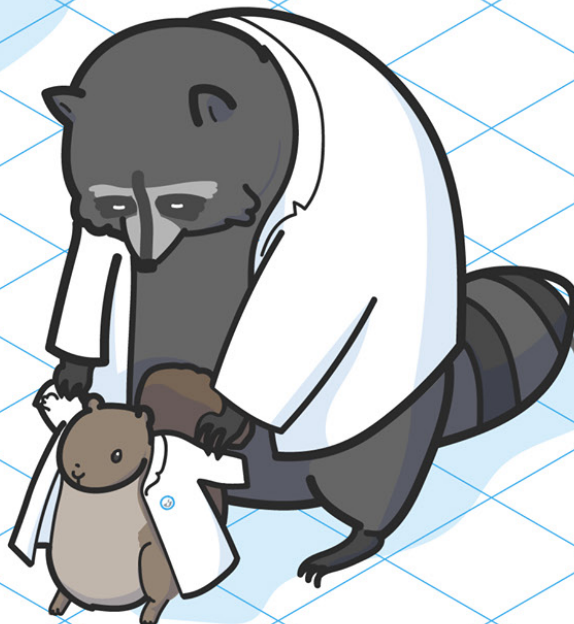
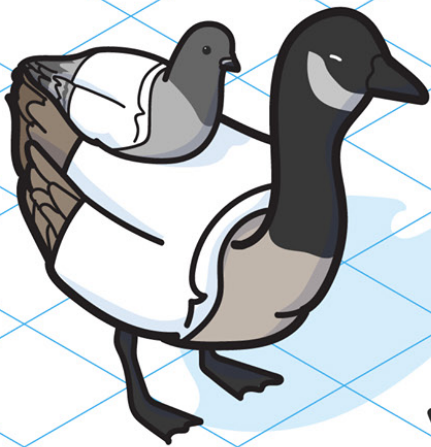
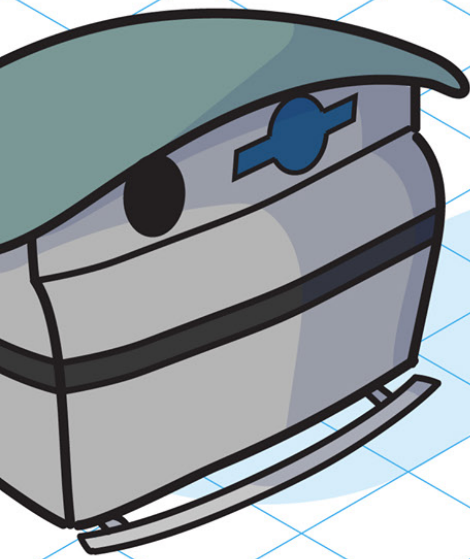


# The MONOGRAPH

Vol. 22, Issue 3



Featured in this issue:

CAPSI Literary Competition  
Winner: Peter Zhang  
pages 7-8

A Prescription for Living  
pages 38-40

A Guide to Anime for  
Beginners  
pages 53-54

ALYEN

# Table of Contents

	Mansi Sheth, 2T4	<b>PAG Address</b>	<b>18</b>
<b>4</b>	Amar Deonandan, 2T3 and David Czosniak, 2T2	<b>Editor's Address</b>	
	Anthony Singh, 2T3	<b>GMI: An Update on COVID-19</b>	<b>19</b>
<b>5</b>	Fabian Cretu, 2T2 and Samantha Cesario, 2T2	<b>UPS Address</b>	<b>New Variants</b>
	Sarah Casola, 2T2	<b>EVOLVE: COVID Testing in</b>	<b>20</b>
<b>6</b>	CAPSI Team	<b>CAPSI Corner</b>	<b>Pharmacies</b>
	Cindy Shen, 2T2	<b>EVOLVE: COVID Prescribing and</b>	<b>21</b>
<b>7</b>	Peter Zhang, 2T1	<b>CAPSI Competition Article</b>	<b>Dispensing Controlled Substances</b>
	Pooja Patel, 2T1	<b>NAPRA Guidelines for Compounding</b>	<b>23</b>
<b>9</b>	Wei Wei, 2T3	<b>CSHP Interview with</b>	
	Tahani Daddak, 2T3	<b>Vincent Vuong</b>	<b>25</b>
<b>11</b>	Jonathan Ko, 2T2 and Cindy Tran, 2T3	<b>Pharmacy Athletics</b>	
	Shelby Yiu, 2T1	<b>COVID Test Experience</b>	<b>26</b>
<b>12</b>	OPA Team	<b>OPA: 'What Pharmacist Hat' Do</b>	
	Misha Krivykh, 2T3	<b>You Wear?</b>	<b>27</b>
<b>14</b>	Shaon Parial, 2T2	<b>UTSU: Mental Health Coverage</b>	
	Hebah Arabi, 2T1 and Gigi Lai, 2T1	<b>(Student Insurance)</b>	<b>28</b>
<b>15</b>	Britney Tang, 2T4	<b>COMPPS: Compounding</b>	
	Narthaanan Srimurugathan, 2T0	<b>Pediatric Edition</b>	<b>31</b>
<b>16</b>	Ken Chung 2T2. Adrian de Boer, 2T3	<b>PharmaPride: Making Your</b>	
		<b>Pharmacy More Inclusive</b>	
		<b>Ongoing Delay to Pharmacy Licensure</b>	
		<b>Affects Several UofT Grads</b>	

# Table of Contents

33	Kevin Galido, 2T3	Cindy Tran, 2T3	47
	<b>Okay, Let's Hope This Is The Last Time We Have To Do This</b>	<b>Relieving Stress Through Yoga</b>	
34	Shaista Malik, 2T2	Sabih Jamil, 2T3	49
	<b>A Mental Health Check-In, How Have You Been?</b>	<b>How I Became a Cat Father</b>	
36	Ashley Domingues, 2T4	Jenna Melanson, 2T2	51
	<b>2T4 Takes on the Winter Semester via BB Collab</b>	<b>The Way of Kings Book Review</b>	
38	Arlene Chan	Kimberly Yu, 2T3	52
	<b>A Prescription For Living</b>	<b>CraftedforYu: Caligraphy and Engraving</b>	
41	Rolan Vaisman, 2T2	Runyang Yin, 2T3	53
	<b>Happy New Ring!?:</b>	<b>A Guide to Anime for Beginners</b>	
43	Sally Jeon, 2T4	Jessica Attalla, 2T2	55
	<b>Time-Friendly Coffee Buns</b>	<b>Puzzles</b>	
44	Misha Krivykh, 2T3	Anonymous	55
	<b>Shrimp Fried Rice Recipe</b>	<b>Pharmacy Shoutouts</b>	
45	Rachel Ma, 2T4	Various Contributors	56
	<b>3D Floral Coconut Jelly Recipe</b>	<b>Artist Spotlight</b>	
46	Priscilla Sung, 2T4	Various Contributors	57
	<b>New Year New Me: Healthy Recipes Review</b>	<b>Behind the Lens</b>	



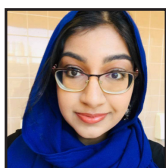
# The Monograph Team



**Editors-in Chief**  
Amar Deonandan  
David Czosniak



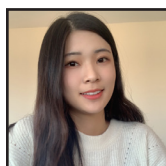
**2T1 Representative**  
Hebah Arabi



**2T2 Representative**  
Shaista Malik



**2T3 Representative**  
Runyang Yin



**2T4 Representative**  
Sally Jeon



**Photography**  
Pharmakon

**Cover Art**  
Jailyn Yen, 2T2

**Layout**  
Matt Jokel, 2T4  
Galit Moroz, 2T4  
Anna Nguyen, 2T4  
Sally Jeon, 2T4

Shelby Yiu, 2T1  
Hebah Arabi, 2T1  
Maryen Lieu, 2T4  
Eulaine Ma, 2T3

## EDITORS' ADDRESS:

### Hey Pham!

Happy New Year everyone! We hope everyone had some time to relax over the holidays and are ready to take on the new semester!

We have a lot in store for this issue! First, we have a lot of New Year-themed submissions, including a review on healthy recipes by Priscilla Sung, a reflection by Rolan Vaisman, an a 2T4's review of the new semester by Ashley Domingues.

We have some club updates from COMPPS, EVOLVE, PAG, GMI, and PharmaPride. We have some great recipes including Misha's shrimp recipe, reflections on COVID-19 by many of our contributors, and some heartwarming stories and crafts you definitely do not want to miss.

As always, we will be hosting another Scavenger Hunt for this issue! Complete the Scavenger Hunt form our Reps sent out to get a UPS Point and a chance for 1 of 5 gift cards!

We have had such a great turnout for this issue of The Monograph, and it wouldn't be possible without our amazing Monograph Reps, and contributors like you! If you wish to contribute something to The Monograph, please keep an eye out for the next Call for Submissions!



*David Czosniak and Amar Deonandan*  
The Monograph Co-Editors 2020-2021  
monograph@uoftpharmacy.com





# UPS Address



Happy New Year phamily and welcome to a new semester! Ahead of us are four months full of new subjects to study, assignments and tests to write, MTM labs to complete, and of course, social events to enjoy with your phriends! With the challenges and opportunities that each new semester brings, UPS is here for you to help you make the most of your time as a pharmacy student.

We are looking forward to the fantastic events in store for this semester! We'll give back throughout Charity Week in February, celebrate the profession in Pharmacists Awareness Month and network at the OPSIS conference in March, and recognize our achievements at the UPS Awards Night in April - and don't forget about the many exciting events your class councils and student clubs will also be hosting all throughout the semester!

Another especially exciting event to look forward to is the virtual induction ceremony for the Class of 2T4 in March! We can't wait to officially welcome you into the profession at such an exciting and inspiring time for health care.

In March, it will also be time to elect your next generation of student council. The UPS general election will be held first, followed by the class council elections. Getting involved in student councils is an amazing way to contribute positively to student life, make connections with your peers, and enjoy your time at the faculty!

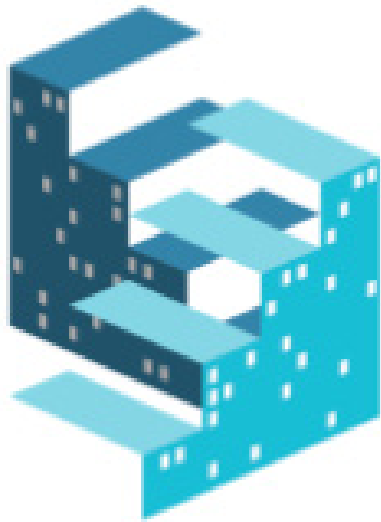
We're always open to chat, whether you have any questions, comments, or concerns - personal or professional - never hesitate to reach out!

*Fabian Cretu and Samantha Cesario*

UPS President and Vice President

[ups@uoftpharmacy.com](mailto:ups@uoftpharmacy.com)





*relevez le défi*  
**PDW 2022**  
**TORONTO**  
*rise to the challenge*

## CAPSI Corner

This January, your CAPSI Representatives Kristina Miclat (Senior) and Michelle Chaung (Junior) attended two days of CAPSI National Council Meetings to represent the interests of UofT pharmacy students. These meetings bring all pharmacy schools together to create the national voice of over 3700 pharmacy students across Canada. The National Council discussed strategies for the semester ahead and exciting virtual professional development opportunities for CAPSI members. We were also excited to announce UofT's winner of the Guy Genest Passion for Pharmacy Award, Peter Zhang (2T1). We would like to congratulate Peter for this well-deserved accomplishment.

Each year in early January, pharmacy students nationwide attend Professional Development Week (PDW), which is the largest student-run pharmacy conference in Canada. While we did miss getting to experience that this year, we are looking forward to PDW 2022, which will be hosted by UofT! It is our pleasure to introduce UofT's PDW 2022 Planning Committee:

Hello pharmacy! Our names are Tiffany Song and Christina Truong. We are the co-chairs of the Professional Development Week (PDW) 2022 Planning Committee. PDW is a 4-day conference organized by a different pharmacy school every year, and it brings together pharmacy students from all across Canada. In 2021, due to the COVID-19 pandemic, PDW had to be cancelled, so we are extremely excited that U of T will be hosting the conference from January 5-9, 2022. The highlights of the conference include educational sessions from renowned speakers, networking opportunities with your future colleagues and professionals in the field, as well as several social events. Our theme this year is "Rise to

the Challenge" and we hope to motivate you to seize all opportunities and overcome obstacles on your journey to becoming pharmacists. PDW 2022 is an event that you do not want to miss!

The planning of this conference is being done by your fellow classmates, and we cannot thank them enough for their hard work!

**Co-Chairs:** Tiffany Song & Christina Truong

**Finance Officer:** Tahani Dakkak

**Sponsorship Officer:** Laurie Lam

**Logistics Officer:** Lok Kan Lee

**Education/Competition Officers:** Helen Huynh & Jenny Ma

**Social Officer:** Marigrace Gorospe

**Communications/Marketing Officer:** Jailyen Yen

**Bilingual/Translation Officer:** Julia Saragosa

**Health Fair Manager:** Fabian Cretu

**Webmaster:** Darren Sam

**CAPSI Liaisons:** Kristina Miclat & Michelle Chaung

Be sure to check out our website and follow us on social media for more information and to stay up to date with the latest news about PDW!



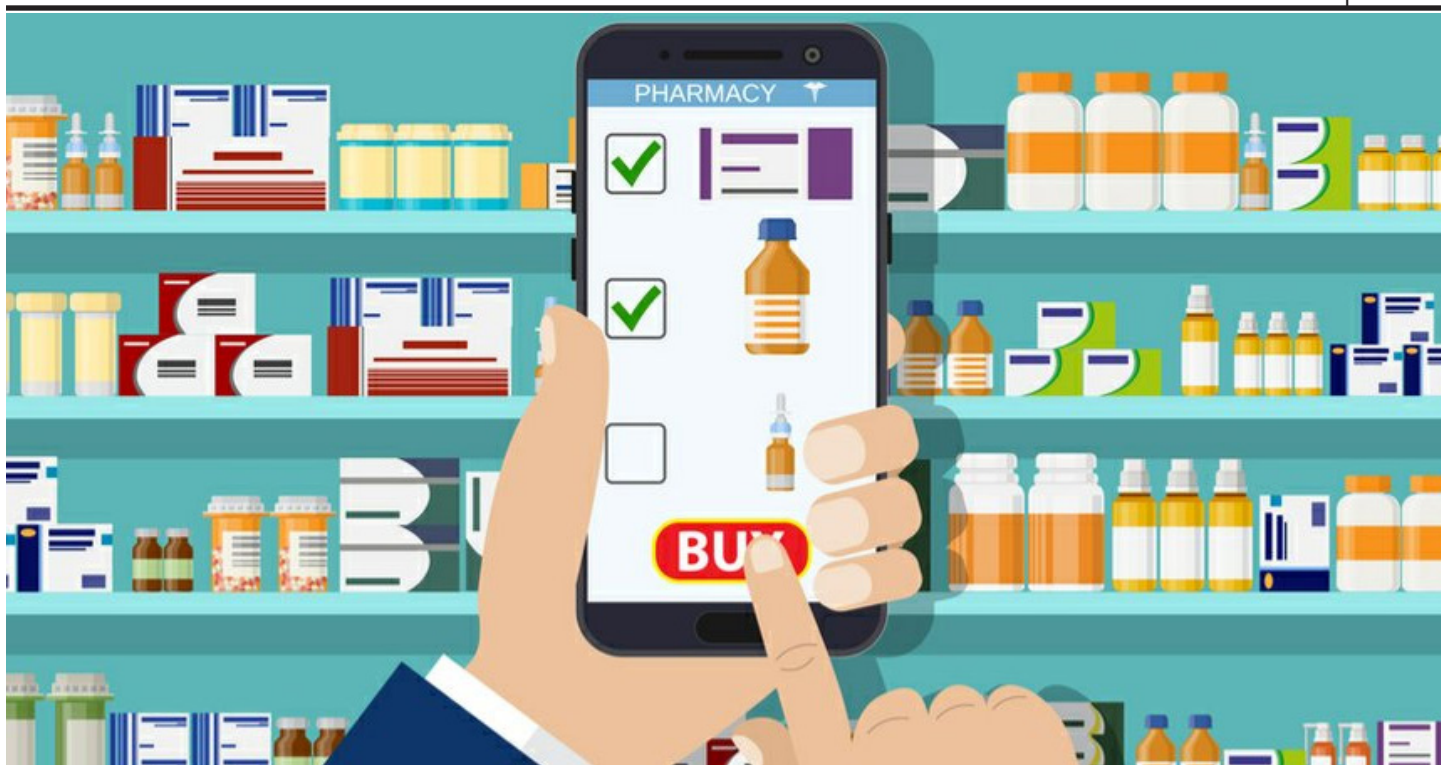
<http://pdw2022.com/>



<https://www.facebook.com/pdw2022>



<http://instagram.com/pdw2022>



CAPSI Student Literary Competition Winner:

# The Future of Pharmacy is Intertwined with Digital Health Innovation

By Peter Zhang, 2T0

*With advancements in technology, we should automate tasks that machines can do so pharmacists can focus on the care only a clinician can provide.*

The integration of new technologies to optimize pharmacy workflow has been transformative. In recent decades, the development of a computerized workflow has allowed pharmacists to automate the process of identifying drug interactions, readily access online therapeutic resources, and digitize the storage of patient information.

For the traditional pharmacy workflow, which includes activities such as medication dispensing, providing medication counselling to patients, and responding to drug information consults, pharmacy technology solutions have greatly enhanced the capacity for pharmacist productivity. However, while these advancements have increased the efficiency of the traditional pharmacy workflow, newer tasks brought on by expansions of pharmacist clinical services have been relatively untouched by technology.

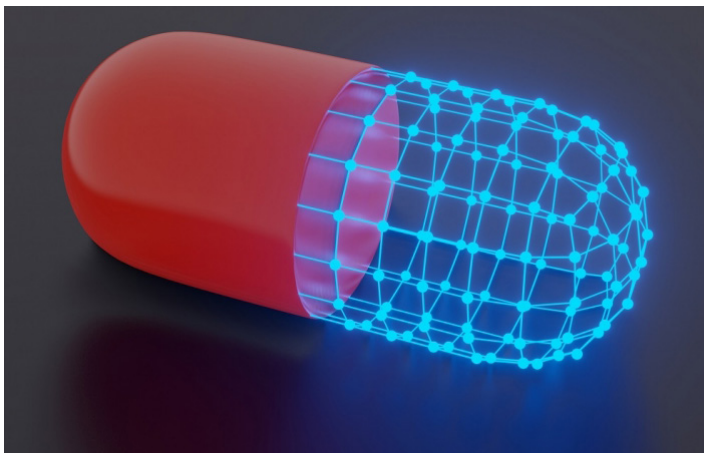
In recent years, the emphasis within pharmacy has shifted away from product-oriented services, and instead towards the provision of clinical care. With the introduction of services like medication reviews, vaccinations, minor ailment prescribing, and COVID-19 testing, the movement towards a clinical focus in pharmacy is well underway.

However, due to the limitations of time available to pharmacy practitioners on an average workday, there are constraints to introducing new clinical services as a routine aspect of the pharmacist role. Without the concurrent advancement of digital health technologies to support expansions in clinical services, further growth of professional scope may become unsustainable. This places pharmacists in a difficult situation where time constraints can impact the quality or quantity of services provided. For example, the time necessary to com-



plete documentation after conducting medication reviews in Ontario results in a significant amount of time away from the pharmacy counter.

With ongoing pressures to perform tasks at the counter, practitioners may have no choice but to sacrifice the quality or quantity of medication reviews conducted. This is especially the case as medication reviews are often conducted without an appointment in advance. Furthermore, without the intervention of digital products to make the provision of medication reviews more efficient, the feasibility of this clinical service as a routine part of the pharmacist role is uncertain.



Other clinical services, such as the administration of vaccinations, also face similar challenges when integrated within the pharmacist workflow. However, there have been recent changes in this area that have alleviated pressures on the pharmacist workload. In the ongoing COVID-19 pandemic, pharmacy services like COVID-19 testing have been developed as an appointment-based service, and existing procedures like walk-in flu shots have been changed to scheduled injections. Importantly, these developments demonstrate that pharmacy services can thrive when an appointment-based system is implemented. This shift towards appointment-based services may represent a lasting change in the way pharmacists carry out services like vaccinations and presents an opportunity for digital health products to create value.

Clinical activities like medication reviews, COVID-19 testing, and administering flu shots can be time-consuming. Furthermore, the unpredictable nature of patients entering a pharmacy can often push pharmacists beyond a sustainable workload. Fortunately, these

challenges can be overcome with novel digital health products that adequately support changes in pharmacist needs. In one example, QMR (Quality Medication Reviews) Pharmacy Solutions, a digital health company led by pharmacists, seeks to increase the efficiency of the documentation process for medication reviews in Ontario. Its product intends to automate repeated inputs and allows for the completion of the documentation process online. If this concept is successfully implemented, it will allow pharmacists to spend more time with patients, and less time on paperwork.

In another example, recognizing the need for scheduled pharmacy services during COVID-19, a pharmacist-led company called MedEssist has developed a digital platform to allow patients to book flu shots or COVID-19 tests online. With the capacity to schedule their services with ease, pharmacists are able to arrange appropriate staffing while avoiding unexpected crowds at the counter, and ultimately, keep the pharmacy and its patients safe as the pandemic progresses.

These are just a few of the numerous examples of pharmacist-led digital health solutions. As health technology innovators, pharmacists are uniquely situated not only due to their training as medication experts, but also as expert navigators of the healthcare system. As a result, digital products developed by pharmacists are patient-oriented and more user-friendly for clinicians. These attributes are critical in bringing a successful digital health product into the market.

With continuous expansions in the scope of clinical services offered by pharmacists, the integration of digital health within the field of pharmacy will become increasingly necessary. With the incorporation of automation on the horizon, we should embrace digital health as a tool that allows us to do more with our time, and we need pharmacists to not only serve as a consultation group for novel health technologies, but as leaders in its innovation.





## CSHP INTERVIEW

With Vincent Vuong



Interview by:

Wei Wei, CSHP Communications Rep

Hi! This is Wei Wei, the Communications Representative of CSHP at UofT. I would like to extend my warm thanks to Vincent Vuong for accepting an interview with me over email. Vincent is a graduate of University of Waterloo's PharmD program, a clinical pharmacist at Credit Valley Hospital, and a Co-Chair at CSHP Lake Ontario West Chapter. His account on his path to hospital practice, his insights on the role the pharmacist plays on a clinical care team, and his advice for students aspiring to a clinical career inspire us to continually advance our knowledge and attitude towards the practice of pharmacy.

**Could you share with us your education and career background?**

I spent 7 years at the University of Waterloo, where I obtained a BSc in Honours Science and a Doctor of Pharmacy degree, graduating in 2017. Pursuing a career in hospital pharmacy was a gradual process for me. My first hospital job was a part-time Clinical Pharmacist position, at Royal Victoria Regional Health Centre in Barrie, ON. From 2018 to 2019, I then completed a 1 year Hospital Residency at Trillium Health Partners in Mississauga, ON. After residency, I have been a full-time Clinical Pharmacist on a General Internal Medicine ward at Credit Valley Hospital for the past year.

**Why did you choose to practice in a hospital pharmacy, and what about it appealed to you?**

After spending 4 long years learning about complex medication management, I wanted to apply my knowledge and skills in a purely clinical role. I liked the idea of playing an important role within a multidisciplinary team, and being able to bounce ideas off of physicians, nurses and allied health in real-time.

**Could you describe your main tasks and responsibilities as a clinical pharmacist at Trillium Health Partners?**

As a clinical pharmacist, a large portion of my time is spent being consulted on medication-related issues such as therapeutic drug monitoring (e.g. with regard to vancomycin, aminoglycosides, phenytoin, digoxin, etc.), renal or weight-based dose adjustment, antimicrobial stewardship, drug allergy review, and medication counselling. Another major responsibility I have is proactively reviewing medication regimens and monitoring for efficacy and safety endpoints to find and resolve drug therapy problems.

**What would you say is the biggest difference in terms of the style of direct patient care between hospital practice and community practice?**

For me, the acuity of the patient's condition would be the biggest difference: intervening on very acute issues on a medicine floor vs. more stable chronic disease management in community pharmacy practice.

**What does a typical day of yours at work look like?**

Although COVID has greatly affected this, a typical day (not including time for breaks and lunch) would generally consist of the following:

- Attend Huddle with the Pharmacy Team

*“Practice can vary greatly between different clinical areas, as well as between different hospital organizations, so getting as much exposure early on in your pharmacy education would be a great idea. Most pharmacists would be glad to help out if you are willing to ask!”*

- Clinically review orders from yesterday evening and overnight, and intervene on any urgent morning medication-related issues
- Attend interprofessional rounds with the care team
- Respond to pharmacist consults including dosing programs, renal dose adjustment, counselling, etc.
- Perform pharmacotherapy work-ups and routine monitoring for patients on the floor, prioritising patients with complex medication issues
- Attend a dispensing shift sometime during the day
- Make time as needed for other activities including clinical teaching (e.g. preceptorship), research, pharmacy meetings, or extracurricular council/committee involvement

**You run several dosing and monitoring programs for warfarin, vancomycin, aminoglycosides, etc. How easy or challenging is it to implement and maintain these programs in the especially interprofessional clinical setting of a hospital?**

Overtime, most physicians at Trillium Health Partners have become comfortable with the idea of pharmacists dosing warfarin, vancomycin and aminoglycosides, and regularly consult us for this service. In addition to our training in pharmacy school, we received extra training for these dosing programs when hired at Trillium, and these programs have become a routine part of the pharmacist role at Trillium Health Partners.

**What would you say is the most challenging part about your job?**

Given the highly interprofessional nature of the hospital environment, I find the most challenging (and rewarding) part of my job is developing and maintaining relationships with the interprofessional team, as well as

within the Pharmacy Department. Having effective oral and written communication is a must in a highly collaborative environment, and well as building trust with the clinical services you provide.

**You are also the CSHP Lake Ontario West Chapter Co-Chair. Why did you decide to become a CSHP member, and why what does your work as a Chapter Co-Chair consist of? Would you encourage students interested in hospital pharmacy to be involved in CSHP, and why?**

I decided to become a CSHP member because I wanted to improve my professional practice by taking an active role in educational and advocacy-related activities. It is also a great avenue for me to network with other pharmacy leaders provincially, as well as nationally. As a CSHP Lake Ontario West Chapter Co-Chair, this is a volunteer role where I help to plan events such as a yearly Pharmacy Residency Research Night, CSHP Journal Clubs, and other educational talks. We also collate articles for our Hospital Pharmacy in Ontario (HPO) newsletter, and plan social outings as well (Pre-COVID).

**What advice do you have for students who want to pursue a pharmacy practice in hospital?**

I would advise reaching out to see if you could shadow hospital pharmacists in a different range of clinical areas (e.g. Critical Care, Heart Function Clinic, Emergency Medicine, General Medicine, etc.) to see if these could be areas you would enjoy practicing in. Practice can vary greatly between different clinical areas, as well as between different hospital organizations, so getting as much exposure early on in your pharmacy education would be a great idea. Most pharmacists would be glad to help out if you are willing to ask!





# Pharmacy Athletics

Welcome back Pharmacy!

We hope everyone had a relaxing holiday! Due to the nature of the current 'Stay-at-Home' order, all intramural leagues are currently on hold. Please stay tuned for any updates on future potential sports such as Cornhole, Kan-Jam, Soccer, Tennis, and Spikeball!

In light of this, we wanted to take a moment to highlight our athletic representatives and show them our appreciation for all the hard work that they've been doing for their classes. As always, if you have any questions, feel free to reach out to us via email ([athletics@uoftpharmacy.com](mailto:athletics@uoftpharmacy.com)) or check us out on Facebook and Instagram. Stay safe and stay active!

Jonathan Ko, 2T2 and Cindy Tran, 2T3

Hi everyone my name is Samantha Robertson and I'm a former varsity basketball player at UofT and the 2T2 Class Council Athletic Representative. During quarantine I've been staying active through walks, yoga classes, and a variety of home workouts that I find on Youtube. I'm really excited to be able to play team sports again once COVID is over!



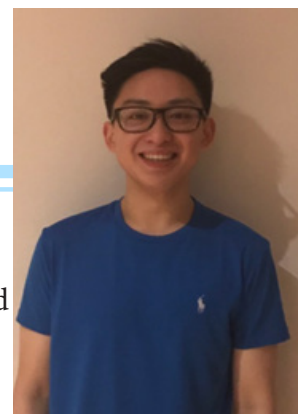
*2T2 Athletic Representative  
Samantha Robertson*



Hi Everyone! I am Jaspreet Ghataura and I am the 2T3 Class Council Athletic Representative! Quarantine gave me the opportunity to focus even more on fitness. I stayed active by doing workouts such as HIT, circuits, and yoga at home. I also aimed at getting at least 10 000 steps a day.

*2T3 Athletic Representative  
Jaspreet Ghataura*

Hi everyone!  
My name is Kaleb Nguyen and I am the Athletic Representative for the Class of 2T4. In



light of the COVID-19 pandemic, many of us have been under quarantine at home for the past few months. Despite these changes, I found the opportunity to create fitness goals for myself. At first, I wanted to lose weight and get that ultimate six-pack I always wanted. I would run around 6.5 miles in the morning and do push ups, sit-ups, and 1-minute planks in the evening. To date, I lost around 25 lbs and I am hoping to maintain my current weight. I hope those who read my story find motivation in getting into fitness and feel free to shoot me a message!

*2T4 Athletic Representative  
Kaleb Nguyen*



# Which 'Pharmacist Hat' do you wear?

Aaron Tran 2T2, Bessie Xue 2T4, Katarina Pessina 2T3,  
Minh Vu 2T1, Julia Giannini 2T3, Simran Sharma 2T2

As many of us may have begun to recognize, the definition of professional identity is not always easily grasped. Pharmacy is and continues to be an evolving profession that has shifted its practice greatly in the past 50 years. Traditionally, pharmacists played a major role in compounding and dispensing medications. Now, our education currently focuses on applying medication expertise to patient-centered rather than product-centered skill sets. This was a necessary change as the manufacturing of medicines has largely shifted to the pharmaceutical industry. Today, pharmacists play the role of dispensers, educators, advisors, medication experts, among many other roles. However, with such a broad range of roles and identifiers, how do pharmacy students decide which to favor to carry on the profession, and how do others outside the profession perceive pharmacists? Are these perceptions analogous to one another or do some perceptions become obsolete? As fledgling professionals, it can be challenging to fully evolve into a pharmacist without a clear definition of our identity.

Within UofT's OPA Student Chapter, we explored and appreciated 5 different roles that pharmacists have identified with over the years [originally researched and presented by Dr. Jamie Kellar to PHM310, Fall 2020]. We also asked students from each class to complete a survey in order for us to evaluate the perceptions within our faculty. The identities and the elements from each that we hold close are as following:

**Apothecary:** Tactile and precise, the apothecary is proud of their mastery of the materials and tools of compounding. Through their expertise, they can transform a formula on a sheet of paper into a healing medicine, specifically prepared for an individual patient. They are entrusted by other healthcare professions with the safeguarding and storage of raw ingredients, as well as the dispensing of a high quality product.

**Expert advisor:** Pharmacists may act as expert advisors to other HCPs within a patient's circle of care. Often specializing in specific therapeutic areas such as oncology/chemotherapy, geriatrics and psychiatry, pharmacists assist physicians, dentists, nurses as well as other HCPs in planning, monitoring and evaluating

drug regimens for patients. Pharmacists review prescription orders to identify potential drug-drug-interactions, allergic reactions and/or contraindications. If concerns arise during this review, pharmacists will discuss these with the prescriber before dispensing.

**Merchandiser:** Pharmacists not only have a wealth of clinical knowledge but they also develop or pursue business acumen as they progress through their careers. This allows many of them to own and operate their own businesses, providing patient care while accessing their marketing, management and business skills. This is an attractive mixture of both science and art that serves as a professional identity worn by many of us. By running a sustainable local business, merchandisers become stable fixtures of their communities, often contributing to local community causes. They may follow a family or patient for decades. They are sources of advice in health but also in life, trusted and consistent.

**Health Care Provider:** The identity of a health care provider places patients at the centre of care and entails a broader role in which pharmacists can play in improving patient care, including providing drug therapy and patient education. Pharmacists may thus identify with the health care provider role because they see themselves as patient advocates. They would manage patients' drug therapy, take responsibility for those under their care, and continuously seek ways to improve patient outcomes through pharmaceutical care.

**Dispenser:** Although pharmacists possess extensive medication expertise and clinical knowledge, in the last few decades it was largely thought that dispensing was the forefront and main identity of pharmacists. The typical pharmacist is often portrayed as a competent middle man between the doctor and the patient; the ones to prepare and dispense medications straight from a received prescription. This in itself has great value, however, a shift in identity has begun to take hold, with both pharmacists and society now beginning to view pharmacists as expert clinicians instead of medication dispensers, able to use their training to better help patients. As the role of the pharmacy technician grows, many of the tasks associated with dispensing are being taken up by this new health profession.

### ***Our Survey***

Through the survey, we asked students to define professional identity and we found that the general definition is to have the same values and expectations that are shared together with all pharmacy students and have a place in society and healthcare where we are respected. While there were no clear identifiers mentioned, the idea of having a general role that all pharmacy students and the general public can agree with was interpreted from all the responses.

To inquire further, we asked students which of the 5 identifiers they most favor. We found that 75% of students lean toward the Healthcare provider role, while an even split of 8% of students lean toward either the dispenser role, expert advisor (to other professionals), or the educator role. The latter was actually added by students in the survey, which comprises both healthcare provider and expert advisor roles into one. No students chose to identify as a merchandiser or apothecary. We also asked students to explain why they chose the identifier, to which the majority answered that the healthcare provider role encompasses all the other roles, that it aligns with their values to provide care and help others, and likely most importantly, this is the identifier that they are taught in school. The few students who added the educator identifier explained that the profession is moving toward teaching patients to become the expert of their health conditions, and through counseling, pharmacists are relaying their expert knowledge of medication while being the most accessible healthcare professional to answer questions about health and medicine. Similarly, students who identify with an expert advisor have the same response, except toward other healthcare professionals, for example working with a team by providing recommendations and pharmaceutical opinions for best patient outcomes. While these reasons are parallel, where they meet is that both identifiers agree that their identity as pharmacy students go beyond the dispenser role.

The heavy emphasis on the healthcare provider role is the result of the widespread adoption of the Pharmaceutical Care Model (most notably described by Helper and Strand in 1990), and its subsequent implementation into the PharmD curriculum. We may stop and reflect, however, on what the impacts of going “all in” on one identity are, and how it has sidelined different aspects of pharmacy practice such as compounding or management.

### ***What about the public perception?***

Now that we understand the pharmacy student's perception of their identifier, does this align with the perception from other healthcare professionals and the general public? The responses gathered from students show that 25% of the public and other professionals perceive pharmacists in the healthcare provider role. Students also voted that the public's perception of a pharmacist is most likely to be a dispenser (50%), a merchandiser (16.7%) or an apothecary (8%). Lastly, students voted that other healthcare professionals perceive pharmacists as dispensers (41.7%) or expert advisors (25%). Given this information, it is presumed that the concept of professional identity among pharmacy students, the general public, and other healthcare professionals do not align with one another. But why is professional identity important and how does this discrepancy have an impact on pharmacy practice? With many different identifiers it can become confusing for pharmacy professionals to visualize themselves with one identity over the other. From the data gathered, the perceptions of pharmacy students and the public does not align with one another. While pharmacy students believe they fulfill the role of a healthcare provider, society identifies pharmacists as dispensers or merchandisers and this conflict makes it difficult for the profession to evolve. As our education moves pharmacy forward, without a change in societal perception, we will continue to take steps back.

### ***So this becomes an opportunity for advocacy.***

Given that pharmacy students believe and visualize themselves to be healthcare providers, we must be the change we want to see in order to shift the public perception of pharmacy so that it can align with ours. What do we spend our time on? It makes little sense to hold an identity that has little association with reality. Let's reflect on how we can adapt our practice to bring harmony to these identities, which do not necessarily need to be in conflict. How can we aim to feel a sense of belonging in the profession and in our own practice?

If we spend time only counselling on medications, it makes sense that the public will see us as experts in medication. If we take the time to consider the patient's overall health and make concrete interventions to improve it, perhaps then the conversation can evolve. Public perception changes slowly, one interaction at a time...



# Mental Health Coverage (Student Insurance)

*Shaon Parial, UTSU Rep*

utsurep@uoftpharmacy.com

## General Information

The UTSU added psychotherapy to its mental health coverage in 2019.

[http://studentcare.ca/rte/en/IHaveAPlan\\_UTSU\\_Health\\_HealthCoverage\\_HealthPractitioners\\_Psychologists](http://studentcare.ca/rte/en/IHaveAPlan_UTSU_Health_HealthCoverage_HealthPractitioners_Psychologists)

Coverage is \$100 per session for 15 sessions (\$1,500 total) each policy year (September to August). Only individual therapy sessions are covered by the plan.

You are covered for a mental health practitioner that meets the following requirements – a registered psychologist, psychotherapist, clinical counsellor, or social worker with a master's degree in social work. Coverage is not limited to members under the Studentcare network, the mental health practitioner must simply meet the above requirements. However, members part of the Studentcare network may be able to provide additional coverage to students beyond the \$1,500 per policy year.

## Student Psychology Network

The Studentcare network is partnered with PsyVitaliti. Additional discounts on top of the \$1,500 per policy year are available for PsyVitaliti's licensed psychologists at the PsyVitaliti's Toronto office (151 Yonge Street, Suite 1176) or through secure online video conferencing.

Further details can be found at <https://psyvitaliti.ca/> or call 1-844-337-2473 EXT- 0.

## Link Mental Health

The UTSU has also partnered with the Link Mental Health program to provide coverage. The plan coverage is identical (\$100 per session for 15 sessions (\$1,500 total) each policy year). This is limited to therapists associated with the Link Mental Health program.

<https://www.linkmentalhealth.com/therapists.html>

LinkMentalHealth works by following survey prompts to match you to an appropriate therapist that you can then book appointments with.

Sessions are done by video, but they do request your postal code. There are language options in English, French, Arabic, Urdu, Hindi, Farsi, Spanish, Mandarin and other options can be requested. You can also tailor your search request based on gender identity, religious/spiritual stance, your specific concerns (e.g. depression, anxiety) and if you want a therapist with a specialization and background in the LGBTQ+ community. They also determine if you qualify for affordable or government funded therapy programs based on your income bracket.

## From the UTSU:

**If you are in a crisis, please go to a local hospital, call 9-1-1, or contact a Distress Centre.**

## Distress Centres of Greater Toronto:

**416-408-HELP (4357)**

[www.dcoft.com](http://www.dcoft.com)

## Canada Suicide Prevention Service (CSPS)

**1-833-456-4566**

[www.crisisservicescanada.ca/en/](http://www.crisisservicescanada.ca/en/)

**CSPS Text: 4565 (Available daily 4pm-12am)**



UNIVERSITY OF TORONTO  
**STUDENTS' UNION**

# COMPOUNDING: PEDIATRIC EDITION



Britney Tang, 2T4

At the age of 4, my sister experienced her first forced medication feeding, with my dad holding her down and my mom dual-wielding a syringe in one hand and the medication bottle in the other. As the one who cleaned her vomit off the floor, I can attest that this method does not work! Without realizing that this unnatural looking, ill-tasting substance is supposed to make them feel better, kids will instinctively avoid the medication. Enter pediatric compounding, creating personalized medicine to solve individualized drug problems and tailor to children's unique needs when commercial products cannot.

We know all about pills, suspensions, transdermal, and even suppositories, but have you seen medications in the form of a lollipop? A popsicle? Or a gummy? Pediatric compounding is where some of the most creative and interesting compounding preparations are found. For a sore throat from tonsillitis or a strep infection, Tetracaine lollipops can be compounded in various strengths or sizes depending on a patient's conditions and age. Persistent diaper rash is another pediatric condition compounding can help with. Cholestyramine ointment can be prepared in petrolatum or a hydrophilic base and is an excellent choice for rashes associated with diarrhea. Nystatin and karaya gum ointment preparations are popular for diaper rashes with constipation. Ibuprofen can be formulated as a suppository, lollipop, or transdermal gel, allowing the pharmacist to be creative with the type of solutions they can offer to patients. Changes in dosage forms are frequently required for younger children who haven't yet mastered their pill-swallowing skills and are still using diapers and putting random objects in their mouths.

Another essential part of pediatric compounding is meeting the special needs of pediatric patients with Sensory Processing Disorder (SPD). SPD can be developed by kids with developmental disorders such as ADHD, fragile X syndrome, and autism. Medication taste and texture can be very important for patients with SPD, who may be non-compliant due to dysfunctional detection and interpretation of sensations. These aspects of the patient's medication experience can make the difference between accepting a medication and vomiting, gagging, and screaming. Compounding pharmacists can optimize suitability for each patient in a variety of ways. For children sensitive to gritty textures, particle size can be reduced by grinding the powder ingredients in a mortar and pestle. Colour and flavour can also be manipulated to promote patient compliance. In some cases, alternate dosage forms can also be created if a patient is unwilling to take an oral formulation. Commercial medication products do not always meet the specific and unique therapeutic needs of the pediatric population. As such, a compounding pharmacist can provide innovative solutions by compounding alternative dosage forms, flavours, or formulations to meet individual pediatric patients' needs. Compounding is something I wish I knew about when I was younger, but I believe that now being able to compound as a pharmacist, I will be able to help individuals in similar situations.





*By Ken Chung, 272*

*Edited by Adrian de Boer, 273*

Often, as up-and-coming health care professionals, we become so preoccupied with memorizing therapeutic alternatives and creating care plans that we temporarily lose sight of the core principles that define our place in society. In our progressively evolving community of diverse individuals, the Principle of Respect for Persons has become increasingly important and we must continually remind ourselves of its meaning and learn to incorporate it into our everyday practice. When we provide patient care, how do we ensure that we foster an environment that is non-discriminatory, welcoming, and respectful? Here, we offer practical tips for students to keep in mind as they enter into their experiential placements and beyond, providing care to a population with diverse identities and needs.

**1. Begin with creating a physical environment of inclusivity.** This is one of the simpler tasks to execute, but its effects are substantially positive for patients. Place signage in your pharmacy which communicates to visitors that your pharmacy is a safe, welcoming, and accommodating space. The Canadian Pharmacists Association (CPhA) has published an example of such signage which you can print, laminate, and post, available here: <https://www.pharmacists.ca/cpha-ca/assets/File/education-practice-resources/WebinarSlideDeck/2019/SmashingStigmaPoster.pdf>. Alternatively, you may make your own signage with a personal non-discriminatory statement—this may include images like the Rainbow flag, which indicates inclusivity for LGBT2SQ+ individuals. Also, consider designating an “all-gender” washroom that is available to individuals

of all gender identities. These actions may seem small or even insignificant to many but are actually very important and impactful for your LGBT2SQ+ patients.

- 2. Refrain from passing judgement.** Health care professionals are expected to maintain neutrality, but this is admittedly easier said than done. Therefore, start now—train your mind to reflect on initial prejudices and presumptions, and to resist stigmas. For example, consider that your patient living with a substance use disorder is not “a terrible person with no self-control”, but someone who has lost a loved one recently and does not know of other coping mechanisms. Regardless of the reasoning, there should be no judgement or unnecessary commentary—you are a healthcare professional, and everyone has the right to treatment. Ultimately, as humans, we are entitled to our own personal beliefs and opinions, but they must not cause harm or interfere with clinical decision-making, nor do they need to be expressed at a healthcare facility.
- 3. Avoid making assumptions** on an individual’s sexual identity, gender identity, and pronouns. Unfortunately, this has not been conventional practice, but this can change if the next generation of pharmacists start early. Make it a habit that for every new patient, you ask what their preferred pronouns are, and to note them on your pharmacy system. It seems simple but referring to someone with a pronoun they do not identify with is distressing. A frequently asked question is, “What about certain clinical scenarios that warrant knowing a patient’s assigned sex at birth, such as when dispensing oral contraceptives?” In such cases, you may proceed to simply ask, “What was your assigned sex at birth?”. As long as you have a rationale to ask, and you ask in a respectful



manner, doing so is completely acceptable. Needless to say, phrasing such as, “What is your real gender?” and, “What were you before?” are categorically disrespectful and offensive. Fortunately, situations that necessitate knowing a person’s assigned sex at birth are generally uncommon in conventional pharmacy practice, and the Ontario Narcotics Monitoring System (NMS) will still approve logs when dispensing controlled substances despite any discrepancies in gender between the government’s record and the pharmacy’s record. At a minimum, when referring to patients whose gender is not yet known, using the pronouns “they/them” is acceptable, and should be encouraged among pharmacy staff.

4. With that being said, **language matters**—edit your lexicon to be non-discriminatory and non-exclusionary. The Canadian Public Health Association has a handy reference on preferred substitutions for certain words relevant to health care providers, available here: <https://www.cpha.ca/sites/default/files/uploads/resources/stb-bi/language-tool-e.pdf>. For example, instead of saying “transgendered” or “transvestite”—both of which are archaic and offensive terms—simply use “transgender” or “trans” instead. Other subtler substitutions include: “a person who uses substances” instead of “addict”, “partner/spouse” instead of “boyfriend/girlfriend/husband/wife”, and “negative/positive” instead of “clean/dirty”. Remember that language and connotations of words evolve—just because a word was previously acceptable does not make it acceptable presently. It is worth reviewing the aforementioned resource and to start being mindful of which words you use, even in your daily life.
5. Take the time to **learn more and educate yourself**. Unfortunately, mainstream pharmacy curricula have many gaps to be improved upon, such as a lack in discussion over trans health and gender-affirming interventions (interventions that help an individual transition, such as feminizing or masculinizing medications). Sherbourne Health, an esteemed clinic in Downtown Toronto known for providing specialized care for the LGBT2SQ+ population, has published a clinical practice guideline (CPG) available online here: [https://www.rainbowhealthontario.ca/wp-content/uploads/woocommerce\\_uploads/2019/12/Guidelines-FINAL-Dec-2019-iw2oti.pdf](https://www.rainbowhealthontario.ca/wp-content/uploads/woocommerce_uploads/2019/12/Guidelines-FINAL-Dec-2019-iw2oti.pdf). This CPG contains the most current local recommendations on both feminizing and masculinizing pharmacotherapies, including regimens, dosing, monitoring parameters, and time to effect. It is not expected for you

to memorize the entirety of this 134-page document (we have enough CPGs to memorize in school as it is), but it is worth bookmarking for reference in the future, as you will inevitably provide care for LGBT2SQ+ patients at some point in your career. At least when a colleague or a patient asks you what gender-affirming medications are available, you will not present empty-handed. CPhA has also produced two documents worth familiarizing yourself with: first is a briefer summary of feminizing and masculinizing pharmacotherapies with additional commentary on HIV treatment and prevention (<https://www.pharmacists.ca/cpha-ca/assets/File/education-practice-resources/WebinarSlideDeck/2019/SmashingStigmaPracticeTool.pdf>), and second is a list of definitions often used within the LGBT2SQ+ community (<https://www.pharmacists.ca/cpha-ca/assets/File/education-practice-resources/WebinarSlideDeck/2019/SmashingStigmaKeyDefinitions.pdf>).

Ultimately, this list is not exhaustive and there are many more ways you can make your practice welcoming and inclusive. Arguably, pharmacists are characteristically traditionalists, but these are practice and behavioural changes that cannot be delayed. As culture shifts and populations become increasingly diverse, our attitudes and behaviours must also evolve. Otherwise, the profession of pharmacy risks devaluation and scepticism among certain spheres. More importantly, all individuals are worthy of the utmost respect when receiving health care. Nobody should have hesitations or anxieties when going to any pharmacy or clinic because of who they are, and that is certainly our responsibility to uphold.



## CLUBS CORNER

# Pharmacy Awareness of Geriatrics (PAG)

*By: Mansi Sheth, 2T4 PAG Internal Events Director*

Pharmacy Awareness of Geriatrics (PAG) is a club led by pharmacy students, tying in education and philanthropy to contribute to geriatric care. Over this fall term, PAG held many interactive events connecting students with geriatrics-related initiatives.

PAG's social media awareness week featured organizations and individuals that play an advocating role in the geriatric field. Our aim for this project was to raise awareness on geriatric populations during COVID-19 and to support local organizations that are inspiring to bring help to isolated seniors. Some of the key highlighted organizations were CHATS, Seniors Outreach, VoGro and Alzheimer's Society. CHATS (Community & Home Assistance to Seniors) is a non-profit organization that provides services to improve the wellness and independence of seniors. Seniors Outreach, a UofT club, promotes community engagement between healthcare professional students and isolated seniors. VoGro is an application that connects people in at-risk demographics with community helpers. Alzheimer's Society's mission is to alleviate the personal and social consequences of Alzheimer's disease and other dementias and to promote research. Students had the opportunity to answer COVID-19 related questions based on shared facts. Naomi Steenhof, an assistant professor in the teaching stream and a geriatric pharmacist, was also featured in a short interview, describing the disproportionate impact of COVID-19 on the geriatric population.

The FUNdraiser for CHATS event featured a presentation by Christina Bisanz (CEO of CHATS) and an online Scavenger hunt. Each year, CHATS provides services to more than 8,500 York Region and South Simcoe seniors and caregivers. They combat issues like social isolation and assist seniors with transportation and grocery/medicine delivery. Pharmacy students posted a picture with a grandparent or senior they saw as a role model as part of #UofTFUNdraiserforCHATS.



The Dinner & Learn event featured Naomi Steenhof's presentation on intergenerational tensions in the time of COVID-19. The presentation explored healthcare challenges faced by the geriatric population and resources pharmacists could provide for mitigation of barriers. Students had the opportunity to challenge views about ageist responses and positive and negative responses to COVID-19.

PAG also collaborated with Interprofessional Healthcare Students' Association (IPHSA) and Alzheimer's Society to deliver their first IPE event: Dementia: Learning Towards Understanding and Supporting Each Journey. Interprofessional students worked on interactive cases tailored to provide care for Alzheimer and dementia patients. The session featured guest speakers, real caregiver stories, and education on services offered by the Alzheimer's Society. We aim to continue to have this annual IPE event, so stay tuned if you missed it this time! Trivia Night with Seniors Outreach allowed students to show support and volunteer with the geriatric community to bring awareness to social isolation during COVID-19. Volunteers guided and played along with seniors on Zoom. Our small conversations with seniors helped us learn about how COVID-19 has impacted their daily life activities.

# An Update on New COVID-19 Variants



**Anthony Singh, 2T3**

*(On behalf of the Global Medicine Initiative Executive Team)*

Due to genomic instability, viruses mutate quickly giving rise to new variants. This is no exception to the SARS-CoV-2 virus causing our current COVID-19 pandemic. The virus that was first detected in Wuhan, China, is no longer the same one found in most corners of the world. The first major mutation, D614G, emerged in Europe in late January/early February 2020 and quickly became the globally dominant form of the virus. In August of last year, another variant, A222V, spread across Europe and was linked to summer holiday travel to Spain. More recently, two new variants have emerged: the B.1.1.7 and B.1.351 lineages.

## **B.1.1.7 (aka 20B/501Y.V1)**

First appearing in the UK in September 2020, this variant has now been identified across the world, including in the United States, Canada, South Korea, Singapore, Brazil and Vietnam. This variant contains an N501Y mutation in the receptor binding domain (RBD) of the spike protein, which increases the binding affinity to human angiotensin-converting enzyme 2 (ACE2) receptors.

Other notable mutations in the spike protein:

- The 69/70 deletion, which occurred spontaneously a number of times, and likely leads to a conformational change in the spike protein
- The P681H mutation proximal to the S1/S2 furin cleavage site, which is a region with high variability amongst coronaviruses
- The ORF8 Q27stop mutation, which does not affect the spike protein, but truncates the ORF8 protein. The effect of this is unknown.

## **B.1.351 (aka 20C/501Y.V2)**

First identified in South Africa in October 2020, this variant has been detected in countries including Austria, Norway, Japan and the UK. It has multiple mutations in the spike protein, including the N501Y mutation found in the B.1.1.7 variant. However, unlike the B.1.1.7 variant, it does not contain the 69/70 deletion. There are additional spike protein RBD mutations, including K417N and E484K, however the implications of these mutations remain unknown.

Potential consequences of emerging variants:

- Ability to spread more quickly between people
- Ability to cause milder or more severe disease
- Evasion of detection by specific diagnostic tests
- Decreased susceptibility to therapeutic agents, such as monoclonal antibodies
- Evasion of natural/vaccine-induced immunity

Although the newly detected variants are believed to transmit more efficiently and more rapidly, there is currently no evidence to suggest that they increase the severity of disease or risk of death. Furthermore, there is no evidence demonstrating that the Pfizer/BioNTech and Moderna vaccines will not be effective against these variants. Nonetheless, this information is subject to change as research continues and our understanding of the variants is refined.





***Sarah Casola***

**2T2 EVOLVE Events Coordinator**

COVID-19 has certainly been the topic of discussion for the last 10 or so months, with a large emphasis placed on daily testing and case counts. Due to lack of resources, initially COVID-19 testing was limited only to those with serious symptoms, pre-existing conditions, and healthcare workers. This meant that those with minor symptoms (cough, runny nose, etc.) did not qualify for a test, and thus the reported daily case counts were greatly underestimated.

Before Ontario announced COVID-19 testing in pharmacies, a survey was conducted by the Canadian Pharmacists Association, which found that 75% of patients would feel comfortable having a pharmacist administer a COVID-19 test for them. In addition, 41% of Canadians felt they would be more likely to get a test if pharmacists were able to administer them. This demonstrates just how much trust the public has in our profession, and how expanding our scope to include specimen collection would improve accessibility to testing.

With an increased demand for testing, the government looked to pharmacists – the most accessible health care professionals – to administer COVID-19 tests. In September 2020, the Ontario government partnered with pharmacies across the province to expand access to COVID-19 testing for asymptomatic patients that meet certain criteria. This was great news for the profession of pharmacy as it involved expanding our scope of practice to include collecting specimens and interpreting lab results.

The Ontario Pharmacists Association has been advocating for expanded scope, including ordering and performing lab tests for several years, so this is a great step to get our foot in the door! Pharmacies and pharmacists around the province eagerly stepped up to the plate to perform COVID-19 testing to expand the professional services they offer. It's also important to recognize that pharmacists were able to successfully integrate COVID-19 testing in such a short timeframe. This proves that the government can rely on the profession of pharmacy for a variety of clinical services and that we should be utilized to our full potential. Perhaps our eagerness and ability to quickly adapt to COVID-19 testing will encourage the provincial government to expand our scope further, to include injection of additional vaccines and medications, minor ailment prescribing, and more!

# Prescribing & Dispensing Controlled Substances During the Pandemic

*Cindy Shen*

EVOLVE 2T2 Representative

After the declaration of a global novel pandemic by the World Health Organization at the start of March, 2020, Health Canada has issued pharmacists a temporary Controlled Drugs and Substances Act (CDSA) subsection 56(1) class exemption on March 26, 2020, which allows pharmacists to dispense any narcotic pursuant to a written or verbal order from a practitioner, dispense a refill of previous narcotic or controlled drug prescription pursuant to a written or verbal order from a practitioner, transfer prescriptions of narcotics and controlled drugs to another pharmacist in Ontario and if they have already been transferred, may be transferred to another pharmacist, and prescriptions for benzodiazepine or other targeted substance that have already been transferred, may be transferred to another pharmacist.

COVID-19 has imposed many challenges and risks for those who suffer from substance use disorder including limitations on services and support. Pharmacists, now tasked with the extra responsibility of renewing and adapting narcotics and controlled substances to ensure continuity of care for patients during the COVID-19 pandemic, must also continue to play an even more important role in harm reduction and medication safety to prevent opioid overdoses and death by providing patient education on safe and appropriate use of opioids and take-home naloxone kits. Furthermore, in order to protect the health and safety of the public, pharmacists must ensure the authenticity of all prescriptions and be extra vigilant when filling prescriptions to identify forgeries.

Naloxone is an opioid antagonist which attaches to opioid receptors and blocks the effects of other opioids. Therefore, it is a life-saving medication which helps prevent opioid overdose and death. Especially during the pandemic where many individuals are in isolation and have decreased access for healthcare aids, there is a higher likelihood of people using opioids in isolation and higher potential risk for overdose [1].

COVID-19 can potentially pose an additional risk of respiratory distress for patients using opioids<sup>2</sup>; it is more vital now than ever that all patients on opioid therapy or opioid agonist therapies be provided with a naloxone kit and be trained on its use. When dispensing naloxone kits pharmacists should provide private counselling while allowing physical distancing of at least 2 meters from the patient or provide delivery and provide training counselling to the patients virtually.

In addition to dispensing naloxone kits to patients on opioid and opioid agonist therapies, there are some other educational points for pharmacists to provide as highlighted below:

1. With regards to intranasal naloxone use during COVID-19 pandemic, Public Health Ontario (PHO) has stated that the administration of intranasal naloxone does not generate aerosol and therefore would not promote the spread of COVID-19 virus [3,4].
2. When performing rescues using naloxone kits during an overdose crisis, rescuers should wear non-latex gloves and surgical masks. Whenever possible, pharmacists should consider best practice procedure by providing or making individual pairs of non-latex gloves and surgical masks for purchase when dispensing naloxone kits [4].
3. The Ontario Naloxone Program (ONP) recommends against rescue breathing, or the use of CPR face shields and one-way valve masks during the pandemic as it may facilitate the spread of COVID-19; instead, the rescuer should provide chest compressions only [4].



If a forgery is identified, pharmacists must report the forgery to the police immediately, and report to the Office of Controlled Substances within 10 days of discovery [5]. If the prescription was dispensed, the pharmacist must report the incident to Health Canada using the Loss or Theft Form [5]. If the prescription was not dispensed, the pharmacist may choose to report to Health Canada using the Forgery Report Form [5]. During COVID-19, pharmacists should ask the prescriber to notify the Drug Program Delivery Branch via the email DrugProgramsDelivery@ontario.ca instead of fax [5].

### Some tips for identifying forgeries in pharmacies:

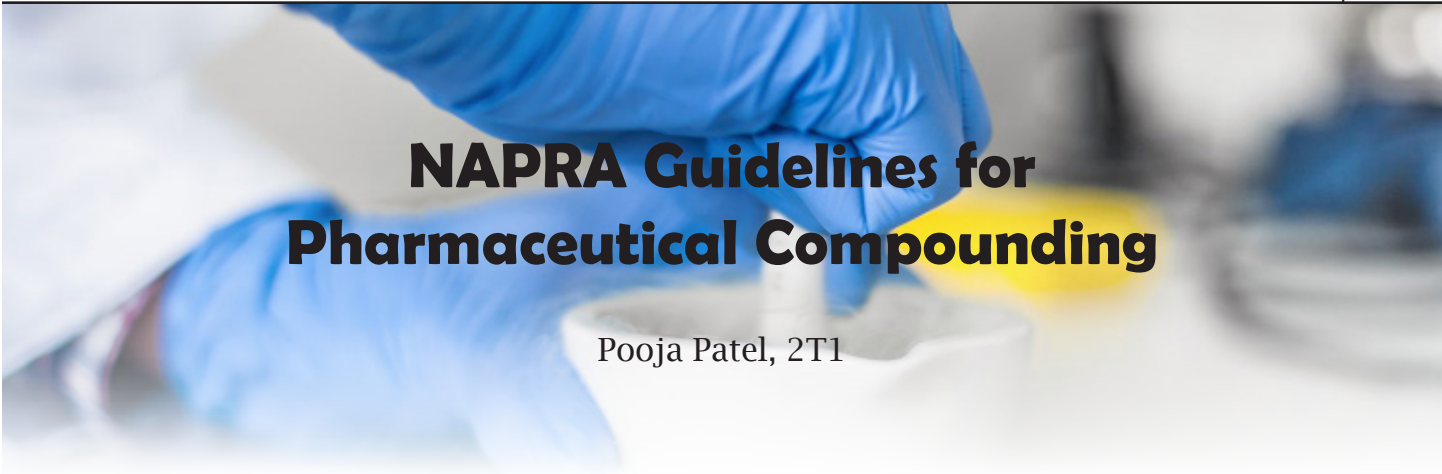
1. Be mindful that unsecured email cannot be used for drugs listed under the Narcotic Control Regulations [6].
2. Screen the prescription: check the appropriateness of the strength, dose, regimen, and quantity. Assess the handwriting (when possible), spelling errors, and any other prescription errors [7].
3. Verify the prescription: call the prescriber using the office number listed on the CPSO in order to verify the prescription [7].
4. Assess the patient: review patient's profile, medication history, and medical history to determine if the prescription is clinically appropriate for the patient

During these challenging and unprecedented times, pharmacists continue to play a key role in supporting patients during the pandemic and are tasked with even more responsibilities to ensure the continuity of care, especially with the newly instated exemption to renew and adapt controlled substances. Pharmacists should be mindful of keeping an open communication with patients by acknowledging this challenging and stressful time and inform patients on how their treatment protocols may be different, and the available resources that can support them. Pharmacists should also discuss the importance of naloxone and provide all OAT patients with take-home naloxone kits.

### References

1. Ontario Harm Reduction Network. How the COVID-19 pandemic is impacting people who use drugs, April 2020. [http://www.ohrn.org/wp-content/uploads/2020/05/Impact-of-COVID-19-on--People-Who-Use-Drugs\\_April-2020.pdf](http://www.ohrn.org/wp-content/uploads/2020/05/Impact-of-COVID-19-on--People-Who-Use-Drugs_April-2020.pdf). Accessed January 13, 2021.
2. 5in5. COVID-19. <https://pharmacy5in5.ca/app/#/module/56>. January 13, 2021.
3. Public Health Ontario. COVID-19: Aerosol Generation from Coughs and Sneezes, April 10, 2020. <https://www.publichealthontario.ca/-/media/documents/ncov/ipac/report-covid-19-aerosol-generation-coughs-sneezes.pdf?la=en>. Accessed January 13, 2021.
4. Toronto Public Health. COVID-19 Guidance for Naloxone Kit Distribution. <https://www.toronto.ca/wp-content/uploads/2020/04/9797-COVID-19-Guidance-on-Naloxone-Kit-Distribution.pdf>. Accessed January 13, 2021.
5. Ontario College of Pharmacists. Temporary Method for Transmitting Prescriptions via Unsecure Email During COVID-19. March 26, 2020. [https://www.ocpinfocanada.com/wp-content/uploads/2020/03/email-prescription-guidance\\_web-page\\_032520\\_v3.pdf](https://www.ocpinfocanada.com/wp-content/uploads/2020/03/email-prescription-guidance_web-page_032520_v3.pdf). Accessed January 13, 2021.
6. Ontario College of Pharmacists. Forgery: Tips for Identifying Fraudulent Prescriptions Fact Sheet. Updated July 2019. <https://www.ocpinfocanada.com/practice-education/practice-tools/fact-sheets/forgeries/>. Accessed January 13, 2021.
7. Ontario College of Pharmacists. Forgery: Management and Reporting of Fraudulent Prescriptions Fact Sheet. Updated April 2020. <https://www.ocpinfocanada.com/practice-education/practice-tools/fact-sheets/forgeries-losses/>. Accessed January 13, 2021





# NAPRA Guidelines for Pharmaceutical Compounding

Pooja Patel, 2T1

In 2017, OCP adopted NAPRA's Model Standards for Pharmaceutical Compounding of Non-Sterile Preparations, which were to be implemented over 3 phases, beginning January 1st, 2020.

As a 2T1, I heard about the new standards here and there, but was never able to fully comprehend what they entailed until I got a prescription for a compound during my APPE rotation and my preceptor started talking about risk assessments and master formula records. I had no idea what he was talking about and decided it was time to do some research. And now having read tons of articles on this topic, I figured I'd summarize some of my key findings for fellow classmates who might be in similar situations.

These new standards are being put in place in 3 different phases. Note that due to COVID-19, the deadlines for pharmacists to meet these standards were extended on March 23rd, 2020.

## Phase 1: Assessing Risks and Gaps – Jan 1st, 2020

The first step in this phase is reading and understanding the NAPRA Model Standards which outline what standards compounding pharmacies must meet, and the accompanying guidance document which provides more details on how the standards can be implemented. This article will be a quick summary of these both.

Next, pharmacies should designate a non-sterile compounding supervisor, who will be responsible for overseeing all the compounding activities and ensuring the new model standards are followed. One of their initial responsibilities will be to perform risk assessments for every compound that is filled thereafter.

The point of the risk assessment is to classify compounds as level A, B, or C compounds, and then determine if the pharmacy space meets the requirements set out to compound level A, B, or C compounds. Essentially, level A compounds have the fewest requirements; a designated and separate compounding area, which most pharmacies will already have. Level B requires a separate, well-ventilated room that's either closed off or has a ventilated containment device to offer greater protection from cross-contamination. And level C compounds require a separate room under negative pressure with a containment device. There are a number of more specific requirements for level C compounds that can be found in the model standards and guidance document.

There's also a handy dandy risk assessment decision algorithm found in the Model Standards, or on the OCP website, that will be your best friend when conducting these risk assessments. The basic steps are as follows: (1) First check if any of the ingredients for the compound are classified as hazardous on the NIOSH List of Hazardous Drugs, which lists 3 groups of hazardous drugs: antineoplastic drugs, hazardous non-antineoplastic drugs, and drugs that pose a reproductive risk. Compounds with ingredients on this list will usually be classified as level C compounds, unless they're only compounded occasionally in small quantities. (2) Next check WHMIS Safety Data Sheets of each ingredient to determine any health hazards, reproductive risks and recommendations on PPE and ventilation when handling these chemicals. (3) Determine frequency and quantity. There are no set definitions for this, so use professional judgement and references to decide what is infrequent and a small quantity for your pharmacy. (4)

Lastly, assess the complexity of the compound.

Simple compounds have published formula, procedure and stability data. Moderate compounds are those that require special calculations or procedures, or those that don't have stability data available. Complex compounds require special training, environment, facilities, equipment and procedures. These 4 factors are plugged into the decision algorithm to help you determine whether the compound is level A, B or C. While there's no template provided for risk assessments, you should be documenting all these steps, any references used and your rationales as part of each compound's risk assessment.

As APPE students, the part of this phase that will pertain to us the most is the creation of master formula records (MFRs). These are basically like compounding recipe sheets, that include all necessary information to compound the preparation and all the references (including safety data sheets for each chemical) which should also be documented and easily retrievable. Helpful resources where you can look for published formulas are Sick-Kids, CHEO, IWK Health Centre, Perrigo, Michigan Pediatrics Society Collaboration and PCCA. The MFRs can be documented using templates from NAPRA or ACP.

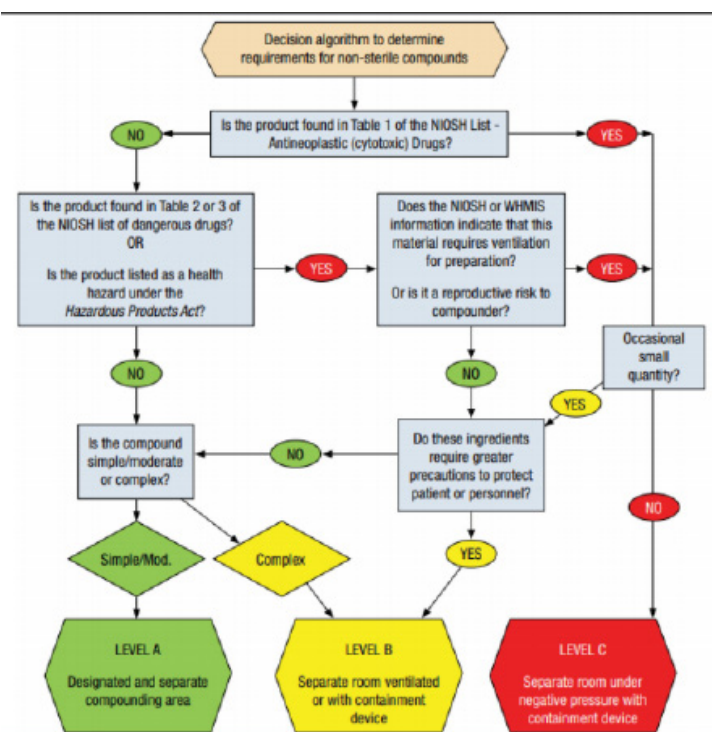
An important part of the MFR is assigning a beyond-use-date (BUD) for each preparation. Recall that for non-aqueous preparations like ointments, this would be either 6 months or the earliest expiry of any of the ingredients. Water containing oral compounds like suspensions should have a BUD of 14 days. And for water containing topicals like creams, it's 30 days.

### Phase 3: Facilities and Equipment –

Jan 1, 2022

This last phase will involve establishing protocols and schedules for cleaning and maintenance, ensuring proper facilities are in place for level A,B, or C compounds (including lighting, heating, ventilation, water supply, work surfaces, furniture, walls and flooring), and developing quality assurance programs for the facilities and equipment.

Armed with this knowledge, I was able to complete the risk assessment and create an MFR for the compound that was prescribed. Both these documents then got scanned into a new mixture record on Kroll. So, the next time we get a prescription for this same mixture, the risk assessment and MFR will be already there and ready to go.



### Phase 2: Personal Training & Quality Assurance –

July 1, 2021

This phase requires a number of steps to be completed. Policies and procedures must be developed, which detail all compounding activities. This includes policies relating to personnel (ei. conduct, hygiene, attire) as well as separate policies for compounding hazardous preparations. The compounding supervisor is also responsible for developing a quality assurance program to monitor ongoing effectiveness and compliance to these policies and procedures. They must also conduct a skills assessment and develop a training program for all compounding personnel.



# Online Pharmacies are on the Rise, but How do They Operate?

Tahani Dakkak, 2T3

By now it's clear to many of us that healthcare is a dynamic field. Technology has rapidly changed the face of healthcare today allowing healthcare professionals to provide more convenient care to meet the ever-changing needs of Canadians today. With the rise of virtual clinics, pharmacies have been rising up to the challenge of using technology to offer patients more convenient options. Most of us have heard of Amazon joining the chain of online pharmacies that exist today but it's safe to assume that many of us are still unsure about how online pharmacies operate. In this blogpost I will share my experience working at The Health Depot pharmacy, an online pharmacy in London, Ontario.

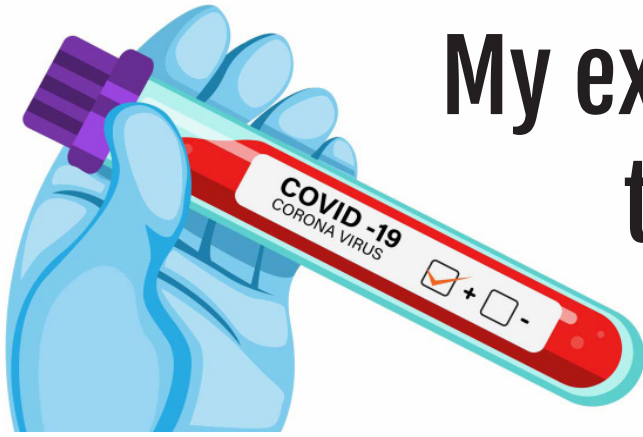
Online pharmacy is a new innovative concept that offers patients a seamless option to getting prescriptions filled from the comfort of their homes. It uses innovative technology to receive prescriptions from patients or have it directly faxed from physicians, fill the prescription on site, then deliver the medication to the patient for free. Before medications are shipped, pharmacists call the patient to counsel on the medication and see if they need any health essential to be shipped with their medications. Prescriptions can be shipped to the patient's work, home, or even cottage except narcotics where they have to be picked up from the post office by the patient.

The pharmacy I work at also has an online health store that offers more than 15,000 products including over the counter medications, health essentials, and home healthcare supplies such as ostomy supplies, braces,

and many others that we can ship with prescriptions for free. The services provided allow patients to take care of their health needs from the comfort of their home, saves travel and wait times, but most importantly allows patients to connect with their pharmacists remotely. Patients at The Health Depot pharmacy have access to a number of pharmacists on-site through video chat, on-line chat, or phone to answer questions about their medications or to make a recommendation on the products available at the store. We have Certified Geriatric Pharmacists, Diabetes Educators, and Respiratory Educators who personalize medications to ensure patients are on the safest most efficacious regimen.

As a Pharmacy Student, I perform all pharmacy assistant duties such as processing and packaging prescriptions, restocking inventory, giving vaccines, and preparing daily dose packs using PACMED machines. I also work along our marketing team to advertise products offered at the health store, plan our social media posts, and I write monthly blogposts pertaining to health to educate our customers. I also help our co-founders make educational YouTube videos to answer our followers most pressing questions. To summarize, pharmacy is a dynamic field and with the rise of technology, we should expect to see the face of pharmacy to change where many processes will become automated. In my opinion, technology will not make us jobless but instead it will give us the opportunity to focus on therapeutics, while machines and technicians count, package and check red pills, blue pills, white pills.





# My experiences getting tested for COVID-19

Shelby Yiu, 2T1

There have been two times in the past year that I had to get tested for COVID-19. One time was back in November at the end of my required community rotation. One of the technicians had family members who had tested positive and was quarantined at home. I booked my test at the Georgetown Hospital online, and got an appointment in 2 days.

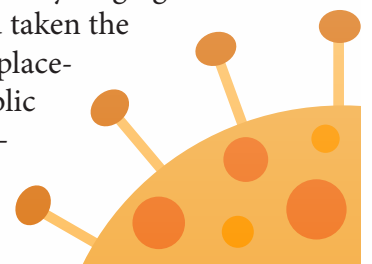
The testing location was at the back of the hospital within 2 connected portables. I waited in a short line outside of them. One healthcare worker stood outside fully decked in PPE to confirm everyone's appointment, to give us a new surgical mask, and to direct us into the portable when it was our turn. When I walked in I had to answer personal questions such as my address, name, date of birth, and give an emergency contact. I was then asked at the next station my reason for a test and given instructions of how to check my results online, and when to quarantine. When the healthcare professional gave me my nasopharyngeal swab, I felt a slight discomfort. It felt as if I had taken in a single breath inside of a pool of water. My test was on a Friday and I received my test results on the government website using my health card the following Tuesday. "Negative", I sighed with relief.

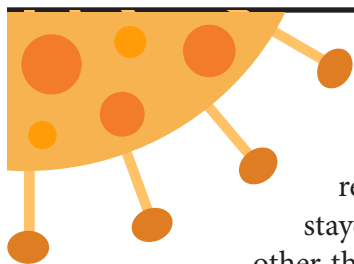
The second time I had to get a COVID-19 test was at the beginning of this year. My placement at Sunnybrook in the Veteran's Centre required me to have a negative COVID-19 test taken within 10 days of the start date of my placement. I tried to book an appointment again at the Georgetown hospital but was not able to, so I made an appointment at Milton Hospital. The appointment had been scheduled to be a week before my placement. Monday, January 11th I went to Milton Hospital confident I would test negative. My previous test I was nervous that I would test positive as I was doing my placement,

and was exposed to someone who had tested positive. This time was different. I had worked around 8 hours a week in a small community pharmacy, during their off hours. The rest of my time I spent at home, playing video games as I had an off block. The wait was short. When I entered the building I gave my health card, driver's license and phone number to the nurse. She had asked me the reason I was getting my test and directed me to a line. I got my test done after 10 minutes of waiting. This time the swab had felt more uncomfortable, as if someone was picking at my brain. It was done. Now all I had to do was wait for the results to email to the education coordinator at Sunnybrook. I didn't think about the test results at all that day, and the day after.

It was Wednesday 11 am before my placement started, I had gotten 2 calls from the Halton Hills region. I didn't pick up, but after the second call I had a strange visceral feeling. I checked my voicemail. It was a call from Public Health Halton. My heart sank. I quickly called the caller back. The healthcare provider picked up. She told me to get comfortable. I told her "I think I know why you have called me, I must be positive for COVID-19". She confirmed my suspicions. I felt paralyzed with fear, my throat tightening as I held back some tears, but quickly composed myself to cooperate with them.

For the next hour I was on the phone with Public Health Canada. I had to confirm that I was asymptomatic, that I had no contact with someone who was COVID-19 positive, I had not been to any large gatherings. The only reason I had taken the test was so I could do my placement. I had to give Public Health the names and contact information of anyone I had close contact





with, which was only the 3 family members i was living with. I had to describe everywhere I went recently, which was I had stayed at home the whole week, other than 7 hours I had worked. I was given the run down how I had to quarantine for the next 2 weeks, along with my family. That I had to shut my bedroom door, and have one bathroom to myself. They went and told me the whole procedure for me and my family, when to seek medical attention. It was a very long hour.

After the call I had to message my family through Whatsapp to tell them the situation. My dad replied how he thought it was not possible. My family then began to book their own COVID-19 tests. I then quickly emailed OEE, my preceptor and the education coordinator of Sunnybrook to alert them of the situation. I sat there staring at my test results online with disbe-

lief. I was scared. I was scared I had infected my family, my co-workers, my patients. I was scared I would lose my rotation. I was scared I was going to harm my small family business. I made my friends (who were not on APPEs at the time) talk to me over zoom to help calm me down. I felt selfish for asking “Why me? What did I do?”. I felt as if it was somehow my fault, even though I barely left the house, and when I did I wore a mask.

At 4pm that Wednesday, I received yet another voice message from Public Health. Confused and optimistic I called back right away. “I have good news,” said the healthcare worker, “you can do your rotation at Sunnybrook there was a lab error, you are negative.” I felt a weight lifted off my chest, “so I am negative?”. “Yes” she replied, “I hope you didn’t email everyone already?” “I did”, I responded back, she chuckled. I then spent the night sending emails to everyone that I was actually COVID-19 negative. I got a “I told you so” from my dad. It was a long day.



## Oh New Year's Tree, How Lovely Are Thy Branches

*Misha Krivyykh, 2T3*

If one were to observe a Russian household on New Year's Eve, one may observe a rather peculiar phenomenon – the family is gathered around its dinner table, there is either festive music or a movie playing in the background (mind you it is the same movie that was playing last year and the year before, and possibly many years before that), cuisine that appears to have been made with a 90% mayonnaise concentration, and...a Christmas tree too is in the room for some reason?

No, this is not a Christmas Eve dinner taking place almost a week late. What one is observing is a celebration of Новый Год (Noviy Gohd) – New Year. This holiday is of great importance to Russians, no matter their religion. The “Christmas tree” in question is actually a New Year's fir-tree (Ёлка-Yolka), under which presents are put during the night by Дед Мороз (Ded Moroz)-Father Frost. Some families choose to listen to the Russian Presidential address broadcast shortly prior to the clock striking midnight, while others just listen to holiday music while bonding over glasses of champagne. The movie referred to previously is Ирония Судьбы (Irony of Fate)–a romcom from

the 70s that is set during New Year's Eve and is as much of a holiday tradition as watching “Home Alone” may be for some during Christmas Eve.

If this all sounds eerily familiar to Christmas celebrations to you, that is not unintentional. The history of Noviy Gohd celebrations is closely linked to the history of Christmas celebrations in Imperial and Soviet Russia. Prior to the Revolution of 1917, both holidays were celebrated by Russian folk, however fir-trees were used for Christmas only, much like they are in Western countries today. After the revolution and the anti-religious tendencies that followed, the fir-tree was changed to a symbol of the New Year, becoming, in some sense, a compromise between fully banning religious practice and retaining it in its entirety.

To this day, the New Year's fir-tree is a symbol of family, renewing aspirations and responsibilities, and for many including myself, of a childhood simultaneously close and far away.



## Snappy Appe Interviews

### Gigi Lai

Interviewer: Hebah Arabi, 2T1 Monograph Rep



**W**elcome back to the second edition of the Snappy Appe Interviews! My name is Hebah and in this series I introduce our brilliant fourth year pharmacy students and share their unique APPE rotation experiences with you. This is where I insert my shameless plug: if you are currently said fourth year APPE student, reach out to me to be featured in our next issue as everyone wants to hear your APPE story! :)

In this issue, I interviewed our very own 2T1 President and my fellow class council member, Gigi Lai. Gigi started her undergrad at the University of Toronto in Pharmacology and Physiology before coming to the Leslie Dan Faculty of Pharmacy. She enjoys baking, drawing, arts & crafts, and playing the piano, and is on the hunt for the perfect cheese for a grilled cheese sandwich. Her therapeutic interests lie in cardiology and oncology. Today we will be chatting about her experience in the Preceptor Engagement Department at the Leslie Dan Faculty of Pharmacy as well as her research at The Hospital for Sick Children!

**Hebah:** Hi Gigi, welcome to Snappy Appe Interviews! I am eager to find out more about you and your experiences as an APPE student. Let's start with you first...if you could choose one spell from Harry Potter to use for the rest of your life, which would it be and why?

**Gigi:** I'm not a big Harry Potter fan (sorry) so I had to google a list of spells but I would go with AraniaExumai. It's a spell that drives away spiders and I'm terrified of spiders and bugs in general.

**Hebah:** That's a great choice and an eco-friendly way of managing insects, kudos! Is there something that you learned about yourself or accomplished during the COVID-19 pandemic?

**Gigi:** I don't think I've really learned anything about myself other than just confirming that I'm a homebody. However, having so much time to myself during the pandemic has allowed me to get into things that I've wanted to do for a long time including reading, yoga, learning Japanese, and binging shows without constant deadlines.

### What are NDPC Rotations?

**Hebah:** I like it: self care and developing personal interests! Let's chat about your APPE NDPC rotation in Preceptor Engagement at the Leslie Dan Faculty of Pharmacy. First of all, what is an NDPC rotation?

**Gigi:** NDPC stands for non-direct patient care so NDPC rotations are any rotations where you're not providing direct patient care. These rotations can include research and project work and they can be at a variety of sites including hospitals, the Faculty, insurance companies, pharmaceutical companies, government bodies, and more! These rotations allow you to explore different areas where pharmacists can get involved and discover new skills that you might not be able to learn in your classes and EPE.

**Hebah:** What was your rotation in the Preceptor Engagement department all about?

**Gigi:** This is a rotation I did with the Leslie Dan Faculty of Pharmacy and I essentially helped with the Preceptor Development Program, developed tools that preceptors can use to teach students, and did some course revisions



by analyzing class data. The Preceptor Development Program is a program that our preceptors are automatically enrolled in where they can take online courses and modules to enhance their teaching skills but other topics including personal and career development and clinical refreshers are offered as well.

**Hebah:** Who was your preceptor/(s), was it a virtual rotation, and how long were you there for?

**Gigi:** My preceptor was Debbie Kwan, who is the current Preceptor Engagement Coordinator. It was a virtual 5-week rotation where I essentially worked from home and had daily check-ins with my preceptor in the afternoon.

**Hebah:** What value do you think the Preceptor Engagement program brings to the PharmD students?

**Gigi:** I think preceptor engagement is crucial to the student learning experience as the program provides training for new preceptors and continuing education courses to existing preceptors to create comfortable learning environments for students. We, as students, often talk about how we would like to see more standardization between EPE/APPE preceptors so that everyone receives a “minimum” level of learning and this program is what works on that.

**Hebah:** What was your role as an APPE student?

**Gigi:** As an APPE student, I helped out with a variety of projects that my preceptor was working on and was able to sit in on some meetings with other Faculty members to present my projects and provide my perspective as a student.

## Research at SickKids!

**Hebah:** You also have gained experience in a vastly different area- research at SickKids! Can you speak about who your preceptor was and what project/(s) you were involved in?

**Gigi:** My preceptor at SickKids was Winnie Seto, who is the Senior Clinical Pharmacy Manager and who I've worked with previously as well for the PHM389 (Research Project) course. This time around, I did a drug use evaluation on IV acetaminophen for PDA (patent ductus arteriosus) treatment in neonates and for

**“I now appreciate how vital conducting and sharing your research is to help other clinicians make decisions for their patients especially in the world of pediatrics where data is already limited!”**

post-operative and acute pain management in pediatric patients.

**Hebah:** What made you choose this project topic?

**Gigi:** I was given a variety of project topics to choose from but I found this one to be more interesting as I wanted to learn more about PDA and acetaminophen's role in treatment and also really look into its efficacy in pain management compared to opioids and NSAIDs.



**Hebah:** What did you learn about the process of research? Any surprises?

**Gigi:** There's a very systematic approach to designing and conducting a research project, there are many factors to consider that often require the opinion of an expert in the field, and every step takes a lot longer than I had previously thought. Prior to PHM389, I only learned about clinical research through the PHM212 (Research Methods) course. Looking back, that course gave a good overview on how to design your research protocol and how to minimize bias but at the time, it didn't quite stick in my head. However, taking the PHM389 course and doing an APPE in research really helped me piece it all together and truly understand the process. If you have no clinical research experience but are interested, I highly recommend either of those options!

**Hebah:** What was your takeaway message from your rotation?

**Gigi:** Skills-wise, the biggest thing I learned is there can be a lot of hiccups in the research process (e.g. things you had forgotten to consider, new data) so it's important to create a timeline and keep yourself on track. But in a more general view, I now appreciate how vital conducting and sharing your research is to help other clinicians make decisions for their patients especially in the world of pediatrics where data is already limited!



**“...use your APPE opportunity to try things that are new, interesting, or unique because you won't have this chance again to 'sample' things once you're out of the program!”**

**Hebah:** What advice do you have for other students who are about to start a virtual non-direct patient care experience?

**Gigi:** My NDPC rotations were some of my best rotations because I had the opportunity to do things that I didn't know were available to me. I think you can learn new skills from any NDPC rotation but really take the time to read through each site and the description and use your APPE opportunity to try things that are new, interesting, or unique because you won't have this chance again to “sample” things once you're out of the program!

**Hebah:** Where do you picture yourself practicing in the future?

**Gigi:** In the future, I hope to see myself in the industrial pharmacy field while still practicing direct patient care on the side at community pharmacies.

**Hebah:** Beautiful, good luck on your journey and I have one last question for you, just out of curiosity, what is your favourite hand sanitizer scent at the moment?

**Gigi:** Nothing beats good ol' Purell! The worst is the one they put outside Loblaws that smell like tequila.

**Hebah:** That is gross and honestly I have to agree with you, you can't beat that fresh hand sanitizer scent!

With that, I'd like to wrap up this edition of SNAPPY APPE Interviews! A huge thank you to our 2T1 President, Gigi Lai, for sharing her project experiences with the faculty and her research journey. Like Gigi mentioned, to our junior students, don't be afraid to try a different rotation because you will never know until you try it for yourself - get comfortable being uncomfortable!

Finally, good luck to the 2T1s as we are in the home stretch with 1-3 APPE blocks left before graduation!



*Hebah Arabi*

2T1 Monograph Rep

# Ongoing Delay to Pharmacist Licensure Affects Several UofT Graduates

By: Narthaanan Srimurugathasan, 2T0

*Disclaimer: The views expressed in this article solely reflect the opinions of the author and are not a representation of the opinions belonging to The Monograph Co-Editors, UPS council, or The Leslie Dan Faculty of Pharmacy.*

Very little was known about the consequences of a global pandemic at the start of 2020. The rapid spread of COVID-19 in the early months of the year led to the World Health Organization declaring a pandemic in March 2020. Since then, much has changed around the world. Life before the pandemic is largely unimaginable today. In addition to the changes in day-to-day life, for the UofT Pharmacy Class of 2020, the consequences of the pandemic included the shift to a virtual convocation, cancellation of the graduation formal, and delay in the provision of the pharmacist licensing exam.

Traditionally, the Pharmacy Examining Board of Canada (PEBC) conducts the Pharmacist Qualifying Examination in May and November of each year. Successful completion of this exam, which consists of a multiple-choice component and an in-person Objective Structured Clinical Examination (OSCE) component, is required to confer the status of Registered Pharmacist (RPh) and practice independently with full scope in the province of Ontario. Typically, undergraduate PharmD students from UofT fulfill the program's educational requirements by the end of April, challenge the PEBC exams in May, and are able to practice as fully licensed pharmacists as of July when the PEBC exam results become available. However, in light of the pandemic, the May session was cancelled. While PEBC was able to offer the multiple-choice component in August (albeit with many applicants having no choice but to take the exam under suboptimal conditions at home via remote proctoring), the OSCE component was deferred to November.

Since the onset of the pandemic, representatives from the UofT Pharmacy Class of 2020 reached out to relevant stakeholders in the profession, including the Leslie Dan Faculty of Pharmacy (LDFP) and the Ontario College of Pharmacists (OCP), to advocate the concerns of graduates. Class representatives held discussions with OCP in May 2020 to propose conditional licensure as a solution to workforce challenges faced by pharmacies during the pandemic, and as a safeguard in the event that PEBC exams had to be further delayed during subsequent waves of the pandemic. Under the Pharmacy Act, OCP does not have the ability to create a new class of license (e.g. conditional license), however, it is able to approve and/or administer another exam in lieu of PEBC for registration. Although OCP acknowledged the concerns and agreed to include a needs assessment component in a workforce survey for pharmacies, they failed to act proactively and address barriers to pharmacist licensure amid the pandemic.

The Pharmacy Class of 2020 was able to continue working in pharmacies as pharmacy interns post graduation. However, there are several limitations to this role. Pharmacy interns must always work under the direct supervision of a registered pharmacist. They cannot perform certain tasks, such as delegation of controlled acts or supervision of the pharmacy. These factors have limited the opportunity for pharmacy interns to practice with full pharmacist scope unsupervised. Where opportunities were present, remuneration was compromised. In a survey of over 90 graduates from the Pharmacy Class of 2020, 66% of respondents reported a wage of \$15-\$20/hr for work as a pharmacy intern, less than half the hourly wage of a pharmacist despite taking on most of their roles.

Candidates registered for the May PEBC session were later automatically moved to the November session. To increase capacity, PEBC even offered



out-of-province OSCE testing sites to Ontario residents, which required candidates to travel by air and expose themselves, other candidates, and exam administrators to COVID-19. However, even with the added measures, PEBC was not able to accommodate all candidates registered for the May session in the November session. During the weeks leading up to the November exam, representatives from the Pharmacy Class of 2020 undertook advocacy efforts with OCP, LDFP, and the Ontario Pharmacists Association (OPA). Concerns were also communicated in writing to officials at the Government of Ontario, including Premier Doug Ford. While the Government acknowledged the concern, they did not provide a detailed response prior to the November session.

Unfortunately, less than 48 hours before the November OSCE exam, PEBC cancelled the Toronto site and markedly reduced capacities for the Ottawa and Montreal sites. This decision affected over 100 pharmacist applicants, including UofT Pharmacy Class of 2020 graduates. Of note, PEBC also cancelled the November OSCE exam in Winnipeg one week prior to the exam. Despite over six months of planning to administer the OSCE amid pandemic restrictions, PEBC did not have sufficient contingency plans in place to prevent the cancellation of exams. Affected candidates included graduates with dependents to support, graduates with a high burden of loans to pay back, and graduates whose conditional employment was lost due to delayed licensure. Due to these cancellations and the applicants newly registered for the November PEBC exams, the backlog of pharmacist applicants awaiting to challenge the OSCE exceeds 500 individuals nationally.

In response to persistent efforts from Pharmacy Class of 2020 representatives alongside OPA and the Canadian Society of Hospital Pharmacists – Ontario Branch (CSHP-OB), OCP drafted a proposal for a new class of pharmacist registration (emergency assignment) to be made available during situations like a pandemic. This new class of registration would be available to individuals who meet the educational requirements for pharmacist licensure during an

ongoing emergency. Pharmacist – emergency assignment allows registrants to practice to full scope independently without the direct supervision of a pharmacist. Following unanimous approval of the proposal by the OCP Council on November 19, the proposal was subject to a 10-day public consultation period. The proposal was finalized at an OCP Board meeting on January 11 and sent to the Minister of Health for approval thereafter.

Meanwhile, OPA, CSHP-OB, the Faculties of Pharmacy in Ontario, and class representatives held discussions with PEBC to ensure timely provision of the OSCE for displaced candidates. Possible solutions including increasing site capacity and shifting OSCE to a virtual platform (which has already been established in other countries) was proposed to PEBC, however, they are unable to accommodate these requests in the immediate future. Rather, PEBC is continuing to seek reclassification of the OSCE to an essential postgraduate examination for healthcare professionals and thereby subject to the same public health exemptions as post-secondary institutions. It is noteworthy that PEBC sought clarification of the aforementioned emergency measures prior to the November session but was not successful.

Pharmacists are an integral pillar of the health care system and we are all grateful for the opportunity to contribute positively to patient care during these times. We continue to work on the frontlines of healthcare amid the global pandemic to serve our communities. After several months of delay, many individuals from the Pharmacy Class of 2020 became licensed this January. Furthermore, the proposal for pharmacist – emergency assignment has been submitted to the Minister of Health for review, with an expected approval date in February. As the pandemic begins to subside with the rollout of vaccines, we are increasingly optimistic about licensure as well.

# OKAY, LET'S HOPE THIS IS THE LAST TIME WE HAVE TO DO THIS

Kevin Galido, 2T3



We left 2020 behind and now enter 2021. I'm hopeful that this year will be better, be safer, and be the last time we'll ever need to do fully online courses ever again. Some people have approached me asking for suggestions about how to stay disciplined for this semester, and my answer is the same:

***“Like I friggin’ know, I just spent the entire day laying down on the couch arguing why Emilia is the best waifu in Re: Zero to all my other degenerate friends...”***

But there are some things that I have tried that I believe work, as long as you stay committed to these methods and keep consistent on a daily basis.

**1.** I wrote an article in the Monograph earlier this year about sanctifying your spaces and keeping them “clean.” I still stick by this, so please take a look if you’re looking for a more encompassing solution: ***Spaceship Isolation*** (published in Issue 1!)

**2.** I’m sure you have heard of different programs that lock you out of your browser or phone for a set period of time. This is handy but there isn’t any consequence if you break focus to visit a distracting website. The ***Forest*** app solves this by instead giving you an incentive and mixing in a little built of guilt. If you complete the timer without visiting distracting websites or apps, you grow a little tree that joins your virtual forest. Each tree you grow will be converted into a seedling that is planted in Sub-Saharan Africa by the Trees for the Future Foundation. If you fail, the little cute tree you’ve been growing shrivels and dies. The app opens up with an image of a dried-up dead tree and you’re forced to accept the fact that you killed it, *you monster*.

**3.** Sense association isn’t always effective, but it can at least allow you to enter the right headspace when working. Whenever studying or reviewing lectures, lighting a

scented candle and playing some slow and low intensity music (preferably with no lyrics or foreign lyrics) can help greatly. It requires a bit of priming; you’ll need to set the association first before you can take advantage of the association.

**4.** This solution requires an understanding of the psychology surrounding procrastination. Most procrastination occurs because you’re going from a state of relaxation to doing a task that is overtly stressful and complex. To avoid this sensation, you can begin a productive session with simpler tasks that lead to more stressful and complex tasks – creating a snowball effect. Before starting that long lecture, why not look through the course calendar to see what tasks need to be done this week? Before the care plan, why not do 10 minutes of the assigned readings? After these simpler tasks, the larger tasks seem less stressful because you’ve simply been able to start doing something and the gaps between what you’re doing and what needs to be done are more acceptable.

***I hope these tips work for some of you! Feel free to message me personally if you have any questions!***

# A Mental Health Check-in, *How Have You Been?*

**Shaista Malik,**  
**2T2 Monograph Rep**



Hey, how have you been? We have been going through a lot lately during the pandemic and I wanted to check in with you. With the state-of-emergency order issued in Ontario and increased restrictions, our day-to-day lives have changed dramatically. These changes have resulted in more time staying at home. Of course, this means being able to attend classes in your PJs and saving time on commuting, but it also means more time spent in front of our screens and increasing social isolation. These changes can affect your mental health, particularly due to the social restrictions. After all, humans are social creatures; we love interacting with others- something the pandemic has limited. As a result, there are days you may feel blue and low. I want you to know that **your mental health matters** and should be a priority at all times. It is important to recognize when you are feeling down. Acknowledging your emotions is the first step in taking care of your mental health. When you find yourself feeling down, put down what you are doing and take a break to clear your mind. It is okay to let yourself breathe. In order to help you get through the ups and downs of the pandemic, here are 17 tips to promote your mental well-being.

## 1. Go for a walk and explore nature

We live in a dazzling world, so why not go out and explore it? Going outside and walking for just 30 minutes a day can help freshen your mind. While exploring nature, be mindful of the world around you; admire the trees, the sky, and the clouds!



## 2. Wear your favourite outfit

Feeling down? Take a shower, apply your skin care routine, wear your favorite outfit and spray some nice fragrance! Taking care of your hygiene and wearing something you love helps you feel good about yourself. It will help you feel more confident and lift your spirits!

## 3. Facetime/message a friend

Although we may not be able to visit our friends and family physically, we can still connect with them virtually! A simple message or phone call allows you to catch up with your loved ones. It can be as simple as picking up your phone and sending a simple “Hello”.

## 4. Take a nap

It is important to recognize when you are tired and need a break. Napping is an important part of self-care that will leave you feeling energized. 30-minute power naps do wonders in helping to add a boost to your day.



## 5. Treat yourself

When you find yourself feeling down, treat yourself! Everyone deserves a special treat every now and then. Eat your favorite food, watch a movie, take a bubble bath or drink some hot cocoa! It is important to acknowledge your efforts and reward yourself! What is your favourite way of treating yourself?

## 6. Clean

Cleaning your living space can be very therapeutic and will help clear your mind and make you feel better. A clean home is a happy home

## 7. Take a break from social media

Sometimes the best thing to do when you feel down is to take a break from social media. When scrolling through Instagram or Facebook, we see images of celebrities and models portraying images flooded with the illusion of perfection, often leading to toxic comparisons between ourselves and others. If you find yourself doing this, then it is a good idea to take a break from social media and to instead work on yourself and take some time for self-care. In addition, watching the news during the pandemic can get overwhelming. With the increasing number of COVID cases every day, things may seem gloomy. If the news is triggering feelings of anxiety, take a break from it and instead pursue your time in an activity you enjoy!

## 8. Meditate and pray

Taking a few minutes during the day to pray or meditate can help to calm you and restore peace in your mind.



## 9. Exercise

Though gyms are closed, there are many ways you can still stay active during the pandemic. For example, you can go for a jog outside, lift weights indoors or watch a fitness video. A good sweat after exercising will rejuvenate you and help you carry on with your day with a new sense of energy.

## 10. Journal

Writing down your thoughts and expressing how you feel through words can be very therapeutic. You can write in a journal whenever you feel down and create a habit of writing regularly as an outlet of self-expression.

## 11. Pursue a hobby

With the extra time saved from not having to commute to classes, take this time to pick up a hobby that you enjoy! Whether that be reading, making artwork, photography, or writing...the sky's the limit! (and hey, The Monograph would love to feature your work!)

## 12. Write a hand-written letter to a friend and mail it

Writing down a special note and sealing it up in an envelope to mail to your friends is a fun way to keep in touch. You can start a chain of letters between you and your friends to stay updated with each other's lives during the pandemic!

## 13. Take care of plants

Personally, this is one of my favourite activities. When I feel down, I like to buy myself a plant to put in my room and spend time taking care of it. Watching plants grow encourages personal self-growth. Taking care of plants by watering them and ensuring they receive adequate sunlight is a great reminder to take care of yourself by drinking water and making sure you get some vitamin D from sunlight during the day!

## 14. Listen to music

Jamming out to your favorite music can help brighten your mood! Dance a little, sing, and explore new music-you won't regret it, I promise!

## 15. Know that it is okay to say no

Sometimes it's okay to say no and instead take some time for yourself. If you are not feeling your best, then chances are that you will not be able to give your 100%.

Your mind is like a battery, when it is running low you need to charge it until it can function at maximum capacity. Remember when your battery is low, it can be difficult to keep going because it only brings down your charge. That is why it is important to pause, take your time, leave what you are doing and take a break. When we plug in our phone to be charged, we don't only plug it for 10 seconds and start using it. It takes a few hours for it to charge fully. Your body is no different—it also needs time, so give it the time it deserves and know that it is okay to say no sometimes, you don't always have to say yes.



## 16. Be kind to yourself

This pandemic has been a difficult time, show kindness to yourself and others and don't be too hard on yourself. If you aren't able to finish all your tasks for the day, it's okay! If you aren't able to get out of bed in the morning and want to get some more sleep, then do it! If you want to treat yourself, go for it! Know that taking time out of the day for yourself does not mean that you are lazy or selfish. Acknowledge all of your efforts and pat yourself on the back, you are doing a great job! Your body does so much for you, and it will be there, no matter what you are going through. It will support you, loves you and all it wants in return is to be supported and loved too!

## 17. Know that you are not alone

Lastly, my advice to you is that whatever happens in life, you are not alone. We are all in this together. Call a friend when you feel down and share what you are feeling with them. It is more important than ever to support one another through this difficult time. The pandemic will end one day, but until then, show yourself and others kindness and love! There are no rainbows without some rain, the sun will soon be back and shine down brightly upon you <3. You matter, and you are loved!

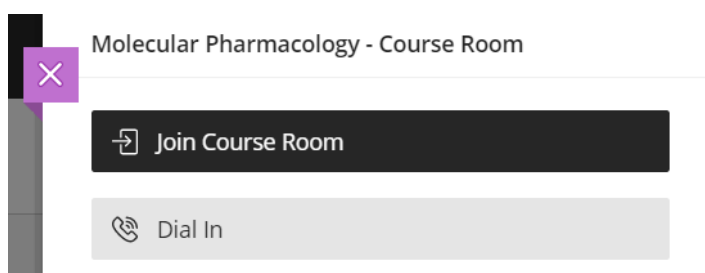
# The 2T4 Class Takes on the Winter Semester via BB Collab

*(or should I say bb crash?)*

Ashley Domingues, 2T4

Here we go again! We have settled, sort of, into the Faculty of Pharmacy at UofT and we are excited to finally meet each other!—is what I would say if we weren't tackling another semester online. Although this semester remains online, we can at least have some comfort knowing we have done this before and we will succeed again.

First semester was a challenge to say the least. I started the semester in a new city, a new university, completely online. I know I was not alone in this situation and I hope that those who were adjusting to a new environment as well were able to find some comfort knowing



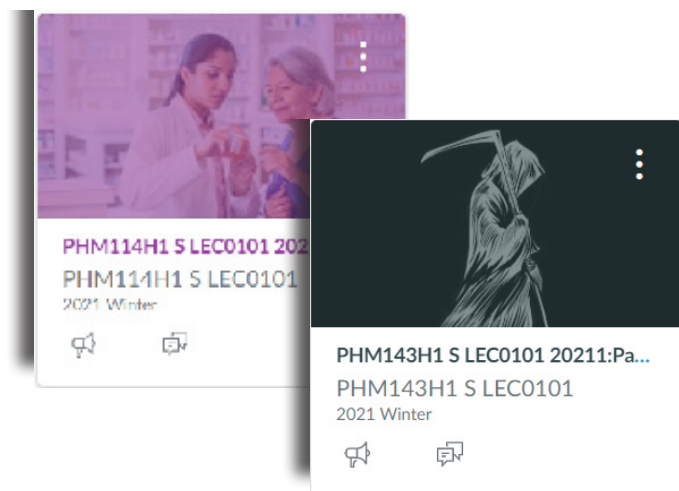
they are not alone. If we can tackle first semester, we are definitely ready for the next challenge.

Starting off with a much needed sleep-in Monday morning to the afternoon classes. Molecular Pharmacology is the most daunting course in my opinion and I'm not sure what to expect. The upper years make it seem like PHM140 is the last level in a Mario game, where you have to defeat Bowser in order to save Princess Peach. Except each level becomes more and more confusing, and there are graphs that I think I understand until we are asked to interpret them. I think if we can put our previous pharmacology and PK minds to it, we can defeat the enemy and get that A.



PHM141 Pharmaceutics is a lovely break after PHM140, and it reminds me a lot of my undergraduate courses. The professor seems very caring and interested in the material taught in class and the overall success of his students. Pharmaceutics is a fun course to poke fun at the pharm chem students and show them how great our phamily is.

PHM143 Pathobiology and Pathology is one of my favourite courses of the semester. We get to learn about different conditions and diseases and dive deeper than pharmacology would about the underlying mechanisms of disease. The guest lecturers are all unique in their own ways, and I'm confident this course will become a class favourite.



Taking a trip down memory lane of first semester we have Social and Behavioural Health. Unlike PHM110 and PHM113, this course seems a lot more application and opinion-based instead of heavy memorization, although I could be wrong. The professor in the first half of the course seems very engaged in the topics and I really enjoy the way she presents the curriculum. I feel this course will bring up a lot of discussion, potentially

controversial, about how we as health care providers need to work on societal issues in healthcare.

Saving the best for last is our two very first courses of many to come in subsequent years and include Pharmacotherapy 1 and MTM 1. As someone who has never worked in a pharmacy before, I am a little nervous but excited to tackle MTM 1. It seems like a nice getaway from the other content heavy courses and although it may be challenging at times to navigate through Kroll, I'm excited to finally have a lab course. Pharmacotherapy seems like the course that will be challenging but rewarding. For students who have end goals of becoming hospital pharmacists, this course is the most applicable. The idea of creating care plans for patients with various DTPs is thrilling, but the textbook and article lists take me back to my research days in undergrad. I hope that we can all put our brains together and become pharmacotherapy experts and work toward our success in that course.

2T4s, I sign off by saying this semester will be challenging, and every upper year has scared you into believing so. But I'm here to say I think it will also be fun, and I think we are a hardworking class who will succeed each in our individual ways. Whatever your end goal is, your phamily is here to help. Take care of your mental health this semester and remember we are all in this together!





# A Prescription for Living

By: Arlene Chan

Excerpt from:

**The Ward Uncovered: the Archaeology of Everyday Life**, edited by John Lorinc, Holly Martelle, Michael McClelland, Coach House Press, 2018.

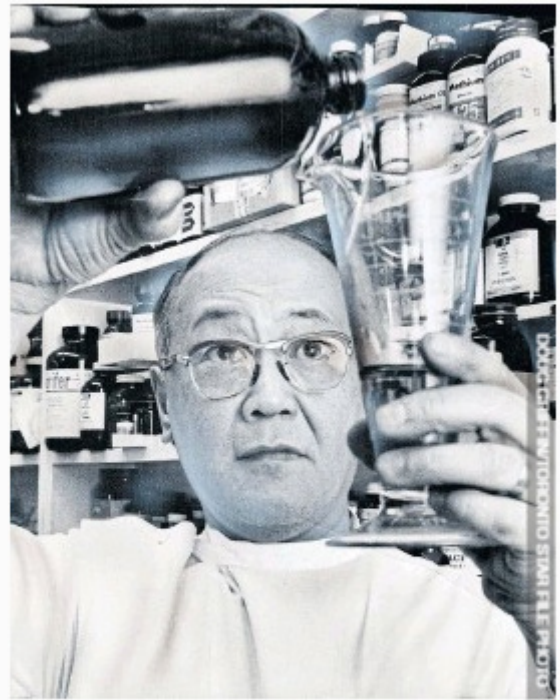
Reprinted with author permission.

*Interested about the history of U of T pharmacy school? What impact can pharmacists have on their communities? Read more to learn about Tom Lock, the first pharmacist of Chinese descent to graduate from U of T.*  
– Michael Vu, 2T1

At his storefront on Dundas St., Tom Lock filled prescriptions and stocked his shelves with pharmaceuticals, personal care items, gift packages and birthday cards. The enticing aroma of roasting peanuts by the cashier made them hard to resist. Folks lingered, waiting for medications, wandering the aisles and chatting with Tom. In the 1950s and 1960s, his pharmacy was a Chinatown landmark.

Among the many household objects found in the nearby Armoury Street Dig, the archeological team retrieved dozens of the day-to-day objects that would have been sold by druggists: medications, toothbrushes, syringes. While the excavated artifacts would have predated Lock's business, they illustrate that residents of this working-class, immigrant neighbourhood were consumers of the same products that would have been found in any household.

As Toronto's first pharmacist of Chinese descent, George Thomas (Tom) Lock must have had a prescription for an extraordinary life. Perhaps he was destined to be one of a kind with the auspicious arrival of his mother to Toronto in 1909, seven years before his birth. At 20 years old, she appeared on the Toronto Daily Star's front page with the headline "Chinese Woman Comes to Toronto" — one of the first to settle in the city.



Tom Lock, shown in 1969, was Toronto's first pharmacist of Chinese descent.

This was the era of the bachelor society, when the majority of the 1,099 Chinese in Toronto were men, many of them married but separated from their wives and children. The impacts of Canada's head taxes (1885-1923) and exclusionary legislation (1923-47) were severe, deliberately deterring, then halting, Chinese immigration and preventing family life. The Locks were one of only 13 Chinese families in the Chinatown area.

The youngest of four children, Lock had a unique childhood: hanging out at the YMCA on College St., playing badminton at the Bay Street Mission on Elm St., shooting hoops at the Chinese Young Men's Christian Institute on University Ave., and joining the all-Chinese 128th Boy Scout Troop. These pastimes cemented his friendships with the other boys in Chinatown.

Having Jewish friends who, like him, were often bullied and pushed around as outsiders expanded his horizons. He learned Yiddish, carried out his friends' household duties during their Sabbath, and gained street smarts. At Ogden Public School, where there were but a handful of Chinese students, he could hold his own.

The Lock children had their share of responsibilities, especially after the untimely death of their father during the Depression years. Working at the family laundry



honed Lock's expertise in sewing, cleaning, ironing, and mending cuffs and collars. Cooking was another chore, and his mother regularly sent him to Elizabeth St. to buy a live chicken. There were two Jewish poultry stores, owned by the competing Wasserman brothers. Lock was often caught in the middle for a sale, a brother yanking on each arm. These were not the only times he was pulled in two directions.

When Canada joined Britain and France in the war against Germany, the Chinese across Canada were strongly divided. Should they volunteer to fight for a country that treated them so poorly? On the other hand, the war opened a door for them to prove their patriotism and ultimately gain the right to vote. To this end, enthusiasts lined up to enlist. Lock's older brother Earl and his cousin and kung fu master Jimmy Lore were among the many to be turned away by recruiters who deemed them unsuitable because of their ethnicity. Lock's recruiter had a different opinion, and he enlisted without incident.

A turning point for the Chinese in Canada was the bombing of Pearl Harbor and Canada's declaration of war against Japan. Canada and China were now allies against a common enemy. In 1944, conscription was expanded to include Chinese Canadians, who became regarded as assets in the Pacific war arena, where they could easily blend in behind enemy lines.

Lock went above and beyond the call of duty. Once again he volunteered, this time for a covert mission to sabo-

tage, infiltrate and spy behind enemy lines. Operation Oblivion was the code name, with a casualty rate projected at 80 per cent. Toughened on the streets during his youth, he was well-positioned for this elite guerrilla unit of Chinese Canadians. Intensive training, with a suicide capsule among the supplies, included jungle survival, demolition with explosives, parachute landing and medic assistance.

Lock returned home safely after the war to the welcoming arms of his family at Union Station; however, he had one more battle to win. During his commando training in Australia, Lock had met and married Joan Lim On. They were now a stateless couple. Lock couldn't settle in Australia because of its White Australia policy, and his wife was not allowed into Canada due to the Chinese Immigration Act. A special Order in Council eventually granted her entry as a war bride, one of a handful of Chinese immigrants who entered Canada during the 24 years of exclusion.

Armed with impressive credentials and reference letters from two Nobel laureates, Dr. Frank Macfarlane Burnet and Toronto's Dr. Charles Best, a co-discoverer of insulin, she was immediately hired as a microbiologist at the Hospital for Sick Children. With financial aid from the Veterans Rehabilitation Act, Lock enrolled at the University of Toronto, where he and his friend Sam Chin were the first Chinese graduates from the School of Pharmacy.

The life-and-death precision of his wartime training had laid the groundwork for his chosen profession. Tom Lock Drug Store opened in 1954 at 136 Dundas St. W. in the heart of Chinatown. Lock became Toronto's first pharmacist of Chinese descent, and proprietor of the first Chinese-owned pharmacy in Canada east of the Rockies.

He was even able to somewhat realize his pre-war aspirations of becoming an interior decorator or fashion designer with the store's startling colours of yellow, coral and turquoise, rather than the typical black-and-white interiors. What also distinguished Lock's drugstore was signage in English and Chinese, the small inventory of Chinese goods such as abacuses, tea and herbal remedies, and services surpassing those of other pharmacies. Bachelor-society men, aging and still alone, relied on his bilingual fluency for filling out government forms, translating letters and doctors' instructions, and getting advice for aches and pains. Lock was the kind of person to lend a hand and serve his community.

Photo developing was a popular service, one that Lock particularly enjoyed providing in-house — he had a keen interest in photography. The customers were themselves a snapshot of the neighbourhood in the 1950s and 1960s: old-timer and new immigrants, travellers arriving at the Bay St. bus terminal, lesbians and gays who frequented the nearby Continental and Ford hotels, and prostitutes.

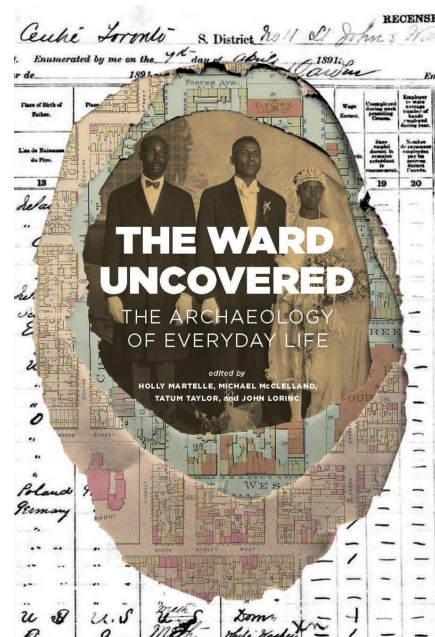
Across the street at the Kwang Tung Hotel, rooms were rented by the hour, and Lock kept an ample supply of condoms and aphrodisiacs to meet demand. His long workdays, from 10:00 a.m. until 8:00 p.m., had their slower moments. Lock would step outside and chat with passersby in English and Chinese, all the while keeping an eye on what was transpiring in the neighbourhood. His vantage point was ideal for watching the hotel, timing the sex-trade workers with their clientele, and noting, "That didn't take long." He was known for his observant quips about life in Chinatown; he called them his "CDRs," his complete detailed reports of the neighbourhood.

Another topic of Lock's CDRs was gambling, a prevalent pastime of the bachelor-society men in many establishments along Dundas and Elizabeth Sts. Lock witnessed frequent police raids, one resulting in furniture being tossed onto the sidewalk and smashed with axes. In the

basement of his store, a steel door led to a gambling house in the adjacent building. The distinctive clatter of mah-jong tiles broke the silence whenever Lock made the trek downstairs to retrieve pop bottles from storage. Fondly remembered as an outgoing personality with his own brand of humour and "Lock-talk" expressions, he served his community at the drugstore for 22 years. Lock lived life to the fullest for 88 years until his passing in 2003, leaving the legacy of a lasting impact on others. His first-hand experience, especially with the aging Chinese men living on the streets and in rundown rooming houses, strengthened his resolve to do more.

He was a founding member and long-serving board director of the Mon Sheong Foundation, the first Chinese charitable organization in Canada. In 1975, the Mon Sheong Home for the Aged opened near Chinatown with 65 beds as the first residential facility in Ontario for Chinese senior citizens. This association coexisted with other institutions, such as the Chinese Canadian Institute and the Chinese United Church, located down the street from Lock's pharmacy.

Lock's contribution lives on at the Mon Sheong Foundation, which has expanded its facilities to 457 beds in the Greater Toronto Area. And Chinese Canadians such as Lock, who enlisted in the armed forces during the Second World War, played a pivotal role in bringing about fundamental changes for the Chinese in Canada: gaining the right to vote, obtaining full citizenship and seeing the repeal of the Chinese Immigration Act. Lock's prescription for life served him well to the benefit of his fellow Canadians.





# Happy New Ring!?:

## Kickstarting my New Years goal of better fitness and health with *Ring Fit Adventure*

By: Rolan Vaisman, 2T2

It's December 31st, and you're just minutes away from the clock striking midnight. Soon you'll be texting or calling your friends and family wishing each other a happy new year, one that is full of opportunity, positivity, and hope. And if you're just so lucky enough (I mean... I don't think you'll need too much luck for this one), you'll eventually find yourself being asked the traditional question-slash-nuisance: **what is your New Year's resolution?**

Depending on the year that just ended, your answer could be very different. For instance, after whatever the hell we just went through in 2020, your NYRs for 2021 can simply be "to live," which is as fair of a goal as it is important. COVID-19 shook up many aspects of our lives, and the optimism that comes with the current vaccine rollout gives us hope that maybe, just maybe, we'll be able to enjoy all the things we've taken for granted again. But say this question was asked right when the clock hit midnight on January 1st, 2020; what were your New Year's resolutions back then? It might've been a bit more grandiose than ever before, thanks to the hype of the number "twenty-twenty." And who's to blame you? None of us really expected the year to go the way it did, myself included. In fact, I'm not immune to making New Years resolutions that asks to bite off more than one can chew.

But... there is one NYR that I was able to actually fulfill. **I lost weight.** And I don't mean just a few pounds immediately following New Years that are regained after NYRs typically crash and burn. Entering 2021, I lost approximately 40 pounds, went down 1-2 clothing sizes, and am much more cognizant of what I eat or drink. I really didn't think it would take a video game to set my goals in motion.

Last school year (\*ahem\* [Issue 5, page 39](#)), I wrote about *Persona 5*, a game that was as fun to play as it was life-changing (and not just because one of the top tracks from its soundtrack is literally called [Life Will Change](#)). This year, I'm delighted to talk about another game that could very well be life-changing for anyone who plays it. It's called *Ring Fit Adventure*, a fitness-based video game for the Nintendo Switch.

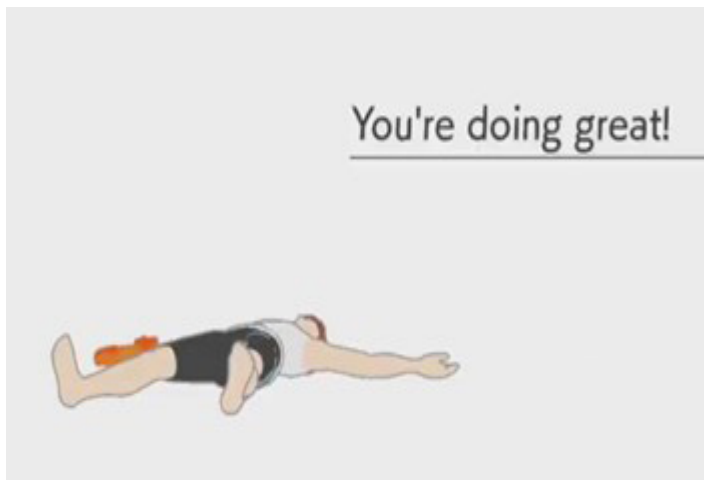
*Ring Fit Adventure* is, well, exactly what it says in its title. It's an adventure-based RPG (role-playing game) that you progress using two sets of motion-tracking controllers: a leg strap, and – as the name implies – a resistance ring. When you start the game for the first time, you are guided on how to set up both controllers, set up your personal fitness profile, and jump into a world taken over by an extremely buff but insecure dragon and his fitness-equipment shaped minions.



Your progression through the game and its wacky world of workouts is completely controlled by you. Literally. Your avatar jogs when you jog, sprints when you sprint, squats when you squat, and- well, you get the idea. In essence, there's nothing truly complicated about this game. In fact, that's the charm of it – what you get out of it is what you put into it, and you can easily get yourself some sweaty exercise just by playing the game for a solid 30 minutes. As you progress through each world, your avatar levels up and unlocks new skills, which means new workouts for you. Workout skills are organized into 4 major categories: arm, stomach, leg, and yoga. You will be encouraged to train in each category, with enemies being colour coded to the recommended exercise. The game also organizes these skills into sets that allows you to optimize exercise for aerobic training, stamina training, posture, and a whole lot more.



Now, what if you're relatively novice to exercising? Whether you've been to the gym only a few times in your life or it's your locked down home away from home, *Ring Fit* can be used by anyone. The game and its workouts are very approachable, and you are guided with the help of two characters: Ring (picture above, left), a talking, uh... ring, and Tippi (pictured below), an assistant that shows you visual tips on how to perform the exercises on the screen (A+ on the names, I know). Ring is actually the driving force for the game's plot. He's trying to track down the game's dragonous antagonist (by the way, his name is Dragaux... like I said, A++ on the names) to bring back harmony to the world and stop his reign of... exercise?



Look, I'm not entirely sure what the plot is. But that's because the game's adventure mode really isn't about *its* story as much as it is *your* story. After all, it is a fitness game, and so regardless of how the game ends, the bigger goal is for you to feel like you've accomplished something. And that's where the game truly shines. As you complete levels, defeat enemies, and unlock new exercise skills, you develop progress to your fitness. Each time you start the game, you're warmed up by a dynamic stretch, and when you finish a session, you

cool off with a static stretch, a summary of your exercise, unlock achievements, and are shown a health tip of the day. During your sessions, you can get your heart rate scanned via infrared to determine how active you were and even estimates the calories you've burned in the past  $x$  minutes of physical activity. These are all the "little things" that compound to a very fun experience in getting some much-needed exercise. And like I said, this game will make you sweat, so it will definitely feel like an exercise despite it being a video game.

At a time where gyms are closed and buying a Peloton may not be within your financial or spatial budget, *Ring Fit* is an excellent intermediate. You might not be able to truly replicate a treadmill, elliptical, or weightlifting, but you can still stay active and feel less guilty about your Quarantine Fifteen. And for those who always considered going to the gym but felt intimidated or left without a choice thanks to the pandemic, *Ring Fit* gives you the choice to pick up a healthier lifestyle without making it feel onerous or dreadful. The game is cognizant of exhaustion, reminds you to take breaks and stay hydrated, and also offers less time-dedicating modes allowing you to squeeze in a quick exercise. There's even this music mode that makes you get moving to the rhythm of the games' soundtrack and I absolutely love it.

So will this game make you as buff as the dragon on its front cover? No, probably not. My weight loss was not made possible by the game alone. But it certainly helped me make better, healthier decisions and feel less hypocritical telling hypertensive/hyperglycemic patients to go exercise 30 minutes a day when school's got us studying like couch potatoes. I've still got a long way to go to reach my fitness goals, but for once I've got the motivation and empowerment to reach those goals, and *Ring Fit Adventure* definitely helped catalyze that process.



# TIME-PHRIENDLY COFFEE BUNS

*Sally Jeon, 2T4 Monograph Rep*

The winter snow descends again slowly by our windows just like last year. As one of my favourite bakeries made at home, coffee buns fill the house with the pleasant scent of coffee and warmth. The original recipe to make coffee buns would require up to 5 hours... which seems like a considerable amount of time to dedicate as busy pharmacy students. So, here I have brought a phriendly recipe that will bring you delightful coffee buns in approximately 2 to 3 hours. The trick is that the time to proof (ferment) the dough will be reduced by activating the yeast faster using heat. This recipe is for making 6 coffee buns, also known as *mocha buns*.

The recipe is divided into 2 parts: *Preparing the Bun* and *Preparing the Mocha (coffee) topping*. I highly recommend preparing the mocha topping while proofing the dough for the bun!



## *Bun Ingredients*

1 tbsp (15g) butter (unsalted)  
 6 tsp (26g) of butter (unsalted/salted)  
 65~70 mL of water  
 73 mL (75g) of milk  
 1 tsp (4g) instant dry yeast  
 1½ tbsp (20g) of sugar  
 ¾ tsp (3g) of salt  
 1½ (200g) all purpose flour  
 Plastic wrap

## *Preparing the Bun*

1. Melt 1 tbsp of butter by microwaving for 10 seconds.
2. In a separate bowl or cup, add milk and water.
3. Heat the milk and water by microwaving for 30 seconds.  
 \* This step is important because the heat from the liquid will activate the yeast and reduce the time required to proof.
4. Add the heated milk and water into a large mixing bowl.
5. Add the instant dry yeast to the large mixing bowl.  
 \* Sprinkle the yeast thoroughly across for activation.
6. Add sugar, salt, the melted butter (from step 1), and all-purpose flour into the mixing bowl.
7. Mix the ingredients in a circular motion with a spatula until there are no visible clumps.

There will be three proofing intervals. This time is needed for the yeast to undergo fermentation for the dough to rise. Proofing: Cover the bowl with plastic wrap & proof the dough in room temperature for 15 minutes. Then, fold the dough inwards from the top, bottom, left and right.

8. Repeat proofing 3 times for 15 minutes each.
9. After proofing 3 times for 15 minutes each, test if the dough is well fermented by poking a hole into the dough. If the hole remains indented, then it has been well fermented.
10. Divide the dough into 6 equal pieces (each approximately 64 g).
11. Round each piece of doughs to have the smooth side face up
12. Cover the doughs with plastic wrap and rest for 10 minutes.  
 \* While resting the doughs
  - 1) Prepare the 6 pieces of butter filling, each for 1 tsp (3-5g)  
 \* 4.2g was best for me
  - 2) Add ½ pinch of salt to each piece. (skip this step if you're using salted butter)
  - 3) Preheat the oven to 356°F (180°C)
13. Slightly flatten each dough to add the 1 tsp butter filling into each dough. Pinch close the dough to enclose the butter inside.  
 \* Make sure to seal it well so that the butter doesn't leak out while baking!
14. Cover the dough with plastic wrap & proof for 15 to 20 minutes (final proofing step!)
15. Evenly spread the pieces out on a baking tray for the mocha topping.





## Mocha Topping Ingredients

2½ (35g) of butter (unsalted) at room temperature  
 2 tbsp + 2 tsp (35g) of sugar  
 ½ an egg (25g)  
 ¼ cup (35g) of all purpose flour  
 1 tbsp (3g) of instant coffee  
 1 tsp (5g) of water  
 Pastry bag or plastic bag

## Preparing the Mocha Topping

1. Add butter, sugar, half an egg, and flour into a second mixing bowl.  
 \* The texture of the butter at room temperature should be a thick creamy texture
2. Mix the ingredients well with a spatula.
3. Dissolve 1 tbsp of instant coffee with 1 tbsp of water.
4. Add the coffee mixture into the bowl and mix well.
5. Add the mixture into a pastry bag or a plastic bag.
6. Cut approximately 1cm of the bag at the corner and top each piece of dough in a coil-like pattern (like a swirl).  
 \* The tip is to top the middle top part of the dough thicker because the toppings will flood down as it gets baked.
7. Bake in an oven previously preheated to 356°F (180°C) for 12 minutes.
8. Cool for about 5 minutes.

The most essential final step for these coffee buns is to eat it immediately while they are warm and soft. The savory fluffy bun with the adorning scent of coffee will melt away any coldness. I highly recommend trying this phriendly recipe during our upcoming reading week!

# SHRIMP FRIED RICE RECIPE

*Misha Krivykh, 2T3*



## Marinade

2 tbsp turmeric  
 1 tbsp basil  
 2 tbsp salt  
 2 tbsp chili flakes  
 1 tbsp ginger powder  
 2 minced garlic cloves  
 2 minced thai chili peppers  
 3 tbsp olive oil

Mix ingredients together in a bowl until a similar consistency of marinade is achieved throughout.

## Shrimp

1.5 pounds shrimp  
 (head & tail-on)

1. Remove heads, shells, and tails. (If you want to make shrimp soup later, you can leave the heads, shells, and tails to make shrimp stock!)
2. Mix the marinade with the shrimp thoroughly.
3. Leave the shrimp to marinate for 3-4 hours.
4. Pan fry shrimp on medium-high, turning it over mid-way, until both sides look pink-golden.

1. Steam/boil the rice.  
 \* If you are using a pressure cooker, use a 1:1 ratio of water to rice (2 cups in this case).

## Rice

2 cups jasmine rice  
 2 tbsp soy sauce  
 1 tbsp chili flakes  
 1 tbsp basil  
 4 carrots peeled and diced  
 ½ onion peeled and dice

2. Once the rice is boiled/steamed, mix it with the soy sauce, chili flakes, and basil.
3. Fry the carrots and onion in a frying pan until the carrots are soft, on high.
4. Add rice and mix it thoroughly with the onions and carrots. Mix rice throughout as you fry on medium.
5. Fry until rice is brown and partly crispy.

*Bon appétit!*



# 3D FLORAL COCONUT JELLY RECIPE

*Rachel Ma, 2T4*

Hello everyone! In this article, I will be providing a recipe to make a **3D Floral Coconut Jelly**. I had a lot of fun making this dessert; the great thing about gelatin art is that it is customizable! You can play with different colours and different petal designs to bring to life your floral masterpiece.

These jelly cakes are a great change of pace from your typical homemade desserts. The cake can be broken down into two components: Clear Jelly Base and the Flower Art. The ingredients for this dessert are available in any grocery store and are quite inexpensive. The only tool that might be difficult to find is the specialized Flower petal syringes, but I believe you can order them online through Amazon.



## Ingredients

### Clear Base

Jelly powder - 10 g  
White sugar - 230 g  
Water - 1 liter  
Coconut juice - 500 mL

### Flower Petals

Jelly powder - 10 g  
White sugar - 230 g

Flower Needle Tips for Gelatin Art:

<https://www.amazon.ca/JJMG-Gelatin-Needles-Syringe-Stainless/dp/B073GR44Y9>

## Instructions

### Clear Base

1. Mix 10g jelly powder with 230g white sugar in 1.5 liters of water (I used 500ml coconut juice and 1-litre water).
2. Soak and stir the mixture until dissolved then put it on high heat until boiling.
3. Once the mixture begins to boil, turn down the heat and let it simmer for 15 minutes.
4. Turn off the heat and get a spoon to remove any bubbles.
5. Drain the gelatin mixture into a mold.
  - You can use any type of dishware to form the general shape. It is recommended to use a glass mold to see where to inject the flower petals.
  - Wait for it to set (I usually put it in the freezer if I do not have time)
  - Note: Remember to pour the only  $\frac{1}{2}$  to  $\frac{3}{4}$  of the mold, leave room for it to inject the flowers.
6. To prepare the different colours for the petals and leaves for injection, mix the following ratio 1 part milk: 1 part gelatin solution: 1.3 parts coconut milk.
  - Note: I usually mixed it as 3 soup spoons of gelatin solution, 3 soup spoons of boiled milk and 4 soup spoons of boiled coconut milk.
7. Then mix in the colours of your choice using food colouring or coloured flavouring. For example, I used strawberry syrup for pink and red.
8. Prepare one big pot of boiling water on the side for the colouring jelly bowls to prevent drying.
9. After the clear base jelly has set, cut out a hole in the center of the mold as this will be the injection point for the flower petals.
10. With your creative liberty, fill the syringe with the coloured jelly, add a specific design tip to the syringe. Then inject the syringe through the hole of the jelly base (have the decorative side of the tip face away from you). When you are injecting the contents of the syringe, slowly pull out the syringe from the jelly base to ensure full distribution of the coloured mixture.
11. After finishing with the injections, add the rest of the clear jelly mixture with a bit of milk and coconut milk (you can also add any flavouring of your choice) to fill the rest of the mold.
12. Let the jelly set overnight.
13. Once set, slowly inverse the mold onto flat dishware to remove your gelatin art from the mold.

### Flower Petals

1. Mix the sugar and jelly powder into the water and stir.
2. Turn on the stove to bring the solution to a high boil while stirring.
3. Once at a boil, simmer the mixture for 15 minutes.
4. Place this gelatin solution to the side for further instructions.
5. Heat 1 cup of milk and coconut milk separately until boiled.

# New Year New Me— Healthy Recipes Review

By Priscilla Sung, 2T4



*Happy New Years everyone! With the start of a new year, I feel like it is common courtesy at this point to make healthy eating a New Years resolution (once again). I generally enjoy baking and cooking as a hobby, so I decided to dig for some healthy and yummy-sounding recipes that I can try out.*

## Chocolate Overnight Oats

Original Recipe by Kirby's Cravings

Difficulty Rating: 1/5



Let's preface this by saying that I am generally not a fan of oatmeal. I've made multiple attempts at hot oatmeal and disliked it every time. I wondered if the temperature was the issue, and given how easy overnight oats are I decided to give oatmeal one more try. Overnight oats are super easy to prepare the night before and you can just pull it out of the fridge the next morning to eat during your 9am lecture. This convenience definitely gives it extra points. I don't know if I'm still a big fan of the soft, mushy (and even slightly slimy) texture of oatmeal, but I definitely like it a lot more than hot oatmeal. Given that I can enjoy a healthy, but still slightly sweet and chocolatey, breakfast I'll be keeping this one around as a breakfast option.

## Double- Tomato Bruschetta

Original Recipe by Pick Up Limes

Difficulty Rating: 2/5



I gave this recipe a slightly higher difficulty rating than the overnight oats since it required more chopping. Otherwise, this recipe is still super easy to make and tastes super savoury and yummy. While the original recipe was meant to be a small appetizer, I added cooked kidney beans to the mixture, which I placed onto toasted bread slices to make it into a more filling lunch option. I also found that you can prep this the night before, and extras stay in the fridge for 1-2 days if you want to meal prep in advance.

*Find more recipes to try on the next page!*





## Avocado Hummus Toast with Miso Mushroom and Kale Sauté

Original Recipe by Pick Up Limes

Difficulty Rating: 4/5



Let's start this off by saying that this recipe calls for a food processor, BUT I feel like the avocado hummus part can totally be worked around by mixing some store bought hummus and mashed avocado. The avocado hummus is super garlicky and tasty to me, but if you are not a garlic fan consider reducing the amount of garlic in the hummus. All in all the recipe is not difficult per say, but I think the mushroom kale sauté is something you would want to make on the spot, hence why I upped the difficulty rating.

## Simple Oatmeal Pancakes

Original Recipe by Pick Up Limes

Difficulty Rating: 4.5/5



Unfortunately you definitely need a food processor for this recipe unless you know where to buy some oatmeal flour. These pancakes definitely don't give me the fluffy satisfaction regular pancakes give me, but they are not bad for a healthier alternative if you amp them up with some toppings. They are super filling (if that's what you're after) and I found it easy enough to switch out the flavours. I made mine chocolate pancakes by using a tablespoon of cocoa powder instead of the cinnamon the original recipe called for.

# Relieving Stress Through Yoga

By Cindy Tran, 2T3

Hey Pharmacy!

After an entire semester completely remote, there's definitely been a lot more sitting than any of us typically do. In turn, this can cause us to develop a lot of tension in our bodies from our intense course workloads.

Here are 3 yoga poses that are simple and easy to do anywhere to help relieve some of that dreaded back pain building up from online learning! Do them the next time you're taking a break and watching your favourite show (Suits is my current obsession) or when you need to get some 7th-inning stretches in. Happy studying!

## Adho Mukha Svanasana (Downward Facing Dog):

This position allows you to be able to stretch your legs while also reducing any tension in your shoulders, and neck, while increasing blood flow to your brain. This can also help stretch out your wrists and hands from all those hours of intense care-plan making!



Find more relieving yoga poses on the next page!

**Friendly tip:** Make sure to keep your hands and feet flat on the ground when you come into your 'inverted V-shape'. As you tuck your head in between your arms, bend your knees slightly to get that nice full stretch.

### Marichi's Pose (Seated Spinal Twist):

This pose is a great way to relieve back pain that can come from constantly sitting in front of a computer all day by assisting in the realignment of your spine. You might even be able to get hear the relief just like you would when cracking your knuckles!



**Friendly Tip:** Place your elbow around the outside of your opposite knee and push into your leg allowing for your hip to twist more to one side

### Bhujangasana (Cobra Pose):

Although we try our best not to, everyone is guilty of hunching when we sit in our seats. This pose helps to open the chest and open the spine as well as relieve lower back pain that can accumulate from being hunched over a desk all day.

**Friendly tip:** Make sure to keep your elbows tucked by your side while placing your hands slightly in front of you then push up with your hands. Lift your gaze up slightly as you start to feel the stretch and bend in your back.

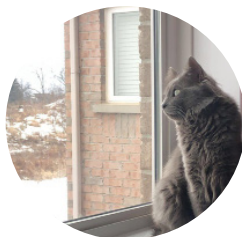


**Fun fact:** Did you know that just standing can burn more calories than sitting? Check out [startstanding.org](http://startstanding.org) for more information on the difference a short period of standing vs. sitting can make based on your height and weight!

Remember to make time for yourself always. You deserve it! :)







## How I Became a Cat Father

Sabih Jamil. 2T3

It all started back in March of 2020 when my friend got stuck in Morocco due to the pandemic and needed someone to take care of her stranded pet. I was worried about my friend and decided that I will take up the responsibility and brought her cat home with me. It was a scary feeling because I was not sure how much responsibility and patience are required to keep a cat. I was also unsure of how the pandemic was unfolding and did not know the duration for which I would have to be responsible for the cat. For the first few days, the cat and I kept our distance. I was a bit scared to pet her because I did not want to get scratched or bitten. But within a week, we had built a bond with each other and were completely inseparable. In the 6 months that I had the cat with me, I got very attached to her and was not willing to give her back. I called her Mano around the house which is a cute name used by people in my culture for pets. But sadly, our relationship was cut short since my friend came back to Toronto. AND that is when I decided to adopt my very own cat. I had a lot of ques-

tions and ideas about adopting and did not know where to start. This article talks about how the search went, how I came up with my cat's name, and how my cats are doing now.

The process of cat searching began a few weeks after Mano had to return to her forever home. My first choice was to buy a cat from a cat breeder or a rescue. I ended up picking rescue because rescues help save the lives of many wild animals. Any donation that I would give would help them support this initiative while giving a stray cat a new home. I started looking for kittens in all the rescues around the Greater Toronto Area. I thought it would be a simple process, I would pick a cat, submit the adoption application, and bring the cat home. But nope, it was a lot more complicated than that. I was looking for just one kitten, only as a companion for me. But all rescues have a rule that kittens can only be adopted in pairs. This is because they are too young to be in a place on their own and need a buddy to play with.



So, I had to change plans and look for cats older than a year who would be okay in a house on their own and started applying for them. But the thing is, the rescues would never contact me back and I would see on their website that the cat is already adopted. I knew cats were in demand, but I didn't realize it would be to this extent. I applied for more than 30 cats but all I would get is an email telling me that the cat I was interested in has been adopted. It came to a point where I had all the rescue websites open on my laptop and I would refresh their page every half hour and apply to any new cats that were posted. But guess what, I still was never the first applicant. I would have lectures open on Zoom on one tab and a cat related website on ten other tabs. Even my friends started helping me and applied for adoption on my behalf to a lot of places. I had just lost all hope and almost gave up. Then one day, I got a call from London Animal Care Center. They had called me to let me know that they had rescued a couple of stray cats and invited me to visit. I drove to London the same day to meet these cats and one of them just caught my eye. He was sitting in a corner all by himself, a bit scared but with a friendly attitude. I walked straight to him and just absolutely fell in love with his green eyes and silky grey coat. I knew right away he was the one I wanted so I started the application process for him. During the same week, I was connected to another rescue. I was informed by the person running the rescue that there are a lot of cats in Egypt that need rehoming. This is because many people in Egypt are giving up their cats due to the potential of their pets spreading COVID-19. They showed me a few pictures and I was just shocked at how cute these cats were, yet they were unwanted by their owners. I knew I wanted to help out and offered to adopt one of them. The one I found really pretty was a white cat with blue eyes. I was lucky that my applications for both cats got approved!

Now that I had two cutie pies coming to my house in a few weeks. I had to think of names, and I had to think of them fast. At first, I wanted something cultural and close to my heart. But there were not too many names other than Mano that I liked. So, I had to explore the depths of the internet to find the perfect pair of names. After much confusion, I stumbled upon an old Lion King DVD in my garage. I then decided that my cat names were going to be based on the Lion King. I picked Simba for the first cat I adopted and Kion for the second one. For those of you who are not too familiar with the Lion

King family tree, Kion is Simba's youngest son. Then I got a cat tree, food bowls, and litter box. Finally, I waited for the arrival of my two precious babies.

I welcomed my first cat, Simba, on December 30, 2020. He is a Nebelung and almost a year old (Birthday: Feb 02, 2020). His shy personality is slowly dissipating away and I can see him opening up. He is very playful and has a mellow personality when it comes to cuddling. My current goal is to train him on a leash so that we can go on walks in the summer. I will be bringing my second cat, Kion, home on January 30, 2021. He will be coming at the airport and I cannot wait for that day to arrive. He is a Turkish Angora and is 8 months old. Simba and Kion would love you to join their Hakuna Matata world on their Instagram @simba\_and\_kion. Go check them out and I hope this gave you guys some ideas about adopting a cat of your own.



Please follow us at:



  
@simba\_and\_kion

## Book Review: The Way of Kings by Brandon Sanderson

By: Jenna Melanson, 2T2

*The Way of Kings* by Brandon Sanderson is the first installment in a series of epic fantasy novels entitled The Stormlight Archives. These novels in addition to other series written by Sanderson take place in a complex universe called the Cosmere. If you like magic systems, in-depth character development and high fantasy, then this might be the book for you.

The Way of Kings tells its story from 3-4 main perspectives, story art (if you read the physical copy), several interludes and flashbacks. The first novel revolves around Kaladin, a soldier in a war against the Parshendi. The story also follows Shallan, a young woman set out to save her family from crippling debt left behind by her late father. Lastly, the story follows Highprince Dalinar, from Alethkar who is trying to determine the origin of its land conflict with the Parshendi. All perspectives are intricately wound to bring forward a compelling narrative that builds upon supportive characters, develops a new magic system based on light and casts an emerging world landscape with its vivid imagery.

With this book, patience is a virtue. The reveals and twists within the novel are bottom heavy.

There is an immense amount of character buildup, backstory and worldbuilding before you get to a myriad of twists, reveals and shocking discoveries. Under other circumstances, waiting over 1000 pages to hear a reveal would put me off, but Sanderson keeps you engaged chapter after chapter, making it worth the wait.

A common negative comment I heard about The Way of Kings was the use of flashbacks to help develop characters as it draws the reader's attention away from the main storyline. Personally, I found that Kaladin's flashbacks made for a more layered development that was needed to fully develop his character. Each flashback takes place closer and closer to the present day (from 7 years ago until the present). These flashbacks are a stark reminder that despite Kaladins' wisdom, courage and perseverance that he is still a young man trying to save himself and the ones he cares about.

Each chapter for the first  $\frac{3}{4}$  of the book focus on a sole character while the "final battle" brings in the perspectives of multiple main characters on a single page. These jumps in perspective allow you to see the battle from various points of view and also permit Sanderson to expertly intertwine the characters' storylines together.

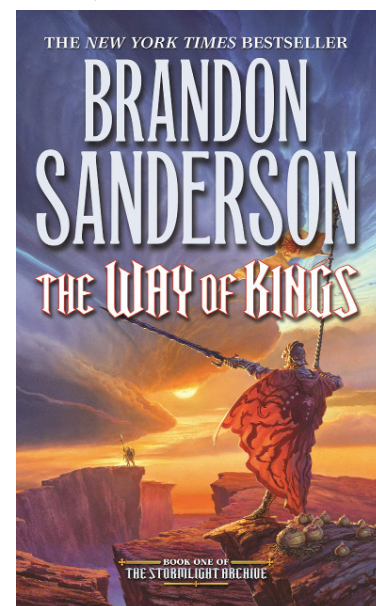
This book plays into some deep and important themes including: Trust | Betrayal | Friendship | Family | Politics | Spirituality | Self-discovery | Philosophy... I could go on and on.

As I mentioned previously, The Way of Kings is not a fast read and requires time to truly appreciate. I gave myself a month to read this book and looked forward to it each time I picked up my (well-loved) copy to read 50 pages or so. When I put the book down, it gave me an opportunity to connect with each character, hypothesize what was going to happen next and fall deeper and deeper in love with the *Cosmere*.

One interesting theme brought up in this book was how there is always a hierarchy between men in the Universe, regardless of how it presents itself. In this part of the world, status is determined by eye colour (whether you are born as light-eyed or dark-eyed), however in other parts of the same world, hierarchy is manifested differently. This theme hits close to home as it plays into a major human flaw: seeking out the differences, instead of similarities between mankind.

One theme I disliked in the novel was the superficial segregation of characteristics between men and women. Women's passions lied in creation. Women read. Women play music. Women draw. While men's passions lie in destruction. Men are at war. Men kill. Men thrive on violence.

Overall this book had me hooked from front to back. I would highly recommend this to most of my phriends. The Way of Kings has a simple and approachable writing style, relatable characters, a unique magic system and will leave you wanting to read more about Kaladin and his crew for days to come.





# Caligraphy and Engraving: CraftedforYu

By: Kimberly Yu, 2T3

Hi I'm Kimberly Yu and I want to tell you about the hobby I've developed of custom calligraphy and engraving. I'd like to start off with how I started doing calligraphy. It was after my first year of undergrad when I picked up my first calligraphy pen that my boyfriend bought for me. Initially, I kept putting off buying supplies for the longest time because I was convinced that I wouldn't be any good. So my boyfriend ended up getting me my first supplies and breaking down the barriers that allowed me to try it. After that, I fell in love with calligraphy and how it allows the words to flow. For years, it was a hobby and something I'd do to take a break from studying and to de-stress. When the lockdown happened in March, I found myself picking up my calligraphy pens more and more, and I found the courage to make my first ever post on Instagram. Soon after, I tried engraving! Engraving allows me to work and create on different surfaces, like glass or ceramic, that I can't usually with a pen. It started with engraving on empty beer and wine bottles to tumblers around the house that I can engrave. I eventually pushed myself to offer commissioned pieces and products! This was very exciting for me and I loved the ideas that customers came up with to give as gifts for their loved ones!

I'm definitely no expert at running a business and I'm continually learning on how to balance it with the pressures of school. However, as with any venture, there are ups and downs. There were some days where school and working at the pharmacy was overwhelming and I want to give up on my crafting projects. There were days where I don't have enough mental strength to push through my own anxieties of customers not wanting my product. I realized that at the end of the day though, I love crafting. The days that I look forward to are when a customer reaches out and asks about one of the projects that I've done or a product that I'm selling or a service that I'm offering.

A little bit about the behind-the-scenes work is tons and tons of drafting. There is drafting on paper, on the product itself and maybe even digitally. Depending on the project, I generally spend an half an hour or so drafting different lettering styles, changing the emphasis on phrases, and etc. After I've decided on a style, I would draft it on acrylic/ glass/ fancy paper, depending on the project. When I'm done with the project, I take pictures and edit to showcase it on my Instagram.

As a novice entrepreneur, I have to create, market, and advertise the project/ product. I'm definitely no expert, but if you want to start learning calligraphy or engraving or if you have any projects in mind, feel free to reach out on instagram, @CraftedforYu!



@CraftedforYu



# A GUIDE TO ANIME FOR BEGINNERS

BY: RUNYANG YIN, 2T3 MONOGRAPH REP



Violet Evergarden

Have you ever asked the question “what exactly is anime”? What about wanting to watch some anime but not sure where to even start? Or perhaps you heard your friends talk about it from time to time and feel left out because you didn’t even know how to pronounce the word “anime”? If I just described you, even by a little bit, then this short article is for you, the anime beginner—who has the epic potential to become a pro one day. Today, I will tell you some interesting facts about anime and how you can enter this fascinating realm and finally begin to enjoy its content. Without further ado, welcome to the world of anime, and I promise you, it is going to be an amazing one.

In case you didn’t know, anime is correctly pronounced as “a-ni-mei” in Japanese. It is a form of animation that originates from Japan and you can technically think of it as Japanese cartoon. Contrary to some of the popular cartoons that you and I grew up watching in the West, anime comes in a myriad of genres and themes that focus on storytelling and character development. With the incorporation of fantasy and supernatural phenomena, the storyteller essentially has limitless ways to create whatever they are passionate about. Anime comes in movies and TV series, but there are way more TV series than movies on the market. Anime series usually have either 12 or 24 episodes (with some exceptions). Each episode is around 25 minutes long (including opening and ending songs). So unlike your Grey’s Anatomy or Game of Thrones episode that typically last for 40 minutes or more, you can squeeze in an anime episode when you’re

taking a short break between your studying sessions (but watching one episode often leads to watching the entire series in one sitting, so be careful). Every anime series is originally voiced by Japanese voice actors and actresses and English subtitles are provided. Almost all anime gets an English dubbed version sometime after the release of the original Japanese dubbed version, so you have a choice in listening to the language that you like better. As for the movies, all I can say for now is that they are nothing but beautiful and fantastic. Anime studios usually spend a lot more effort and budget in animating the movies, so the result is a very elegant and real-life-looking piece of work that will leave your jaw dropped to the ground for the entire duration of the movie (referring to *The Garden of Words*). Also, did you know that anime actually inspired many classic film and television shows in North America? The animated series of Batman, Spiderman, and even Avatar: The Last Airbender are all anime-inspired to some extent. Toei Animation, the pioneer of Japanese animation that produced Dragon Ball, Sailor Moon and Digimon, have also collaborated with American studios to create some of the animated Transfers TV series. Anime is not just a western phenomenon these days, its legacy has reached every corner of the world.

Now, let me introduce you to some anime movie titles. The recommendation that I’m about to give you is a bit subjective, but still mostly reflects the general public’s recommendation. I personally enjoy slice-of-life titles and like to focus my attention on the art style of specific

anime studios, because I think of anime as more than just entertainment. It is also an art that could take a lifetime to master. Having said that, Studio Ghibli has been revolutionizing the world of anime since 1986 with its legendary, world-class, and award-winning movies. There are many Ghibli movies and all are classics but some titles that you must watch include Howl's Moving Castle, Spirited Away, and Kiki's Delivery Service. If you can handle the sadness and realistic reflection of post-World War II Japan, then Grave of the Fireflies is also highly recommended. Also, as you watch each movie, pay attention to the details of the animation and enjoy the original soundtracks. Their soundtracks are so beautiful that I haven't stopped listening to them since I watched my first Ghibli movie twelve years ago. To prove my point, I recommend you listen to The Name of Life from Spirited Away and Merry Go Round of Life from Howl's Moving Castle. Moving on, other movie titles that I highly recommend are Your Name, The Garden of Words, and Weathering with You. These titles are all directed by Makoto Shinkai, one of the most successful animators in Japan right now. I have attached some images of the animation quality of these films below for you to see how impressive Japanese animation can be. The plot of each movie is very layered and will wedge your heart.

Now let's talk about the TV series. The things that probably come to your mind when I say Japanese TV series are Pokemon, Digimon, and Sailor Moon. Indeed, those are anime series, but they are just the snowflakes on the iceberg. To explore the actual tip of the iceberg, we need to first consider the series that are popular on Netflix. If you like action and supernatural powers, I highly recommend Demon Slayer, One Punch Man, Death

Note, and Attack on Titan. These titles belong to a very unique genre called Shonen, which roughly translates to the youth genre in English. In this genre, you will find lots of action, fighting, and superpowers that can hype up your whole night. Even though it is called the youth genre, audiences from all age groups watch them. The story plot is usually straightforward and easy to understand. One downside of this genre is that they usually have hundreds of episodes, which I definitely find to be a burden. If you're still not sure which one to start with, go with Attack on Titan. It is literally the number one hype in the anime community right now because the final season just came out. I have recommendations for those who prefer calmer and more relaxing titles as well. If action is not your thing, then I recommend you Violet Evergarden and Haikyuu on Netflix. Violet Evergarden is mostly about finding the purpose in one's life and is very heartfelt, intimate and emotional, whereas Haiykuu is about sports and very inspiring. Violet Evergarden is only 13 episodes long and I loved every second of it.

This is all for now. I hope this article was able to provide you with more insight on how to break the ice with anime. If you already watched the ones that I recommended and still want more recommendations, you can reach out to me anytime, or go on [www.myanimelist.net](http://www.myanimelist.net) to see which titles are ranked top 10 of all time and which ones are trending. If you still find anime a bit intimidating and hard to get into after reading this article, then that's okay, because at least you learned something new today. As always, I wish everyone good health, and a safe and successful semester. Until next time.



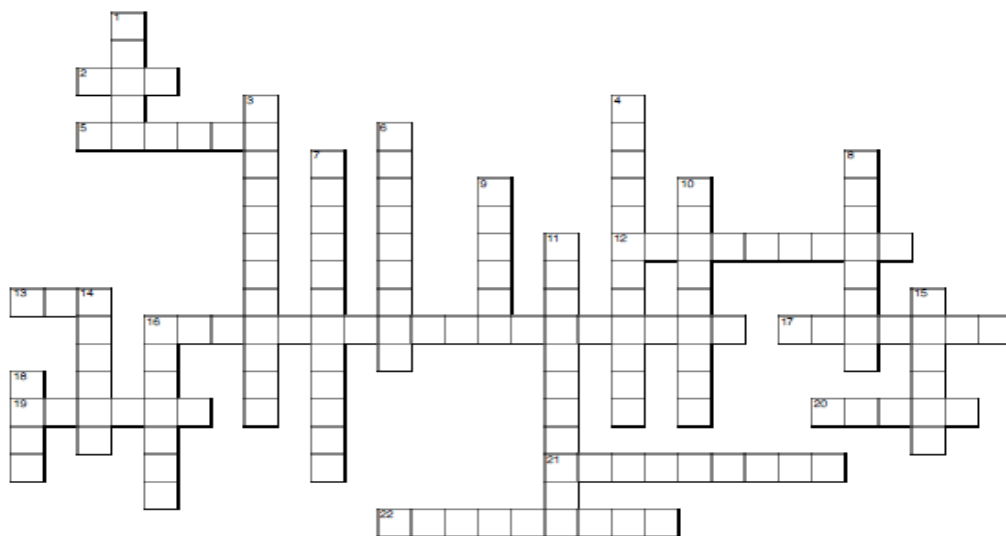
The Garden of Words – cooking scene



Demon Slayer

# Crossword and Shoutouts

A Decade of Change  
Biggest things of the 2010s



## ACROSS

- 2 it's your first oscar??  
5 taking the cinematic universe by storm  
12 the fatal wildfires that began spreading in \_\_\_\_ in 2019  
13 winter is coming  
16 Zuckerberg's scandal  
17 Alexa, play my music on \_\_\_\_  
19 the United Kingdom is not...in unity...anymore  
20 down with sexual assault #\_\_\_\_  
21 check my story  
22 the film that blew cinematographers away

## DOWN

- 1 leading the fight to go green  
3 what color is the dress, for real  
4 most popular dance craze of the decade  
6 dad can u drive me downtown so i can catch this Eevee  
7 the sequel we've been waiting for since birth  
8 got everyone into broadway  
9 multibillion dollar company tearing through the economy  
10 most watched music video of the decade  
11 Artist of the Decade  
14 swipe left  
15 vine gave its life, so \_\_\_\_ could be born  
16 something we really hope will just stay in the 2010s  
18 out late for a drink and you call an \_\_\_\_?

## Pharmacy Shout-Outs!

🔊 S/O Stonks

🔊 I don't think people realize how hard working and amazing pAl really is. Truly everyone's best friend and probably one of the best presidents EVA!! Thank you for all the work you have done for us so far, keep being you bb 🥺

🔊 Shout-out to the 526 pham <3

🔊 Cindy and Sanaz!!!!!! UWU!! Y'all r amazing, thank you for all your hard work 🙏❤️

🔊 Sally, Runyang, Shaista and Hebah are the greatest Monograph Reps ever!!!



# Artist Spotlight



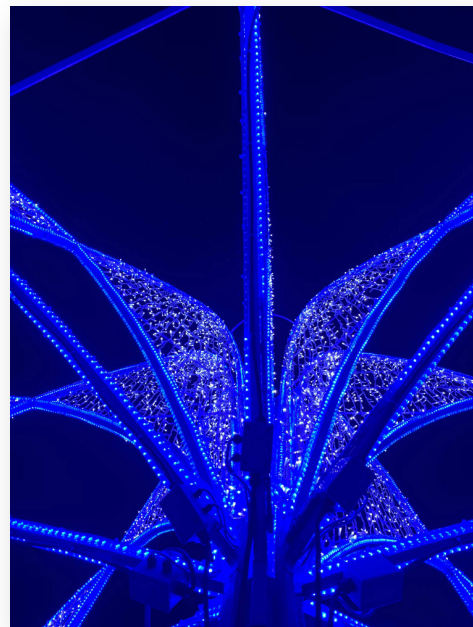
Maira Hassan, 2T4



"No Thorns, Just Flowers"  
Hebah Arabi, 2T1



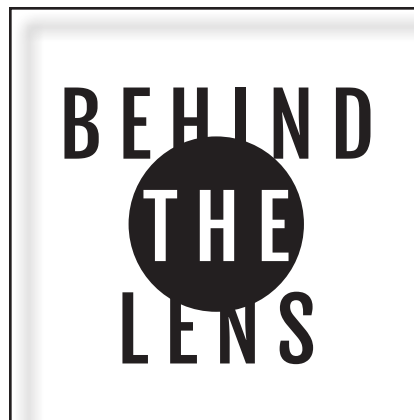
Shelby Yiu, 2T1



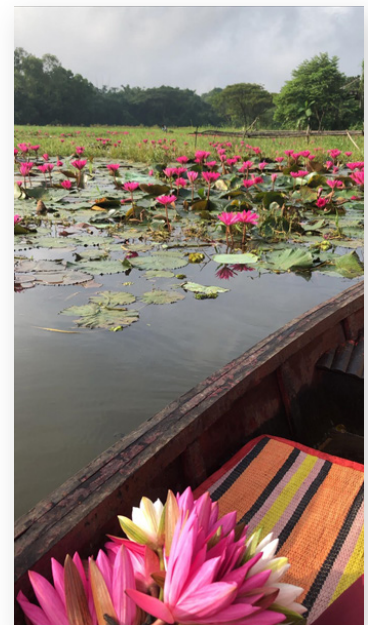
**"United By Blue" Shadir Rimzy, 2T4**



**Donna Hoang, 2T3**



**Janet Geum, 2T4**



**Bangladesh  
Nubaira Forkan, 2T3**