

THE MONOGRAPH

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The Voice of the Pharmacy Student



Photos Courtesy of PHARMAKON

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The image shows the Ontario College of Pharmacists logo, which features a green shield with a white caduceus. To the right of the logo, the text reads "Ontario College of Pharmacists" in blue, with the tagline "Putting patients first since 1871" below it. Below the logo and tagline, there is a green graphic of a hand holding a pen. The main text in the advertisement says "Visit our website for information on registering with the Ontario College of Pharmacists". Below this text is a screenshot of the website www.ocpinfo.com. The website screenshot shows a navigation menu with options like "Home", "About the College", "Preparing to Study", "Registration", "Practice & Education", "Regulation & Discipline", and "Links". There are also three main sections: "PUBLIC" with a person icon, "APPLICANT" with a person and document icon, and "REGISTER" with a person and document icon. At the bottom of the website screenshot, the text reads "ONTARIO COLLEGE OF PHARMACISTS" and "Putting patients first since 1871". Below the website screenshot, the URL www.ocpinfo.com is displayed in large green letters.

CO-EDITORS' NOTE

Hello Readers!

We are proud to introduce you to the first issue of The Monograph! As your Co-Editors, our goal was to provide you with interesting and captivating content! (We hope we did just that!). This happens to be the most jam-packed issue yet! And we are so excited to share it with you! You'll find everything from student life experience, to buzzworthy drugs and everything in between! There is something for everyone in The Monograph!

Special thanks to our crew of brilliant Staff Writers, Monograph Representatives and our Staff Editor, Walter, who helped edit all these submissions! We hope you enjoy their articles as much as we did! And a huge shout-out to Pharmakon for letting us use your beautiful pictures! If this issue inspires you to write for us or submit your artwork/photography, feel free to shoot us an email at monograph@uoftpharmacy.com.

See you in the next issue!

Sandra Wood and Yumna Ahmed
Co-Editors, The Monograph
Undergraduate Pharmacy Society
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Welcome Back Pharmies!

We hope that you all had wonderful summers, but that you're starting to get back into the routine of school again. This year, the Undergraduate Pharmacy Society (UPS) is starting some new initiatives and we hope you'll be as excited for them as we are! These initiatives include:

1) Student of the Month & UPS Position of the Month

Our Faculty is filled with wonderful students and we'd like to start showcasing them! If you've been impressed with someone's act of kindness, special talent, commitment to a club/volunteer group, etc. please let us know! Nominate them by sending their name to ups@uoftpharmacy.com with a short blurb about why they deserve to be Student of the Month. We will then select a winner from the nominees for the month. UPS Council will nominate UPS Position of the Month.

2) Increased Student Participation in UPS Council

This year, UPS would like to invite all those interested to sit in on our council meetings. This will allow for increased discussions and student representation. To find out when our next meeting will be, visit the events calendar on the UPS website. If you're interested in attending, please e-mail us in advance so we know how large of a room to book. Our first meeting will be held on Monday, September 28th at 7:00 pm. We will also be having a Town Hall meeting on Tuesday, September 29th in PB B150 where UPS will present our budget for the year and answer any questions you may have about how we operate.

3) New Resource for Student Clubs

Running a student club can be hectic at times, so the UPS has created an on-line form to help simplify things! Through this form you can register a new club, renew an existing club, apply



for funding through the Student Initiatives Fund (SIF), book a date for an event, submit a fundraising event application, and/or request UPS points for event organizers and attendees. Check out the form at the link below! Don't forget that the deadline to renew an existing club is October 31st and the deadline to apply for funding through the SIF is Friday, October 2nd at 5:00 pm.

Student Clubs Form: <http://uoftpharmacy.com/clubsForm.php>

If you have any questions or suggestions regarding these new initiatives, please stop us in the halls of the Pharmacy Building or send us an e-mail. We're here to help and love hearing from you!

Have a great fall y'all,

Tiana & Shane
UPS President and Vice-President

Pharmacy Student of the Month - Alexandra Gilletz

Our first ever Pharmacy Student of the Month is Alexandra Gilletz! Ali impressed her classmates with her initiative and camaraderie. While second year was in full swing last spring, Ali noticed that her classmates could benefit from additional resources in Cardiology. She therefore took it upon herself to contact the Canadian Cardiovascular Society to arrange the procurement of free pocket guide references for her classmates. Ali arranged the delivery and distribution of these references for her classmates. For going out of her way to help her fellow students, Ali is the Pharmacy Student of the Month for September.

UPS Position of the Month - 1T8 President & Vice-President

Our inaugural winners of the UPS Position of the Month are the 1T8 Vice-President and President! Sara Tawadrous and Alexander Mok impressed the UPS Council with their dedication and innovation this summer while planning Phrosh Week. Organizing activities for 200 new students is no small feat and Sara and Alex pulled it off seamlessly. On top of adding new events like Treetop Trekking and a Blue Jays game to the week's schedule, they released impressive promotional materials! For their hard work welcoming the Class of 1T9, Sara and Alex receive the UPS Position of the Month award for September.

Calendar of UPS Events – October 2015

- 2nd: SIF Fall Deadline
 - o 5:00 pm
- 6th: IPSF Student Exchange Presentation
 - o 5:00 pm - 6:00 pm
- 7th: OPA Dinner & Learn
 - o 6:00 pm - 7:30 pm
- 8th: CAPSI PIC/OTC Competition
 - o 6:00 pm - 9:00 pm
- 13th-16th: Phollies Auditions
- 15th: National Bank Lunch & Learn
 - o 12:00 pm - 2:00 pm
- 16th: CAPSI Student Literary Competition Deadline
 - o 5:00 pm
- 16th: CAPSI Compounding Competition
 - o 5:00 pm - 7:00 pm
- 22nd: Blood Drive
 - o 12:00 pm - 2:00 pm
- 22nd: Phollies Rehearsal
 - o 5:00 pm - 10:00 pm
- 23rd: Phollies Show
 - o 7:00 pm - 10:00 pm

CAPSI Corner!

By Areeba Zaheer, Senior CAPSI Representative (1T7)
and Maria Moreno, Junior CAPSI Representative (1T8)

Welcome back, kiddos!

CAPSI is happy to announce that we are in full swing this year prepping to make the 2015-2016 school year one to remember! This summer, Maria and I attended the CPhA conference in Ottawa where we were able to meet with all the CAPSI representatives from every school and strategically plan our year.

We kicked things off during Phrosh Week with an ice cream social, where the 1T9 students were able to pick up their backpacks. We have already commenced Professional Development Week (PDW) competition planning and we have our dates set, so please check your fall calendars! The competitions are a lead up to PDW, which will be held in the beautiful city of Niagara Falls and will be hosted by the University of Waterloo.

Many students wonder, what is "PDW"? It is the largest completely student-run pharmacy conference in all of Canada. There are a variety of things planned for you over the course of the 4 days including educational talks, motivational speakers, competitions, and socials. It is a great way to meet students from across the nation! Maria and I are proud to say that through CAPSI

and PDW we have a pharmacy friend at every pharmacy school across Canada *tear*. For more information check out the PDW website at www.pdw2016.ca. Registration for PDW will begin in early October, and the conference itself will take place January 6th to 9th. I would encourage all of you to attend; it is going to be a lot of fun (and educational at the same time, wink wink). As always, Maria and I are open to all feedback from our students, so if you have any comments or concerns just shoot us an e-mail (torontosr@capsi.ca). We look forward to seeing many of you around the faculty this year!

Xoxo,
CAPSI



UPS Athletics - Intramurals and More!

Welcome 1T9s and welcome back 1T8s and 1T7s to another exciting year of athletics! We are really excited that so many of you came out to our annual Tug-o-war event and want to congratulate the class of 1T8s on successfully winning this competition in back-to-back years. We have two other events planned for the year, so be on the lookout for these events!

I'm sure you're all excited about intramurals this year. Whether you're a seasoned veteran or if you're interested in trying a new sport, intramurals is a great way to do just that! Intramurals are also a great opportunity to meet other pharmacy students from all years. Intramurals will

be starting later this month for some teams and early October for other teams, there will be more information coming soon.

Lastly, if you have any questions about athletics here at Pharmacy, feel free to approach any of your class athletic reps or us personally. We are here to enhance your athletic experience any way possible. We're looking forward to an exciting year with all of you!

Regards,
Élise, Jonathan, Phillip
Your UPS Athletic Directors

What's Cooking with COMPPS?!

Compounding Opportunities and Mentorship Program for Pharmacy Students (COMPPS) is a club founded one year ago dedicated to providing knowledge, practical experience, and resources to students regarding all things compounding. In our first year we organized hands-on workshops where students practiced skills involved in preparing topical creams and ointments. In addition this past summer, we organized a field trip to the pharmaceutical company Patheon to learn more about compounding on an industrial scale.

This year we are busy planning more fun activities. We hope to organize compounding workshops on more uncommon dosage forms, to prepare student teams for the CAPSI compounding competition, to bring in speakers to discuss practical aspects of

seeking a career in compounding pharmacy practice, to arrange more field trips, and other activities proposed by YOU the club membership.

We invite you to join our mailing list at <http://compps.uoftpharmacy.com> and follow us on our Facebook page <https://www.facebook.com/learn2compps> to stay up to date with the world of compounding!

All the best in the coming year!
The COMPPS Executive Team



Is Pharmacy Ready for Expanded Scope?

By Sara Temkit, Staff Writer (1T7)



Would you take the initiative to help this patient?

Before I had even entered into the UofT Pharmacy program, the owner of the dispensary where I volunteered gave me some unexpected advice. He said, "To be honest with you, I make a third of what I used to as the owner of an independent pharmacy. Pharmacy is not what it used to be. If you were my daughter, I would advise you not to get into pharmacy school". The pharmacists that worked there seemed to agree. They said: "The government wants us to do more, but they are not willing to pay for it."

These remarks were echoed over the years during my placements at different pharmacies in Ottawa, from Shoppers to Rexall. Some of the pharmacists, which I had a great rapport with— even asked me to apply to medical school, because they thought that the field of pharmacy was going downhill.

Though all my experiences so far have been garnered from community pharmacies, after hearing the same stories and lamentations over and over, I am starting to wonder whether or not the field of pharmacy is headed in the right direction. Many pharmacists are having a hard time embracing their clinical potential. I have seen most of a pharmacist's day spent double-checking prescriptions, even though there are qualified registered pharmacy technicians that can sign off on the technical component.

I think most of the disenchantment in community pharmacy has to do with poor reimbursement for much-needed services. In Ontario, where minor ailment prescribing and therapeutic substitution are not yet authorized, MedChecks are the only profitable expanded service. Some pharmacies take advantage of the high profit margin, billing the government \$60 for a sloppy, 5-minute chat with a patient. According to Rhonda Dorren (CEO & Founder of Chique Pharma Clinic), "There is a growing awareness that clinical services offered by pharmacists are not sustainable without adequate revenue generation. Thus, pharmacists need to not only acquire the knowledge and skills necessary to deliver clinical services that meet the patient's needs, but also to market these services".

The lack of adequate marketing means that some patients, as well, have a tough time seeing pharmacists as "clinicians". In my personal experience as a pharmacy student, I saw many patients who were puzzled by MedChecks.

I once saw a colleague ask a patient for his blood pressure read-



Or do you prefer to passively wait behind the counter?

ings, and the patient said: "Why do I need to tell you my blood pressure readings? I just had an appointment with my doctor, and he recorded all that. You are NOT my doctor! So, don't ask me that question. Just ask me about my drugs". Of course, we all had our fair share of rude patients, but it is more than apparent that this particular patient has never heard about the expanded scope of practice for pharmacists. And, who do we have to blame for this --- the patient, OPA, or ourselves?

On a more positive note, I find that the academic environment is much more optimistic about the changes in pharmacy, embracing expanded scope, and even tailoring the new curriculum to better prepare us to provide these services. Perhaps as the repertoire of clinical services provided by pharmacists expands and as we learn to market these services, we will be taking a more proactive role in improving health outcomes, reducing annual health care costs, and increasing patient productivity. The question is: Is pharmacy ready? Are you ready? Only you can decide.



Accessible clinician?

The Dangers of Using Fentanyl: Should Patients Be on This Narcotic?

By Rana Khafagy, Staff Writer (1T6)

Over the past couple of years, the use of narcotics has sparked much attention leading to their tight regulation and government control. Recently, the number of deaths associated with fentanyl misuse is being broadcast. This past summer, an increase number of deaths were linked to this opioid. The government, along with healthcare professionals, are being scrutinized for not doing enough to stop this “Canada-wide disaster”.

Fentanyl is a highly potent opioid, almost 80 times more so than morphine. It is typically prescribed to patients with persistent chronic pain not managed using other pain relievers. It is highly effective in relieving severe pain but this does not come without adverse events – drowsiness, slowed heartrate, respiratory depression, death, and the potential for abuse.



Although the media portrays fentanyl as a catastrophic medication that ruins the lives of those who take it, they have failed to mention how many lives it has helped. According to the Canadian Pain Society, one in five Canadians suffers from chronic pain. It is estimated that over three quarters of these people

have poorly controlled pain that interferes with daily living. One reason for this high number is the hesitation of healthcare professionals to prescribe stronger pain killers and monitor these patients appropriately.

That being said, fentanyl can make a huge difference in managing severe pain if used appropriately. In 2009, ISMP Canada tracked 3291 patients on fentanyl. There were 271 reports of harm, of which 8 resulted in death. To put this into other terms, fentanyl caused issues in about 8% of patients. This is not to trivialize the harm fentanyl can cause but to put it into perspective. There are people who benefit from this medication and not everyone who is on fentanyl will experience an adverse event.

Yes, pharmacists should be on alert when we see a prescription for fentanyl but we should not treat those patients as criminals or act as if they are walking into their deathbed. Instead, we should monitor those patients and ensure they are using fentanyl appropriately and are aware of the danger signs, so they know when to seek help.

In the News: Drug Developments

FDA Approval of the First 3D-Printed Drug: A Glimpse into the Future of Pharmaceuticals?

By Allison Barre, Staff Writer (1T9)

Three-dimensional printing (3DP) was first introduced in the 1980s and has since entered the healthcare environment, being used for everything from custom prosthetics to living tissue models. Now, this technology is being applied to the pharmaceutical industry with the first Food and Drug Administration (FDA) approval of a 3DP drug, Spritam (levetiracetam), on August 3, 2015 for the treatment of seizures in adults and children with epilepsy.

The makers of this drug, Aprelia Pharmaceuticals Company, commented that they are the first company to use this technology to manufacture an approved drug for commercial sale and are the sole-proprietors of ZipDose 3DP, originally developed at MIT. Zipdose technology involves the assembly of tablets using layers of powders and printed droplets, leading to binding of the material at the microscopic level¹.

The result is a highly porous tablet that rapidly disintegrates due to its water-soluble matrix, even at very high loading and maintenance dose concentrations (up to 1000 mg in a tablet). ZipDose technology does not rely on compression or moulds, which normally limit the dose ranges of orodispersible medications, leading to complete dissolution of the product in less than 10 seconds¹.

The benefit of this innovation is the improvement of adherence and compliance. “By combining [3DP] technology with a highly-prescribed epilepsy treatment, Spritam is designed to fill a need for patients who struggle with their current medication experience,” said Don Wetherhold, Chief Executive Officer of Aprelia¹.

Almost three million people in the United States are diagnosed with epilepsy, and 460 000 of those are children. Many patients, particularly children and the elderly, have trouble swallowing large pills or taking a number of doses throughout the day. More than half (71%) of patients in one survey acknowledged forgetting, missing, or skipping a dose at some time, and half reported the onset of a seizure after the missed dose¹.

Aprelia claims that Spritam enhances the patient experience and prevents missed doses by allowing administration of a large concentration of levetiracetam with a sip of liquid. As well, 3DP provides a precisely dosed way to take this medication, with no need for measuring.

Spritam is meant to be customizable for high dosage treatments and 3D-technology could alter the way many drugs are manufactured and prescribed. Overall the technology could

lead to on-demand medications, completely customizable doses, and higher production of niche medicines. Many health professionals feel that children could be the patients to gain the most benefit².

“This technology could revolutionise the way we look at children’s medicines, both in terms of what they take and the ability to keep changing the dose as they grow,” says Steve Tomlin, consultant pharmacist at Evelina London Children’s Hospital, UK. Due to the large weight range among children, they all need different doses, requiring the measurement of liquid medicines. However, studies demonstrate that even younger children would rather take tablets².

3DP tablets can deliver the exact dose of a needed drug at the precise time it is required. Other researchers are currently working on the development of inkjet 3DP for use in pill manufacture. While this technology is at least 10 to 15 years from entering the market, the potential implications are great, including the possibility for personalized drugs that take genetics and allergies into account and increased access to pharmaceuticals in remote or developing areas².

As well, many patients require variable dosages of their medications, so allowing the consumer or pharmacist to adjust dosages easily could reduce visits to the physician. 3DP also allows tablets to be created in novel shapes, changing the kinetics of drug release. This could mean better control over whether a medication

is fast acting or released gradually over the time².

There are barriers to 3DP that need to be accounted for, including illegal drug manufacturing and mislabelling; national regulators and the pharmaceutical industry will have to develop strategies to prevent this³. As well extensive quality control and validation will need to take place in order to demonstrate the production of a consistent product².

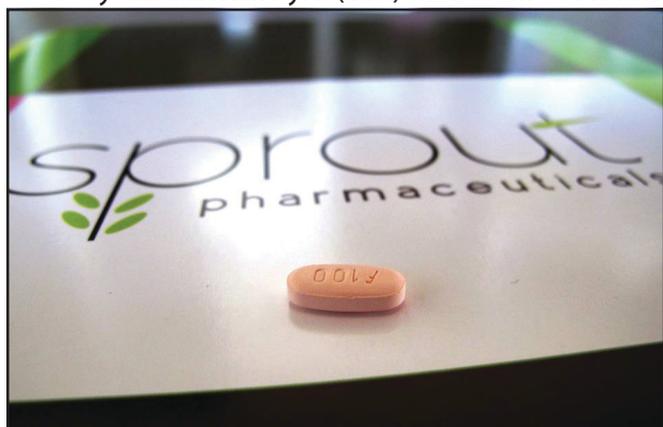
Despite these hurdles, the approval of Spritam by the FDA demonstrates the willingness of industry and regulators to seriously consider the viability of 3DP drugs. Spritam will hit the market in the spring of 2016, and Aprelia is planning on introducing multiple new products using the ZipDose technology in upcoming years. Clearly, the potential for 3DP in pharmaceuticals will soon be determined.

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2. Sanderson, K. (2015). 3D printing: The future of manufacturing medicine? *The Pharmaceutical Journal*, 294(7865). doi:20068625
3. Lincoff, N. (2015, August 7). 3-D Drugs: Your Pharmacy Will Now Print Your Prescription. Healthline. Retrieved September 9, 2015, from <http://www.healthline.com/health-news/3-d-drugs-your-pharmacy-will-print-your-prescription-080715#1>

Here’s What You Need to Know About the New “Female Viagra”

By Caitlin McIntyre (1T6) on behalf of *Pharmacy Students for Women’s Health (PSWH)*



You’ve probably seen a few articles lately about the new female sex-drive drug Flibanserin; brand name Addyi (pronounced ADD-ee). This newly approved drug is the first to have an indication in women for hypoactive sexual desire disorder (HSDD), a disorder in the DSM-V¹. This disorder is defined as “persistent absence of sexual thoughts, fantasies, responsiveness and willingness to engage in sexual activity that causes personal or relationship distress and cannot be accounted for by another medical condition or substance”². HSDD is a life-impacting condition that can affect a woman’s relationships, self-confidence and self-image¹.

Although the FDA has only just approved Flibanserin in August,

Sprout Pharmaceuticals has been trying to get FDA approval since 2010². The FDA initially rejected the New Drug Application (NDA) in 2010 due to its lack of efficacy in improving sexual desire². In 2013, even with a new study that showed a significant increase in sexual desire with Flibanserin as compared to placebo, the NDA was again rejected². This rejection was due to issues regarding Flibanserin’s risk-benefit ratio as it is associated with significant side effects and only a “modest benefit”².

So why approve it now? The FDA has felt pressure by many women’s groups, including a large group called Even The Score³. This group was formed to advocate for women’s sexual equity and has allowed women to voice their opinions about living with HDSS³. Sprout Pharmaceuticals has partnered with this group to help them in their campaign. Therefore, Flibanserin’s approval has sparked many media outlets to report on this controversy.

Here are 5 important facts you should know about Flibanserin:

1. It’s not at all like Viagra; it has a completely different mechanism of action. Flibanserin is a postsynaptic 5-HT1A agonist and 5-HT2A antagonist². Its direct action is on neurotransmitters to help improve desire in women.

2. The dose of Flibanserin is 100 mg po qhs². It’s designed to be taken regularly, rather than when needed before sexual activity.

3. It has only been studied in premenopausal women and is therefore only approved for this age group (although there is some talk that Sprout Pharmaceuticals will try to acquire approval for postmenopausal women soon).

4. Alcohol consumption is strictly contraindicated for women taking Flibanserin². This contraindication is due to an increase in hypotension and syncope when the two were combined in trials. This interaction is so severe that Flibanserin is currently only available in the US through a restricted access program where prescribers and pharmacies must be certified to dispense it¹.

5. CNS depression, including somnolence, sedation and fatigue, is one of the major side effects (21% with drug, 8% with placebo)¹.

The approval of this drug for HDSS is very important for the advancement of women's health and is something to be celebrat-

ed. Still, no drug is perfect and it is important for us as clinicians to be realistic about Flibanserin's efficacy and caution women about its side effects and contraindications. Although this drug is only approved in the US, it's only a matter of time before it's available in Canada.

References:

(1) Sprout Pharmaceuticals. (2015, August 18) Sprout Pharmaceuticals Receives FDA Approval of ADDYI™ (Flibanserin 100 MG) Retrieved from <http://www.sproutpharma.com/sprout-pharmaceuticals-receives-fda-approval-addyi-flibanserin-100-mg/>

(2) FDA. (2015, June 4). Flibanserin For the Treatment of Hypoactive Sexual Desire Disorder in Premenopausal Women Advisory Committee Briefing Document (2015). Retrieved from <http://www.fda.gov/downloads/AdvisoryCommittees/CommitteesMeetingMaterials/Drugs/DrugSafetyandRiskManagementAdvisoryCommittee/UCM449090.pdf>

(3) Even The Score. Accessible via Eventhescore.org/about-us/

Health Canada Approves Mifegysimo

By Lauren Ferruccio, Staff Writer (1T6)

This past summer, Health Canada made headlines across the country when it approved an abortifacient called Mifegymiso. Due to the publicity and controversy regarding this product, as well as its novelty in Canada, pharmacists are bound to get questions regarding its use from patients as well as other healthcare practitioners. Some key information is discussed below, but this article is not meant to replace the monograph, so please take a look at that for more complete information.

What is "Mifegymiso"?

Mifegymiso is a combination product used to induce medical abortion, containing one 200 mg tablet of mifepristone (a progesterone antagonist that is also known as RU-486), and four 200 mcg tablets of misoprostol (a prostaglandin analogue). While misoprostol has been approved in Canada for years, this is the first product containing mifepristone to be approved in this country.

The official indication for Mifegymiso is "medical termination of a developing intra-uterine pregnancy with a gestational age up to 49 days", and is approved for use in women aged 15 and older. It has a 95-98% success rate.

How is it administered?

One 200 mg tablet of mifepristone is taken orally, followed 24-48 hours later by 800 mcg of misoprostol (200 mcg x 4 tablets) taken buccally.

Why is the approval of Mifegymiso so important?

Mifepristone was first approved in China and France in 1988, and has since been approved in 60 countries around the world. There is ample evidence to support its use, and it is also on the WHO's list of essential medicines. The Society of Obstetricians and Gynecologists of Canada (SOGC) has called for mifepristone to be available in Canada since 1992. Despite this, there was a nearly three-year delay from the time the application was submitted in 2012 to the time it was approved.

Without access to mifepristone, medical abortions are done either using misoprostol alone, or a combination of methotrexate and misoprostol. Both options are less effective than the combination of mifepristone and misoprostol, and the methotrexate regimen can have a delayed effect – beyond 20 days is not uncommon.

There is a wide variation in access to health care in Canada, and many women do not have access to surgical abortions, or would prefer an alternative option. Although mifepristone was available through the Special Access Programme, the paperwork and processing time would have made timely access to mifepristone difficult for most patients. All patients in Canada deserve equal access to healthcare, and the care that they receive should follow best practices.

When can I expect to start seeing Mifegymiso in pharmacies?

While marketing of Mifegymiso is expected to start in January 2016, it will only be available directly from physicians. However, this does not necessarily mean that pharmacists will not be involved. The accessibility of pharmacists means that patients will likely come to us with questions regarding the efficacy, safety and administration of Mifegymiso, as well as how to access it. Prescribers may also contact pharmacists, seeking assistance in managing drug interactions or with questions regarding the pharmacokinetics, just to name a couple of examples. Pharmacists can also be involved in pain management in patients undergoing medical abortions. CPhA is working with SOGC (Society of Obstetricians and Gynecologists of Canada) to develop training and guidelines to assist both physicians and pharmacists with the hope that at some point in the future, pharmacists will be involved in dispensing Mifegymiso.

Aftermath of the Tianjin Warehouse Explosion

By Yannan Liu, Staff Writer (1T9)

September 11, 2015 marked the end of the search for the last eight remaining survivors following the Tianjin Warehouse Explosion in China. The Chinese Government officially stated that the last eight missing survivors were now presumed dead, resulting in a final death toll of 173 people. In addition, about 800 have suffered non-fatal injuries.

The explosions that occurred on the night of August 12th, 2015 were located at one of the world's largest ports, which hosted a company known as Ruihai International Logistics. This company was largely responsible for the storage and handling of hazardous materials and chemicals, and as such, the port hosted a large number of warehouses and fire pumps for safety. One of the largest concerns the company faced prior to the explosion was the location of the warehouses, some of which were too close to the residential areas according to regulations. Contents of the warehouses also included some compressed gases, flammable materials, and toxic chemicals which included sodium cyanide, toluene diisocyanate, potassium and sodium nitrates, and calcium carbide.

While the initial cause has yet to be determined, the two large explosions have been suggested to be have been caused by improper handling of the situation by firefighters. Before the explosions, firefighters were dispatched to put out the fires that initially blazed at the warehouse sites. However, given the lack of proper information and communication, the firefighters doused the warehouse with water, which may have reacted with the calcium carbide stored on the site. Water reacts with calcium carbide to form acetylene, which then can go on to form a chain

reaction by detonating the other chemicals in the warehouse. What followed were two explosions which were equivalent to three and twenty-one tonnes of TNT being detonated.



Following the explosion, residents from a few kilometres away could feel the shockwave, and those closest to the blast suffered injuries due to burns and shaking buildings and around 800 people were hospitalized. Moreover, around eight thousand cars have also been desolated in the nearby parking lots, most of which hosted new Hyundai, Toyota, and Kia models. A thousand firefighters were also later dispatched to clear up the residual fires.

The explosion still has lasting effects to this day: as of the beginning of September, cyanide levels measured in the water quality plants still had 20 times the normal limit. Workers have been working tirelessly to help clear debris following the explosion, and water treatment workers have been sent to try and combat the pollution in the area. Controversy surrounding the proper handling of the materials in the warehouses, as well as the breaching of regulations regarding the warehouse locations have instigated an investigation of the executives of the Logistics Company, with a dozen members detained already. Regardless of the cause or negligence of the company surrounding the explosion, one can only hope that the lives of those affected can return to normal soon.

Cecil.

By Natasha Dogra, Staff Writer

A name that likely did not have much significance to most of us until this summer. Cecil the Lion lived within the Hwange National Park and was a fairly popular and loved animal at the park. The death of this animal brought much sadness to the locals, park attendees and animal lovers all across the globe. I am one of those animal lovers. The cause of Cecil's death was "trophy hunting", which is a sport that commonly involves the killing of an animal after which, parts of the animal's body are preserved and showcased as a souvenir of the hunt.

"Trophy hunting" is a contentious subject that has been under the radar by the media and various conservation groups, particularly since the killing of Cecil the Lion. Those in favor of the sport say that this hunting is beneficial for conservation efforts as they help to control animal populations, and that the sport is a financially stable form of tourism. Conversely, most groups against the sport are afraid for the threatened and endangered animals and worry about how the sport may negatively impact animal populations and ecosystems.

At this point, I cannot call myself an expert on the matter. However, I can say that from this event I have begun to do more re-

search on the subject of trophy hunting and at risk animals. From Cecil's death I have realized that it is important for us to become more proactive in learning not only about animal population changes and trophy hunting, but about nature and the environment in general. No matter what we do for a living, whether it be a dog walker, firefighter, barista or a pharmacist we all have one thing in common: we all live on this amazing planet.

With our busy schedules, some of us can forget about what is happening in the world of nature until an event, such as the death of Cecil the Lion, catches our attention. Despite the fact that the event took place on the other side of the world, the death of Cecil the Lion, has opened my eyes to some serious issues that need to be explored and discussed and hopefully changed for the better. By consistently educating ourselves on the changes of our planet each of us, in a small way, can help make a huge difference. Perhaps it seems like a stretch, but I have decided to do my part by sharing with you some of the things that I am learning about our planetary changes so that we may all be reminded of this and hopefully make a contribution towards improving our circumstances.

Getting Back to The Grind

By Shireen Cotton, Staff Writer (1T8)

If you're like me, you probably spent your summer binge eating nachos and sipping sangria on one too many patios. This is perfectly acceptable. Unfortunately, back to school brings on a whole new set of unhealthy practices. Spending hours on end sitting in class and studying, ordering take out when you forgot to pack lunch and dinner (or just didn't want to) and getting approximately zero hours of sleep during exam season are all too familiar feelings for pharmacy students. Our brains are going to be working overtime and it is so important to take care of our bodies. Getting back into exercising regularly and eating healthy can be difficult, so here are a few tips to keep spirits high, and to get back into treating our bodies properly.

Get Up After Every Hour of Class or Studying

We've all been there, 4 hours into a study session and suddenly everything hurts. Make the effort to get up and get a coffee, visit with a friend or just go to the bathroom. Moving around even a little bit can make a big difference. Use the 10 minutes between classes to get water, or just get up and stretch. Your body will thank you.

Get to the Gym

Guys, the University of Toronto has THREE gyms to choose from. The Athletic Centre, Hart House and the Goldring Centre are all great facilities that are available for our use. Just remember, start slow! Don't try and do too much at once, especially if the last "exercise" you did was moving from the couch to the fridge.

Walk to School

Toronto is such a walkable city. For those of you that live downtown, instead of sitting miserable on the TTC, get an extra few steps in by walking. Those commuting can get off a stop earlier

and walk the rest of the way! Exercise in the morning can clear your head and help you focus and relax for the upcoming (probably) stressful day.

Plan your Meals

For a lot of us, back to school means back to living on our own, without mom's home cooking. Planning out your meals at least a day in advance can help you to avoid a lot of extra calories spent on fast food and not to mention, save you a lot of money. Another great trick is to make a big batch of rice, stir fry or quinoa to have on hand for the week. This can stop the urge to order in when you're staring at the fridge for 10 minutes trying to figure out what you can make with a bottle of mustard and 2 apples.

Find Something You Love

There are so many intramurals to join, classes to take at Hart House and tons of fitness facilities around the city to be a part of. Get out, get moving and make some friends!

If you need a little extra motivation, here is a list of songs to help give you a little extra push:

1. Forever Tonight – Galantis
2. You're On (feat. Kyan) – Madeon
3. Coming Over (ft. James Hersey) – Dillon Francis
4. Trap Queen – Fetty Wap
5. Lost You – Zeds Dead
6. Lionhearted – Porter Robinson
7. What Do You Mean? – Justin Bieber
8. Gorgeous – X Ambassadors
9. Downtown – Macklemore & Ryan Lewis
10. All We Need (ft. Shy Girls) – Odesza

Simple Tips Leading to a Healthy Diet

By Donna Yang, Staff Writer (1T9)

Health Canada has created a Food Guide with the recommended number of servings per day from each food group to assure we meet our daily nutrition requirements. The truth is that it's one thing to know what a balanced diet consists of, while it is another thing to find and stick to the healthier choices. This is particularly true for students as we are always on the run and juggle between school work, extra-curricular activities and other commitments. Thus, when it comes to food, often, we grab whichever is the most convenient for us. Does that mean we need to sacrifice eating healthy to meet our other demands? The answer is "NO"! Consider these tips for finding and sticking to healthy eating.

1) Eat a Good Breakfast

Breakfast is one of the most important meals of the day after a long night of fasting. While you are on the run, you can grab fruit, yogurt and granola bars on your way out! This is one meal that you do not want to skip.



2) Choose Wisely if You Must Eat Fast Food

Let's admit, sometimes we eat fast food, especially when we are desperate for food. However, we should try to limit high fat foods like fried chicken and French fries. When given the option, substitute your side of fries with a salad.

3) Reduce your Sugary and Caffeinated Drinks

Do you tend to order a double-double at a coffee shop or drinks like lattes and fraps? These drinks tend to be packed with sugar and fat. If possible, skip the whipped-cream, substitute cream with milk and reduce the sugar for your drink. Obviously, this

might be a big adjustment, so take one step at a time. Make these changes slowly over time and you will eventually get use to it!

4) **Keep Healthy Snacks Around**

When cravings for junk food strike, choose healthier alternatives. For example, if you are craving chips, choose a healthy alternative with a crunch like nuts or rice chips. Similarly, choose low fat yogurt over sweets like candies and chocolate if you are craving sugar

5) **Watch the Portion Size**

Be careful with the amount of food you eat because sometimes you end up eating more than you think. This is particular true during stressful times such as the exam period where it likely you will find a large bag of chips opened sitting on your desk while studying. Chances are you will end up emptying the bag because it is very difficult to resist the food in front of you. So, keep the food away from your desk!

6) **Aim to Eat More Fruits and Veggies Everyday**

It seems difficult to consume sufficient fruits and veggies everyday. However, you can easily sneak them in throughout your day. For example, pack some fruits and veggies like celery and carrots as part of your snack. Alternatively, have a glass of orange juice in the morning or after a meal to get an extra serving of fruit.

7) **Drink Plenty of Water**

Keep yourself hydrated by bringing a water bottle with you to

class. Furthermore, drinking water can prevent you from over-eating by providing a bloating sensation.

8) **Choose low fat sauces and dressings**

Don't ever underestimate the amount of calories and fat sauces can add to your meal! If possible, try to skip sauces or use low fat dressings over creamy ones like mayonnaise, ranch or Caesar dressings. Also, consider asking for sauces on the side. The same goes for cooking, so try to replace sauces with spices.

9) **Avoid Bad Processed Food if Possible**

These processed foods tend to have little nutritious value and are high in sodium and sugar, which aren't good for you. One great example would be canned food. Similarly, while frozen dinners are convenient, they are very high in sodium, which increase the risk of developing hypertension.

10) **Indulge Once in Awhile**

As you are trying hard to maintain a balanced diet, remember to give your body a reward by giving it food that you can't eat all the time. Just a reminder, watch for the portion!

While these tips may seem very self-explanatory and probably known by many of us already, it is easier said than done! Hopefully, these tips will act as a reminder to kick start the school year! Just remember, everyone has a different lifestyle but try to spend some time building yourself a balanced diet that will last for the rest of the school year.

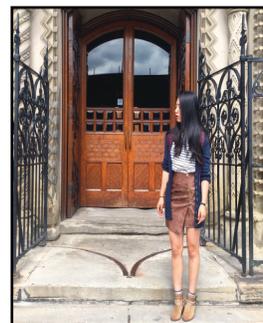
Lifestyle: Fashion

Top 5 Easy to Wear Fall Trends

By Jennifer Wang, Staff Writer (1T7)

1. Flares are back! Whether it's bell sleeves or flared blue jeans, this 70's inspired trend is taking over.
2. The timeless trench coat. Whether you choose a classic beige one or a darker tone like navy, it's a quick cover up you can throw on over almost anything.
3. Dark lips. This one is probably my favourite; dark tones like plums or brick reds never fail to add class any outfit. Tips: Choose a cool toned shade with hints of blue to make your teeth look whiter! Also, apply with a lip brush for a clean, crisp look.
4. Suede ankle boots. You can wear these with jeans, skirts, leggings you name it.
5. A great big smile! Nothing lights up an outfit like a smile on your face :) remember to wear this with every outfit.

For more fashion inspo, check out my instagram @wangjenniferr



Yo' Momma's Kitchen!

By Kyle Acton (1T7) in Association with Culinary Awareness in Pharmacy

In this issue, we will preparing the much celebrated pretzel!

The Ingredients :

3 cups all-purpose flour	1/4 teaspoon salt
1 tablespoon active dry yeast	3 table spoons baking soda
1 teaspoon white sugar	2 tablespoons, butter, melted
2 tablespoons butter, softened	3 cups water (trust me, you'll see why)
1 1/3 cups water	

How To:

Step 1: Make the Dough

Stir 1 cup of flour, the yeast, the sugar, 2 tablespoons of butter, and 1 1/3 cup water. Let this mixture stand until bubbles begin to form (about 15 minutes). Stir in the salt and gradually stir in the remaining flour until dough can be picked up and kneaded on the counter. DO NOT OVERMIX! Knead until smooth and elastic, about 8 minutes, adding more flour if needed.

Step 2: Prep It!

Divide the dough into 6 pieces and let them rest for a few minutes. Roll out one piece at a time into a rope about 15 inches



long. Loop and twist into that cool pretzel shape. Set on a baking sheet while you roll out the remaining portions.

Step 3: Soak it!

Preheat the oven to 450 degrees F (220 degrees C). Bring the remaining 3 cups of water to a boil and add the baking soda. Remove from the heat. Dip pretzels into the water bath for about 45 seconds, flipping over about halfway through. Place the soaked pretzels on a greased baking sheet. Brush them with melted butter and sprinkle with coarse salt.

Step 4: Bake it!

Bake in the preheated oven until golden brown, 8 to 10 minutes. Once done, it's yours to enjoy!!

Super-Fun, Easy Recipe!

By Xuan Yao, Staff Writer (1T9)

Toronto is known for its multitude of ethnic restaurants and good food, but there comes a point in a student's life where eating out every day is just not a feasible option. So what do you do when you want to eat like a king but still save on the bucks? Well, we have a great recipe for you to try.

Japanese Curry Block: With this key ingredient, you can have a savoury meal while saving on the expenses. The box comes with instructions on the back but I will give you a quick run-down of the process. This product can be purchased at most Asian supermarkets as well as Lo-blaws and Walmart under the international food section.



Suggestions:

- I prefer to use chicken breast for meat since chicken is generally easier to cook compared to beef.
- If the curry looks too runny, leave the pan on the stove without lid for a few minutes. Vice versa, add more water if the curry looks too dry.

Ingredients:

- 2 tablespoons of vegetable oil
- 2 cloves of garlic minced
- 1 or 1/2 onion depending on your preference, diced
- 400g of poultry cut into bite-size pieces
- 2 medium carrots, chopped into bite-size pieces
- 1 large potato, chopped into bite-size pieces
- 1 cup of water
- Glico curry sauce

Instructions:

1. Prepare all the vegetables; mince the garlic, dice the onion, chop the potato and carrots into bite-size pieces and cut the meat into bite-size pieces as well.
2. Heat up the frying pan at medium heat and add vegetable oil.
3. Add the garlic first, fry till fragrant but not browned.
4. Add the onion next and fry till it is semi-translucent.
5. Add the rest of the ingredients in, the meat then the vegetables and stir-fry for around 5 minutes at medium heat.
6. Pour in the water and cover the pan with a lid for 20 minutes.
7. Break the curry block into chunks and place into the pan.
8. Stir the curry mixture until the chunks have completely melted.
9. Serve with rice and enjoy!

School's in Session: You Scream, Ice Cream!

By Shakira Hakim, Staff Writer (1T8)

The school year has been quickly creeping up on us, but that doesn't mean we have to let summer go. The good weather blossomed a nutritious appetite in those achieving beach bods, while a not-so-healthy appetite in others (like myself) consisting of ice cream and other delicious desserts. I understand that with classes underway, we're probably trying to grab on to any bit of happiness we can keep. So instead of jumping into commitments with that summer fling that you know won't last, why not head over to one of these dessert spots instead for those little bursts of happiness we loved so much this season?

Bang Bang Ice Cream and Bakery located on the Ossington Strip is worth the crazy line-up because it's got the perfect fit for everyone. They boast many unique ice cream flavours that can be eaten solo or served up in your choice of a pastry puff, cookie, macaroon, or Hong Kong waffle. My favorites include Burnt Toffee or London Fog ice cream in a Nutella Pastry Puff – although it's hard to go wrong at this place.

If you head North from there, you won't reach Santa's home but there's something that's just as magical as Christmas Cheer. Bakerbots is situated near Ossington Station and they serve up some killer Banana Pudding. It's light but so tasty and is composed of vanilla pudding, vanilla wafers, whip cream, and chopped bananas. Grab a Small (it's quite a lot) and stock up on that Potassium because it's good for you! Bakerbots also serves ice cream sandwiches and other treats that you may want to check out.

If you're not interested in travelling far but want a quick fix then head over to the Red Bench at Yonge and Wellesley. They make ice cream cookie sandwiches (Sammi's as they like to call them). Their cookies are the best I've had and not just because they're organic and home made.

Choose your gourmet cookie(s), ice cream, and toppings to coat on the side of the cookie and prepare to make your taste buds do backflips. If you're not looking for something cool, check out

their Made-to-Order cookies. Get those creative juices flowing because you're choosing the ingredients and in about 10 minutes you've got some warm cookies to call your very own

The very last place is the one I concluded my summer with. The Big Chill (near College/Bathurst) is a cute retro diner boasting many cow figurines. They're Cash Only so make sure you've got some moolah on you or head over to the BMO across the street. Don't underestimate its innocent appearance because this place packs one heck of a waffle. Simply sniff your way to this joint because you can smell their homemade waffles from a block away. Get a waffle, get a scoop of ice cream, and add your choice of sauce and toppings. Please have a friend or loved one nearby in case you lose your senses.

Hope you enjoy some of these full proof ways of extending your summer vacation!



Bang Bang



Red Bench



Big Chill

Restaurant Review: KaKa All You Can Eat

By Luo Fei Liu, Staff Writer (1T9)

Newly opened in the summer, this Markham restaurant has been quickly rising in popularity. What separates KaKa from other all-you-can-eat sushi restaurants is their offering of torched sushi and oshizushi (pressed sushi). These novelty items are definitely worth a try for any sushi lover. The quality of their fish is relatively decent with their sashimi coming out fresh. A complimentary sushi platter is served during dinner on weekends, which has items not available on their regular menu such as torched scallop sushi.

Even if you are not a fan of raw fish, KaKa has a wide selection of other dishes. With everything from grilled food items to ramen, there are also unique dishes not found in similar restaurants. Personal favorites include their Beef Sashimi, Spring Egg, Lobster Bisque, and their Baked Oyster with Cheese. As well, be sure to save room for their amazing dessert options where everything is



Spring Egg



Torched and Pressed Sushi

worth tasting!

The restaurant itself has a calm ambience, with dim lighting and comfortable sofas. The staff were friendly and it was very easy and efficient to order with their iPad menus. Certain food items did take longer to come out but this was understandable since they take a decent amount of time to make.

Lifestyle: Food - Restaurant Reviews

Although the restaurant has been open for over two months now, they are still extremely busy so it is recommended to make a reservation at least a week in advance. For those of you who do not live in the Markham area, KaKa is expecting to open a downtown location so be sure to be on the lookout!



Desserts from KaKa All You Can Eat Restaurant

Lifestyle: Out and About!

Toronto Must-Sees and Fall Activities on a Student Budget!

By Josephine Vu, Staff Writer (1T9)

Feeling adventurous? Day trips from PB to Tim Hortons just not cutting it anymore? Here are a few fun Toronto activities to try before the readings pile up, the stress levels rise, and the weather gets cold.

What: Guided Brewery Tour

Where: Steam Whistle Brewery (255 Bremner Blvd, Toronto ON M5V 3M9)

Why: Located at the historic John St. Roundhouse south of the CN Tower, Steam Whistle's world-class brewery is located right in the heart of the city and is one of the most iconic landmarks in Toronto. The Roundhouse, built in 1929, was originally a Canadian Pacific Rail steam train repair facility and still retains some of that old rustic charm today. For \$10, you can enjoy a guided tour of the brewery along with a take home souvenir (usually a vintage beer bottle opener). With complimentary pilsner throughout the tour and great Steam Whistle staff guides it's no wonder thousands of visitors explore the brewery each year for tours and various on-site events. After the tour, feel free to check out the Steam Whistle shop, snap a pic with the vintage trains outside of the Roundhouse, or stay for a few more pints.

Things to know:

- Tours run every day of the week from 11:30am to 5:00pm
- Monday-Thursday tours can be reserved in person via phone or online
- Friday-Sunday tours are first-come-first-served basis only (so arrive early!)
- Proper ID required to sample/ purchase

What: ROM Friday Night Live #FNLROM

Where: Royal Ontario Museum (ROM) (100 Queen's Park, Toronto ON M5S 2C6)

Why: Where else can you dance with the dinosaurs? Kick off the school year with one of Toronto's most unique social events. Presented by Ford of Canada, the eighth season of ROM Friday Night Live will run for 9 weeks and offers the city's hottest DJs, live performances, and a chance to experience the museum and its exhibitions after dark. Hungry or thirsty? Purchase a few ROM Bucks and trade them in for some unique food items or at the full service bar. #FNLROM is sure to deliver unique entertainment and cultural experiences with themed nights planned for the entire season:

Oct. 2 - nuitROM
Oct. 16 - Dig it!

Oct. 9 - Thanks Canada
Oct. 23 - C'est Fashion

Oct. 30 - Day of the Dead
Nov. 13 - Superstition
Nov. 27 - Volcanic Bash

Nov. 6 - Remembrance
Nov. 20 - Light

Things to know:

- Tickets are \$15 (\$13 for students) and go on sale Sept. 18, 2015
- Early bird tickets can be purchased online with a staggered release of tickets by date and early-bird ticket holders have guaranteed admission before 8pm
- Tickets can also be purchased at the door at 7pm the night of, depending on capacity
- 19+ event with valid ID required
- Bag check is free

What: Comedy Show

Where: The Second City (51 Mercer St, Toronto ON M5V 9G9)

Why: Originally from Chicago, the Second City started as a small cabaret theatre and became one of the most prolific comedy theatres in the world. Mixing sketches, skits, and improv, The Second City creates and performs comedy in a fresh new way and has a mainstage theatre and training school right here in Toronto. Several different shows are performed throughout the week, each running about 1.5 – 2 hours. Incorporating current events, witty satire, and even musical and dance numbers, the shows are sure to get a laugh out of just about anyone. The Second City Toronto offers a full bar and finger food menu throughout the performance. In case you're feeling fancy, The Second City also offers a dinner package at Wayne Gretzky's Toronto restaurant that includes reserved seating for Second City ticket holders and a special, 3-course prix-fixe dinner menu before the evening shows (prices vary according to day and range between \$39-\$50).

Things To Know:

- Tickets are \$14 every Monday
- Student tickets are available for late shows only (10pm or 10:30pm) Tuesday – Sunday (\$16 on Tuesday, Thursday, Sunday; \$18 on Friday, Saturday)
- Discounted Student tickets are available online (promo code: STUDENT) or purchased at the box office (valid student ID required)
- For improv lovers, late shows are usually followed by a 30min improv set where the performers come back on stage and incorporate audience input into the skits.

Bring Me the Horizon Brings You a New Sound! [An Album Review]

By Faizan Baig, Staff Writer (1T9)

Bring Me the Horizon (BMTH) is a British rock band from Sheffield, Yorkshire. Formed in 2003, the group currently consists of lead vocalist Oliver Sykes, lead guitarist Lee Malia, bassist Matt Kean, drummer Matt Nicholls and recent addition, keyboardist Jordan Fish. Oliver Sykes, the lead vocalist, who suffered from a ketamine addiction, which after overcoming, provided as a catharsis for much of his writing style. Their fifth studio album, *That's The Spirit* was released on September 11th, and implements a major, and I mean MAJOR, style change as they move from metalcore to alternative/indie-rock.

Track Listing:

1. Doomed
2. Happy Song
3. Throne
4. True Friends
5. Follow You
6. What You Need
7. Avalanche
8. Run
9. Drown [Album Version]
10. Blasphemy
11. Oh No



Oliver introduced this album by stating that he was done screaming, and instead wanted to sing. He stated that screaming could only convey so much emotion, that he needed singing to fully access those feelings and give it to us as the listeners. While it makes sense in theory, I'm not sure how well it played out in practice with this album. On a side note, I have already listened to the album about three times over to make myself familiar to it. So here we go, bear with me folks!

Beginning with **Doomed**, I thought that it would be a real banger of an intro considering it starts off the album. However, it begins with soft vocals, and touches of electronic music. It then kicks off into the chorus, catchy and heavier, Oliver climbing into a falsetto range, with a throwback sound to their previous album. Singing "I think we're doomed, and there's no way back". I can only imagine that it's Oliver's message to his listeners and the band's departure from their metalcore sound and how it might be received amongst the fans. Bridging into **Happy Song**, the most memorable part of this song is probably the cheerleaders chanting "S-P-I-R-I-T, spirit, let's hear it". It's definitely a heavier song, and is definitely not a very happy song, which makes me think of this more as a sarcastic and satirical of how most mainstream songs are. Towards the end of the song, the music style definitely shifts more into BMTH's older sound, with Oliver screaming and the heavy guitar style, telling his listeners to "sing along a little louder". **Throne** is basically what Linkin Park has become, an electronic rock song filled with synths and distorted vocals. The chorus reflects Oliver once again talking to his listeners saying, "every wound will shape



me, every scar will build my throne", reminiscent of his recent interview where he stated that no matter how the album does, they are never looking back and will continue with what they want to do. I definitely see this song as being a crowd favourite at concerts, upbeat and catchy. This next song I have a love and hate relationship with, and I'm torn on how I feel about it. **True Friends** is a catchy song for sure, borrowing string instrumentals in its recording to deliver its very powerful message, that "True friends stab you in the front" (huge "eyeroll"). I'm pretty disappointed with Oliver's lyrical work on this song, as he continues with lines like "You can run, but you can't hide, time won't help, 'cause karma has no deadline" (more "eyeroll"). Regardless, I do find myself bobbing my head along with the song which only further worsens my love/hate relationship with the song. With an R&B style intro, surprising to see in a BMTH song, **Follow You** is actually one of my favourite songs on the album. I almost want to call it a ballad, and in terms of metalcore, this is what a ballad would be like, but this love song is soft and easy to listen to. Oliver is again showing his range by hitting falsettos on each chorus, but keeping his raspy style of singing throughout. I basically have nothing else to say about this song right now; have a listen for yourself and see what I'm talking about. If that song isn't something that you enjoyed, perhaps this next one will be exactly **What You Need**, a fast, energetic head banging track. It definitely seems to draw from punk-rock style songs, with quieted lyrics and a loud chorus. Ending the track with a quick solo, another new thing to their style, I want to listen to the song once more, but because I'm doing this for you guys, I'll regrettably power through to **Avalanche** instead. Once again Oliver sings, and doesn't growl or scream, showing the surprising range in his voice. The chorus is catchy and memorable, though the song itself is easily forgettable amongst the other songs in the album. If that doesn't make any sense, email me at faizb@hotmail.com and I'll be sure to explain to you why it doesn't make any sense to me either. I hope you haven't **Run** away from this album review section yet, because this track is pretty interesting. Upbeat, and using a lot of drum beats to drive the song through the slow verses, I have come around to enjoy it. Oliver continues to deliver his lines powerfully, especially along the chorus, where he could be shouting or using his falsetto, again showing his range. The different "genres", for lack of a better word, of each song actually hold the album together really well, and show a more experimental side to the band instead of relying on one genre. **Drown** is a single that was released previously between *Sempiternal*, the last album, and *That's The Spirit*, and was actually incorporated into the latter one. Interestingly enough, Jordan Fish, the keyboardist commented that if this song made it onto the next album (now known as *That's the Spirit*) then something was very wrong. However, this song fits very well with the album, a more heavier song with some sounds borrowed from *Sempiternal*, it could have been in either album and none would be the wiser. Oliver starts **Blasphemy**

strong with a good ol' "You got hell to pay", though the song isn't as heavy as I would have expected it to be with a title like that, it still remains to be a solid song. Oliver has previously used very angry lyrics and songs to deal with his own anti-religious sentiments that he believes in. Here he seems to have put that feeling behind him and gives it one last send off as he moves on to different topics and themes. Have you ever associated saxophones and club music with a metalcore band? Well, now you can experience it all with **Oh No!** Honestly, I have no idea how to feel about this closing track, it screams party music, a foreign concept to a band like Bring Me The Horizon. However, with that in mind, it's still a pretty catchy song to listen to, even with a random saxophone solo in the middle of it. Compared to **Hospital for Souls**, the closing track for their previous album, *Sempiternal*, I expected a stronger song.

Overall Opinion: The album is good, but disappointing as a Bring Me the Horizon album. **Doomed** is probably one of the best songs they've ever made, and I really wished that they had carried on the tone of that song throughout the rest of the album more consistently. It was too all over the place in terms of sound for me, and the lyrics were very weak. If you listen to *Sem-*

piternal their previous album and compare it with this one, you'll understand exactly what I'm talking about.

I would prescribe this album **4 Adderall's out of 5** to treat it's distracted-all-over-the-place feeling.

Favourite Songs: Doomed, What You Need, Follow You
Least Favourite: True Friends [----why, oh why these lyrics!]

If you enjoyed listening to this album, I suggest listening to: *Sempiternal* by Bring Me the Horizon, *The Hunting Party* by Linkin Park, *Sempiternal* by Bring Me the Horizon, and *Sempiternal* by Bring Me the Horizon (You can tell I really loved *Sempiternal*)

Next genre we will be covering is...I have no clue yet! So please send in suggestions if you can, I am looking for new music, preferably albums released in October/Late September.

If you have any questions, comments or concerns please do not hesitate to email me at faizb@hotmail.com

Album Review : Kurt Vile – *b'lieve i'm goin down...*

By Stefan Saragosa, Staff Writer (1T8)

On indie rocker Kurt Vile's September release **b'lieve i'm goin down...** the veteran singer-songwriter delivers an entertaining record filled with well-crafted, catchy tracks that showcase Vile's infectious Philly twang.

The single 'Pretty Pimpin' opens the album with acoustic guitar picking and Vile musing absently but humorously about identity. Airy, dreamy synths and some very sweet overlaid vocals all groove together nicely around the mantra "I woke up this morning and didn't recognize the boy in the mirror." The track fades out and is followed by the banjo-accented folk jam about lonerism, 'I'm an Outlaw' that paints Vile as a tongue-in-cheek badboy. This track harnesses a raw, crisp aesthetic which alternates well with the hazier, more psychedelic tracks. A bright piano rhythm opens up 'Lost my Head there', a song about Vile seeking refuge from troubles in music. Rising xylophone, light vocal samples, sharp percussion and a lone kazoo colour this track's production.

'All in a Daze Work' is a return to the psychedelic folk Vile expertly peddled on his critically-acclaimed *Wakin On A Pretty Daze* in 2013. Vile's vocals are meant to mesmerize the listener as he repeats "All in a Daze Work," subtly upshifting the tempo of his picking, drawing the listener in for the simple guitar harmonies that unwind the track. 'Wheelhouse', is a fuzzy, whirring track that revisits the themes of lonerism and things sacred. 'Life Like This' is a curious piece that has Vile rambling and bragging over melancholic piano rhythms. Though for the most part, the themes and sounds are varied, tracks such as 'Lost my Head there' and 'Bad Omens' suffer poor pacing, expose some weak and corny lyrics.

In short, Kurt Vile delivers again with a catchy, mature, lush indie rock record.

RATING: 7.8/10

ESSENTIAL TRACKS: Pretty Pimpin, Wheelhouse, Lost My Head There, Wild Imagination



TIFF 40: The Movies to Add to Your Must-Watch List!

By Alessia Forestieri, Staff Writer (1T7)

The list of films at the Toronto International Film Festival this year is long and impressive, and many of the films have left festivalgoers very excited. In particular, **The Martian**, which stars Matt Damon as an astronaut stranded on Mars, has received overwhelmingly good reviews. **The Danish Girl**, with Oscar-winner Eddie Redmayne starring in a transgendered role, has also been the recipient of great praise from TIFF audiences. While I haven't been able to watch either of these movies yet, I have seen some enjoyable, buzz-worthy films at the festival:

Brooklyn



Saoirse Ronan is fantastic in the role of an Irish immigrant who is trying to make a new life for herself in 1950s New York. The film realistically depicts the struggle to adjust to a country and culture that is different than one's own. The character does eventually thrive in her new surroundings, mostly as a result of the romantic relationship that she establishes with a charming Italian-American, and it is this budding relationship that is truly the heart of the film. The screening

ended with a powerful standing ovation, reflecting the deep connection that the audience felt to the story, the characters and the difficult decision to choose between a life that is familiar and safe, or one that is uncertain but potentially so much more.

Youth

Set in a resort for the rich and famous in the Swiss Alps, this is a film that explores the themes of aging and friendship. It is also

a film of absurdities and the large cast of quirky background characters drives the storytelling. While there seemed to be a bit lacking in terms of plot, this was balanced by the superb acting from Michael Caine as well as great moments of intense emotion from supporting actresses Rachel Weisz and Jane Fonda.

This Changes Everything

Based on the book of the same title by Naomi Klein, this powerful documentary gives examples of damage due to climate change in various parts of the world. The common theme throughout is that human beings view the Earth and its resources as something that we own and can manipulate to our liking without consequence, and that is proving not to be true. The film stirs feelings of anger and outrage in the viewer, especially because of the striking images of the tar sands and oil spills. I highly recommend this documentary to those who are activist-minded or simply want to learn more about environmental change on a global scale.



There's at least a dozen other films that I could have reviewed in this article - the TIFF line up this year was fantastic. I highly recommend trying to watch the film that wins the Grolsch People's Choice Award (to be announced on September 20), because if past years winners (*The Imitation Game*, *Silver Linings Playbook*, *12 Years a Slave*) are any indication it's bound to be a great one.

Entertainment: Literature

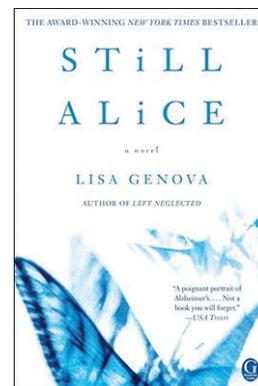
Recommended Reads: *Still Alice* by Lisa Genova

By Naomi Lo, Staff Writer (1T8)

This is a corner for any bibliophiles and bookworms who are searching for their next conquest. Featuring my personal thoughts and commentary, I share recent literature that I found worthwhile to read.

I found this widely acclaimed novel when there were news of a film adaptation, and recognized the author's name, Lisa Genova (*Left Neglected*). Although this was her debut self-publicized novel, she writes with a deft hand, realistically painting a first-hand account of an Alzheimer's patient. In the first few pages, her prose is convincing as she describes the seemingly normal life of Alice Howland, a Harvard psychology professor and linguistics lecturer. Alice, balancing family and career, is constantly on the move, with all her days planned out. However, things begin to spiral out of her control as she starts to show the symptoms of dementia. There is a sense of helplessness as Alice tries to understand her sudden memory lapses and confusion. Unaware of her genetic pre-disposition to Alzheimer's, she misdiagnoses herself, until her career is significantly affected. Then, she sees a neurologist, and finally finds the answer she was praying not to hear: early-onset Alzheimer's disease. Genova carefully outlines

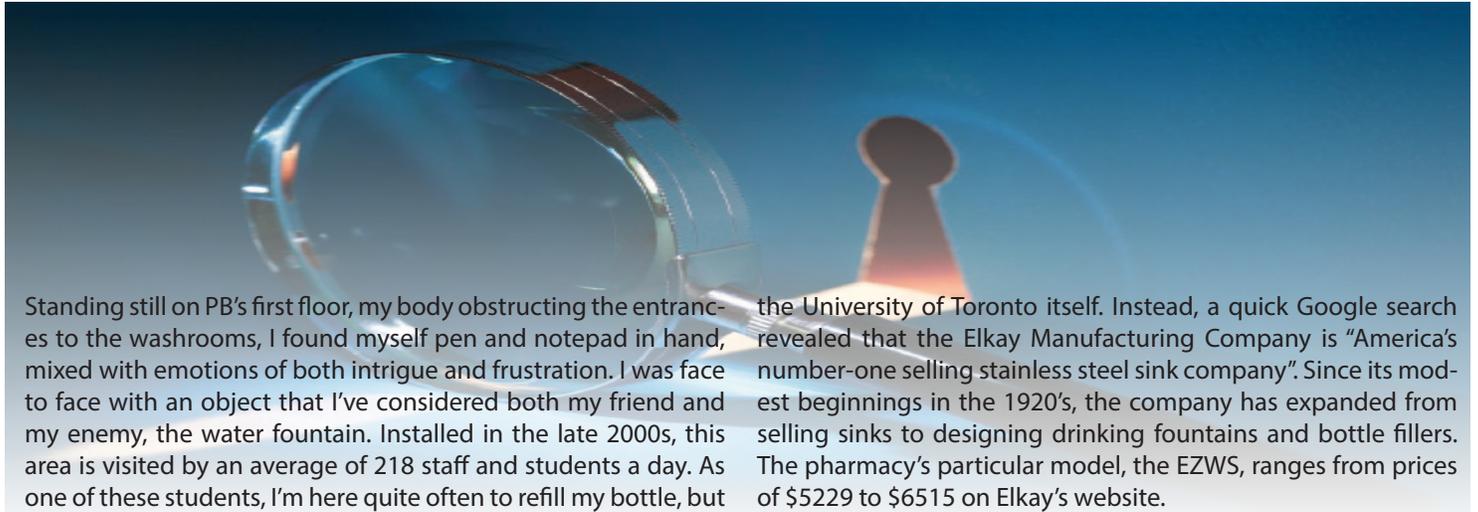
the various reactions of Alice's family and friends, who show their support for Alice in their own ways. Though it is unnerving to witness the rapid deterioration of Alice's mental capabilities, it also candidly reveals the cruel nature of this incurable illness. Unforgiving and uncertain, we can see how much she changes; from a woman to being itant and uncertain. gives lectures, does even go for a run self. She struggles to children's birthdays, her house address, and even her own name. Yet, on this path of loss and desolation, Alice still retains fragments of her personality, and spreads hope to others suffering from the same illness as her. Although we know how Alice's story ends, it is nonetheless a story that will be remembered.



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Jimmy Tieu – PPI (Pharmacy Private Investigator): Where Did All the Water Go?

By Jimmy Tieu, Staff Writer (1T7)



Standing still on PB's first floor, my body obstructing the entrances to the washrooms, I found myself pen and notepad in hand, mixed with emotions of both intrigue and frustration. I was face to face with an object that I've considered both my friend and my enemy, the water fountain. Installed in the late 2000s, this area is visited by an average of 218 staff and students a day. As one of these students, I'm here quite often to refill my bottle, but today I was here for a different reason – to conduct an in-depth investigation into the fountain's inner workings.

The fountain is filled with unique features that set it apart from the ones that you would typically see if you visited your old elementary school. Two separate level drinking areas, a spout for your water bottle and an electronic counter of environmental friendliness. I loved it when I first saw it; unfortunately, I slowly realized that there was a problem with this fountain, and I wasn't alone.

"Sometimes I feel like if you put your cup outside while it's raining, you'd get more water than you do at that fountain" expresses Viv T (1T7), a frequent visitor. "I hate that water fountain, it doesn't work like 80% of the time" added an anonymous student. When asked about his opinion, Ryan Co (1T6) stated that "My washroom trips are shorter than the time it takes to fill a container". With the thoughts I had gathered so far, I started to wonder how many other students shared similar feelings for the machine.

Suddenly, it dawned on me that standing alone in the middle of PB was generating a bit too much attention, so I walked forward to inspect the fountain. To my surprise, it was fully functional, with cold, fresh water coming out in a steady stream. It was in perfect condition for the new school year.

It's seldom that the fountain works this well as many 1T6's, 1T7's and 1T8's can recall the times of weak water flow and droughts that plagued them last year. During one particular instance, the fountain began to dispense less and less water until at one point, it completely stopped functioning. As a result, students have come up with quite a few nicknames for the drinking fountain; ranging from simple ones such as air dispenser, to wittier ones such as the BPH fountain. But if this is the case, what is the tamsulosin to the fountain's BPH?

Inscribed in both blue and white text across the top of the fountain I saw the words "Elkay EZ H2O", which I never noticed earlier. I had always imagined that the fountains were constructed by

the University of Toronto itself. Instead, a quick Google search revealed that the Elkay Manufacturing Company is "America's number-one selling stainless steel sink company". Since its modest beginnings in the 1920's, the company has expanded from selling sinks to designing drinking fountains and bottle fillers. The pharmacy's particular model, the EZWS, ranges from prices of \$5229 to \$6515 on Elkay's website.

However, my search still wasn't getting me the answers I wanted. Why does the water flow get so weak and why does it break down so often? I went to seek out the caretaking staff in our building and was able to find someone to speak with me. To my surprise, I found out that it's not the job of the caretaking staff to manage the fountain, but rather our faculty has to call another department on campus that specializes in fountain issues.

The person who makes that important call is Olga, our first floor receptionist. I decided to interview her as she kindly took the time to help answer my questions. "The fountain usually never really breaks, but it's the filter that's the problem" explains Olga. "Over time, the filter stops working as well and slows down the water flow; that's when it needs to be replaced". Unfortunately, obtaining the filters for the water fountain can be difficult to obtain and often takes 2 weeks to ship once ordered. Recently, Olga has been ordering multiple filters at once so that workers can replace the ones in the machine quicker.

With the high volume of users during the school year, it can be difficult to keep track of the fountain's status, which is perhaps the main reason why droughts can occur. Olga suggests that it's best to let her know once the fountain's water flow slows down so she can call the other staff to replace the filter.

I think it's important to keep in mind that the water fountain is free, conveniently placed, and offers an easy way to refill your bottle. So perhaps we shouldn't be too hard on the fountain for its trouble dispensing water. In any case, we of all students should understand that there's a lot more that happens behind the scenes when it comes to dispensing.

844 bottles were saved by the Elkay EZ H2O during the course of this investigation.



Aspirin: a Journey of Serendipity

By Shan Liu, Staff Writer (1T9)

It was August 10, 1897, when the 29-year-old Bayer chemist, Dr. Felix Hoffman, reported his successful synthesis of acetylsalicylic acid (ASA) in his laboratory journal.

SA, a natural health product, can be extracted from willow barks or meadowsweet. Along with its analgesic effects, it also causes gastric irritation, nausea, and bleeding. For a long time, the use of it as a natural pain remedy was only prevalent among women herbalists, while the extraction from Peruvian trees, better known as quinine, was used more often as an antipyretic for the treatment of malaria for the general public.

In mid-18th century, Reverend Edmund Stone tasted a willow bark by accident. As willows tend to grow along moist riverbanks, and its barks have an extraordinary bitter taste, both of which resemble the Peruvian trees, the reverend suspected that it might also have important therapeutic benefits. He then prepared some powdered willow bark, and tested its effects on himself and 50 other patients to satisfy his own curiosity. For some patients, the willow bark powder was insufficient to get rid of their fever; for many others, its duration of action was not long enough, and the distemper that it takes away returns quickly.

In 1806, the supply of quinine came short. As Emperor Napoleon I of France decided to block the trading vessels between European mainland and England, the import of Peruvian bark from South America drove the price of quinine up. Suddenly, the imperfect willow bark juice became an ideal substitute. Soon after that, the active ingredient, SA, was identified. It was first chemically synthesized by Professor Hermann Kolbe in 1859, which significantly reduced the cost of SA and made it more readily available.

In spite of the therapeutic benefits, the discomfort resulted from SA consumption led to very low compliance and low therapeutic outcome. As the son of a long-term rheumatoid arthritis sufferer, Dr. Hoffman was very well aware of the disadvantages of chronic SA treatment. With the less corrosive pure ASA synthesized, the next step is to test its efficacy.

When Dr. Heinrich Dreser was first asked to examine the chemical synthesis method and the pharmacological profile of this Bayer's future best-selling drug, he refused. He was occupied by the other drug that Dr. Hoffman synthesized, heroin, as it appeared to be a promising tuberculosis and morphine addiction treatment. Despite his initial refusal, Dr. Dreser later became a zealous supporter of, who praised its "invariable effectiveness against pain, inflammation, and fever" with "no side effects on the heart or stomach" in his eloquent and influential laboratory report. This is comprehensible, for Dr. Dreser, the chief pharmacologist of Bayer at the time, was credited on the patent of aspirin and made quite a fortune from this. Later in February, 1899, ASA was officially registered with patent No. 36433 in Berlin.

Without much advertising by Bayer, aspirin proved its effectiveness during the Spanish flu and the World War I, the prescription

and sales of aspirin soared around the world.

The mechanism of action of aspirin was not discovered until



1971, but its discoverers became the Nobel Laureates of 1982. The anti-pyretic, anti-inflammatory, and analgesic effects of aspirin-like drugs were correlated to the physiological effects mediated by prostaglandins.

Prostaglandins are eicosanoids, and they all share the same carbon backbone. This structural resemblance is not a coincidence, as they are all derivatives of a common precursor, arachidonic acid. The first step of prostaglandin synthesis is the conversion of arachidonic acid to cyclic prostaglandin endoperoxide (PGG and PGH), which is carried out by an enzyme called prostaglandin-endoperoxide synthase, also known as cyclooxygenase (COX). In 1975, Roth et al. showed that aspirin acetylates the active site of COX, which covalently and permanently inhibits the activity of COX and thus exerts its functions.

However, aspirin is not without adverse effects, especially since it is a non-selective inhibitor of both COX-1 and COX-2. While the inhibition of COX-2 makes the inflammatory responses much more manageable, the inhibition of COX-1 is thought to be particularly problematic. One of the most common side effects is gastrointestinal ulcer, as aspirin blocks the secretion of the protective mucous layer. The other major side effect caused by COX-1 inhibition, but instead of being viewed as a negative off-target effect, it is now the major therapeutic use of aspirin, whose study started in 1950 by Dr. Lawrence Craven.

Because of aspirin's analgesic property, it was commonly used by surgeons during operations. It was observed, that these patients tend to experience longer bleeding time. In fact, vitamin K was commonly prescribed then to combat the excess bleeding associated with aspirin use. Dr. Craven, who performed tonsil removal on a regular basis, proposed in 1950 that as aspirin is shown to prolong prothrombin time, it could potentially prevent coronary thrombosis and myocardial infarction (MI). In order to verify the premise of his hypothesis, twice did he take 12 aspirin tablets (3.9g) daily for 5 consecutive days, and profuse nose bleeding was experienced as expected.

Interests

His proposal received a substantial amount of positive responses from physicians. Although they were unable to decipher the mechanism of this anti-coagulatory effect at the time, it was shown that aspirin interferes with platelet aggregation. Dr. Craven then recommended the daily use of aspirin for people who are 45-65 years of age or are predisposed to having MI. Dr. Craven himself, ironically, passed away at the age of 75 due to MI, possibly because he was no longer within the age range that he recommended.

When the collagens of the endothelial cells are exposed, which usually indicates vascular injury, it soon attracts and activates platelets to seal the wound. While platelet aggregation is desirable in this case, its activation can sometimes cause trouble. For example, when macrophages enter the endothelial layer of blood vessels to digest lipid particles, they expand, form local vortices, and cause the exposure of collagens. All these anomalies can cause platelet aggregation. As the plaques flow in the systemic circulation, they can block small capillaries, which cause thromboembolic diseases, such as stroke and MI. One of the prostaglandin derivatives, thromboxane, is secreted by platelets, and is crucial for platelet survival. When aspirin is used, the platelet counts decrease, and the plaque-forming ability becomes limited. This is also the reason why the half-life of aspirin is only 2 hours, but its effects on platelet aggregation appear 10 hours later. If it weren't for the beneficial role that aspirin has on the cardiovascular (CV) system, aspirin would not have remained as Bayer's best-selling drug.

Bayer has been making use of this protective feature. They advised chewing aspirin during a suspected heart attack, as well as taking a low-dose daily aspirin regimen to reduce the risk of

heart attack or stroke, though this regimen may not be applicable for everyone. As a very affordable CV protective drug, aspirin has a large and diverse consumer population, which provides a good basis for clinical trials. Several factors were shown to contribute to the complex situation: age, concomitant use of other drugs, history of heart attack, and genetic make up.

The prognosis and diagnosis of the effects of aspirin are based on two outcomes: primary, which includes stroke, MI and sudden death, and secondary, which are mainly vascular events. In general, daily aspirin regimen alone can reduce the rate of developing MI or unstable angina by 50% after the primary event, and the mortality rate decreases by 25%. In acute stroke treatment, 90% of patients are shown to be responsive to aspirin, although the effect is short lasting in 30% of these patients. In the younger population, the use of aspirin is preferred to warfarin, an anti-coagulatory agent instead of an anti-thrombotic agent, as it is effective as a maintenance treatment, and the dose is easier to control. In the older population, however, although warfarin seems to be slightly more effective than aspirin, as the risk level is rather high, neither one of the treatments is sufficient to provide substantial preventive effect.

Aspirin has been used as an anti-inflammatory agent for 115 years. When its rivalry, Tylenol and Advil, comes, it found its new way out by being a great preventive treatment for heart attacks for the past 65 years. Nowadays, although it is less prescribed than beta-blockers or statins, it starts to show its usefulness in the field of cancer suppression. The long history of aspirin is full of surprising finds and miraculous outcomes. There is no doubt that aspirin will continue to lead us on a journey of serendipity.

Apps to Get You Back in the School Groove!

By Yannan Liu , Staff Writer (1T9)

Alarm Clock Xtreme (Android)/ Alarmy(iPhone)

Back to school means getting up early again, and if you're someone like me who sets up 16 alarms just to snooze through all of them and show up late anyways, I think these two apps will be very helpful. I personally use Alarm Clock Xtreme, an app which makes you answer a number of math problems of varying difficulty before it turns off (and trust me, when you're half awake, $65 \times 14 - 327$ doesn't seem so easy with your phone screaming at you). Alternatively, you can use Alarmy if you own an iPhone which forces you to get up and take a picture of your sink before it turns itself off... so you can fall asleep in the sink! Both have many settings and are free on the respective app stores.



Duolingo

Duolingo kind of feels like if Candy Crush Saga and Rosetta Stone got hitched, had a kid, and let that kid teach you Spanish, German, French or a number of other languages. Small exercises teach you vocabulary and phrases, and then reward you with points for completing the challenges which can quickly get ad-

dicting. And again, like my other suggestions, it's free. Try it out! It may give you something better to do during study breaks and long bus rides. C'est magnifique!



Mint

As students, personal finance will always be something we need to manage on a daily basis. If you need some help keeping track of spending and budgets, Mint is one of the many apps you can use! While it may get tedious entering every transaction you've made today, that 10 minute investment may help you stay within your weekly budget or even prevent that heart attack when you get your next credit card bill. Sometimes, all you really need is just a small reminder to cut down on unnecessary spending. And yes, of course, this app is also free! (Good personal finance probably means NOT paying \$10.99 for a personal finance app.)



Yours to Discover—University of Toronto Campus

By Erin Cicinelli, Staff Writer (1T7)

As pharmacy students, it is easy to become wrapped up in our little corner of campus, but there are rich cultural events, great cafés, and opportunities for adventure awaiting beyond the Pharmacy Building! Here is a list of ten delicious, entertaining, or just plain quirky ways to discover the University of Toronto campus and all it has to offer.

1. Stargaze at the Department of Astronomy and Astrophysics' Planetarium and Observatory

On the first Thursday of most months, free AstroTours are hosted by graduate students of the Department of Astronomy and Astrophysics. Tours run for two hours, and consist of a talk, planetarium shows, and telescope observing.

2. See a Play at Hart House Theatre

Hart House Theatre has been called the cradle of Canadian Theatre, and some of the country's finest actors, directors, and playwrights got their start right here! This season's offerings include *Into the Woods*, *Hamlet*, and *We the Family*.

3. Try a New Campus Café or Restaurant

You cannot live on ramen, Timbits, and Kraft Dinner alone, and there is no shortage of nearby healthy food options. Try Harvest Noon Café, Veda Healthy Indian Takeout, The Exchange Café, or The Green Beet, just to name a few.



Coconut mixed vegetable curry from Veda Healthy Indian Takeout

4. Stock Your Bookcases at a College Book Sale

I know how much you enjoy poring over your copy of *DiPiro*, but if you are in the mood for some new reads, check out the annual University of Toronto Book Sales. Thousands of books covering every subject imaginable are available at very low prices, and the selection includes many rare finds and out-of-print titles.

5. Fix Your Bike for Free at Bikechain

If you are brave enough to ride a bike on Toronto streets, Bikechain is for you! Located at 563 Spadina Crescent, this not-for-profit cycling organization offers free bike lending, workshops, and a do-it-yourself bicycle repair space.

6. Explore a New Library

When the fluorescent glow of Robarts starts to get you down, or when the mid-term season aroma of unwashed bodies and stale food in PB becomes overwhelming, try testing out a new library. Our library system is the largest in Canada and is ranked third

in North America, behind only Harvard and Yale. If you are not sure where to start, I recommend the John W. Graham Library at Trinity College, which offers cozy reading rooms with arm chairs and fireplaces.



Reading room at John W. Graham Library

7. Attend a Performance at the Faculty of Music

Not all great music is downloadable from iTunes. Each week, you can catch performances by talented students, the University of Toronto Symphony and Concert Orchestras, and a variety of ensembles. Admission for many performances is free, but you don't need to tell that to your date.

8. Sneak Into a Lecture

I know what you are thinking: "I WILL NOT spend my free time attending more lectures!" But with literally thousands of courses to choose from with titles ranging from "The Beatles" (MUS 321), to "Austen and Her Contemporaries" (ENG 323), to "Public Nudity: History, Law and Science" (HPS 204), you are guaranteed to find something that peaks your interest.

9. Harvest Some Vegetables at the Sky Garden

Located atop the Galbraith Building, The Sky Garden is one of Toronto's largest rooftop vegetable gardens (yes, that's a thing). Harvested produce is donated to campus food banks or divided among volunteers, so you might just be able to pick your dinner!

10. Make (and taste!) Maple Syrup at Hart House Farm

Escape the hustle and bustle of the city at this 150-acre retreat located in Caledon. In the spring, you can attend the annual "Sugaring Off," featuring a maple syrup-making workshop, pancake brunch, and a chance to participate in a polar dip. Other Hart House Farm events include the mid-October "Cider and Song" and a "Winter Escape" each February. Register early to reserve your spot!



Hart House Farm

Campus Drama

By Lyudmyla Pashkivska, Staff Writer (1T9)

Welcome to the column where I will be sharing reviews of Hart House plays for this season. In this issue I will describe my experience with the theatre and the performances at the University of Toronto's very own: Hart House.

My relationship with the theatricals has been complicated. As a child, I was frightened by glimpses of plays on TV, especially the solemnity of adult performers. As a high school student, I found Shakespeare outdated and convoluted. However, my opinion changed as I started attending plays. Live performances provide extra context through gestures, costumes, sets and music that make the script immensely more enjoyable and accessible.

One of my favourite places to watch plays is at UofT's theatre located in the historical Hart House. There are numerous reasons that make this site so interesting for me. The performances are high quality and amusing. Also, a large portion of the theatre is run by our fellow UofT students, so it is easy to relate to them. Moreover, our alma mater produces not only top scientist and engineers but also top actors and directors. For example, Donald Sutherland, who played the roles of Mr. Bennet in the 2005 adaptation of *Pride and Prejudice* and President Snow in *The Hunger Games*, performed on the Hart House stage during his undergrad at UofT. Similarly, Lorne Michaels, the creator and producer of *Saturday Night Live*, was a director of comedy skits named *Follies* that took place at this prominent U of T

stage. Another reason I like attending Hart House Theatre is that as students, we get great ticket discounts. For fifteen dollars, a price of a movie, one can attend a theatrical play and pretend to be a "cultured snob"!

Over the last two years, I have seen six performances at this location. They included comedies, musicals, modern dramas and the works of Shakespeare. A play titled *The Importance of Being Earnest* was my favourite because the skilled delivery of lines made the whole audience laugh uncontrollably. *The Wedding Singer* was another great production that showed heart-break and new love using very catchy tunes. I was wonderfully surprised by *This Is for You Anna* and the set design that complemented the serious themes of violence and justice. The wonderful choreography of the spirits in Shakespeare's *The Tempest* added to the magical feeling of the play.

The 2015 – 2016 season has many promising titles including *Into the Woods*, *Boeing, Boeing* and *Hamlet*. The next play to be performed is *We the Family*, which will be running September 18th to October 3rd. It deals with ideas of intercultural relationships in a comedic yet dark way. As someone dating outside my ethnicity, I am looking forward to the Canadian author's interpretation of this phenomenon. I will tell you all about it in the next issue of The Monograph!



Becoming a Health Professional

By Kathryn Carson (1T9)

It took me three years of applying to U of T to finally get accepted to this prestigious program. I will forever remember the emotions that overwhelmed me as I read that simple word 'Congratulations' in the subject heading. I was in, I was going to be a pharmacist! I dressed up and went to an expensive restaurant that night to celebrate with fancy drinks. People asked what I was celebrating, I would tell them and they were happy for me but little did I know my celebratory news was also about to become my life sentence - that of being a future health professional.

When I was an undergraduate student my family and friends knew how to talk to me, approach me. Now just the mere fact that I have been accepted to pharmacy school leaves them with apparently one subject to talk about – their health issues and what I can do about them! All of the sudden I am being held to a higher standard and expected to know EVERYTHING (even though I haven't learned anything yet!). My family members now deem it reasonable to dish on the nitty gritty details of their foot fungus and asthma inhalers that are malfunctioning – pulling me into their rooms to show me their new weird rash or ingrown hair. All I want to do is yell 'I DON'T KNOW ANYTHING YET – DON'T YOU GET THAT!' It does not seem to occur to them that an acceptance letter doesn't automatically result in the upload of 4 years of material into my brain, like what?

This issue doesn't just extend to my family members and friends, but apparently the general public as well. I recently went on a last minute trip to New York City (the whole 'I have so much money now that I have a credit line!' idea). On my flight back to Toronto the lady beside me couldn't stop asking me questions (apparently she didn't connect well with her daughter so was taking advantage of me...). I



tried to avoid the subject of pharmacy school but in the end it was inevitable. To my surprise she didn't react the way my family members had – she said congratulations and we moved on. LITTLE DID I KNOW however... that the entire row in front of me was apparently listening in and clearly spent the rest of the flight scheming up what they should ask me when we landed.

Thirty minutes later we land, seatbelts are off, were standing in the aisle, they turn around (6 of them) and immediately start bombarding me with questions! 'My back is sore, can I take aspirin for that?' 'I'm deaf in my ear! How do I stop this from happening?' 'My 2 year old has a cold, can I give her Tylenol?' 'Where is the closest pharmacy?' 'Give us free drug advice!' I swear the whole plane was looking at me... I stood there basically silent, contemplating just how I was going to deal with this situation and those that I had decided I would inevitably encounter in the future. What is the best answer to give? I can't give them advice, I'm not licenced, I don't know anything yet? I'm scared, I'm nervous, I just want to meet a bunch of people during 'Phrosch' week and get drunk, I'm not ready to counsel... oh my god, HELP!

Thankfully in the end, my MMI preparations kicked in and I kindly and empathetically claimed ignorance and suggested they seek help after we got off the plane and all was well. But these experiences leave me with an understanding of what it means to be a health professional. People immediately respect and trust you with their personal information. Even being a student, who hadn't even started pharmacy school, these strangers were ready and willing to listen to any advice I could give them. I imagine similar situations have happened to others so I decided to write this to let you know that you're not alone – and I would love to hear other people's funny stories. But for those of you who have yet to encounter this phenomenon, let this be a lesson to you: Do not tell anyone you're in pharmacy school! You know nothing. If you tell them otherwise, there *will* be consequences and it might just get awkward.

A Pharmie's Summer Adventures

By Boyd Hao (1T7)

This summer, I had the chance to visit my two hometowns, Hong Kong and Wuhan (China) for about 3 weeks individually. As a pharmacy student, one thing that cannot escape your mind, wherever you go, is your constant attention to anything drug- or health-related which instantly stimulates your brain into a "must look out for those DTPs" mode (#truepharmie). Even as I tried to drown out my pharmacy student senses through the mouth-watering cuisines and beautiful sceneries of my hometowns, I cannot outrun the drug life in me. Thus through the Monograph, I wanted to share some of the interesting observations from my trip with my phellow pharmies to provide a different perspective of pharmacy from the other side of the world. And if you wanted to be a true pharmie keener, think about some of the potential DTPs and safety issues that could occur with some of these cases as you read through this while munching on your lunch.

1. In Hong Kong, oral contraceptive pills like Yasmin, Yaz, Alesse, etc. can be found as OTC medications in pharmacies which anyone can purchase. Yup, these seemingly harmless little pills can be found right next to your regular Tylenols (Fun fact! Acetaminophen is commonly known as paracetamol in many parts of Asia)

2. Antibiotics like ampicillin, amoxicillin, cefixime and norfloxacin tablets can be purchased as OTCs from any pharmacy in Wuhan, China.

3. Despite the lack of consistent evidence of efficacy with many herbal medications, some Traditional Chinese Medicine DO work! lot of Chinese people rely on these or diseases ranging from neurological disorders to cardiovascular and musculoskel-

Student Experience

etal conditions. I was in complete shock when my grandmother, who's had diabetes for over a decade, completely replaced her insulin injections with this pill that contained 6 or so different TCM herbals 2 years ago. I was very worried at first but to my surprise, her blood glucose readings have been within normal range ever since. Important pharmacy lesson: some herbal medications may seem sketchy, but keep an open mind and never completely doubt their efficacy or importance in treatment.

4. IV Antibiotics all day errday. In China, being prescribed IV antibiotics is like as common practice as taking Tylenol whenever you have a cold or the flu. You have a cough that's been bothering you for a few weeks? Go see the doctor and BOOM IV antibiotics. Have a fever? BOOM IV antibiotics. Doctors like this method because it is effective. Patients like this method because it is faster than taking pills. Yes, this doesn't make any sense, and I know you can probably think of a thousand things wrong with this, but giving IV antibiotics is very common practice in China. I further looked into this issue and statistics showed that an average Chinese person consumed 10 times the weight of antibiotics consumed per capita in the US. It was also found that 70%

of inpatients in Chinese hospitals received antibiotics (contrasting to the World Health Organization recommendation of 30%). If any of you are interested in this issue, I would strongly recommend reading the Times article "When Penicillin Pays: Why China Loves Antibiotics a Little Too Much" (google it!)

All in all, the drug life will follow you wherever you go, and your keen senses to always look out for those DTPs will always be there (even when you think your brain is on holiday mode). And lastly, of course as the IPSF (International Pharmaceutical Students' Federation) Rep, I have to tell you all that as pharmacy students, we do have the opportunity to travel to another country and experience the pharmacy student life there through the Student Exchange Program (which you can ask me about!).



The Canadian Pharmacists Conference 2015 - Ottawa, ON

By Caitlin McIntyre (1T6)

This year the Canadian Pharmacists Association (CPhA) and the Ontario Pharmacists Association (OPA) cohosted the Canadian Pharmacists Conference in our nation's capital. This conference was the CPhA's largest conference to date, and hosted over a thousand participants including pharmacists, pharmacy students, and pharmacy technicians. The OPA also hosted a one-day Pharmacy Technician Professional Development Conference – their first conference for pharmacy technicians!

Before the official start of the conference, I had the opportunity to get to know the city of Ottawa and participate in the Centennial Leadership Awards Program as one of the CPhA's Centennial Leadership Award winners. Since this award is given to one pharmacy student from each of the ten schools of pharmacy in Canada, I was able to meet pharmacy students from across the country. The CPhA had many team-building activities planned for us over the few days leading up to the conference including biking along the Rideau Canal, bouldering (rock-climbing without a harness!), and a haunted walk of Ottawa. We also had dinner with the CPhA board of directors; most of which were previous Centennial Leadership Award winners. It was very motivating to see their passion for our profession and to listen to how they got to where they are today.

Throughout these activities, the ten of us students got to know each other and became friends. Even though we were all from different provinces, we quickly realized how much we had in common. As I'm sure you know, the scope of practice for pharmacists varies from province to province, so it was really interesting to hear first-hand about what pharmacists can do across Canada.

The first day of the conference was very exciting and included

many interesting talks. The Grand Opening featured the launch of the CPhA's new mission, vision and strategic plan since the CPhA had undergone several changes since 2014. The launch also outlined three priority areas: "Lead, Educate, and Innovate", which were very much the themes of the conference. There were many presentations from speakers across Canada who came to teach us about their area of expertise including therapeutics, pharmacy practice, business, and research.

The first night of the conference was the CPhA/OPA Awards ceremony. It was an honour to represent our faculty and accept my award in front of my friends and colleagues. Listening to the speeches of the other award winners was very inspiring; they have done outstanding work and have accomplished so much for our profession.

The next two days of the conference were filled with fascinating speakers, research presentations, and the tradeshow (so many samples!). Also, our Faculty hosted a "U of T Night" at one of Ottawa's breweries, Lowertown Brewery, which was a wonderful night of networking and socializing. I'm happy to say that there was a lot of U of T students and alumni at the conference!

This year's conference was quite inspirational – with so many exciting changes to our profession; we're going to be able to help our patients more than ever. More inspiring even was talking with the other Centennial Award winners about what they plan to do when they graduate as pharmacists. I hope that all my classmates reading this get a sense of how exciting it will be to practice as pharmacists once we graduate! Thank you CPhA/OPA for a great conference! In 2016, the Canadian Pharmacists Conference will be cohosted with the Alberta Pharmacists' Association (RxA) in Calgary June 25-27.

Made to Music

By Abdullah Aboukarr, Monograph Representative (1T7)

I was a shower singer, never holding back when in the comfort of my own bathroom. Let's be real, who doesn't sound good when their voice is muffled by pouring water? It's not that I didn't sing elsewhere; I just never thought myself as good enough to perform in front of a crowd. The only chances I had were at karaoke, and that's where Lisa Tran and I first sang together (we've actually known each other since middle school!). We mutually discovered our passion for music, and agreed that we would record together sometime. It was always in the moment though, until we were both accepted into the pharmacy program at U of T. Neither of us knew what Mr. Leslie Dan had in store for us then, but boy were we happy with the outcome!

School started and I stuck with who I knew. It is probably my biggest regret to date because I delayed meeting some great people. Lisa, on the other hand, flew like the butterfly she was and met all sorts of amazing people. Among those people were Gerick Abaca and Jason Tang, not only extremely talented musicians, but some of the most genuine individuals I know. Lisa, upon discovering their musical abilities, suggested we perform at the upcoming Pharmacy Arts

Night. It was an idea and we went with it. We chose 'The Scientist' by Coldplay, practiced hard, and prayed for the best. Not many people actually know this, but whenever we practiced I was never able to hit the right key for the song, causing me some serious panic on the night of the performance. My bandmates, however, never lost faith in my shower-training and knew that somehow it would all work out in the end; I'm glad to say it did. That was the night Made To Music (MTM) was born.

The experience was surreal, and the crowd's reception was warm and I was on cloud nine. We went on to perform at next year's Phollies and then again at the Pharmacy Arts Night. Each performance was unique, powerful, and well-received. We also branched off into solo performances and collaborations with other talented Pharmacy students, attempting different genres and broadening our horizons. I was living a dream.

MTM is probably one of the biggest reasons I'm excited for this upcoming year. As it is our last school year, we have an exciting lineup of performances. I can't reveal too much, but you really do not want to miss us at Phollies on October 23rd! I promise you won't regret it.

Got a Talent? Why Not Show it Off?

This year, Pharmacy Phollies, our annual talent show, will be held on **Friday, October 23, 2015**. All talents are welcome, so grab your friends and be creative! Auditions for acts and emcees will be held during the week of *October 12-16*, with more details to follow. If you are interested in performing,

volunteering or have any questions, please send us an email at events@uoftpharmacy.com. We look forward to seeing you soon!

Cheers,

Annie & Viv, UPS Events Directors 2015-2016

All the Way From Australia!

By Jessica Sawyer (1T6)

Hey there Canada!

How're you doing? I'm sending you all a hello all the way from beautiful Australia and providing you with some travel tips for Aussie, things I've learned, and some things you should keep in mind for an international APPE rotation.

Did you know Australia is the place where everything can kill you! Its home to the most dangerous animals on the planet, and trust me – some of the animals I've read about in books here you don't want to mess with. Luckily for me I have not seen any spiders or snakes and I plan to keep it that way! Up in Cairns, (where I am doing my rotation) it's the tropics, so be prepared to see tiny little orange ants EVERYWHERE as they eat sugar. Every single piece of food has to be kept in the fridge or wrapped up and stored in containers; or else you get a mouthful of protein for your breakfast (yep that happened to me!)

What am I doing on my placement?

I was lucky enough that Cairns Base Hospital was able to arrange

for me to do a mental health research audit to see how closely the protocols for alcoholics and thiamine administration are being followed. The reason this is a large concern is that Australia has one of the highest drinking rates in the Western World and is known to have a higher percentage of Wernicke's encephalitis cases (caused from thiamine deficiency). Not only do I get to do a medication audit, I have been able to spend time on multiple wards learning from some amazing pharmacists. I've seen a great deal of TB cases (fingers crossed that I'll still have a negative skin test when I get back), rheumatic fever complications (common in the Aboriginal Islanders), Melioidosis (a serious soil born bacterial infection only seen in Northern Australia), and much more.

APPE Tips

Make sure you have a preceptor!! Last minute my preceptor decided he was no longer going to be a preceptor and the co-preceptor just landed a new position and was about to go on her honey moon. In the end I've had the school make a special exception for one of the other pharmacists to be my preceptor while I'm here.

PharmaSass: Expectations vs. Reality

By Anonymous 1T9

Suffice it to say the first week of my PharmD did not align very closely with my expectations. Like most Tumblr-using, internet-surfing young 20-something year olds, my mind had immediately created an “expectations vs. reality” gif set of my first week here at this pod-filled fortress. On the expectations side I had imagined row upon row of bookish Hermione Granger types with sharp wit and sky-high GPAs. I imagined my professors and lecturers to be the types who would answer the question “how are you?” with “it’s in the syllabus.”

I am happy to announce that the “reality” side of this photoset proves that:

- a) My parents should have placed harsher restrictions on my internet usage as a child in order to prevent such wild imaginary scenarios from forming, and
- b) I was so very wrong.

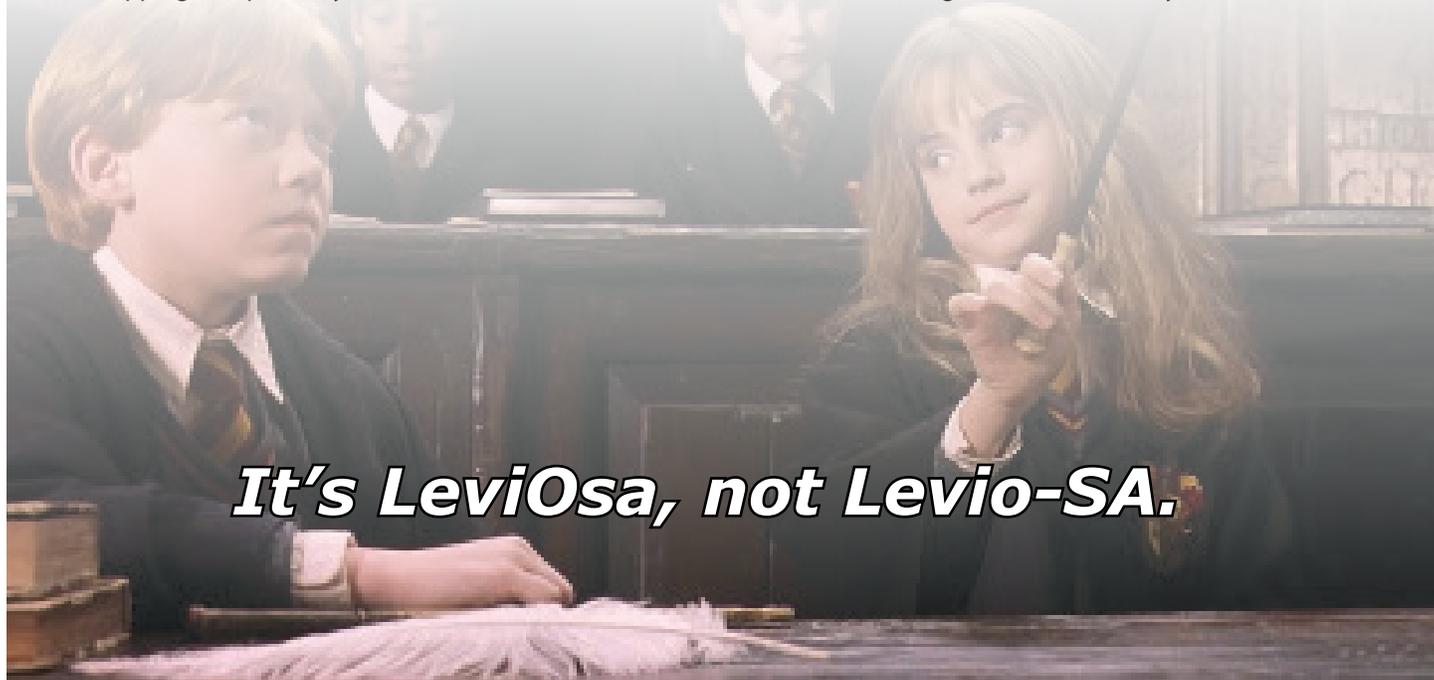
I was also relieved to discover that every row was not filled with 10 perfectly alert students, each having received a healthy 14 hours of sleep the night before. On the first day I had expected to sit beside a tall statuesque blonde who would look over at me, flash her gleaming white teeth and casually announce that she had already finished all of the readings and had begun her EPE-1 early just to get a head start. It was refreshing to sit down beside a guy with a dazed expression who looked at me in a strained sort of way and asked, “which class is this?” I am happy to announce that I, anonymous 1T9, knew what class it was (“PHM130,” I exclaimed – not knowing what PHM130 actually was ... seriously, how am I supposed to navigate my way through 13 PHM courses?). In that first lecture alone, the guy beside me fell asleep, the girl in front of me was doing so much online shopping she probably maxed out her credit card, and

a guy a few rows in front of me was streaming a soccer game. Even people in pharmacy school didn’t pay attention all the time. Take me for example; I was too busy people-watching. The professors and lecturers also shattered my expectations with a large mortar and pestle-shaped baseball bat. Office hours were posted on the first slide of each lecture, lecture content was engaging, and I could tell that they wanted us to succeed. Even in the most seemingly complex of classes, pharmacosdlk-jaldkxhkhk, the professors were dedicated to making sure you learned the material, instead of simply hearing it. As a budding member of the healthcare industry, it then dawned on me how imperative it was for me to take this education as a privilege.

Now, as a freshly (and metaphorically) branded member of the class of 1T9, I notice something different when entering classes: excitement and curiosity. Everybody wants to learn as much as I do. On the first day of my undergraduate degree, the first thing said to me by a classmate (before even asking for my name) was “what did you get in high-school calculus?” Conversely, on the first day of my PharmD, the first thing said to me by a classmate (after asking for my name) was “can you believe we’re in pharmacy school?” At this faculty, my classmates are dedicated to becoming first-rate health care professionals and are willing to help each other reach the same goal. Classmates are viewed as colleagues, not competitors (a sentence which, in hindsight, is oddly reminiscent of “fish are friends, not food”). Between lecturers and classmates, friends and administration, hundreds of people at this faculty have invested time, energy, and money into ensuring that I get access to a once in a lifetime experience, and I intend on treating it as such.

Thanks for defying my expectations, 1T9 – I really appreciate it.

P.S. I still haven’t gained access to my locker. Is this normal?



A Day in the Life of an OPA Pharmacy Internship Student

By Tiana Tilli (1T7)



This past summer, I had the privilege of completing a pharmacy student internship with the Ontario Pharmacists Association (OPA). The OPA is an advocacy organization representing over 8,200 pharmacists, pharmacy students, and pharmacy technicians. They work towards evolving the scope of pharmacy while promoting excellence in practice and patient care. Each year the OPA provides two students the opportunity to explore the inner workings of the asso-

ciation and experience first hand the work involved in pushing the scope of pharmacy practice further. As applications for the internships are due in early October, I've put together an overview of a typical day during my placement so that those interested can learn more before applying.

For information on how to apply for this position, visit <https://www.opatoday.com/professional/resources/for-students/internships>.

8:30 am: I arrive at the OPA office. It's a short walk from the Pharmacy Building, past SickKids Hospital around St. Patrick subway station. The first thing I do is say hello to my fellow University of Toronto pharmacy student, Saliha Syeda, and my supervisor, Dr. Zahava Rosenberg-Yunger, the Director of Health Policy and Research. I then check my e-mails to get up to speed on any business that took place the evening prior and to read the top stories in pharmacy news that the communications team sends out to staff daily.

9:30 am: I get to work on an article I'm writing for the OPA's blog "Beyond The Counter". Blog posts are released monthly and are traditionally written by the OPA's Drug Information and Resource Centre (DIRC) pharmacists. The theme of my article is Minor Ailments and focuses on conjunctivitis. As the target audience of the blog is practicing pharmacists, I focus on writing about making a differential diagnosis and appropriate therapeutic recommendations. Through the article I hope to address the overuse of antibiotics in viral conjunctivitis.

My blog post, entitled "The Conjunctivitis Weekend", can be found here: <https://beyondthecounter.wordpress.com/2015/07/>

10:30 am: After sending my blog post to the DIRC pharmacists for review, I print out the slide deck for a meeting I have been invited to sit in on. The meeting, hosted by the Ministry of Health

and Long-Term Care, has been scheduled to review the role of pharmacists in the 2014-2015 universal influenza immunization program in Ontario. It's encouraging to see increased uptake of pharmacists as influenza immunizers compared to the previous flu season. It was also informative hearing about the application process pharmacies undergo to receive approval to administer flu shots.

11:30 am: Once the meeting concludes, I return to my cubicle. My supervisor has requested that Saliha and I complete a jurisdictional scan on pharmacists' reimbursement for travel and routine immunization administration. Together, we determine the amount reimbursed for pharmacists in other provinces and countries by searching existing literature and calling the registrars of various pharmacy colleges. Once complete, we put together a summary chart of our findings. This document may be used in the future as a reference should the OPA create a suggested fee guide for vaccine administration.

12:30 pm: Lunch time! Saliha and I eat our lunches together, either in the kitchen or outside. The staff at the OPA is friendly and approachable so we often sit with them. If it's a Tuesday, we discuss what happened on *The Bachelorette* the night before.

1:30 pm: After lunch, I work on my main research project. The first part my project involved created an online travel health tool for pharmacists. The tool I created combined existing resources with novel OPA documents that I created. These documents included screening forms for travel vaccines, step-by-step travel consultation guides, and vaccine drug charts. As an expansion of scope to include pharmacists as travel vaccine administrators is on the horizon, this tool may be used in the future to support pharmacists in their new role. The second part of my project focused on testing my tool. I used an online survey to determine the tool's ability to increase users' knowledge regarding travel health and participants' perceptions of the tools' usability.

4:00 pm: The day is coming to a close. Saliha and I meet with our supervisor to discuss the day, progress made so far in our research projects, and our next steps.

4:30 pm: The day is over! I go home and complete some readings on travel vaccines and travel medicine. I also reflect on my most memorable placement moments at the Ontario Pharmacists Association.

Top 5 Most Memorable Moments

- 1) Seeing an interactive tool Saliha and I created included in a new OPA continuing education course on diabetes
- 2) Modeling in an OPA photoshoot
- 3) Attending the OPA/CPhA Conference in Ottawa
- 4) Answering the "Ask a #Pharmacist Day" questions for @OntPharmacists
- 5) Presenting my travel health research findings to OPA's senior leadership team

Tales from Behind the Counter Contest!

The contest for this issue was asking you for your embarrassing, strange, or funny patient interaction. We got some great story submissions which you can read below. Congratulations to **Jennifer Wang** for winning our contest!

If there is one thing for sure, there's never a dull moment in a pharmacy!

****phone rings***

Me: "Pharmacy! How can I help you?"

Patient: "Hi there, I was wondering if you could help me...I bought some Gatorade from your store the other day, and I started drinking a bottle and now I can't remember if there was a seal on it"

me in my head: dafuq you calling the pharmacy for?

Me: "Don't worry ma'am! Do the other bottles have plastic seals? It may just have a plastic ring connected to the lid to act as a seal so that's why you didn't notice it."

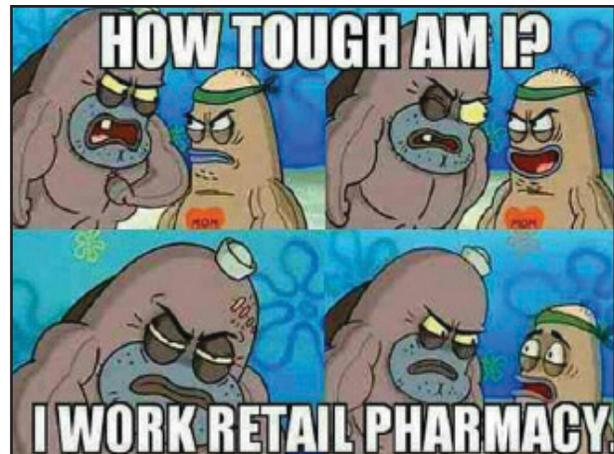
A part of me wanted to troll her and tell her she had 10 more minutes to live."

"My preceptor asked me to counsel a patient on a topical medication, can't remember the name now. The patient, KJ, was a 74 year old male. A very nice and sweet old man. Part of the counselling points for this particular medication is to avoid sun exposure on the treated area to minimize negative side effects. After counselling the patient on how to use the medication, I mentioned at the end of the session, "Make sure to avoid sun exposure on the treated site." KJ's response was epic and I will never ever forget, "Oh there will definitely be no sun exposure on this site, I'm treating the penis, unless I go to a nude beach" LOL. He said all of that with a cheeky smile on his face lol. I on the other hand was a little bit traumatized, by what I just heard as I never expected that. Very nice old man."

"During a hospital APPE rotation, I went to visit a patient to conduct a BPMH. When I entered the room, the patient was fast asleep on his bed. He was black, and beside him was an older black gentleman, who was his father. So I begin to ask the father permission to conduct a BPMH since his son was unable to. He agreed. So I began with asking what medications his son was currently taking. He gave no answer. As I was prompting, he gave me a confused look. He proceeded to tell me that he wasn't the patient's father, but rather the hospital chaplain. Safe to say I was quite embarrassed."

"A patient in his mid 60s came to pick up his meds. He was late for his Rosuvastatin refill by 58 days. I started talking to him to figure out why e was late and learned how he doesn't feel any effects of increased cholesterol so he doesn't take pills. From our conversation, I also felt I should do non-pharm counseling and started talking about benefits of healthy food and exercise. He cut me in the middle when i was talking about importance of exercise and walking; and told me, friend, I don't like walking at all. How about SEX instead, though? I can i have sex multiple times in a day to compensate for the exercise?'. and I stood there like a statue, had no words to say.."

"A male patient in his late sixties came to the counter to inquire about creams that were safe to use on his penis, which he claimed was quite itchy. Upon further questioning, he revealed that there was no discharge and no urinary symptoms, but he was certain the problem was because his wife was not cleaning the toilet properly, and when he would sit down, his penis would rub against the dirty toilet bowl. He was quite upset that his wife was not cleaning the toilet adequately, and didn't know what to do about it. I gave him verbal instructions on how to clean a toilet, and helped him pick out a cleaning product. I also told him to see his physician if his penis did not show any signs of getting better within a few days after he cleaned the toilet. He seemed quite satisfied, and went home with his new toilet bowl cleaner."



"So I was filling a prescription at the pharmacy for a patient whose name I thought looked a bit familiar. When the patient came in to pay at the cash register, I recognized them as my one of my all-time favourite professors! I managed to mumble a shy hello and something about how I took one of their classes last year and how much I loved it. Judging from their amused look and my burning cheeks, they were probably feeling sorry for me. Nonetheless, this was the most random and cool experience-definitely a highlight of my time there!"

It's Tuesday, 10am - the second day of my APPE at this placement.

A woman came up to the counter and asked for "the person who would know about drug interactions"; I stepped up and said I could probably help and she said:

W: "I just spent time with the pervert masturbator on the corner and he filled me with a bag full of pills and sh*t and now it's in my duodenum and slowly seeping out... what can I take to stop them from interacting"

Me: You have a bag full of pills inside you? You need to go to the hospital.

W: "The hospital looks at me like I'm crazy and they're all racist.... Are you Jewish?"

Me: Uh no, I'm not Jewish. Also, you still need to go to the hospital.

*this interaction was quite convoluted and was not as succinct as depicted - but really this was all I could accurately remember after I got done. Also, yes, she really did use the word duodenum.

"I was cashing a patient out one day when she asked why she had to pay so much more than usual. She wasn't an ODB patient and had private insurance but it turns out she had to pay her yearly deductible (duh). When I started telling her about that she gave me the most dumbfounded look and replied "what do you mean, isn't that like, only for old people?"

"The community pharmacy that I completed my EPE-2 at offers observing methadone maintenance therapy doses as a service. One day, after observing one of our regular patients take his dose and participating in polite conversation with him he tells me, "We're friends...that's why I don't tase you." He then flashes his taser and leaves."

A Friend in Need, Is a Friend Indeed!

"While I was doing my EPE-2, a patient brought in a prescription for Staxyn (Vardenafil). After filling the prescription, I went over the e-CPS to freshen up my memory on the key counselling points associated with this medication. Realizing that counselling with this medication could be very awkward, I asked the patient if the doctor had mentioned anything about the medication or if he has any knowledge about this medication. He said no and so I started counselling him on important points about Staxyn. I asked him questions to find out if he uses nitroglycerin pump spray or drinks grape fruit juice on regular basis. He replied me with ""I don't know"". So I explained him the consequences about using this newly prescribed medication with nitroglycerin pump spray and grape fruit juice. After I was almost finished with the counselling, he tells me slowly that this medication is not for him but actually for his friend. The only reason he is getting it under his name is because the medication is very expensive and his private insurance covers it"

Pharmacy Shout-Outs!

Here at The Monograph we give you the opportunity to publically but anonymously express your fondness, love or appreciation to someone you think is awesome! It's a simple way to send some love! :)

Here are this issue's Shout-Outs!

Shoutz to Tanner Warren, aka TanMan, for just being the absolute best guy around!

To the frosh leader I encountered for a split second during Treetop Trekking: Thanks for offering me a banana when I told you I was super tired! It made my day!

To everyone invested in making Phrosh Week stellar- phroshies, leaders, and PPC! Well done!!

Shout-out to the best third floor tech-guy --- JAMES LU

Just want to give a huge shout-out to Tiana. I reached out to her through Facebook when I needed some advice and her support has really helped me make positive changes in my life. Thank you :) <3

Shout-out to my main man Anish Krishnan for always giving me notes and getting me through Pharmacy when I sleep in class. Shrem!

Shout out to Kebin for being the nicest, most understanding and most helpful person ever. Thanks for having my back no matter what and for always listening. I never imagined we would be such good friends when we met at phrosh but now I'll always be grateful to that dumb rice cooker.

A Shout-Out to Phrosh group 13, the funnest bunch of people who made orientation week AWESOME.



PHROSH WEEK : BEHIND THE SCENES

By Sara Tawadrous (1T8)

Instead of detailing highlights of the week, I chose to shed light on some of the behind the scenes from each event because there is so much more to be appreciated from the small stuff (that's the good stuff). Quote from Robin Williams: "People call these things imperfections, but they're not. Ah, that's the good stuff"! Below I have ascribed the list of heavyweight champions that helped plan the week, and tried to encapsulate their contributions but I have certainly come short!

1. Amanda Debreceni – aka Beyonce numero deux. So she ran the entire Speed Meeting schedule without any glitches! She contacted our 5 speakers ahead of time to secure their availability (which really impressed one speaker). Despite having one speaker drop out last minute and an empty seat available, she delivered a stacked line-up!

2. Faraz Razzagh – Coordinated the Club Night and didn't even break a sweat when the previous club changed plans. Drove his car Saturday at 7AM to cook eggs at Alex Mok's place with Jenny Carter and Becky Cheng and drove the water bottles, freezies and photo-op background to Woodbine Beach after breakfast. He also co-hosted and performed the best night, Open Mic Night!

3. Vivian Tang - planned the Phot scavenger Hunt alongside with recording points and printing slips of username/passwords for smooth sailing!

4. Elsa Purivatra - planned and organized the Pep Rally + BBQ (got and experimented with the face paint designs, coordinated with our Food Sponsors at No Frills and Monster Energy Drinks)

5. Krista Chau - lead the icebreakers and ensured smooth sailing with Treetop Trekking (boarding buses and site communications months in advance). Basically she does not throw the towel but gets on the other side of the lifting!

6. Anna Xu - awesome individual who took the time to take shots of our promo pictures and filmed and edited TWO promo videos ("Dear First Year Self" and "1T90s Inspired promo video of events"-can be found <http://1t9phroshweek.weebly.com/>) - kudos to Alex Mok for the website design!

7. Natalie Ternamian - Helped with setting up Icebreakers and made the 1T90s Banner that was used to autograph names during the Pep Rally . One time, she forgot it at home on her way to the meeting way back in August, but wait, she could have easily said she forgot it at home...if she didn't decide to go back and get it !?!

8. Marina Simeonova – So she surprises us back from her exotic European getaway on the Wednesday and helps clean up after the BBQ/Pep Rally!! On the Thursday, the plan was to go to the CNE ahead of the buses and cover everyone's admission. Traffic was brutal so I text Marina "get ready to run". She meets me in front of her condo (because it was 10 minutes away from the CNE), park my car and

I'm all dressed in sweats and kicks thinking I'm like Bolt (and she's in sandals!!), we start running and then I stop, pretending to check my phone and she looks back I can feel her eyes, all like, "I thought we were running?!". We make it to the gates, after my pathetic run and I tell her: you must take the ring, I mean the tickets up to Dufferin Gates because that's where the buses are unloading. So she runs basically all of Lakeshore to give the CNE tickets to the group at the Dufferin Gates?!? Like are you seriously in your sandals?!, the Gate Manager at the Saskatchewan gates (where I was hyperventilating and emptying out their water cooler) started laughing when I said she made it ! Thanks for making us turn the skeptics into believers #catchherifyoucan

9. Sarah Ngov & Becky Cheng – So I couldn't tell you how stressed they were until I was speaking to some of their friends that basically told me, they had gone nights without sleep. Breakfast might sound simple, but if you are changing the menu everyday and forget your Costco membership the day we were supposed to get the Eggs- it can get stressful! They lead the entire Saturday Breakfast from beginning to end in terms of scheduling "Bagel and Egg Teams" and food menu connoisseurs.

10. Jennifer Carter - had everything prepared for our joint Games Night (same time as Clubs Night) including ensuring the Projectors worked, enough game boards and game consoles. You can trust this girl to deliver! I don't think she asked for anything except extra controllers and batteries?

11. Meiko Peng - planned the itinerary for Beach Day and got equipment from UPS athletics prepared for the Saturday

12. Sasha Campbell - despite having a concussion earlier in the summer, planned an awesome and engaging 3 hour Trivia Challenge!! (including sound and video clips!)

13. Alex Mok - basically was involved in every little detail (choosing the leaders, setting up rooms, booking out the projectors and fridge space and everything!!) He created the website (weebly) and engineered our awesome T-shirts. Allowed us to use his space Saturday Morning to cook the eggs (shout out to The Guys- Miles, Andrew, Stefan!). Open Mic Night was his protégé and despite worrying months in advance of its success - it easily became the highlight of the week!

**So we meet back at PB after CNE, all like we can't have one band perform for the majority of time, because let's be real, only Beyonce can do that...what to do ?? We send out a mass message to all the phrosh groups making it mandatory to come up with something with your group within hours of the night !?! >> shout out to all those leaders who delivered (dance routines, lyrical slams to 90s renditions, rap battles?)

Thank you! These people are magnificent and deserve all the recognition because without their motivation every week in the summer, this would not have been possible :)



Sudoku Soup for the Stressed Student's Soul

By Selwyn Chui, Staff Writer (1T9)

Fill in each space with numbers 0-9 such that each individual row, column and black box has no repeated digits.

Easy

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

Intermediate

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

REBUSES: 1 Puzzle O.U. Q.D. x10 Days

By Selwyn Chui, Staff Writer (1T9)

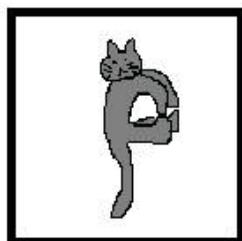
Rebus puzzles are a popular word and picture puzzle, featuring pictograms with a hidden meaning. Pay attention to all aspects of the riddles, including symbols, size and positioning.



1 _____



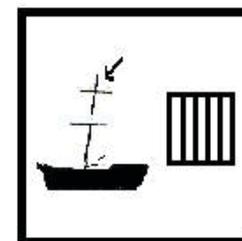
2 _____



3 _____



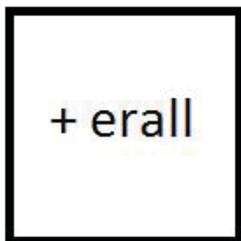
4 _____



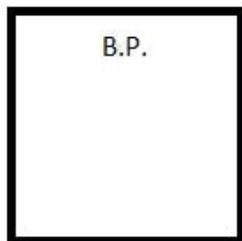
5 _____



6 _____



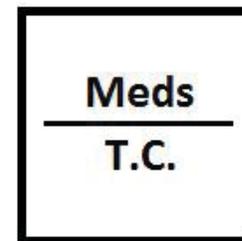
7 _____



8 _____



9 _____



10 _____

ANSWERS TO THESE PUZZLES WILL BE REVEALED NEXT ISSUE!



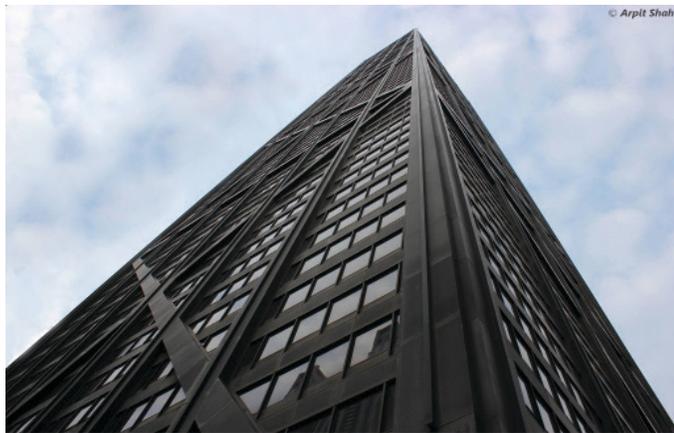
By Dennis Tran (1T7)



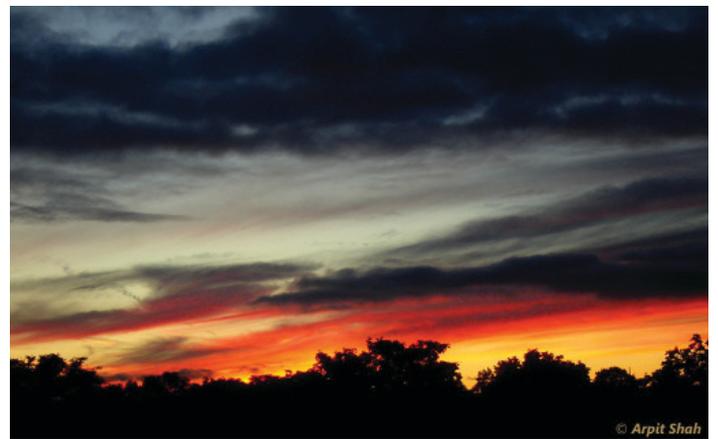
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