The Monograph

November/December 2010
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ANECDOSE
BY M.E. SCHELL

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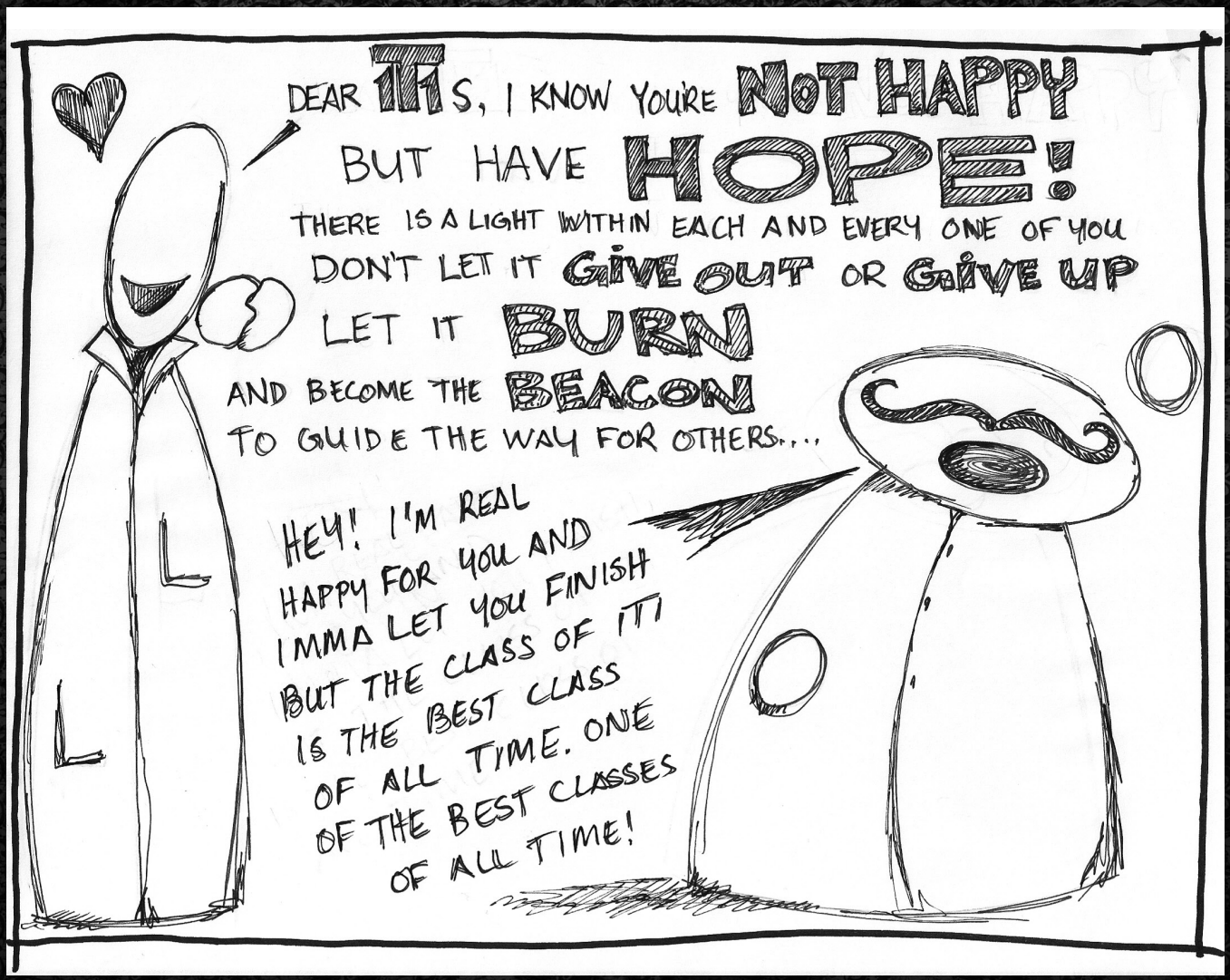

Special thanks to M.E. Schell...Anecdose will be missed next year! And to Adam Calabrese for years of candid and unadulterated wit. Best wishes to the class of 11!

- The Monograph

The Monograph

November/December 2010

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UPS CORNER

What's up Pharmacy? Now that we have all survived our seemingly endless (or actually endless for the 1T1s) slew of midterms, we hope that you have all caught up on your sleep in time to tackle your December exams.

In true pharmacy student fashion, the recent academic mayhem has not hampered our pharmacy spirit. Charity week this year was an enormous success, and the class charities are all receiving wonderful donations thanks to your generosity. Your class councils did an amazing job organizing bake sales, a pancake breakfast, twoonie slides, the prof auction and raffle to fundraise over $5000! We also saw the good times a rollin' at Semi Formal when Mardi Gras filled the Arcadian Court. This year's curling bonspiel was a rockin' good time thanks to everyone who came out.

Now we all have our sights set on the upcoming holiday break, but this December will be bittersweet. Sadly, we say goodbye to our 1T1 friends who will be frolicking under the warm Mexican sun while the rest of us plow through our 1st wave of finals. We wish you the best of luck in your upcoming SPEP rotations, PEBCs and careers as pharmacists. The rest of us will be joining you soon enough!

Happy Holidays everyone,

David Yam and Bryan Falcioni
UPS President and Vice-President, 2010-2011

Happy Holidays!

Editors' Note

In a profession considered to be a safe and financially secure career, it's easy to get lazy and forget about the big picture. It's nice to be under the possibly naive impression that the faculty admitted us into the program because they thought we would be good for the profession, not because we thought the profession would be good for us. Right now it's more difficult than ever being a pharmacy student in Ontario. The waves of change are rocking the boat, and add that to looming midterms and assignment deadlines—and you might be tempted to use a scopolamine patch before trying to navigate through these trying times.

Change often makes us act in irrational ways. We tend to believe that change is bad and we act to resist it. But we should try putting a positive slant on the situation, especially a situation which is inevitable and already in the works. Change can help us grow and create innovative ways to further pharmacy. This brings us to an issue that appeared and disappeared before many of us had a chance to sort out what it meant...the Pharm D.

The switch to Pharm D degree at this faculty has been creeping up for the last few years and every year, the same questions arise. What is the new curriculum? Will I be at a disadvantage with the BScPhm? The only difference this year is that the switch to the Pharm D program at our faculty, unbeknownst to most, has actually come quite close to fruition. Apparently, student support was a significant contributor to pushing the movement forward and evidently, it wasn't quite there with only about 40% of our student body's signatures collected. So, that begs the question, what went wrong? Did students get an opportunity to learn about and debate the merits of the new degree and how it will further Ontario pharmacy? It doesn't seem so. A town hall meeting was held amid Phollies preparations and midterm stress. Petitions were being passed around with minimal explanation just days and even hours before the faculty had to submit their final proposal to the government! One class was completely excluded from the petition-signing campaign. Had the students been properly informed about what the new program entails, rather than just relying on word of mouth and urban myths about the Pharm D, they may have been able to see the benefits of introducing such a program and endorsed it, instead of abstaining or refusing to sign the petition for fear that their hard earned BScPhm would soon be made obsolete by a Pharm D.

Although it is too late to make a difference in the proposal submitted by the faculty to the government, we feel it is important to address this issue. We feel that the implementation of an entry level Pharm D would be extremely beneficial to the profession of pharmacy in Ontario**.** Firstly, the advent of Bill 179 has opened the Ontario pharmacy world to new possibilities and frontiers. The 'Pharm D' name reflects the rigorous nature of our program and in turn, if further negotiations with the government concerning expanded scope of practise occur in the future, a profession worthy of a Pharm D degree would likely be held in high regard to both the government and more importantly to the public. They will not distinguish 'old non-Pharm D pharmacists' from 'new Pharm D pharmacists,' they will simply recognize that pharmacy is a profession that rightly deserves a doctorate degree.

Secondly, as many of us in this program complain, the curriculum at our faculty undoubtedly needs an overhaul. With the new Pharm D program, it is our understanding that the curriculum will maximize the efficiency of teaching, and ensure that students can better retain knowledge about a certain disease state and its treatment alternatives and is taught progressively, with concepts building on each other. That is more practical than the status quo, which has us trying to remember bits and pieces from different lectures and professors, sometimes trying to make sense of why one professor contradicted another. We're sure there is so much more that students would like to see changed.

Many students believe that their future colleagues graduating with a PharmD will have an advantage over us. If they have an advantage it will be due to the restructured curriculum and delivery of education, and not due to the different letters behind their name. At the end of the day, a Pharm D or BSc Pharm degree is not sufficient to become a pharmacist in Ontario, you must be licensed through the Ontario College of Pharmacists. We'll all be pharmacists and have the same scope of practise. Furthermore, if our curriculum taught us one thing, it is how to teach ourselves. If we feel like we are disadvantaged in the future, then it is up to us, as 'life-long learners' to upgrade our knowledge and skills to be on par with where pharmacists should be. It is solely an issue of moving our profession forward. If we were asked to sign a petition in support of moving our profession forward, there would be 100% support of it. That is what the Pharm D degree is, so why wasn't it marketed as such? If the faculty wanted 100% support for this movement, there should have been much more initiative taken.

This brings us to our final point. It is extremely important that we voice our opinions as students. Let's not wait for a petition to come in front of our faces. Let's not let our signatures be the only voice that we have. If we want good change, we need good discussion and legitimate action. These discussions should not be limited to poorly attended town hall meetings. It is easy to say that the faculty doesn't know what we want when they make decisions about the curriculum. But if we don't tell them what we want as students then how can they meet our demands? There are so many ways you can get your voice heard. Speak to your class presidents, you elected them to represent you, so give them something to represent! They meet with the dean several times throughout the year and are in a position to voice your thoughts. We encourage writing anything and everything for The Monograph but it is a fantastic avenue to voice your opinions regarding the profession. The faculty does read The Monograph so it is a great way to let them know how you feel if you prefer to express yourself in writing.

By choosing to be pharmacists, we are committing ourselves to a lifetime of altruism and helping people. While it is tempting to think about ourselves and our futures as individuals, it is of utmost importance that we think about our profession as a whole and do our part in helping to push it in the direction that we want it to go.

Best of luck on your exams and thanks for a fantastic first three issues of The Monograph!!

Sidika Dhalla & Zenah Surani
co-Editors-in-Chief

ADDICTION: THE 8TH DTP?

By: Priya Bansal, 1T2 Monograph Rep

Medication not indicated, additional therapy required, medication not effective, dosage too low, dosage too high, adverse drug reaction, patient not willing or unable to take the drug therapy as intended. Hmmm well, maybe addiction fits into the last one. Or then again, going through the therapeutic thought process, it could just as well be the first or third one too?… Yet, none of them seem to fit properly. It really just depends on how you look at it. How does our profession look at it?

If you can't already tell, I'm confused. This confusion began during the summer when I was working at an outpatient pharmacy. A dermatologist was holding a Photoderm Clinic that day, and about a million people came to the pharmacy to get various mixtures; all involving coal tar and petrolatum. "What a perfect opportunity for you to practise your compounding skills!" is what I remember my preceptor saying. Thank goodness they had upgraded from a torsion balance to an electric scale. As I stood there compounding my day away, meticulously measuring out every last ingredient, levigating, triturating, mixing in equal parts, my mind started to wander. This was clearly an art pharmacists took pride in mastering.

Then, a technician came by and told me about a patient who they believed to be dependent on dimenhydrinate and as a result, the pharmacist moved Gravol behind the counter to the Schedule II section. The technician then advised me to just tell that patient we didn't carry it, if he came in again asking for it. Without even looking up from my compounding, I nodded. My previous work experiences and hearing stories from other pharmacy school friends had taught me about dependency and addiction. Stories like: patients calling the pharmacy every week asking for advances for their narcotic refills because they were "going on vacation". A patient wanting 5 bottles of Tylenol with codeine "for each member of her family and they all lived separately." Neighbouring pharmacies warning each other about patients trying to get their hands on addictive medications. OCP giving helpful tips on catching forged prescriptions.

We do our best to catch forgeries and stop the sale of addictive medications to dependant and addictive persons. That is the role of the pharmacist I had seen and learned. As I stood there compounding, I realized just how flawed this role was. Firstly, we're not doing a good job of denying these persons medications because they can always find another pharmacy to go to (no matter how many other pharmacies we warn), and secondly, we're completely avoiding the real problem at hand: these people are suffering from a disease of the body and mind. Instead of opening the doors to communication to our patients, we slam them in their face as if they are unwelcome criminals.

I couldn't help but notice the irony of my disposition. There I was, so carefully compounding these mixtures, feeling like I was mastering one art of pharmacy. Just the day before, I was mastering other arts; problem solving and communication. I was performing Medschecks, OTC counselling, answering drug information questions, and basically solving DTP's left, right, and center! These "arts" are skills needed for providing patient care. Yet somehow our profession failed to consider providing patient care towards those who became physiologically dependant and later psychologically addicted to medications.

For a profession that is advocating for change, why did we not change our views about addiction? We certainly identify it as a problem since we take such active steps to catch forgeries and prohibit sales. But why this attitude of "them against us" instead of an opportunity to provide patient care? Maybe we assumed it was another health care professional's responsibility. Maybe when faced with someone who is irritable because of dependence, we forget that their condition doesn't always permit them an amiable demeanour or the ability to make reasonable choices. Maybe we just didn't have dependence/ addiction clearly outlined as a DTP.

I understand that some patients with addiction can cause harm to pharmacists and staff; and in these instances, staff safety comes first. However, many patients that are dependent are not aggressive. Dependence arises from the physiological need for a medication and from this comes addiction; a psychological drive or motivation to continue seeking this medication despite becoming harmful. Often, we can see dependence and addiction building as a result of poor monitoring of prescribed therapy. In London, Ontario, many of the prostitutes are young mothers that became addicted to narcotics after having been prescribed narcotics for pain. Opioid-related mortality seems to be on the rise in correlation with increased number of narcotic prescriptions. This is an issue that has recently caught the OCP's attention and they have already taken steps to ensure better pharmacist accountability and to promote inter-professional collaboration in terms of monitoring and addiction education. Pharmacists aren't able to provide the psychological counselling needed, but with our great accessibility comes great responsibility. We ought to be aware of the resources we can refer patients to, such as CAMH's 24 hour help line, and actually use them.

It is blaringly obvious to me that the development of addiction is a drug therapy problem. I find it surprising that our profession can foster an attitude towards addiction that is completely contradictory to its enthusiasm towards a more patient-centered approach to care. How can we be so motivated (and at times really meticulous) about some aspects of care, and yet so negligent about others? If we truly want to advance the profession, we need to be consistent and advance all levels of care we provide. We should embrace our accessibility and all of the responsibilities that come with it; especially in the area of addiction where pharmacists can have a crucial role in monitoring the beginning stages of dependence and addiction and initiating counselling through referral.

Introducing a Student-Run Initiative to Promote the Pharmacy Profession: SOAPE - Helping Pharmacy to a Fresh New Start

The future of pharmacy in Ontario is uncertain. As the new scope of practice unfolds before us, many pharmacists feel the need for a strong and representative voice to lead the way. A recent poll indicates that the majority of pharmacists in Ontario are in favour of having a stronger advocating body.

Students for Optimizing and Advocating Pharmacy Endeavours (SOAPE) is a committee of enthusiastic students who are dedicated to the betterment of the Pharmacy profession and the advancement of quality patient care. In light of the recent cuts and subsequent threats to health care as a whole, SOAPE was assembled in an attempt to better unify the profession. It is worth noting that SOAPE is an unbiased committee, unaligned with any businesses or corporations.

The controversy surrounding recent provincial legislation illustrates the fact that while pharmacists may be hard-working and capable advocates for their profession, there is a desperate lack of effective communication between them and key decision makers. As such, one of SOAPE's key objectives is to work towards implementing mandatory OPA memberships for all pharmacists licenced in Ontario. In so doing, the OPA would represent 100% of practicing pharmacists, thereby giving them much more credit and influence in communications with the government. In Ontario, the pharmacy profession is unique in its lack of a unifying representative body. The medical and nursing professions, under the OMA and RNAO respectively, have long understood the importance of effective lobbying in order to advance the causes of their professions. Unifying under the OPA will give pharmacists a stronger legislative voice and allow the profession as a whole to act pro-actively rather than reactively. Although the unification process may be a long and arduous endeavour, SOAPE believes that it is in the best interest of pharmacists to have a strong and unified advocacy group.

It is also important to note that the OPA is an organization that represents pharmacists, not pharmacies. Over the long term, SOAPE is dedicated to keeping business, politics and bureaucracy out of the OPA in order to keep the OPA on track and fighting for the rights and autonomy of the individual pharmacists. Advocating for the recognition of cognitive services and for the development of positive solutions for working within the current legislative landscape are also important priorities on SOAPE's agenda.

Upon gaining some traction, SOAPE is interested in collaborating with students from the Faculty of Pharmacy at the University of Waterloo to carry forward the SOAPE movement.

For anyone with comments, concerns or suggestions for SOAPE, or if you are interested in taking part in the committee, please contact your SOAPE year representative or e-mail soape.uoft@gmail.com.

1T2 Kitchen Kompounding...

1T2 is here for you, to make all your holiday recipe dreams come true!
Compiled by Priya Bansal, 1T2 Monograph Rep

MANGO MOUSSE-PUDDING BY: Dipti Tankala

This delicious dessert is perfect for mango lovers looking for a new way to eat their favourite fruit. The texture is absolutely divine; decide for yourself whether it is more like a mousse or pudding! The recipe provided will serve about 20-25 people (or less depending on how much they love it). It is perfect to take to parties and potlucks; you'll have the most popular dessert, guaranteed!

INGREDIENTS + MITTE
Sweetened Mango Pulp - 1 Can (850g)
Cool Whip - ¾ liter
Cream Cheese - 8 oz
Milk- 2 Cups
Sugar- 1 Cup
Water- 1 Cup
Knox Unflavored gelatin: 3 ½ small envelopes or around 3 ½ tbsps

SIG:
1.Mix the mango pulp, milk, sugar, and cream cheese in a blender, food processor or with a hand mixer until everything is blended well. Don't blend too much though!
2.Dissolve the gelatin in 1 cup water as per directions on the package.
3.Pour the dissolved gelatin mixture over the mango pulp mix and blend.
4.Mix the cool whip into the above mixture. Again, don't blend too much or else you will lose the fluffy texture of the cool whip.
5.Pour the final mixture into an aluminum foil container, baking pan or into individual clear plastic cups, and refrigerate for about 4 hrs (until it is firm to the touch).
6.Cut into pieces and prettify it with fruits, assorted nuts and/or whipped cream before serving.
7.Enjoy, but make sure you hit the gym the next day!

Note: 1 cup= 250mL

Rice Pudding By: Priya Bansal

This dessert is pretty common in almost every culture. You've probably all had some adaptation of it before, but now you can make it and serve it to your friends!

INGREDIENTS + MITTE
1/3 cup rice
1 cup (250ml) water (just use the same cup as for measuring the rice)
4 cups half-and-half cream
A cinnamon stick
¾ cups of sugar
1 tablespoon (15ml) orange blossom water
2 tablespoons nuts (walnuts, pine nuts, or almonds)
1 tablespoon of raisins

SIG:
Wash the rice several times with water, then soak in 1 cup of clean water for half an hour. Boil the rice on low heat in the same water until all of the water is absorbed.

Now bring the cream slowly to a boil. Add the rice and cinnamon. Simmer, stirring until thickened, for about 15 minutes, then add the sugar and cook for another 10 minutes (or until it has a creamy consistency). Stir in the orange blossom water. Chill for 4-5 hours. Serve hot or cold, adding the blanched or slivered nuts just before.
Adaptation from "The Green Way to Healthy Living"

1T2 Kitchen Kompounding...

No-Bake Toblerone Cheesecake By: Katie Palmer

INGREDIENTS + MITTE
* 1 cup Oreo Baking Crumbs
* 1/4 cup butter, melted
* 2 pkg. (250 g each) Brick Cream Cheese, softened
* 1 cup Smooth Peanut Butter
* 1 cup sugar
* 2 bars (100 g each) Toblerone Swiss Milk Chocolate, chopped, divided
* 1+ 1/2 cup thawed Cool Whip Whipped Topping, divided

SIG:
Mix crumbs and butter; press firmly onto bottom of 9-inch springform pan. Refrigerate 10 min.
Beat cream cheese, peanut butter and sugar with an electric mixer on medium speed until well blended. Stir half of the chopped chocolate into the cream cheese mixture. Gently stir in 1 cup of the whipped topping. Spoon over crust. Refrigerate 3 hours.
Microwave remaining 1/2 cup whipped topping and chopped chocolate in small microwaveable bowl on HIGH for 1 min.; then cool slightly. Pour over cake. Refrigerate until ready to serve!



Gingerbread Friends – The Perfect Holiday Treat By: Ashley Homsma

INGREDIENTS + MITTE
¾ cup butter, softened
½ cup packed brown sugar
1 pkg. (6-serving size) Jell-O Butterscotch Instant Pudding
2 eggs
2 ½ cups flour
1 tsp. baking soda
1 tbsp. ground ginger
1 ½ tsp. ground cinnamon
2 tbsp. decorating icing

SIG:
Beat butter, sugar and dry pudding mix in a large bowl with a mixer until light and fluffy. Blend in eggs. Mix all remaining ingredients except icing in another bowl, then add gradually to pudding mixture, beating well after each addition. Refrigerate for 15 minutes.

Heat oven to 350°F. Place dough between 2 sheets of waxed paper; roll 1/4-inch thickness. Cut into gingerbread-man shapes with a 3- to 4- inch cookie cutter, rolling dough scraps as necessary. Place them 2 inches apart on greased baking sheets.

Bake 10 to 12 minutes or until edges are lightly browned. Let stand on baking sheets for 3 min. Cool completely. Decorate with icing!

A Tale of Two...Souvlakis

By: Sam Hsieh, 1T2

A pair of distinctly similar restaurants on the Danforth, Kalyvia and Messini both have a lot to offer their patrons. The two serve up Grecian cuisine from their kitchens, yet the culinary execution of the dishes between them is remarkably different. This isn't meant to be a comparable study of the two restaurants. Rather, it serves to illustrate what sets these two places apart.

Instead of the typical bread and butter affair to start off the meal, Messini ushers you in with nicely toasted flat breads and a smooth tapenade spread (purée of olives, capers, anchovies and olive oil). Their Greek salad is a blend of the usual suspects: tomato, feta cheese, green peppers, onions, cucumber, kalamata olives, but sans the lettuce. The freshness of the constituents was much more pronounced without the leafy greens diluting their flavours. What they do especially well here is their gyros pita (choice of meat include pork, chicken, lamb – come early for the lamb and pork as they regularly run out of them by midday). The meat is succulent, with a nice crispy crust, the tzatziki refreshing, and they stuff French fries into the pita.

Yeah, that's right. Fries. In your gyros pita. At first try, it felt extraordinarily awkward, kind of like that distant cousin that shows up to family reunions. You're not quite sure if they really belong there, but once you analyze the aftermath of this gastronomical atrocity, you realize that it's wrong. So wrong, that it's so good. And as you shamefully take another bite, you thank your lucky stars that Lipitor went generic.

A couple of streetlights down is Kalyvia. The duel entrances to the restaurant are reminiscent of the Unilever logo. Their saganaki is quite the spectacle. It's essentially a Greek cheese sautéed in oil, then flambéed tableside with a shot of brandy. If eaten on its own, there is enough salt in the cheese to induce hypernatremia. But when sandwiched between the buttered loaf of bread, it becomes the most luscious grilled cheese-esque appetizer. The feta fries are epic. Perfectly fried loonie-sized potato slices topped with copious amounts of olive oil, feta cheese, and oregano. The creaminess of the cheese is accented by the herb infused oil, and the fries are the perfect vehicle to deliver all that goodness onto your palate.

But really, what Kalyvia does insanely well is their pork souvlakis. These skewers are cooked perfectly over an open fire grill. The charcoal imparts that pleasant smoky taste, while the aroma of the oregano wafts seductively through the air, like the Siren's call to good-eating. You watch, you wait, you take a bite. You fall in love. There's more juice in these tiny morsels of piggy-goodness than a carton of Tropicana. But one bite just isn't enough, you take another, and 4 skewers in, you realize you've converted from vegetarianism to porkism. They're absolutely oink-tastic.

I think I figured out the perfect stocking stuffers for Christmas this year.

CAPSI Column

The fall semester is quickly winding down, and your CAPSI local council has been very busy with our local competitions and 2nd annual mock OSCE. A brief summary of our competitions winners:

Patient Interview Competition: Katie Palmer, winner of $250 towards PDW costs.

OTC Competition: Katie Palmer, winner of $250 towards PDW costs.

Compounding Competition: Tiffany Kan, Jonathan Fung, Ken Dong, Kenny Ma, winners of $250 each towards PDW costs.

Student Literary Challenge: Adam Falconi, winner of $250 towards PDW costs.

CASPI/Wyeth Guy Genest Award: Tina Hwu, winner of $500 and recognition at PDW.

Pharmafacts team: To be determined, winning cash prizes for PDW costs!

On November 20th, over 50 of the fourth year students participated in our 2nd annual mock OSCE. The students did extremely well and hopefully gained insight into how one portion of their licensing exam will be run and the type of situations they will encounter. A special thank you to all of our incredible volunteers who came in on the Saturday after semi-formal, and especially to Anne Sylvestre who did anincredible job writing the cases and organizing the whole event!

Happy holidays, and good luck on the December exams!

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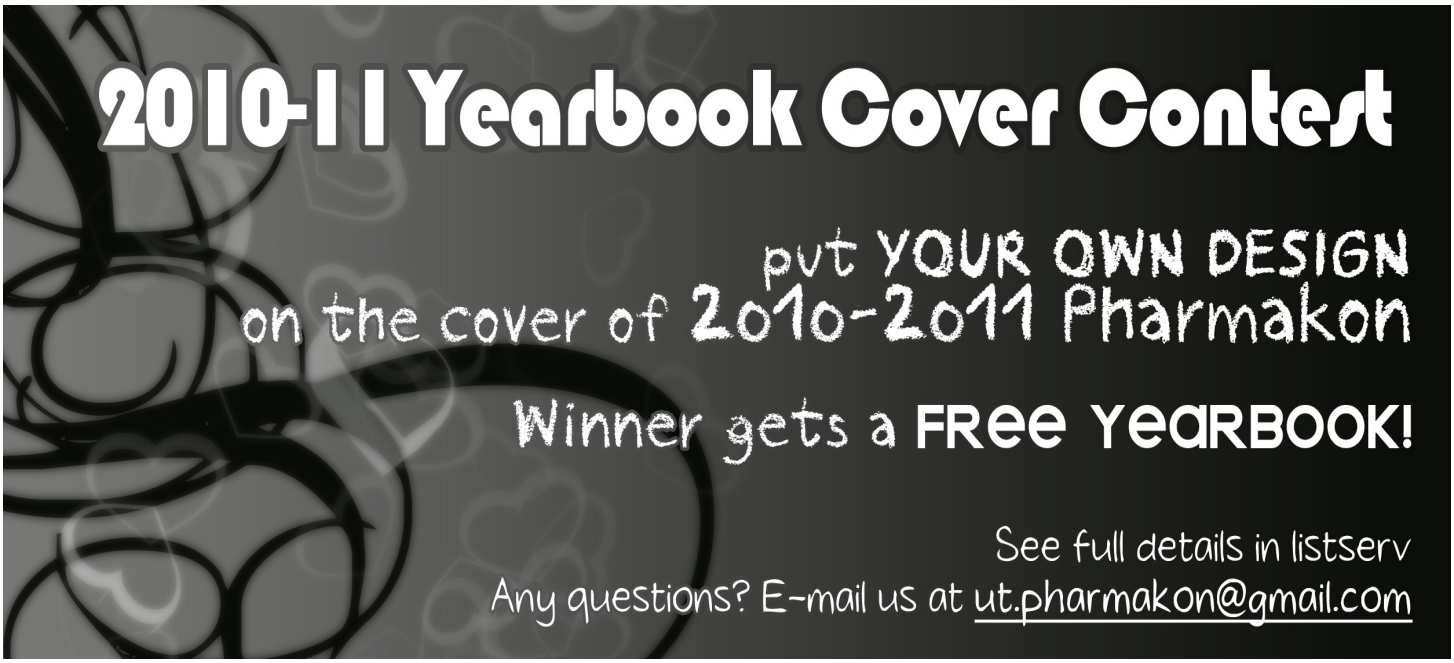


OPIOID USE AND ABUSE: AN OVERVIEW OF WHO, HOW AND WHAT IS BEING DONE ABOUT IT IN ONTARIO

By: Amber Lee-Carriere, 1T4

"Among the remedies which it has please Almighty God to give to man to relieve his sufferings, none is so universal and so efficacious as opium." – Thomas Sydenham (physician, 1624-1689)

In Thomas Sydenham's time opium referred exclusively to drugs derived from the opium poppy, ***Papaver somniferum*** (The Columbia Encyclopedia, 2008). The earliest written allusions to this drug date back to the third millennium B.C., it is called "gil", a homonym for "joy", or "hul gil", which means "plant of joy" (Brownstein, 1993). In present day context, opioid drugs are defined by their ability to act on opiate receptors on cell membranes and can be naturally occurring, semi-synthetic, or synthetic (Adelman, 2010). These drugs have powerful analgesic and euphoric effects, a dangerous combination that can drive physical and/or psychological dependance within 2 – 10 days of use (Preston, 2009).

Recently, the use of prescription opioids has come under scrutiny among the media, policy regulators and health care providers. The conventional image of an opiate abuser has transformed as safety precautions and access to prescription narcotics continues to prove to be inadequate. The solution to opiate abuse requires implementation of a stronger monitoring system for prescriptions, education for patients and healthcare providers, as well as innovative approach, as abuse is a multifaceted and multipart problem.

According to the World Health Organization (WHO), "opioid dependence develops after a period of regular use of opioids ... [and] is a complex health condition that often has social, psychological and biological determinants and consequences, including changes in the brain" (World Health Organization, United Nations Office on Drugs and Crime, UN AIDS, 2004).

This condition describes a startling number of Ontarians. Ontario has the highest rates of narcotic use per capita nationally (Morgan et. al., 2008), while Canada ranks 5th globally for per capita use of prescription narcotics (Haydon, 2005). Not only is the number of opioid users are growing, but so is the scope. The range of prescription narcotic users now ranges from traditional cancer and post-operative patients to opiate addicts and even students. It has been theorized that opiate addicts are turning away from dangerous street drugs, like heroin, for the false sense of safety associated with strong prescription narcotics (Sproule, 2009). More alarming, however, is the recent trends of abuse among Ontario students. An estimated 180 000 Ontario high school students abused opioids in 2008 and a survey from the Centre for Addiction and Mental Health found that 18% of students from grades 7 – 12 had used opioid drugs non-medically over the past year (CBC News, 2010). These results rank opioid pain relievers as the third most commonly used drug by students in grades 7 – 12, after alcohol and cannabis (Paglia-Boak, 2009).

The consequences of opioid abuse are highlighted in the WHO's position paper on ***Substitution maintenance therapy in the management of opioid dependence and HIV/AIDS prevention***, which states "that opioid dependence results in significant costs to society through unemployment, homelessness, family disruption, loss of economic productivity, social instability and criminal activities. Major health consequences of opioid use include higher risk of premature death..." (2004) Between 1991 and 2004 there were 3, 406 narcotic-related deaths in Ontario, of these, 54% were deemed unintentional overdoses and in 22% of the cases the user's intentions were undetermined (Dhalla et. al., 2009) Furthermore, the median age of patients with narcotic-related deaths was 40 years (Dhalla et al., 2009).

The drug distribution system in Ontario is poorly monitored and easily manipulated, particularly in the context of opioid access and prescription narcotic abuse. Opioids are currently covered by Ontario Drug Benefit Coverage (ODB), however it is not acting in the best interests of the patients or their finances of the provincial government and there is still an inadequate monitoring system for the use of opioids. In 2000 when Oxycontin was added to the ODB formulary, there was a 416% increase in Oxycodone-related deaths (Dhalla et. al., 2009). ODB was billed $54 million dollars for OxyContin last year alone, not including other opiates that are classified as benefits under Ontario's drug coverage. While there are advantages to opiate coverage, the data clearly indicates that the increased access to prescription narcotics is dangerous to some patients and is truly damaging to Ontario's finances.

The solution to the problem of opioid abuse must be as complex and multifaceted as the initial use itself. While one might suggest that removing the most heavily abused opioids from the ODB formulary, such abrupt action would punish patients suffering from extreme and unnecessary pain. A more sustainable remedy includes education and innovation in addition to monitoring. Health care providers and patients alike have to understand the severity opioid addiction and the risks involved with taking prescription narcotics. Moreover, health care providers have to pioneer new pain management practices to avoid diversion from prescribed treatment plans. The College of Physicians and Surgeons of Ontario (CPSO) released Avoiding Abuse, Achieving a Balance on September 8th, detailing 31 recommendations in response to opioid abuse (2010). The recommendations recognize the importance of taking immediate action to halt the abuse of prescription narcotics and propose advancements in education, monitoring systems, and addressing diversion. The recommendations are sound, but they are a whim without policy change implementing and enforcing them.

The traditional profile of an opioid abuser has changed dramatically over recent years, and approaches to the underlying issues have to be equally dynamic. The current system of prescribing and dispensing opiates is no longer adequate, but can be remedied through education, monitoring, and an innovative approach to opioid use and pain management. These steps are essential in protecting the safety and well-being of patients and in maintaining the integrity of the Ontario systems for health care and drug benefit coverage.

Works Cited (Cont'd on pg 12)

Adelman, Steven A., William J. Meehan. "Opioid Abuse." ***eMedicine from Web MD.*** 13 Oct 2010. Web. 19 Oct. 2010. <http://emedicine.medscape.com/article/287790-media>

Brownstein, Michael J. "A brief history of opiates, opioid peptides, and opioid receptors." ***Proceedings of the National Academy of Sciences***. 90 (1993): 5391-5393.

CBC News. "Ontario doctors tackle opioid abuse." ***CBC News***. 8 Sept 2010. Web. 14 Oct. 2010. <http://www.cbc.ca/health/story/2010/09/08/con-doctors-drug-abuse.html>

Dhalla, Irfan A., et. al. "Prescribing of opioid analgesics and related morality before and after the introduction of long-acting oxycodone," ***Canadian Medical***

What U of T doesn't (but should) teach you – How to speak into a microphone

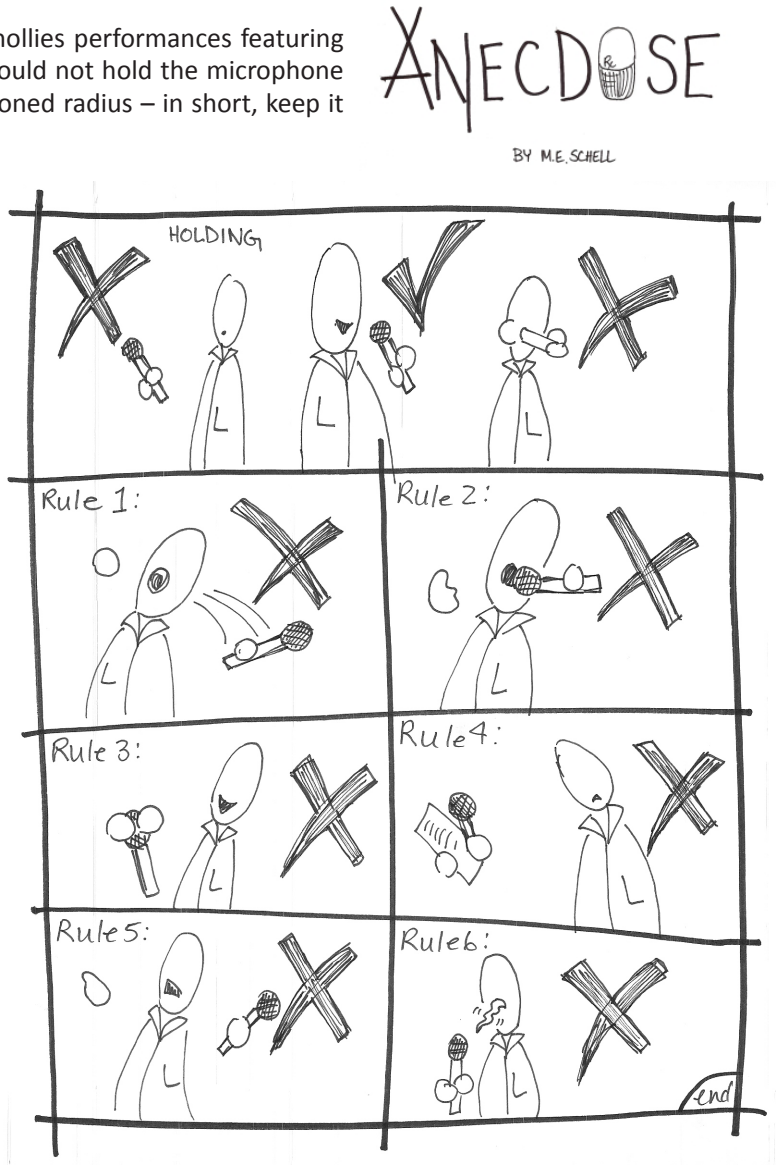
By Lisa Levangie, 1T2

The first years are probably quite perplexed as to why this would be necessary. The second years may be confused as well, since for some reason Debra's panels seem to be relatively well heard. However, my classmates in third year definitely know what I mean especially for Therapeutics and Medchem. Since this knowledge will directly benefit the class, I have come up with a few rules that we should all abide by. (Sorry fourth years but I thought of this too late to have any benefit for you).

I will first explain the proper procedure for holding a microphone – the following rules are examples of when this has gone horribly wrong. First sit upright and look up, place the microphone speaker directly in front of (but not touching) your mouth, there is a very small radius that your voice needs to reach in order to be heard adequately. Also, although you can't completely hear your voice, you should be able to hear that it is being picked up by the microphone. Just because the microphone is right there is not a reason to speak quietly, your volume should be slightly higher than normal when speaking to someone who is right next to you.

Rule 1: Don't gesture with microphone. I know that Michael Heffer teaches that gestures are important to ensure that the message gets received; but by moving your microphone-holding hand you break too far away from the radius where you voice gets heard. So practice unilateral gesturing if you feel you must!

Rule 2: You are not a hip hop artist. Contrary to most Phollies performances featuring rapping pharmacists (which I thoroughly enjoyed), you should not hold the microphone sideways as it can cause it to stray out of that aforementioned radius – in short, keep it upright and perpendicular to the floor!



Rule 3: Hold it from the bottom – it looks like a handle for a reason. By covering the speaker on top you are making it impossible for the microphone to pick up your voice.

Rule 4: Be confident when speaking and if you must consult your notes bring them up in order to read them. By looking down at your notes and being unsure, you cause your voice volume to drop and are probably not moving the microphone concurrently so you are outside of the radius yet again.

Rule 5: Talk to the microphone not the prof. Sorry to burst your bubble but we don't really care if you are wrong, although we do want to hear you in case you are right! This is my theory as to why Debra's panels are pretty well heard – she's right in front of you so it's easy to look at her with the microphone. If the prof does engage you in conversation, turn the microphone with your head - don't break that close radius!!

Rule 6: SLOW DOWN!!!! I know you're nervous but speak slowly – remember how it feels when the profs speak too fast? Most of your classmates are trying to taking notes as you speak. So make sure to prepare for class, the more prepared you are the less nervous you should be.

The PFEC Account

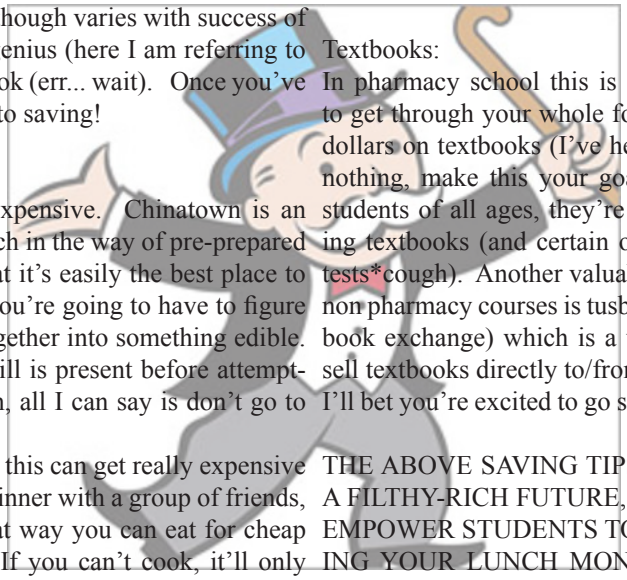
The PFEC account is a series of articles written by the Pharmacy Financial Education Club executive aimed at improving pharmacy students' financial knowledge

By: Tara Farquharson, 1T3 (PFEC promotions director)

On Saving:

If you're anything like me, saving money isn't as much a chore as it is thrilling (what can I say, I lead an exciting life). So I thought I might share some financial gems with my classmates.

If you're looking to save capital, the first step is to acquire some. This is an important step. Money can be acquired by various methods: jobs (very time consuming), OSAP/UTAPS (not so time consuming), Parents (convenient access, though varies with success of acquisition) obtain finances through genius (here I am referring to grants/scholarships), or invent Facebook (err... wait). Once you've completed this step you can move on to saving!



Food:

If you live downtown, this can be expensive. Chinatown is an amazing way to save. There's not much in the way of pre-prepared food but for fruit, vegetables and meat it's easily the best place to go. This would imply however that you're going to have to figure out how to put these raw materials together into something edible. Ensure that some form of culinary skill is present before attempting this. If you don't live downtown, all I can say is don't go to Sobeys.

Also, avoid buying meals on the go as this can get really expensive really quick! If you're going out for dinner with a group of friends, you might want to try a potluck. That way you can eat for cheap and get together with your friends. If you can't cook, it'll only take one visit to a potluck before your friends will ask you to bring yourself and not your food (which is even better for saving money!)

Movies:

it's actually really easy to save money on movies. There are a number of 'no name' movie theatres downtown such as Rainbow Cinemas and Magic Lantern Theatres which offer cinema experiences for about 7-9 dollars (5 on Tuesdays!). If you're not interested in those options Scotiabank and AMC tickets can be purchased for a discount of about 10 dollars at the UTSU office. AMC also offers tickets for 6 dollars every day before 12 noon. The deals are so great it's like a dream! Or even a dream within a dream within a dream within a dream

Nights out:

Like to get your drink on but don't like burning holes in your pockets? Drinking can be expensive in bars and clubs, pre-drinking is a good option and it's a good chance to hang out with your friends without the background noise. If you arrive at your destination and your level of intoxication is not at par, purchasing a pitcher is another effective way to keep a night out affordable.

The holidays: if you're going to be buying gifts this holiday season, do your best to shop after Christmas! It will also help your purse/wallet if you enjoy getting up early every day the week after December 25th to hunt for deals in crowded malls full of crying babies and window shoppers. You may consider refilling your prescription for Ativan for this special occasion.

Discounts:

Use them! Coupons aren't just for seniors. Also if you've got friends who get discounts where they work (especially Wal-Mart or Shoppers), become better friends with them (and then ask to use their discount). Remember though that discounts on useless things are not savings. For example, a 50% discount on a "Snuggie" is a 50% charge for looking like Jedi reject.

Textbooks:

In pharmacy school this is really easy, I would say it's possible to get through your whole four years and spending a few hundred dollars on textbooks (I've heard rumours of students who've paid nothing, make this your goal). Make friends in with pharmacy students of all ages, they're a great resource for buying and selling textbooks (and certain other valuable references *cough past tests*cough). Another valuable resource which is more helpful for non pharmacy courses is tusbe.com (Toronto undergraduate student book exchange) which is a website allowing students to buy and sell textbooks directly to/from other students.

I'll bet you're excited to go save some cash, go forth and be thrifty!

THE ABOVE SAVING TIPS WILL IN NO WAY GUARANTEE A FILTHY-RICH FUTURE, AS THE PURPOSE OF PFEC IS TO EMPOWER STUDENTS TO EXPLORE OPTIONS OF INVESTING YOUR LUNCH MONEY IN ORDER TO GROW MORE LUNCH MONEY. TO FIND OUT MORE, STAY TUNED TO PFEC'S LIST-SERVS

http://pfec.uoftpharmacy.com/

pfec2009@gmail.com

Association Journal. 181 (2009): 891- 896

cont'd from pg 10

Haydon E., et. al. "Prescription drug abuse in Canada and the diversion of prescription drugs in to the illicit drug market." ***Canadian Journal of Public Health***. 96 (2005): 496-461.

Morgan, Steve P. et. al. ***The Canadian Rx Atlas Second Edition***. Vancouver: The Centre for Health Services and Policy Research. 2008.

Ontario College of Physicians and Surgeons. ***AvoidingAbuse, Achieving a Balance: Tackling the Opioid Public Health Crisis.*** Toronto: College of Physicians and Surgeons of Ontario, 2010.

"Opium." ***The Columbia Encyclopedia, Sixth Ed.*** 2008. Web. 19 Oct. 2010. <http://www.encyclopedia.com>

Paglia-Boak, et. al. ***Drug Use AmongOntario Students 1977-2009.*** Canadian Centre for Addictions and Mental Health. 2009.

Preston, M. "Opioid Abuse and Dependence." ***Patient UK***. 29 Apr 2009. Web. 20 Oct 2010. <http://www.patient.co.uk/doctor/Opioid-Abuse-and-Dependence.htm>

Sproule Beth et. al. "Changing Patterns in Opioid Addiction: Characterizing Users of Oxycodone and Other Opioids." ***Canadian Family Physician.*** 55(2009): 68-69

World Health Organization, United Nations Office on Drugs and Crime. WHO/UDODC/UN AIDS position paper: Substitution maintenance therapy in the management of opioid dependence and HIV/AIDS prevention. Geneva: WHO, 2004.

Fun... with MedChem?!?

By Emily Chen, Michael Tsui and Rose Liao, 1T3

On a Friday night, two days before the dreaded first Medicinal Chemistry midterm,Michael, Emily and I (Rose) decided to get creative to memorize the gazillion transporters we had to know for the test. The three of us sat in the second floor study room from 4pm to 10pm, only going out to have dinner. However, those six hours were spent not only being productive, but extremely enjoyable! We laughed and joked, shared ideas, and conquered transporters all at the same time! One of the best things about pharmacy is our tight-knit community and collaboration. Even in the midst of stressful midterm season... Who says studying can't be fun?

Intestines:

Absorptive
OATP2B1 - Organic Best Green Egg Plant –
*Benzylpenicillin, *Glibenclamide, *Estrone sulfate, *Pravastatin
OCT1 - October 1st = flu season, so need *ANTI-VIRALS* - acyclovir, ganciclovir although
they're not anti-flu)
Efflux
MDR1- DR. 1 (MD and DR) - prescribes *EVERYTHING LIPOPHILIC*,
*EXCEPT*ACE Inhibitors and STATINS
MRP2 - MR. 2
- he is promiscuous and *CONJUGATES* (glucuronide, glutathione, sulfate) around, so he gets *HIV *(saqunavir, ritonavir, indinavir) and *syphilis* (benzylpenicillin)
- he has high cholesterol (*STATINS*) and HTN (*ACE inhibitors*)
- he also has cancer (*anti-cancer drugs *like etoposide)
- he is married to Christine (*vincristine*)

BCRP- *Estrogen *Makes *Females *Very *Touchy and they become *CAM4s
- Estrone sulfate, Mitoxantrone, Favonoids, Vinblastine, (all) Tecans,
Cimetidine, Anthracyclin, Methotrexate, 4-methylumbelliferone sulfate

Liver

Sinusoidal
OAT2 - hippies (p-amminohippurate) need ASA (*NSAIDs, salicylate) for
their brain (cephalorsporins)
Canalicular
MDR1 - DR. 1 now prescribes *ACDDEM-QQ+VV* (atorvastatin, cyclosporin, digoxin,
daunorubicin, etoposide, methotrexate, quinidine, quaternary N salts, vinblastine,
verapamil)
MRP2 - Same as in the intestines
BSEP- Now renamed to be *Bile Statin* export pump - transports bile acid & statins
BCRP- Same as in the intestines
MATE - MATEing is a CIN and you will DYE (transports - cin's and cationic dyes)

Note: This is not a comprehensive list, but first years, feel free to use our silly acronyms next year!

Time-Out

By: Simone Liang, 1T4

Left standing in darkness, I begin calling out to my brothers and sister, while fumbling around the house for a flashlight and candlesticks. During power outages, my siblings and I have always been left baffled by the loss of the television, internet, and simple act of turning on a light by flicking a switch. The loss of electricity always made me feel isolated from the modern community, and emphasized how much I consider technology as a part of society.

Though we were forced to find other means to entertain ourselves during power outages, the time spent reading or playing cards without electricity always seemed more precious. Like camping, the time spent in the absence of technology revealed the pursuits and activities that did not require the internet, television or cellular phone. I remember how on one particular night the loss of electrical power left me writing out my French homework by candlelight. Initially, the idea of finishing my paper at 9 pm without a computer and light source seemed unlikely, and I was strongly tempted to excuse myself from the task altogether. However, after carefully writing out a final draft of my paper by the light of a flickering candle, I had a renewed sense of accomplishment, and respect for those before me who had completed their tasks by candlelight.

Today's society tends to forget the aspects of life that do not require technology, and the tasks that can still be completed without it. However, with my three email addresses, Portal, and Facebook, I have only been able to control technology's influence to an extent. With 3000-word essays, word count has become priceless and online quizzes and lectures have made Portal a necessity. Consequently, when a power outage occurs, I breathe a sigh of content as society and I are forced to take a break from technology.

The Problems with Pharmacy Students: A Treatise in Five Parts

By: Adam Calabrese, 1T1 Monograph Rep

I - Substitute Reinforcement

This will be my last Monograph article while I'm still piddling around the faculty building. For every issue of the Monograph since September of 2007, I've submitted at least one (sometimes more) article per issue, and for that matter, my articles are frequently the best of each issue. Despite this, I've never once won an award, which is usually given out every issue by a draw. Consider! How much of The Monograph is composed of people writing because they have to, and how much of it by people who want to? Which articles are usually better? It's not a coincidence.

II - Object Permanence.

This is something that pharmacy students apparently do not learn. When Zubin Austin tells us about a certain precedence of law that we don't like, everyone seems to take it upon themselves to ask if that's *really* the case, expecting reality to be altered to fit their preconceived notions of how it should be. There are two explanations for this. The first is that, after years of being in science classes where asking a question often yields a different explanation or resolution of conflicting information, pharmacy students are accustomed to things changing when a question is asked. The second is that our parents didn't play nearly enough peek-a-boo with us as infants, resulting in spectacular failures of imagination when we can't derive answers to our own questions from first principles. In other words, when Tom Brown tells you that birth control pills can be administered vaginally and you want to ask if doing so will actually work, you should consider how likely it is that an expert in the field would knowingly recommend an ineffective form of birth control. Just once, I would love – and even pay – to hear a professor tell a student how spectacularly stupid their question was.

III - Object Permanence, part II

This segment isn't actually a problem with pharmacy students, it's a problem with former pharmacy students who go on to become pharmacy professors. Have you ever been sitting in a lecture where the lecturer is simply bombing – usually manifested by asking near-rhetorical questions of the class and waiting for answers – and they continue doing the same thing throughout the course of the lecture (and their career), infinitely compounding its tediousness? This behaviour doesn't merely annoy me, it makes the lecturer's life much harder than it has to be, and yet it persists. In fact, it epitomizes everything wrong with this faculty: when something is plainly wrong and messed up, it keeps happening, to the dismay of students and discredit of the faculty. And yet, the faculty has the gall to tell us that we need to become "life-long learners" despite their own clear failure to do so. It's an embarrassment, and if this faculty wants to have any business elevating the status of our profession in the public sphere it should start with a curriculum worthy of "the most trusted health care professional", with professors who can set that standard. But I'm not just saying this to vent steam. This article has an audience of about a thousand people, give or take. Here's something the faculty doesn't tell us enough: we're the future. Many of us are going to occupy powerful positions within hospitals, businesses, professional associations, and this faculty. If any one of you find yourselves in such a vaunted position, stands need to be taken: against lousy professors, lousy lecturers, lousy courses, lousy degree requirements and more importantly against a curriculum where the rate limiting step in moving from one year to the next is decided by people who have no business deciding what is and isn't important for pharmacists to know. Remember what it feels like to be on the sharp end of bad decisions and don't let them be made again. This apparently does need to be said: with reference to part I, it seems a lot of people who have any motivation to occupy positions of leadership are in it for themselves, rather than for the people beneath them. If I come back for a twenty year reunion and find any of you in such a position without having resolved this state of affairs, I'm not going to be happy to see you. For that matter, if you're one of those lecturers who consistently bombs every lecture year after year, take a public speaking course. Considering how much of our money we pay you to teach us, it's not too much to ask you to do the job well.

Part IV - Self-pity

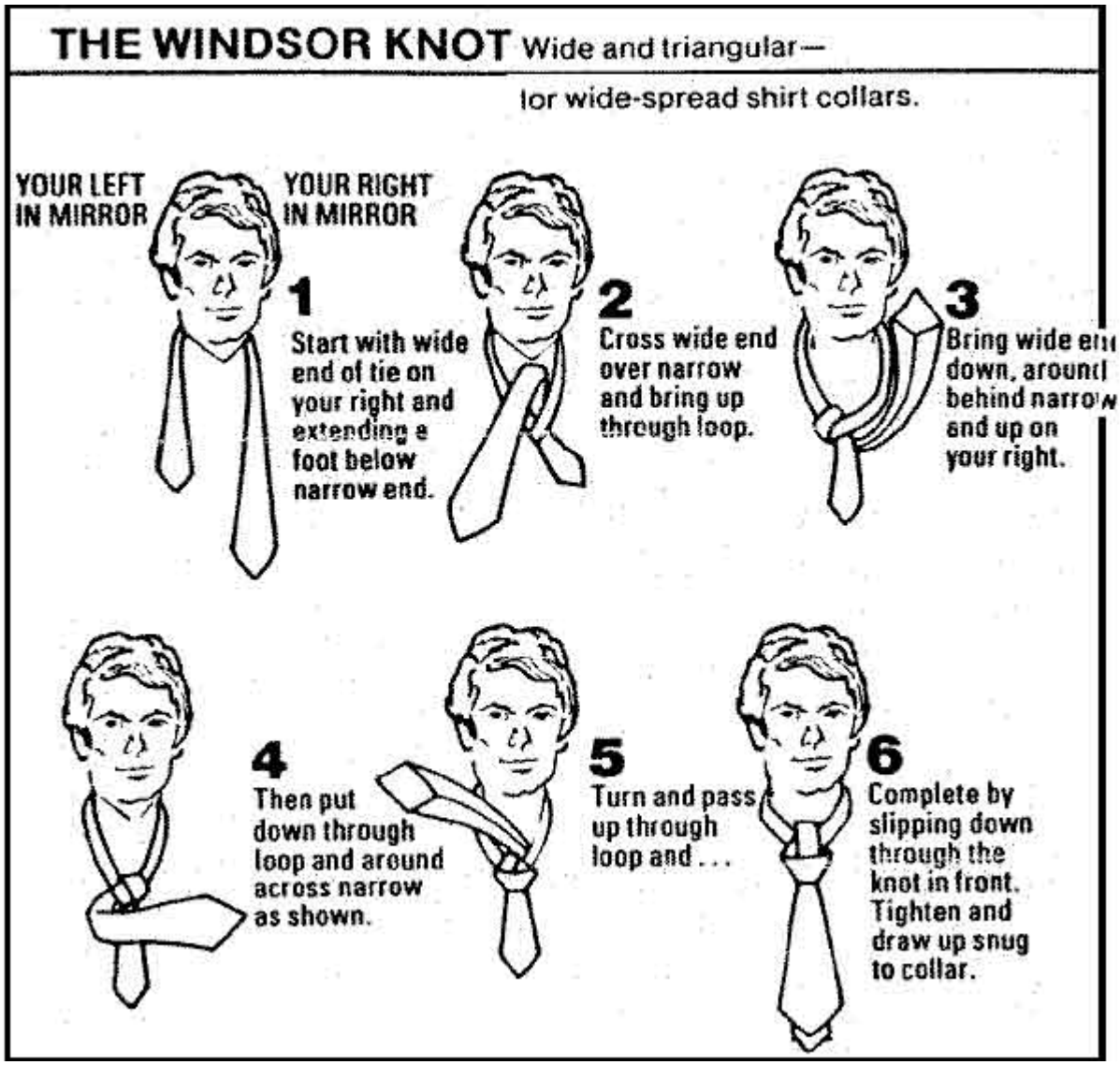
There is no occasion too minor to bemoan the pharmacy student's fate: we complain that the clocks in the building aren't visible from the back of a classroom, because it's apparently too Sisyphean a task to look at our laptop screens, cell phones, watches, MP3 players, or any one of the many devices each of us has which tell time. If there's an alumni reception, let's whine that we won't be making as much money as them and won't be able to afford such a wonderful evening. Companies trying to recruit us don't provide the finest of free dining or their representatives don't grovel hand and foot at our impending degrees. None of these characteristics are becoming of "the most trusted health care professional". If you want to be paid for giving trustworthy medical advice to people, you should be trustworthy yourself, and if you're busy whining about how your SPEP commute is too far (though of course, not too far to move) then chances are you shouldn't be trusted with organizing so much as a picnic. Since it's been proven beyond any doubt that the faculty isn't looking out for our interests, it's up to us. We need student government that innovates, rather than one that just follows what the UPS constitution tells them to do, or one that runs for office to boost their resumes, or is afraid of being too edgy, or busies itself with censoring Monograph articles that make fun of it, and whose members don't plagiarize articles for

the Monograph (the last two have happened in the last few years). But to do any of this, we need a student body that embodies all of these principles. How do we get that? Well, to go back to part I, we need a student body that wants to, rather than has to, be here.

Part V - Motivation

On a collective basis, pharmacy students would rather avoid being wrong than be rewarded for taking a chance. How many of us are pharmacy students because our parents pressured us into it, or because we thought it'd make a good path to medical school? A lot of us, and far more than we'd like to admit. It's the reason everything's a downer. We could shirk off our parents and do what we really want with our lives, or focus all of our efforts on getting into medical school rather than getting out of pharmacy school, but a lot of us were too afraid to fail. The next time you're being told about the wonderful future of pharmacy – being reimbursed for cognitive services, performing pharmaceutical care, penetrating dermises – remember that it doesn't exist yet. It's going to take hard work, risk, and a willingness to operate in unfamiliar territory. Since we're evidently afraid to operate in the unfamiliar territory of commuting uptown, or Barrie, or taking a jab at Deb Matthews in the grad song, we would do well to consider how likely we are to overcome the challenges facing us and lead the profession to the future we want.

Also, would all of the men in pharmacy do me (and themselves) a huge favour and learn how to tie a full windsor knot on a tie? You all look ridiculous.



Rx Files: Dora Chan

Compiled by: Dipti Tankala, Junior External Affairs Director, 1T2

Demographic Info

Year of Graduation: 2001
Pharmacy School: UofT
Have you completed any advanced training or certification? Certified Geriatric Pharmacist, Certified Respiratory Educator, PharmD Candidate (will be graduating from University of Florida Working Professional PharmD program in Dec 2010)
Do you participate in any other professional activities (eg. committees, professional associations)? Member of OPA, CPhA, ASCP (American Society of Consultant Pharmacists)
Treasurer for the Canadian Society of Consultant Pharmacists (A chapter of ASCP)
Involved with teaching at the Faculty (TA in the professional practice lab, SPEP preceptor)

Job Description

Are you a part A or B pharmacist? Part A
What position do you hold or what is your current practice? Family Health Team Pharmacist (Taddle Creek FHT in downtown Toronto) and long-term care consultant pharmacist for GeriatRx Pharmacy in Toronto
Describe your typical work day?
@FHT: answer drug information questions from the physicians and other health professionals on the team, see patients for INR monitoring and Warfarin adjustments, med and supplement reviews, asthma/COPD assessments & teaching and hypertension management.
@GeriatRx: spend my mornings at the nursing home doing chart/medication reviews, nursing education, drug disposal, auditing of medication ordering and administration procedures. Afternoons spent doing dispensing activities at the pharmacy.

What do you like most about your job?
Challenging drug-related questions and med reviews, autonomy to build my FHT practice, flexibility of consulting, working with different health-care professionals
What is the most challenging aspect of your job? Defining my role at the FHT and getting other HCPs to realize what I am capable of doing. It is still a challenge to get referrals from the physicians I work with.
What medications do you find the most challenging to manage? Opioids – clinicians are hesitant to prescribe and patients are afraid to use them for fear of addiction (even though their pain is not well-controlled).

Job History

How did you get to where you are today? Networking! Most of the job experiences I had prior to my current positions were the result of meeting key people while in pharmacy school and also outside of pharmacy. These prior job experiences provided me with exposure to many different types of pharmacy practice and helped me to figure out what I enjoy doing the most.
What were some of the greatest challenges that you had to overcome along the way? Juggling PharmD school with work.
What courses, degrees, or previous positions that you have held do you find the most relevant to your current job? All of my previous positions built up my experience and were relevant to my current jobs. In the past, I've worked in a hospital setting, retail, drug information, research and home care.

Pharmacy School

Fondest Memory from Pharmacy School: Attending CAPSI in Quebec City with my friends and classmates
Favourite Pharmacy Professor/Course: Professional Practice labs with Christine Pavicic and Zubin Austin
Summer Jobs held during Pharmacy School: I worked at a Bakery in Kensington Market, until I got a job at the Shoppers Drug Mart at Bloor and Spadina.

Advice Questions

If you did your pharmacy degree all over again, what would you do differently? Nothing – I'm happy with how it's turned out so far!
What advice do you have for current pharmacy students or new graduates? Keep your eye out for interesting opportunities by joining organizations such as OPA, CSHP, ASCP, etc & keeping in touch with classmates. Try to get certified in a specific area that

you are interested in

What advice do you have for students searching for a job next summer? Network!! Be proactive and talk to potential employers ahead of time; volunteer if you have to!

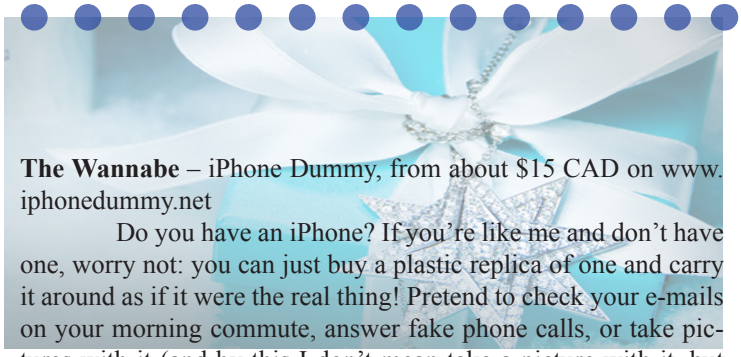
Future of Pharmacy Questions:

Where do you see the pharmacy profession in Ontario heading in the next five years? Considering the upcoming changes to the profession through Bill 179, I foresee more pharmacists involved in multidisciplinary care, especially at the retail level.

If you have any comments about this interview or would like to suggest a pharmacist to be featured in RxFiles, please contact us at tankala@gmail.com or nataliapersad@gmail.com.

The Perfect Gift...

By: Kristine Galido, 1T3 Monograph Rep



It's that time of the year again, when the malls become full and crowded with people doing their Christmas shopping. I LOVE IT. Shopping for the gifts is half the fun.

But of course, there's always that handful of people on your list that are especially difficult to shop for. Personally, I think I'm one of these, because I always end up getting really unoriginal and age inappropriate gifts. For example, the 32 piece makeup brushes kit when I was 8 and didn't wear makeup, or the Mary-Kate and Ashley perfume set, complete with their autographs of course, when I was 18 and (obviously) too cool to be associated with such merchandise. And let's not forget the Christmas card I received addressed simply to "KM". I mean, I know it's the thought that counts, but sometimes it seems like they weren't really thinking of you at all.

So in order to avoid giving your friends the same boring old gifts, I've put together a small list of some of the quirkiest, oddest gifts of varying and often debatable utility that I found while surfing the Internet. And even if none of these are good gift ideas, at least it will have been a good laugh.

The Perfect Gift for...

The Annoying Lovebirds – *Smittens*, about $30 CAD, www.smitten.com

It's pretty much two pairs of gloves where one pair has been fused together so that the wearers can hold hands inside it. While I admit the idea of having a pair of smittens is kind of cute, they're also a little bit useless since you can only use them when the other person is around. Plus it encourages uncomfortable, sweaty handholding, which I think is sort of awkward. But a cute and novel gift, nonetheless.

The Lazy One – The Moo Mixer, about $14 CAD on www.amazon.com

The Moo Mixer is a self stirring mug which stirs up boring milk and exciting chocolate syrup and creates chocolate milk. I'm sure this mug can stir more than just chocolate milk, which makes it slightly less useless and a little bit more awesome in my books. The less effort I have to put into mixing my coffee in the morning, the better.

The Wannabe – iPhone Dummy, from about $15 CAD on www.iphonedummy.net

Do you have an iPhone? If you're like me and don't have one, worry not: you can just buy a plastic replica of one and carry it around as if it were the real thing! Pretend to check your e-mails on your morning commute, answer fake phone calls, or take pictures with it (and by this I don't mean take a picture with it, but take a picture with you holding it, so you look super cool). And don't worry, if your friends don't think it's legit, you can show them the retail box that it came in – which this website also sells.

The Violent (and coincidentally, neat) One – Dead Fred, Splat Stan, and The Ex, from about $12 on www.amazon.com

A pen holder, coaster, and knife rack respectively, Fred, Stan, and The Ex will help you keep your place nice and tidy by doing such things as keeping your pen upright, leaving the coffee table free of water stains, and holding a series of very sharp knives while satisfying your urge to mutilate little plastic humans.

The Amateur Ornithologist – Birdseed Shoes, unknown price, unknown location

I just saw a picture of these that said they were available to buy in 2007, but I'm not sure if they still make them. But they're for your friend who loves birds so much that they wouldn't mind if a couple of them landed on their feet and ate their shoes off.

The Philanthropist – Donations to a fake charity, FREE on www.care4less.org

This isn't an actual gift, but I thought I would throw it in just for fun. At the very least it will put a smile on your face. Donate to a fake charity like the Lost Geriatric Glasses Fund on behalf of your friend and send them an e-mail about it. And if that doesn't interest you, you could donate to a real charity, which is also very highly recommended.

Me – The Banana Guard, $6.99 CAD on www.bananaguard.com

I'm not saying that this is on the top of my Christmas wish list, but it's a pretty useful gift despite the fact that it looks a little...weird. Personally, not a big fan of having the banana I was going to eat as a morning snack crushed by my Biochemistry textbook. Apparently owning one of these will help.

Happy Holidays, everybody!

PHOLLIES 2010

This year's Phollies was a HUGE success! We had a full house for both nights!

On Thursday night, we had some great acts including skits from all the class councils, pianists, dancers, and singers. The Choir opened the show with a wonderful rendition of "Don't Stop Believin'". This was followed by "Wedding Dress," a dance performed by some 1T2's, Nick Tsang, Will Khong, Carole Chen, and Janet Chang. The class councils all did some amazing skits and musical parodies that kept the audience captivated and wanting more. Tassnim's slam poetry was very insightful and revealing. Jack Bodkin's original piano piece was uplifting. The much-anticipated Bhangra dance didn't disappoint and delivered a show-stopping performance right before intermission. After the intermission, Zhenming, Angelo and Dominic from 1T3 got out their guitars and harmonicas and sang "Sleeping Sickness" and "Kids". The act that was the most talked about after the show was MDMA's dance medley where they danced to "Wedding Dress", "Poker face", and to top it off, " Single Ladies"! We ended the night with Chris Fata on the acoustic guitar followed by the grad song performed by the 1T1s.

On Friday night, we had a special performance by the Faculty! Dave Dubins, Vinita Arora, and Debra Moy performed a skit and song about second-year labs. We also had some more pianists perform on Friday night including Ian Wu playing and singing to "Great Balls of Fire" and Justin Lin performing a classical piano piece. Rachel Whitty also joined us on Friday night to perform a self-choreographed dance.

Special recognition has to be given to the MC's, Adam Calabrese and Cameron Forbes, who's comedic and musical acts kept the audience laughing and smiling for the entire show. Some big LOL's came from their slideshow, Cameron's rendition of Neil Young's songs using a rubber chicken, and of course the Jug and Spoon music!
A big thank you to all the performers, the MCs, our technical coordinator (Sabrina Liu), our stage manager (Eric Leung), and all our volunteers who made the show a great success!

Tiffany Kan & Elizabeth Lu
UPS Events Co-Directors 2010-2011

144 College Street - The Pharmacy School Musical

By: 1T2 Class Council

Prologue

To the tune of Fresh Prince of Belair

Now this is the story all about how I wear this white coat right now
and I'd like to take a minute just sit right there
I'll tell you how I became a dealer, all legit and fair
In South East Ontario, born and raised
I used to surf, sleep not study
most of my days chillin' out, maxin', relaxin', all cool
but all shy of girls in and outside of school
when a couple of guys who were dressed up all good
started makin' money in my neighborhood
Wanted to know who they were, but ask? No way!
yet someone said, "They be drug dealers, here to stay"
I went home all dazed, it wasn't fair

(continued on next page)

How could drug dealing be legal, how did they dare?
I had to find that job, just didn't know where
My search hit U of T, I started to care
I worked real hard, only studied and ate
To be finally told "You're in! You made it!"

I looked at Leslie Dan I was finally there
to sit on the pod and study pharmaceutical care

Act I: First Year

To the tune of Just the Way You Are by Bruno Mars

"First year first year, So much ahead to learn and fear
(But we've) got time, got time
At least until we reach 3rd year
So for now, Let's just enjoy this atmosphere
OOHHH you know you know you know, Doris is kind of scary
If perfect's what she's searching for, I'll fail pharmacy
Nooo, just put on your labcoats and try to do OK
So we can sayyyyy
Mom and Dad
We got into Leslie Dan
It's just like highschool
Except we're all older
Tug-of-War, Phollies, free pizza, and socials galore
Yeah it's amazing, The lack of work this year

Act II: Second Year

To the tune of: Empire State of Mind by Jay-Z

Yeah, Yeah I'm up on third, now I'm down on second floor
Right next to the giant pod, but I'll be in basement lecture hall.
Now I'm in second year and since I made it here
I can make it anywhere, yeah this is my year!
I used to study all night, 128 test
Then I got to second year with that 222 mess.
Took me all month to understand Wells,
Now a new prof, man what the hell?

Running up the stairs, no time to wait
Pharmaceutics lab and I'm really late.
Dave Dubins rockin out, on his guitar
A song about viscosity…and cornstarch?
Say what up to Debra, sportin those high heels
Sittin in panel, getting that nauseous feel.
Dude I don't want the mic, I didn't do the readings
Tell by my attitude, that I don't wanna be…
In PB, concrete jungle where PPLs happen
Watch out for those DTPs, now you're in PB
Doris will make you feel like a fool
Big pods will inspire you, let's hear it for PB, PB, PB

Act III: Third Year!

To the tune of Miss Me by Drake

I said pharmacy what's really going on
Lecture is beginning, I'm ready but what's happening
3rd year is the year that I be learning
Drugs I'll be seeing everyday my brain is hurtinnngg
Debra she be grilling me, asking me bout ostomy
Lice pediculosis it be crawling up my bed sheets
Kinetics it's confusing, graphing on log sheets
Uetrechct's class is word for word I'm just transcribing
Fadie u got it right(said by harvinder) ye I got it harv
I think we should just use colchicine just because
Cus therapeutics tough
My groups had enough
Kenny's got a dermatitis rash on his butt
Yeah, We be in PB 'til late at night
Someone tell the Dean to let us in the building past 5
Call up Ms Lavack tell her 240 aint the right size
She should cut it down so we can find a job all right!
Now I now I'm whining but I gotta tho
Shoppers cutting hours and our wages on the down low
got friends goin to med school, one got into dentistry
But to tell u what the only route fo me is pharmacy
cus I just love how we can do it all
got a patient on crestor, his wife be on that adderall
I am the most accessible, got a question? U just gotta call
I see Rocchi in the crowd, we think u above em all
Advair, symbicort, flovent, for my chest
I see Daveyyy Yam president of that ups
Now ima pass it off I'll see u all at the next
Phollies 2010, 1T2 we da best!

Act IV: Fourth Year

To the tune of Public Service Announcement by Jay Z

Allow me to re-introduce myself
My name is HARV OH, H-A-R-V
I used to move Advil by the library
I guess even back then you could call me
Associate of the PHARM-A-CY, OH!
Fresh out of pharm school and into the fire
I be the, sick patients number one supplier
Flyer than the piece of paper bearin my name I
Got the hottest chick in the game wearin' my chain, that's right
HARV I'm not a D.O.C.
but similar to them letters, pharms can do it better
I check prescriptions like my old preceptor
My homey Nima told me, "Dude you the freshest"
So that's what I'ma do, get you back in the mood
with the bestest, me I got the money and the licence
Let me tell you what I gotta do to protect this
I dispense drugs with much due diligence

How do YOU deal with exam stress?

Compiled by Kristine Galido, 1T3 Monograph Rep

One week before Med Chem and one week after Biochem, I asked the class of 1T3 how they were dealing with their exam-time stresses. This is what I got in reply:

"I blast absurdly loud feminine pop music and sing into a hairbrush like Taylor swift in the music video for 'You Belong With Me' until I lose my voice..."
- Zhenming Wei

"So... Exam time stress, eh? Interesting question. Well, SOMETHING certainly happened to me. To this date, I'm still not quite sure whether I've managed to look past the marks and laugh it all off, or I've just plain snapped. I went to the last two midterms with minimal studying. And by that, I really mean minimal. Like starting biochem at 12:30AM on the day of. And I wasn't nervous in the least at the exam centre. I honestly tried to draw up some inkling of fear, or anxiety, but it simply didn't come. I was as calm as... A rock, for lack of a better simile. So. What's wrong with me? Cracked and gave up? Or on to something really awesome here? You decide. As an afterthought, by some miraculous act of God, I'm actually not part of the half a dozen poor souls who did badly enough to receive special mention by the professor in class. God really has a wacky sense of humour.
- David Teng

"Harry Potter! "
- Samantha Dyer

"How am I dealing with exam stress? CARBS!"
- Tracy Zhang

"I BEAD THINGS..."
- Irene Lee (pictured)

OPA Student Cup 2011

Join us for the annual hockey showdown between UofT and Waterloo schools of Pharmacy. UofT has held the championship for two years in a row...can they do it again on home turf?
Come out Sunday March 20th in pharmacy RED and cheer our team on!
Contact the UPS Co-Ed athletic director if you want to get involved with this amazing event! brendon.wiebe@utoronto.ca

The Wonderful Land of Musicals

By: Sana Naqvi, 1T4 Monograph Rep

A few years ago, in early July, I was walking home from the bus stop and decided to check the mail. As I flipped through the numerous flyers and letters for my parents, I came across an envelope addressed to me with a return address from England. Confused, I quickly opened it only to find two tickets inside. Turning them over, I realized they were two tickets to the Lord of the Rings Musical! I ran home to find out who the mystery sender was and realized that my oldest brother, who was in England at the time, had sent me an early birthday present! Anxiously waiting until the big day arrived, my sister and I went to watch my very first musical. And that's when I fell in love…with musicals.

Since then, I've seen many musicals including Dirty Dancing, The Sound of Music, and Legally Blonde, each of them being absolutely fantastic! I really feel like I'm in another world when I'm watching a live performance, totally immersed in the story, taking in every detail I possibly can. I think the magic of it all begins as soon as I step foot into the theatre, walking on their plushy maroon carpets and breathing in the scent of popcorn. As I walk in and take my seat, hoping that no one with an oversized head sits in front of me (no offense), I eagerly pull out the musical programme handed to me at the door. I always like reading about the actors and actresses before I see them on stage. I love knowing about how long they've been acting, where else they've performed, their career goals, etc. As I read to myself, I wonder what it would feel like to perform in front of hundreds of strangers over and over again and to receive that same exhilarating standing ovation always given at the end. Do they get used to it and think nothing of it? Or do they genuinely appreciate the applause each and every time? Are they nervous they might mess up, or do they really feel as confident as they look?

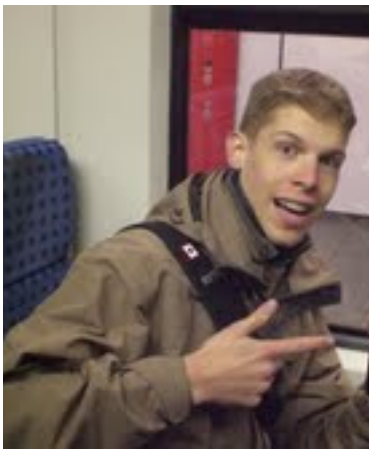
Finally the lights are dimmed, everyone gets quiet, and I begin to get sucked in to the wonderful land of musicals. As the characters come to life on stage, I'm always surprised by how accurately they both look and sound like the characters which they are emulating. For example, when I went to see The Lion King, Simba and Scar were so in character. I mean, obviously they're actors and that's their job, but I mean come on, they're supposed to be acting like cartoon lions! It can't be that easy, especially with all the roaring and crawling they have to do. Okay fine, I guess that's not that hard to do for trained professionals, but what about the 5 and 6 year-old members of the cast? You have to give them some credit at least. The thing I love about musicals, is the fact that it's all live. You really get to see exactly what is in front of you, with no editing and no photoshopping.

After studying the program and knowing the lives of the individual performers on stage, I begin to see how beautifully they're all able to work together. I mean, their choreography and harmony is almost always flawless. How many times did they have to rehearse to get everything so perfect? I'd really love to see the behind the scenes of a musical.

Then, when I get over the fact that the performance is so wonderfully choreographed, I start noticing the artistic detail. Have you seen the amount of time and effort put into the costumes? The Lord of the Rings musical amazed me the most with its elaborate costumes. Then, there's the detail put into the actual set. I love watching each scene smoothly melt into the next, with all of the background workers scurrying around in the dark moving around the props. I love how each individual worker knows precisely where to put each chair and set each table. My favourite part is how it only takes a couple of people to enter the stage from various sides, place random items here and there, and with a few swift movements everyone's gone and voila! The next scene is ready.

Finally, we get to the actual musical part of the musical. The singers and musicians are simply phenomenal. It always surprises me how each of them have such strong and resonating voices. Then there's the amazing fact that the orchestra, usually down below the stage, is perfectly in tune with what's going on above them. Do they have cameras down there to see what's happening on stage? How do they know exactly when to play each note? It is amazing that the entire soundtrack is being performed live below the stage!

As the scenes fly by and I delve deeper and deeper into the performance, taking in all the sounds and sights, before I know it the curtain is drawn. As each performer arrives on stage for their applause, I feel a huge rush of both exhilaration and inspiration. There always ends up being one or two performers that receive the most applause for their spectacular performance. It's always fun to see which actor or actress earns that respect. At last, as the entire cast arrives on stage, they all come together, hold hands and take a huge bow. I love how that single bow truly represents the remarkable team effort required to produce a flawless performance. As we leave our seats and exit the theatre, I can't wait to return for another amazing show. I think it's safe to say the one and only thing I hate about musicals is that they always end too soon.



Adam Calabrese I Like It On My Facebook Status

As I write this, Facebook is in the midst of another silly breast cancer awareness trend. By the time this comes out, we'll probably have forgotten about it, but I'm willing to be boring and even a little irrelevant to make an important point. The current trend of stating where you like to keep your purse, along with last year's trend of posting your bra colour are two symptoms of a broader syndrome where the otherwise serious subject of cancer has devolved into mindless fluff, thinly disguised smut and feel-goodery.

The ostensible goal of telling everyone that you like it on your yoga mat is to raise breast cancer awareness. Ask yourself: who, living in a first world country with a high standard of living and medical care, is not aware of breast cancer? Of those people, how many of them are on your friends list? Do you seriously expect such a person to suddenly have their awareness raised by a subtle innuendo whose point they don't understand about a disease they weren't aware of? I don't think anyone can honestly say yes to that question, which suddenly makes the trend utterly and absolutely meaningless. What did people expect? That setting their Facebook status to a certain sentence was going to prevent breast cancer from occurring? If you wanted to raise awareness, you'd busy yourself collecting statistics and pointing out the benefits of self-exams and regular mammograms for those at risk of breast cancer (and as you'll see in the next paragraph, this is the type of awareness that really needs raising).

But this runs into the trap of "awareness" as an end to itself. During the heat of the American debate on health care reform last year, the preventative services task force changed the mammogram recommendations. Having discovered that too many women were submitted to invasive biopsies or diagnosed with a false positive and sent through rounds of chemotherapy, it is now recommended that in the absence of other specific risk factors a woman's first mammogram should be at the age of fifty rather than forty. Instead of being a non-story in the news media, this caused a minor scandal from the moronic likes of Sarah Palin by being called the first step in Barack Obama's plan to ration health care. Although there are other factors at play for this issue, it's not too much to assume that this feel-good brand of breast cancer awareness, couched in a deep ignorance of it, was responsible for much of the reaction. If the received wisdom from awareness campaigns is that everyone is at an extreme risk for breast cancer and mammograms are an unquestionably good way to detect breast cancer, what happens when evidence says that the current number of mammograms being performed actually causes more harm than good? Well, the response turns out to be that people think that treatment is being withheld from women who need it. It may not be a particularly welcome conclusion that what was once thought to be a good and important step in detecting breast cancer was actually doing harm, but adhering to unwelcome conclusions in the face of evidence is what medicine requires. And of course, when conservative treatment recommendations are made for diabetes, nobody accuses the government of trying to save money on insulin and metformin.

If breast cancer is going to take up a major portion of the public's consciousness about disease, its prevalence bears some examining. According to the American Cancer Society (as such, these data are American), there were an estimated 209,060 new cases of breast cancer in 2010 (8.8% of cases in men) and 40,230 deaths (9.4% in men). For a little bit of context, there were 1.52 million total estimated

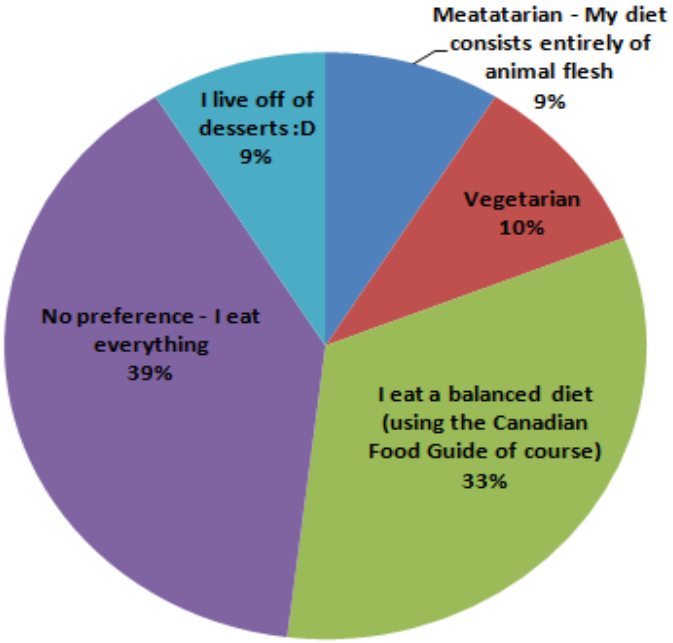
new cases of cancer, and some 569,000 deaths. The Centres for Disease Control reported in 2007 that diseases of the heart were responsible for 616,000 deaths (the number one cause), and cerebrovascular diseases were responsible for 135,000 deaths (the number three cause of death, after all malignant neoplasms). I can't help but notice that for all of the awareness being spread about breast cancer, it seems that there are other conditions that might deserve more attention. Smoking, poor diet and sedentary lifestyles are major risk factors for these three leading causes. Pancreatic cancer (36,800 esimated deaths in 2010) and colon cancer (51,370 estimated deaths in 2010) have similar figures to breast cancer for annual deaths. Why doesn't pancreatic cancer have its own uniquely-coloured ribbon? Why don't we have waves of young people updating their facebook status with confusing innuendos to raise awareness for colon cancer (since evidently, these cancers actually do need their awareness raised)?

It's clearly not by coincidence that the cancer of the breast has so much attention focused on it: it's so that people can talk about sex without actually talking about sex. If I come across as being too clinical about this, you might consider watching an episode of the TV show produced by magicians Penn and Teller, with a title too racy for this student-run paper. In an episode dedicated to "Breast Hysteria", dealing with such topics as the prudishness surrounding banning breast feeding in public spaces, the pair discussed exactly what I mention here. Some good points are raised. For example, despite every fundraiser, pink-ribbon emblazoned grocery store item and walk and run for the cure out there, there is no co-ordinated effort towards breast cancer research, so money is fractured among various organizations (to say nothing of overhead costs). Although it might feel good to wear a pink ribbon or participate in walk/runs for the cure, feeling good is not the same as doing something of concrete utility. And, to lend some credibility to my arguments, the same points are made in that episode by a former breast cancer patient, who wears a pin declaring "Cancer Sucks!" rather than joining in the hysteria of pink ribbons. It's a good statement.

When we start to inject emotion and feel-goodery into this subject, we open ourselves up to vulnerabilities. I've known people to openly declare that breast cancer is one charitable cause which they will always support, no matter what (although any cause could be used as an example). Attitudes like this render it a near certainty that shady characters will exploit an otherwise noble sentiment. Since it's already been proven that people will do just about any stupid thing with the label of "breast cancer awareness", how much convincing does it take to get them to start giving money? There are times when maintaining a stiff upper lip in the face of emotional circumstances is to our benefit. Just as it's necessary when deciding on recommendations for cancer screening procedures, it's necessary in deciding where our charity dollars go. Judging by Facebook trends, it seems that people think that doing anything at all is better than doing nothing. It's not true. I hope I don't really have to say it, but charity is about everyone *but you.* If your charitable donation hasn't actually gone to help people in need, then you might as well have burned your money, no matter how good you might feel about having donated. By the way, Facebook statuses exhibit the opposite trend: they exist solely for your sake, and nobody else's.

Worldwide, breast cancer was responsible for 0.84 percent of all deaths in 2002. I hope it's not too callous of me to point out that measles kills more people than breast cancer. We all know that measles is a vaccine-preventable illness. It's justifiable for us to focus on diseases that are prevalent in our own neighbourhoods, moreso if we've been close to people affected by them. Nonetheless, what motives exist for our charitable donations? In the case of cancer foundations, our motives ought to be saving lives and reducing human suffering. Not to say that cancer foundations aren't a worthy cause, but if we really cared about saving lives and reducing suffering, then ensuring every child born in the world were given a full MMR vaccination schedule would do more good than every walk and run for the cure, every box of cereal and toilet paper in grocery stores emblazoned with a pink ribbon, and every titillating Facebook update ever could.

1T4 Poll - What's Your Eating Style?



COMPILED BY:
SANA NAQVI, 1T4 MONOGRAPH REP

Pharmacy Athletics!

Womens Athletics

Another month has flown by in women's athletics and most sports have come to an end except for women's Hockey. Big thanks to all the ladies who found time to come out, especially the 1T1 athletes: Kayla Castonguay, Jenny Kotsidis, Nicole De Gasperis, Jessica Fitzgerald, Vanessa Cho, Sabina Wong, Jennifer Lam, Roshina Babaei-Rad, and Jelena Sparavalo, our intramural teams wouldn't be able to run without your dedication and all the best to your SPEPs!

The women's soccer team had their final against SGS, they had an exciting start and was twice leading on the field. Unfortunately they were defeated close to the end, losing at 2:4, but anyhow it was a great game and everyone contributed the fullest effort.

Good news is that we have indoor soccer in the winter term. The flag football team had the last game against Med, although defeated, they definitely pulled out some great shows with spirits and talents that would shine in a new season. And for women's basketball, Suzanne Rodger played amazingly well despite the team not making into playoffs. The women's hockey team is now the second leading team that's behind UTSC by just one point, and there are still more games for them, keep it up, ladies!

For those who missed out some wonderful time with pharmacy athletics, don't worry, you will have chances to play sports next term, just keep an eye on the athletic board for sign up sheets and listservs in early January.

The female athlete of the month is Irene Lee (1T3). Irene is the captain of women's flag football team, a member of Co-ed ultimate frisbee and Co-ed flag football team. She also participates in badminton and softball tournaments. Her dedication and skills has inspired others and contributed greatly to pharmacy athletics. Thank you and Congratulations Irene!

Shanshan Zhu-UPS Female Athletics Director

Male Athletics

As fall ends and we start to see winter setting in, another intramural season is coming to a close. The pharmacy men have had a very productive season this fall.

Our soccer team played a great season, but sadly lost a hard-fought game 1-0 in the semifinals. One of the pharmacy basketball teams made the playoffs this year, and had a heartbreaking loss of 32-30 in the first round of the playoffs. Our football team finishes the fall season off with a thrilling championship win. This is their third in a row! Congratulations on this semester pharmacy, but there is time to build on our success for the winter season.

Pharmacy hockey is the only team still left in action with 3 wins, 2 ties, and zero losses. We wish them the best of luck to them for the rest of the season and the playoffs.

The October male athlete of the month is Kenny Ma (1T2). He captained our co-ed volleyball and basketball teams, as well as playing on the ultimate frisbee team. The November athlete of the month is Ardalan Barghi (1T1). He captained our soccer team all the way to the semifinals. Great job gentlemen.

A big thank you to all our players, coaches, captains, and fans for a great semester. I look forward to seeing you all out on the courts and fields in the winter semester. A special thank you goes out to the 1T1's who participated this fall; your commitment will be missed.

Marko Tomas - UPS Male Athletic Director

Co-Ed Athletics

Hey Pharmacy! Yet another semester of pharmacy sports is coming to a close, and playoffs are winding down. The Co-Ed Frisbee team placed second in their league and went on to play UTM in the playoffs. Unfortunately, they lost in overtime in a hard fought match. Our Co-Ed basketball team also made it to the playoffs, but they too lost in their first playoff game to Trinity. Our flag football team made it to the playoffs as well, beating Phys-Ed to move on to the finals against Victoria College. After a tough game, pharmacy unfortunately lost, placing second. Although none of our volleyball teams made playoffs, each team played hard in some close round robin matches. Thanks to all our athletes and good job everyone! On another note, thank you to everyone who came out to the Curling Bonspiel this year. A total of about 50 students showed up, making for an afternoon of friendly competition against one another.

I encourage everyone to watch for the signup sheets in the second basement student room next semester and to get involved in some pharmacy sports. There are difficulty levels and a wide variety of sports for everyone to get involved in.

Brendon Wiebe - UPS Co-Ed Athletics Director

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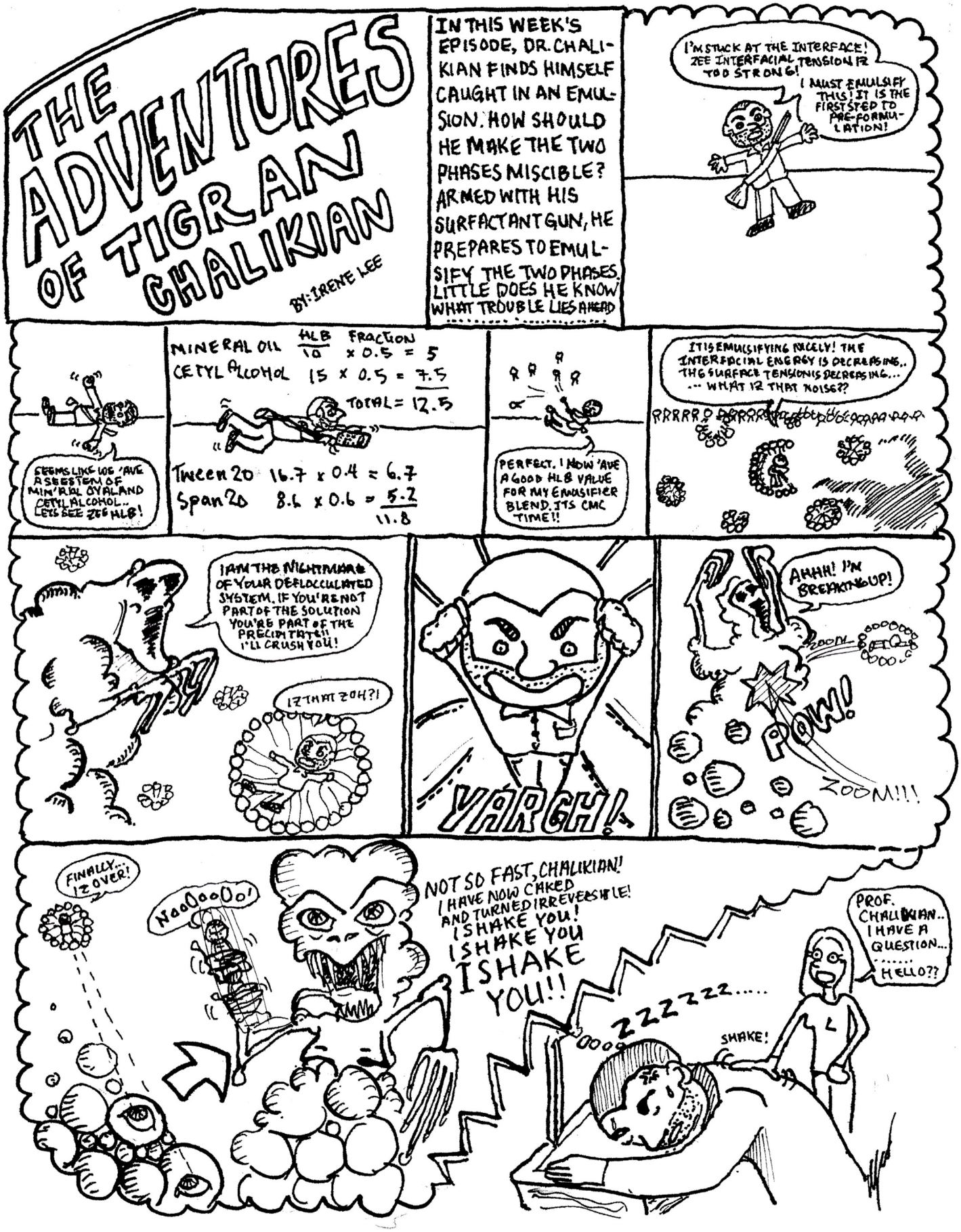
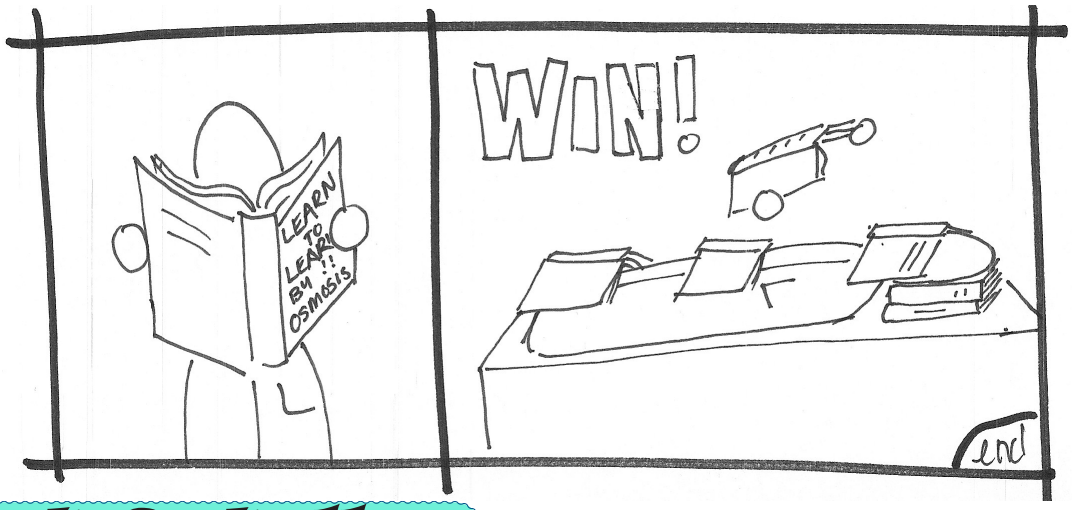

THE ADVENTURES OF TIGRAN CHALIKIAN
BY: IRENE LEE
IN THIS WEEK'S EPISODE, DR. CHALIKIAN FINDS HIMSELF CAUGHT IN AN EMULSION. HOW SHOULD HE MAKE THE TWO PHASES MISCIBLE? ARMED WITH HIS SURFACTANT GUN, HE PREPARES TO EMULSIFY THE TWO PHASES. LITTLE DOES HE KNOW WHAT TROUBLE LIES AHEAD
I'M STUCK AT THE INTERFACE! ZEE INTERFACIAL TENSION IZ TOO STRONG!
I MUST EMULSIFY THIS! IT IS THE FIRST STEP TO PRE-FORMULATION!
SEEMS LIKE WE 'AVE A SEESTEM OF MIN'RIAL OYAL AND CETYL ALCOHOL.. LETS SEE ZEE HLB!
MINERAL OIL HLB/10 FRACTION x 0.5 = 5
CETYL ALCOHOL 15 x 0.5 = 7.5
TOTAL = 12.5
Tween 20 16.7 x 0.4 = 6.7
Span 20 8.6 x 0.6 = 5.2
11.8
PERFECT. I NOW 'AVE A GOOD HLB VALUE FOR MY EMULSIFIER BLEND. ITS CMC TIME!!
IT IS EMULSIFYING NICELY! THE INTERFACIAL ENERGY IS DECREASING.. THE SURFACE TENSION IS DECREASING... ... WHAT IZ THAT NOISE??
RRRRR?
I AM THE NIGHTMARE OF YOUR DEFLOCCULATED SYSTEM. IF YOU'RE NOT PART OF THE SOLUTION YOU'RE PART OF THE PRECIPITATE!! I'LL CRUSH YOU!
IZ THAT ZOH?!
YARGH!
AHHH! I'M BREAKING UP!
POW!
ZOOM!!!
FINALLY.. IZ OVER!
NOOOOOO!
NOT SO FAST, CHALIKIAN! I HAVE NOW CAKED AND TURNED IRREVERSIBLE! I SHAKE YOU! I SHAKE YOU I SHAKE YOU!!
ZZZZZZ.....
SHAKE!
PROF. CHALIKIAN.. I HAVE A QUESTION..... HELLO??

...distractions...

ANECDOSE

BY M.E. SCHELL



Shout Outs!!

@PB: say goodbye to the membrane.

@NS: YOU WERE THE WORST LOCKER PARTNER EVER. - SD

@HB: this font is called HOBO STD

@BW: yo bro, you so red! -NT

@KM: why so serious?

External Affairs and UPS *Presents…*

The External Affairs Student Writing Award

What it is: Two annual awards which recognize students who promote and raise awareness about opportunities offered by OPA and CSHP (1 award for each organization)

Criteria:

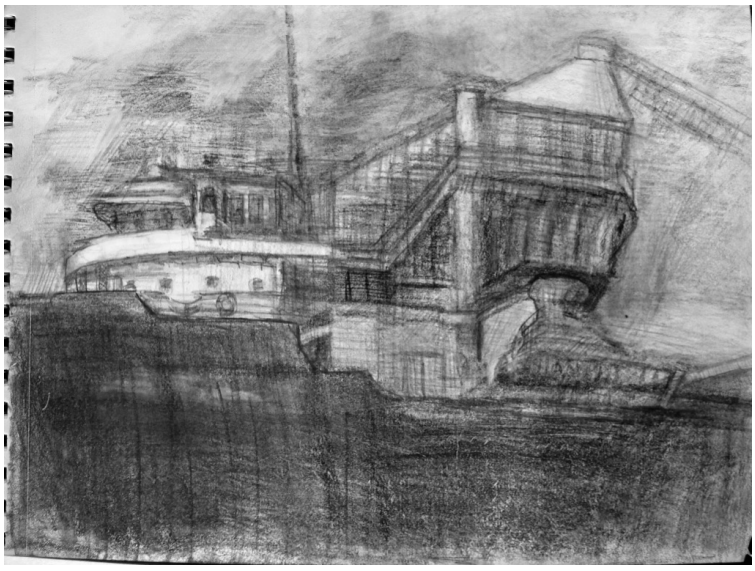
- Be an active student member of either CSHP or OPA
- Submit an article to the Monograph between September and April, which talks about a service provided by the organization that you are a member of. Examples include conferences, CE events, social events, etc.

Award value:

- 1 year membership in the organization
- Plaque with your name on it presented to you by a CSHP or OPA member at the UPS awards night in April

Questions: Contact natalia.persad@utoronto.ca or dipti.tankala@utoronto.ca

Nutrients - By Yasmin Saeed, 1T4



Ship - By: Timothy Luk, 1T1

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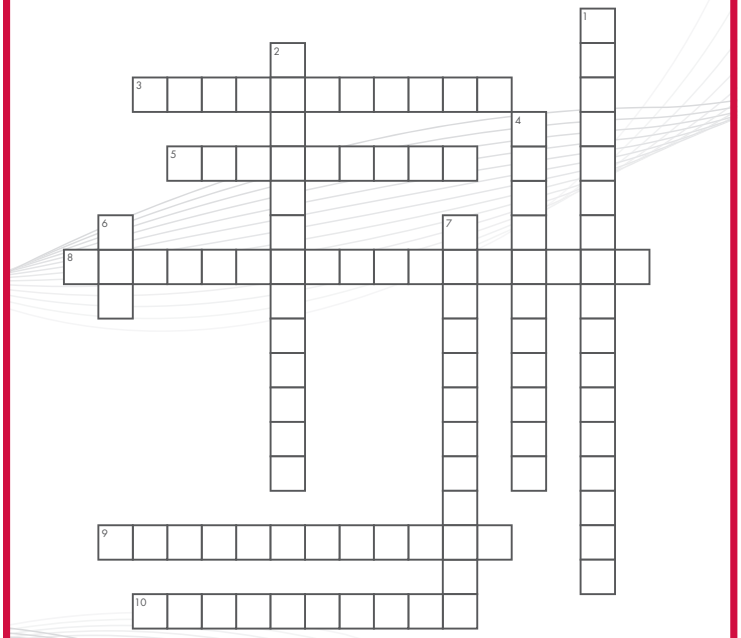

ACROSS

3 The process of creating custom medications
5 A private consultation with a pharmacist to review your medication
8 A simple and convenient way to organize your medications at home
9 A written direction from physician to pharmacist for preparation and use of a medicine or remedy
10 A group of independently owned pharmacies across Canada

DOWN

1 Chronic condition that affects the central nervous system including the brain and spinal cord
2 Live will _____ are one-to-one meetings on a variety of health topics
4 Drug used for lowering cholesterol and preventing cardiovascular disease
6 Pharmasave mascot hint: buzz
7 PPI which prevents the stomach from producing gastric acid