

# The Monograph

Vol 12 Issue 4 February 2011



**Are YOU a Secret Studier?**

# The Monograph

February 2011

Executive Team

Editors In Chief

Zenah Surani & Sidika Dhalla  
themonograph@gmail.com

1T1 Representative

Adam Calabrese  
adam.calabrese@utoronto.ca

1T2 Representative

Priya Bansal  
priya.bansal@utoronto.ca

1T3 Representative

Kristine Galido  
kristine.galido@utoronto.ca

1T4 Representative

Sana Naqvi  
sana.naqvi@utoronto.ca

We want YOU in  
The Monograph!!

themonograph@gmail.com.

PRINTED BY

The Learning Achievement Centre

www.TLAC.ca

Toronto Printing -

233 College St

## CORNER

UPS

Hi fellow Leslie Dannonites,

Can you believe we're in the home stretch of 2010-2011 already? Hopefully we've all had a relaxing reading week and are fully charged for the last 2 months of school. UPS has plenty of events to keep us all distracted from our April final exams!



Firstly, be sure to take part in Pharmacy Awareness Week from March 6-12! We've got a PAWsitively Delicious Bake Sale

planned, the annual Kids and Medicine tradition, and be sure to check out the "Speed Meet the Pharmacist" activity! The week after PAW, make sure to pick your winners in the CAPSI Charity Week March Madness NCAA basketball pool or buy a raffle ticket for a chance to win a BlackBerry! Then be sure to get your pep rallied for the 3rd Annual OPA Students' Cup on Sunday, March 20 at 3pm in the University of Toronto's Varsity Arena. Toronto will be going for their 3rd consecutive victory in this fast-growing tradition! Keep your eyes and ears peeled for details about all of these upcoming events to see how you can get involved.

It's also the time of year where we say farewell to the current UPS Council and welcome in fresh new faces to be in charge for the next academic year. With the class of 1T5 starting a brand new curriculum in the fall, it's never been more exciting to be a part of UPS! The election process will be starting soon, so if you have any questions at all, don't hesitate to ask the current council members what it's like to be on UPS.

Good luck in the rest of the semester,

David Yam  
UPS President 2010-2011

Bryan Falcioni  
UPS Vice-President 2010-2011

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



# Editors' Note

Zenah Surani + Sidika Dhalla



ARE YOU A SECRET STUDIER? Answer the following questions to find out!

1. After an exam, you normally:

- a) Plop down on the couch and reward yourself for your hard work with a KFC double down and by re-watching the entire Season 1 of Modern Family.
- b) Tell everyone you're going to go take a long nap, but then when they are a safe distance away, take a detour and head to Robarts to hit the books. Who needs a break when there's so many exams?
- c) You feel confident, but you tell yourself that next time, you will start studying in advance. No more all-nighters!
- d) You feel confident that you probably got a 60, and forget about it and take the rest of the night off.

2. The night before an exam, you:

- a) Watch the "Social Network" for the 10th time...it's such a good movie, and you can study afterwards...you've already gone over most of the stuff anyway.
- b) Tell your friends you're taking the night off because "you're just gonna wing it" and then go over all your therapeutics notes for the 15th time. You're feeling pretty confident about this exam.
- c) Get an extra large coffee and pick up a couple Red Bulls while you're at it. It's gonna be a long night, especially since you're seeing a lot of this material for the first time.
- d) Calculate the minimum number of questions you need to answer correctly in order to pass, and spend your time on what you \*think\* the prof might ask.

3. In a typical PPL:

- a) You never prepare but you luck out by having a TA that gives you TTO passes for everything. It's all about who you know.
- b) You wake up at 7AM, have a hearty breakfast that will keep you going, look over your notes, and then arrive just on time, telling your friends that you woke up 20 minutes ago and you're not prepared at all. You end up getting honours on everything.
- c) You actually do wake up 20 minutes before the lab and when you arrive, you are a sweaty, flustered mess. You end up marginally passing everything. At least there's more labs coming up so you can redeem yourself!
- d) You spend most of your time looking through the course syllabus, memorizing what you need to do in order to pass. You've

secured a pass in the first three labs, so by the time the fourth and fifth labs roll around, you've already passed the term work, so why try?

4. You're in third year. This summer, you:

- a) Plan on doing nothing but sleeping in, lounging around the house in your PJs all day, then partying the night away. Every day.
- b) Had your pick of pharmacy jobs in every sector possible. You pick the one that will give you the best future prospects. Your friends are amazed that you were so lucky, since it seems like you don't even try.
- c) are applying to every pharmacy job that comes your way. If only you had started looking earlier!!
- d) Plan on travelling the world. You already did your time through EPE last year, so why not enjoy your last summer off?

If you scored **mostly As**: You're a couch potato.

Congrats on making it this far by doing next to no work! I'm jealous. Easy on the double downs.

If you scored **mostly Bs**: You're a secret studier.

Turn to page 23 and have a read.

If you scored **mostly Cs**: You're a crammer.

Yeah, we know...you would have done better but things "just kinda came up." Here's a reality check: contrary to what you've been telling yourself all these years, you don't actually work better under pressure.

If you scored **mostly Ds**: You'll take that six oh and go, Glen Coco!

Why go above and beyond if you can do the bare minimum and still be a pharmacist like the keeners in your class? You've never understood why people work so hard for the same incentive.

One last question....

Do you want to be the editor of The Monograph next year?!

- a) Totally! But you can never be as cool as Zenah and Sidika
- b) Yes! And you're SO much cooler than Zenah and Sidika
- c) Maybe...I would love to be as cool as Zenah and Sidika
- d) It would be a dream to fill the amazing shoes of Zenah and Sidika!!

**If you answered a, b, c or d, find someone else that did too and send us your resumes as well as a joint letter to apply to be next year's Editors-in-Chief!  
themonograph@gmail.com Deadline: March 11, 2011**

# WHAT I DID ON MY SPEP VACATION

By: Adam Calabrese, ITI Monograph Rep

SPEP is a funny place - in that people in hospitals tend to fawn over pharmacy students in a certain way. When I'm introduced as a pharmacy student 2 months from graduation, certain people (note: "people" does not necessarily include "physicians") tend to get a certain smile on their face and make a comment of some sort expressing their happiness at my impending graduation or a comment about how hard pharmacy school must be. I am willing to make the bet that if I introduce myself as a pharmacist three months post-graduation, those looks will be replaced by a look of horror - As in, "oh no, this guy is three months out of school, he has no idea what he's doing, and there isn't a real pharmacist making sure he doesn't kill people." It's a rather justified fear.

• • •

An aunt of mine, whose current or former status at U of T remains a bit of a mystery to me, is a nurse practitioner who has recently returned to Baycrest (as I told her at Christmas, "God help you if any of my former classmates wind up there"). She calls U of T "Fake-It-Till-You-Make-It U of T". I understood the general principle - pharmacy is by no means the only faculty underpreparing its graduates for the world - but it's not as though we should pretend that U of T is the only university alone in this predicament. As far as I can figure, like any good principle, it can (and by definition, must) be applied universally. Sure, our curriculum doesn't prepare us much for the finer or more practical points of health care, but it would be rather unreasonable to expect it to prepare us to conduct a med-rec with an increasingly senile patient whose primary diagnosis is "failure to thrive" or "failure to cope". So what do you do? Pretend that you have some idea of what you're doing, and hold on long enough to do something useful. I won't bother giving you the specifics of how this works because it's supposed to be one of those things you learn for yourself. If you pay attention, you'll notice that these principles are no different than the skills required to pass a PPL: stay calm and look for something useful to say. Keen observers will note that none of our finely honed complaining or panicking skills come in useful at any point.

• • •

On the topic of complaining, an ethics seminar I attended at my hospital did prove useful, in a small way. Aside from the normal running through various ethical principles before finally declaring what someone is legally allowed and obligated to do in a given situation, the ethicist did point out a useful tip for dealing with job-related issues. His advice? Whatever problems exist at work don't belong to you, and they don't pay you enough to bring them home and inflict them on your family. I wish I'd known about that at the beginning of my academic career. With reference to whatever paranoia is sweeping pharmacy at this time (and it seems that every graduating class has its panic), nobody pays us enough to care about them. Side note: nobody pays us to make (or read) jokes about therapeutics material on our Facebook feeds, either.

• • •

I have discovered yet another advantage to being in a small town. In fact, the realization is so striking that I wish I were someplace even smaller than Orangeville. Small towns (and I mean "small" as in "Creemore" small) do not forbid snowmobiles from driving on their roads. So instead of getting up early to shovel the driveway and giving yourself extra time to commute to work the morning after a snowstorm, you could drive your snowmobile. And no matter what happens, every conversation you have that day will go as follows: "Hey, how was your morning commute?" "Mine was terrible, how was yours?" "AWESOME!" Because snowmobiling to work would be so awesome as to make going to work worthwhile, if only for the sake of going.

• • •

I've been wondering ever since I wrote that last article as to whether I am living on the Niagara Escarpment or the Oak Ridges Moraine. At once, the Bruce Trail, which follows said escarpment, winds its way through here. At the same time, the Bruce Trail Conservatory website describes this section of the trail as containing "moraine deposits", and the Wikipedia map shows an extension of said moraine into this region. I haven't been this confused over such a mundane and ultimately meaningless question since ... oh, right. My last pharmacy exam.



If you were wondering as to the various bits of stupidity that have escaped from my mouth in the last few weeks, here are a few gems. I was once asking someone's son (their son because the patient didn't speak English) regarding his mother's weight. He asked his mother, who responded "135". I then asked, "135... pounds?" because apparently it seemed a possibility that this tiny Italian lady could have weighed 135 kilograms. And then there are the times when the pharmacists put me up to calling physicians to have an order changed without being very clear as to what products we have in stock. This results in me saying, "Well, the reason I suggested 250 mg was because we have 250 mg capsules..." and the physician responding "Uh, he's three. You're going to have a hard time giving him capsules, you're going to need to give him a suspension". With each blow to my ego, I am reminded of that particularly brilliant webcomic, XKCD: "You were once shoved head first through someone's vagina. Why are you acting so dignified?" I am also reminded of this each time someone introduces themselves to me as "Doctor so-and-so" when they're not in the hospital. It suggests something about their personality. Or, rather, it suggests that their current profession is a substitute for one.



In my last article I made some point about us being the future of the profession and issued a vague threat towards anyone who, in becoming that future, persisted in making bad decisions. I have discovered more bad decisions being made. Pharmacist conferences are murder on its attendees: pre-breakfast meetings starting at six in the morning, with meetings running late into the evening. Well that's another thing that needs to stop. If any of you find yourselves in the position of scheduling a conference, I want you to weigh whatever benefits you might imagine of having a meeting at six in the morning against the visceral fear that you will feel when I find out what you did.

**McKesson Canada is proud to support the University of Toronto's Undergraduate Pharmacy Society and its students.**

McKesson Canada is the leading provider of logistics as well as information products and services within the Canadian health care marketplace. McKesson Canada empowers health care every time a pharmacist spends more time where it counts... with patients.



[www.mckesson.ca](http://www.mckesson.ca)

**McKESSON**  
Canada  
*Empowering Health Care*

# Community and Hospital

By Priya Bansal, 1T2 Monograph Rep

With the very last summer of my life just around the corner, I am now forced to think about where I might be working next year. As our faculty and student organizations have shown us, there are many unique and interesting opportunities open to those with a degree in Pharmacy. In fact, this summer, I hope to work at an antiretroviral AIDS clinic in Namibia. Talk about unique! Usually after graduation, however, many pharmacy students begin their career in either community or hospital... or family health teams (FHTs). Community, Hospital, FHTs. C., H., F. It's giving me congestive heart failure just thinking about it. Where am I going to go, what am I going to do???

The debate is usually limited to just community or hospital, as there aren't many FHTs out there yet. This brings me to my main discussion: community vs. hospital. Have you ever noticed a certain negative attitude towards community, especially from those in hospital? I certainly have. Having worked in both settings, I have seen that the two have their own pros and cons, and although I don't know which one I'll enter into first, I plan on taking Bill Wilson's advice and eventually experience both.

I first noticed a disregard for community pharmacy even before pharmacy school. During my undergraduate degree, amongst my peers it seemed as though everyone wanted to either get into Medicine, Pharmacy, or do a Masters. Whenever anyone, including myself, said that they were interested in Pharmacy, people would ask why. I was even told that it didn't seem like they did anything. I had already worked in a community pharmacy before, so I was able to say that pharmacists actually did a lot more than patients really knew. Others, however, would justify their decision by saying that they didn't want to be one of those pill-counting pharmacists and that they would work in a hospital instead. That seemed a like a good enough answer for most people.

Sometimes during interviews for hospital placements, I also got the feeling that some of the pharmacists were not too keen on community pharmacy. They mistook my enthusiasm for wanting to learn about a different work setting for wanting to leave behind community. Even amongst some of us here in Pharmacy school, there are some who think that hospital is better; that it is more challenging and that pharmacists utilize their knowledge more.

Everyone has their opinion and reasons for the career path they choose. But I will say this: choosing a career path because you genuinely find it interesting or enjoy it, and choosing a career path because the other paths are not good enough are two very different things, even if they bring you to the same point. If you let it, the latter can make you think poorly of those in other settings, while the former simply makes you think highly of the setting you've chosen. Yes, hospital may have a steeper learning curve and in the past pharmacists have utilized more of their knowledge, but as it stands, both are currently in the midst of changing the role of the pharmacist. Whether pharmacists are moving from the basement to pacing the floors in clinical rounds, or from behind the counter to the counselling room, the point is that both have room for improvement and are working to achieve higher standards of care. The other point is that both types of pharmacists are extremely crucial to the health care system and to ensuring patient safety and ought to be valued for this.

I used to be bothered by the fact that community wasn't always viewed with the same respect as other pharmacy settings. But hey, if I was looking for glorified respect, I would have gone into Medicine. I don't mean that in a bad way towards Medicine (everyone knows how difficult it can be to get into Medicine), but a good way towards Pharmacy. I like that I have to earn my respect. No matter what setting I choose to start with, I know how I want to practice and that's the important thing. In first year during my CSV, I had a preceptor that was a new UofT graduate, and he literally did exactly what we were taught in school, starting with "So, did the doctor tell you anything about this medication?" He also did as many MedsChecks and follow-ups as he could. It was the first time I had seen a community pharmacist provide true patient-centered care. Maybe enough of us haven't seen community pharmacists practice this way, and that's why we view them the way we do. This draws me towards community even more; I would like to be a part of this forefront of change.

Having negative views of different types of pharmacy practice cannot be good for the profession as a whole. Pharmacists tend to really associate themselves with the Canadian Society of Hospital Pharmacists or community in general, but appreciating the value of the work of your counter-parts is extremely important, especially with the government-proposed changes, and also because as individuals, you never know where you might end up, and what you may find suits you better.

DIRECTED BY DEBRA SIBBALD PHD, MA, BSc

# 2011

WE WERE WARNED

SATURDAY MARCH 5

PHM 320 PRESENTS A LESLIE DAN FACULTY OF PHARMACY PRODUCTION

DIRECTED BY DEBRA SIBBALD PHD MA BSc: "2011"

STARRING DERMATITIS, PRESSURE ULCERS, LICE, SCABIES, HEMORRHOIDS, SWIMMER'S EAR, TRAVELLER'S DIARRHEA,

WITH ALLERGIC RHINITIS, COUGH AND COLD, CONSTIPATION, ACNE, PSORIASIS, EYE IRRITATION, DYSPEPSIA

EMERGENCY CONTRACEPTION, TENSION HEADACHE, AND MORE

WORTH 50% OF YOUR FINAL MARK SO YOU STILL HAVE A CHANCE OF RESCUING YOUR MARKS WITH MARKS FROM

COURSE WORK BUT IT'S NOT LIKELY YOU WILL SO MAKE SURE YOU STUDY HARD

AND IF YOU DO FAIL THAT'S OKAY NO ONE WILL JUDGE. YOU CAN ALWAYS WAIT UNTIL NEXT YEAR

AND DO IT AGAIN IN 2012

By: Nancy Tieu, 1T2

# Keep Yourself Motivated!

By: Kristine Galido, 1T3 Monograph Rep

The light at the end of the tunnel is near. Let's just hope it's not a train.

It's hard to believe that summer is within reach. When the school year started in September, it seemed too far away. And now, it's just two months away. However, what's so close is still so far. The days are getting longer (who else is stoked that the sun no longer sets before 5 pm?), and the weather is starting to get nicer. And if you're anything like me, keeping yourself motivated to keep going until the end of the year is an uphill battle. So here are some useful, albeit not completely serious tips to help get you out of the fresh air and sunlight and back into the dark and depressing library to get your mind into top form for finals.

## 1. Find a place that is free from distractions

This pretty much means any place where I'm not studying next to you. To all those people whom I've annoyed/offended with my obscenely loud voice, I apologize. But seriously: is there such a place? Going to a library all by yourself usually works in minimizing social distractions. Deactivate your facebook. Turn off your cell phone. Purposefully leave your laptop at home. Something.

## 2. Get new paper and pens

This is pretty much my favourite tip, because I love to

buy useless things. I'm a compulsive highlighter, and that helps a lot, especially when you have the attention span of a fly. If you'd seen my notes for panel, you would have sworn that a rainbow had thrown up all over my paper. Buying new school supplies keeps you motivated to do work because doing your schoolwork gives you a wicked excuse to use all your cool new pens. It's lame, but there comes a time when this stupid excuse is as good as any to inspire yourself to do something other than aimlessly browsing the web.

## 3. Caffeine

Do I really need to say anything about this one? Generally, you tend to be more productive awake than asleep. But don't go overboard.

## 4. Think of all the fun you'll have when it's over

Sleeping? Going out for drinks? Summer vacation? I think so. Think of a particular thing that you're going to do at the very end, and work towards it. Like for instance, while writing this article, I'm thinking about all the reading week fun I'm going to have once I finish.

## 5. Most important: FEAR

Fear motivates me like you wouldn't believe. (Disclaimer: FEAR only works if you still care) For instance – the last exam is always the hardest to study for, right? Because you just want it all to be done so summer can begin. What? Med Chem is on April 29th? No problem. My plan is to take a look at that heinous cube thing about a month in advance, and that should get me going. You should try it. It's super effective.

ing. This is an ideal property for a column or other support structure.

Finally Pharmaceutics TA especially enjoys criticizing hard-working pharmacy students. By pumping all this 'hot air' spouted off by TA into the building lobby – which is unacceptably cold this time of year – we can all stay toasty warm.

Class dismissed.



## • Engineering 102 – Civil Engineering for

### • Self-Care Pharmacists

• By: David Laughren, 1T3

• Case Study: You are walking by the Leslie Dan Faculty of Pharmacy building when you notice that one of the concrete pillars is cracked. What do you do? You may think: let's replace it with gold. Gold pillars be ballin'. But no! Gold is too malleable and too expensive. This is a poor choice.

• You might also suggest: let's just replace it with another concrete pillar. This is a good choice. However, concrete pillars are as exciting as G protein receptors, so we need to choose something more interesting.

• Correct solution: Make the pillar out of a material known as 'pharmaceutics TA'. Concrete has a compressive strength of 70 MPa, whereas for human bone it is an impressive 170 MPa. Because pharmaceutics TA has an especially thick skull it is even stronger.

• Pharmaceutics TA also has a head full of air, making this material both strong and lightweight!

• It is also well known that Pharmaceutics TA enjoys standing around for long periods of time doing nothing.

# The Five Golden Rules of Vegetarian Recipes

By: Ian Wu, 1T3

Vegetarian recipes are not easy. Coming from someone who is currently living alone, adapting to the vegetarian lifestyle, it takes skill to make dishes that not only taste good, but also, appeal to one of the well known merits of a vegetarian recipe – its superior health benefits. After 6 months of experience, I've come across 6 “golden rules” that I tend to follow in order to maximize taste and nutrition.

## 1) Steaming: The 5 minute rule

Deep fried vegetables is nice and crunchy and all, but personally, I'm a big fan of steaming vegetables. It reduces the contact of the vegetable with water, thus allowing its nutrients to be preserved. Moreover, steamed vegetables taste crunchy provided that you add in the proper complementary ingredients. How many minutes should you steam? Multiples of 5, depending on its thickness. I steam broccoli for 5 minutes, diced carrots for 10 minutes, and diced beets for 15 minutes. For “thinner” vegetables like broccoli where only 5 minutes is needed, it is important not to steam too much or too little. Too little and its texture will turn from crunchy to unpalatable. Too much and everything becomes too moist and soggy and that too will be unpalatable. I encourage everyone to steam vegetables, but it's really your choice. Keep in mind though that deep frying exposes vegetables to high heat, damaging its nutrients and antioxidants.

## 2) Cheese goes very well with vegetables

If there's one ingredient to add to steamed vegetables that you should almost always consider, it's definitely going to be cheese. Cheese provides this salty, creamy flavour that goes well with the crunchiness of the vegetables that melts in your mouth. Health-wise, cheese contains essential vitamins and minerals that most vegetables lack – namely, zinc, Vitamin B12, and riboflavin. My top choices are feta cheese, mozzarella cheese, and parmesan cheese. They are expensive, yes, but there are a couple of cheese stores in the Kensington Market that sell cheese at a very reasonable price.

## 3) Oil dressings – unsaturated ones

My top oil pick here would be extra virgin olive oil. Do a google search and you'll soon realize that most nutritionists value this treasure very highly. Why? It has the most antioxidants out of all the oils out there, provided that you buy the “extra virgin” kind. True, price is an issue, but once you head into Kensington Market, a lot of high quality olive oil are sold as cheaply as (if not, cheaper than) sunflower oil in your regular supermarket with the same bottle capacity. If convenience and price is a major concern, then the regular olive oil, sunflower oil, or safflower oil can be used. Not only does oil enhance the flavour of vegetables, but also, oils are one of the best sources of Vitamin E. The more unsaturated fat there is (i.e. olive oil, safflower oil), the more Vitamin E there is. This is important because most vegetables are high in Vitamin C, and a combination of C and E provides a double dose of antioxidant protection in your body.

## 4) Tomatoes and Legumes (and some spices)

Many people find it difficult to eat a big bowl of legumes, but you cannot deny the fact that tomatoes and legumes go together like a baseball and a bat. The... tomatoey flavour of tomatoes enhances the soft, crunchy flavour of beans. Also, if you're cooking a legume recipe, go crazy (seriously, go CRAZY) with spices. Cilantro, parsley, cumin, turmeric, basil, oregano, you name it. Just... don't add cinnamon to it. And dill works the best with root vegetables, not much with anything else.

## 5) Grains + nuts for morning breakfast, sweetened if possible

Everybody knows about the grain + nut combination because it provides all essential amino acids for protein synthesis. They also complement each the taste fairly well –the nuts provide this crunchiness to an otherwise soft tasting grain. Feel free to add sweeteners if you can, like honey or molasses, and/or add fruits. Another thing to note is that cinnamon goes well with most grains, especially oatmeal.

## 6) Leafy greens and lemon juice. Also, never eat them wet

Out of all the vegetables, I'll be honest and say that leafy greens are the hardest ones to make because it's so difficult to make them taste good. First, they tend to be bland, and second, once you steam or boil them, they get all wet and soggy. Removing all of the water after cooking them should be a priority. This way, the ingredients won't be diluted to unpalatable levels, especially when you're adding lemon juice. I find that lemon juice does a great job in masking the bland taste of most leafy greens such as swiss chard, and I find that olives and tomatoes also do a fairly good job. Once you get started with your recipes, I hope that you'll view these tips to enhance the taste and nutrition of your recipes. They may not work for some recipes, in which case, the best method would be for yourself to try to see which ingredients work and which don't work. Bon appétit.

# *Crossing the pond:*

## *Pharmacy Student Exchange*

**By: Louise Hemmings**

During the Summer of 2010 I was fortunate enough to be accepted on an IPSF Student Exchange Placement in a community pharmacy in Canada. During my four weeks in Toronto, I worked at Shoppers Drug Mart. This company, I would say, is the equivalent of Boots in the UK, in that they have a big shop floor area and a busy pharmacy department. A walk-in doctor's surgery was also in the building which meant that the pharmacy saw a whole range of patients at all times of the day.

The drugs in Canada are a lot more expensive than I've ever seen, for example one patient paid \$700 for their diabetic medication. In the UK most people qualify for free medication and the rest have to pay a nominal amount of £7.20 per medication.

Licensing of drugs is also very different. I expected that Canada would have similar drugs with Pharmacy only (behind the counter) and GSL (General Sale) status; however this was not the case. Zovirax is available by prescription only in Canada, while in the UK it is GSL and you can buy it from any shop or supermarket shelf. Fluconazole capsules are GSL in Canada, allowing anyone to just pick it up from the shop floor, while in the UK it can only be bought from behind the counter.

In the UK 99% of prescriptions are NHS which means that we send all the prescriptions to the prescription pricing bureau and that's who pays the pharmacy the cost of the medication and a set dispensing fee per item. Only a small minority are private prescriptions in which the patient pays for the cost of the medication. These are usually done for foreign patients who do not qualify for NHS prescriptions or for patients who have to pay the £7.20 for an NHS prescription, but it turns out the cost of the drug is much lower than this e.g. 21 Amoxicillin is usually charged at £3. These are kept filed away for 2 years which is similar to Canada, but you would barely fill one small box in a year as so few are done. Each is also written up into a private prescription register. This is very different to Canada where every single prescription is kept in the pharmacy and a paper receipt is attached to it.

Many prescriptions in Canada include "refills" which allowed repeat supplies of medication for long term conditions. The computer system is set up detailing the number of refills, so that the prescription could be filled away without having to refer back to it. The UK has a similar system, but as an NHS prescription can only be dispensed once, the doctors print off "batch" prescriptions i.e. 6 prescriptions in one go which are allowed to be dispensed at set intervals. This means that patients do not have to keep going back to the doctor for another prescription each month. The pharmacy keeps hold of these "batches" so that they can monitor how often the patient is requesting certain medications.

Luckily Canada has not had to experience healthcare professionals such as Harold Shipman; therefore the laws around Controlled Drugs are much more lenient than in the UK. Controlled drugs are kept in a safe, but once dispensed are stored on the collection shelves and no CD register is kept. The only precaution they do take is to double count controlled drugs, just so a patient cannot complain they did not receive the correct amount and try

to demand more. In the UK Controlled drugs have a separate register in which every single tablet/millimetre is accounted for. Each time a patient is prescribed a controlled drug it is documented in the register, who prescribed it, the date it was handed out and who collected it. Periodically inspectors look at the registers and if there are any discrepancies these are investigated. This is a very time consuming task to do, especially when you may serve many methadone addicts who have daily pickups and each needs to be entered every day. When any controlled drug is out of the safe it must be kept under the watchful eye of the pharmacist and then once checked locked back away with the pharmacist keeping the safe key on them at all times.

In terms of dispensing most of the drugs are still in big tablet bottles in Canada and require counting individual tablets. To me this felt like working in a Victorian pharmacy, but then on the other hand each stock bottle was scanned on the computer to confirm it was the correct product. The pharmacist also checks the DIN number on the products, rather than relying on the name, strength and form on the bottle. I felt this way to be much more robust. In the UK the majority of products are in prepacked boxes and we find it annoying when doctors prescribe drugs in quantities different to the pack sizes which require us to start repacking the tablets. Many UK hospital pharmacies now use robots which cut down the number of errors made when selecting the drugs to dispense, but community pharmacies still rely on reading the label on the box to check.

I found it quite difficult to read some of the prescriptions in Canada as they are handwritten. In the UK the majority of prescriptions are computerised, and in the next few years paper prescriptions will be phased out as we are moving to electronic transmission. At the moment most prescriptions have a bar code which you can scan and it downloads the information to the computer, reducing errors in reading the prescription.

I was also surprised by the lack of additional pharmacy services in Canada. Med checks are done but not very many by the looks of it. In the UK we perform a similar thing called a 'Medicine Use Review' and these are being pushed by all the big companies. We also do diabetes testing, Chlamydia testing, pregnancy testing, needle exchange services and free emergency hormonal contraceptive services to name just a few in the pharmacy.

When I wasn't spending time in the pharmacy I spent most days/nights out with the local pharmacy students. One memorable day involved going to a shooting gallery and learning how to shoot a variety of guns, from small hand guns to the large shot guns. It turns out that girls are much better at aiming than the guys! Afterwards we went to a Chinese BBQ restaurant where I tried a variety of items on a BBQed skewer. This included chicken hearts, chicken intestine, quail eggs and skewers of just garlic cloves. This was something that I would never have tried at home.

My host pharmacist was a lovely man who took me out on a few trips as well with his family. We spent a day at Niagara Falls soaking up the sunshine and taking photos of one of the Seven Wonders of the World. On another day we went to a Blue Jay's baseball game. We sat right down at the front where the players were batting, so I got to see everything going on. The whole experience felt very Americanised, especially when a couple got engaged on the big screen and everyone danced to some music with the mascot.

Toronto is such a diverse city that never sleeps. There was never a day when I didn't discover something new or an event going

on. I would take in a stroll through the Kensington Market area where there are many small quirky shops, and would often find a street music festival taking place. I sat and watched an indie band play, followed by a steel drum band and then one very eco friendly band that had volunteers on cycling machines that helped to power their amplifiers. There was also the slightly shocking day when I walked out of my university accommodation to find a charity naked cycling event passing by! There were about 50 men and women showing all their glory to the world, waving to passersby.

I also discovered that they world really is very small. Having kept in touch with old friends via the infamous Facebook, I discovered that that one of my old school friends was currently in Toronto completing a PhD. After contacting her it turned out we were staying one street away from each other which was really strange.

She took me to her favourite hangout where we gorged on giant pieces of cheesecake and caught up on 7 years of each other's lives since school. We also took a trip up the CN tower, looking in amazement across the

whole of Toronto from such a massive height.

Throughout my time in Canada I found out a lot about the pharmacy profession, and also about the pharmacy undergraduate course. It turns out that we are very lucky in the UK with our



course. In Canada you are not allowed to start a pharmacy Masters programme straight from school, but in the UK you can start at 18 years old. After 4 years of studying pharmacy students take their licensing exam with the state pharmacy regulator and then start

**“Overall compared to the UK, Canadian pharmacy is very different...certain aspects of it are about 10 years behind us...but then other bits of it are much more advanced.”**

a 4 month internship before becoming a fully fledged pharmacist.

To me this seems quite scary as we go through 12 months of preregistration training before being allowed to sign off any prescriptions and then we take out registration (licensing) exam at the end. But after talking with the pharmacy students they are quite happy with this format. By spending time doing a couple of years of a science course it then means that the pharmacy course is much more clinically focused. A lot of assessments are OSCE based preparing them well for their licensing exam. In the UK we have a lot of basic science incorporated into the pharmacy course.

Overall compared to the UK, Canadian community pharmacy is very different. Certain aspects of it are about 10 years behind us, with the lack of additional community pharmacy services and counting tablets, but then other bits of it are much more advanced. It is a legal requirement that every patient is counselled on a new medication, which means that patients do go to the pharmacy a lot more as they know how much a pharmacist knows and can do. The general Canadian lifestyle is so much more laid back. I would never have guessed that I was staying in a large city, as everyone takes their time to get about and strangers do hold open the door for you and say hello. Or maybe they talked to me more because they were fascinated by my British accent! By my final week at work, the staff was constantly making jibs at my Yorkshire phases and found it amusing that the more I tried to blend in the more my true roots came out. But it certainly didn't put me off, as next year I intend to go back to Canada to see more of the country and maybe one day even look into working across the pond as a pharmacist.

### **A Warrior's Reconciliation** By: Ian Rangwala 1T3

We are flanked on all sides by the unrelenting enemy. I remember times of frugality and simple pleasure, humility and resilience, vigour and optimism. Alienated were we, not long ago, from all manifestations of vice. We knew no thing as greed, listlessness, jealously or frivolousness.

But those days were finite. We have blackened. Our skin has grown thick, our voices stern and our hearts sour. The policy of hedonism has encapsulated our former selves, and we roam the earth like wretched beings. We kill, steal and lie at the behest of our whims. We embrace materialism as religion and accumulate and aggrandize. We have lost touch with our true selves.

As the battle begins, I pray alongside my brethren for the possibility of atonement and rebirth.

### *Love So Sweet* By: MJ (1T4)

In honour of the month of love: a story of love, bottled in one hundred words; potent enough to stopper the yearning heart.

There was once a great thief, the greatest in all the land, it was said. One night, cloaked in

shadow, the thief stole into a peaceful village. He caught sight of a woman of purest heart, in a garden by herself.

Slipping to the gate, the thief leaned in. Such sweet blossoms he whispered out of thin air, then offered to pluck the moon from the sky for her, the woman of his dreams.

She swung open the gate. The thief snatched her heart, neer returned.

The memory of his blossoms, long wilted and disappeared, is all she has left.

# Heavier doors produce better pharmacists, study finds

By: Brendan Yeats, 1T4

Researchers from the University of Toronto's Leslie Dan Faculty of Pharmacy published a study this week with groundbreaking implications. They found that pharmacy students attending classes in buildings with heavier doors end up performing better as pharmacists, as judged by every metric used to assess those attributes which make good pharmacists. While students have been complaining for some time about the outdated curriculum, the faculty feels this study finally vindicates their decision to invest heavily in cumbersome doors and door research rather than the program itself.

When asked for preliminary information regarding any other studies the faculty may be undertaking, they touted the initial successes of the recently implemented MMI process. Take the 1T4s, for example. The MMI process selected 'people people' so well that the entire class banded together and did their statistics assignments as a team! While discussing an assignment with another person at any time is obviously academic misconduct and not condoned by the faculty, they feel this serves as an excellent example of how spending years and untold amounts of money into researching how to select the best candidates really paid off. When pushed for further evidence that the MMI process really works, the faculty pointed to a recent incident in which the 1T4s had to sit through only a single day of classes in PB250 with security guarding each entrance from an unnamed classmate, only vaguely aware of why security was there and wondering if it was even safe to be in class. "Just think of how often this would happen had we not implemented an interview process to screen for such situations," faculty responded\*\*.

When pressed for details concerning upcoming studies, the faculty hinted at a pilot program to produce the smallest endowment fund possible, by indiscriminately accusing each and every member of a class of cheating. "As evidenced by the fact that the 1T4s were the largest fundraisers during charity week this year, and the hundreds of dollars they raised for prostate cancer research during the month of Movember, we know they're a philanthropic bunch. We wanted to nip this problem in the bud and alienate them early, really sever any ties these students may be thinking of developing with the establishment before they had a chance to flourish."

*\*\*For those to whom it is not already abundantly clear, the faculty was not actually interviewed in the preparation of this submission.*

## OPA STUDENT CUP 2011

**What:** The third annual hockey showdown between Waterloo's School of Pharmacy and our very own Leslie Dan Faculty of Pharmacy hockey team!

**Where:** U of T Varsity Stadium, Bloor and St. George

**When:** Catch all the action when the puck drops, at 3PM sharp on Sunday, March 20, 2011

**Who:** YOU!!! (UW students will also be there by the busloads) Be sure to wear red and cheer on our team!!!!

**WE'VE WON IT TWO YEARS IN A ROW... CAN WE MAKE IT A THREE-PEAT?!**

A helpful study tool to help you with those infectious diseases:

**"MRS.A had an affair with DR. Love"**

Methicillin Resistant Staphylococcus Aureus can be treated with:

Daptomycin  
Rifampin  
Linezolid  
Vancomycin

# Canadian Endangered Species: The Swift Fox

By: Rose Liao, 1T3



## Fantastic Mr. Fox

a greater number of them survived.

In 1983, a recovery program involving Canadian federal and provincial governments, environmental groups and universities aspired to reintroduce the swift fox to parts of its former range in Canada. The program released both captive-bred and wild swift foxes from the United States in two ways. The first method, called the “soft” release technique, involved feeding the foxes at certain sites in the designated range over the winter and releasing them the following spring or summer. This allowed the foxes to adapt to their environment better before their release. The second method, called the “hard” release technique, was used later, in which the foxes were released directly from captivity into the wild. Data collected shows that the second method, surprisingly, is a better way to discharge the animals.

From 1983 to 1992, approximately 650 foxes were released into the Canadian prairies. In the beginning, there was a low survival rate of the animals. The principle cause of mortality was predation by coyotes, bobcats, eagles, and owls, which accounted for 58% of the deaths. Human actions, such as road kills, hunting or trapping, also contributed to a small percentage of the total mortality figures. Many of the released foxes survived, however, then reproduced and raised their young. In 1991, an estimated 250 swift foxes were roaming free in southern Alberta and Saskatchewan.

Even though most of the first released foxes did not survive, the second-generation foxes born and raised in the wild had better survival rates. The population of swift foxes more than doubled in five years. In 1999, the Committee on the Status of Endangered Wildlife in Canada upgraded the status of the swift fox from “extirpated” to “endangered,” which shows the success of the recovery program.

The Canadian reintroduction project continues to monitor the swift fox population in the prairies. They are aiming to remove the animals from the Canadian endangered species list and re-establish a permanent population of swift foxes to its original homeland in effort to restore part of Canada’s natural heritage.

## References

- Alberta, Naturally. (1997) Swift fox. [WWW page]. URL [http://www.abheritage.ca/abnature/speciesatrisk/swift\\_fox\\_intro.htm](http://www.abheritage.ca/abnature/speciesatrisk/swift_fox_intro.htm)
- Hinterland, Who’s Who. (1999). Swift fox. [WWW page]. URL <http://www.hww.ca/hww2.asp?id=105&cid=8>
- Parks Canada. (2004). Swift fox: Making a speedy recovery [WWW page]. URL [http://www.pc.gc.ca/canada/pn-tfn/itm2-/2004/2004-05-31\\_e.asp](http://www.pc.gc.ca/canada/pn-tfn/itm2-/2004/2004-05-31_e.asp)

The swift fox (*Vulpes velox*), North America’s smallest canid (it is about the size of a house cat), was once an essential part of the grassland ecosystem in the Canadian prairies. The species once occupied much of Alberta, and southern parts of Saskatchewan and Manitoba before suffering a dramatic decline in numbers in the late nineteenth century. The rapid and radical change of Canada’s grassland to farmland wiped out many prairie carnivores, including the swift fox, which completely disappeared from the Canadian plains more than seventy-five years ago. In 1978, the Committee on the Status of Endangered Wildlife in Canada formally pronounced the swift fox as an “extirpated” species.

A major cause of extirpation of the species was habitat destruction by human intervention. The swift fox lost much of its grassland habitat due to the formation of farms, roads, towns and cities as early settlers cultivated the land. During the coyote and wolf eradication programs, the swift fox was hunted, trapped, and poisoned, despite the lowly value of its fur. The last swift fox in Canada was seen in the late 1920s. In the United States, however, the swift fox population fared better, and



OPA is the professional advocacy association representing the views and interests of over 10,000 practicing pharmacists and pharmacists-in-training in Ontario.

For every year that you join as a student member of OPA, you will be eligible for a \$50 gift certificate that can be used towards your full or supporting membership fees after graduation. It's almost like getting your student membership free!

It's never too early in your career to join your professional pharmacy association.  
Call OPA Membership at 416-441-0788 ext. 4224 to join today!

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

# AMAZING INVENTIONS FROM 2010

By: Sana Naqvi, 1T4 Monograph Rep

While reading up on the latest inventions from 2010, I came across several really interesting healthcare advances and breakthroughs. I decided for this issue of the Monograph, I'd enlighten my fellow pharmies on the five inventions or ideas that I found the most interesting.

## 1. Skin Printers

A team at Wake Forest Institute for Regenerative Medicine in Winston-Salem, N.C., has come up with a 'bio-printer' that prints out new skin cells to heal wounds. The printer has a laser that can scan a patient's wounds to measure its dimensions. Then, a computer controls the release of new skin cells that are sprayed directly and precisely on to the wound from the printer! This new 'bio-printer' has only been tested on mice so far, but it has shown that the wounds are healing 2 weeks faster than normal. Hopefully, if this bio-printer can prove to work successfully on humans, it will be able to replace skin grafting. Skin grafting is a painful procedure where skin is taken from one part of the body to cover another part. Instead, the bio-printer can be refilled using the patient's own skin cells that are grown and cultured in the lab. This way, only a small amount of skin from the patient would be needed rather than taking the entire amount needed for the wound. It's estimated that the entire body could be covered with new skin after only 8 weeks of growing skin cells in the lab. Cool, eh? But I wonder how expensive something like this would be if it were to actually be used in practice? And could it be used for aesthetic purposes? I think a lot of people, me included, would love to get new clean and clear skin for our faces! Haha .. I'm sure that would raise tons of ethical issues. Could we use this skin printer to get different complexions? Actually, if the bio-printer was easily accessible (though I'm sure it wouldn't be) we could all potentially be putting on new masks every day! Yikes!

## 2. Surgical Sponges

Unfortunately, surgical sponges are the most common objects mistakenly left inside patients after a surgery. Out of 190,000 patients interviewed, 5,500 of them suffered from this life-threatening experience. To prevent this, a company called ClearCount Medical Solutions in Pennsylvania has come up with radio frequency identification (RFID) tags. These RFID tags will be sewn on to surgical sponges and gauze pads before use in surgery. Similar to when buying products from a store, the tagged items will be scanned before use during surgery. Then, when the surgery is over, as each item is removed from the patient it will be re-scanned. If at the end, the scanned items don't match on the computer, the surgeon and staff will be notified and they can look for the missing item using an electrical wand. This idea has been FDA approved and is already being used in some hospitals in the U.S. So simple, yet so useful!

## 3. Artificial Corneas

Thousands of people suffer from blindness due to scarring or clouding of their corneas. Often, in various countries around the world patients wait up to 3 years before a cornea is available to them for transplant. After ten years of hard work, May Griffith from the University of Ottawa successfully made the first artificial

cornea. The corneas were made using a synthetic collagen from yeast cells and then chemically treated to take the shape of a natural cornea. Griffith and her team finally got nerves to grow back into the material resulting in a 'regenerated' cornea. A clinical trial with 10 patients was conducted in Sweden at Linköping University. Of the ten patients who received artificial implants, 6 showed improved vision and the other 4 can see using rigid contact lenses overtop the cornea. All 10 patients are now able to see as well as patients with conventional implants!

## 4. Stem Cells

We've all heard about the latest craze with stem cells and how they can all save our lives. But can they really? Have they ever been successfully used? Well, several teams from the Research Centre of the University of Montreal Hospital Centre and Maisonneuve-Rosemont Hospital have been trying to find out. Forty heart attack patients were given their own bone-marrow stem cells to their damaged heart muscles. So far, in this ongoing trial, the results are promising and patients are recovering better than anticipated. Furthermore, a second trial is being conducted on improving the outcomes of patients that have previously suffered from heart attacks. Stem cells in these patients are also proving to be useful. The first patient tested had an ejection fraction (the amount of blood the heart is able to pump to the rest of the body) of 40%, where an ejection fraction around 60% is considered normal. After injecting stem cells into his heart muscles, the patient's condition improved by 15%. Hopefully, this advancement in stem cell research will lead to people having better hearts in the future. (haha)

## 5. Cockroach Brains and Shrew Spit

Finally, researchers at the University of Nottingham in the U.K. have discovered powerful antibiotic properties in the brains of both cockroaches and locusts. The properties found in the brains of these bugs are able to kill 90% of bacteria, including MRSA (methicillin-resistant *Staphylococcus aureus*) and *Escherichia coli* without harming human cells. Hopefully, this will be available to the public in five to ten years as a treatment for multi-drug-resistant bacterial infections. Also, Jack Stewart from Mount Allison University in Sackville, N.B., discovered that the a protein called 'soricidin' found in the poisonous spit of the short-tailed shrew (a type of mouse) is able to kill ovarian cancer cells without affecting normal tissue. Phase I trials of soricidin ovarian-cancer therapy will begin this year in 2011. At least now these nasty bugs and rodents can prove useful to us!



CAPSI COLUMN presents...

three  
67 counting  
two  
67 down  
one  
6 for



# Samila Mermaid 2011

THE 57<sup>th</sup> IPSPF WORLD CONGRESS  
HATYAI, THAILAND



3-13 AUGUST 2011

“THE LARGEST WORLD CONGRESS  
FOR PHARMACY STUDENTS”

### REGISTRATION FEES

1 <sup>st</sup> REGISTRATION PERIOD	JAN 15 <sup>th</sup> - MAR 31 <sup>st</sup> , 2011	350 EURO
2 <sup>nd</sup> REGISTRATION PERIOD	APR 1 <sup>st</sup> - MAY 31 <sup>st</sup> , 2011	450EURO
3 <sup>rd</sup> REGISTRATION PERIOD	JUN 1 <sup>st</sup> - JUL 15 <sup>th</sup> , 2011	550EURO
LEADER IN TRAINING (LIT)	JAN 15 <sup>th</sup> - MAY 31 <sup>th</sup> , 2011	150EURO
POST CONGRESS TOUR (PCT)	JAN 15 <sup>th</sup> - MAY 31 <sup>th</sup> , 2011	400EURO

WWW.IPSF2011.ORG





## **How to Make CAKE BALLS** (Adapted from Bakerella) BY: FRANCES CHUNG

They might look like Tim Bits, but they aren't Tim Bits. They might look like truffles, but they aren't truffles. They're CAKE BALLS. What, you say? What are cake balls? Well, simply put, they're delicious bite-sized bits of cake and frosting covered in chocolate! Sounds good, right? They can look classy, they can look fun, you can mix and match your flavours and dress them up however you like, and the best part is that they're extremely easy to make. So if you want to impress your friends and family or even just your own taste buds, then keep reading to find out how to make your very own cake balls!

### **INGREDIENTS + MITTE**

One box of cake mix (make sure that it will make a 9x13 cake)

One can of frosting

One package of chocolate-flavoured confectioner's coating OR chocolate almond bark OR semi-sweet chocolate chips and 1-2 tablespoons of butter

Half a package of white chocolate chips (optional)

Sprinkles, shredded coconut, and any other decorative toppings of your choice (optional)

Wax paper

Toothpicks

Several forks



### **SIG**

1. Bake your cake according to the directions on the package. Any flavour will work. Let it cool, and then use a fork to crumble the entire cake.
2. Add frosting to the crumbled cake, one spoonful at a time. Any flavour of frosting will work. Mix the frosting and cake crumbs thoroughly. Only add as much frosting as necessary to hold all the crumbs together. (Too much frosting will give the cake balls a mushy consistency and you definitely don't want that!)
3. Use a melon scooper to scoop balls of the cake-frosting mixture and place the balls on a sheet of wax paper. Alternatively, if you don't mind a bit of a mess, you could use your hands to roll the mixture into balls. At this point, your cake balls should resemble Tim Bits.
4. Place the cake balls into the freezer for at least 30 minutes. This will help them to become firmer, which will make it easier for you to dip them into chocolate coating.
5. While the cake balls are in the freezer, prepare the chocolate coating. If you are using chocolate-flavoured confectioner's coating or chocolate almond bark, simply melt the chocolate according to the directions listed on the packaging. If you are using semi-sweet chocolate chips, melt one tablespoon of butter in a bowl in the microwave. Then add several large handfuls of chocolate chips into the butter and microwave them until they begin to melt. Stir until all the chocolate has melted and the mixture is smooth. If necessary, re-microwave for several more seconds and/or add more melted butter to achieve a thinner consistency. NEVER use water or milk to thin out the chocolate mixture.
6. Take the cake balls out of the freezer and dip them in the chocolate mixture. The easiest technique is to poke the cake balls with a toothpick, swirl them each in the chocolate mixture and let the excess chocolate drip off. Place the dipped cake balls onto a sheet of wax paper and remove the toothpicks. If desired, add sprinkles or shredded coconut before the chocolate coating hardens. Afterwards, return them to the freezer for another 30 minutes to allow the chocolate coating to harden.
7. If you wish to drizzle your cake balls with white chocolate, melt half a package of white chocolate chips in the microwave. (Do NOT add butter or any other ingredients to the white chocolate. It behaves differently than semi-sweet chocolate.) Use a fork to ensure that the melted white chocolate is smooth and is of a runny consistency. Remove the cake balls from the freezer. With a quick back-and-forth wrist motion, use a fork to drizzle white chocolate over the now-hardened semi-sweet chocolate coating. Let the white chocolate set.
8. You're done! Jump up and down and enjoy your cake balls!



## LEMON POPPY SEED BUNDT CAKE

BY: JENNIFER CHUNG

### INGREDIENTS + MITTE

3 cups all-purpose flour  
 2 tsp baking powder  
 3/4 tsp salt  
 3/4 cup softened butter  
 2 cups white sugar  
 3 eggs  
 Lemon juice from 2-3 lemons  
 Zest from 2-3 lemons  
 1 cup plain yogurt  
 1/3 cup poppy seeds



### SIG

1. Preheat oven to 350°F. Grease and flour a bundt pan
2. Stir together flour, baking powder, and salt. Set aside.
3. In a large bowl, cream together butter and sugar until light and fluffy. Beat in eggs one at a time.
4. Mix lemon juice and yogurt together and add alternately with flour mixture and butter mixture. Stir in poppy seeds.
5. Bake at 350°F for 50 minutes or until knife inserted in center comes out clean.

## CARROT CAKE BY LYNDA MAO

### INGREDIENTS + MITTE

6 oz soft butter  
 3/4 cup all purpose flour  
 3 eggs  
 3/4 cup sugar  
 1 1/2 teaspoon baking powder  
 1 cup grated carrot



### SIG

- Heat oven to 350F or 180C. Grease pans with butter. Put soft butter and sugar in a bowl and beat until pale and creamy.
- Beat eggs in another small bowl. Add to butter and sugar mixture slowly stirring as you go until the entire mixture is smooth.
- Sift flour and baking powder into the wet ingredients. Beat well until batter is soft and light.
- Add grated carrot to batter and mix well.
- Pour batter into greased pan and place pan in oven. Bake for 20-25 minutes or until no batter sticks to a toothpick inserted into the cake.

## CHOCOLATE MARBLE MUFFINS BY: MONIKAH ZHANG

Here's a yummy recipe for those who like white and milk chocolate.

### INGREDIENTS + MITTE

2 cups flour  
 2 tsp baking powder  
 1 cup sugar  
 half bag of chocolate chips  
 half bag of white chocolate chips  
 3 teaspoons melted butter  
 1 cup milk  
 1 egg



### SIG

- Preheat oven to 350°F (180C) degrees.
- Sift flour. Add sugar and chocolate chips (including white). Beat egg. Combine egg, milk and butter.
- Stir until all mixed but if stirred too much it will not rise! Pour into muffin tray.
- Bake for 15-20 mins.

## *Baking....*

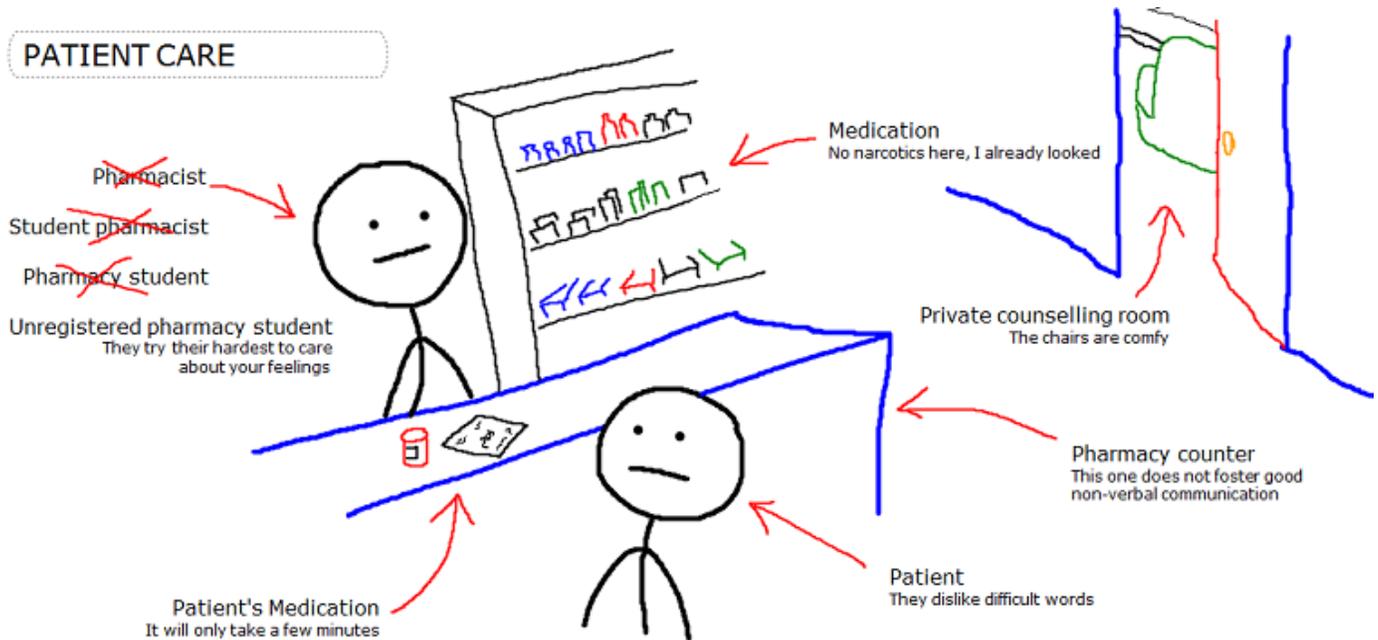
*Dream of*



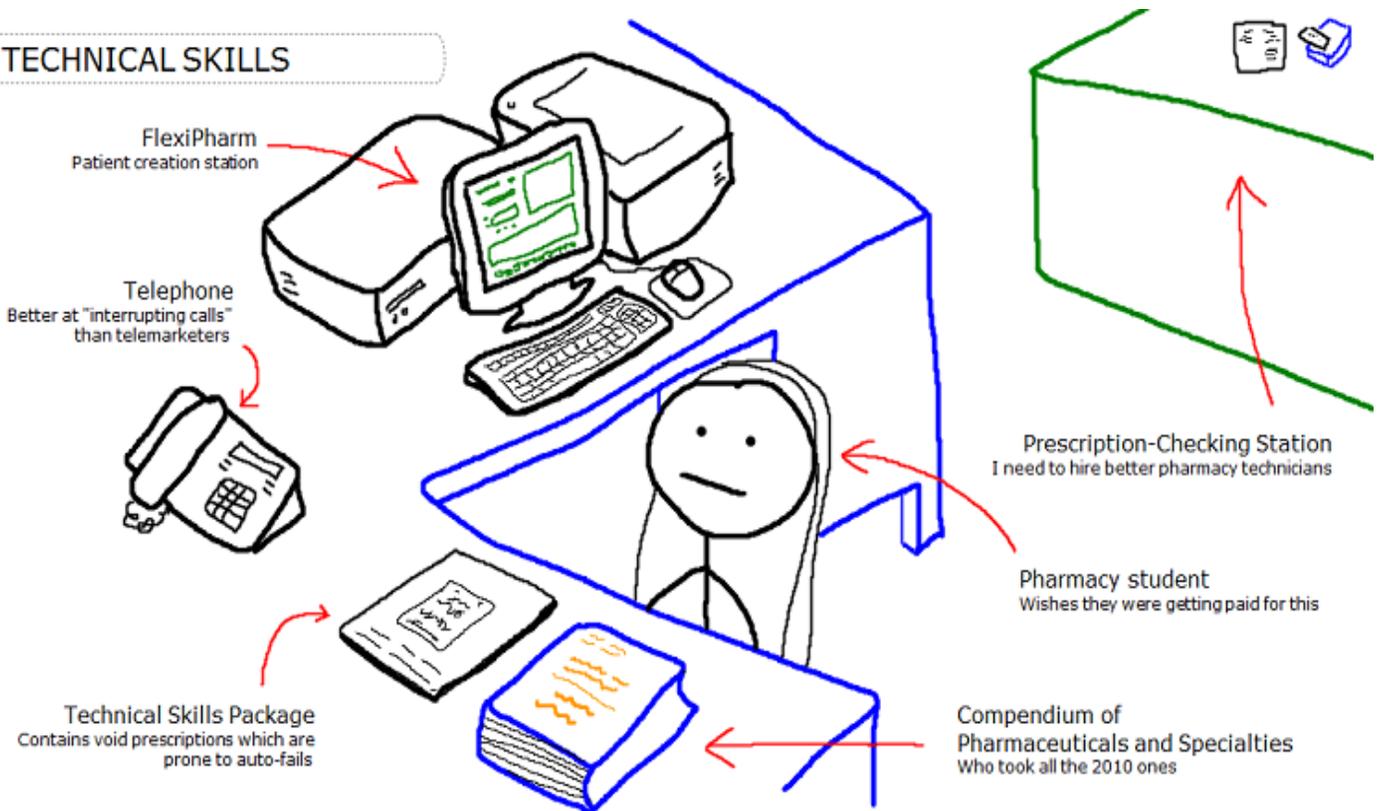
# THE (PHARMACY) WORLD ACCORDING TO KEVIN JM CHOW (1T4)

“Simple diagrams to give you a glimpse of what a typical session of PHM129 is like. Drawn with a mouse in Microsoft OneNote 2007 after a particularly boring night of studying.”

## PATIENT CARE



## TECHNICAL SKILLS



# DTP: 1T3 is suffering from the signs and symptoms of TOO MUCH CLASS...

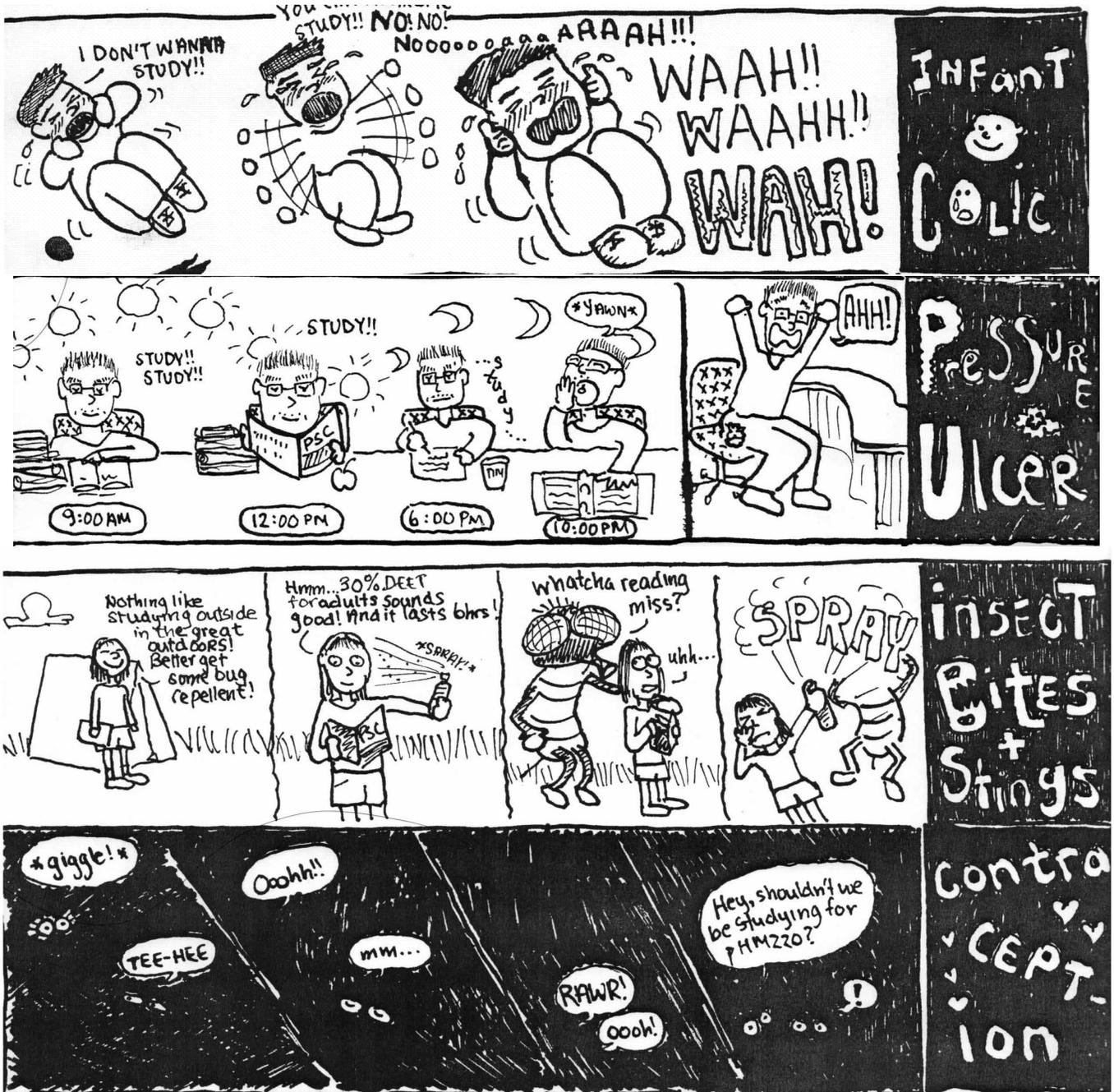
## Studying for PHM220

SOME TOPICS COVERED IN pharmaceutical Care

By: Leanne Lee



...IT3s love to Study too!



# horoscopes

By 112



Aries

## March 21 – April 19

The mystic Moon inhibits your ability to create cortisol. You may have trouble adapting to a difficult situation. Although caffeine seems like the obvious solution, it will only result in resting tremors. Find a suitable (legal) replacement.

## April 20 – May 20

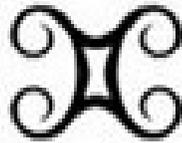
Piercing eyes are watching from above. It is advised you do not eat lunch on the pod today. But since big brother is always watching you in PB, do not make eye contact – you will get petrified.



Taurus

## May 21 – June 20

You may be feeling a sense of relief and accomplishment from overcoming the wrath that is Wells' Medchem. Be wary, you have yet to encounter its younger brother: Toxicology.



Gemini



Cancer

## June 21 – July 22

Your special and unique qualities will enable you to look beyond the terrible marks that arose in first semester and continue to aim for the big 6-0. So long as you **\*\*\*WORK TOGETHER\*\*\*** (as health care professionals often do), you will be successful in your endeavours.



Leo

## July 23 – August 22

The pods are aligning in your favour. Take courage, put on your best looking PPL attire, and ask out that cute lab partner before someone else beats you to it!

## August 23 – September 22

Under the pressure of looming exams, you may think you are imagining things. However, your ridiculous suspicions are correct. Santa Claus really does have an uncanny amount of knowledge about medicinal chemistry.



Virgo

## September 23 – October 22

As you prepare for exams, remember to make good summaries. Lower forms of life (ie. later years) will be depending on them.



Libra



Scorpio

## October 23 – November 21

Consider socializing with those that sit on the opposite side of the classroom. Despite a slightly different view of Deb Sibb's perfectly trimmed hair, you have much more in common than you think.



Sagittarius

## November 22 – December 21

All those days of skipping classes might make you feel a little lost. Maybe getting our hands on some good notes will help. Let the hunt begin.

## December 22 – January 19

You will discover that a few of your friends are secret studiers. Now, every time they say "I'm just going to go home and watch TV," you will know the truth. Raised eyebrows and grimacing are appropriate when you hear such comments.



Capricorn

## January 20 – February 18

You may or may not experience being put on the spot, with a mic in hand, in front of all of your peers. Although it may seem like the perfect opportunity to belt out a Backstreet Boys song, it is not. In fact it is never appropriate to sing a Backstreet Boys song. Ever.



Aquarius

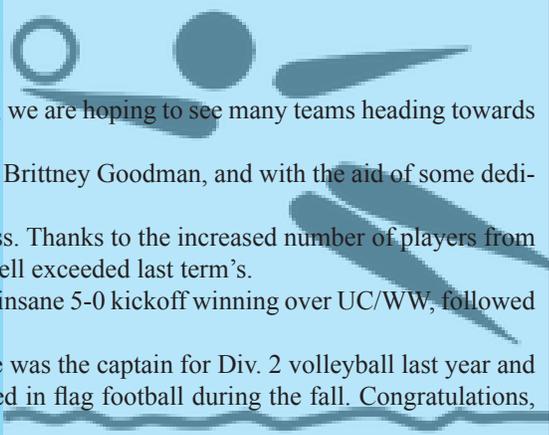


Pisces

## February 19 – March 20

Your lunch and/or supper may contain some contaminants today. Gynecomastia/Hirsutism is not an imminent side effect, but you may be feeling a little more like the opposite gender today.

# PHARMACY ATHLETICS!



## Women's Athletics

Spirits are high for pharmacy girls in the last few weeks. With their fantastic play, we are hoping to see many teams heading towards playoffs. Great job and thank you to all who are participating!

The volleyball team has won three games in a row. Led by team captain Brittney Goodman, and with the aid of some dedicated 4th year players the team is gaining momentum to playoffs.

Our indoor soccer team also had an excellent start with 2 wins and 1 loss. Thanks to the increased number of players from first and second year, and consistent dedication from 3rd years, its success has well exceeded last term's.

Women's joint hockey team with Meds had a great start as well. With an insane 5-0 kickoff winning over UC/WW, followed by one win and one loss, they are hopeful to repeat as women's Champions.

The athlete of the month for February is Michelle Hoang from 1T2. She was the captain for Div. 2 volleyball last year and has been an essential player for volleyball team throughout. She also participated in flag football during the fall. Congratulations, Michelle!

Michelle Hoang, 1T2-February Athlete of the month

Shanshan Zhu - UPS Female Athletics Director

## Male Athletics

Hey Pharmacy,

Hopefully midterms have been good to you all and you've been participating in some of the intramural sports that are offered this term. It is still not too late to join a team, so if you're interested, get out there and make a difference! The soccer and basketball seasons are in full swing, and our teams are both poised to make a playoff run. Our volleyball team started the season off with a win and looks to continue their success this month. The hockey team is firing on all cylinders right now and looks to continue their undefeated streak.

I hope you spent your reading week wisely, practicing for the annual Pharmacy Dodgeball Tournament held at Hart House. Look for more details in March and come out to show your class spirit and skill. On another note, come out on March 20th for the 3rd annual OPA Student Cup at Varsity Arena and cheer on your Pharmacy Hockey Team as they take on Waterloo for supremacy!

The January athlete of the month is Dane Bergstrom from 1T2 (see picture below for Dane's skills). He is the captain of our ultimate frisbee team as well as an integral member of our inner-tube waterpolo team. Congratulations Dane. If you have any questions or concerns about the intramural teams or the program in general, feel free to contact myself or one of the other athletic directors.

"Drugs on 3!"

Marko Tomas - UPS Male Athletic Director



## Co-Ed Athletics

So far this semester's Co-Ed sports have been up to a good start. Our Ultimate Frisbee, Waterpolo, and Volleyball teams are currently in good standing, and are hopefully playoff bound. Be sure to keep an eye out for upcoming class challenges. A Dodgeball and Ultimate Frisbee tournament between the classes are currently in the works. Make sure you come out and support your classes chance to win the Robax Platinum Challenge. It's also a good excuse to not study and get some exercise. There are also some intramural tournaments approaching. In the past we've had a strong showing in Broomball tournaments, and there will also be a Waterpolo and Dodgeball tournament to look out for. Also, be sure to mark March 20th on your calendars, as this is the date our faculty will be hosting the Waterloo Pharmacy's hockey team for the 3rd annual OPA student cup. The game will start at 3:00pm and will run until 6pm. Afterwards we'll be heading to the Maddy to (hopefully) celebrate our 3rd straight win and enjoy some drinks and food with our future colleagues from Waterloo. Be sure to come out and support our faculty, and remember to wear RED!!!

Brendon Wiebe - UPS CoEd Athletic Director

If hospital pharmacy is your life,  
we've got your website.



Recommended dose: 1 to 2 times per week.

Indication: Improved industry awareness and job satisfaction.

Possible career advancement. Can be taken with or without food. Repeat.

Side Effect: May induce excitement.

**[www.ppcdrugs.com](http://www.ppcdrugs.com)**

The #1 online source for Canadian pharmacy.



# THE UOFT SECRET STUDIERS AND OTHER RANTS

By: Anonymous

I'm absolutely sick and tired of people lying about their study habits, you know, those people you walk up to and ask them how their studying is going and they reply with "I barely studied" or "I'm going to fail" or "I haven't started" when, in fact deep down you know that they've been studying on a regular basis. These are known as Secret Studiers, and they piss me off. How do they benefit by lying to your face? Do they end up getting better? No. So what the heck is their problem? I don't know who coined the term in the faculty originally, and frankly it doesn't matter. It's not that person had it trademarked™ or copyrighted®.

And here's another thing that has angered me off to such an extent that I'm unable to actually compose a decently written article for The Monograph: the pharmacy program. I am immensely glad that they're going to change it for future students, but I'm equally angry about how it is right now. We just had a confounded toxicology exam where the marking scheme was BY-THE-SENTENCE i.e. if you didn't mention something the marking scheme wanted, then you lost marks: 0/3, 0/7, 0/LIFE. As Utrecht likes to say, it's a "guess-what-I'm-thinking" question – except it's not a question it's a 25% exam. What kind of marking scheme is this?

And then you have the Jeopardy Class: Therapeutics. I've seen people walk into class, check to see if their group has been called down, then immediately leave when it hasn't. The contestants sit in a row with their team and try to answer as many questions as they can and, meanwhile, the game show host isn't hosting the show, she's sitting in crowd trying to blend in, all the while awarding points to the team that answers the most questions. But I swear to you the scoreboard is broken, because the more my team participates, the worse the outcome. Don't get me started on CSS.

And only God knows what's going on in Pathophysiology. That course is a blur to me. Then we have the Kinetics assignment. You could probably do a phylogenic analysis on the assignments and trace them all back to 10 original works.

But at least I can take solace in knowing that upon graduation, I'll find a \$120,000/year job in the GTA.

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:*

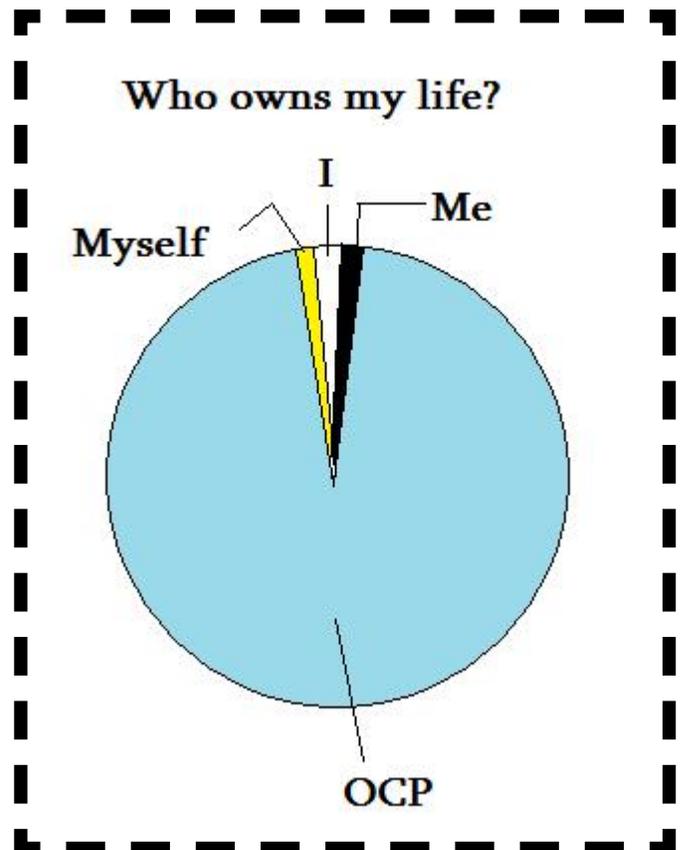
- Be an active student member of either CSHP or OPA
- Submit an article to the Monograph between September and April, which talks about a service provided by the organization that you are a member of. Examples include conferences, CE events, social events, etc.

*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:*

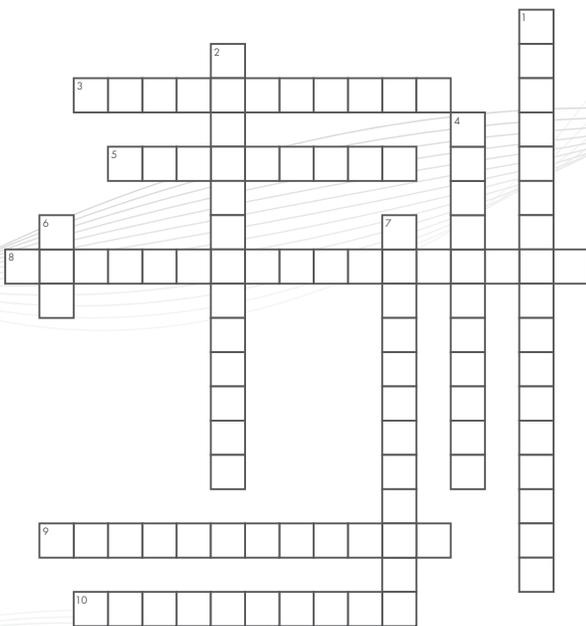
Contact [natalia.persad@utoronto.ca](mailto:natalia.persad@utoronto.ca) or [dipti.tankala@utoronto.ca](mailto:dipti.tankala@utoronto.ca)



# PHARMASAVE®

## Live Well. Enjoy Life.

Pharmasave has been built by people who have a passion for the practice of pharmacy—people who are interested in providing health solutions and health management. People who, in addition to dispensing and counseling, are looking for a way to share their unique health care expertise with their community. We offer some of the most innovative and successful patient care programs in Canada so you can develop your passion into a career. Whether you're interested in becoming a community-based pharmacist in a rural or urban setting or in becoming a pharmacy owner, Pharmasave has a career development path for you. For more information, visit our website at [www.pharmasave.com](http://www.pharmasave.com). You'll find more than just the answers to the crossword below.



### 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

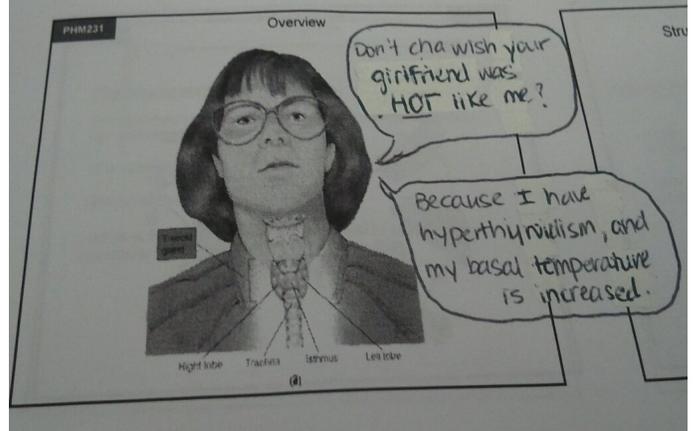
## Shout Outs!!

**Dear reading week: you're useless.**  
**From: everyone**

@ winter: **GO AWAY!**

Shout out to the secret studiers in pharmacy. Live long and prosper.  
 - The Original SS

### More from 1T3....



## SUDOKU!!

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