The Monograph

Volume 10, Issue 6

Check us out in colour at http://ups.uoftpharmacy.com/monograph

The Monograph 2008

Executive Team

EDITORS-IN-CHIEF
Ruby Liang
Yuan Zhou
theMonograph@gmail.com

0T9 REPRESENTATIVE
Leanne Drehmer
leanne.drehmer@utoronto.ca

1T0 REPRESENTATIVE
Josh Lieblein
obsidian_17@hotmail.com

1T1 REPRESENTATIVE
Cameron Forbes
cameron.forbes@gmail.com

1T2 REPRESENTATIVE
Kenny Ma
ken.ma@utoronto.ca

PRINTED BY
The Learning Achievement Centre
www.TLAC.ca
233 College Street 416-597-3949

Looking for ways to contribute to The Monograph? We'd love to print your articles, stories, photographs, shout outs, jokes, artwork, rants and poetry. Contact your class representative for more info.

Potential advertisers can contact The Monograph via email at **theMonograph@gmail.com**

WHAT'S INSIDE...

Salutations

Pharmacy News and Views

Student Life

Phree Expression and Phitness

Cover Image created using:
http://www.pictosaic.com

From the Editors

Hi (for the last time) Pharmacy!

Welcome to the final issue of '08-'09!

We hope that we have filled your year with some pharmacy news, interesting views and laughter to get you through the day.

In this issue, you'll find the 4th year anti-calendar and other goodies!

We'd like to congratulate the winners of this and last issue's random draws: Vincent Ho and Maria Schell (Anecdose), respectively.

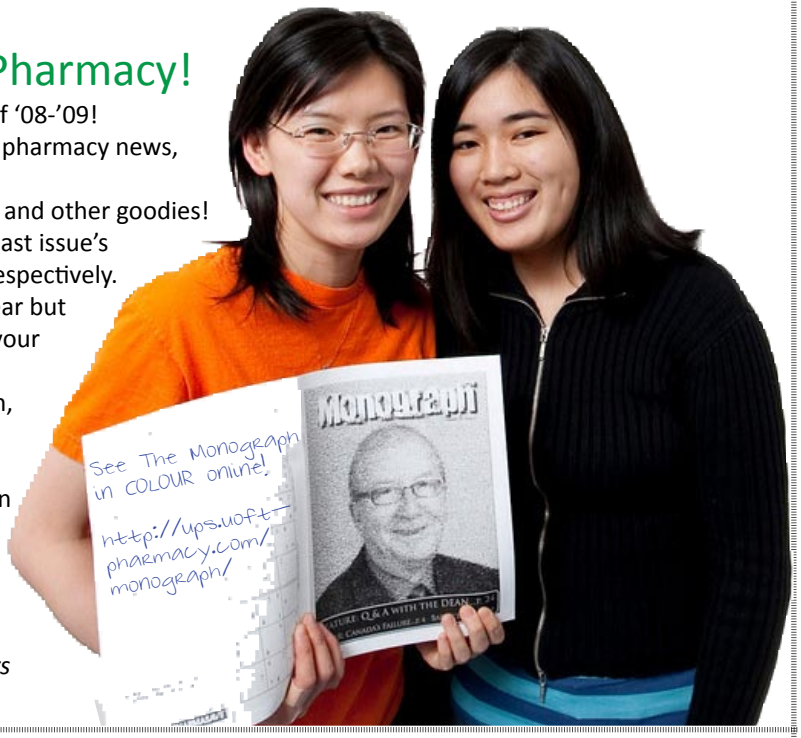
Also, if you contributed to The Monograph this year but have yet to receive your **appreciation gift**, please contact your class Monograph rep so that we can get it to you!

A big thanks to our Monograph reps: Leanne, Josh, Cameron, and Kenny for their dedication this year.

Finally, we'd like to introduce your next editors, Rachel Fu and Janet Leung. We know that they will carry on The Monograph tradition with pride!

Good luck on your exams, congrats to all the graduates, love your summer, and see you in September!

-Yuan Zhou and Ruby Liang, The Monograph Editors



UPS Corner

Hey Pharmacy!

We can't believe it's time for our final instalment of UPS Corner! This year has passed us by so quickly! We would like to send out a quick thanks to the UPS council for all their hard work and dedication this year. Also a huge thanks to the student body, to whom without, we would serve no purpose. Thanks for coming out to events, participating in our activities and showing support for pharmacy!

Pharmacy Awareness Week was quite a success. Special guest speakers, including Lesley Levack and Tom Brown, made the week very fun and interesting. Thanks to our events directors for planning a wonderful week.

CAPSI's March madness and bake sales were also very successful. Congratulations to all the raffle winners and to CAPSI local council for a successful charity week!

The first ever Ontario Pharmacists' Association Students' Cup hockey game was a huge accomplishment. It was nice to mingle with our Waterloo pharmacy counterparts while having the Battle of Ontario. Good job to both teams for a game well played.

Also as this school year comes to an end, we commemorated the hard work and dedication that you have demonstrated through UPS's social, professional, and athletic activities at our annual Awards Night. Thanks for coming out to support your fellow classmates.

And lastly, congratulations to the newly elected members of UPS and class council. We are confident that the next school year will run smoothly in your hands.

Best of luck on your exams and have a wonderful summer!

James Morrison UPS President & Christine Truong UPS Vice-President

CAPSI's Winter Symposium – Immunization Safety

- Meaghan Linseman -

This March, CAPSI was pleased to welcome Allison Dekker, a clinical pharmacist from the Hospital for Sick Children, who specializes in pediatric vaccinations. Ms. Dekker addressed several immunization "hot topics", such as the controversy over whether the MMR vaccine causes autism and common concerns about the new HPV vaccine, Gardasil. Here is a brief summary of some of the highlights from her presentation:

What are some good vaccine reference websites for pharmacists?

1) Immunize BC - http://www.immunizebc.ca/default.htm
2) Vaccine Education Centre at the Children's Hospital of Philadelphia - http://www.chop.edu/consumer/jsp/microsite/microsite.jsp?id=75918
3) Canadian Coalition for Immunization Awareness and Promotion - http://www.immunize.cpha.ca/en/default.aspx

All of these websites have a wealth of information for both the public and health care professionals. They include vaccine specific information and answers to common immunization questions. Some also include special videos that address parent concerns and videos of parents whose children have contracted vaccine preventable diseases.

Do vaccines actually cause autism?

A 1998 study by Wakefield claimed that the MMR vaccine causes a series of events (including intestinal inflammation and leakage of harmful proteins into the brain's blood supply) that ultimately lead to autism. However, this study included only 12 children (8 of whom had autism), and it had no control group. Additionally, intestinal symptoms were observed after, not before symptoms of autism, and the results of the study have never been reproduced by other researchers. In 2004, 10 of the Wakefield study's 13 authors admitted that the study's interpretation was incorrect and they agreed that there was no connection between the MMR vaccine and bowel disease/autism syndrome. Many epidemiological studies have been conducted to determine if there is a link between vaccination and autism. A study of all children born in Denmark born over a 7-year period (n = 537 303) found no difference in the rates of autism between babies who received the MMR vaccine versus those who did not. Another study of 498 children from the UK with autism found that the proportion of children who had received the MMR vaccination was the same in autistic versus unaffected children. Finally, a Canadian study of 27 749 children born between 1987 and 1998 found that the proportion of this population of children that developed autism increased, while MMR vaccination rates decreased. This recent increase in autism rates is likely because diagnosis is becoming more and more efficient and health care professionals and the public alike are more aware of the condition and its clinical presentation. Claims that children are healthy until they acquire autism from their MMR vaccination are also false. It is simply coincidental that the symptoms of autism do not become obvious until about 1 year of age, which is the approximate time at which most children get their MMR vaccine.

Who needs to get the HPV vaccine? Is the HPV vaccine safe?

Three quarters of the population will have at least one HPV infection during their lifetime. Transmission rates are high with most infections being acquired soon after sexual behaviour begins. Most often, the infection is asymptomatic and self-limiting, clearing within 6-12 months. Over the span of years, persistent infections can lead to genital warts or a variety of different cancers, especially cervical cancer. Condoms do not prevent transmission of the virus, because it is transmitted via skin-to-skin contact. The ideal age for girls to be vaccinated is between 9 and 15, before they become sexually active, because the vaccine does not protect from disease if the patient was already infected with the virus before being immunized. In addition, studies show that children have improved immune antibody response at this age compared to older adolescents and adults.

Is the HPV vaccine safe?

The HPV vaccine administered contains only the capsule of the HPV virus and does not contain any DNA. It does not deliver an active form of the virus itself, and therefore, is considered safe. The vaccine is associated with some non-serious side effects such as local pain, swelling, headache, nausea and fever, but there have been no reports of the vaccine causing any serious adverse events.

Are there enough studies to determine its long-term effects?

Two major phase III trails (N = 2200 and N = 5301) have demonstrated that the Gardasil vaccine has been 100% effective in preventing development of HPV 16 or HPV 18 related cervical cancer precursors. Unfortunately, because the HPV vaccine is relatively new to the market and because HPV-related cancers take

years to develop, there is a lack of scientific data concerning its long-term effectiveness and safety. Also, it is not known yet whether or not a booster vaccine will be necessary. However, most health organizations believe that it is worth vaccinating children now because of Gardasil's outstanding ability to prevent several common cancers and save thousands of lives.

How should pharmacists deal with parents who are skeptical about having their children vaccinated?

It is important to acknowledge parents' concerns and remember that most parents do not have the same scientific and medical knowledge that you have. Be sure to refute any myths they may believe and provide valid information to support why the myth is incorrect. Try to educate parents about the potential consequences of not having their children vaccinated. For example, since the introduction of vaccinations, the incidence of many infectious diseases has been significantly reduced. As a result, many parents believe that their children will never be exposed to the disease in Canada. However, because of globalization, anyone can acquire even the most rare diseases if they have not been vaccinated against them. In fact, at the Hospital for Sick Children, many Canadian children die every year from vaccine-preventable diseases.

Check out the UPS website for more information:

- Slides presented during the symposium
- Immunization resources (with direct links)
- Comparison chart of the effects of disease and vaccines
- MMR vaccine does not cause autism: examine the evidence!
- 10 HPV vaccine myths
- Immunization Schedules for Ontario – January 2009

The Health Impact Fund Shifting the balance of pharmaceutical innovation and profit

By Matt Koehler, 1T0 GMI Co-President

It's something we're already accustomed to - when you buy something new, you're paying for the technology, not for its production. It happens with touch screen cell-phones, computers, genetically modified crops, and of course, drugs. And in most cases we are happy to do so; anything to make life a little easier. But what happens when you can't afford to pay these high prices, and the market doesn't distinguish between an iPhone and life saving medicines? Here lies a clear ethical dilemma that makes it difficult for a drug company to fulfill both its moral obligations to provide access to their medicines and their legal obligations to shareholders. At the same time, it is hard to hold drug companies to a higher standard of corporate responsibility that limits their ability to make profit when they are also expected to compete against other markets for investors.

Facing up to a problem

It is estimated that the cost to develop and bring a new drug to market is $800 million. Naturally, if a pharmaceutical company cannot re-coop this cost through monopoly prices for which they sell their drug, innovation comes to a halt. Or at least this is true in the conventional system. What make matters even more complicated are diseases that almost exclusively affect people in the developing world ("neglected diseases"). Drugs targeting these diseases certainly will not generate enough sales to make drug development financially sustainable. Similarly, some diseases affect such a small number of individuals globally that the limited volume of sales possible makes it difficult for companies to regain their upfront development expenses ("orphan diseases"). Phil Gould, former head of product introduction at Glaxo Smith Kline (GSK), who now acts as a business consultant to the industry stated that "It's no good spending $1 billion developing a drug and taking it through clinical trials if there is no market for that drug, or if it will be hard to get it licensed. There was an era when that sort of thing happened, but those good old days are long gone." Because of this, a number of "push" and "pull" factors have been introduced or proposed in an attempt to stimulate research and development for otherwise unprofitable innovations. Conventional push factors might include tax incentives for completing clinical trials or direct funding for certain research and development. A pull factor used to make a market more attractive might include advance market commitments (purchasing guarantees) by governments or enhancing intellectual property rights. Each of these has its distinct place in stimulating innovation. In 2008, a political philosopher from Yale University and a health economist from the University of Calgary published a book that served as a proposal for a novel and comprehensive solution to provide innovative medicines at cheap prices while allowing drug companies to still make profit. This book is titled *The Health Impact Fund*, and it was the topic of GMI's most recent journal club discussion.

How it will work

The Health Impact Fund will allow patent holders of pharmaceuticals to elect to sell their product globally at a low price designated by the Fund. In exchange for forgoing their right to monopoly pricing, the Fund will pay them for 10 years based on their product's impact on global health. The measure of impact will be based on Quality Adjusted Life Years (QALYs) which is currently used for cost-utility analysis in health care. After the ten year period the chemical and associated technology for producing it will be open for anyone to use. The low price of the drug will be set in order to cover the cost of production. Any profit the company will receive will be paid out of the Fund. Each year the Fund will have an annual pay-out, and each product registered with the fund will receive payment proportional to the health impact it generated. Thus, payment will be maximized by products that cure illness in contrast to the current patent system in which medications used on a continual basis for the treatment of chronic conditions is more profitable. The HIF will be most beneficial for medicines that could have a large impact on global health but are not profitable under monopoly pricing. Hence, the Fund will create an incentive for innovation into neglected diseases.

How it's Funded

Funding will be dependant of government contributions. It has been stated that the minimum input needed to support the fund is $6 billion per year. This is to come from a collection of governments and would be capable of supporting two new products each year, and a stock of 20 drugs. To put this into perspective, the United States contributes about $10 billion annually into combating HIV/AIDS, malaria and tuberculosis outside of the U.S. Furthermore, the lowered drug costs of products registered by the Health Impact Fund (HIF) will lead to decreased drug procurement expenditure.

Advantages

There are a number of qualities that make the HIF different than many preceding initiatives. Parallel importation arising from differential pricing, a term which refers to developing countries paying less than developed countries for the same pharmaceutical, will be eliminated. Differential pricing has led to illegal resale of the cheaper medicines in the wealthy market for profit. By charging a uniformly low price globally, the HIF avoids this practice. Another added feature of the HIF will be a reduction in counterfeit medicines. In many developing countries without adequate drug control and drug distribution systems, counterfeit medications are immensely prevalent. In fact many organized criminal groups have began counterfeiting medications because of the lucrative nature and because criminal charges are far less severe than for producing narcotics. Drug prices that far exceed production cost, but by selling drugs registered to the HIF at cost, counterfeit practices will no longer be profitable, and drug safety can be dramatically improved. Another problem with international aid is what is sometimes referred to as "the last mile" problem – a situation in which developed, produced, purchased and shipped HIV medications do not reach their intended patients. This dilemma is largely due to poor infrastructure for distribution, especially low resource and rural settings. Under the HIF, companies

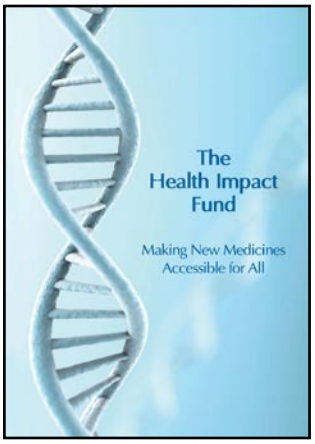
will be encouraged to ensure their medicines have maximal reach because their profits will be based directly on health outcomes.

Gaps and Criticism

Despite the advantages the HIF provides in terms of improving pharmaceutical innovation and global health, it does not provide a complete solution. One gap the HIF leaves is innovation for orphan drugs. Since health impact is based directly on QALYs, the profit for drugs that will treat only a very small number of individuals is not significant. Since HIF payment isn't designed to make these products profitable, push factors described earlier would be better suited to give incentives for these drugs. The HIF is obviously not meant for all drugs. There are drugs that do not provide a decrease in the disease burden and therefore would not be profitable under the HIF, but are still valuable to many patients. For example, drugs treating erectile dysfunction or baldness are not essential to life, however they do have significant value to many people. Medications such as these would be best suited for the conventional patent system. The unique characteristic of the HIF is that it does not attempt to change the existing patent or intellectual property systems. Instead, it allows companies the option to elect to either register into the Fund, or enter the conventional market.

Putting Plan into Action

The HIF has been well received by the academic community in recent months. It is now being presented to government officials – with whom the destiny of the HIF essentially lies. In the past, any suggested reduction of intellectual property rights has been heavily resisted by the pharmaceutical industry. Industry has also been reluctant to enter the discussion of their role in access to medicines. However, GSK CEO Andrew Witty recently made the public recognition that patents do in some ways act as a barrier to medication access in developing countries. The company is committed to providing a patent pool for neglected tropical diseases. This type of corporate social responsibility may be a catalyst in developing novel and innovative ways to address the global drug gap. This movement is an encouraging prospect for the HIF, but only time will reveal whether or not governments will see it as a worthwhile investment. M



"Untitled" - Mavra Z (1T0)

Thoughts of such surpassing stupidity that they need to be addressed

By Adam Calabrese, 1T1

In a panel discussion during the now long-gone Pharmacy Awareness Week, the topic of selling Plan B to men came up. As with previous class lectures, there were some people there who voiced some objection to selling Plan B to men, as had happened in a PHM 220 lecture. This opinion is to some degree based on wanting to counsel the woman who will be taking Plan B on its proper use; but the far more popular reasoning is that a man purchasing Plan B is likely to be raping a woman and then sneaking her Plan B to avoid impregnation. This train of thought is far too prevalent among pharmacy students, and needs to be shut down.

In the panel discussion, I mentioned that if a man is willing to sneak Plan B to a woman, there is another woman willing to buy Plan B for the man. When I said this, I was given more than a few dirty looks that more or less expressed disgust that I could possibly assume that a woman would ever do such a horrible thing. I hope by now the dichotomy is clear: if it is objectionable that I think a woman would ever purchase Plan B for such a reason, then why is it acceptable for a woman to assume that a man would do so? It isn't. It is not hard to think of various reasons why a man might purchase Plan B. The woman might be too embarrassed to go into the pharmacy, or she might not be sober enough to venture beyond arm's reach of a toilet, or she might be in crisis, or the man might even be picking up some Plan B "just in case" while he happens to be in a Shopper's Drug Mart buying some chocolate bars and shaving cream. These are all perfectly legitimate scenarios whose motives warrant no questioning. I'll put it another way: let's imagine that, for whatever reason, a man needs to purchase Plan B for a woman at one in the morning, and the woman is unable to be there, or communicate with the pharmacist. Then, imagine that the man is refused Plan B by the pharmacist, whose spider sense tells him or her that the potential customer is going to rape, or has raped, a woman. If that happened to me, you can bet money that I would inform the OCP about the issue, after giving the pharmacist a good piece of my mind. It is insulting in the highest degree to be accused of such a disgusting crime, and it is astonishing to me how those who espouse the position have given very little thought to this aspect of it.

There is also the logical short-circuiting of refusing Plan B on presuming the man to be a rapist. If, and I cannot stress enough that this "if" is enormous, a man intends on purchasing Plan B to use after raping a woman, what do you think refusing the sale is going to do? I'm asking this quite seriously, because I cannot wrap my head around what this accomplishes. It will not prevent any crime from occurring, and it will not lessen the magnitude of the crime in any way. If you think a man has raped or is about to rape a woman, call the police. Since the discussion of actually calling the police in this circumstance never comes up, I think it means that the advocates of this position don't really believe what they say, but are simply doing what pharmacy students do best: being obsessively paranoid.

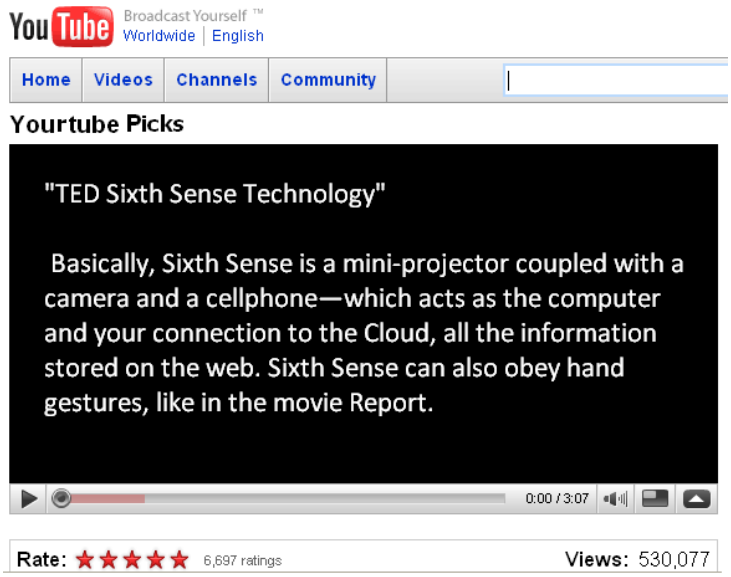
Lastly, there is the pinnacle of lack of critical thought in the whole issue: that rapists are so kind and benevolent to their victims as to try to prevent their becoming pregnant. Think about it really hard. It just doesn't line up with reality, in any way. I am in fact near my wit's end in writing further about this, because there is so little that needs to be said, and at the same time, it seems that more does need to be said because this is apparently the train of thought of more than a few people. This is a blatantly false and ridiculous premise.

As I said before, the enormous loopholes and short-circuiting required to hold the opinion that men should not be sold Plan B are so enormous that they lead me to think that anyone who has ever advocated the position simply isn't thinking very hard. That isn't meant as an insult – I think it's an idea thrown around in the absence of all others to create an explanation as to why it might be a bad idea to sell Plan B to a man. It also attempts to create an explanation where one is not needed. If I were to espouse the idea that women are likely to use any given drug for illegal reasons, no one would hesitate to label me as sexist, and more than a few women would rightly take offense. However, when the same assumption is made about men, the idea seems to go somewhat unchallenged. It insults me that I might be taken as a rapist if I were to purchase Plan B, and anyone who thinks that men use Plan B to rape women on any regular basis should be ashamed of themselves. In an ideal situation, a pharmacist should directly counsel the woman taking Plan B on its proper use. However, I shouldn't need to tell you that if a woman needs to take Plan B, ideal situations have already flown out the window. That's why they call it Plan B.

OVERHEARD IN PB

TA: I'm from Wu's lab...
Student 1: Who's lab?
Student 2: Trastuzumab!

A: "This is a pro-drug."
B: "+ this is a newb-drug"
A: "lol"



MY PERSPECTIVE

A Big Fear of Mine...Acquiring Diabetes

Most people fear heights, riding in airplanes, small spaces or death. I fear getting diabetes.

This isn't something I dreamt about overnight. I'm afraid of getting diabetes because I hate needles and can't stand the thought of injecting myself with insulin. I couldn't even prick myself in first year when we were taught how to use glucometers, so how am I supposed to prick myself 6-7 times a day? I also fear getting diabetes because I don't want to go blind or have neuropathy problems. Are these fears a bit irrational? Maybe.

This fear of getting diabetes actually started at an early age. It probably started way before I really even knew what diabetes was. It stems from the fact that people tell me I consume too much sugar. I should probably face reality and admit that I really do, indeed, eat too much sugar. I take roughly 6 teaspoons of sugar in my coffee and 3-4 in my tea. I also eat an extremely high amount of chocolate in various forms, including ice cream, hot chocolate, chocolate bars and chocolate truffles, on a daily basis.

I probably should do something about modifying these dietary factors. It would perhaps help with this fear as well. Anyways, all that's beyond the point right now.

Generally speaking, the top risk factors for diabetes include having a relative with diabetes, hyperlipidemia, hypertension, obesity, vascular disease and being >40 years of age. I don't fall into any of those categories.

This should alleviate my fear of acquiring diabetes. Yet, it doesn't.

So the other day I took the opportunity to ask a diabetes specialist some questions. It started like this, "is there a correlation to consuming too much dietary sugar and getting diabetes?"

A little surprising, but much to my liking, the short and sweet answer was "No."

A paraphrase of what I was told:

"Diabetes is a condition where fasting glucose is elevated. The key word is "fasting." Anyone who takes 6 teaspoons of sugar in their coffee is going to have raised glucose levels an hour after they consume that coffee. In a diabetic, this elevated level does not come down. This is the problem.

The main reason why dietary sugar intake may look like it is a risk factor for diabetes is diet in general. People who tend to eat a lot of sugar tend to have poor diets which are high in carbohydrates and fats. These people are at risk of hypertension and hyperlipidemia. These are conditions that put you at risk of diabetes. Therefore, if you are a healthy person who just happens to consume a lot of sugar, you are at no greater risk of acquiring diabetes than a person who consumes very little dietary sugar."

Therefore, in conclusion, as of right now, I can eat all the chocolate I want and continue to take 6 teaspoons of sugar in my coffee, and really I shouldn't acquire diabetes.

Convinced? I guess we'll see in 30 years or so.

**Christobelle (1T0)
(Christine.Truong@utoronto.ca)

Simply Complicated

Simply Complicated

If you don't see it, it's not there
By: Milson Chan (1T0)
<milson.chan@gmail.com>

People misplace things on a fairly regular basis. As a result, it is easy for anyone to lose things on any given day, anything like binders, pens, and books, to money, coat, and umbrellas… Imagine that there is a Lost and Found section in the pharmacy building. It will probably be full of lost items. But since most people do not suffer from dementia, they are probably just forgetful to have things gone missing. Of course we can also consider the possibility for things to disappear on their own, like entering the Bermuda Triangle. It is a very interesting concept that remains as one of the unsolved mysteries of the world even at almost 60 years after it was first described.

The Bermuda Triangle is a triangular region formed by joining the island of Bermuda, Miami, Florida, and San Juan, Puerto Rico as boundaries. Some people also referred to it as the Devil's Triangle since multiple ships and aircrafts have reportedly disappeared while navigating in this region and the disappearances cannot seem to be explained by natural disasters or human factors.

Over the years, there have been a lot of controversies as to whether the Bermuda Triangle actually exists. There are supporters who explained that the phenomenon is likely due to some sort of paranormal activity or extraterrestrial creatures such as ghosts, aliens, and UFOs.

People who do not believe in the theory such as Lawrence David Kusche from Arizona State University and the author of The Bermuda Triangle Mystery: Solved tried to reject its existence by suggesting that the number of disappearance is consistent with what is seen in other oceans given the large amount of ships and planes have gone through the area on a regular basis. They also feel that the reports of disappearance are inaccurate and flawed. They suggested that disappearances are possibly due to a wide range of factors such as possible human errors, hurricanes, and volcanic activities that produce methane hydrates that reduce the density of water to make the ships sink. We also need to consider the conservation of mass because things do not just vanish, violating the law of thermodynamics.

On the other hand, the supporters of the existence of Bermuda Triangle claim that there are possible paranormal phenomenon and extraterrestrial involvement. They believed that the Bermuda Triangle may be somehow linked to the lost city of Atlantis. These theories have definitely increased people's interest in the subject, resulting in publishing of numerous books, as well as production of movies and TV shows. They also pointed out the fact that since the research has been poorly done, without any scientific expedition into the area in order to see if something would happen, there is really no proof against its existence.

Until there is a definite answer, it is possible that things do disappear without a trace like the surveys that students were supposed to complete the night before OSCE but the information somehow got trapped in the "internet black-hole" and would never be found. But then there are also items which have been posted and deleted in the Knowledge Forum that, according to Debra, will always be there even when we do not see them. So at the end of the day, the debate will continue regardless of the truth. And the rest of us are still waiting for the day when the scantron sheets disappear before the exam marks are entered so that everyone gets 100%… that is, of course, assuming we will not have to rewrite the exam again in the summer.

Sources:
1. http://www.wikipedia.org/
2. http://www.bermuda-triangle.org/

ATHLETICS

FEMALE ATHLETICS

March Athlete of the Month

This month's athlete is Lisa Levangie. This year Lisa captained the women's basketball team to a championship in the fall semester. She also played flag football and soccer in the fall. This semester Lisa participated in coed basketball, women's volleyball and indoor soccer, and captained the women's basketball team. Lisa was also an essential component in getting our first field hockey team off the ground and winning the championship. Lisa ia a great athlete and always willing to do whatever the team needs to succeed. Congratulations Lisa!

Women's Intramural Athletics 2008-2009 Wrap Up

Congratulations Women's Pharmacy Athletics on a hugely successful year. All our hard work paid off and at the Intramural Awards Banquet we were awarded the **Marie Parkes Award** for the highest number of points in intramural competition based on participation. In addition, **Shauna Forsey** and **Megan Barkway** were awarded the **Intramural T Award** in recognition of their contributions to the Intramural Program as a player and team captain.

I would like to thank everyone who participated in women's athletics this year, making it one of our most successful intramural years ever. We won a total of four championships – **Intercollege Basketball Trophy**, **Medicine WUAA Field Hockey Award, Women's Touch Football Trophy and the Anne Hewett Trophy** (Soccer) - and four other teams made it to the playoffs.

I would also like to thank all the team captains, and especially Linda Plong and Lisa Levangie, for all their hard work in helping me make this year as Female Athletics Director a success. I could not have done it without them. The program is in great hands next year as Lisa will be the new Female Athletics Director. Congratulations again to the Pharmacy Women!

Sport	Result	Captain	MVP
Fall			
Basketball	League Champions	Lisa Levangie	Terri Ann Jewett-Smith
Flag Football	League Champions	Stephanie Chan	Linda Plong
Ice Hockey	Semi-Finals	Linda Plong	Linda Plong
Soccer	League Champions	Shauna Forsey	Shauna Forsey
Volleyball Divison 1		Megan Barkway	Megan Barkway
Volleyball Division 2		Jenny Kotsidis	Jenny Kotsidis
Volleyball Division 2		Anna Huisman	Michelle Hoang
Winter			
Basketball		Lisa Levangie	Man Ying Ho
Field Hockey	League Champions	Maari Wotherspoon	Hayley Fleming
Ice Hockey	Finals	Linda Plong	Katie King
Indoor Soccer	Quarter-finals	Jenny Kotsidis	Jenny Kotsidis
Volleyball Division 1	Semi-finals	Tatyana Depcinski	Tatyana Depcinski
Volleyball Division 2		Anna Huisman	Jenny Kotsidis

Women's Varsity Athletics

In addition to our success in intramural athletics, pharmacy is proud to have some amazing athletes at the varsity level. These student athletes deserve some recognition for their hard work, dedication and success in balancing the demand Varsity athletics with being a pharmacy student. Congratulations on a successful year!

Athlete		Sport	Result
Heather Roth	0T9	Fastpitch	5th OIWFA
Megan Barkway	0T9	Fastpitch	5th OIWFA
Hayley Fleming	1T0	Squash	4th Canadian University and Colleges Championshup BC Division
Erin McClure	1T0	Track and Field, Cross Country	OUA All-Star, CIS First all-Canadian team, 7th 5km at CIS
Rachel Knott	1T0	Dance	1st University Dance Challenge (team)
Kayla Castonguay	1T1	Figure Skating	4th OUA (team)

Anna Huisman
Female Athletic Director

MALE ATHLETICS

Hey guys,

Well the intramural season is over and we have had another successful year in pharmacy athletics. A big thank you to all of you who signed up for our teams and helped make our teams as competitive as they were this year.

Thank you for those that came out and supported our hockey team battle out a close but very big victory over the University of Waterloo. The event was a huge success and will be done for many years to come. If you were unable to attend this year, be sure to be a part of the event next year where we will likely travel to Waterloo to defend our title!

March Athlete of the Month

The final athlete of the month this year is Matt Koehler for the month of March. He has had a major effect in many of his intramural teams this year and is a force to be reckoned with especially in volleyball and basketball.

I would like to take this opportunity to thank you all for a wonderful year as your UPS male athletic director and I hope that I did everything I could to make our male athletics the best they could be. Look forward to seeing you all next year!

Paul Bazin
Male Athletic Director

CO-ED ATHLETICS

This year has been exceptional for Pharmacy Co-ed sports teams. Championship T-shirts have been handed out on numerous occasions and the faculty of Pharmacy has come home with both Coed banners this year.

At the U of T Intramural award banquet on March 31 Pharmacy managed to walk away with both the Stewart-Wodehouse Award, for the faculty with the most participation in coed sports and the new Bradley-Copp Award, for the faculty with the best performance in coed sports. This sweep of the coed awards was all due to the great turn out we've had at all of the sporting events and I thank everyone who participated on our many teams.

Pharmacy students also grabbed some of the individual awards at the awards banquet. Rene Mader walked away with three awards that night including the Dave Breech Award, which is awarded to a graduating student showing leadership, sportsmanship and performance within coed sports throughout their entire time at the university. Anyone who has had the opportunity to play with Rene would certainly agree that he possess the necessary qualities to win these awards.

This semester in league sports, Pharmacy has improved greatly over most of last year's results. Not only did both of our Ultimate Frisbee teams make it to the playoffs, our 1T1/1T2 mixed team made Pharmacy's first appearance in the championship game for Indoor Ultimate. However, after a long day without many subs, fate would not be on our side and we fell just short of victory in the dome.

In Inner-tube Water Polo, we managed to get a team in division 2 this year and make it to the playoffs. Unfortunately after great playing in the regular season we fell just short of victory in the semifinals.

In Volleyball, we fielded 2 very large teams in division 2. Both of our teams played very well and the 1T0/1T1 team qualified for the playoffs. The team fell short of victory in the quarterfinals and ended up placing 5th.

For Basketball, Pharmacy fielded a team in each of the two divisions. Both team struggled for attendance this semester and the Div 1 team unfortunately had to default in the semifinals due to overlapping game times.

I would like to give a shout out to all of the captains who helped this semester; Tommy, Bryan Marko and Baseer without you guys none of this could have happened, thank you very much. To all the 0T9's leaving us this year, your presence will be missed, on the court and/or field.

Brandon Thomas
Co-ed Athletic Director

Sport/ Team	Captain	MVP
Volleyball Div 2 Team 1	Brandon Thomas	Matt Koehler
Volleyball Div 2 Team 2	Mario Tomas	Heather Bannerman
Basketball Div 1	Tommy Lam	Tommy Lam
Basketball Div 2	Baseer Yasseen	Baseer Yasseen
Ultimate Frisbee Div 2 Team 1	Brandon Thomas	Brandon Thomas
Ultimate Frisbee Div 2 Team 2	Tommy Lam	Stephanie Chan
Inner-Tube Water Polo Div 2	Bryan Langel	Laura Metrailler

Warning: Pharmacy Curriculum May Have Adverse Effects on Social Life (and Vice Versa)

By: Andrew Ting-A-Kee, 1T1

In a past lifetime I was an avid gamer. Monday night was Magic: The Gathering night and Wednesday night was board game night. At home I would play video games into the early hours of the morning. Those times are long gone. These days, I am often in the Pharmacy building completing an assignment or studying for the next midterm until 8 PM or later. Meanwhile, my Nintendo Wii gathers dust and my expensive new Playstation 3 goes largely untouched. My social life outside of pharmacy is non-existent, and when I do decide to go out and have some fun, my studies suffer.

The second year pharmacy workload has been intense, with tests and/or assignments to prepare for every week. (This is your warning, 1T2s. It gets harder.) I've never worked so much to keep up with lectures and labs. I suppose that this is the price of becoming a health care professional, but it's steep. In addition to the $50,000 for the degree, I feel that I've lost a lot of my social life outside of the Faculty. There never seems to be time to do anything. Of course, that doesn't stop me from going on a wild spree of not doing work.

Wednesday: I put away my notes and pick up my fake plastic guitar to play Rock Band for the first time in six weeks. Constant failures at the game make me put it away in disgust and switch to fake plastic drums. Continued failure at the drums leaves me frustrated. Then I accidentally erase my save file, causing me to lose all my unlocked and downloaded songs. I need at least two hours to unlock everything again, and I don't have the time to do that. At this point, I wonder what other damage schoolwork has done to my hobbies.

Thursday: I go shopping at the Eaton Centre for no apparent reason. After three hours of buying absolutely nothing, I realize that I have to be home to do a fantasy baseball draft. However, I haven't done any research at all because of a mix of schoolwork and laziness, and I end up picking random baseball players in a panic. (I picked a player who was already injured before the season start.)

Friday: I go to a Magic tournament on a whim. Within an hour I realize that I can't remember how to play the game well anymore and get eliminated in a quick and brutal fashion. It's still early on a Friday night (and I'm unconvinced that I suck), so I buy some more cards and enter another tournament, only to lose in a similar horrific fashion. This is extremely embarrassing for someone who formerly played Magic: The Gathering at a professional level. I manage to lose my Friday night, $26, and my pride.

Saturday: My brother's friends are coming to the house to play board games. I can't say no to board games (particularly because the gaming area is in my room), so I join in on some Battlestar Galactica: The Board Game. As President Admiral Saul Tigh the Cylon, I drive the humans into extinction. Then I realize that it's 4 AM and I haven't written a Monograph article that I promised myself I would submit.

Sunday: I go out with fellow 1T1s to enjoy dinner and cheesecake under the condition that they help me write my first article. Five hours of fun times pass, but no article-writing occurs. I come home at 10 PM having done no work since Wednesday. I face problem sets, panels, a lab report, and an article to write for the Monograph.

As students prepare for the final stretch before the summer, I wonder about what studying for Pharmaceutics, Medicinal Chemistry, and panels has cost me in terms of my hobbies and social life. I blame these classes for destroying my ability to game and have a social life, and I blame my social life for ruining my study habits and marks. Hopefully things will be less busy next school year. I mean, it's not like I'm going to be the Monograph Rep or anything…

(Questions/feedback/comments? Send them to andrew.ting.a.kee@utoronto.ca)

Cardio is Overrated

By Sharjeel Syed, 1T0

Given that I've been strength training avidly for several years now, and in light of the growing interest in fitness in recent issues of the Monograph, I figured that I'd share my two cents about why strength training can be more worthwhile at improving fitness than cardio. To begin with, I'd like to make a few clarifications. One, when I say strength training, I mean any workout where the primary goal is to strengthen the musculoskeletal system (i.e. weight lifting and calisthenics) as opposed to the cardiovascular system, which is the prerogative of cardio training. Two, proper nutrition should be the cornerstone of any fitness routine. Regardless of the type of exercise, if your diet consists mostly of fast food it's unlikely you'll realize much success. Three, my intent is not to denigrate cardio but rather to point out that it isn't the only way to achieve and maintain a healthy body weight and image. With that said, I'll first discuss some of the benefits of strength training, and then expand on a few of the common misconceptions concerning it.

Firstly, strength training creates a greater caloric deficit than cardio in the long-term due to its effect on basal metabolic rate (BMR). BMR is influenced by numerous factors, many of which are not modifiable. These include age, gender and height. One of the modifiable determinants of BMR is muscle mass, as muscle is a very metabolically active tissue (i.e. every pound of muscle burns about 40-120 calories a day to sustain itself, while every pound of fat burns only about 1-3 calories). In other words, the more muscle you have the higher the BMR. Cardio on the other hand tends to be catabolic for muscle, as your body preferentially breaks protein down for energy instead of fat. Sometimes, people tend to drastically reduce their caloric intake in their attempts to lose weight, which lowers BMR due to the starvation response. This yo-yo dieting results in rapid weight loss primarily from water and muscle reduction. People then return to their normal eating habits but because they now have less muscle, they tend to deposit fat more readily and gain all the weight back and then some. They

then diet again, creating a vicious cycle of body fat accumulation. By minimizing muscle loss when following a sensible diet and increasing resting BMR, strength training can produce more substantial effects on lowering body fat levels compared to cardio. Secondly, strength training is much more amenable to time considerations. We've all heard that we should exercise at least 30 minutes a day, 6 days a week. Unfortunately, that's very difficult to implement in practice. When you do an exercise that challenges your muscles, your body needs time to adapt. The next time you perform the same exercise your body performs it more efficiently so it seems easier. Depending on factors such as your individual fitness level and the intensity of the exercise, this recovery period can take anywhere from two days to nearly a week, so you shouldn't work out too frequently to avoid overtraining. An additional consequence is that you minimize the possibility of overuse injuries; this is of particular importance for overweight people, as carrying extra body fat puts additional stresses on the joints. Trying to immediately implement a high-impact activity like running to lose weight can actually do more harm than good in some cases. Thus, since strength training is adaptable to your current fitness level and can be easier to integrate into your daily lifestyle, it can be less of a challenge to maintain it as a lasting change.

Despite its many benefits, there are several misconceptions about strength training that can make people hesitant to pursue it. Since these issues tend to be of greater concern for women, I'll focus my discussion primarily on addressing them from that perspective:

Strength training will make me bulk up. For some reason, many women are under the assumption that weight lifting will somehow transform them into She-Hulks. In reality though, unless you take in a considerable caloric surplus, consistently work out at a very high intensity, have superior genetics, and get a little help from anabolic steroids, it is *extremely* unlikely you'll achieve muscular hypertrophy to any significant degree. Even male trainees who have the advantage of having much higher levels of testosterone (a key hormone in muscle growth and development) have difficulty in getting big unless they train very intensely (and in most cases they take supplemental male hormones as well). Most strength gains in the case of women come from improving the efficiency of motor unit recruitment. Nonetheless, if you are physically weak then you will experience some muscle gain because your muscles first need to be strong enough to do a task before they can become efficient at doing it. This trend of muscle adaptation is not linear though (i.e. will usually plateau) and depends on a variety of factors, many of which I've already mentioned. Another thing to keep in mind is that muscle is more dense than fat, so you may initially find that you're gaining weight but clothes seem to fit better. This is one reason why you can't go by the BMI or weight scale measurements to monitor fitness gains, since these do not take into account body composition.

Strength training does not really improve the cardiovascular system. This is true to a certain degree because you usually experience muscle fatigue before your cardiovascular system is impaired. There are ways to circumvent this limitation however, such as circuit training and performing high volume repetitions of exercises. In circuit training, you minimize rest periods between exercises by alternating an upper body exercise with a lower body one (i.e. bench press followed by squats) or training antagonistic muscles consecutively (i.e. biceps curls followed by triceps extensions since this forces the opposing muscle group to rest while the other is working). An example of high volume work would be to decrease the total number of sets while increasing the number of reps, so instead of doing 5 sets of 5 reps, you would do 3 sets of 10 reps. In any case, there are so many body systems in addition to the cardiovascular system that building aerobic capacity shouldn't be your only consideration anyway. Specifically, strength training can be hugely beneficial in preventing the natural loss of bone/muscle mass that occurs with disuse as we age, as well as reducing the risk of osteoporosis.

Strength training is too dangerous and/or complicated. Any exercise has some risks associated with it. This is as true of any cardio routine as it is of weight lifting. Granted, the risk of injury can be greater with strength training, particularly as you progress to more complex exercises, but essentially all such injuries result from poor technique and/or lifting a weight you can't safely handle. If you start off slow and learn the technique properly, strength training can actually be one of the safest ways to train and the lasting benefits far outweigh the small potential risks of injury. Incidentally, compound (multi-joint) exercises that engage several muscles at once should be the mainstay of any strength training program while isolation (single-joint) exercises should be add-ons, as the greatest gains are made by training the body as a whole. As for complexity, strength training isn't rocket science. There are some exercises that require specialized instruction (i.e. Olympic lifts), but for the most part you can learn basic exercises quite easily and many of these most people already know (i.e. pushups, chin-ups, squats, etc). Furthermore, there are a myriad of fitness resources available that provide proper instruction in how to perform a specific exercise, so the only thing you really need is a little time and motivation.

In summary, I hope that I've been able to make a competent case of the merits of strength training. Still, I need to emphasize that strength training should not be regarded as a panacea for weight loss. Cardio can and does produce a high level of health in numerous people. The thing to remember is that neither cardio nor strength training should be credited with being the only paradigm of fitness. A combination of strength training and cardio can be even more effective for losing weight than either alone. While I can't guarantee that strength training will allow you to attain your fitness goals, at the very least you'll be that much closer to being able to open the Pharmacy Building doors without having to rely on the Handicap button. M

References:

1) Whitney EN, Rolfes SR. Understanding Nutrition. 9th ed. Toronto: Wadsworth/Thomson Learning; pp 246-252.
2) Roizen MF, Oz MC. "YOU on a diet: The Owner's Manual for Waist Management." New York: Free Press; pp 138.
3) Girvitz G. "Strength without size: How to get stronger without getting bulky." [URL: http://www.stumptuous.com/strength-without-size-how-to-get-stronger-without-getting-bulky] Accessed March 29, 2009
4) Scott K. "Why diets don't work, problem 2: Muscle munching." [URL: http://www.stumptuous.com/problem-2-muscle-munching] Accessed March 29, 2009
5) Scott K. "Why diets don't work: Conclusion, and what DOES work."[URL: http://www.stumptuous.com/what-this-all-means] Accessed March 29, 2009
6) Scott K. [URL: http://www.stumptuous.com/] Accessed March 29, 2009

THE 4TH YEAR ANTICALENDAR

Written by: Leanne Drehmer, 0T9 Monograph Rep
Contributions by: Kirk Wong, Marie-Helen Irvine, Fabine Aziz, Jay Reaume, Sandra Ng, Krista Biederman, Alex Vuong, and Diana Law

It's finally here! The time when you get to choose which classes you take! This article is designed especially for our siblings in 1T0 who will be entering 4th year, and choosing their electives over the summer. Here we provide you with the info you need to succeed for the mandatory 4th year classes, and hopefully some info to avoid choosing a snore of a class for an elective!

The Electives

Course: Phm459 – Hospital Pharmacy Management
Course Coordinator/Professor: Bill Wilson

If you liked Phm326, you'll like this course. There is one written assignment worth 40% of your grade, and a short-answer final exam. Marks on the assignment are high if you even hand in something decent (i.e. it does not require a lot of time commitment!). Lectures consist of topics such as the history of the pharmacy residency programs, and the importance of vendors and group purchasing for hospitals. If you ever need to pass up a lecture, do it for the guest lecturers as questions for the exam are primarily focused on Bill Wilson's lectures. As with 326, memorization will serve you well for the exam, and the prof will guide you as to what is important to study, so take the hint!

Course: Phm458- Community Pharmacy Management
Course Coordinator/Professor: Harold Segal

This course is very light in terms of workload. There is a multiple choice midterm, and a multiple choice final exam – but the trick is, the exams are so short! There is pretty much one mark per percent of your grade. The prof will lay it out for you - he wrote the textbook for this class, so when he says you should read it, you probably should – especially the sections with calculations because you will be expected to memorize them for exams and no formula sheet is given. This year, lecture notes were available electronically, which was a first, but they are often scant and not reliably posted before class. Go to class to get good examples to help figure out what the questions on the exam are asking (which can be a little cryptic). In class, you'll even learn about the many conversations the prof has with his dog!!

Course: Phm450 – Aboriginal Issues in Health and Healing
Course Coordinator/Professor: David Burman

This course is the only elective where the class is shared with Arts and Science students. You may have heard rumours on why people take this class – many of which are true. Yes, there is no final exam. Yes, every class consists of sitting around in a circle. Yes, there are SNACKS for each class! Yes, you theoretically only need to attend 5 classes, as the assignments do not directly correlate with class material. For the 5 classes you must attend, you have to write a 1 page journal reflection on the significance of the reading and how it will help you in the course, in life, and in the completion of the case study. The case study is group work, and with people from different disciplines, it can be challenging to find a common time to meet. Course difficulty is what you make of it - you aren't marked on participation in class, but you will definitely get more out of the class if you participate. The course helps pharmacy students realize that health is more than just physiological well-being, and that spiritual, emotional and other factors contribute to one's health.

Course: Phm456 – Pediatric Pharmacy Practice
Course Coordinator/Professor: Sandra Bjelajac Mejia with different guest lecturers every week

This course consists of a written assignment worth 25%, a midterm worth 30%, and a final exam worth 45%. The final exam is multiple choice and short answer. You will learn an overview of illnesses and issues that affect the pediatric age spectrum which ranges from tots to teens. The lectures are usually given by a health care professional from the Hospital for Sick Children, so the lecture style can vary a bit. The midterm and final are straightforward, with most of the material coming from the lecture slides. Guest lecturers submit questions, but professor Bjelajac Mejia has the final say. As a bonus, there is no textbook for this course – so your wallet can breathe a little easier ;)

Course: Phm457 – Natural Health Products
Course Coordinator/Professor: Rishma Walji and Heidi Amernic

This course is normally taught by Heather Boon, who was on sabbatical this year. The main bonus of this class – there is no final exam! There is one midterm, and one major project worth 60%. The midterm covers lectures on some of the major herbals, with information such as counselling points, and drug interactions. There are also a few lectures on Traditional Chinese Medicine and homeopathy. Classes end in early November so that students can have time to work on their 3 assignments which comprise the major project. The major project is research of a herbal product of your choice (one that is not already on CAMline). You will need to do a literature review (typically pick a product with 10-15 studies), and the first assignment is a critical appraisal of one of these RCTs. The second assignment is creation of a CAMline review for your product, summarizing all the literature you have found. The third part of the assignment is a presentation of your review to the class. Overall, the assignment is easy if you manage your time well (which will be important because you have a Phm425 protocol due at the end of the term too!), and guidelines are straightforward. Professors are generally flexible and helpful, as the number of students in this class is smaller and easier to manage for them.

Course: Phm462 – Alcohol and Substance Use Disorders
Course Coordinator/Professor: Beth Sproule

Did you know that withdrawal from benzodiazepines and alcohol can cause seizures? Curious about illegal/legal substances of abuse? Want to learn about creative ways to make a crack pipe? Want to be greeted by guest lecturers wearing glow-in-the-dark necklaces with rave music blasting in the background? This class was taught mostly by Beth Sproule, with various guest lecturers from CAMH. The tests are very reasonable and straightforward. The major project consists of a drug information question that is to be worked on between you and a partner.

Course: Phm463 – Phamacotherapy in Obstetrics and Gynecology
Course Coordinator/Professor: Tom Brown and Lisa McCarthy

This course is very laid back and relaxed, but that doesn't mean it's a cake-walk. The lecture format is discussion, meaning that students bring up questions they want to learn about under the specific topic of the day and the class as a whole participates. If you are not into participating in class, you won't get much out of it, because this class is all what the students make of it. Lisa McCarthy's lectures are more structured, with powerpoint slides. This means that she is looking for a lot more detail on her exam questions. There is no doubt about it – because of the loose format of the class, you really shouldn't skip because the questions on exams come from only what was discussed. There are three midterms, and one final exam. All are short-answer format, so you need to be able to reason out your responses. Along the way, you'll be enlightened by Tom Brown's humour, and at some points you won't be able to escape the giggles!
Course: Phm468 – Self-Directed Online PBL Self-Medication

Course Coordinator/Professor: Debra Sibbald

This is the class where you get to create one of the online interactive cases to be used in Phm220/320! Look forward to one less lecture, midterm and final exam, because this class only has 2 minor assignments, which both lead up to the major project online interactive case. For the interactive case, first you will be required to critically appraise key articles related to your topic and design an outline of your case. Tutorials are held when needed to discuss course expectations. CAUTION: this course is NOT for procrastinators! Although Debra is pretty flexible with due dates, deadlines can sneak up on you. You will be expected to meld therapeutic knowledge with creative story telling. Check out interactive cases from previous years to get an idea of the work involved. Enrolment for this course is very limited, so if you want to take this elective, act quickly and contact Debra before the summer deadline for ROSI!

The Manditory Courses

Course: Phm421 – Therapeutics (Pharmaceutical Care III)
Course Coordinator: Lalitha Raman-Wilms

Fourth year therapeutics is much like third year therapeutics – except this year, there is one less CSS because you are only here for four months. Only being here for four months also makes this course killer – you will have a really heavy workload, and spend most of your time on this course. There are 2 or 3 cases per week, making dividing up the work among your group essential! There are two midterms, and one oral/written final. The overall topics are cardiology, oncology, and psychiatry, so a good understanding of the cases will help you wherever you are placed for SPEP and decide to work afterwards. Lalitha is great in providing summaries and helping students progress smoothly through the course. It may seem like a lot of effort and reading, but try to stay on top of this course as it will not be pretty in the end if you have to cram for the exams!

Course: Phm425 – Pharmacy Practice Research
Course Coordinator: Paul Grootendorst

This course will be the biggest pain in the neck at the end of the term. There is one small midterm early in the year, and a final exam, but the entire rest of your mark will be made up by the research protocol. There are assignments related to the research protocol along the way, such as a proposal, literature review, and presentation, but the bulk of creating the research protocol falls at the end of the term, right before exams, as you will not have been taught all of the material to create the protocol until the end. The key is to select group members you trust and you know will pull their own weight to get the project done. A lot of stress will ensue if you don't work well within your group. For understanding the course material to create your protocol and do well on the midterm and final, your best bet is to dedicate your time to reading professor Grootendorst's PDF summary files rather than the lecture notes. Although they are long, these notes will guide you through what he was actually talking about in class and provide good examples and formulas. Class is entertaining if you want an off-beat laugh, but you might not always get very much out of it!

Course: Phm427 – Health Systems in Society II
Course Coordinator/Professor: Linda MacKeigan

This is a continuation of Health Systems from second year. It is a broad overview of the health care system and role of pharmacy. There is one midterm, a final exam, and two tutorials. The tutorials are later in the term, and focus on pharmacoeconomics – there will be readings that you should understand before the tutorials because you will be expected to participate and there are also quizzes to make sure you have done the work. The midterm is pretty straightforward, but not very easy to get a high mark on. You will need to know the material from lecture inside and out. There are readings which can add to the lectures and clarify concepts, but are not always necessary if you understand what was discussed in class. There will also be a writing assignment, with varying topics every year depending on what is hot in the media. The key is to be clear and concise and think about the question to stay on topic. The final exam focuses only on pharmacoeconomics, so there is not a lot to study, which can help balance out the busy exam schedule.

Course: Phm428/Phm429 Professional Practice IV / PPL
Course Coordinator/Professor: Zubin Austin / Ron Fung

The workload in Zubin's Phm428 class is really light. His lectures are entertaining, and he makes the information easy to remember. Be sure to write down the examples that he gives, as the slides do not provide much information to go on for the exams. The first half of the class is psychological theories, which are interesting - but you really need to be able to apply them and understand the subtle differences between them. Classes end in November, and the final exam consists only of three lectures on the legal system and pharmacy. This class is a nice break and is pretty straightforward!

Phm429 is the laboratory component, and can be challenging. Compared to other years, there is finally no dispensing component to this lab, and it focuses solely on counselling skills. The labs are challenging, as cases can often throw you off guard, and you will really benefit if you prepare beforehand by doing the pre-lab questions. If there are suggested readings provided – do them! It was often the case that you are expected to apply what you have read. Bring your references and readings to make you more comfortable and confident in your recommendations. Be conscious of the time, but always be aware that it is better to look something up if you are not sure than risk guessing. Don't get discouraged by a fail here and there, but be proactive in attending remedials and use TA comments to learn from your mistakes for future labs.

POP QUIZ ON PHARMIE-RELATED POP CULTURE!!

FROM THE MID 90S TO MID 2000S

by: Shirley Lin (1T1)

1) What is Alanis Morrisette's 1995 breakthrough album called?
2) In this 1999 movie, Neo had to choose between the red or blue pill.
3) Who sang "Graduation (Friends Forever)" in 2000?
4) In her 2002 song, P!nk sang, "you're just like a _____, instead of making me better, you keep making me ill?".
5) In a song called "Addicted" by Kelly Clarkson in 2004, she sang, "It's like you're a _____; It's like you're a demon I can't face down".

ANSWERS:
1) Jagged Little Pill
2) The Matrix
3) Vitamin C
4) pill
5) drug

U of T Wins First OPASC!

By: James Morrison, UPS President

The first ever Ontario Pharmacists' Association Students' Cup (OPASC) was a remarkable success. The event served as the first opportunity for Toronto and Waterloo pharmacy students to get together for some friendly competition and socializing. The OPA generously sponsored this event to bring our two schools together.

The Waterloo pharmies filled two buses and hit the road for the big city with their hockey team, gear, and fans. The two schools flooded into Moss Park Arena, which was admittedly located in a somewhat sketchy part of town. The Toronto fans had tough competition from the Waterloo Spirit Squad who came equipped with banners, custom T-shirts, and pans for making some noise.

The hockey match was a closer game than anyone had predicted with Waterloo scoring the first goal! Toronto soon caught up and surpassed Waterloo with a final score of 3 to 1 for Toronto. OPA CEO Dennis Darby and OPA Chair Tina Perlman presented the Cup to Toronto's team captain Bryan Langel, while OPA Vice-Chair Dean Miller refereed the game. After the game, both teams posed for photos with the OPA representatives. Dean Wayne Hindmarsh and Hallman Director Jake Thiessen were also present at the game and posed proudly with their respective teams. Faculty and staff were represented by Tom Brown, Marie Rocchi, Jef Ekins, and David White.

Following the game, there was a mixer at the Duke of Richmond where we crowded around the free food platters and mingled amongst the Waterloo crew. Many players and fans passed around the Cup and used it as a grand chalice to consume fermented grains flavoured with hops. The evening drew to a close when the buses departed for Waterloo shortly after 10 pm.

I would like to thank the Waterloo President Claude Charbonneau for his help in making this event possible. I would also like to thank Paul Bazin, Rachel Fu, and Anna Huisman who contributed their talents and passion to make the event run smoothly and successfully. Finally would like to thank both hockey teams and the student bodies for their enthusiasm surrounding this event. Let's make it even bigger and better next year when Waterloo will host! M

Heart

Mavra Zvenigorodksaya (1T0)

Short Poem

Mavra Zvenigorodksaya (1T0)

The spring wind
Is calling our name
It beckons to us: Fly -
On the wings of the wind
All is not the same
The question: Can we fly
Without fear of falling?

PharmaFiles
Your Rx for Success

Hi Pharmacy,

As our school year comes to a close, our final PharmaFiles features Kat Timberlake, cardiology pharmacist at the Hospital for Sick Children. Kat is actively involved with the Ontario Branch of CSHP. We hope her unique experiences and contributions to the pharmacy profession inspires you to become involved within the pharmacy community.

It was a pleasure to profile some of the extraordinary pharmacists for you. We hope you enjoyed reading our section this year and good luck on your final exams. Congratulations to the graduating class of 0T9 – hopefully we see you featured in PharmaFiles soon!

Michael Pe and Sassha Orser
2008-2009 External Affairs Directors

Demographic Info

Name: Kat Timberlake

Year of Graduation: 2002

Which pharmacy school did you graduate from? University of Michigan- Go Blue!

Have you completed any advanced training or certification? Pharmacy Practice Residency at the University of California-San Francisco

Do you participate in any other professional activities? I am actively involved in the Canadian Society of Hospital Pharmacists (CSHP). In no particular order, I am a member of the Educational Service Committee, which is responsible for creating the two main educational programs put on by CSHP every year, the Professional Practice Conference (PPC) and the Summer Educational Sessions (SES). I am currently the Chair of the Metro Toronto Chapter of the Ontario Branch. Metro Toronto is the largest chapter of CSHP and we aim to have 6-8 educational events each year, including the Residency Night where all the Metro Toronto hospital pharmacy residents are given an opportunity to present their research projects and are judged on the quality of their research. Finally, I am the Chair of the Paediatrics Pharmacy Specialty Network (PSN). This is primarily an online forum for pharmacists interested in paediatrics to ask questions of the group across Canada.

Job Description

What position do you hold or what is your current practice?
I primarily provide pharmaceutical care to inpatients at the Hospital for Sick Children with the Labatt Family Heart Centre (aka Cardiology). I am also the interim TDM coordinator for the pharmacy department.

How did you get to where you are today? What was your career path?
I started at Sick Kids just after finishing my residency. I have always had an interest in teaching and a bit of research. But, my primary focus has consistently been patient care. To work as a clinical pharmacist, having a residency is really the first step in being able to apply what you learned in school. Working in a hospital setting was also something I have always wanted to do. The variety of patients, the ability to interact directly with physicians, nurses, and working in a fast-paced setting is something I find exciting.

If someone was going to make a movie called "A Day in the Life of Kat", what would the plot be? (i.e. walk us through a typical day for you)
Rounds start at 9:30 most days, so I arrive around 8:30 to do some preparation before rounds. During rounds, I contribute information about patient's medication history, suggest changes in therapy, ask for lab work or answer drug information questions. I collect lab data, review current medications, do medication reconciliation on newly admitted patient and do discharge counselling during the rest of the day. For some drug information questions, I might send an email to the PSN to see if anyone else in Canada has any experience on the subject. I often have a student or resident with me, so I might meet with the student to discuss topics, patients and provide feedback.

What do you like most about your job?
When I talk to families who are scared about giving a newborn baby or a child a medication, I feel like I've made a difference if I help them to understand the reason for use of the medication and possible side effects.

Have you experienced any challenges that you had to overcome?
I was really lucky to be matched at the residency program where I ended up. UCSF is a leader in pharmaceutical care and pharmacy education (in the States). But, I think being adventurous and doing what is best for your career takes courage. Moving away, if just for one year, can really broaden your horizons. So, I would encourage anyone to see what it's like in another setting before you settle down.

Fun Questions

What is your most embarassing pharmacy moment?
See below:

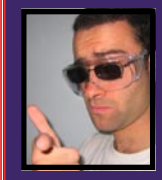
Tell us something very few people know about you (eg. hidden talent).
As a student, I wrote a poem about Epoetin. It starts, " There once was a drug Epoetin…"

What is your favourite drug and why? :) Carvedilol- because this is a medication that actually has been studied in paediatric patients, and has real potential to help patients with heart failure.

Advice Questions

What advice do you have for current pharmacy students or new graduates? *See answer to How did you get where you are today? Go into hospital pharmacy, and do a residency.*

The Dispensary



By Josh Lieblein, *1T0 Monograph Rep*

For all the complaining that The Dispensary does about life in Pharmacy school, I actually have mixed feelings about the end of this year, because these past two semesters were a very special time for me. I got to serve as 1T0 Monograph Rep and basically write the same silly articles I have always written, except this time I got to play God with other students' written offerings and make whatever changes I felt were necessary, and that's something I'm definitely going to miss. Then there's the realization that this summer will be the last summer I ever spend as a student (if I don't fail), and that for every year of the rest of my life until I retire, I'll probably be spending May to September behind a pharmacy counter. Finally, I've come to the understanding that 95% of my pharmacy knowledge will be crammed into first four months of 4th year. I mean, come on: We haven't even done a serious study of how to treat blood clots in class yet. Has anyone else noticed that they've been talking about warfarin and INRs for the past THREE YEARS and we have yet to learn how to apply this knowledge to a single patient in class?

With that in mind, if I haven't thoroughly depressed you yet with that last paragraph, here's what's making Pharmacy News for the last time this year.

Pharmacy Student Applies Therapeutic Thought Process In Real Life: Hilarity Ensues

A recent Pharmacy graduate found out that sometimes, the best lessons are the ones you learn the hard way when he tried to apply the Therapeutic Thought Process during a recent patient interaction.

It seems that the patient had been involved in an accident while fixing his roof and had hammered a nail through his hand, and had come to the pharmacy in a great deal of pain looking for help. Instead of calling 911, however, the eager young pharmacist began to construct a thorough medication history with the intention of deciding whether this patient's condition was precipitated by a drug or disease, just like we all learn to do in Therapeutics.

When the patient tried to explain that he had a nail sticking out of his hand and that he didn't think a Pharmacy Care Plan would be necessary, the Pharmacist offered an empathy statement ("That must be very frustrating for you") and explained that he had no choice because his Therapeutics professor took marks off for not applying the entire Therapeutic Thought Process.

Despite the tense situation, both the patient and the pharmacist were able to reach an understanding: the patient was referred to a pharmacist who had somehow managed to make it through pharmacy school with the common sense portion of their brain intact, and the pharmacist was promoted to District Chair by the Ontario College of Pharmacists for his in-depth understanding of Pharmaceutical Care.

Pain Week Leads to Several Painfully Unfunny Puns

The Class of 1T0 are still suffering from *bruised* egos after having to get up at 6 AM *EVERY DAY OMGWTF* during Pain Week some time ago and are *aching* for summer to start, but that didn't stop them from making silly pain puns all the way through Pain Week until it *hurt*. "Pain Week was pretty *painful*, wasn't it?" was a popular offering, as were variations on "I'm going to need some pain medication to help me get through this week."

A definite *sore* point for Pharmacy students during Pain Week, however, was the realization that, contrary to what the Faculty of Pharmacy has been telling them for several years, other health care professionals know quite a lot about drugs and in many cases, they don't need pharmacists to "educate" them. Finding out that O/Ts and P/Ts know more than we do about how to treat juvenile idiopathic arthritis (a disease we don't even cover in Pharmacy) was also described by many as "a real *headache*". *Ouch*.

Pharmacy Robots Go Mad, Wreak Havoc by Offering Medication Consultations to Random Passerby

As is usually the case with these situations, the new PCA dispensing terminals, which were supposed to usher the profession of pharmacy into The World of Tomorrow, have developed minds of their own and are waging a relentless campaign of medication consultations against humanity. The machines, described in greater detail in this newspaper article (http://www.thestar.com/article/606550), slowly infiltrated pharmacies across the nation in preparation for their takeover before launching their assault. It is believed that the machines were able to prepare for the takeover without any pharmacy students noticing because their introduction into pharmacies was only mentioned in newspapers, and everyone knows that pharmacy students do not read newspapers.

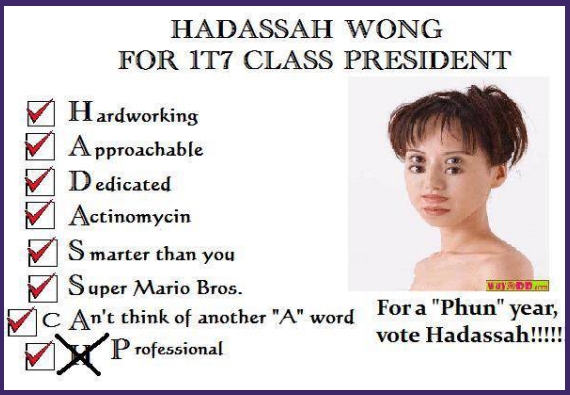
It seems that, unlike other robot takeovers recorded throughout human history, the machines do not want to enslave humanity. Instead, being pharmacy robots, they just want humans to take their medication as directed and follow the directions given to them by their pharmacists. In doing, this, the machines have proven themselves to be more effective than any pharmacist, and as a result, pharmacists have become obsolete.

"We were always afraid that we would be replaced by machines one day, but we always expected it to be a much more gradual process that would affect new pharmacy graduates only and keep them from taking our jobs," one experienced pharmacist was quoted as saying.

Dispensary Extra: Anatomy of a Pharmacy Class Council/UPS Election Poster

The Dispensary has provided this helpful template for your next election campaign poster. Please do NOT deviate from

this model in any way because it might break one of the 86,352 rules governing Pharmacy elections that nobody follows anyway. Thank you!



That wraps up another year of The Dispensary. Join us next year when we compress the entire Dispensary into Twitter format. We might call it the Dispenswitterary, or the Twistterpensary, or even the Dwittspenser, but whatever it is called, it will be no longer than 140 characters.

CALL FOR NOMINATIONS:

OPA Student of Distinction Award

Awarded to an undergraduate pharmacy student who has demonstrated outstanding leadership in service to the profession, in any of the following areas: the community, the Association, or the profession of pharmacy.

Nominations Due: **May 1, 2009**. Visit www.opatoday.com for more details.

Ad removed.

I am Vegetarian

By: James Morrison, 1T0

This may come as a surprise to many of you, since surprise seems to be the most common reaction when someone newly learns of my vegetarianism. I would like to share with you answers to some of the most common questions I am asked about my decision to give up meat and hopefully encourage some discussion among my audience. I am not writing to be patronizing, but only to share the personal experience of one veggie.

Why are you vegetarian?

I have always loved animals. Quite simply put: Animals are my friends and I don't eat my friends. Now that I have learned more about factory farming and the suffering of animals in the production of meat products, I am very happy with my choice.

How long have you been a vegetarian?

I decided to give up meat at the end of grade 8. This was an age where I was able to make such big decisions for myself. That was over ten years ago and I have never regretted my choice.

Do you eat eggs, milk?

Yes, I do eat eggs and milk. However, I have recently been trying to rely less on eggs and milk due to the suffering of the animals in both these industries. I don't think I will ever be a full vegan. Technically I am a lacto-ovo vegetarian since I still eat some milk and eggs. I have also switched to eggs from free-range hens since I feel they are less cruel.

Do you eat seafood?

Even before I gave up meat I never ate seafood. I grew up walking along many sea shores and I have a profound appreciation for the ocean and never wanted to eat the sea creatures that I found so fascinating, even as a child.

Does someone eating meat in front of you make you uncomfortable?

I am usually ok with other people eating animals at the same table. If you saw me covered in grease and soot at the welcome back BBQ then you know this is evident.

But I see you are wearing leather shoes, aren't you a hypocrite?

This is my uncle's favourite question/stab. My response is always, "I don't eat my shoes." I used to think leather was just a bi-product of other people's meat eating. However, I have recently learned that in many countries that supply us with leather products cows are killed just for their hides. Maybe one day I will give up on leather, but for now I can't afford vegan alternatives. I see it as a balance and I am at least doing something for the benefit of animals.

Some funny experiences with being vegetarian:

Many Toronto restaurants don't seem to know what vegetarian means since I often find food made in fish sauces or oyster sauce under the vegetarian section of the menu.

One problem is that I don't really like most mushrooms because of the texture and taste. However, the vegetarian alternative at most set banquets is usually some sort of mushroom. I have gone to Winterlicious twice, both times were mushroom pasta. At PDW last year, the opening dinner was a single portobello mushroom sliced in half, and PDW this year the banquet dinner was mushrooms wrapped in pastry and they served it both nights!!!

There were a million problems eating vegetarian in Cuba on the pharmacy trip last year. "No como carne!" They basically don't have vegetarian alternatives. On the catamaran day-trip there was a lobster lunch, so I basically had the side salad for lunch. Then later in the afternoon they had meat sandwiches on the boat. I am lucky Amanda brought along spare granola bars.

I had to make a flight change on my trip back from the UK. The fact that I am vegetarian didn't transfer over and as a result there was nothing on board for me except for the side salad. I was pretty hungry when we landed in Halifax.

Some famous Vegetarians:

Samuel L. Jackson
Ellen DeGeneres
Natalie Portman
Lisa Simpson
Paul McCartney
Carrie Underwood
Charles Darwin
Alicia Silverstone

Fat Soluble Vitamins in a Haystack

By: Ian Wu, 1T2

Here's how it works: I'm going to give a rating out of 10, but in this case, the rating is based on how easy it is to obtain that nutrient. A 10/10 represents a nutrient that's you'll always obtain if you follow Canada's Food Guide, and a 1/10 represents a nutrient that's as easy to find as radioactive carbon inside an apple.

FAT SOLUBLE VITAMINS:
Vitamin A:
Here's a vitamin that is damn easy to find, yet 85% of the world's population suffers from a Vitamin A deficiency. Get the paradox? Well, before you jump to any conclusions and claim that 85% of people "don't have nutrition knowledge", just remember these two magic phrases: "orange vegetables" and "dark green leafy vegetables". Why? Because those two are the only sources of Vitamin A outside of the animal kingdom (in case you're interested, liver and eggs are very good animal-based sources). But that's just the bad news, and the ONLY bad news. The good news? One single carrot provides around 300% of your daily requirement for Vitamin A. A cup of spinach provides even more. Heck, if you were to eat one serving of orange vegetables or dark green leafy vegetables, you'll never be deficient in Vitamin A.

On a side note, in case you people bought into the scare made by the author of Bad science from last month stating that the big, bad, and phony Vitamin A can "cause cancer and bone fracture", I partially agree. And only partially because I'm totally confused whether he meant the synthetic form of Vitamin A or the natural form. Are the patients in the study taking synthetic Vitamin A supplements from shady manufacturing companies with 20 different god-knows-what by-products that may be harmful to the body, or are they taking Vitamin A from natural whole foods that contain other compounds that may help with the health boosting effects of Vitamin A? I believe it's the former because I have yet seen a study showing that carrots or sweet potatoes can cause people to "develop cancer" or have "bone fractures". Water can kill you, if you obtain water from a polluted lake from Ethiopia. But water from my well-handled Brita jar will not kill you. It all depends on the proper language that you use (hmmm.. I've heard this before somewhere.)
Score: 9/10

Vitamin D:
If you think Vitamin A is bad, Vitamin D is far, far FAR BLOODY WORSE! The ONLY natural sources of Vitamin D are sardines, tuna, sockeye salmon (and ONLY sockeye salmon), and shitake mushrooms (around 100% of your daily requirement). The rest have jackpoop amounts. Yes, ladies and gentlemen, if you rarely eat those, then you are officially deficient in Vitamin D... if... and only if... it's winter time, and you don't live in the "malaria endemic" zones (I'm talking about near the equator). Thankfully (phew!), your body can make Vitamin D. If you let sunlight (only in the summer because of the angle of the sun's rays) shine on your skin for around 20 minutes, you'll produce all the Vitamin D that you'll need in a day.
Score: 1.5/10 (During winter), 10/10 (During summer)

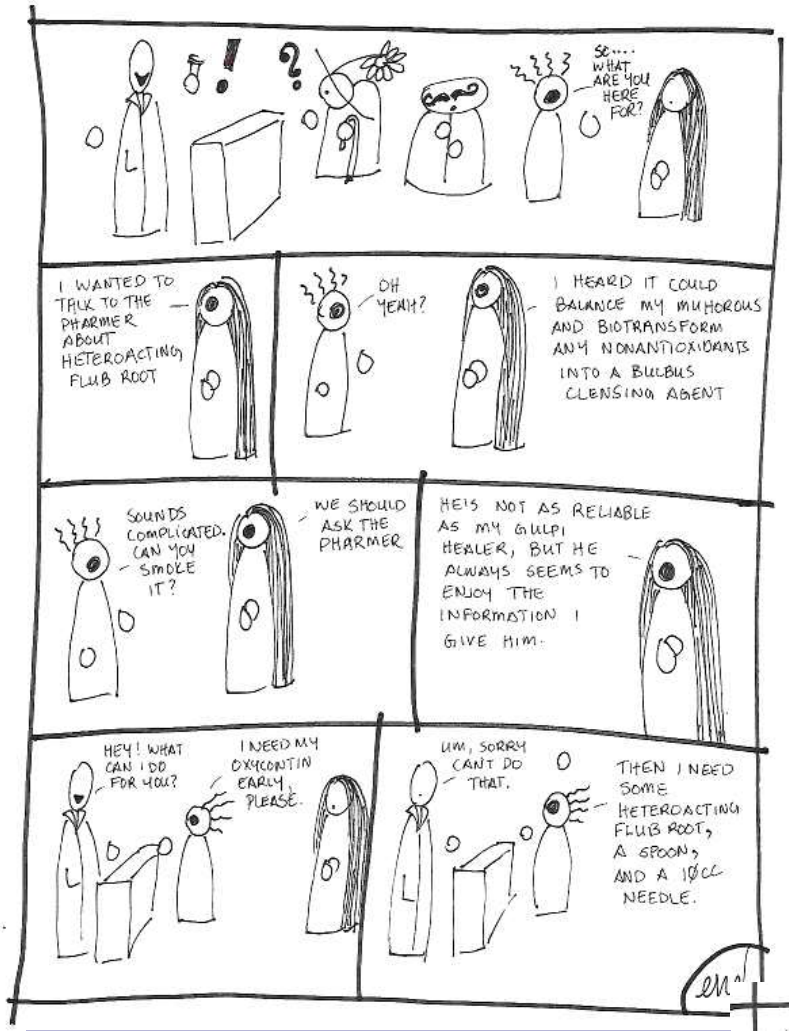
Vitamin E:
So nothing can be more rare than Vitamin D right? Well, now it gets even sadder. You might have been told that everything contains Vitamin E, and that is true, but most contain them at abysmally low amounts. (as in, less than 5% of your daily requirements). Sure, they add up together, but if you do the math, you're going to eat at most 20 servings of food to get 100% (and while we're at it, won't you get pesticide toxicity if every food contains low amounts of pesticides?) So why not choose dense sources of Vitamin E? Well, sorry to break it to you, but the only foods that contain more than 25% (yes, 25%) of your daily requirement of Vitamin E are almonds, sunflower seeds, and oils (I recommend olive oil). Sunflower seeds have the most (with a sexy value of 120%), almonds around 60%, and oils around 30%. Which means, among the population, oils are the main way to get Vitamin E. And even then, there's still a catch because heating oils for too long will destroy Vitamin E since it's so fragile. Not to mention that "healthy eaters" who avoid every source of fat (WATCH OUT FOR THE HEALTHY MONOUNSATURATED FATS THAT WILL CLOG UP YOUR ARTERIES! *cough*sarcasm*cough*) will develop Vitamin E deficiency any time of the day (keep in mind Vitamin E deficiency won't really kill you, thankfully).

In case you also bought into the Vitamin E scare, here's the article that showed how flawed that study was: http://74.125.95.132/search?q=cache:OFyfqhsLj8kJ:www.freedomofchoiceinhealthcare.ca/Articles/Supplements-Vitamins/Articles/Press-Release-Vitamin-E.doc+vitamin+e+death&cd=5&hl=en&ct=clnk&gl=ca&client=firefox-a
I should give Mr. Calabrese credit here for telling us how important it is to look for unfounded articles like the vaccination and autism link and the Vitamin E and death link (the latter of which he totally didn't do which really amuses me). The article basically pertains to the exact same thing as the problem with the Vitamin A scare: not accounting for the fact that it really depends on what kind you get and how you consume it (which is the supplement). Some like it up and down, some like it left and right, it really depends!
Score: 3/10

Vitamin K:
After 2 unfortunate cases of vitamin rarity, now's a time to take a fresh air because Vitamin K is found in almost all leafy green vegetables. It's like Vitamin A but with little found in orange vegetables and far more found in just regular green vegetables.
Score: 9/10

Lastly, just so that brave and mighty soldier won't rip me a new one, I'm going to protect myself by concluding that there is no proof that vitamins can cure vitamin deficiencies. There has never been an accurate study done on it, and according to Adam, correlation does not equal causation. So if you're deficient in any of these vitamins, take a drug. If it doesn't work, don't take vitamins because everything has side effects, and given that the drugs don't work and vitamins actually do work, that must mean vitamins have far more side effects than drugs (again, according to Adam). Go for the safer route please.

If you're not Adam Calabrese, please ignore that previous paragraph. I was being sarcastic there.
PS: Broccoli tastes so damn good.



chair. No matter how much you may want to, do not put your face on the radiator. You will be rewarded for it.

LIBRA (September 23 – October 23)
You will hide under your desk to avoid your fear of failure. Dogs distrust you.

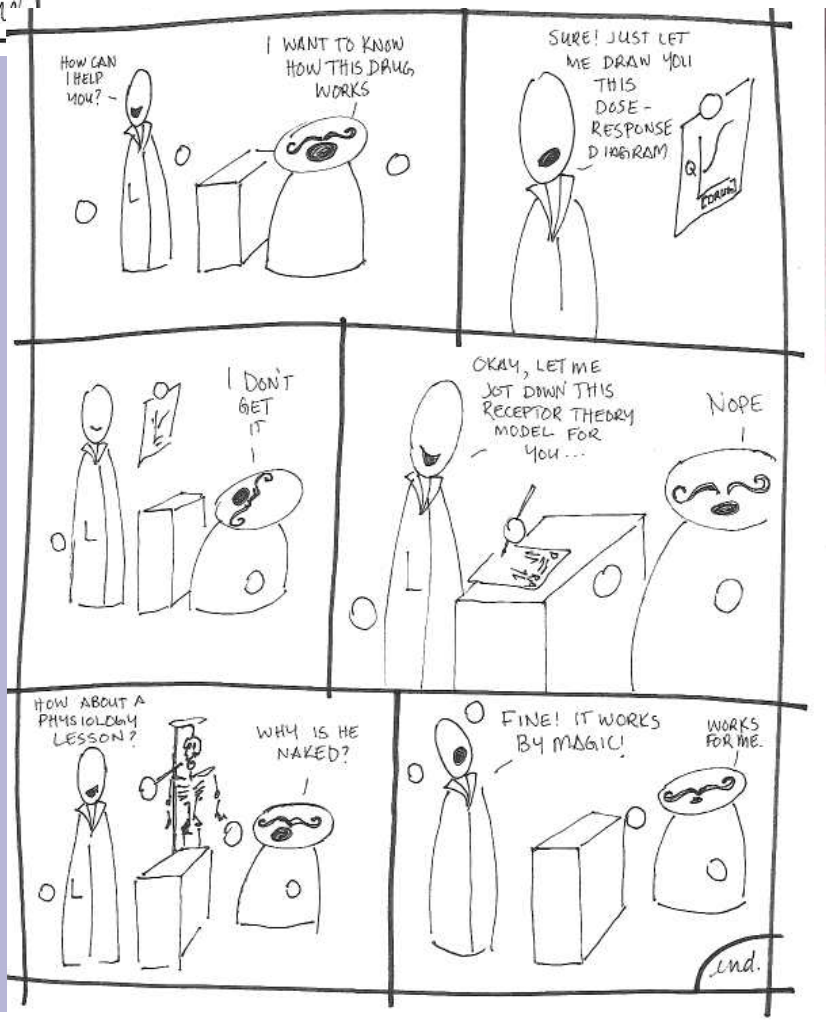
SCORPIO (October 24 – November 22)
Your day will be average; not too good but not too bad. You may be chased by rabid cats.

SAGITTARIUS (November 23 – December 21)
A car will backfire in your presence. You will be startled. There is a 30% chance of rain.

CAPRICORN (December 22 – January 20)
You will contemplate the meaning of life while in the shower. Consult Wikipedia for the answer. A smoking man will tell you your hair is perfect for dreading.

ANECDOSE

By M. Schell (1T1)



HOROSCOPES

Brought to you by the 1T1 P*ssy Posse

ARES (March 21 – April 20)
Today, you will don a shirt and maybe some pants. A squirrel will eye you suspiciously.

TAURUS (April 21 – May 21)
A secretive waiter will put you in a bad mood. Tip low. At home, you will consider vacuuming but will nap instead.

GEMINI (May 22 – June 21)
Consider wearing a brassiere today so people will avoid guessing your age from the obvious effects of gravity. Remember: Time is money!

CANCER (June 22 – July 22)
Your life feels empty. Fill that void with falafel. You will have an "Aha" moment while watching *Rock of Love Bus*.

LEO (July 23 – August 23)
Today, the laws of physics do not apply to you. Begin work on perpetual motion machine. Your Mom will leave you a message. Ignore it.

VIRGO (August 24 – September 22)
You will sit today – possibly on a couch but probably on a

SLAYERS_`BOXER`: LEGACY OF THE EMPEROR

Starcraft and The Emperor

In Korea, Starcraft gaming is a blood sport. Just as athletes drive their bodies mercilessly for the glory of winning, gamers in Korea train twelve excruciating hours a day, detailing every click of their mouse and sharpening their gaming instincts. When they finally clash, the game that results becomes vivid with intricate strategy, power, and drama. It's like seeing Sun Tzu's Art of War in lucid action. The individual players' aggression, defence capabilities and attitude manifest in a powerful, riveting deathmatch.

For every battlefield, there is a leader. In Starcraft, there is Lim Yo Hwan, The Emperor, who plays under the name SlayerS_`BoxeR`. When Starcraft was still in developmental stages in Korea, Lim became the best player on the scene. He innovated heavily and developed novel strategies and playstyles. These innovations stimulated the imagination of a stagnant gaming community and Lim gained a rabid fanbase. He harnessed this response, and in tandem with his personal ambition and charisma turned the game into a national sport. His fans crowned him *The Emperor*. Although other players would eventually usurp his position as the best player, nobody could deny The Emperor created modern Starcraft.

Air Force ACE

In 2006, the inevitable happened. Lim was conscripted into the Korean Army. This 2-year service is mandatory to every male in Korea, and serves as both a symbolic and very real transition into "The Real World". Conscription meant a permanent end to a programmer's career because in Korea, and around the world, gaming is seen as something for boys and not men. Millions of SlayerS_`BoxeR` fans lined up in a tearful goodbye. The Emperor was finally leaving. But of course, they were wrong.

Several months after his conscription, The Emperor did the unthinkable. He convinced his military superiors to form the official Air Force ACE Programming Team. Lim had challenged the public perception of gaming and won. For the first time in history, army conscripts reported to duty and practiced Starcraft. The Emperor made a triumphant return to the programming scene at the head of an intimidating military team of Starcraft gamers. The gaming community had a collective orgasm.

A Bright Future

In 2008, The Emperor left the army, but his legacy lives on. The Air Force ACE team is now led by Reach "Mantoss" Park-Jun Suk, known for his manly looks and unique game play. In the programming scene, the level of competition had exploded beyond anyone's imagination.

And as for Lim? He suddenly disappeared from the programming scene. The word is that he is in deep practice, honing his skills for the destined return of The Emperor to his Throne.

Epilogue

If you do not watch Starcraft, start watching it. If you watch starcraft, watch some more. Here are some links to get started with:
http://www.gomtv.net/videos/ (English commentary)
http://www.youtube.com/profile?user=Jon747&view=videos (Recent games)
http://www.youtube.com/watch?v=HbMIIht8xq0 (Boxer highlights)

"Fortunately, my mind is as clear as the autumn sky. The mighty opponent most likely to defeat me is not the player sitting across from me. It's me. If I give it my best I will not lose this game. My laziness is my most fearful enemy. Defeat is acceptance of my own laziness."

"However I had not once thought of defeat as failure. Even though I lost at that moment, I thought of myself as the final victor and I could not remain in that state. After scrutinizing why I lost, I started practicing again to win the next match. And so my preparations for the next event began."

"They say there are two choices in life: one is to accept the conditions given to you as it is, and another is to try to change that condition. Becoming satisfied with the present and settling down, or opening a new door by myself – my decision was always the same: challenging the new world! "

- SlayerS_`BoxeR`

Tom He
1T0 Inspirational Writer
And non-inspirational student

Pharmacy 0T9 Grad Trip

By: Alexander Vuong, 0T9

From December 14-21, 2008 approximately 150 class of 0T9 students and their phriends took over an airplane and spent a week at Cayo Coco, Cuba! From all you can eat, to all you can drink, the trip was all about excess! Excess fun, hugs and ESPECIALLY photos! Judging from my newsfeed, it seems that everyone averaged 2 albums! (3 if you were part of the "Left Side"). What a great way to end 3.5 years together! The days were filled with lounging on the beach or the pool while the nights truly saw all the different cliques break down their barriers.

We didn't have the whole class in attendance, but the presence of those not in attendance was sorely missed. Perhaps the 5 or 10 year reunion? Anyways, it was a pleasure organizing the trip for my fellow 0T9s. While the resort wasn't exactly paradise, the true purpose of the trip was the company and camaraderie. We are the most spirited pharmacy class in recent history with a grad trip that was 250% larger than ever before! Nothing "normal" about that! M

THE CURIOUS CASE OF MONOGRAPH REPTON

By Cameron Forbes, *1T1 Monograph Representative*

Throughout my tenure as Monograph Rep, I've tried to make my mandatory listserv emails as interesting as possible. As such, I thought it would be a fitting end to my run to publish a compilation of the emails I sent, as kind of a MonoRep timeline. Unfortunately, the editors told me we didn't have room for that, so I'm only publishing about 15% of them. Sorry! Many thanks to everyone who supported me and read my articles. I'll really miss handing out the issues next year, it was such as pleasure to get to meet and talk to everyone. Best of luck for finals, and have a great summer!

Subject: paris hilton just walked by and I ended up with herpes
From: Cameron Forbes <cameron.forbes@gmail.com>
Date: Fri, 10 Oct 2008 12:50:06 -0400
To: PHM1T1-L : Pharmacy Class of 1T1 <PHM1T1-L@listserv.utoronto.ca>

So here's the scenario: It's Thanksgiving weekend. You're enjoying a delicious homecooked meal with your loving family. You finish that last bite and ... blech, you're so stuffed, you undo that top button on your pants. Not comfortable yet. You unzip your fly. Getting better, but not there yet. Finally, you just take your pants right off. Relief!

Now, you're standing there, pantless. And what do you always think about when you've got your pants off? Me, of course! Aww yeah, that's right.

So you reach down... down... still thinking of me... and fondle for it... touching... can't get it ... oh, there it is.... almost got it..... AHHHHHH!... a pen! You should keep those in a more convenient place! Now you're all set to write an article for the MONOGRAPH!

Subject: puff balls, probits, and the all-important mugwumps
From: Cameron Forbes <cameron.forbes@gmail.com>
Date: Sun, 18 Jan 2009 11:36:27 -0500
To: PHM1T1-L : Pharmacy Class of 1T1 <PHM1T1-L@listserv.utoronto.ca>

Only halfway through my year as Monograph rep, and I've already gotten into some hot water. It wasn't enough to complain about my "unprofessional" listserves, someone had to talk to the Dean! He asked me to speak to him, but for some reason, he preferred to have the conversation online, through instant messaging. I of course saved the transcript and have pasted it in this email for the class to see.

*cameron.forbes has been added to the conversation
*the_DEAN has been added to the conversation
cameron.forbes: Good afternoon, Dean Hindmarsh. I understand there has been some trouble with the emails I've been sending the class?
the_DEAN: yea
cameron.forbes: Is it serious? I never mean them to offend anyone.
the_DEAN: dude, shut up for a sec
the_DEAN: I'm trying to watch dick in a box
cameron.forbes: Okay. Sorry.
*the_DEAN is now known as sexy_dean
sexy_dean: OK, heres what u need to know
cameron.forbes: Okay.
sexy_dean: one: cut a hole in the box
sexy_dean: LOL
cameron.forbes: I'm sorry?
sexy_dean: punked you! thats jokes, man.
*sexy_dean is now known as SexKitten124
*SexKitten124 is now known as meanest_cleanest_deanest_penis
*meanest_cleanest_deanest_penis is now known as LordoftheNuvarings
LordoftheNuvarings: ok man Im gonna add Zubin to deal with u while I check facebook
*zubin.austin has been added to the conversation
cameron.forbes: Hello, Professor Austin. Am I in trouble here?
zubin.austin: Well, Cameron, that depends.
zubin.austin: You sent some pretty unprofessional emails, and nothing comes without a cost.
LordoftheNuvarings: Oh, BURN
LordoftheNuvarings: wtf? why do people keep poking me? POKE BACK, LESLIE LAVACK
*LordoftheNuvarings is now known as Pirate_Dean
zubin.austin: We're going to let it slide for now. But you should be more careful in the future.
zubin.austin: These kind of things can have a drastic effect on your pharmacy career.
zubin.austin: You wouldn't want it to finish prematurely.
Pirate_Dean: That's what SHE said!
Pirate_Dean: ROFL
zubin.austin: Wayne, do you have anything you'd like to add?
Pirate_Dean: YAAAAAAR, I'm a PIRATE
*zubin.austin has been kicked out of the conversation
Pirate_Dean: That guy is such a debbie downer
cameron.forbes: So, are you going to punish me? Or am I just let off with a warning?
Pirate_Dean: whatev, man why shoudl I care? IM RETIRING WOOOOOO
*Pirate_Dean is now known as SUCKONTHISLESLIEDAN
*SUCKONTHISLESLIEDAN has left the conversation

Send me anything at cameron.forbes@gmail.com , or if you'd rather, sexycameron@whalepenis.org .
(disclaimer: the above chat conversation was a work of fiction and is in no way a representation of the real Dean. He is the manliest of men and must be treated with unwavering respect. Chuck Norris turns into a crying girl in his presence.)

Subject: the LAST monograph email I will ever birth from my impregnated womb of literacy skills... I'm going through MONOPAUSE! LOL
Date: Sat, 21 Mar 2009 23:29:52 -0400
To: PHM1T1-L : Pharmacy Class of 1T1 <PHM1T1-L@listserv.utoronto.ca>

Before we get to the pertinent information, I've taken a break from BeardyFather to write a list of the top 15 things I've noticed or come to realize up to this point in my pharmacy school career. I hope you will enjoy and agree :)

1. One can never **truly** say they "hate Mondays" until they've had to spend them in pharmaceutics lab.
2. Courses don't have to actually teach what their title suggests they should. For instance, how about learning anatomy from an engineer in a class called pharmaceutics? Or a pharmacology midterm that was actually a harder physiology exam than the ones we get in physiology?
3. If you run out of course material to teach, just reteach stuff you did earlier in the year. If only we could do that on papers. I'd love to write the same body paragraph three times!
4. Wikipedia is NEVER an acceptable source… unless you're making lecture slides, of course.
5. Pharmacists are expected to be able to communicate elegantly, emphasize well, educate efficiently, and speak fluent English. Strangely, these skills are not mandatory for the people who teach the pharmacists.
6. Being called to panel is that much more fun when you're front row centre for diaper dermatitis and get to look at huge pictures of diseased infant genitals for 90 minutes.
7. It's a good thing Pharmacy pays well, because the inevitable therapy needed to cure the fear that all tall, bald, bearded men will try and smother you with graphs is pretty expensive.
8. Avoid making announcements in front of the class when you have an erection. You don't want to have to learn this the hard way.
9. Those people in the class you really can't stand? They're two years away from being trusted with peoples' lives. (If it's me you can't stand, please forget this one.)
10. The advantage of PowerPoint is severely diminished when the presenter doesn't know how to make it fullscreen.
11. Digital wall clocks are very difficult to read if you're further than maybe ten feet away.
12. If what people do on their laptops during class is any sign, 1T1 graduates may end up sucking at immunopharmacology, but they'll be damn good at finding all the words you can make out of six letters.
13. If you're going to sit at the front of the class and fall asleep, it may as well be face down on your desk – just to make it that much more obvious!
14. Don't be excited when you hear a prof say "cartoon" in lecture; apparently, at the university level, it's just another word for "drawing"… not "Spiderman".
15. A PhD's worth of higher-level education, and half our professors would still be lost with their computers if James Ying wasn't in the class.

Well guys, that's it for me. I'd like to sincerely thank everyone who made the position of Monograph Rep so much more fun for me. All the compliments and positive feedback I received was really appreciated, and I'm truly glad that (at least some of) you seemed to enjoy the work I put in. As always, thanks for reading, and take care. M

SHOUT OUTS

To JL, EK, RF, KD:
HIPPO!!! TURD
<3,
YH

to: coco,
hugs JUST for YOU!
- your secret admirer

to Brianne and Carey, who somehow manage to be the hottest AND coolest couple in pharmacy!

Dear 1T2s and ph-ellow pharmies,
Thank you for making first year pharmacy one of the best years of my academic life! I look forward to spending the next three years with all of you!
Best of luck in all your future endeavors!
Tanya (1T2)

To Yuan, thanks for a great year!!!! -R

My Dearest Ruby: However did we manage? I'm glad it was you. =) -Z*pi*r

TO VALAS, YOU GUYS ARE AWESOME! NO MORE STORMING- ONLY PERFORMING! BLARGH!

Pharmasaurus Rx

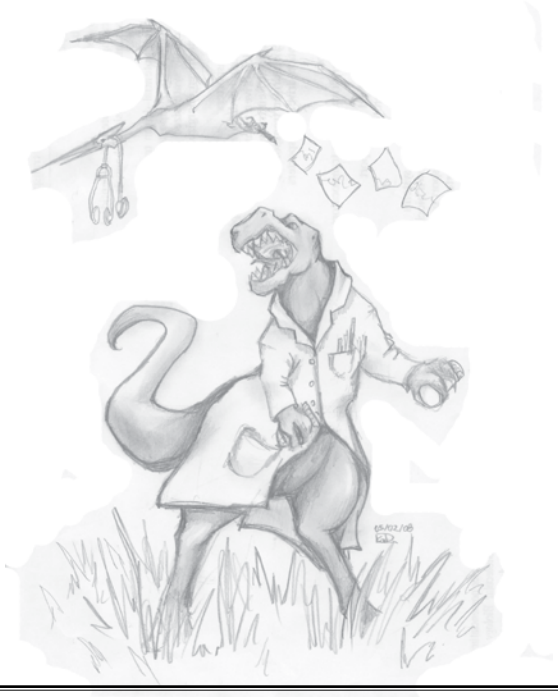
By: Adam Calabrese, 1T1

On one of my recent forays into the Internet, I discovered that the St. Louis College of Pharmacy's mascot is The Eutectic. It makes me wonder about their curriculum because it seems as though that if we had chosen The Eutectic as our mascot, it would have been in a tie-breaking vote with The Particle Size Distribution for the most boring part of our curriculum. Mind you, we would have had to use the caveat of the most boring thing with some kernel of relevance to pharmacy, lest we have engaged in an eternal discussion about which part of first year is most worthy of being immortalized in this manner. My vote would have gone to the Swedish women who think they're allergic to calculators. Nonetheless, if you've mixed a eutectic, as I have, you never forget your first one. The pharmacist handed me the script and, in her thick French Canadian accent, told me I was in for a surprise when I mixed the camphor and menthol. I was kind of hoping there would be some sort of explosion, but no, they just melted and proved ridiculously inconvenient to incorporate to the base. So as it turns out, The Eutectic is, in fact, an appropriate representative for pharmacy school: promising when you're first told about it, and impressively underwhelming on the follow-through.

But, as many a Monograph editor will tell you, I have a serious problem with appropriateness. Why choose a mascot because it represents who we are when we could choose a mascot that effectively represents what we wish we were? And thus was born the idea of the Pharmasaurus Rx, depicted here as it probably would have existed in the wild, attempting to eat a low-flying ptero-doctor who has terrible foot-writing. Considering that people actually die because of bad foot-writing, eating that ptero-doctor is both the ethical and awesome thing for Pharmasaurus Rx to do. What else does Pharmasaurus Rx bring to the table? For starters, he (or she) has a dedication to professional behaviour so ferocious that he (or she) makes Christian Bale look like Alexander Vuong. He (or she) also looks fetching in a lab coat. And of course, being over sixty-five million years old, Pharmasaurus Rx has no patience for any form of bad or pseudo-science, and is prepared to roar fearsomely at any corporate manager who insists on carrying a minimum of homeopathic products in his (or her) pharmacy.

Pharmasaurus Rx's scaly epidermis is also entirely resistant to all known mechanisms of dermatological response. So, if Pharmasaurus Rx were ever bitten by a mosquito (despite the fact that no mosquito could do so) Pharmasaurus Rx could use whatever topical anesthetic he (or she) pleased to relieve the itch, and self-administer anti-histamines topically. Pharmasaurus Rx is that tough. You will also notice powerful legs to remain standing up during 12 hour locums, a thick, sturdy neck to support all of the knowledge up in his (or her) brain case, sharp claws to open child-proof prescription bottles, and sharp teeth to more effectively snack on expired food from the rest of the store.

Pharmasaurus Rx was graciously illustrated by Katrine Dragan on what may or may not have been the back of a medicinal chemistry lecture handout.



BYOB – Buying Your Own Beater

By: Marko Tomas, 1T2

Its that time of year again. Final exams are coming up and we all can't wait till they're over, but where do we go from there? Back home for a summer of slacking off with friends or maybe a summer position you have to drive to daily? Fear not, for I'm here to give you some advice on picking up your very own box on wheels. Here are some recommendations:

Transportation Appliance – Toyota Tercel (1993 or 1994)

For about $500-1000, depending on condition, this Toyota is your main point A to point B car. It is as basic as it gets, many don't have air conditioning, and some have had their radios stolen, but you can just roll down the windows and tell your carpoolers to sing louder. Who knows, maybe they'll offer to drive their car all the time. Major things to watch for are that the timing belt has been changed recently and that oil changes have been kept up with. Other than that, the engine is fairly bulletproof and it should serve you well till the end of summer where you will have to pay someone to take it off your hands.

Ballin' On A Budget – Mercedes 190E (1987-1993)

For $1000-2500, depending on the year, you can have your very own Mercedes (New Era hat and "bling" sold separately). If maintained properly, these cars have a lot of life left in them. Diesel and gasoline engines were offered; you can't go wrong with either but make sure you check the springs as well as the transmission ($$). This car has a timing chain as opposed to a belt, so it won't leave you stranded but it'll cost huge money in repairs unless you are comfortable doing them yourself. Pick one of these up and you're well on your way to a record deal if that Wal-mart summer program falls through.

Boy Racer – Honda Prelude (1983-1994)

For $1500-3000 you can have what you've always wanted (no not that you pervert!). The Prelude is a car you can drive to work and take to the track on weekends because we all know you're way too cheap to pay those overly high go-karting prices. This will help you hone your skills while only having to fill the tank. If you find a model with pop-up headlights, make sure they're functional and also ensure you don't opt for the 4-wheel steering models, they're a nightmare to maintain. As with all Hondas, make sure the timing belt has been done and check the CV joints because they're common fail points. If you don't feel like taking it to the track you can always slap a huge wing on the back, buy some neon lights and make your own low budget version of The Fast and the Furious without Vin Diesel (vroom and woosh noises not included).

General Thoughts

Things to keep in mind when buying a car are to look for a service history whenever possible, be familiar with the weak points of the model you're looking at, and be aware of a reasonable price. If the car is being sold "as is" there is a good chance it cannot pass emissions testing and you'll have to shell out a lot of money to get it repaired enough to be certified. Craigslist and Kijiji are good places to find hidden gems but are also full of scrap metal posing as drivable. Used car dealers tend to mark up their offerings but they can be a good bet if you're looking for a no frills car that can be driven off the lot with all the paperwork done for you. Enjoy your summer and happy car hunting. M

The 'F' Word

By: Anna Huisman, 1T0

In this, the final installment of the 'F' Word for this semester, I decided to focus on interim progress (!) and the challenges I have faced this semester in attempting to lose weight.

To date, I have lost a total of 5 lbs. My weight seems to fluctuate in a 10 lbs confidence interval and the mean has dropped by 5lbs. This is peanuts compared to my total weight loss target (which I won't share because I still do not want anyone to know how much I weigh), and it is exceedingly frustrating and incredibly disheartening. I have not measured the number of inches I have lost, which may be more significant that the weight.

This semester I have faced some significant challenges trying to lose weight. The biggest challenge by far has been **time management**. I am a great time manager when it comes to commuting over an hour each way to the Pharmacy Building, school work, athletics, being on UPS, working and doing research. However, working out and making the effort to make my own meals are the things I let fall by the wayside to compensate for all my other activities. It takes an incredible amount of time and effort to work out at least 3 days a week, and exercising 3 days a week is not enough for me to lose weight. I know from my past experiences in weight loss that I will need to dedicate at least 1-1.5 hours five days a week to exercise to lose a significant amount and reach my goals. I also need to factor in the time it takes to eat healthy. It is too easy to go to Tim Horton's or Subway when I have slept in and don't have time to make my lunch and snacks for the day. Eating at these places at a minimum doubles the amount of calories I would have eaten for that meal if I had made my own food. I spend about 30 minutes each morning prepping my food for the day – salad, veggie sticks, fruit, yogurt, and some sort of a dinner if I am staying on campus late – and if I sleep in a little my time to get all this prepared is cut drastically short.

The key to all of this is **routine**. Having a routine makes scheduling exercise and food preparation during my day easier. This is difficult when you have an assignment due or an exam and need to take the time to study or complete the assignment. While in school, having a routine at times can be almost impossible, but once work starts in the summer, (with the regular hours and no studying to do) developing and sticking to a routine will be much easier.

Moving on from here I have set out some new goals heading into exams and then working for the summer:

- Exercise at a minimum 3 days a week, even during exams. It could be as simple as taking my dog for a walk for 30 minutes
- Walk to and from Union station each trip for the month of April (exceptions for inclement weather and lateness)
- Once work starts, develop a routine
- Use my new gym membership – easier to do since I have joined a 24 hour gym
- Not gain 10 lbs on my two week trip to Holland M

CONDOM-GATE 2009: HAS THE CHURCH GONE TOO FAR?

By Danny Ricci, 1T1

On March 17, the Pope responded to a question on the Church's "ineffective and unrealistic" approach to fighting HIV/AIDS in Africa:

> *"The problem of HIV/AIDS cannot be overcome with mere slogans.* ***If the soul is lacking, if Africans do not help one another, the scourge cannot be resolved by distributing condoms; quite the contrary, we risk worsening the problem.*** *[1].*

Did the Vicar of Christ just say that distributing condoms can worsen the problem of HIV/AIDS in Africa? Could there be truth to this? Could the Pope (or the "whore of Babylon" as he is affectionately known in some protestant denominations) actually be on to something? Could 2000 years of Church teaching and tradition actually be more scientifically sound than the Illuminati who teach of condom distribution as necessary for the salvation of Africa? Well, I did a little research to see if my German Shepherd might actually be right. And, in the spirit of my favourite saint, St. Thomas Aquinas, I structured my results in the Medieval tradition of the dialectic.

Question: Should condom use be promoted in sub-Saharan Africa to combat HIV/AIDS?

Objection 1: Condoms have been shown to be effective in stopping the spread of STDs between partners. Therefore, it is logical that condoms should be promoted as a barrier for the HIV virus.

Objection 2: Condom use is the most effective and realistic tool in preventing the spread of HIV in Africa. Abstinence and fidelity are too ideological to work in the real world.

Objection 3: The only ones promoting abstinence and fidelity are religious conservatives who find it morally wrong to distribute condoms. We should not impose our morality on Africans when millions of them are dying due to HIV.

Objection 4: Before the implementation of the first President's Emergency Plan for AIDS Relief (PEPFAR) in 2003 Uganda, which once had a high prevalence of HIV (about 18%) lowered its rate by about two-thirds. Now, condom distribution is low in the country and HIV rates are going up again.

On the contrary, billions of condoms have been sent to Africa [2]. However, in countries that have relied on condom use to prevent the spread of HIV, no great decline in the virus has been seen [3].

I answer that, in the African country of Botswana the widespread distribution of condoms was relied upon to fight the spread of HIV. However, even though there was widespread condom use in Botswana for over a decade, "soaring rates of condom use have not brought down high HIV rates. Instead, they rose together until both were among the highest in Africa." [4] Also, researchers have noted that, "No clear examples have emerged yet of a country that has turned back a generalized epidemic primarily by means of condom promotion." [5]

Reply to Objection 1: In the laboratory, no more than 1 out of 250 condoms can fail a leakage test [6]. The Western world has sent billions of condoms to Africa to date (I'll let you do the math on this one). Also, some of the shipments that go to Africa are of the worst quality [7]. Besides the laboratory tests, condom use in the real world is not ideal [8]. Even after being given sex education, most couples do not use the condom consistently or correctly. In fact, in one study, only 50% of couples consistently used a condom even though they knew their partner was HIV positive [9]. Furthermore, protection offered by condoms decreases with repeated exposure. A study has shown that individuals who used condoms consistently and correctly over time were not less likely statistically to acquire at least one STD than those who used condoms inconsistently or not at all [10].

Reply to Objection 2: To see how abstinence and fidelity is not ideological, let us compare two nations with roughly the same population: The Philippines and Thailand. In 1987, the Philippines had 135 AIDS victims and Thailand had 112 AIDS victims. The World Health Organization (WHO) predicted that the Philippines would have 80,000 to 90,000 AIDS victims and Thailand would have 60,000 to 80,000 AIDS victims. The Philippines, to the chagrin of the WHO continued to follow the teachings of the Church and stressed abstinence and fidelity. Thailand, on the other hand, promoted mass condom campaigns for the population. What were the AIDS cases in 2005? The Philippines had 12,000 and Thailand had 580,000 reported cases of AIDS [11]. To give further evidence of how realistic and effective abstinence and fidelity are, one scientist noted that if South Africa had promoted self-control that about 3.2 million lives would be saved from 2000 to 2010 [12].

Reply to Objection 3: Dr. Edward Green, a Harvard research scientist, who had previously advocated for widespread condom distribution, has stated that by the time foreign AIDS experts began to arrive in the early 1990's, Uganda's HIV problem was already beginning to show great signs of improvement. However, these foreign AIDS experts began to change the formula from abstinence and fidelity to condom use and this resulted in the increase in the number of young singles having sex (27% to 37% between 1995 and 2000) [13]. He also said that it seems that those in public policy who viewed abstinence education as unrealistic were wrong [14]. Dr. Green is, in his words "a flaming liberal, never been to church, never voted Republican in my life." [12] Furthermore, what about the morals and values of the African people? In Africa, traditional values are still held in high regard and the majority of Africans adhere to Christian values [15]. It seems arrogant on the part of non-government organizations (NGOs) to go into their countries and tell them their ways of dealing with their people is wrong and they must adhere to current Western thought on the subject.

Reply to Objection 4: It is important to note how Uganda made such a stunning turnaround in the first place. As noted previously, it was due to the promotion of abstinence and fidelity [12]. The prevalence rate of the male condom was less than 5% [14]. The main reason for the great reduction of HIV rates was the 65% drop of casual sex between 1989 and 1995 [16].

People say that my Church has condemned millions to death in Africa by not allowing condom use (read Richard Dawkins). My response is that condoms have been used and after 20 years AIDS is still a major problem. Perhaps instead of suggesting that the Church remove her ideologies, maybe it is time for AIDS campaigners to remove their ideologies and focus on working with the African people and their morals to stop the spread of AIDS. As a leading AIDS prevention expert in Uganda, Sam L. Ruteikara stated, "Let my people go. We understand that casual sex is dear to you, but staying alive is dear to us. Listen to African wisdom, and we will show you how to prevent AIDS." [17]

For references, please refer to next page.

Classes Throught, Nothing to Do, Time for a Year 2 Prof Review

By: Yin Hui, 1T1

You know the feeling you get when you have a new prof, and you are like... hmmmm, I wonder if I'll like him/her?
As my second year comes to an end, I'd like to share my thoughts our profs. I'll try to keep this short, since I'm anxious to know how Blair is doing after her REJECTION (totally saw it coming) and what Chuck is up to now that he's entered the emo stage of his life....This list is by no means exhaustive, and only includes profs who I have personally had lectures with.

200
1) Dr. Wojtowicz –
Think of the first prof for Organic Chem II
2) Dr. Goode –
Great lecturer, really emphasized the key points

(There are many other profs who taught 200. If I only knew who...)

222
1) Dr. Kotra -
Given: lecture;
Required: understanding;
Analysis: w = v;
Solution: as one sees fit
Paraphrase: easy breezy!
2) Dr. Pang -
There are many transporters in your body.
You will be told about some of them in a clear manner.
Too bad you have to remember them
3) Dr. Wells -
Imagine Santa Claus
Now imagine Santa Claus after a successful diet
Now imagine Santa Claus after a successful diet speaking Polish to you about lines on grids
4) Dr. Uetrecht -
Imagine Santa Claus
I challenge YOU to spell his name correctly by the end of the school year
5) Dr. Pennefather -
To quote my fellow classmate:
"The advantage of PowerPoint is severely diminished when the presenter doesn't know how to make it fullscreen."
A similar statement can be made regarding graphs and captions.
6) Dr. Harper -
The light at the end of the tunnel is coming!!!
Someone we understand!!!!
7) Dr. Angers -
Drop the H's and be on your way to the end of the tunnel.
8) Dr. Baigrie -
The tunnel is ending. Wait, it has ended. Now we are falling through the rabbit hole!

220
Dr. Sibbald -
We think we learned the general gist of somethings. Let's take a survey with our clickers!
WATCH OUT FOR THAT SENSITIZER!
Overall, very informative, very innovative teaching style

223
Dr. Cai -
Seriously one of the best profs I've had in UT because she cares and tries hard.

224
1) Dr. MacGregor -
funny man
2) Dr. Chalikian -
Go overheads =)
3) Adam Shuhendler
So, you probably should know this...
This is really not that hard, lemme explain it to you...
4) Dr. Bowen -
Selected quotes:
"This lab is wasting too much paper. There will be no more paper provided"
"...[mumble mumble]..."
"...[mumble mumble]...radiopharmaceuticals...[mumble mumble]..."
5) Dr. Dubins -
He sings, and plays the guitar! IN CLASS!
AND, he's a chemical engineer

225
Dr. Hampson -
Student: Are there different types of GABA receptors?
Answer: well, in the brain, there are mechanisms ... [5 minutes later] ...a variety of factors contribute to signal firing..."

226
1) Dr. Henderson -
A Doctor. Twice over.
Eloquent speaker
2) Dr. O'Brien -
I seriously can't say

227
Dr. Kohler -
Imagine 120, but better!

228
Vinita Aurora -
Either you'll really like her, or you'll really dislike her...

229
Doris Kalamut -
Enjoy the compounding video! ha ha ha ha ...
"My name is Yin. I'm the pharmacist. How can I help you today?..."

231
Dr. Erclik -
A U of T born and bred
Be prepared to wait up until 2 am... (Key word being WAIT, instead of stay)
I really want to say she knows her stuff
(Trivia: Erclik is pronounced Er-ce-lick)

REFERENCES

1. Interview of the Holy Father Benedict XVI During the Flight to Africa (March 17, 2009). http://www.vatican.va/holy_father/benedict_xvi/speeches/2009/march/documents/hf_ben-xvi_spe_20090317_africa-interview_en.html
2. Browder SE. (2006) "Dirty Little Secret: Why Condoms Will Never Stop AIDS in Africa," Crisis.
3. Allen T & Heald S. (2004) HIV/AIDS Policy in Africa: What Has Worked in Uganda and What Has Failed in Botswana? Journal of International Development 16(8):1141–1154.
4. Timberg C. "Speeding HIV's Deadly Spread," Washington Post Foreign Service (March 2, 2007).
5. Hearst N & Chen S. (2004) Condom Promotion for AIDS Prevention in the Developing World: is it Working? Studies in Family Planning 35(1):39–47.
6. Centre for Disease Control (1988) Perspectives in Disease Prevention and Health Promotion: Condoms for Prevention of Sexually Transmitted Diseases. Morbidity and Mortality Weekly Report 37(9):133–137.
7. Carey C. "Holey Condoms—Marketing Defective Condoms," FDA Consumer (February 1989).
8. Wald A et al. (2001) Effect of Condoms on Reducing the Transmission of Herpes Simplex Virus Type 2 from Men to Women. The Journal of the American Medical Association 285:3103.
9. Fitch JT. (2001) Are Condoms Effective in Reducing the Risk of Sexually Transmitted Disease? The Annals of Pharmacotherapy 35(9):1137.
10. Mann J et al. (2002) The Role of Disease-Specific Infectivity and Number of Disease Exposures on Long-Term Effectiveness of the Latex Condom. Sexually Transmitted Diseases 29(6):344–349.
11. UNAIDS "Report on the Global AIDS Epidemic," 2006, Annex 2: 511, 514.
12. Allen A. "Sex Change: Uganda v. Condoms," The New Republic (May 27, 2002).
13. Green EC & May W. "Let Africans Decide How to Fight AIDS," The Washington Post (29 November 2003): A23.
14. Testimony of Edward C. Green, Ph.D. before the Committee on Energy and Commerce, U.S. House of Representatives (20 March 2003), 3.
15. White H. World Leaders. "Condom-Promoting Forces Attack Pope Over Condom AIDS Remarks" LifeSiteNews.com (March 19, 2009). http://www.lifesitenews.com
16. Low-Beer D & Stoneburner R. (2004) Behavior and Communication Change in Reducing HIV: Is Uganda Unique? African Journal of AIDS Research 2:2.
17. White H. "World's Most Successful AIDS Prevention Programme in Uganda 'Sabotaged' by Western 'Experts'". LifeSiteNews.com (July 11, 2008). http://www.lifesitenews.com

Where Has The Time Gone?

-Kenny Ma, 1T2 Monograph Rep

Not to outdo myself in any of my past articles (like that is even possible… =P) I decided it might be a good idea to get a feel of what the class of 1T2 felt about their first year in the faculty of Pharmacy, and what they expected for next year. So doing what I usually do I asked some of the students in the first year class a few questions to summarize how what their first year experience was like. Below are some of the more interesting responses.

What did you think of first year?

There was a variance in the responses to this question. Students like Anne, Tiffany, Jon and Liz enjoyed first year and thought that it went well. Others such as Zenah, Diane and Lindsay thought that it was really relaxed and there really wasn't much pressure. On the other hand Ashlee, Brent and Leah thought it felt quite long at times, and could get boring.

What did you like?

Most of the people surveyed liked that first year was quite easy and that there was a light course load. However most of the people who said this had exemptions, and some felt that they could skip classes and still do okay (Ashlee and Leah). Another common response was meeting all the new people and feeling like they were in high school again; being in the same classes and staying in one building. Not to be outdone Jon Fung's answer to this question was that he liked finding out that he passed physical chemistry (I think everyone who went through that exam was pleased).

What did you dislike?

Common responses to this question were: Stats, Phys Chem, full course load, and "any class starting with a P". However more interesting answers came from a few people. Diane did not like how we only had THREE microwaves in the student lounge. (Only 3!!) And Tiffany did not like being an older student (take it easy grandma Kan). Finally, Anne did not like how we were registered with the OCP but we didn't show up on their website. (What an interesting complaint).

What are you doing in the summer?

About half the people said they had a job lined up and were most likely going to work in Pharmacies. However, the other half was still looking for work and was having trouble finding a summer position in a Pharmacy. (I am not sure if this information will please the rest of the class or not). Some interesting responses to take note were: Safeway Tours – Tiffany, hang out with Kenny – Diane (yay Sauga!), and take over the world! (I am not quite sure who said this, I think it may have been Heather, if not it was definitely from someone sitting with her).

What excites you about next year?

It seemed that a lot of people were excited for the hospital site visits, and of taking classes that were more "useful". There were of course those that loved the idea that they would be closer to graduating, such as Ashlee, Leah, Tiffany, and Diane. Sidika was excited for her Mongraph rep position (good luck), while Lindsay was excited about being a Phrosh leader. The best answer however came from Jon Fung, who said that he was excited for all the babes in 1T3. (I had to print it Jon).

What scares you about next year?

Most common answer was Medchem. It seemed that the upper years had thoroughly scared our class into dreading that course. Anne was scared about the switch to the PharmD program, and wondered where that would leave us. Lindsay however seemed to give the most sensible fear: "being a real Pharmacist".

If you had to first year again what would you do differently?

Rosey and Lorna said that they would want to participate more and maybe get into intramurals. Kaye, Brittney and Andrea wish they had studied less. But the more interesting responses were in reference to friends. Salini and Zenah both said that they would have made different friends. (Mind you they were sitting with them while they said this, lol). And while Tanya said that she wouldn't have made friends with Kenny, Diane said that she wished she had hung out with me more (that's one and one Tanya).

Do you know any good Pharmacy jokes?

The only good Pharmacy joke was:
Q: What's the generic name for Viagra?
A: Mycoxadroopin.

A chemistry/science related joke was:
Q: What element is the undertaker?
A: Barium *fist pump* - courtesy of Rosey

And one that I found was amusing: Today is going to be a "rocky" day.

What's the most annoying answer or question you get when you tell people you are in Pharmacy?

The two common answers that people said were: Why didn't you get into medical school? And can you give me some drugs? However, Anne and Tanya were both annoyed to hear from their own doctors: "That's a good job for a woman."

And finally the last question was: If you had to name someone from inside Pharmacy to be the new Dean, who would it be?

So here are the choices that the people surveyed said:

Andrea, Kaye and Brittney liked the old dean, Professor Taddio got one vote from Rosey, Professor Rocchi got two votes, as did Professor Heffer, and Professor Zubin got four votes, but that was only good enough to tie with me (Kenny) as I got four votes as well. (Thanks!).

Well that's the end of what I hope was an interesting and enjoyable year for everyone. Thanks to everyone who contributed to all my articles and for those of you who read them. Thanks to the editors for all there great work (Yuan and Ruby!) and best of luck to everyone on exams.

Cheers.

The Gallery

You can find poetry and artwork elsewhere in The Monograph, as well! Check out pages 16, 22, and 32!

Mediafire

Lyrics by Terry Ip (1T1)
Music composed by: Aerosmith,
"I don't want to miss a thing"

I sit close to you, feeling nauseating.
I was still drunk in the morning,
'cause I was drinking beer since midnight.
And I realized lecture notes aren't numbered,
Every page has a table or figure.
I weighted out your lecture notes, it was exactly 10 pounds!

Don't wanna close my eyes,
I don't wanna fall asleep
in your lecture, sir.
And I don't wanna miss a thing.
'cause even when I read your notes,
the G-protein and binding curves..?
I don't understand.
Thanks for the lecture recording tapes.

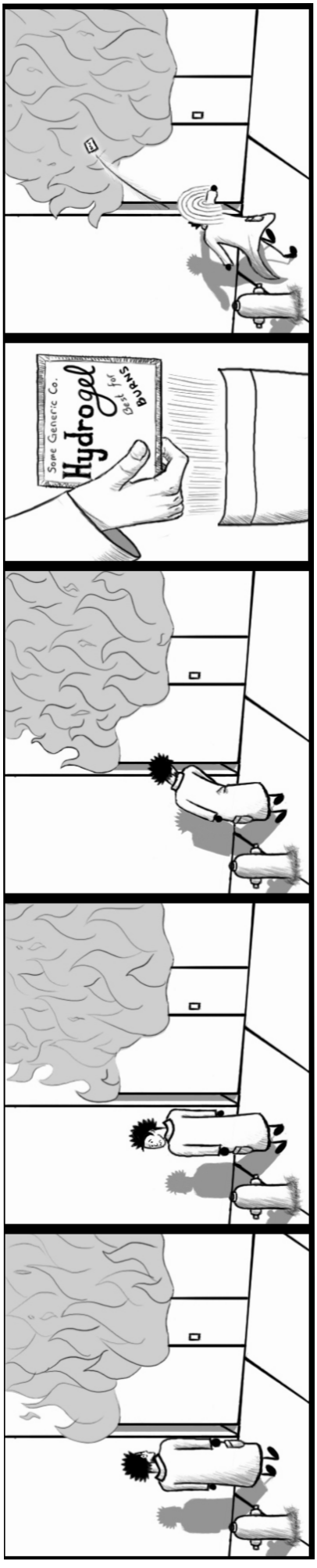
It was 9:15, the room was half empty.
Hear you stutter while you're speaking,
pause in the middle of a sentence.
I could stand up and leave this room forever,
but my laptop was charging, and I was playing Tetris.
(facebook and what-not)

Don't wanna close my eyes,
I don't wanna fall asleep
in your lecture, sir.
And I don't wanna miss a thing.
'cause even when I read your notes,
Ion channel's ligand-gated,
or voltage-gated?
And I don't understand a thing.

I don't wanna miss one word,
it's hard to catch up with your speed.
I just wanna pass this course,
right at 60, just like this.
I tried to catch up with you,
yet you leave me so behind,
and stay confused in this moment,
for the rest of time.

Don't wanna close my eyes,
I don't wanna fall asleep
in your lecture, sir.
And I don't wanna miss a thing.
'cause even when I read you notes,
I feel like I was cracking codes,
oh, so difficult!
I think I still haven't learned a

Terry Ip (1T1)



Pharmasave / far-ma-say-v /

Noun

1: a vibrant group of independently owned community pharmacies across Canada

2: the best of both worlds; an opportunity to be your own boss but never on your own

Pharmasave is unique. Ever since we began operating in 1981, we have subscribed to "member governed" philosophy. This means our Board of Directors are elected from Pharmasave owners so their decisions truly represent the member needs. At the same time, each Pharmasave store still operates independently to serve its individual community.

At its core, this means Pharmasave offers its pharmacy owners the best of two worlds. They have the freedom to run their own pharmacy while being able to take advantage of Pharmasave's proven products and services, such as leading edge professional programs and marketing and merchandising support.

If you want to start your career in a progressive, independently owned practice, come join our Pharmasave team!

For more information go to **www.pharmasave.com** or email us at **info@on.pharmasave.ca**

LIVE WELL WITH PHARMASAVE®

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