically distant people and socialize online. On the other hand, the rapid development of technology has also substantially reduced human-to-human interactions. Now, we may be staring into screens more than we look at actual people or the nature around us. The unexpected pandemic involuntarily placed us in a majorly virtual world without a choice, which has been taking a toll on our mental health.

Mental health is significantly influenced by social interactions. Studies show that social interactions play a crucial role in our stress coping mechanisms, especially during major life changes. It particularly promotes positive thoughts about the current environment and helps us let go of the negativity.

This COVID-19 pandemic situation we are all facing is not only a contributing factor to our stress, but it also inhibits the coping mechanisms since we are restricted from social interactions that will eventually relieve our stress. In fact, long-term social isolation can cause mental health symptoms such as hallucinations, mood swings, loss of impulse control, etc. These symptoms were often observed in prisoners and/or hospitalized patients who were involuntarily restricted from human contact for extended periods of time.

In a cascade, our mental health affects our physical health, resulting in poor sleep quality, impaired executive function, and accelerated cognitive decline. It can also increase the risks of cardiovascular disease, heart attacks, autoimmune disorders, hypertension, cancer, and delayed wound healing. Contrary to social isolation, social interactions can minimize many mental issues, and further positively improve physical health.

On the bright side, with the ongoing distribution of COVID-19 vaccinations, we may finally be able to actively interact face to face. We now understand how precious we are to one another. So, I just want to tell the COVID-19 virus that WE GET IT. NOW GIVE ME BACK MY FRIENDS AND PHAMILY!



It's hard to believe that we are almost at the end of another school year! At the start of this year, I wrote an article about the upcoming online school year. Now that we have made it to the end of classes, I'm reflecting back not only on this year, but on my entire pharmacy journey so far.

I will be honest here: before coming to pharmacy at UofT, I was extremely hesitant. I had received offers to both UofT and Waterloo pharmacy and had actually accepted my offer to Waterloo. Before declining my offer to UofT however, a spot in the graduate house residence was offered to me. After reconsidering, I decided to come to U of T but I was uncertain of my final decision. Choosing a program with more students and unpaid placements didn't seem like a smart idea at the time. There were several times during my first year where I even questioned if I had made the right choice.

Throughout pharmacy school, I have been very involved with the student community. I sat on student councils and clubs and I attended as many events as I could. Here's another honest confession: these decisions were initially driven by my ego and insecurities. I was aware of the saturation in the pharmacy job market coming into the program and because there were so many students, I felt like I had to stand out. I felt like I had to be somebody, otherwise nobody would know me and would want to hire me for any pharmacy related job after graduation. This fear of having nothing after

graduation drove me to take on a lot of opportunities outside of classes and resulted in burnout and exhaustion at many points during school.

There is one thing that I have taken for granted throughout my years in the program however. Something that has made the experience at UofT's pharmacy school really worth it for me. And that is my connections within the student community. During phrosh week, I was shocked with how friendly people in the pharmacy community were. I did my undergrad at another university, and I always associated UofT with having a very competitive and distant student community, so this was a very pleasant surprise. This sense of community continued throughout pharmacy school, and even continued online in the face of a global pandemic. Although my motivation to get involved in school was initially driven by fear, the student community has helped me overcome some of my insecurities and helped with identifying what interests me and what does not.

As I look back on my pharmacy journey before heading off to APPEs, I don't remember the position titles I held, the awards or competitions I won, or how many UPS points I racked up during my time here. What I do remember are the lessons I learned, the people I met, and the memories we made together. From the small interactions such as quick chats in PB or social events, to the bigger ones like attending conferences or being in a club or council together, I'm thankful to have had the opportunity to connect with many other students in the program.

My advice to the younger years: take things one step at a time in your career. Approach opportunities out of curiosity and interest, not out of fear and insecurity. You don't have to have everything figured out before you graduate. Lastly, take care of yourself and enjoy your time as a student: these are things that you can't put on a resumé but can help you out in the long run after graduation.

What you get out of an experience is what you put into it. Looking back on my pharmacy school experience, I'm glad I made the decision to come to UofT and I have no regrets in my journey so far. I'm still learning things about the profession and about myself, but life is a marathon not a sprint, and the learning doesn't stop once you leave the walls of the classroom.



# The End is Near

Arnold Ruste, 2T3



April always brings the duality of joy and sadness. April approached us all too quickly. We are anticipating numerous things having already received our final exam schedules, our early practice experience schedules, and whatever else may be going on in our lives. Within the ongoing pandemic, we are all faced with compounding pressures on our academic and social lives, and on our invaluable efforts to support the end of this pandemic through front-line work.

*But let us all appreciate the joys in these trying times.*

April is my birthday month. It is sandwiched in between an Infectious Disease and Science of Pharmacotherapy exam. It could have been worse. April always has that vibe that reeks of stress - you know what I mean? But it's a blessing to not have an exam on the actual date of my birthday. I can save learning about how wrong homeopathy is for another day.

How do you feel about COVID-19 vaccinations in pharmacies? The government has recently started their pilot project as of writing. And based on my work schedule for the upcoming weeks, it is not fun. But it could have been worse, again. I'm glad we have all these vaccines available for the public. The 2020-2021 flu season gave me an entire life's work of experience for vaccinating,

and I'm looking forward to seeing what the future holds from the COVID-19 vaccine. We're all going to be pros. One more thing I'm excited about is the weather. Yas! We all know the effects of winter here in Canada. Sunshine and warmer days are ahead. Just remember to buy that snack that you're craving. Take all those breaks that your body's been needing. Order that fit sitting in your checkout cart for that first post-pandemic outing. Make everyday a Wellness Wednesday. You deserve it.

When you didn't buy any snacks at the supermarket because you told yourself you need to stop snacking but now you feel snackish



# BRINGING THE U OF O TO THE U OF T: UNITING WITH MY PAST AND IGNITING MY FUTURE

By Huy Pham, 2T4



Between the lectures, assignments, and midterms, I had the bright idea to attend the University of Ottawa Healthcare Symposium (UOHS) that took place from mid-January to February. For those who don't know, my old university-the University of Ottawa, hosts an undergraduate healthcare conference every year in hopes of promoting a holistic view of health and healthcare that integrates multiple disciplines. It used to be a one-day event but, for obvious reasons, this year's conference was held virtually over the span of six weeks. It didn't detract from my experience though, since I had a lot of fun. Some of the content was tailored for those in Medicine and Pre-Med since there was a Q&A by the Saint James School of Medicine, a Caribbean medical school and a presentation by onboardMD, a mobile app to help students get in and navigate through medical school and practice (and whose methodology could be applied to pharmacy). However, I found that the seminars covered a variety of subjects such as epidemiology, the application of technology in health care (particularly for the ageing population), and inclusion and diversity in STEM.

The topic of the past year, COVID-19, came up in multiple seminars. Heck, on the very first day, the keynote speech by Dr. Vera Etches was on COVID-19 and the response by Ottawa Public Health. Far from being dis-

couraging, the speaker, herself the Medical Officer of Health for Ottawa Public Health explores how at least in Ontario, the scope of public health intersects with health care and the municipality. This implies cooperation with not only the hospitals, nurses, and physicians but also schools, the media, and elected officials at multiple levels, the last of which is helpful as there is a "need to change the environment that promotes health", and it got me more curious about how pharmacists can collaborate with public health agencies.

With their goal of raising awareness of the interdisciplinary nature of health, you'd expect that they would include a speaker who isn't a doctor or physician and they delivered with a discussion by a registered nurse whose principles are applicable to any profession. In the beginning of the seminar, she poses the question of what it means to be a nurse and I'd like to pose the same question to my fellow pharmacy students. What does it mean to be a pharmacist? Forget about the public perception of pharmacists or their role in health care for now and think about what it means to you? What's your version of pharmacy? The speaker also covers opportunities and the need to create one's own opportunities. To greatly misquote Mike Sullivan, CEO & Co-Founder of Cubic Health (but it's pretty much in the spirit of his message), you have to be active, taking initiatives to find

opportunities and to expand your network. I'm certainly intending to take this message to heart, throwing myself into online seminars and conferences, not only the ones provided by the UofT clubs (though they are fun) but also ones hosted by organizations like the OPA, RxTx, and Pfizer.

In the end, if I were to choose the most memorable portion of UOHS, I'd say it'd be the presentation by Dr. Kashif Baig, an ophthalmologist. Apart from the...visually-pleasing videos of eye surgeries and the intriguing look into the field of ophthalmology, what resonated with me was his discussion about his journey in becoming an ophthalmologist. He explains, with respect to ophthalmology, there are many specialties and there is a need to think about why does one like that specific specialty and what is one suited for. Why does one want to do hospital pharmacy? Why does one want to do industry? He also recommends against basing the overall impression of a field based on a single experience, good or bad, and rather, reading up on that specific field, connecting with residents and doing honest introspections on how one wants to live their life? It left me thinking

what do I want to do as a pharmacist? Am I able to give 1000% until retirement? Am I ready to fully devote myself to pharmacy? These questions are going to gnaw on me for quite a while.

Overall, the UOHS was a very insightful and enjoyable experience. I hope to attend more professional conferences during my time at the Leslie Dan Faculty of Pharmacy and beyond, preferably in-person once COVID-19 restrictions are lifted. As opposed to looking at a screen and essentially "hiding" behind a camera, I want to actually get properly dressed, walk or use public transport, and be physically in the event. And I hope to inadvertently see one of you at these events.



## Specialty Coffee Shop Review

*Runyang Yin,  
2T3 Monograph Representative*

After visiting specialty coffee shops throughout the Greater Toronto Area and taking a look through some of the best coffee blogs out there, I think I'm ready to share my two cents on where you can find the best lattes and pour-over coffees in Toronto. The first time I tried specialty coffee was 4 years ago when I was traveling abroad. My friends introduced me to matcha latte and genuine cappuccino at a very popular coffee Brewster called Arabica in Kyoto, Japan, and I fell in love with the coffee culture ever since. I spent the last couple of years discovering new coffee shops all across the GTA, sometimes even going as far as Kitchener to try out that one coffee shop that people recommend on the internet. Every cup of coffee is different because of different brewing skills and quality of coffee beans, but one thing that every cup of coffee has in common is that they can take your breath away with their superior aroma. I want to tell you guys about five specialty coffee shops located around the Pharmacy Building so that when we go back to school in the new semester, you guys can take your friends and family to enjoy a great cup of Joe.



**The Library Specialty Coffee** – I really like the atmosphere, good matcha latte and cold brew, and their simple interior. This is a good place to study and chill with friends. The drinks and desserts are all tasty and worthwhile. So, if you are up for a fresh place with a friendly and calm environment, then this is a must to visit.

*Address: 281 Dundas St W, Toronto*

**Neo Coffee Bar** – inspired by Japanese coffee and dessert culture, I would say that this coffee shop is a must for coffee lovers. The service was good and the variety of coffees and teas served in its vibrant atmosphere was very satisfying. They also sell delicious Japanese style short cakes and roll cakes that go very well with your cup of latte.

*Address: 770 Bay St, Unit 3, Toronto*



**De Mello Coffee** – this coffee shop is probably my personal favorite. They have the coolest interior I have ever seen in all the GTA coffee shops that I have visited, and they sell some of the most delicious and high-quality coffee beans. The baristas there are highly skilled and artistic, and they make the best matcha brownie in the entire world. When you go, you absolutely must try their matcha brownie with your latte. The only downside is that it is located at Eglinton Station on the yellow subway line, which is a bit out of the way. I still think it's worth going though.

*Address: 2489 Yonge St, Toronto*



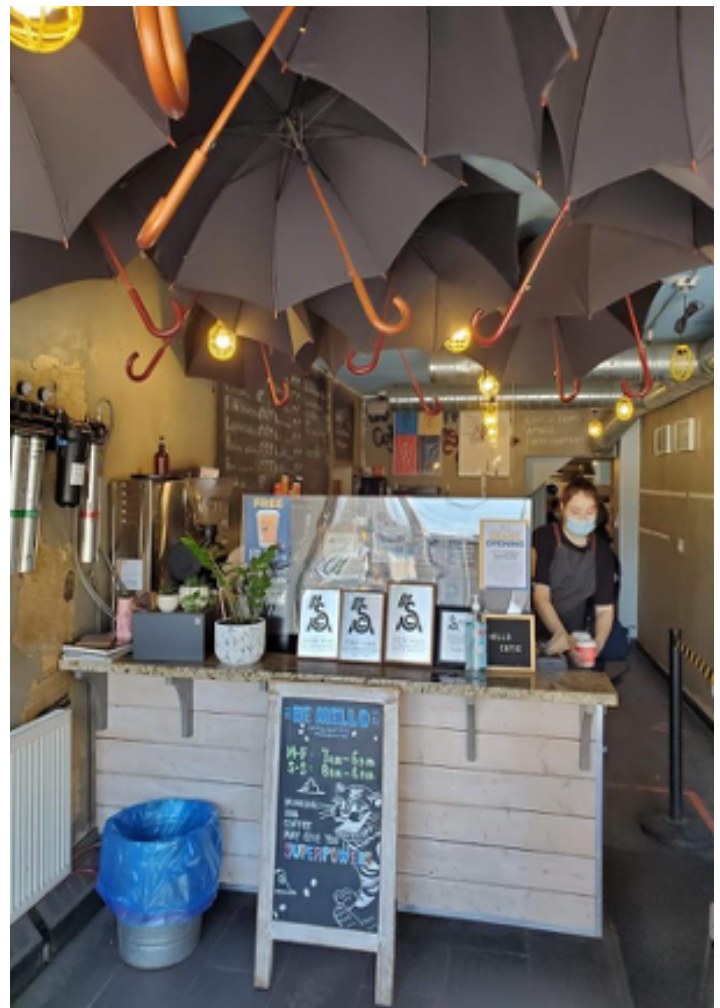
**Strange Love Coffee** – located in the heart of Downtown Toronto, it is a very busy location but very cozy and lively. It is unquestionably the best coffee shop in the West part of Old Toronto. Their croissants are really good and I highly recommend getting one to go with your latte. Because it is so busy, it can be difficult to find seats, so takeout is probably your best bet. I love doing takeout coffee in Toronto because there are a lot of places to explore with your friends.

*Address - 101 Spadina Ave., Toronto*

**Versus coffee** – yet another very high quality coffee shop for you to explore in the heart of downtown Toronto. This coffee shop has indoor seating and an outdoor patio, so it actually has a lot of space for you and your friend to sit and relax. If you like to read, they have great novels and magazines for you. They have a large selection of coffees and teas, but what makes them unique is their colorful lattes. So rather than using regular white milk to make your latte art, their latte art comes in a variety of colors which means if you are into photography and Instagram, this is probably the best spot for you.

*Address: 70 Adelaide St E, Toronto*

And that's it! I hope this little review will help guide you to trying out some new places this summer when more places reopen in our province. Remember, it doesn't always come down to the quality of the coffee, but the people that you enjoy your coffee with. Take some good pictures for me when you go and I hope everyone has a great summer!



# How to Make the Best Steak of Your Life

By: Neil Patel, 2T3

Today I'll be showing you my recipe for steak, I wouldn't call it super easy but it's not too difficult either but I'm here to walk you through it so don't feel intimidated. **Here is what you'll need:**

**A pan:** cast iron is best, stainless steel is fine, but you do not want to use a nonstick for this one

**Neutral oil** (vegetable, canola, grapeseed, etc.)

**A piece of steak,** my recipe used a New York Strip Steak, you want it to be at least 1 inch thick

**Some rosemary,** 2 cloves of garlic, chili flakes (optional), kosher salt and black pepper

**For the sides:** baby potatoes (1 whole pack might be too much, use as much as you want), broccoli crown, garlic powder, dried oregano, dried basil, some more rosemary, lemon, olive oil, baking trays. In the picture you can see spinach but I didn't really like it so I'm going to leave it out of the recipe.

Take the steak out of the fridge and pat all sides of it dry with a paper towel. Sprinkle liberally with kosher salt and black pepper on all sides. Let it rest for at least 30 minutes.

Preheat the oven to 210°C/415°F. We're going to start with the sides. Cut as many baby potatoes as you want to make into halves. Get a large bowl and put the baby potatoes in the bowl. Pour enough olive oil to lightly cover the potatoes, then sprinkle a light amount of salt, black pepper, and garlic powder. Put in the dried oregano, basil, and rosemary; for the rosemary I like to use just the leaves. I put a lot of the herbs but not too much that it's overpowering, just enough to lightly cover the potatoes. Mix then put it on a baking tray. Chop up the broccoli crown into small pieces. On a separate baking tray, put a light amount of olive oil and put the broccoli on a parchment-paper lined baking tray. Season with salt and pepper, garlic powder, and some lemon (around 1/8 – 1/4 of the lemon). Toss around and set aside. Once preheated, put only the potatoes in the oven for 25-30 minutes. After 15 minutes, flip the potatoes then put the broccoli in for around 15-20 minutes, I like

them crunchy so 15 minutes is good. Take the potatoes and broccoli out as soon as they're done and transfer to a plate.

Put the pan on the stove over medium-high heat (I put it on the 7th setting). Pour some of the neutral oil into the pan, enough to coat the bottom layer of the pan. When the oil shimmers, carefully put the steak into the pan, away from you (unless you like getting hot oil splattered on you). Let the steak sear for 2.5 minutes on each side. If you have a kitchen fan, **USE IT!** If you have windows, **OPEN THEM!** It's going to get super smoky. After each side is cooked, I turn the stove all the way to medium-low, throw in some butter, 2 cloves of garlic (just crush them, you don't need to chop). Put 2 sprigs of rosemary on top of the steak. Tilt the pan to get the melted butter on one side of the pan, then spoon that butter over the steak for a minute. After a minute, if you have a strip of fat on the side of the steak, make sure you sear that for 30 seconds to render it. Then take the steak off the stove and wrap the steak in some tin foil and let it rest for 5-10 minutes.

After 5-10 minutes, put the steak on the plate, sprinkle some chili flakes and enjoy! To be extra fancy, I like to sprinkle some cheese on top of the potatoes.





# Cheddar Cheese & Scallion Scones

By: Alissa Kong, 2T4

*Adapted from King Arthur (predominantly) & Ina Garten (modifications) recipes*



While 10 scones in one sitting is arguably a bit too much (I won't stop you if you'd like to), they taste amazing even in the next several days!! These scones can be stored at room temperature in an air-tight container for several days. When you're ready for another scone, just pop it into an oven for about 5-7mins at 250°F.

## YIELD: 10 scones

Ever struggled to find some source of food before those dreaded 9am classes to make class just a tad more bearable? Look no further, these cheddar cheese and scallion scones may be the solution you've been looking for!! Flaky, buttery, cheesy, and just a bit of green to make you think it's healthy, these scones have the ability to start your day off on the right note. Did I mention that they're also incredibly easy to make? So what are you waiting for, go make yourself a batch right now!!

## INGREDIENTS

### Scones

241g (2 cups) all-purpose flour; +1 tbsp flour (for fillings)  
 ½ tsp salt  
 1 tbsp baking powder  
 85g (6 tbsp) butter, cold and cut into small cubes  
 113g (1 cup) cheddar cheese, cut into rough cubes (~1-1.5cm for each side)  
 3 scallions, chopped  
 2 large eggs  
 1/3 cup milk or light cream (or any dairy of your choice)  
 15g (1 tbsp) Dijon mustard  
 Black pepper, to taste

### Toppings

Milk (to brush scones before baking)  
 Additional shredded cheese and/or scallions

## DIRECTIONS

1. Preheat the oven to 375°F
2. Line a baking sheet with parchment paper
3. Whisk together the flour, salt, and baking powder
4. Work in the cold butter with fingers to make an uneven, crumbly mixture
5. Toss together the cheese, scallions, and tablespoon of flour

*\*Additional flour helps suspend these fillings within the dough so they don't sink to the bottom*

6. Add cheese-scallion mixture into the dry ingredients
7. Mix together the eggs, cream (or dairy of your choice), mustard, and black pepper
8. Add to the dry ingredients, stirring just until everything is evenly moistened

*\*Dough will be very sticky*

9. Dump the dough onto a well-floured surface
10. Pat the dough into a rectangle  
*\*Smaller, taller scones = 10" x 2" rectangle*  
*\*Larger, flatter scones = 15" x 3" rectangle*
11. Cut the rectangle into 5 squares, then cut each square in half diagonally to make a total of 10 triangular scones
12. Place the scones onto the prepared baking sheet, leaving at least 2 cm (1 inch) between each scone
13. Add the shredded cheese and scallions on top of scones, lightly pressing into the scone
14. Lightly brush each scone with milk
15. Bake the scones for 20-23 mins until nicely browned
16. Remove from oven and serve warm / at room temperature

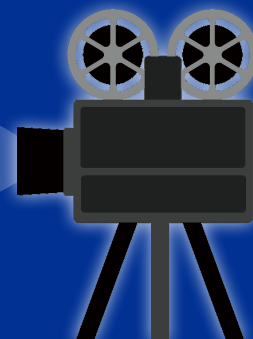
**WARNING: these scones are addicting and may burn your tongue if you can't resist them straight out of the oven!**





## MOVIES TO WATCH DURING LOCKDOWN

Moid Shah, 2T3



Hello everyone! I know we've all been bored in lockdown and looking for ways to keep busy and distract ourselves from school. This is why I'm making a list of five movies (with honorable mentions) that you can watch to either forget about being locked inside, or to soak yourself in the misery of it all by watching movies that exemplify the cabin fever we've all been experiencing.



**1** The first movie on the list is My neighbour Totoro (1988). While I'm sure many of you are familiar with the famous animation studio Studio Ghibli, it's always a safe recommendation for anyone to check out their movies. In some respects, they can be considered the Pixar of Japanese animation. But, in other respects, they are so much more. Studio Ghibli has an expertise in making slice of life movies that make you forget about the problems of this world and escape into a wholesome, whimsical adventure. No movie, in my opinion, is better at offering this escape than My

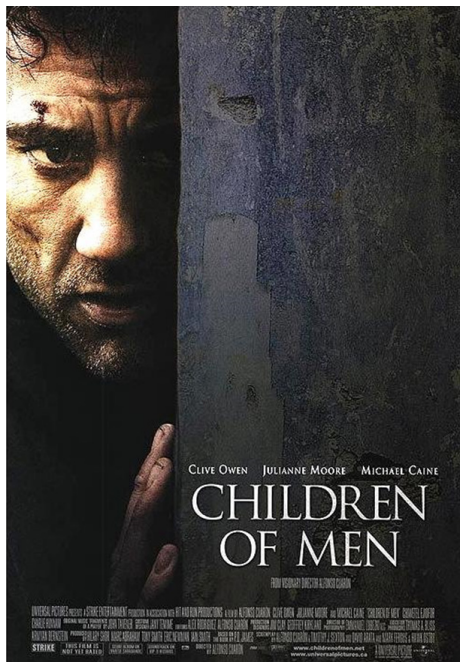
Neighbour Totoro. This story follows the escape of two young sisters into a hidden natural world led by a large, fluffy creature Totoro. The childlike innocence of this movie makes you feel nostalgic for when you would frolic as a kid. At the same time, none of what's going on in this movie is grounded in reality, but that's what makes it such a wonderful escape. As a child you might imagine yourself creating this kind of a world in your head. Watching a movie like this or any other movie made by Studio Ghibli feels so pure and so wholesome. I think everyone needs a little bit of Studio Ghibli in their life, ESPECIALLY during lockdown. Some other studio Ghibli movies that I really enjoy are Princess Mononoke, Spirited Away, and The Wind Rises.



**2** The next movie on my list is The Shining (1980). This is a legendary movie made by one of the most famous directors of all time, Stanley Kubrick. Personally, this is my favourite horror movie of all time. This movie is an adaptation of the Stephen King book of the same name. In fact, this movie made the author angry because of how different it was from the original book. That being said, this movie works on every level. We follow the main character Jack Torrance and his family move into a hotel in the middle of nowhere that he is paid to watch over for the winter.

Because of how intense the snow is in the area, the hotel is blocked away from all potential visitors and the family becomes incredibly isolated. Slowly cabin fever starts to set in for Jack and he can't separate reality from delusion. This is a horror movie, so what ensues is intense and not something worth spoiling. That being said, for a movie that is two and a half hours, there's never a dull moment.

There are many other movies that give a slow, and isolating feeling of cabin fever. A couple in particular that I love that make you go crazy along with the characters are *The Thing* (1982) and *The Lighthouse* (2019). If you like *The Shining*, you will also love these two movies as well.



**3** Another movie that creates a sort of uneasiness about the state of society is *Children of Men* (2006). Whereas *The Shining* creates a sense of isolation, *Children of Men* shows the chaos of a mismanaged authoritarian society. Crime is rampant, and extremism is everywhere. There is a lot of plot that

is not worth spoiling but to give an idea of why the world is in so much dismay I will describe the central hook of the movie. No woman can get pregnant anymore in this world. The youngest person on earth, baby Diego, who is 18 years old, dies at the beginning of the movie, and the world is in total chaos because it seems all hope is lost. This is where the movie starts and the story continues from there. What makes this movie so great is just how much is conveyed visually through the cinematography. A lot of the time the camera will veer away from the characters and instead show the viewers what is going on in the world. Instead of being like the characters and ignoring the suffering, the camera takes us on a journey to witness it. Another interesting thing that's done visually in the movie is the use of long one shot takes, and handheld camera to make the viewer feel like they're right there in the action. For any gamers out there, it may also feel like an open world video game the way that background actors will mutter words to themselves and how you are taken from one point of action to the next. The pace of the movie is just so intense, but also the threats so imminent. This kind of technique makes the movie very tense and fast paced. That's also why it's so much more impactful when there is a change of pace and we switch camera techniques. That's all I say about the movie without spoiling it. *Children of Men* is definitely a movie to check out, even if it can be extremely depressing and unexpected at points.

More movies that in my opinion show a similar sense of dismay in the way that society is being run by the powers that be are *Gattaca* (1997),

*Contagion* (2011), *Outbreak* (1995) and *Brazil* (1985). In addition, I think fans of this movie might enjoy the zombie movie genre altogether, although *Children of Men* isn't a zombie movie, it can give off a zombie vibe at times.



**4** On a somewhat lighter note I thought it would be worth recommending a coming of age movie. These are the kind of movies that take you back to a simpler time when things felt really complicated, but you can look back on it a bit comfortably because you know looking back things work out and everyone has been through these sorts of things. The one I'm recommending is *The Way, Way Back* (2013). I really like this movie because it takes place during summer break. The main character is on vacation with his mom and his step dad who he doesn't have too positive of a relationship with. But, to keep busy he finds work at a nearby water park and gets really close with a lifeguard who works and lives at the park. This guy acts as a sort of old-



er brother/father figure for him and seeing the main character gain confidence and find himself throughout the run time of the movie is really enjoyable to see. Of course, as any coming of age movie, there's a lot of conflict. But, something about how everything works out and the summer break vibe is just always comforting for me to come back to. This is why I'm recommending it as a quarantine movie, because I think the summer break vibes are going to be nice to have during lockdown.

Lucky for everyone reading, there are an abundance of these kinds of movies to watch. Two directors that I think are consistently good at making this specific kind of movie are Richard Linklater and John Hughes. Watching any movie by either of these directors will hit the spot if you enjoy coming of age movies. Other movies that I think work well in this category are *Perks of Being a Wallflower* (2012), *Call me by Your Name* (2017) and *Frances Ha* (2012) (This is Isabella's favourite movie by the way and she's making the quarantine music list so this is definitely one everyone should check out).

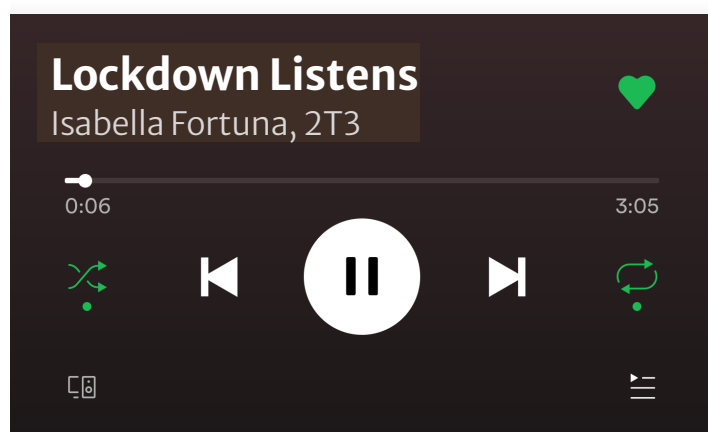


**5** Lastly, I wanted to recommend a movie that will make you feel closer to your family. A lot of us are stuck at home with our family, but I know many people might be separated and haven't seen their family in a long time. Either way, this movie will make you want to call your parents and tell them you love them. *The Farewell* (2019) is about an American girl who visits her grandma in China. Her whole family organized the trip, and the real reason they're going is being hidden from the grandma. The re-

sulting story about returning to your roots and balancing different cultures is extremely heartwarming. The movie is filled with so many touching moments that I really don't want to spoil even a second of it. It's just the perfect feel good movie to watch either with your family during lockdown, or to remind yourself of your loved ones. I can't say anything bad about this movie and everyone should watch it.

If you're looking for more movies about dysfunctional families then I would also recommend *Nebraska* (2013), *August Osage County* (2013), *Meet the Parents* (2000) and *The Meyerowitz Stories* (2017). All of these movies will remind you that even if your family drives you crazy, at the end of the day you love them and nowadays it's really refreshing to watch a movie like that.

That's it for my list! If you end up watching all these and are still thirsting for more just message me and I give some more recommendations. Or maybe... I'll make another list in the future.



Hey everyone! This is a sort of continuation of Moid's quarantine movie recommendations. These are a couple albums which have been on my rotation over quarantine and have brought me much comfort and joy.

### Songs by Adrienne Lenker

Written and released during the pandemic, *Songs* is a masterpiece that has provided me with a lot of comfort throughout quarantine. Adrienne Lenker, the lead vocalist, songwriter and guitarist, of indie band Big Thief, created this album while isolating in a cabin with just her recording engineer. The song *Anything* establishes Lenker's unique lyricism through its vivid imagery and consistent rhythm. The acoustics on tracks like my personal favourite, *My Angel*, flow with such momentum you feel mesmerized. *Songs* is so simple that you feel like you are close friends with the singer, still it is so complex in the emotions it conveys. The sister album *Instrumentals*, released alongside *Songs*, consists of three tracks composed of simply guitar and wind chimes. It's made to feel like a friend is in the room playing guitar



for you. Other albums which create this intimate feeling include *For Emma* by Bon Iver, *FLOWERS* for VASES/ descansos by Hayley Williams, and *U.F.O.F.* by Lenker's band Big Thief.

### **OK Computer by Radiohead**

When this album came out in 1997 it was an instant classic. Throughout the twelve tracks the band continuously builds and releases tension through their incredible instrumentation and production. Iconic songs off the record, like *Karma Police*, are proof of the band's immense talent and showcase their ability to set a mood. My personal favourite, *Exit Music (For a Film)*, is the perfect dramatic, end of the world, living in a music video kind of song. Overall, every album this group has released sounds very different but they manage to hold consistencies in tone and I highly recommend them all. Radiohead is one of the cornerstones of alternative rock and members of the band have gone on to create solo works, like Thom Yorke's soundtrack for *Suspiria* (2018) and Jonny Greenwood's soundtrack for

*Phantom Thread*. You may enjoy this album if you are a fan of *XO* by Elliott Smith, *Disintegration* by The Cure or *Collapsed in Sunbeams* by Arlo Parks.

### **Purple Rain by Prince and the Revolution**

This album is required listening. Released in 1984, this album can still make the world party, something much needed in these weird times. Prince and the Revolution don't hold back, they go all out on shiny rhythms, electrifying riffs and stand out bass lines. The first track, *Let's Go Crazy*, is pure light and fun. The titular track, *Purple Rain*, is an almost 9 minute long epic that you can't help but sing along to. Whether you need a late night study boost or a solo dance party or a reminder that life is a party this album is there for you. The energy of this album is irreplicable but along the same wavelength as *MASSEDUCATION* by St. Vincent, *Dirty Computer* by Janelle Monae, *Random Access Memories* by Daft Punk, *The Rise and Fall of Ziggy Stardust* by David Bowie and *Soft Sounds from Another Planet* by Japanese Breakfast.

## Album Review: For the First Time

By: Black Country, New Road

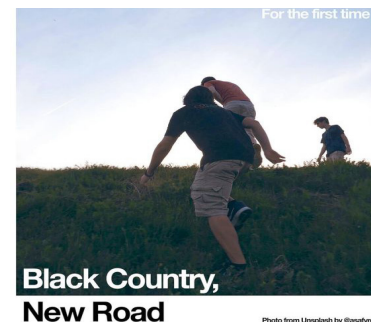
5/5

By: David Czosniak, Monograph Co-Editor

Klezmer music. What the hell is Klezmer music? To be honest, I barely know myself, all I know is it's a genre of music that's been used as a descriptor for this album in every single review that's been written about it.

Now, aside from my score, how do I convince you to check out a band that's inspired by a genre that my only references for are the Eastern European Jewish folk music my grandparents grew up on and whose most current culturally relevant proponent is John Zorn? (If you have no idea who that is, that's exactly my point). It's by telling you that this band is so much more than Klezmer. Black Country, New Road (BC,NR) are breathing fresh life into the rock music scene that hasn't been seen since the early 2000's post-punk of Interpol or The Strokes.

BC,NR are a group of seven musicians who have come out of a strong experimental rock scene growing in England today. They first rose to prominence with two early singles, "Athens, France" and "Sunglasses". Gaining hype from these releases, they were signed for the release of their debut album *For the First Time*.



This album includes six tracks, including reinterpretations of the aforementioned "Athens, France" and "Sunglasses". These two reinterpretations include new lyrics, but still maintain the edge of their previous incarnations. The album also includes "Instrumental", the opening track that builds strong forward momentum that holds for the majority of the album. Breaking this propulsion the album moves to the light Track X allowing you to relax, just to prepare you for the best and final track on the album, appropriately titled, "Opus". It starts as a slow burner, but then bursts with energy similar to Slint's "Good Morning Captain" leaving you wanting more. (It's also the track where the Klezmer shines through the most with its staccato horn runs).

Overall, this album presents a strong debut album and I cannot wait to hear where BC,NR go next. If you enjoy this album as much as I do, reach out so we can discuss!

# 2T4 White Coat Ceremony

By: Al-amin Ahamed, 2T4



March 3rd, 2021 at 3:00pm EST marked the much anticipated 2T4 White Coat Ceremony. While traditionally held in a large theatre in January, the unprecedented restrictions amidst a pandemic led this major milestone to take the form of a virtual pre-recorded Youtube premiere. Although not under the most ideal circumstances, this occasion nonetheless celebrated the induction of the 2T4 Class into the pharmacy profession.

Through the efforts of the Faculty and the 2T4 Class Council, the ceremony uniquely featured a culmination of pre-recorded congratulations, welcome messages, and words of encouragement from many staff, students, and other pharmacy professionals. This included messages from Jamie Kellar (Associate Dean, Academic), Natalie Crown (Acting Director of the PharmD program), Lisa Dolovich (Dean), Fabian Cretu and Samantha Cesario (President and Vice-President of the Undergraduate Pharmacy Society), Justin Bates (Chief Executive Officer, Ontario Pharmacists Association), Michael Saikali (PHM144 Teaching Assistant) and Scott Walker (PHM144 Professor).

Arguably, the most iconic feature of this tradition is the donning of white coats, which inevitably had to look different this year. Innovatively, the faculty invited students to submit photos and videos of themselves donning their white coats which were featured as a film credits style collage that also included the names of students of the 2T4 Class. This was followed by the recitation of the Pledge of Professionalism presented by the 2T4 Class Council.

As a reception could not be accommodated, the 2T4 Class Council organized a virtual watch party that featured live cameos from Natalie Crown, Lisa Dolovich, and David Dubins. In order to share the memory with others, students were encouraged to join a Zoom call that started off with some friendly trivia games and a creative video message put together by the Council. To end the livestream, Professor Dubins played an original rendition of Be Our Guest to congratulate the class. I don't know about you, but the performance itself certainly made the special day even more meaningful!

If this year has taught us anything, it has displayed the importance of pharmacy professionals to adapt and grow in order to uphold our commitment to professionalism and patient care. While this year has been unique to say the least, it has brought together a unique group of determined, courageous, and resilient students that I have no doubt will make a difference in the pharmacy community.

Congratulations Class of 2T4 and cheers to a bright (and in person) future!

## Welcome to the Profession of Pharmacy 2T4s!

# Puzzles and Shoutouts

## Sudoku Puzzle

By: Maira Hassan, 2T4

3				8			7	9
	9				1			6
4	2	8	7			3		
2	1	6		9				
							3	8
5	8		6	7	4			1
		4			7			
		2	4	1			9	7
	7	9		3	8	1	4	2

## Pharmacy Shout-Outs!



Shout out The Weather



thank you bev oliver for being my personal mini fac rep and keeping our crew on top of things!



Shout out to UPS Council 2020-2021! You guys have been AMAZING this year <3



Shout out to the 526 pham <3



Shout out to the 2T4s! Y'all have been thriving despite only experiencing pharmacy virtually. The future of pharmacy is in great hands with you!



Shoutout to 2T1s! We should be immensely proud of ourselves for getting through our APPE year during a pandemic. I'm grateful for the beautiful souls I met (and will marry hehe) b/c of this program <3 good luck 2T1's, lets be the best pharmacists we can be!



My twin bro is better than yours! :D



It's pronounced like down



Thanks JRG for being my rock during the last 4 years



S/O Harambe. Gone but not forgotten



# Artist Spotlight



*Eisha Vijay, 2T1*



*Eisha Vijay, 2T1*



*Rachel Ma, 2T4*







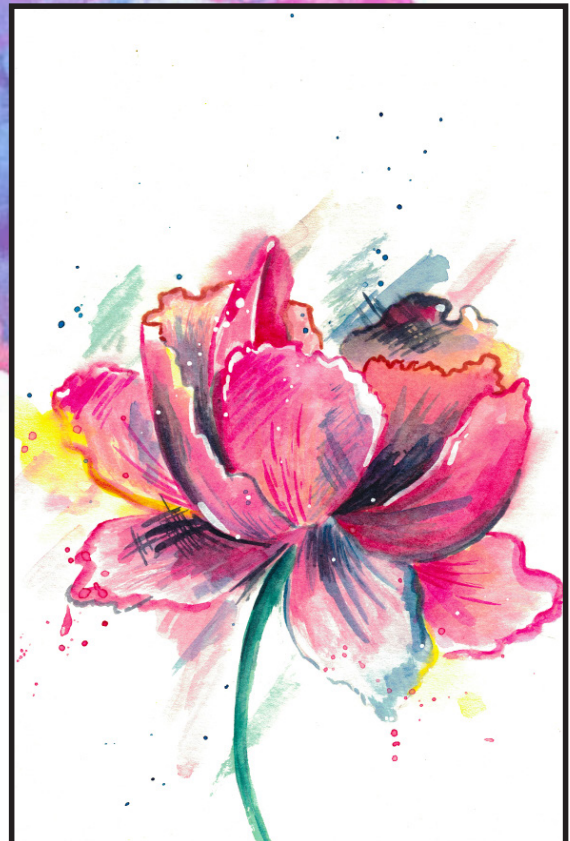
*Ben D'Mello, 2T2*



*Hebah Arabi, 2T1*



*Pooja Patel, 2T1*



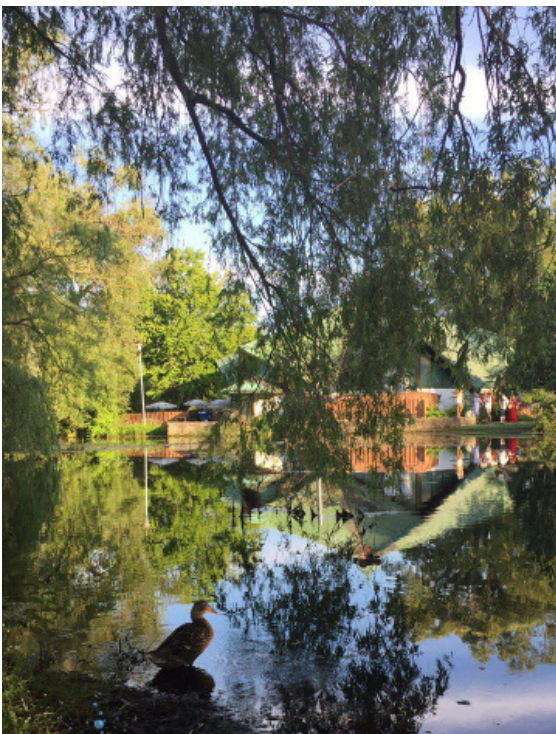
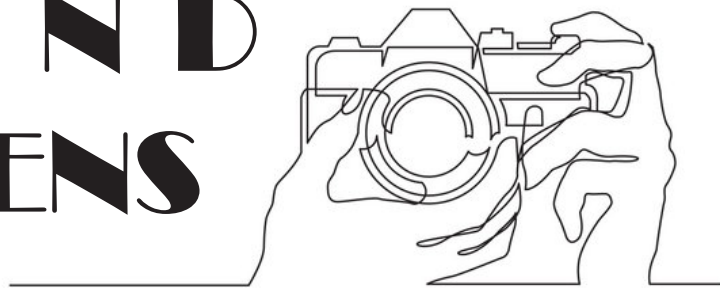
*Pooja Patel, 2T1*





*Ann Chang, 2T2*

# BEHIND THE LENS



*Galit Moroz, 2T4*



*Galit Moroz, 2T4*