

The Monograph

Mar/O8
Vol. 9 No. 5

OSCE

Cover story:

OSCEs - The Untold True Story p.10

Also in this issue:

From T-Dot to T-Bay: Part II 6

What You Need to Know About Baby Bottles 16

Does University Really Need to Be This Competitive? 14

Contributors

EDITORS

Matt Fong
Lara Tran
themonograph@gmail.com

0T8 REPRESENTATIVE

Alena Hung
alena.hung@utoronto.ca

0T9 REPRESENTATIVE

Matthew Lee
synergy_85@hotmail.com

1T0 REPRESENTATIVE

Christine Truong
christine.truong@utoronto.ca

1T1 REPRESENTATIVE

Adam Calabrese
adam.calabrese@utoronto.ca

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Are you in pharmacy and are interested in contributing to The Monograph? We are always looking for articles, stories, photograph, shout-outs, jokes, artwork and poetry. Contact your class representative for more information.

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Notes

3 Letter from The Editors 3 UPS Corner

Pharmacy

- 5 Contest winner: The Pontifications of a Waterlooser
- 6 From T-Dot to T-Bay: Part II
- 8 Reflections of SPEP: Part 2
- 8 IPSF TB-Day Special
- 10 COVER STORY: OSCEs - The TRUE Story
- 12 The Dispensary*

Student Life

- 13 Narrow Minds
- 14 Does University Really Need to Be this Competitive
- 15 School Board Rock
- 16 What you need to know about baby bottles
- 17 Counselling Corner: Job Hunting*
- 18 My Perspective*
- 18 The Boil of Contempt
- 19 Abridged Monograph: Empathy

The Arts

19-20 Athletics

20-23 Artwork

open cage
Kiera Knightly
Christiano Ronaldo
Drawing
the life tree
dragon's soul
Beaded Bracelet
Beadoodle

21 Comics

George

23 Games

Word Search
Sudoku

24 Calendar: March Happenings

* Feature articles that will likely appear throughout all the issues this year.

The Articles of The Monograph are not reflective of University of Toronto, the Leslie Dan Faculty of Pharmacy nor the Undergraduate Pharmacy Society. They are strictly opinions of the authors. If you find any articles that are inappropriate or offensive, please contact us to discuss the matter in further detail.

LETTER FROM THE EDITORS

The little birds have started to take flight. No, this isn't in reference to spring (as it seems to be nowhere in sight), but is Debra Sibbald's way of telling the OT9s that we're on our way to becoming pharmacists! It is true - our courses in self-medication have finally finished with the completion of the mock OSCEs at the beginning of this month. For some, it was a deathly challenge. For others, it was a true testament to life as a pharmacist. The month's feature article by OT9 monograph representative Matthew Lee, entitled **OSCEs: The True Story**, will give readers first-hand insight into this intriguing topic.

We would also like to congratulate and send our well wishes to our fellow OT8s, who, too, are on the road to freedom after finishing the first round of SPEP. In this issue, you can read about two contrasting perspectives, from Alena Hung and Gabriel Sin, about their first SPEP rotations. Good luck to everyone on your next rotations!

This month we were fortunate to have *one* contest entry (wow!) about the new University of Waterloo pharmacy school. Congratulations to Tina Hwu (1T1), a former Waterloo student, who took on the challenge of writing about her views on the opening of a new pharmacy school and what it means for U of T pharmacy students and for pharmacy in general. She wins a \$25 gift certificate from Chapters! Based on the poor response rate for our **contests**, our next one will be a **free-for-all!** All submissions will be considered, and the best one will win 2 movie tickets! So, put on your creative thinking caps and get writing!

The deadline for submissions for the *very last issue* of this school year is **Tuesday, April 1, 2008**. 'Don't be a fool - write for your school!.... paper'. We'd like to thank everyone who has submitted thus far. It's been very much appreciated. And we'd like to encourage the rest of you to write, whether it be an article, shoutout, art, poetry, short stories, anything to leave your mark and have your voice heard in The Monograph!

Until next time, keep on truckin'!

Matt and Lara
Co-Editors, The Monograph

The Monograph is available in full
colour, online at:
ups.uoftpharmacy.com/Monograph.php

UPS CORNER

As reading week flies by, and March midterms approach we are all getting more excited that the school year is almost done! Before the year finishes off, UPS has a bit of housekeeping that it has to take care of. UPS elections are occurring, and we encourage all of you to actively seek out information on the candidates and most importantly, go to vote! There are a lot of great, qualified candidates, so we encourage you to come to speeches on March 11 at 4:30 PM in FG103. The speeches will follow the UPS Town-Hall Meeting, which addresses our first ever referendum on increasing student society fees. Voting takes place in the Pharmacy Building atrium on March 12, from 9AM-5PM. Class Council elections will begin shortly after this, for those who would like to serve their class for the 2008-2009 school year. The PDW 2010 committee has recently been selected, and we're sure everyone is eager to hear exciting plans from the committee. Leslie Dan Faculty of Pharmacy students have a lot of spirit, and we are positive that this committee will organize the best Professional Development Week ever.

Make sure to mark your calendars for the UPS Awards Night, scheduled for Monday, April 7, 2008 at 5pm in PB B250. As a student body comprised of not only the best and brightest, but also some of the sportiest, funnest and charitable-. Every year UPS recognizes students who have made outstanding achievements, be it in athletics, academic, volunteer work, social involvement, or in reaching milestones in the accumulation of UPS points. Everyone is invited

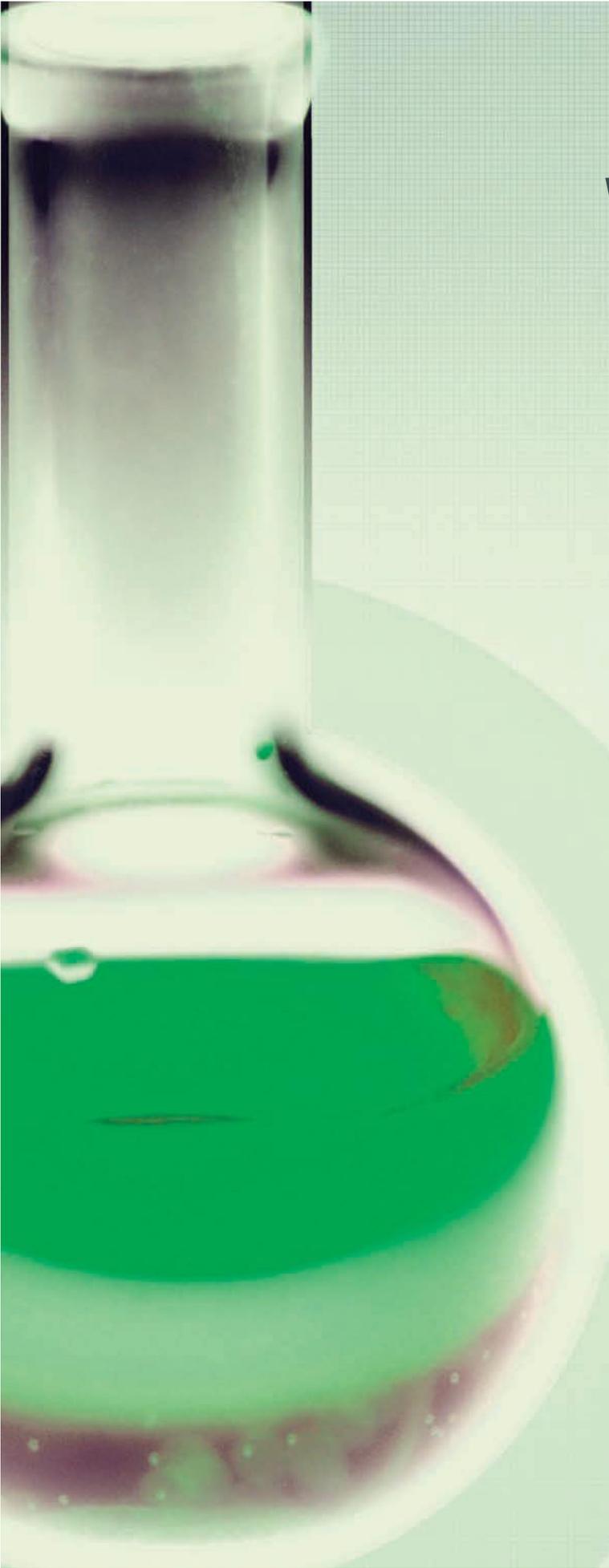
to attend this Awards Night, whether you are to receive an award or to support your friends and fellow students.

Lastly, to highlight the importance that the Undergraduate Pharmacy Society places upon student involvement in undergraduate life, UPS sponsors an award, called the UPS award. Awards valued at \$250 each will be made available to one deserving student from each class who has actively contributed to student life during this past year, but did not hold a class council or UPS council position. Students are nominated by their classmates and approved by UPS and the Faculty. Nomination procedures and further details will be provided shortly.

The 2007-2008 UPS General Council has strived to do the best job of their ability this year so feedback is always welcome. Why not send an e-mail to UPS General council members with suggestions, criticism or acknowledgement? Our email addresses can be found in The Key.

Health and humour,

Alexander Vuong & Stacy Yeh
UPS President and Vice President



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BIOVAIL 

Pontifications of an ex-Waterlooser

By Tina Hwu - 1T1

To echo the thoughts of the good Jane Austen, “it is a truth universally acknowledged, that a man or woman undertaking a Waterloo education, must be in want of a social life”. Situated in a small town, Waterloo and its students quickly bond together in what can only be described as “misery loves company”. Lamentations abound and fail-safe scenarios that we used to laugh about are now poignant regrets. Thoughts about why didn’t we go to Western, infamous for its partying - er... excellent curriculum, kept us warm in our beds at night.

Slowly but surely, however, the Waterloo institution manages to creep into your heart like an underdog sweetheart story. By the end of three years, the smell of manure brings back wistful memories and insults like “Waterlooser” have become affectionate nicknames. With great temerity, I applied to Waterloo’s inaugural School of Pharmacy class and was accepted. I had solidified my life in Waterloo for the next four years. The road was planned and I was ready to walk. Then, I received Toronto’s acceptance letter. My planned road suddenly had one great ditch in the middle.

I began plotting pros versus cons: Waterloo has the only pharmacy program in Canada with co-op and presented the chance to be a first, integrated learning with medical school students, a new building, and my in-the-closet love for Waterloo. This was all pitted against one singular argument: the University of Toronto name. In that name lay established alumni connections, distinguished links to pharmacy associations, a strong program that had successfully produced most Ontario pharmacists, and a semi-new building. My summer of ’07 was marred by my indecision until finally, with great uncertainty, I sent in my phros week registration to University of Toronto. I wondered even as I was walking into the Pharmacy Building if I had made the right choice.

Five months later, this is what I have learned in hindsight. Without a doubt, I have made the right decision. While I cannot attest to what life would have been like as a Waterloo pharmacy student, I can say that my life at UT pharmacy has prospered beyond any hope or expectation. There is a reason why so many people fight to be accepted into this program. I believe that the UT program is stronger than the UW program, at least for now. While I cannot predict what happens in the future, the positive aspects of co-op do not yet outbalance the uncertainty that lies ahead for Waterloo students - licensing success, the ease of finding jobs at pharmacies mostly staffed by UT alumni, and the shaky footing of the new curriculum and its student government are the unavoidable cons of the new program.

While I do feel that most students from the two schools feel edgy about each other, I don’t believe that UT and UW will be in competition with each other for the job market. The law of supply and demand ensures that graduates will be able to find their own niche in pharmacy practices everywhere. While there is an increase in the supply of pharmacists, we have not yet succeeded in meeting the demand of Ontario residents. Especially in light of pharmacy technician certification, pharmacists will now have more time to focus on counselling, including the pharmacy favourite MedsCheck, whose greatest obstacle until now has been the time constraints of busy practices. With heavier emphasis on the ability to counsel, I believe that the public will come to rely more heavily on pharmacists as a strong health care providers who are more available than doctors (because who likes the waiting room at the doctor’s office?) A large demand with an increasing supply equals two happy pharmacy schools in Ontario. Other facts that support an increase in pharmacy students: Ontario’s pharmacy schools will certify 30 more students compared to Quebec’s two schools of pharmacy (Quebec: 330, Ontario: 360), but these 30 extra Ontario graduates will serve a population larger by 5 million people. Another fact: Ontario exports more pharmacists nationally and internationally than any other province in Canada.

With that in mind, I believe that a spirit of co-operation can and should be fostered between the two schools. My debate over the strengths of both schools attests to the fact that we can learn from each other, and hopefully come out as stronger pharmacists because of each other’s existence. I can’t wait until inter-school mixers and socials so we can compare our curriculums. For example, are their PPLs as dreadful? Who is Waterloo’s version of Doris Kalamut? What is co-op like? And so on. Additionally, I’m sure they would have questions for us so that we could discuss our differences and similarities.

Final statement: students of the Waterpoo should be our friends, not foes. To quote the Dave Matthews Band, “I’ll lean on you and you lean on me, and we’ll be okay”. As a Waterloo former, I can attest to the want of social interaction and the friendly spirit of those whose undergraduates have been reared on Waterloo grounds. Let’s keep in mind the #1 rule of the playground: learn to play with others and share! ■

FROM T-Dot TO T-Bay: PART II

By Gabriel Sin - 0T8

Hello everyone! Most of you don't know me, but my name is Gabriel, and I'm currently wrapping up my first (community) SPEP rotation here in Thunder Bay. These past few weeks have been absolutely eye-opening for me, as living and working in TBay helped me mature both professionally and personally. And now, as I start making departure plans, I find myself growing attached to this lovely little city, and I actually feel sad about having to leave. ☹

Last month I submitted an article where I talked about my personal experiences up here in TBay. To my surprise and delight, it actually got published. A few of my friends even emailed me and told me they enjoyed the article, which got me really fired up. As promised, here's round II of my SPEP Adventures, where I shall tell you more about my current hometown – Thunder Bay. So here it is – and hey, beats the hell out of reading Gossip Girl.

History: Google it.

Climate: Cold. No, seriously, it's cold up here. Typical TBay winter has an average high of -15°C , but it can be as low as -45°C . At this temperature, even breathing can be painful. Surprisingly your body will eventually adjust to such extreme weather. This afternoon, for example, the temperature was -10°C , and my new friends and I were playing outdoor hockey in long sleeve tees. Thunder Bay also receives very little precipitation, which means while it's cold, it's very dry and unlike Toronto, strolling down the street doesn't feel like walking into slushy.

People: Most people assume that Thunder Bay consists mostly of white people. Truth is, TBay is quite ethnically diverse. One might be surprised to find that, for example, a big portion of TBay's residences are of **Finnish** descent. These early Scandinavian settlers found TBay's climate strikingly similar to their native home, and settled in numbers. Currently, TBay has the highest concentration of Finnish settlement per capital in Canada, and Finnish influence can be seen everywhere from restaurants to stores to cultural centers... occasionally I'd even encounter patients that only speak Finnish - Olen pahoillani!

TBay also boasts a sizable **Italian** population, but strangely they're divided into **Northern** and **Southern** Italians, and they simply don't get along. Each side boasts their own cultural center (Da Vinci Center and Italian Cultural Centre), their own restaurant district, and their own soccer team. When they (inevitably) play against one another, it's an absolute riot. There are also many citizens of **Ukrainian** and **Polish** descents, and both sides claim to make the best perogies.

Aboriginal People can be seen in all walks of life. Some are very well educated and are working hard to uplift their community, but many are downtrodden and cursed with lives of poverty, substance abuse, crime, and domestic violence. Despite these setbacks, the TBay community works hard to preserve and promote Aboriginal history, culture and language (Ojibwe).

There are maybe, **5 Chinese people** in all of TBay.

My general impression of 'Thunder Bay-ers' is that people here are **nice**. When I told my mom I'm going up North, she was worried that I'd get a burning cross on my front yard by day 4. It also doesn't help that I live on a shady street with, according to a local, at least 3 drug dealers (I suppose I count as one). Yet whether in the pharmacy, at a bar, on the ice, or in a grocery store, everyone I met is sincere, approachable, helpful, and friendly. People leave their cars unlocked, walk down the street in the middle of the night, and aid one another without presumption. In general, if you like Canada, hockey, beer, and/or outdoors, you'll have no trouble fitting in here.

And fellas, Thunder Bay has more hot girls per capital than Toronto. Trust me on this one ☺

Recreation: Bordering Lake Superior, with open spaces and cold winters, it is no secret that Thunder Bay is a hockey town – some even



TBay = Snow, trees, Lake Superior, and Mountains in the horizon

like to say that TBay's biggest export isn't pulp and paper products, but NHL hockey players. Everyone here plays hockey, and there are literally dozens of hockey rinks and arenas scattered all over town, where anyone from young beginners to old veterans can play for free. As a youth growing up in Toronto I never had the opportunity to learn how to play the great Canadian sport, but here in TBay I was privileged to live just 30 seconds from an outdoor rink, maintained by the city and free for all to utilize. My startup cost was extremely low – I had an

old pair of skates, and at **Play it Again Sports**, TBay's most iconic sporting goods store, a few pucks and a standard twig will only run you less than \$15. Throughout my SPEP rotation I managed to hit the ice for an hour or two of solid ice time after work everyday, and on weekends there are always pickup games where I get to meet new friends, learn from expert players, and have tonnes of fun. Aside from hockey, other winter sports such as **curling**, **snowboarding**, **snowmobiling** and **skiing** are also popular among TBayers of all ages. And too bad SPEP doesn't happen during the summer because, according to the locals, the city is beautiful during the warmer months. With Fort William National Park as the main attraction, TBay has tonnes of **camping***, **outdoor camping**, **(ice) fishing**, **hiking**, and **boating** opportunities, all of which suits my interest.

Influenced by the large Finnish population in the area, traditional **Finnish Sauna** is also a must try when in Thunder Bay. I visited a local public Finnish Sauna house, and found it to be very therapeutic.

Finally, there is one activity, for which I feel great contempt, that really shouldn't qualify as a recreation but is an activity unique to Thunder Bay nonetheless – **Throwing Eggs at Prostitutes on Simpson Street (Drive-by)**. Simpson Street, much like Jarvis St. in Toronto, is where a lot of sex workers congregate. To their misfortune, some local youths find it amusing to drive around Simpson Street, roll down the window, and pelt eggs at them. Over the years, it became something of an underground local tradition. Obviously it's extremely unsympathetic, cruel, and downright illegal to be hauling projectiles at these sex workers for the purpose of sheer amusement, but I was astonished at how pervasive it is. Everyone in TBay knows about it, and everyone knows someone who did it at least once during their reckless youths. As one local teenager explained, "Growing up you go through these few odd years when you are old enough to drive, but too young to go drink at a bar, so you have to improvise and find something

to kill time with.” I was also amazed to discover that if you don’t want to throw eggs, you can also throw **spoons**.

There are always rumors floating around that one guy ended up hitting an undercover cop who was making an arrest with an egg to the face, and the individual ended up being thrown in jail for assault. So the moral of the story is – this is one Northern experience an SPEP student should never attempt! ☺

*In Northern Ontario, cottage = camp, so camping, or going to camp = visiting your cottage. Outdoor camping = propping a tent, starting a fire i.e. camping camping.

Transportation: Almost everyone in Thunder Bay drives **pickup trucks**. No joke. One time my colleague offered to give me a lift, so there I was hanging out by my front door expecting a Honda or some sort when a **THREE QUARTER TONNE** Suburban rolled up. I literally had to climb into my seat, and we were 3 feet taller than all other vehicles on the road. Ugh!!

Unlike the TTC, **Thunder Bay Transit** is very reliable, and is always on time. You can even dial in the location of your bus stop and they’ll tell you how long until the next bus arrives. What’s more important, the bus drivers are always friendly and helpful – something the TTC should take note. Granted, it’s really sketchy at times, and the fact that they installed a garbage can onboard suggests that there are always drunks throwing up, but I rather think it builds character.



Persian: the official pastry of Thunder Bay

Since everyone drives and everyone drinks and buses are infrequent, the practice of **car hopping** is popular – as the night progresses, people who are too drunk to drive simply leave their cars behind and get driven to the next bar by those who are still sober. The following morning, everyone retraces the bars they frequented the night before, and eventually everyone reclaims their vehicle. Students generally choose to drink and bike, with hilarious consequences.

Restaurants:

Breakfast: The most famous breakfast joint in town is, without a doubt, **Hoito’s**. Located in the heart of Thunder Bay’s Finnish district (and only 2 minutes walk from my house) Their **Finnish pancakes** are wonderfully thin, soft and crisp. Also, don’t forget to order their fish soup (**Sienimunakas**), which is only available on Tuesdays and Fridays for no reason whatsoever.

Across the street from Hoitos’ is **Thunder Bay Restaurant**, the number one hangover breakfast destination in TBay. Operated by a nice little lady who chirps away, talking your ears off. TBR offers cheap and greasy food served on occasionally clean dishes, and coffee so strong they should be kept behind our counters along with Tylenol 1’s.

Lunch: Umm normally I don’t get a lunch break – you know how busy community pharmacy is!

Snack: Forget donuts - the official choice of pastry of Thunder Bay is **Persian**, an oval-shaped, cinnamon-bun-like pastry with a sweet, pink icing made of either raspberries or strawberries. It originated in and remains unique to the city. Much like Persians in the movie 300, these Persians are also inaccurate representations of the people of Iran - traditional lore is that the Persian was named for U.S. general John ‘Blackjack’ Pershing. However, the most famous Persian pastry shop in Thunder Bay, **Persian Man**, boasts a borderline racist illustration of

a Middle Eastern man as their logo, which adds more confusion to the origin of this delicious pastry.

It is practically an act of war to tell someone from TBay you don’t like Persian. So even if you don’t like Persians, just pretend you do in order to avoid confrontations and heart breaks.

Supper (No one in Northern Ontario uses the word, ‘dinner’): Lots of choices – **Madhouse** has really good sandwiches, **Prospector** has awesome roast beef/salad bar/buns with garlic butter combo, **Tony and Adams** for Barbeque Chicken Pizzas and roast garlic wings... Thunder Bay actually has numerous quality restaurants.

Nightlife: In Thunder Bay, people drink on days that end with the letter ‘Y’. Popular predrink options unique to TBay include **Red Eye** (Beer + Tomato/Clamato Juice), **Schlitz** (Official beer of the pharmacy hockey team), and **Rye and 7**.

The city boasts lots of really awesome little pubs and bars:

On Deck – My favorite bar, where there’re no lineups, no covers, and \$6 can get you two bottles of **Labatt Crystal** (Only available in Northern Ontario) or 2 cans of **PBR**, and a few coins can earn you a dirty pit of nachos or a whole pan of pizza. The TV is permanently tuned to ESPN or TSN, the radio is always blasting rock music, the floors are never cleaned, and there are 4 foosball table stacked end to end in the middle of the bar. Featuring nightly bar fights and people getting tossed by the owner who’s so massive, he makes Popeye look anorexic. Ruthless!

Jacks – Good place to be when the live bands are playing, but on any other nights it’s either dead or packed with 17 year old Lakehead University hipsters who wants to pretend they’re in Toronto.

The Outpost – Lakehead University’s campus bar. Featuring Tanker Tuesdays – it’s basically \$5 for a pint of beer, except these pint glasses can hold 3 regular pints. Chippin chippin chippin~

Places to avoid – **Centerfold (eww)**, **Scuttlebutts**, **Donny’s Den**, **anything on Simpson Street**

Sadly, Thunder Bay will only be a pit stop in my journey to become a pharmacist – perhaps just one of many pit stops I will encounter in my pharmacy career. While it is unfortunate that I can’t take the nice people, scenic mountains, and majestic lakes of TBay back to Toronto, I take joy in the new things that I can bring home – freshly acquired hockey skills, enriched pharmaceutical knowledge, newly forged friendships, added maturity, unique perspectives, and all that I have learned about myself, Thunder Bay, and Canada. The Northern Spirit, as they say, cannot be taken away, but if you embrace it, it will become a part of you, and follow you wherever you go.



Look out, London, here I come!!

Gabriel M

Working on my SPEP Portfolio

Reflections of SPEP—Part 2

By Alena Hung - 0T8, Monograph Rep.

Ding Round 8

I don't know where the time has gone, but miraculously, I've survived weeks 3-7 of SPEP and am now halfway through my eighth and final week of Rotation 1 of SPEP. While the past five and a half weeks have been infinitesimally better than the first two weeks, what can I say is SPEP is still tough! Don't believe me? Let me give you some live and vivid examples:

Week 4: The MedsCheck saga continues. Having successfully completed a MedsCheck before, I felt confident that I could conduct yet another one. Oh, how naïve I was. How do you emphasize the importance of following a medication regimen when the person just doesn't care? Furthermore, how do you explain the MedsCheck program to a patient that just keeps saying "are we done yet?" I finally completed the MedsCheck and was thinking to myself "well at least the patient will appreciate the updated medication list that she gets to take home" when I went to make a photocopy of the sheets and a sheet of blank ink came out. That's right, that photocopier died and a little bit of me did too when the patient said "so tell me, what was the point of that?"

Week 6: Week 6...over the hump and on the way down. And downwards things did go. I approached the pick-up counter (as I normally do) to dispense a prescription. When I proceeded to hand out the information sheets that come with the prescription to the patient, I heard (and felt) a roar so loud that my ears were vibrating. What was it? What else? The patient was yelling at me. I cannot remember the event in the clarity that I wish I could, but I do recall a lot of profanity and a ridiculously loud voice. I held my composure until the patient left, but in the end, tears were shed, I was embarrassed, and I would dare to say that optimal pharmaceutical care was not provided. It turns out that this lady was from Evil-town and treated everyone the same way, but wow, what an awakening!

Week 8: Well, finally, I'm nearing the end of Rotation 1. In fact, me and my friends had a little cheer and the excitement is building. One down, one to go! But with my luck, and my experiences so far, I'll bet that the fun isn't over yet! So in true Alena fashion, I'll leave you with a short rhyme to tie you over until I report again from Rotation 2:

Sitting here at the end of Rotation one,
I look back and reflect at all that I've done,
Tears were shed,
Blindly I was lead,
Through Rotation one,
Whew, thank goodness it's done! ■

Tuberculosis - If you can decipher Table 61-2 in Applied Therapeutics, 8th ed. You do not need to read this article!

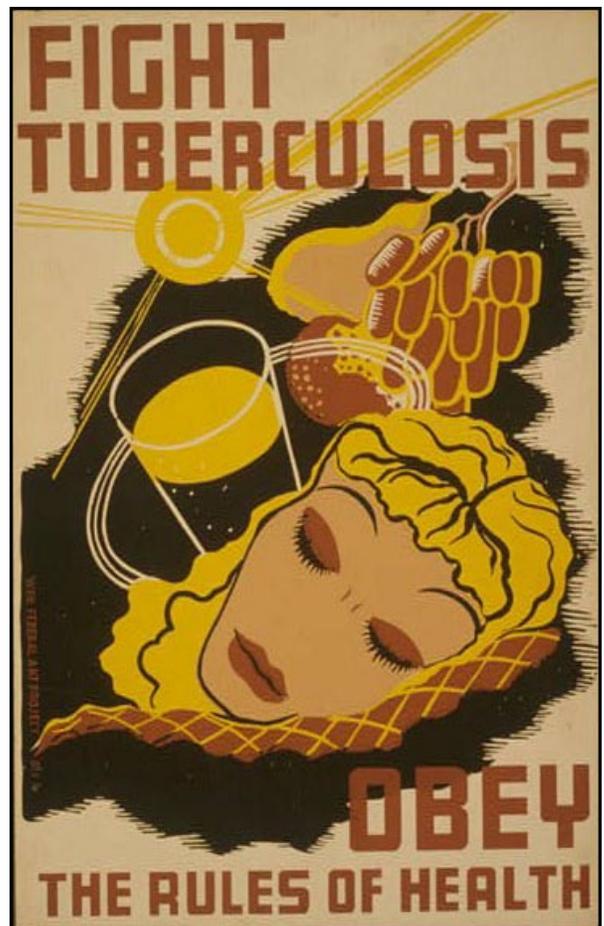
(To the third years: How many weeks do we treat for again? Every-day? Every other day? 5 days/week? I am still confused...)

By Jennifer Teng - 0T9, IPSF Rep.

Hey Pharmacy, It's time for another informative IPSF Public Health Campaign! This month's topic is Tuberculosis as March 24th is World Tuberculosis Day.

As a privileged pharmacy student living in North America, I hardly feel touched by this disease. The prevalence of the TB is relatively low in Canada with only 5 cases in 100,000 people per year. According to the 2006 pre-release of Tuberculosis in Canada by Health Canada, 1,621 cases of newly active or relapsed TB were reported to the Canadian Tuberculosis Reporting System (CTRS) in that year, only a slight decrease from the previous year. So why all the fuss? Six hundred forty-one cases were reported in Ontario alone, mostly (84%) from individuals born in foreign countries such as the Western Pacific, African countries with high HIV prevalence, and Latin America/Caribbean. This is by far the highest number of cases in any province, with Quebec and BC following far behind reporting 227 and 320 cases, respectively.

But the global disease burden of TB is not isolated in Canada, nor is Canada isolated from the rest of the world. Every second someone in the world is newly infected with TB and overall one-third of the world's population is infected with TB. In contrast to Canada's TB burden, the estimated incidence of TB infection in Sub-Saharan Africa is nearly 350 cases per 100,000 people (WHO Fact Sheet, 2007). Although we have effective treatments for TB, approximately 1.6 million



<http://alignmap.com/wp-content/Graphics/tb%20poster%202x.jpg>

Wyeth
Consumer Healthcare

deaths resulted from TB infection in 2005. At this rate, nearly 4,500 people die from TB every day.

Thus, due to the high numbers of foreign born individuals residing in Ontario and the startling prevalence of TB infection globally, as future pharmacists, it is imperative that we understand how to diagnose and treat this disease.

I hope that with this article and campaign advertisement, you will learn something new about TB that you can bring with you into practice. I'm no expert, so I've provided some references for you to do your own research.

So, What is Tuberculosis?

According to the WHO, Tuberculosis (TB) is a contagious disease, which spreads through the air. There are two forms of the disease, pulmonary TB and non-pulmonary TB. The source of infection is people with TB affecting the lungs (pulmonary TB). When infectious people cough, sneeze, talk or spit, they propel TB germs, known as bacilli, into the air. A person needs only to inhale a small number of these to be infected. Infection refers to the presence of TB bacilli in the body. However, not all people infected with TB bacilli will necessarily become sick. The immune system "walls off" the TB bacilli which can lie dormant for years. This is known as Latent TB. Failure of the immune system to control infection with TB bacilli leads to active TB disease. Disease refers to damage caused by TB bacilli. Left untreated, each person with pulmonary TB will infect on average between 10 and 15 people every year.



http://a.abcnews.com/images/Health/ap_Tuberculosis_bacterium_070529_ms.jpg

What does the bug look like?

There's no cool flagella (I was disappointed too). This bug is a gram positive, non-spore forming rod. Latin name: Mycobacteria Tuberculosis.

First years! Name a kind of stain we use to see M.Tuberculosis? If you don't know this, Dr. Crandall would be disappointed! (See end of article for answer. Hint: Not Gram Stain...)

How do we Dx infection?

The most common diagnostic tool to detect M.Tuberculosis is the tuberculin PPD Skin Test (Mantoux method.) This test is performed by injecting 0.1ml of purified protein derivative (PPD) M.Tuberculosis intradermally in the dorsal surface of the forearm. If you have been infected with M.Tuberculosis, a raised red area begins to develop at 5-6 hours and is read by a health care professional at 48-72 hours. Though this test is often used, it is not required for diagnosis of active TB. Positive signs and symptoms of infection as well as sputum culture and chest x-ray are often sufficient for diagnosis.

How do we treat active infection?

Combination therapy of isoniazid, rifampin, pyrazinamide, and ethambutol. Please refer to Table 61-2 in Applied Therapeutics for treatment regimens.... :)

How do we treat latent infection?

Patients with latent infection are typically given 300mg of Isoniazid with 25mg of Pyridoxine (Vitamin B6) to be taken daily for 9 months.

What is MDR-TB? XDR-TB?

MDR -TB is multi drug resistant tuberculosis and XDR-TB is extensively drug resistant tuberculosis. MDR-TB is defined as being resistant to at least isoniazid and rifampin, two of the most potent anti-TB drugs. Drug resistant TB is caused by inconsistent or partial treatment of infection this type of resistant TB is found in every country surveyed by the WHO. For an interesting article on the airline traveler with XDR-TB please visit: <http://www.foxnews.com/story/0,2933,276336,00.html>

What can you do?

1. Ensure that patients presenting with risk factors (history of cough, fatigue, weight loss, night sweats, productive cough +/- blood, and fever) are referred to a doctor for diagnosis.
2. Counsel Patients on TB medications regarding compliance and side effects to prevent the emergence of drug resistant organisms.
3. Ensure that close contacts of Active TB patients are treated.
4. Visit the following websites to see what we are doing nationally and globally to prevent the spread of TB. Get involved with the STOP TB Partnership. What is it? Read Below.■

The WHO Website: <http://www.who.int/topics/tuberculosis/en/index.html>

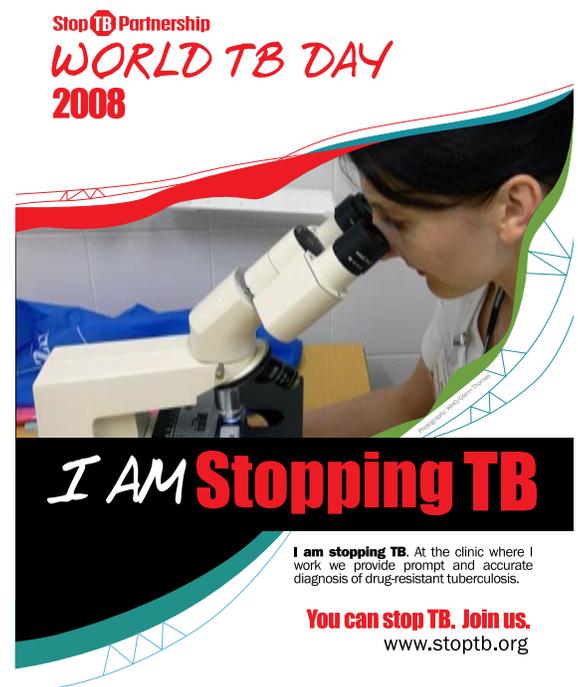
Stop TB: <http://www.stoptb.org/>

Health Canada (Tuberculosis in Canada):

http://www.phac-aspc.gc.ca/publicat/tbcan00/pdf/tbcan_2000_e.pdf

The Global Plan to Stop TB: http://www.stoptb.org/globalplan/plan_main.asp
(Photo: www.stoptb.org)

The Stop TB Partnership was established in 2000 to eliminate tuberculosis as a public health problem and ultimately to realize a world free of TB. It comprises a network of more than 500 international organizations, countries, donors from the public and private sectors, and nongovernmental and governmental organizations that have expressed an interest in working together to achieve this goal.



Stop TB Partnership
WORLD TB DAY
2008

I AM Stopping TB

I am stopping TB. At the clinic where I work we provide prompt and accurate diagnosis of drug-resistant tuberculosis.

You can stop TB. Join us.
www.stoptb.org

World Health Organization

TIPS

TRUE PHARMACY STORY

OSCEs: the TRUE story

By Matthew Lee - 0T9, Monograph Rep.

You may not know me, my name is John Smith. I am the person sitting right in the middle of the classroom, the one who skips 90% of classes, the one in the front row writing down every single note the professor says, the one slacking off in the back. All the same, regardless of my personality, I am someone who had to write the OSCE.

Let me start from the beginning. I remember the virgin years of being a pharmacy student at U of T: the excitement of meeting new friends, being part of a faculty which creates a feeling of a glorified high school, attending classes which really have no relevance to anything, and finally... the start of the dreaded panels.

I'll admit, it was all a bit overwhelming at the start. The Therapeutic Thought Process is a difficult concept to grasp. And honestly, I'm pretty sure I can speak for a large majority of our class when I say I still have no clue how to treat for a pressure ulcer. But the panels just kept coming with no remorse. There were two panels per week on topics which required several readings (including the bit wonky Patient Self-care). Waking up bright and early every Thursday to feel the early morning rush, not of a coffee, but rather of the adrenaline of rushing to the door to see if your name is on the "List", a truly unique experience.

Thirty-plus topics later, many of which I had no clue even existed (black cohosh? Infant colic?), I have slowly become an expert at being able to list questions to ask the patient, the undesirable signs and symptoms, the treatment alternatives and quickly finding answers on my key point summaries. However, I still resent my parents for not having a last name starting with "A".

"OSCE": the word whispering in the cold wind of the Atrium. The word the upper years grumble about from the cave in which they live during their never ending exams. The word which the professor uses to scare you, motivate you, confuse you. So here I am, to give you the low down on the OSCE from the perspective of

just another student.

First, what is the OSCE? The Pharmacy Examination Board of Canada (PEBC) runs a qualifying examination, which all pharmacists in Canada (except Quebec) must pass in order to obtain the coveted Board Certificate of Qualification. This PEBC exam has two components. The first is a multiple choice section, and the second is the Objective Structured Clinical Examination (OSCE). The OSCE assesses communication and problem solving skills based on the simulation of pharmacy practice. More specifically, it assesses how well the pharmacist can:

- practice pharmaceutical care
- assume ethical, legal and professional responsibilities
- access, retrieve, evaluate and disseminate relevant information
- communicate and educate
- manage drug distribution
- apply practice management knowledge and skills

OSCE TOOL BOX

Here are some practical tips which I have gathered in hindsight of the experience.

- It is important to practice being a pharmacist with your friends in as many patient scenarios you can get your hands on. But more importantly, make sure you act out the scenarios to the best of your abilities because the patients you will encounter have some sort of emotional issue, or complication.
- Form study groups – either to practice or to compile updated key point summaries, as this will be more efficient than doing readings and flipping through pages of notes.
- I won't lie, the cases are hard. I felt it was tricky beyond what I was prepared for. So make sure to ask tonnes of patient history questions to ensure you have enough background information to properly address the issues.
- Try to be a flexible counsellor. The patient will ask questions, which can throw you off if you are too systematic – this will lead to forgetting about key portions of the interview. But at the same time, make sure to maintain your 'management of the interview'.
- 30+ topics seems overwhelming, and it is. But I think if you're a good crammer, it is "do-able" in a couple of days. In actuality, you just need to know a couple of non-pharmacological, and a couple pharmacological therapies for each topic. And a lot of it is just common sense. ie. For all the different dry skin conditions, just hydrate them! (Of course it is better to study in advance!)

The actual test is a series of 7 minute stations where the pharmacist is involved in simulations of professional situations. These include tasks of critical nature which a pharmacist will encounter on a daily basis. Every station will include one of the following tasks to be completed:

- counselling clients
- responding to oral or written questions
- responding in writing to a message or request for information or advice
- screening and evaluating new prescriptions
- checking dispensed prescriptions for accuracy

Ok so now that the boring stuff is out of the way, here's the main point: the "OSCE" everyone talks about during school which happens in third year is only a PRACTICE one. It may sound silly for me to be telling you this, but I know so many classmates who did not know if this was the 'real' OSCE up until even a week before. It is actually just a practice OSCE which makes up 50% of your mark in the PHM320 course.

So here I am, it's Saturday, February 16th and exactly 2 weeks prior to March 1st, the date of the OSCE. I have a fresh blanket of reading week ahead of me to absorb all the Pharmacy self-care knowledge I can. So here I am, it is Monday, February 25th, and I now have 5 working days to absorb all the Pharmacy self-care knowledge I can. My friends and I have created a system to make updated key point summaries based on what is said in class (because what Debra says is apparently more powerful than the Pope). And the studying begins...

The day has finally arrived. Going to school on a Saturday is bogus, but as Debra says, "this will be the first day of the rest of lives". The class is divided into two sections, one going from 9:30am to 12:30pm, the other from 1:00pm to 4:30pm. I was lucky enough to be placed in the latter group. (A little extra sleep and a few more hours of studying can go a long way). Here is a little summary of my day's occurrences (skip this section if you don't want to read pointless thoughts, wait, that's this whole article):

- 9:00am – wake up, shower, eat cereal, sleep, wake up.
- 10:30 – begin reviewing notes.
- 12:30 – arrive at school to sign in.
- 12:45 – waiting around in 2nd floor study area like cattle.
- 1:00 – climb stairs to floor 7 to begin the interviews (don't wear high heels!)
- 1:00-2:45 – students enter one by one to face their first interview while others sit silently outside and wait. This may be the most awkward, anxious, nerve-racking moment of your school career. During this time, some of us make faces at our friends, others are madly studying last minute notes, others straining their ears to decipher any words they can hear through the door to know what case it is, others praying...or just focusing on controlling their bladders.
- *during this same time, after you're done the interview, you head to another waiting area which is by far the best part of the day.*

2:45 – 4:30 – the second interviews take place, where immediately following your case you leave the building, having signed a contract to never look back.

That's it. It's simple. I think the whole process is not nearly as terrible as everyone makes it out to be throughout the year. Here is a fact that will change your perspective. In reality, 4 out of the

five criteria you will be marked on are based strictly on your patient interaction skills, and NOT all of the therapeutic related things we learn in class. These include: 1. Response to the patient's feelings, needs, and values (empathy), 2. Management of the interview 3. Verbal and tonal expression 4. Non-verbal expression. The last criterion is based on your knowledge of the topic (taken directly from the global rating scale). What this equates to in your actual mark (from both the actor and pharmacist), is that 75% of it comes from this "empathy" business alone!

In all, I found the practice OSCE to be highly beneficial in preparing us for the real OSCE we will face after graduation.

*I know I haven't written much about the actual cases and the interaction, but it was also part of the contract to not disclose any of that information.■

I'll finish with some quotes from classmates who just wrote the OSCE...

"It was a good learning experience, but it could have been improved if the patients were standardized"
– Janet Chow

"This was the most unique final exam experience ever" – anonymous

"I think that OSCE's a great way to prepare for the real world. However, because pharmacists are not allowed to diagnose, I don't feel like that is what we should be doing in our OSCE."
– anonymous

"It made me sad."
– Kevin Curley

"I didn't feel like my patient was very realistic"
-anonymous

"I rocked it"
– Neil Malhotra

The Dispensary



By Josh Lieblein (1T0)
UPS Events Co-director

After a brief hiatus, the Dispensary returns to form. The end of the year draws near and Pharmacy students from all four years are already working out their summer plans. From what I hear, Shoppers and Rexall will once again top the list of this year's most popular vacation destinations, while the pharmacy student A-listers will converge on the always-trendy Toronto hospital district and compete for some exclusive time in the IV preparation unit. Meanwhile, the annual Pharmacy Awards Night is expected to give this year's Oscars a run for their money, especially since Jon Stewart isn't fit to wipe the dirt off Dean Hindmarsh's shoes when it comes to hosting an event. Finally, election season is upon us once again at the Faculty, and we here at the Dispensary would like to wish all the candidates the best of luck in Photoshopping themselves next to Chuck Norris for their campaign posters. All in all, things seem to be as usual in our happy little Faculty, but that isn't going to stop us from coming up with more items that are making Pharmacy News at this time:

Pharmacy Students Finish Exam And Sit for a Whole Hour Waiting For Someone Else To Stand Up And Leave Before They Do

Peer pressure has always been a powerful motivator at the Leslie Dan Faculty of Pharmacy, and the current trend of "sitting at your desk for an hour or more after you finished writing the exam" is just the latest example of this fact.

"I never want to be the first one out of the exam room," said one pharmacy student. "I'd rather get up with lots of other people at once in a big group as we all hand our tests in at the same time. Sure, I could be stuck sitting there doing nothing until the end of the exam if nobody else gets up, but I think that's a small price to pay."

It is believed that this trend is the result of people believing that TA's mark the first test harder and get easier as they go on, marking wrong answers as right just because their test was in the middle of the pile.

Creepy "OBAY" Ads on TTC More Effective Than Pharmacy Sociology Courses At Getting Pharmacy Students to Think About Ethics of Pharmaceutical Industry

While the B.Sc.Phm curriculum has always been effective in improving the critical thinking skills of pharmacy students, the new "OBAY" advertising campaign, which appears to be a criticism of overmedicating children in order to control them, has led to an unrelated increase in pharmacy students talking about whether the pharmaceutical industry is ethical.

At time of press, The Dispensary had not received confirmation whether the Faculty's curriculum review committee would incorporate the ads into any future courses. This is likely because nobody knows who is behind these ads, and because OBAY has not been approved for use in Canada yet, it is possible that the Faculty wishes to avoid any intellectual property disputes with the makers of WhyBecauseISaidSo.TM



Who thinks OBAY would make an excellent motivator for Pharmacy Students to study? (From <http://img257.imageshack.us/img257/7426/img5521hi4.jpg>)

Local Community Pharmacy Torn Apart by Drama Between Frontshop and Dispensary

The sad story of the harsh struggle between a local Shoppers' dispensary and frontshop is yet another confirmation that pharmacy school drama does not end when you graduate.

It apparently all started when the frontshop people held their own Christmas party and didn't invite the dispensary people. "Now, dispensary people start crying their eyes out when someone doesn't say 'hello' to them," said a frontshop worker who asked not to be named. "Just because they're accredited, the techs think they're so much better than us."

It's anyone's guess as to whether conflicts such as these will or will not advance the idea that pharmacies are meant to deliver professional care. ■

Special Feature: Rejected Submissions for Pharmacy Connection's "Deciding on Discipline" Section

Case 1

Recommending aloe vera, a known sensitizer, to a patient.

Hearing Date: March 12, 2008

FACTS

A pharmacy student recommended aloe vera as a moisturizer for a patient during a PHM220 panel and really, there's no need to discuss the case any further.

INTERIM RESTRICTIONS

The College completed its investigation on an expedited basis and determined that the student be sentenced to 5 consecutive life sentences in prison with no chance of parole.

REASONS FOR PENALTY

Because everyone who has taken PHM220 knows that aloe vera is an evil substance and should never, ever, ever be used by anyone.

Case 2

Singing the "Schnappi The Crocodile" song repeatedly.

Hearing Date: March 25, 2008

FACTS

After the "Schnappi The Crocodile" video (<http://www.youtube.com/watch?v=Oe3FG4EOgyU>) was played at the beginning of a PHM224 lecture, a pharmacy student got the song stuck in her head and began singing it repeatedly for a period of 7 to 10 days.

INTERIM RESTRICTIONS

Representatives from the College were going to fine the student and suspend her from the B.Sc.Pharm program, but then they got the song stuck in their heads too and became too obsessed with the song to do anything.

REASONS FOR PENALTY

Because, no matter what anyone says, a German song about a crocodile does nothing to increase "Egyptian Pride".

Case 3

Failing to recognize that Lysergic Acid Diethylamide (LSD) is not an acid, despite the fact that it has the word "acid" in the title.

Hearing Date: April 2, 2008

FACTS

While trying not to fail a PHM222 midterm, a confused pharmacy student decided that LSD was to be classified as an acid on the basis of its name, despite the presence of a tertiary amine in its structure.

INTERIM RESTRICTIONS

The College decided that a failing grade in PHM222 would be a sufficient punishment for this colossal error in judgement. The makers of LSD received no penalty despite engaging in ridiculously false advertising.

REASONS FOR PENALTY

The course's cumulative final worth ~50% (that covers a year's worth of material) usually ensures some failures anyway.

NARROW MINDS

By Allegra Connor - 0T9

Every problem in the world is due to narrow-mindedness: an obsession with trying to fit, mold, twist, and compress everybody into a rigid classification system. He is gay, she is Muslim, he is black. Think about all the prejudices and hate that are fostered in those three simple categorizing statements. Why does everything have to be binary? Why does a person have to be either black or white, either Muslim or Christian, either gay or straight? Think about how much less animosity there would be in the world if everyone thought on a continuous spectrum rather than a discrete binary system. Some people with a bit more intelligence add new categories to the mix, like "he's bisexual". But I challenge them to classify a man who had girlfriends for half his life, then married a man for the remainder. Is he bisexual because he has been with both, or is he gay because he settled on a man? Well I say he is an individual who has found ultimate happiness in his soulmate. And isn't that the meaning of life?

If there were no discrete religions, the world would be a much more peaceful place. We live in a world where a Protestant wouldn't be caught dead reading the Catholic version of the Bible because there is a comma instead of a semicolon in the book of Genesis chapter 12, verse 2, line 7. Blasphemy! In my opinion, if you are kind and generous throughout your life, that is all God cares about when comes judgement day. I seriously doubt the first thing on God's mind when judging your life is whether you had a piece of latex over your penis when having sex, and if it is, then that's not a God worth believing in. Any God worth believing in wouldn't want you to be conceiving when you are not ready to dedicate your life and love to your child, nor would he want you to be overpopulating the earth. In any case, latex is a man-made material invented long after the Bible was written, so how can God possibly have forbidden it? Logically, if God wanted man to save himself for conception, he would not have provided him with 280 million sperm per ejaculation until his dying day. The fact is that 99% of people fornicate, so maybe it's time for religions

to change the rules on what is considered a sin. Some religions forbid eating pork just because someone suffered food poisoning in 2000 BC after consuming a poorly cooked sacrificial pig. This is just another example of religions holding onto ancient rules instead of thinking holistically. These rules are simply not reason enough for people to hate each other and start wars as they do. The religion of today should unite people, not divide them.

The particular shade of a person's skin is purely a factor of how much sun exposure their ancestors have received. When purchasing a set of pencil crayons, do you only buy black and white? No, you buy teal, fuchsia, terracotta, burnt sienna.... there is virtually a continuous spectrum of colours available! So why do we confine humanity to monochromaticity? It is simply to satisfy the narrow-minded desire to classify everybody in the world. But if something has to be bent out of shape to fit into a box, it doesn't belong in that box. The day we accept the diversity of individuals is the day that we will finally live together in peace. ■

Does university really need to be this competitive?

by Pascal Niccoli - 1T1

Originally published in "Challenge the Experts" by Elder & Leemaar Publishers

As members of an elite group of students who have been sufficiently successful in our undergraduate studies to gain admission to this faculty, I'm confident that we have all faced our fair share of competition along the way. This summer I wrote an essay in regards to a question posed about whether or not competition is necessary in our academic institutions. It is an interesting question and one that deserves a great deal of thought. Let's take pharmacy as an example, we all would likely agree that we are here in this faculty because we worked hard and we deserved it. And that's the way it should be, right? Maybe not. Maybe competition is just something we've all come to accept and no longer question, like commercials when we're watching tv, or Professor Bajcar's never-ending "technical difficulties". Maybe it's really not a necessary part of life and maybe, just maybe, we'd all be happier if it simply didn't exist. In Sweden, university education is much like high-school: it's free and it's accessible to all. Is it a coincidence that Sweden is among the healthiest nations on earth? Are we competing our way into an early grave?

In today's society, it is difficult to fathom a world in which competition does not exist. However, does this necessarily imply that competition is a vital aspect of our human nature? Is it truly required for our civilization to function? There is unfortunately no facile, definitive answer to these questions. Many would argue that the need for rivalry is innate and that it is always the fittest of any species that will survive. But in today's world it is unnecessary to compete for survival, for there are sufficient resources to feed, shelter, and clothe each and every human being alive. Therefore, the issue is not the quantity of resources available; rather, their mode of distribution. It is indeed a winner-take-all world in which the economic gap between rich and poor is vast. This very detriment, caused by excessive global competition for resources, can be seen in more specific examples, such as in the highly competitive nature of our academic institutions.

Competition among students vying for the most restrictive universities has resulted in increased competition among universities themselves to attract the top students. This vicious cycle is injurious both to the student and to society. In an ideal world, financial aid in the form of scholarships or bursaries would benefit largely those who most need it. However, in order to attract the best, universities have been forced to offer large scholarships to those who do not necessarily require them. The consequence of such actions is obvious: less funding for those who actually do need it. Many deserving students lacking the required finances are thus denied the opportunity to attend these universities. This is a veritable injustice, and it is at this juncture that the entire academic system becomes flawed. Although it is an unfortunate reality, one's economic standing does indeed influence one's ability to develop academically. It is the aforementioned competitive nature of universities which is single-handedly allowing economic inequality to continue to expand. While the rich are given the training necessary towards obtaining economic security, the poor are left to fend for themselves.

Despite the harmful effects just described, competition does undoubtedly have its advantages. Although the system does tend to favour the wealthy, it also certainly values academic excellence. Many students take comfort in the knowledge that hard work and perseverance will increase their likelihood of success. It is important that those professions which are considered most valuable to society be reserved only for the most qualified individuals. Competition is necessary to ensure that this occurs. Furthermore, without competition there would be no need to work harder in order to improve one's own abilities. In this case, individuals would be less competent in the positions they hold, and this would surely have a severe economic impact.

Finally, this is not a simple question of whether competition is good or bad. Rather, the real debate concerns the proper deployment of a methodology that would limit the harmful effects of competition without compromising its many benefits.■



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www.opatoday.com

School Board **Rock**

By Adam Calabrese - IT1, Monograph Rep.

Since my first article for the Monograph criticising Catholic school boards for being ignorant about the HPV vaccine, it seems that the Toronto public school board has just been itching to up the ante in the educational stupid bee. You might well have heard of the decision to set up an “Africentric” school to cater to the needs of black students in the hope to find a solution to the higher dropout rate of black students in Toronto schools. Although it’s not something I’m proud of, I’m from Scarborough and went to high school there for two years, so I feel that I carry more authority than usual in having decided that this is the worst decision made in education since they cut down March break from two weeks to one. During my two-year stint in this school, there was a school dance postponed because of tips sent to Crime Stoppers that a gang shooting was going to occur. I also saw students who happened to be drug dealers being arrested at nearby bus stops, and other students openly handling drugs and weapons in class. I still wonder why people ask me why I switched schools; the only drugs I saw being passed around in the other school was a joint which was actually made of oregano, even if the place was undeniably filled with overly creative types.

Aside from the school board’s actual decision, public opinion has had me rubbing my head for some time. Between listening to local radio stations and reading that free hipster magazine, Now magazine (which I only did because I was waiting for a pizza), I wonder what happened to logic and reason. People seem to have gotten the idea that teaching black kids about black history will motivate them to graduate. An even more radical idea than this, floated by a reader of Now magazine, was to place black students in a Swahili immersion program, because it just might work. I don’t get it. Has it been forgotten that Canadian history and English are mandatory courses? They didn’t motivate me much towards graduation (I had other, better reasons to do that), and unless all of these non-graduating black students aren’t Canadian and are non-English speakers, I don’t understand how teaching black history or Swahili might better motivate them. This, however, is not the core of the misunderstanding: black history is simply not the most important subject that can be taught. I took a history course focusing on Europe from the 16th century until the Cold War, and I can assure you that I did not find the Renaissance more interesting because my last name ends in a vowel. Rather, I found the Scientific Revolution and the Enlightenment to be the most engaging and relevant topics that I could have ever learned outside of a science class. Aside from learning about the foundations of Western society, science, and democracy, it has exponentially increased my understanding and enjoyment of many books I’ve read since. Although I’m sure other students didn’t enjoy the course as much as I did, I will not accept the argument that relevance is just a function of opinion: the history of Western Europe gives crucial context to modern events and forms either the basis for or fundamental aspects of almost all modern academia, from science to philosophy. In either Now magazine or that same radio call-in show (I really can’t remember which, not that it matters), it was posited that African history is also the history of the entire world. I’d call this for what it is, but it would probably be censored. So let me just say this is the worst sort of political correctness. Yes, modern homo sapiens originated in Africa, and from there went out to the rest of the world, but history of that sort belongs in the realm of science,

and even then, saying that all of the human race came from Africa over 100,000 years ago is no more historically relevant to a black student than to anyone else, seeing as it applies to everyone. More importantly, the importance of performing or visual arts and science education can’t be lost in the effort to find a version of history that makes everyone feel fuzzy.

It was clear that many black students were simply unmotivated towards school in general, not just at the topics they were learning. The “academic” courses I took (later known as university preparation courses) were filled with students who were already more motivated at school, almost universally with ambitions towards post-secondary education. Some courses were not split into academic and applied streams, such as religion, and the students in each class were picked from the entire grade at large. From what I remember of them, the time spent in these classes bore the hallmarks of students who just didn’t care about school, and the problem was only made worse by incompetent teachers. I can quite confidently say that the only thing the new school will be able to accomplish is to take a large problem from across the city and concentrate it into one building.

It is not my intention with this article to argue that the low graduation rate among black students is not a significant problem. Looking at the racial diversity (or lack thereof) of universities in Ontario, and even this faculty, provides evidence of it. Scholarships are often either unattainable or not enough to overcome economic disparity, much less the gang problems and social conditions. The problem quite clearly does not lie in a poorly designed curriculum. ■

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What you need to know about baby bottles

By Matthew Fong - OT9, Monograph Co-editor

A recent report (1) about plastics used for baby feeding bottles has the whole country buzzing and some concerned parents may come to your pharmacy wondering what the commotion is all about. It is important for us as front-line health care providers to understand what the issue is and how we can help.

The report was released by *Environmental Defence Canada* in early February (2008) and it outlines some issues regarding plastic baby bottles and contains evidence pointing to the potential danger of chemicals leaching out of the plastic.

The report states that some 90% of plastic baby bottles are made up of chemicals that can leach or ooze out into foods or liquids with which they are in contact, particularly when heated.(1) The main one is bisphenol A (BPA), which is one of the main constituents of number 7 plastics. BPA plastics are one of the most highly manufactured plastics accounting for about six billion tonnes of commercial use yearly.(4) Currently, HC guidelines allow BPA plastics to be used in food containers based on extrapolated data from toxicity studies in animals. The acceptable daily intake of BPA, set by HC, is 25ug/kg/day. This is well below the actual limits of current exposure which can be measured in nanograms.(2)

BPA has a similar structure to estradiol, a hormone normally found in the body, and has been shown to be capable of binding estrogen-related receptors and disrupting the normal functioning of the hormone.(2) In animals studies, it was shown to increase the risk of breast and prostate cancer as well as several reproductive and developmental processes.(3) Other studies have shown that BPA can have an effect on sexual differentiation and sexual development in rats.(8) Little evidence is available on the direct effects of BPA in humans.

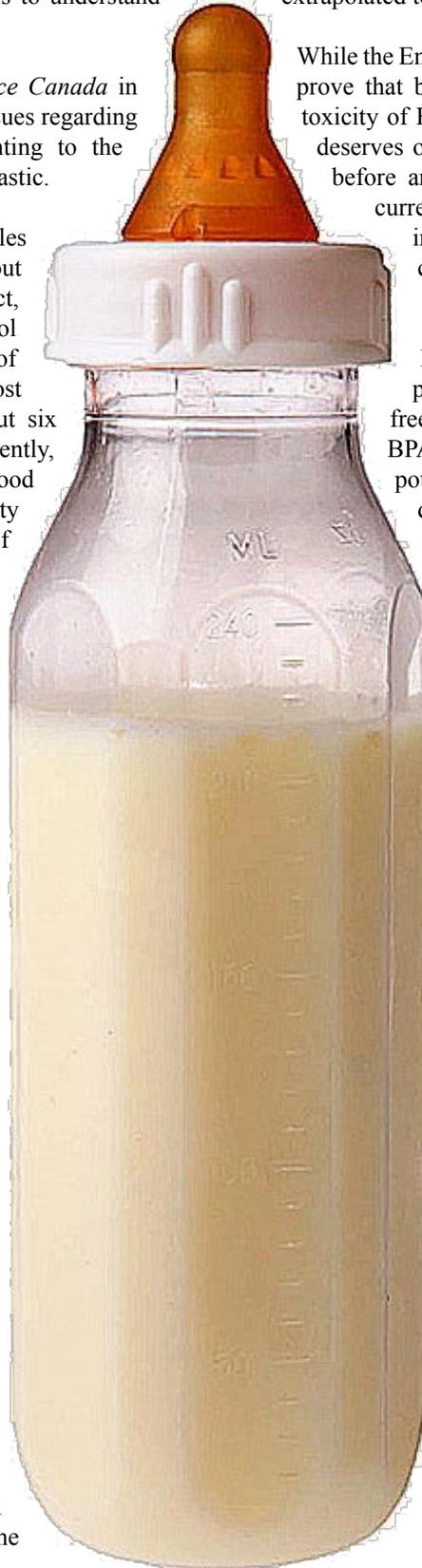
Undeniably, BPA has the potential to have toxic effects in humans, if found in high enough quantities.(3) However, studies have not concluded definitively that such quantities can be produced with regular use of plastic products.(4, 5) Others, as in the authors of the Environmental Defence report, claim that even low doses of BPA (fractions below acceptable limits) can have serious effects and that these levels of BPA can leach out of several baby bottles. (6)

Several aspects of this report seem disconcerting to me. Most importantly, the data itself is not supported by the scientific community at large. It is important to note that the study conducted in the report (that of measuring the levels of BPA leached out of baby bottles) was not peer-reviewed. Also, the

methods used do not accurately reflect the common use of these bottles. It was found that at room temperature, no leachates were found whereas in heat-treated (80°C for 24 hrs) samples, 5-8 nanograms/milliliter of BPA was recovered. Furthermore, most of the studies referenced in the report focus primarily on animal studies, which cannot easily be extrapolated to humans to great extent.

While the Environmental Defence report does not unequivocally prove that baby bottles are dangerous, the idea of potential toxicity of BPA, at any dose, remains an important issue that deserves our attention but still necessitates further research before any drastic measures be taken. Health Canada is currently conducting a review of several chemicals, including BPA, to reassess the risk of exposure to consumers. (7) Results are expected to be released in the spring of 2008.

For those who are concerned about the use of BPA plastics, we can recommend switching to BPA-free or glass bottles. For those who continue to use BPA products, care should be taken to minimize the potential for leaching by avoiding dishwashing, harsh detergents, use in microwaves, and prolonged storage of liquids. ■



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Counselling Corner: Job Hunting

Compiled by Andrea Tofano (OT8) for the Pharmacy Mentorship Program

It's reading week, you have dreams of relaxing, sleeping, having a social life... but wait... you forgot... you don't have a summer job! This issue of Counselling Corner comes a little bit late for those hoping to snag the perfect summer job, but don't be discouraged because lots of great opportunities come late and instead let this be motivation to get searching!

Lucky for us, pharmacy students are in high demand relative to other academic disciplines. You can choose to work with community pharmacy, hospital pharmacy, government, the pharmaceutical industry, or even the faculty. Our tips should help you in your search for the right job. A summer job in one of these areas can offer a myriad of opportunities to learn about the profession of pharmacy. Experiencing pharmacy in practice can greatly enhance the overall academic experience we get at school.

Community Pharmacy

For many pharmacy students, a summer job in a community pharmacy setting is good starting point. You would want to start looking now. Depending on your plans for the summer, students often prefer locations near their homes. There may be many pharmacies in the area, and perhaps one may be difficult to choose. This is where research comes into play. Find out about the pharmacy, its dynamics, the staff and most importantly, the management. Being a pharmacy student gives huge leverage, so remember this; show your face and make them aware of who you are. Since this a community setting, you will be working with people all the time. Therefore, patient interaction and general customer service are key assets. Sometimes, pharmacy managers or owners are looking for those that already have experience with their particular computer system or work experience. Don't let this discourage you! We have a unique skills set and background to offer. Polish your resume and tailor it to every position being applied for. Even if they are not hiring, it never hurts to introduce yourself and network! Also, keep in mind that the management may be looking for commitment past the summer, so flexibility may be pivotal. Know what capacity of commitment you can offer before going ahead with your application.

Polishing up the ol' resume



http://www.es.vu.nl/~frankh/popularising/cartoon2.gif

Hospital Pharmacy

The key here is to apply early and do some research. The mentors surveyed reported that the application process starts in early January and that many hospitals do not advertise summer positions. Research all of the hospitals that you are interested in and find out who does the hiring; you can check websites or ask former summer students. When interviewing, ask about clinical rotations or project time because some jobs can involve lots of homework, so be sure that you are willing to commit. Give yourself lots of time when going to interview at the hospital because many inpatient pharmacies are hard to find. Many summer jobs will entail technical work, keep in mind that any experience in the field is a step in the right direction and will help you in your future hospital career.

Industry/ Government

Most of the opportunities here are not advertised and hard to find. Try to network and meet former summer students, or managers who are involved in hiring. These jobs are often available to students of many different disciplines and you will need to market your pharmacy skills. As there are many companies, there is a wide window for applications, thus apply early to avoid missing out. The ideal candidates are mature responsible students with excellent communication skills. When interviewing, don't be intimidated by the size of the company or number of interviews—focus on being confident. Also make sure to be professional and dress the part! ■

External Affairs and UPS

Presents...

The External Affairs Student Writing Award

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

Criteria:

- an active student member of either CSHP or OPA
- completion of an article submitted to the Monograph between September-April which is about a service provided by the organization that you are a member of
- Examples include conferences, CE events, social events, other membership benefits etc...

Award value:

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

Questions?

MY PERSPECTIVE -



By **Christobelle (IT0)
(christine.truong@utoronto.ca)

The Peaceful Life of a Domestic Fish

I was at the dentist the other day and in the waiting room was this huge 80 gallon fish tank. Inside this fish tank was one medium-sized fish in a beautifully set-up environment which included treasure chests, algae plants, a castle and an overturned ship. This fish looked so content in the aquarium. As I stared at it and watched it move, I was amazed at how peaceful and calm the fish seemed. It was just happily swimming and navigating its way around this enormous tank. Now I'm sure you might be thinking, "of course it is swimming, it has nothing else to do but swim around." But honestly, I admire and envy the fish. Not the whole part about being by himself all day and everyday. But I am envious that he gets to swim around in this controlled environment, be fed on a daily schedule and be taken care of.

How can I be so sure the fish is as happy as he seems? I guess I can't really be sure, I'm not the fish. But from my perspective, throw in another fish of the opposite sex and that fish is living the dream life.

Okay, so my article seems like it has no point so far, but bear with me. I need supporting points before I draw a conclusion. I was recently given a pet betta fish for a present. I like my fish. I want to say that I spoil my fish because I would like to spoil it. But how exactly can you spoil a fish? I feed it on a regular basis. When I'm not around, I make sure he is still fed by someone on a regular basis.

I keep his water clean and at the appropriate temperature. What more can I do? Not much. This leads me to believe that pet fish lead a pretty low maintenance and carefree life: qualities I envy or strive for.

Now on the flip side, the fish has no control over anything. What if he actually doesn't like being fed in the mornings? What if he actually hates the food I feed it but must eat it anyway? What if he hates the pretty rocks at the bottom of his home? What happens if he hates his environment? Well, that's just too bad because there is nothing he can do about it.

So is my dilemma clear? Probably not. I realize I'm presenting it by drawing a crazy connection but it makes sense and it's in a simplistic manner. Anyway, what it comes down to is the choice between carefree peacefulness and being able to control things. The first seems like a pretty good way to live; you're just at peace with everything. No concerns, no worries, no stress. The second choice probably involves lots of ups and downs, sacrifices and rewards. With the first one, how do you know you're happy if you keep doing the same thing over and over again? At least with the second one, when you're good you know you're good because you're not bad. I still think I'd choose the latter. Because after all if things were given to you on a silver platter, you'd probably eventually take it all for granted.

So the moral of my story, as much as I envy my pet fish or the fish at the dentist, I don't actually want to be a domestic fish. => ■

The Boil of Contempt

by Maggie Wong - 0T9

Having difficulty fending off all those pharmacy suitors? Are they so sweet, they're giving you cavities? Disinfect your oral mucosa by swishing and spitting out some of these lines to induce cardiomyopathy.

You are so persistent, it takes 3 to 4 half-lives to get rid of you.

I'm not blushing because of you; it's from the Niacin.

You're like steroids. I can only take so much of you every other day.

If I was a receptor and you were my substrate, I would rather let another drug bind to my allosteric site and change my conformation than to allow you to exert your actions on me.

The thought of you makes me reach for the Graval.

You're more promiscuous than Amiodarone.



<http://blog.washingpost.com/bs/mckinley/broken-heart.jpg>

Abridged Product Monograph for Empathy

By Allegra Connor - 0T9

Indication: Consistent failure of PC skills in PPL

Onset: Immediate

Cost: Significantly outweighs cost of avoidance, which is failure of PC skills

Convenience: PRN (therefore convenient)

Note: Administration on a regular dosing schedule rather than PRN has been shown to improve efficacy in a randomized double blind placebo-controlled trial (n=240); however, adverse effects may become intolerable in certain high-risk patients.

It may be beneficial to screen for patients at high risk of intolerable side effects of empathy. Risk factors include:

- male
- high socioeconomic status
- busy/in a hurry
- fully ambulatory

- oriented x 3
- hemodynamically stable

However, research has shown a significant proportion of risk factors are not predictable, and patient response should be monitored, with dose adjustments as necessary.

Side effects: include nausea and irritation. Side effects can be reversible if dose of empathy is tapered down under close monitoring of the patient. Abrupt discontinuation of empathy is not recommended, as it may result in significant withdrawal symptoms (such as anger resulting in failure of PC skills).

Directions for application of empathy:

- Apply empathy liberally PRN
- There is no dose ceiling effect (dose can continue to be elevated indefinitely with increased efficacy)
- Assess patient response closely and adjust dose accordingly
- If adverse effects (e.g. nausea, irritation) become intolerable to the patient, discontinue empathy with tapering to prevent withdrawal symptoms (e.g. anxiety, anger) ■

A THLETICS

Women - Intramurals

As the regular season of intramural sports wraps up, Pharmacy female athletes should be proud of their achievements this semester. On the volleyball court, Pharmacy was fortunate enough to field two teams. The Pharmacy team went undefeated this season with a 5-0 record. However, Pharmacy's perfect record was not without a few bumps in the road as exams threatened their unbeaten streak when most of their players were unable to make a midseason game. Fortunately, thanks to some skilled ringers, the unbeaten streak remained intact and they clinched first place position in their pool. The second Pharmacy volleyball team, a combination of Pharmacy and Grad House players, currently sits in the third and final playoff spot in their pool with a record of 2-2.

On the ice, Pharmacy's first women's hockey team (in combination with Meds) looks to rebound this season after their heartbreaking overtime semi-final lost last semester. The undefeated record the Pharm/Meds team currently holds is in large part due to the defensive backbone of the team (coincidentally, all Pharmacy players are on D). Michelle Peters (0T9) is a tough, physical defender in front of her own net but is also a threat offensively as she often jumps into

rushes to play the fourth forward in the opposition's end.

The onslaught of midterms seems to have affected our women's basketball team the most. Their season began optimistically with two strong wins. Unfortunately their streak came to an abrupt end when exams kept its core players preoccupied. Despite the midseason slump, the basketball team finished their season with a 3-2 record, clinching them a playoff position.

With playoffs beginning the first week of March, we're sure to see some exciting action as many of our women's teams show strong potential to be championship contenders. Good luck, girls!!!

Athletes of the Month

Christa Connolly's ability to be a jack-of-all-trades on both the soccer and ultimate team earned her the title of January's Athlete of the Month. Christa (1T0) who played midfield and forward all of last semester on the women's soccer team, has demonstrated she can do more than dribble

and score goals. This semester Christa has flexed her goal keeping skills by shutting out her opponents each time she has played net. On the co-ed ultimate team, Christa's forehand flick, patient handling and stealthy receiving abilities give her team an offensive boost.

February's Athlete of the Month is Tatyana Depcinski (1T0) for her participation on the women's basketball and volleyball teams. On the volleyball court, Tatyana has shown an improvement in her swing from last year. This veteran lefty doesn't hold back when hitting and has been consistently hitting the back corners this semester to win points for her team. Although new to basketball, Tatyana has quickly picked up the sport. She knows how to use her height to her advantage in order to grab rebounds and isn't afraid to shoot the ball to generate some offense during games.

Linda Plong
Female Athletic Director

Contact the Athletic Reps for more information on how you can get involved in Pharmacy sports!

Male Athletics: Bryan Langel - b.langel@utoronto.ca
Coed Athletics: Rene Mader - mader.rene@gmail.com
Female Athletics: Linda Plong - linda.plong@utoronto.ca

Male Athletics Suffering...

Well this year we have a lot of new things happening in the world of sports. We decided to go with three basketball teams in three different divisions for the first time ever. It seems to be going well as the Div. 4 team will most definitely be making the playoffs. The Div. 3 team pulled off a few close games but just missed making the playoffs. Brandon Thomas (1T1) did a great job captaining that team and deserves an honorable mention for his efforts. The Div. 2 team will probably be making playoffs with a 3-2 record but due to defaults they might not be shoe ins.

On to men's indoor soccer; they have had the tightest games of the year. The loss of all-star talent like Mena Ibrahim (0T8) has surely stunted their ability to score with only one goal in three games. They've still posted a respectable record of 1-1-1 but will have to step it up in order to make playoffs. Perhaps I should suggest scoring a little more?

Men's volleyball this year is also taking a huge hit with the team only posting one win all season. As expected they did not make the playoffs. However, one bright spot on the team did shine in Peter Chiu (1T0), who played through tremendous adversity. He not only wins athlete of the month but also the iron man award for the guts to play with a busted wrist.

The Pharmacy Hockey squad has also shown up big this year posting a 2-0-1 record

and will most likely see action in the playoffs. As mentioned in the last issue they've moved up to Div. 2 and as expected they've experienced a much more advanced level of play.

I'd like to give this month's athlete of the month award to Peter Chiu of the 1T0 class. Peter had a major injury to his wrist playing Div. 2 basketball but was a trooper and finished out the game. Then without regard for his health, suited up to play Men's Volleyball and prevented a possible default by his team. If everyone took sports as seriously as him this would be a dominant program. Kudos to Peter, and good luck to all the Pharmacy teams.

Bryan Langel
Male Athletic Director

COED Sports

The winter term has started off great for COED sports. The Div. 1 teams in basketball and volleyball are looking to make impressive playoff drives with the championship title in their sights! The Inner-Tube Waterpolo team has hit the water for another great season of dunks and goals. While volleyball has remained a popular sport with teams in every division! Pharmacy has never been so successful in participation and competition!

The basketball team is undeniably in hot pursuit of their first title! A recent victory over

last season's champs has shown how much the team has improved. The chemistry on the court has never been better with outstanding contributions by Tommy Lam (1T0), Jelena Sparavalo (1T1), Lindsay and Lori Tribe (0T9).

This year marked the first time that Indoor Ultimate was played in the Varsity Bubble. For those of you that still don't know what Ultimate is, imagine a non-contact combination of Soccer and Frisbee (well mostly non-contact : P). This isn't your Grandma's idea of playing fetch in the park with her dog. It's a highly competitive and skilled sport! This year's squad is tearing up the turf with the sure hands of Cynthia Leung (0T9), Linda Plong (1T0) and Brandon Thomas (1T1) leading the way. The departure of the 0T8s left a huge hole in the team, but the supporting cast has stepped up and the team is still a playoff contender. Way to go guys/gals!

With all the choices available for the beginner or advanced player, there has never been more chances to get involved with intramural sports.

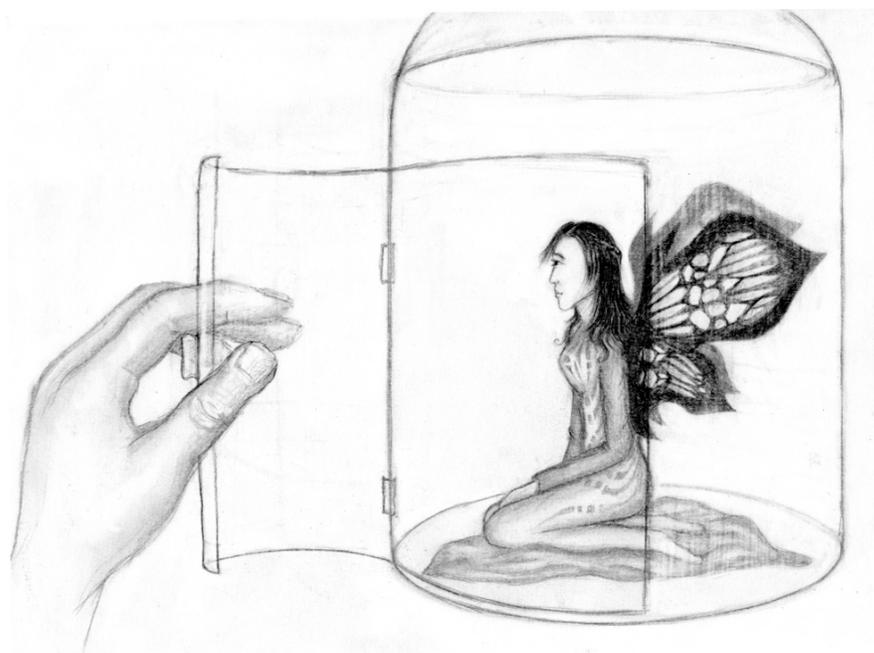
It's time to bring home some championships!

"DRUGS on three!"

Rene Mader
COED Athletics Director

The Arts

open cage
by Mavra Zvenigorodskaya - 1T0



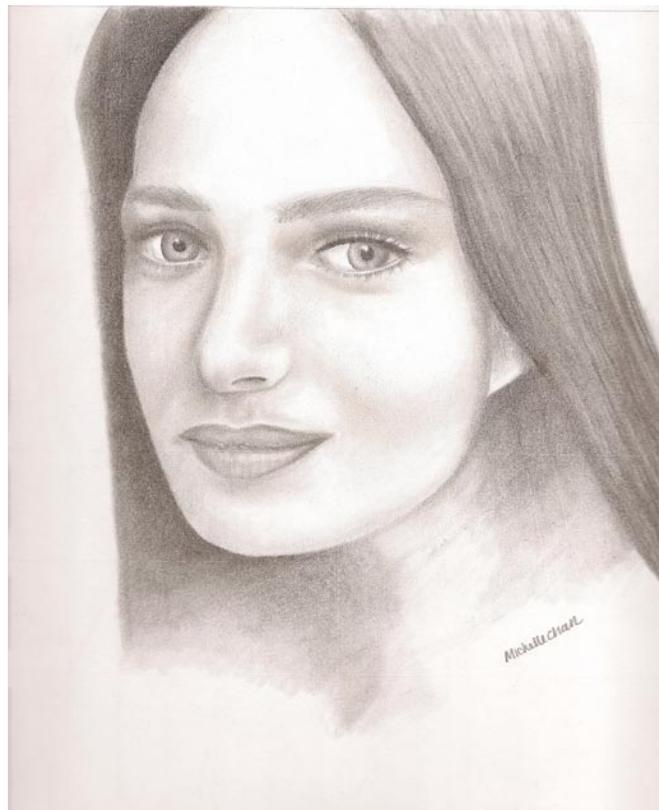
Kiera Knightly
by Catherine Chung - 0T9



Charcoal - Cristiano Ronaldo
by Timothy Luk - 1T1

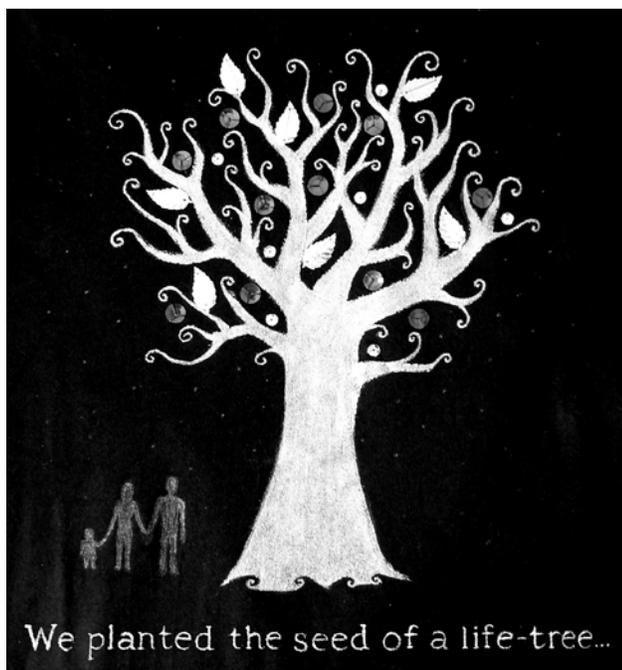


Drawing
by Michelle Chan - 0T8



the life tree

by Mavra Zvenigorodskaya - 1T0



dragon's soul

by Mavra Zvenigorodskaya - 1T0



George

by Jon Lu - 1T0



Word Search

SUMMER JOB HUNT

RESUME
JOBHUNT
POSTING
MONEY
INTERVIEW
ANXIETY
HANDSHAKE
CONFIDENCE
NONVERBALS
SKILLS
EXPERIENCE
PHARMACY

COMMUNITY
HOSPITAL
INDUSTRY
OTHER
VACATION
WAGE
NEGOTIATE
COMPETITIVE
MENTOR
TRAINING
WHIMIS

M Y B R B N E K A H S D N A H K
E E I L Y Y R T S U D N I P N W
M G N R M M V T R A I N I N G H
U R T T C O M P E T I T I V E T
S J E Z O K N M F P O S T I N G
E X R C C R Q E K J D V V U H C
R S V M N N L W Y A T W H O T S
C L I P K E H K N B E B S D L V
O A E B H I D X F T O P M L E A
M B W N M A I I A J I R I Y G C
M R Y I M A R I F T D K E K A A
U E S G T B T M A N S N T H W T
N V L Y Z O H L A K O L G D T I
I N G M G G C L M C J C P B Y O
T O K E L Q V B N M Y N N T B N
Y N N L V G E X P E R I E N C E

Beaded Bracelet

by Allegra Connor - 0T9



Beadoodle

by Allegra Connor - 0T9

Sudoku

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

Let's Get Personal...

...With Personal Health Solutions!

Personal Health Solutions is an exciting professional pharmacy program which gives our patients an opportunity to meet one-on-one with a trained pharmacist to learn more about how to decrease their health risks and optimize their quality of life. The consultations are available year-round by appointment and are perfect for patients who would benefit from personalized health education.

Not only does the patient gain valuable knowledge, but the pharmacist also gains the opportunity to charge for his/her valuable skills and expertise! At Pharmasave, we believe in the value of our pharmacists and Personal Health Solutions.

Other patient care programs we are willing to charge for include: community seminars, in-depth medication reviews, disease management clinics, and much, much more.

If you're interested in a rewarding career, working in a unique environment where you can be paid to integrate professional services such as consultations, community seminars, and disease management clinics into your daily practice, consider a position with Pharmasave!

For more information, contact:

Peter Zawadzki, B.Sc.Pharm., R.Ph.
Manager, Pharmacy Innovation
Pharmasave Ontario

Tel: 905.477.7820 ext 232

Email: pzawadzki@on.pharmasave.ca

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MARCH HAPPENINGS...

S	2	
M	3	Pharmacy Awareness Week (PAW) begins
T	4	
W	5	
R	6	
F	7	Pharmacy Awareness Week (PAW) ends
S	8	
S	9	
M	10	CAPSI symposium on entry level PharmD
T	11	Town Hall on Referendum / Election Speeches
W	12	
R	13	St. Patty's Day Karaoke
F	14	Drug Fair / Toronto Rocks Game
S	15	
S	16	St. Patty's Day 5K Walk/Run
M	17	
T	18	
W	19	Rock Climbing at The Rock Oasis
R	20	
F	21	Good Friday - No School
S	22	
S	23	Easter Sunday
M	24	Pain Week (OT9)
T	25	Pain Week (OT9)
W	26	Pain Week (OT9)
R	27	Pain Week (OT9)
F	28	Pain Week (OT9)
S	29	
S	30	
M	31	
T	1	Monograph Submission Due
W	2	
R	3	
F	4	
S	5	
S	6	
M	7	UPS Awards Night

FACTS & FIGURES

\$16 000, the amount of interest you would pay on a \$40000 student loan if you take 10 years to pay it with monthly payments of \$492.

\$8100, the amount of interest you would pay on the same loan if you shorten the repayment period to 5 years, and pay \$801 per month.

\$3.1 Million, the amount earned by age 65 if you invest \$6000 per year from age 25-35, with 12% return.

Reference:

MIKE SULLIVAN, R.Ph., B.S.P., M.B.A.
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