



THE MONOGRAPH

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The Monograph

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DISCLAIMER

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

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CORNER

UPS

Hello Pharmies!

Welcome to another year of pharmacy school at the Leslie Dan Faculty of Pharmacy. Some faces are new and some are old but nonetheless, we are glad to have you here.

Every September, you are one step closer to being a pharmacist and this also means there is less time to meet and make new friends in pharmacy. This year, we want to challenge you to find that pharmacy connection and we, the Undergraduate Pharmacy Society (UPS), here at the Faculty are here to help you make these connections.

When we say ‘connections’ we do not mean “an advantage when it comes to job-searching”. Instead, we’re speaking in terms of having fun and hilarious memories with other pharmies to reminisce about ten, twenty, thirty years down the road. To facilitate this, the UPS has already started to develop and plan professional, athletic, social, and academic events and activities.

As part of the central executive council of UPS, we are excited to have new and old faces join us in some of these events and activities. So don’t be shy and get involved!

Angela Cho
President, UPS 2011-2012



Jamie Zao
Vice-President, UPS 2011-2012



THE MONOGRAPH WANTS YOU!

Hey Pharmies!! We encourage any and all submissions, whether they be articles (not necessarily about pharmacy or healthcare), artwork, jokes, or whatever you can think of - if you want your voice heard, get in touch with us!! Shoot us an email at monograph@uoftpharmacy.com to submit!! We want YOU in the Monograph!! Potential advertisers can reach us at monograph@uoftpharmacy.com as well.

Editors Note

Hey all!

Welcome back from your Monograph Editors! And a special welcome to the newest addition to our phamily, the 1T5's! We're so excited to get the Monograph out to you guys this year, and we hope you all like it as much as we do :P. There are tons of great submissions this month, a huge thanks to everyone who submitted! A special thanks to all the Class Reps who worked hard to write their own fabulous pieces and get awesome submissions from their classes :D

This issue has tons of exciting things to look out for. If you’re looking for advice for the school year, make sure you check out the Anticalendar (Pages 8-12). If you’re looking for inspiration, make sure to read the invaluable experiences



our fellow pharmies have had abroad (Pages 24, 25, 30). If you just can't take any more reading and want something mind-numbing, check out the comic relief segment (Page 15), or the cartoons, wordsearch, Sudoku, and club ads throughout the monograph! Lastly, if you want to know who’s representing you, or you just want more friends, be sure to check out the UPS Who’s Who (Pages 4-7).

As editors, we obviously love to edit. So please, if you have any suggestions, comments, or even questions, don’t hesitate to email us! Also, we are always accepting submissions, whether they are stories, artwork, articles, jokes, or even shout-outs. You can email us at monograph@uoftpharmacy.com.

So what are you waiting for? Go ahead and flip the pages! Happy Reading! :)

Sincerely,

Sana Naqvi & Shajia Zia
Monograph Co-Editors 2011-2012

Be Green!

You think the Monograph looks good right now?! Wait until you see it in color! Be sure to check it out online at www.uoftpharmacy.com under the Monograph tab!

Be Green. Lets not kill more trees than we need to.



UPS COUNCIL: WHO'S WHO?

UPS President - Angela YeSeul Cho (1T3)

Description: UPS President-Elect is basically a title given to the incoming president of UPS. This position is often called as P.E. and P.E. learns and does what UPS president have to do such as: meeting the Faculty and external organizations, act as representative of U of T Pharmacy at provincial and national level, organizing certain events throughout the year. Most importantly, P.E. observes the dynamics of UPS council for a smooth transition into taking the lead of council.

If I could be a super villain, I would be Poison Ivy because she has immunity against all bacteria, toxins, and virus--perfect to work in a health care setting without getting sick! You would be so useful during epidemics like SARS.



UPS Vice President - Jamie Zao (1T3)

Description: I am the president's right hand and help her with her duties for most of the year. At other times, I am organizing the Phrosh banquet, the Key and the Awards Night.

If I could be a supervillain, I would be Harley Quinn because she's fast, furious and unstoppable.



Executive Secretary - Ramona Samonis (1T3)

Description: I'm in charge of taking minutes at meetings, keeping track of UPS points and organizing the yearly UPS constitution review.

If I could be a super villain, I would be Cruella De Vil because I would totally kidnap 101 puppies...but not for fur coat making purposes :).



Senior CAPSI Representative - Jen Baker (1T3)

Description: To oversee and plan the running of all CAPSI National events at U of T.

If I could be a super villain, I would be the evil witch from Sleeping Beauty because then I could let all of pharmacy have really long naps.



Junior CAPSI Representative - Amber-lee Carriere (1T5)

Description: CAPSI stands for so many things! Professionalism, learning and advocacy - for pharmacy students, by pharmacy students. Corny, but true! As Toronto Jr I'll be working with Jen Baker (our senior representative) and all of the awesome class CAPSI reps to bring the CAPSI compounding, PIC and OTC competitions, symposium and fundraisers to our campus!

If I could be a super villain, I would be the Borg because they're so good at team work! ;p! Haha



Webmaster - Franky Liu (1T3)

Description: I do web geek things!

If I could be a super villain, I would be TROGDOR because I'd be the BURNINATOR of consummate v's.



Senior External Affairs Director - Dipti Tankala (1T3)

Description: The responsibilities of the External Affairs Directors include soliciting companies for sponsorships which help to pay for publications like the Key and Monograph and also help fund a number of UPS events. In addition, we interview pharmacists for PharmaLife (previously called RxFiles), assist with OPA and CSHP event planning and make sure UPS stays well connected with external organizations!

If I could be a super villain, I would be Dr.Octopus from Spiderman...because he has 8 arms! I could count 8 pill bottles out at once! Talk about speed and efficiency :D



Junior External Affairs Director - Pearl Le (1T4)

Description: Help out with sponsorship for monograph and yearbook and community outreach like CIBC run for the cure.

If I could be a super villain, I would be "the Situation" from the Jersey Shore because he is always starting drama and it is just so darn entertaining.



Senior Finance Officer - David Laughren (1T3)

Description: We write cheques, make deposits, balance the budget, and make sure that everyone spends responsibly.

If I could be a super villain I would be Med Chem so I could give you all nightmares!



Junior Financial Officer - Yongjun (George) Wang (1T3)

Description: Looking after YOUR money. :)

If I could be a super villain, I would be the New Goblin in Spider-Man 3, because he is powerful, rich, and most importantly, he has a sense of conscience.



Pharmakon Co-Editor - Claudia Ng (1T3)

Description: Ensuring the yearbook holds precious memories which fellow pharmies can relive for years to come.

If I could be a super villain, I would be a phase shifter because, I will be able to turn into anything I want. I can become a bird when I feel like flying. I can evade the authorities - no one will ever catch me. I only require a touch of that particular being, and I just copy it. Of course, it will still be my mind controlling my body. I can have different unimaginable talents, which would potentially make me the most powerful living creature.



Pharmakon Editor - Lisa Mai (1T3)

Description: Immortalizing all of your great pharmacy moments on film and fusing them into the most priceless yearbook that you ever can own!

If I could be a super villain, I would be Felonious Gru because who wouldn't want a legion of adorable minions?



Social Director - Amy Marie Dresser (1T4)

Description: As Social Director I'm responsible for making sure Pharmacy students have a good time this year. I plan the major social events like Boat Cruise and Semi Formal, but also lots of other small-scale gatherings.

If I could be a super villain, I would be Cruella DeVille so that I could be a huge baller walking around in a fur coat all day (but not a real fur coat - that's cruel) and have two hench men at my beck and call.



Events Co-Director - Jacqui Herbert (1T4)

Description: As one of your Events Directors, I will be working with Lindsay to coordinate and keep you informed about faculty-wide events, such as Pharmacy Phollies (our annual talent show) and Pharmacy Awareness Week, among others.

If I could be a super villain, I would be The Wicked Witch of the West, because then I'd have an army of badass flying monkey minions to do all the work for me.



Monograph Co-Editor - Sana Naqvi (1T4)

Description: As your Monograph editors, we are here to make sure your voice is heard! Whether you have an opinion about pharmacy, healthcare, or ANYTHING, we want to hear from you! We can be reached at monograph@uoftpharmacy.com.

If I could be a super villain, I would be Joker from Batman just because he's insane!



Female Athletic Representative - Faye Peralta (1T3)

Description: In short, I help organize and co-ordinate women's intramural sports as well as faculty wide athletic events along with my partners in crime, Irene and Davin.

If I could be a super villain, I would be Bellatrix Lestrange because she is one crazy bi... witch.



Co-Ed Athletics Representative - Irene Lee (1T3)

Description: Along with Faye and Davin, I help organize and plan all things sports related for the coming school year.

If I could be a super villain, I would be cat woman because who doesn't like to wear a suit made of PVC?? Plus, she carries a whip ;)



Male Athletics Representative - Davin Shikaze (1T4)

Description: I help plan exciting and fun sporting events throughout the year!

If I could be a super villain, I would be Shredder because he could shred things.



1T2 Class President - Zao Zhu (1T2)

Description: Making everyone's life easier.

If I could be a super villain, I would be Loki because trouble and mischief make me look forward to each day.



1T2 Class Vice President - William Khong (1T2)

Description: Support class council activities, get the money for 1T2's and assume power as President when President is not around :).

If I could be a super villain, I would be Health Minister Deb Matthews because its time to cut pharmacist pay cheques to force the profession to innovate (I'm suppose to be evil, right?).



1T3 Class President - Calvin Ng (1T3)

Description: Lead class council and making sure everything runs smoothly with regards to managing class resources, running fundraisers and events. Take part in Dean meetings to relay class concerns and ensure the needs of the class are met. Also act as class representative for external organizations, faculty and UPS.

If I could be a super villain, I would be Mister Mxyzptlk because then I'd have a last name void of vowels just to see what that's like (hmm, wait a sec)."



1T3 Class Vice-President - Shanshan Zhu (1T3)

Description: Do whatever I can to fundraise.

If I could be a super villain, I would be Captain Hook because he's such a boss.



1T4 Class President - Ophelia Chik (1T4)

Description: I represent my class and ensure our council is doing a good job of making the school year a success =)

If I could be a super villain, I would be Magneto because the ability to move and manipulate metal would make my life pretty awesome and hassle-free (plus he has a pretty cool/weird-looking helmet!).



1T4 Class Vice-President - Kevin D.N. Chow (1T4)

Description: Do what I do.

If I could be a super villain, I would be Matthew Chow.

THE ANTI - CALENDARS

FIRST YEAR ANTICALENDAR

By Henry Leung, 1T4 Monograph Rep

Dear 1T5s,

It has come to my attention that I am obligated to provide an “Anticalendar” for you guys. Unfortunately, I lack the super powers that I often boast of and describing courses that I have never taken is definitely something I cannot do. But I must and so I shall.

To continue with my lack of coherence, I request your forbearance and your imagination. Suppose I invented a telephone that enabled conversation with another “version” of me in an alternate universe. And that one day, I decided to call myself up because I had nothing better to do. Now suppose I chatted with myself and discovered that in the alternate universe I was in your shoes, 1T5s, and actually took some of your courses! What a convenient coincidence, right? Lastly, if I didn’t hang up on myself already, suppose that I was absolutely dying to ask my alternate self about “my” experience taking those courses. Here is how my alternate self’s description of some of your courses may have gone...

Regards,
Henry

PHM145: Human Histology and Anatomy

If I were a betting man, I’d bet this course is similar to our “Human Anatomy and Histology” course. And I loved that course! Armed with an absolutely fantastic professor (Professor Ballyk), the course provides a highly structured outline loaded with interesting pictures, live in-class drawings, frequent discussions (sometimes off-topic but always entertaining) and, to me, invaluable and interesting information. I loved the progression of the course material from week to week and found the segregation of material into gross anatomy and organ systems well organized and intuitive. Professor Ballyk is already 66% “B-A-L-L-E-R” and it was no doubt, hands waving wildly in the air, smiling from ear-to-ear my favourite course of the year.

PHM143: Pathobiology and Pathology

Back in the day, PHM143 was known as Microbiology of Infectious Diseases and it was probably the most interesting course I’ve ever had in my semi-short university journey. Interested in STDs? This is your course. Interested in videos of worm copulation? You get that here (I’m not kidding)! Interested in scar-your-life pictures of infectious diseases and conditions? Check and check. Similar to anatomy, Microbiology organized its information into clinically applicable sub-topics that, you all will soon find, is extremely applicable in hospital settings and community practice. It may seem like a lot of information at first and intimidate you, but its’ concisely presented class slides will definitely make it easier for you. Professor Crandall is definitely a very friendly and interesting fellow and his “potty” humour definitely tickles most students in an educational and interactive way.

PHM110/PHM114: Health Systems I AND Social and Behavioural Health

Since I’ve been speaking in superlatives, I guess it’s only fair that I balance our mutual excitement about the aforementioned courses with this one. Yes, this is passive-aggressiveness. These two courses sound a lot like our Communications course and our Introduction to the Profession of Pharmacy course. While the communications course was rather light in workload and fairly interesting in terms of course material and assessments, it was highly introductory with regards to mimicking patient interaction. It was heavy on the theory of patient interactions (how to talk to senior adults, how to provide empathy statements etc.) but without actual clinical practice, I felt the course fell short just a little. To me, patient interaction deserves a much more social and practical application type of teaching. You do not necessarily appreciate the humanity of neither patients nor how spontaneous normal conversations can go if you learn about that stuff from a book. If you go strictly by theory, you’ll eventually catch yourself reciting empathy statements to patients, blurting out word-for-word introductions for your patient interaction without really understanding how to empathize or how to welcome a patient. However, I do believe that the new curriculum accommodates for that with increased/earlier exposure to clinical settings.

Also, the assessment for the Communications course included “simulated” patient interactions, so there is definitely some practical application. But with just 3-4 of these simulations, I definitely prefer the new curriculum’s increased exposure to clinical settings.

Next, we have our Introduction to the Profession of Pharmacy course. Where do I begin? Well, if you are gung-ho for reciting things accurately, this course will definitely float your metaphorical boat. When you are expected to read well over 20 readings and regurgitate direct passages/lists/definitions from them in a cumulative exam, it definitely felt stressful and at times unnecessary. The saving grace of this course was the ethics session. We were given cases with ethical dilemmas and were asked to learn about the fundamental theories behind ethics ourselves. Then, we applied what we learned to the dilemma, what an ingenious way of making us learn! Sitting through those presentations and seeing the different ways of approaching an ethical dilemma, from different theories, made learning the material much more PRACTICAL and subsequently interesting. Lastly, if you ever feel bad about any mark you may have gotten in your academic journey, just ask me what my Intro to Prof Pharmacy mark is :(...

PHM101/PHM105: MTM related stuff

This is definitely a lazy generalization, but do you realize how expensive an inter-universe phone plan is? MTM is the shiny new way of saying Professional Practice Lab, with some improvements and additions. From my interpretation from first year, this was the course that tied emulated pharmacy practice. It included both patient interaction and the technical skills training necessary in practice. In a way, it put everything we learned in class (be it from Communications or from our Professional Practice class that taught a lot about technical dispensing and the

duties of pharmacists) into a 2-3 hour trial run. It was definitely a fun experience. For someone with limited exposure and experience with pharmacy practice at the time, it was definitely interactive and interesting. The TAs are generally incredible and are great mentors to newcomers to the profession. Just keep in mind that bad grades/assessments are given to students so they learn from their mistakes. It’s a good thing to screw up sometimes! The lab coordinators are also kind and knowledgeable, and the Professors are VERY engaging, interesting and great didactic educators. I think for a lot of my peers as well as you guys, these courses will be some of your favourites in first year.

In closing, the rest of my alternate self’s courses include PSL205 (similar to 2nd year Physiology), PHM142 (similar to 2nd year Biochemistry), PHM140 (I’m guessing it’s similar to Pharmacology in 2nd and 3rd year), PHM144 (similar to Pharmacokinetics in 3rd year) and Pharmaceutics (similar to 2nd and 3rd year pharmaceutics). So feel free to continue reading into the upper year Anticalendars to get a sniff of what your incoming year holds.

PS: I didn’t actually invent a magical phone. I barely have a cell phone, let alone a magical one. I just read the course outlines on the Faculty site and guessed what each new curriculum course sounded like. I apologize for deceiving you 1T5s :(Hope this helps and best of luck!

SECOND YEAR ANTICALENDAR

By Tara Farquharson (1T3 Monograph Rep) and George Zahalan (1T3 Faculty Rep)

Hey 1T4s, welcome back! I hope your batteries are recharged and you’re geared up to go, because you’re in for a challenging year. If you try to keep yourself organized and you prioritize your work flow you’ll find the year much more manageable. I hope our summaries are helpful and wish you the best of luck!

PHM225 : Biochemistry I Professors Henderson, Hampson and Wells

This course covers general biochemical concepts like lipids, proteins, carbohydrates etc, as well as some enzyme-substrate kinetics, and finally biotechnology. If you’re not excited about this course now, there must be something wrong with you (ahhh-heh *snork*). The textbook for Professor Hampton’s section of this course is not very helpful, studying from the notes is best, but Professor Henderson likes to test with material from notes and some textbook material. This course will likely be a general review for most students.

PHM227: Health Systems in Society Professor Marie Rocchi

This course looks at the Ontario health care system from the perspective of a healthcare practitioner. Most lectures are presented by guest lecturers, similar to PHM120, on a variety of topics. There is a fair amount of reading involved, some interesting, some less so. The course is made up of a midterm, exam, and two case study assignments. For the case studies you are asked to read a lengthy document

(the topics are usually quite interesting), and in groups you answer questions from the perspective of one of the stakeholders. Be careful with your answers on midterms and finals, especially with respect to definitions. Put down as much about that word as you can remember, be sure to give examples and explain like you never have before.

PHM228: Professional Practice II Professor Vinita Aurora

This class focuses on compounding, pharmaceutical calculations and jurisprudence. The information is valuable and the prof is engaging and light-hearted but the subject matter is dry. The calculations portion of this course is mostly self-taught and is the only material presented on the midterm. I would advise that you don’t leave this until the last minute, the material is not difficult, but it can be challenging to figure out how some of the answers in the book came to be, so if you’re in a rush it will be frustrating. The exam will test knowledge from the entire course, which is mostly technical pharmacy practice, focus on the lecture slides when studying for the final.

PHM229 : Professional Practice Laboratory Professor Marie Rocchi

This course is a once a week lab, which includes technical, communications, and compounding sections. The technical section is similar to first year; two written, one verbal (or patient transfer) prescriptions, checking filled prescriptions for errors and interruptions. Interruptions involve you calling the TA who will speak to you as a physician or patient with a question about a drug (usually cost or limited use codes). You are given 15-20 minutes to come up with an answer. There is also a written DI question which will be due at the beginning of the next lab. The focus in technical sessions tends to be on narcotic dispensing laws.

The communication section is very helpful for exposing you to some commonly used medications. Each week will have drugs from a specific category (e.g. gastrointestinal, cardiac or psychiatric disorders). Once you get into the groove of counselling it becomes very easy, though at times it can feel robotic. Extra credit is given for nonpharm therapies and extra information (i.e. referring stressed or depressed patients to organizations which provide group counselling). The compounding section of the course is a lot of fun, you get a chance to make some creams and suspensions and learn some valuable techniques. Watch out for the dreaded balances though. For whatever reason, using digital balances is not acceptable, so you must learn to use Archimedes-inspired balances. This involves a lot of finger crossing and swearing under your breath. If you’re able to master this balance, you won’t have any other issues.

PSL200 : Human Physiology Professors Michelle French etc

Compared to the phonebook sized units in medchem, the countless hours of pharmaceutics lectures and continuous PHM224 labs that seem to never end, physio is a relatively light course. A 1.0 credit presents plenty of opportunity to do well in the course without investing much time. There are three term tests and they count the best two out of three. Those make up 60 % of your course mark. It is advisable

to study well for the first two because they tend to be at a time in the schedule when there are not many other term tests around. The third test tends to be at a busy time in the year and the material is not as intuitive as the material covered in the first two. The final is worth 40 % and requires a lot of memorization. Since the final exam schedule is quite hectic, it is good to budget your time and to have done well on the term tests to give you a cushion going into the final. Physio Ex exercises take a little bit of time to do but they are worth concentrating for because a fair amount of material is tested on them and they help consolidate your understanding for the lecture material anyway.

Contributed by Andrew Mikhael

PHM220: Self Care Ia Professor Debra Sibbald

This is one of the most useful courses you will take in second year. This course uses “panels” (~20 students are chosen to work through a case, while the rest of the class observes) to teach you the therapeutic thought process, as well as triaging patients and treating conditions OTC. The tests for this course are multiple choice and can be very tricky, sometimes with multiple answers seeming valid. The professor does not always agree with some of the material in Patient Self-Care so you should be careful to take good notes! I also recommend that you download your lecture slides (posted AFTER lectures only) well before your midterm and exam. The website for this course WILL crash around midterms due to volume of traffic, and you may be unable to retrieve them.

PHM222: Medicinal Chemistry Professors Lakshmi Kotra, Sandy Pang, Jack Utrecht, Jim Wells, Peter Pennefather, Carolyn Cummins, Stephane Angers, Brian Baigrie

This year long cumulative monster has 8 different profs and 8 vastly different topics. The best advice I can give you are as follows: Kotra- slides aren't descriptive, take good notes. Pang – notes are good, LOTS of memorization, Wells – Practice all the past-test questions you can find, Utrecht – go to his tutorial class , Pennefather – acquire alternate methods of education, Cummins – likes to test on details not discussed at length, Angers –straightforward section but pretty detailed, Baigrie – (3 lectures) his notes and a scan of his ‘additional’ readings will suffice for answering his questions. As much as we complain about this course, it is manageable if you stay on top of the material. Once you get a little bit behind, it's very difficult to get caught up. It's also a good idea with this course to step back from the material every so often and take a look at the weighting of each section, don't waste time learning things that don't carry much weight.

PHM224: Pharmaceutics Professors Wu, Abu-Ghazalah, Chalikian, Dubins, Reilly

This class is an amalgamation of several different professors' specialties and areas of research that make up “pharmaceutics”. Its goal is to teach you the biopharmaceutical side of different dosage forms (oral, nasal, ocular, etc.). The course is worth 2 full year credits and the class is broken down into a midterm, exam and many assignments and quizzes which add up in the long

run. Dr. Abu-Ghazalah's section is first, he is pretty-straight forward but the first time you have him he can be a bit confusing. His second section is much clearer and his section of the midterm is similar to past years. Dr. Wu can be unclear, BUT she is an extremely kind professor and takes time to answer students' questions. Dr. Dubins is a fun-loving guy but don't be fooled, his portion of both exams are definitely the hardest when compared to other professors. Dr. Chalikian's part was many students' favourite because he prints his notes and reads them. He also has a tendency to reuse exam questions, so you may consider looking at some past exams. The last professor is Dr. Reilly whose material is dense and dry. His portion of the final exam in April is even less fun because his multiple choice questions are undoubtedly the most difficult many students ever encounter.

This course also includes a lab section which is pretty-time consuming but, hey, that's second year! Read up on the lab manual so you can do well on the quizzes.

PHM233: Early Hospital Experience

This is an elective course which involves visiting institution for a total of 14 hours broken up over various days. During your visits to these institutions you get a chance to see what hospital pharmacy is like. I would highly recommend taking this course. The pharmacists who volunteer to take students are highly motivated and engaging, and do their best to get you involved with pharmacy practice. There is a checklist of activities involved in the course manual which includes discussing, observing and undertaking various activities such as order entry, drug distribution process, medication history taking/reconciliation, discharge counselling, drug information questions and resources. The credit for this course is pass/fail, and is determined by a mid and end rotation reflection. My understanding is that it's very difficult to fail.

PHM234: Early Practice Experience

This course takes place over the summer between 2nd and 3rd year. Each student will find or be given a placement (which may be paid or unpaid) where they will explore pharmacy practice for an equivalent of one month full time. Various activities must be fulfilled including Best Possible Medication Histories or Medication reconciliations, drug information questions, prescription entering and filling, patient education, and patient self care (in community) and a presentation on patient safety. These assignments will then be uploaded on the inherently complicated “Evalue” website. If you can figure out Evalue, the rest of the course will be straightforward. Your experience in EPE tends to depend on your placement. Do your best to find an inspiring preceptor that will take the time to teach you, rather than use you as free labour.

PHM223 : Methods of Pharmaceutical Analysis Professor Christine Allen

This course is an overview of the lab techniques associated with the health sciences (ex: UV-VIS, IR, NMR, TLC, etc.). It's an Analytical Chemistry course with a focus on

analyzing drugs and all things ‘pharmaceutical’. The material itself is dry, however Dr. Allen does a good job of making it as entertaining as she can. Other bonuses with this course include: it's only one hour a week; the course evaluation is broken down into a final exam, an easy tutorial assignment and an even easier lab report that tells you what you need to write to get a good grade. It's easy to get a decent grade in the course (the average is usually an A-). Make sure to attend the lab and tutorial sessions because each of the lab and tutorial reports is 20% each. For the lab report, follow the rubric provided to a tee and you will do very well. For the tutorial assignment instructions are vague but grades seem to correlate with effort. For the final exam, it's pretty straightforward BUT, it is a pretty long exam (26 pages) so use your time wisely. Dr. Allen does HINT a lot at what kinds of questions she will ask on the final exam throughout the semester. If you take notes of those questions she hints at, you will not be surprised by what is on the final exam.

PHM226: Metabolic Biochemistry Professors Henderson and O'Brien

This class is an eclectic mix of biochemistry topics that are very relevant to pharmacy. By far, the most important aspect of this course is the ‘biochemistry of diseases’ portion, where you begin to understand about disease states and (biochemically) how/why they occur. This sets you up for pathophysiology in third year. Dr. Henderson focuses on biochemical cycles – he absolutely loves cycles so for his midterm make sure you can re-draw them. His midterm consists of 50 short-answer questions and they are very straight-forward but require very detailed answers, so know your stuff. Pay attention to what Dr. Henderson says is “important” in class because he will usually ask it. For Dr. O'Brien, his in-class component requires a bit less attention and note-taking because the final exam consists of randomly picking questions which he gives you ahead of time. Be cautious with his advice that you'll be fine for the final knowing his answers, last year's exam (1T3's class) contained questions which were quite different from those we were given ahead of time. However, previous years stated that their questions were exactly the same. The professors offer a bonus presentation during the tutorial sessions where students can get up to a bonus 4%. Many students decide to do these presentations after the midterm.

PHM231: Pharmacology I Professor Erclik

This one of the most relevant courses in second year. Dr. Erclik does a good job in presenting the topics from a systems perspective. In addition, her teaching style is organized and clear, making the topics easier to learn. She does an even greater job explaining the extra information you need to understand the slides better. She also gives hints for the midterm and final exam. Don't be afraid to ask questions, as Dr. Erclik is sometimes unclear on topics that are unfamiliar to her. You should also attend her review sessions because she goes over complicated topics, answers students' questions and gives more hints. The last bit of advice is to make up drug summary charts/tables/notes. Many students did this and found it very helpful in serving as a reference when studying her mountain of notes/slides. When you're strapped for time in second year, you're going

to regret not summarizing her notes.

THIRD YEAR ANTICALENDAR

By Sidika Dhalla (1T2 Monograph Rep)

Third year is a special year. It will be the cause of those white hairs that you will slowly start discovering. It will also be the year during which you both question your bright idea to become a pharmacist and then confirm that you did indeed make the right choice. To start, let me say that everything you've heard about third year is true, and so here's my advice to those of you who will be taking this set of courses for the 2nd last time ever! Good luck – you'll pull through!

PHM320 – Pharmaceutical Care Ib

This class covers more self care topics in panel form just like 2nd year and you probably already have the book. It will basically be a semester long panic session about Professor Sibbald's OSCE. Preparing for it will nullify any vacation plans you have made for reading week. It will be 2 role playing situations on 2 topics from Professor Sibbald's 2nd and 3rd year courses – ***most likely*** one from 2nd year and one from 3rd year. Our topics last year were infant colic, seborrhoea, traveller's diarrhea and swimmer's ear. Professor Sibbald talks about the OSCE A LOT. Even if you vow to yourself now that you will be immune to her “scare tactics,” you will be consumed. Beware + prepare!! The day of the OSCE seems like the proceedings prior to being sent to your own execution. You'll worry that you failed – but you didn't.

PHM321 – Pharmaceutical Care II

This is the course that will change your life. This is the course that will be your answer when people ask you which course has been the biggest challenge for you. This is the course where you will learn a lot of what you need to know for the rest of your life. First I will talk about the tests because they are different than anything you've written before. Be able to recite the therapeutic thought process in your sleep – your answers must follow this format, even if you think you sound silly repeating things – there is a method to the madness. Every step of the process is worth something so don't skip things. The learning in the course is case based – you're given a case, expected to know everything about it, have made as good a decision about the treatment as you possibly can and come to class to be able to defend that plan. In theory, it is a fantastic way of learning, but then life happens. My advice is to be a solid team player, make sure people can rely on you, but make sure that you do some reading up on every topic every week because these exams require much advanced studying. Take good notes in class – some of these speakers are fantastic role models and leaders in their areas and will provide really valuable pearls. I cannot stress enough that regardless of whether you know all the material inside and out ... if you don't write the cases on the tests in the therapeutic thought process, you could fail – don't let that happen!! There are three exams, each with two long cases to be answered using the TTP, and 25ish multiple choice questions. The final exam has an oral component where you have to answer direct questions about three cases and then also write the

multiple choice section.

PHM322 – Pharmacology/Medicinal Chemistry Tutorial

If you're Professor Utrecht's biggest fan, you'll love this course. The idea is to apply what we learned in med chem and pharmacology to answer clinical questions – sounds like a good deal. Recycling is great for the environment, but Professor Utrecht will be slightly more impressed with you if you talk to him rather than read to him. There are 3 exams each worth 16%, participation when your group is called up is 10% and the final is worth the rest. The final is cumulative so try to retain knowledge a bit longer than you're used to. Take very good notes on Utrecht's words and his words only – he has a lot of wisdom.

PHM323 – Applications of Pharmaceutical Analysis

This is a half year course. One assignment based on one tutorial worth 20%. One lab report based on one lab worth 20%. One multiple choice final exam worth 60% that will be much harder than you anticipate. Countless details to memorize about things I unfortunately don't remember.

PHM324 – Pharmacokinetics

This is a full year course; there are 2 exams, December and April. The first part of the course is taught by Professor Walker – who has a lot of graphs on a lot of slides. The material is not overly difficult and once you get it you will see it comes down to some formulae – it may take you a while to get there. Past exams have never been more useful than for this December exam. The second part of the course is a bit more difficult – but most people have already passed the course going into the April exam.

PHM325 – Introductory Toxicology

Wells 2.0 in all his glory. There are 2 exams and a final in this class and you take it along with artsci's interested in pharmacology. There are 3 diagrams you will learn early on. Be able to recite them in your sleep – it may be a good bedtime routine to go through the therapeutic thought process and then these diagrams every night – probably equally efficacious to diphenhydramine. Pay close attention to what Wells tells you to pay close attention to. But then again, you really never know what he'll throw at you. It's one of those undergrad courses you thought you left behind when you got into pharmacy. It focuses on how side effects happen and many times how they figured them out using mice.

PHM326 – Pharmacy Practice Management

Professor Bill Wilson – AKA Bilson – is awesome. He is a great mentor, he has a lot of advice about life, pharmacy and everything. Take him up on his offer to look through your resume! And know the lists that populate his slides. You have to write a cover letter and 2 written exams in the course. Very edutaining class.

PHM328 – Professional Practice III

This course consists of seemingly random, very important topics, that don't quite fit into any other class! Half the course will focus on critical appraisal which might be difficult to

follow for a lot of you, but trust me, it is probably one of the most important skills to have for life as a pharmacist because when you get out there, you'll realize how much you don't know. And you can't look it up on Wikipedia. There is some jurisprudence. Drug interactions and adverse drug reactions are also taught and are also very important things to know. Exams are mixed multiple choice and short answer. There are also eight Language of Medicine chapters for self study tested in multiple choice questions.

PHM329 - Professional Practice III Laboratory

If you're not dumbstruck when you start third year PPLs... you're probably a 1T2 that's repeating the year. There is a huge difference in expectations between 2nd and 3rd year PPLs. Instead of just two written prescriptions, you're given a patient case which you have to work up. You're given signs and symptoms, a diagnosis if you're lucky, lab values, past medical history and two written prescriptions written for this patient's condition. You need to state the DTPs (why the medications prescribed are wrong), state your recommendation (using your brain, Therapeutic Choices or any electronic or print resources you felt like bringing with you) and create a therapeutic plan for this patient. You'll have to process both of these prescriptions as well as take a verbal prescription for a narcotic/controlled drug. (Take the narc chart with you to the phone and catch the mistake right away and you'll get Honours :)) Topics for the patient cases are generally topics that you have already learned in Therapeutics (or will learn in the near future) so bringing your brain as your only resource is probably not the best idea.

Ok now for the Patient Care Communication part of things. Once again, the first PCC will leave you wide eyed and saying "they didn't teach us that, how do they expect us to know it?" You're given a list of possible topics for each session, again they will be things you've covered or things you haven't, it's quite unpredictable. No topic, no drugs you prepped the night before, no cue cards – what do you do? Be a pharmacist. Gather all the information you need from the patient and don't forget to be nice to them. Use your resources. RxFiles and/or Therapeutic Choices are good books to bring with you. Just think about all the times a patient will come to you in the future with a problem that you were taught how to solve 15 years ago in pharmacy school but you don't remember. That's why they throw things at you that you don't know – they want to see how effectively you can use your resources and how good of a pharmacist you can be in 10 minutes or less.

PHM330Y1 - Clinical Biochemistry/Pathophysiology/ Pathology

I'm having trouble coming up with advice for this course. Some lectures are great, some not so great. Most material is difficult, some not. There is very little flow to this course. It's just a string of diseases that you learn. You'll be glad to know that in the new curriculum, it will fit in much better. It will also be integrated with pharmacology and therapeutics so you only have to learn psychiatric diseases once – and not 3 times like you will likely have to this year. Having said all that, it is very important information and is tested with 3 multiple choice exams.

PHM331H1 – Pharmacology II

Fire alarms are evil.

TOP FIVE THINGS 1T3s LEARNED IN EPE

By Tara Farquharson (1T3 Monograph Rep)

1. When you tell a patient their prescription will be ready in about 10 minutes patients hear, "It'll be ready in exactly 30 seconds."
2. Documentation of patient interactions is a valuable skill which is best developed by doing it wrong several times, and having your flaws pointed out.
3. August is amnesia month. Keep in mind most ODB patients won't remember they have a \$100 deductible. Do remind them before filling or else they'll be mighty surprised when they come back.
4. Know how to use your resources. If you don't know the answer to something, you should know how to look it up efficiently.
5. Patient counselling is an art.



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PHARMACY ATHLETICS CORNER

Welcome back 1T2's, 1T3's, 1T4's and congratulations to the 1T5's

Summer fun has ended, but it doesn't mean that school can't be fun as well! In fact, we've got pharmacy intramurals coming straight at you faster than you can say 'dodgeball'. When school's getting a little dry and you need some excitement, we welcome you to participate in all the intramural teams we have in store. If you're looking to show off your skills at an advanced level, check out what varsity teams U of T has to offer at the Athletics Centre.

WHY should I even bother to do sports?? Pharmacy athletics is a great way to keep fit and stay active. As well, it's an excellent networking opportunity to meet students from the upper years and from other faculties! With a wide variety of different sports to choose from for both men and women, such as volleyball, basketball, flag football, ultimate frisbee and soccer, we are confident there is an activity suited to your interests.

During the year, we host mini-sports tournaments within the faculty which count towards the Robax Platinum Cup. So, if intramural teams aren't your thing, be sure to come out to the Robax Platinum Challenges to support your year and fellow classmates! **First event up: Robax Platinum Challenge #1 Tug of War.** What's that all about?? It's an exciting day to prove your strength and show your dominance as a class as you pull the rope towards VICTORY!! A class will be declared the winner of one of several Robax Challenges. The more you win the closer your class comes to taking home the trophy (see awards cabinet on the first floor atrium). And remember, participation counts. So grab all your friends and come out and pull some rope!

Here's another bonus for being a part of pharmacy athletics: your participation will earn you UPS POINTS; you can get awards for Female or Male Athlete of the Month as well as MVP in each respective sport! Sounds pretty awesome, huh? So come on out, keep your eyes and ears open for our intramural sign-up sheets in the student lounge and class announcements for events coming your way!

We encourage you to come out and participate in some athletic events this year, so we hope to see everyone on the field/court/ice! Let's play hard and have fun!

Faye Peralta
(Female UPS Athletics Rep)

Irene Lee
(Co-Ed UPS Athletics Rep)

Davin Shikaze
(Male UPS Athletics Rep)

Contact us at: athletics@uoftpharmacy.com



TORONTO: PHARMACY DOORS OPEN 2012

By: Molly Marcellus (1T4)

Twenty-eight pharmacy students from all over the world gathered in Tokyo, Japan during reading week of this past year. These students got the chance to simultaneously explore Japan and learn about international pharmacy practice. During this past summer, I have been a part of a committee working on bringing this same experience to Toronto. We have been planning diligently all summer so that Toronto will be able to host 24 international pharmacy students next summer. This tour will take place from May 13 to May 18 2012. These students will explore the city of Toronto (from Harbour-front, to High Park, to the ROM) our international guests will get the full Toronto experience. The pharmacy related excursions we are planning range from hospital site visits and community site visits, to a family health team visit. And of course, we will have to give them a tour of our beautiful campus and pharmacy building.

In addition to 24 inspiring and unique international pharmacy students, we are going to need 12 group leaders. These leaders will help show them the ropes while also having a great time! The weeklong tour will cost \$40.00 for leaders : this will include all activities and meals for the week. The applications will be posted at a later date.

I encourage everyone to check out our website: <http://doorsopen.uoftpharmacy.com>. Feel free to contact us at : doorsopen@uoftpharmacy.com

ADVICE AND COMIC RELIEF

COURTESY OF 1T2S

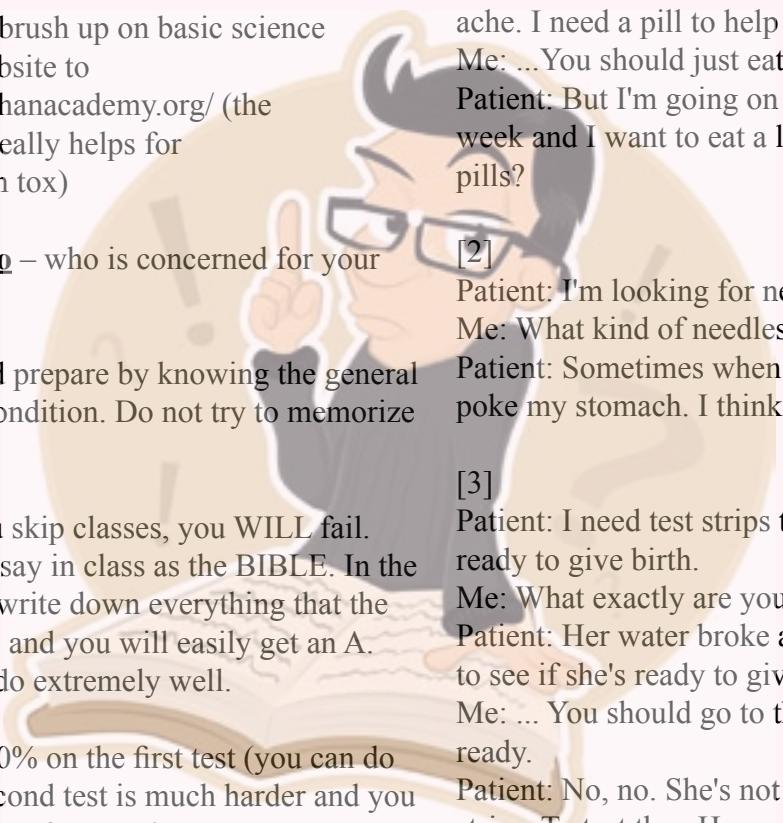
By Sidika Dhalla (1T2 Monograph Rep)

Dear 1T3,
Here are some bits and pieces of advice from 1T2 as you embark on your tumultuous journey through 3rd year:

A Tip from Dipti Tankala

YOUTUBE is a great resource to use for PPL Prep - you can find instructive videos to learn how to use inhalers, insulin pens etc.

Also, if you need to brush up on basic science concepts, a great website to visit is <http://www.khanacademy.org/> (the immunology video really helps for one of the sections in tox)



From Billy Suwanto – who is concerned for your academic sanity

For OSCE, relax and prepare by knowing the general treatment for each condition. Do not try to memorize everything.

Therapeutics...If you skip classes, you WILL fail. Treat whatever they say in class as the BIBLE. In the tests and exam, just write down everything that the lecturers say in class and you will easily get an A. Listen and you will do extremely well.

Kinetics! Do Get 100% on the first test (you can do this), because the second test is much harder and you have no past test to use for practice.

Toxicology - Prof. Wells will mention which slides or part of the notes that you need to memorize. MEMORIZE them. He will also specify which part to ignore. IGNORE them. However, if he does not specify to memorize or ignore, MEMORIZE those parts because it will come up in the tests or exam. Also, write down every single thing he said about those parts. He will ask them in the tests.

Patho: Get the GENERAL idea then memorize the slides. Otherwise, those details will not stick.

From Nancy Tieu – who is concerned for your actual sanity
Have a laugh!

[1]
Patient: I'm looking for digestion pills.
Me: ...Do you mean for heartburn or stomach upset?
Patient: Sometimes when I eat a lot I get a stomach ache. I need a pill to help me digest better.
Me: ...You should just eat smaller portions.
Patient: But I'm going on an all-inclusive trip next week and I want to eat a lot. Do you have digestion pills?

[2]
Patient: I'm looking for needles.
Me: What kind of needles?
Patient: Sometimes when I get full I use the needle to poke my stomach. I think it's called acupuncture.

[3]
Patient: I need test strips to see when my wife is ready to give birth.
Me: What exactly are you testing?
Patient: Her water broke and I need to test the water to see if she's ready to give birth.
Me: ... You should go to the hospital ASAP. She's ready.
Patient: No, no. She's not hurting yet. I need test strips. To test the pH.
You know what that is? *Speaks slowly* p....H....

Good luck to you,
From 1T2!



By Paul Moyer (IT3)

- Dear Pharmacy,
- We have an important job to do on October 6th, we need to vote! Let's be clear, I'm not here to support one party over the others but I do want to see every eligible voter cast a ballot. Most of us fall in the 18-25 year age bracket which is notorious for not voting. I want that to change this time around.
- For those living under a rock, here's a quick update. This spring and summer we saw uprisings, rebellions and a civil war as people demanded change in the way they are governed. We are fortunate to have our free, open elections. If we have any sympathy for these folks, let's show our personal commitment to responsible governance by voting ourselves. We are the gold standard of democracy in their eyes, so let's show that we are worth following. We also heard of Jack Layton's passing a few weeks ago and there was quite the outpouring of support, especially here in Toronto. I never met the man, but I'll bet he would have rather seen us vote for a different party than not vote at all. If you truly respected the man's work then you should care enough about elections to cast a ballot.
- I've heard some say their individual vote isn't worth it. I say that's baloney! Yes, the majority rules, that's how elections work. If you are the only one voting for the Purple Pyjama Pirate Party they won't win a majority government. However, every party pays attention to whether they got more or less support than in previous years and they respond accordingly. Moreover, if we all accept this mindset and refrain from voting we end up with people that didn't vote complaining that the party they like didn't win. If all

the people that support a particular party don't vote, they can't be surprised when another party wins.

Whether in power or not, political parties aim to earn future votes by pleasing the majority. If we young'uns don't vote, then the older generations are a bigger portion of the majority vote. They will have more influence over who wins this round and they will have the attention of politicians that want their support. This new government will make decisions that please these voters rather than our generation. If this concerns you, then do something about it!

Make no mistake - our votes can make a difference. Every politician knows this, but they are banking on us being too lazy to get to a polling station while 80-year olds in wheelchairs race to the ballot boxes. Let's show our leaders that we care about the future of our province. To learn more, check out this Elections Ontario web page: <http://www.wemakevotingeasy.ca/en/home.aspx> You can find out about the candidates in your riding & how to cast your vote. NB: If you are a Canadian citizen & Ontario resident from out of town you can vote in the riding in which you currently reside or you can mail a vote to your home riding.

I believe Rick Mercer said it best before the federal election: "If you're between the age of 18 and 25 and you want to scare the hell out of the people who run this country, this time around do the unexpected. Take 20 minutes out of your day and do what young people all around the world are dying to do." Let's do it folks, let's vote!



WHAT MAKES A GOOD PHARMACY STUDENT?

By Anonymous

When you are given an opportunity, please run with it. Past experiences with sharp objects notwithstanding, the aforementioned cliché has grown greatly in personal meaning and depth over the past few months. As a student fresh out of first year, I consider myself a relative newcomer to pharmacy, a newborn student of the profession's teachings. And just as newborns are to their new environments, I stared inquisitively at the profession in front of me and soaked in any information that was provided about our profession. What I experienced was something of mixed feelings.

Pharmacy students are proud. That is well-warranted, as we are investing our time and dedication towards a profession. What our faculty promises us is a higher education for the development of expertise in pharmaceutical care. What society promises is yet to be fully comprehended. As is with any journey in life, I expect pharmacy to run into a few walls in the near and distant future. I expect our education to adjust accordingly to these ebbs and flows, for better or for worse from a student's perspective. Over the past couple of years, the profession of pharmacy has met a few bumps in the road and as I've witnessed, we have displayed considerable emotion towards academic and social issues surrounding pharmacy. But, when our students feel so endearingly towards their academic well-being, are they doing so with their pharmacy career in mind? When they verbally advocate so adamantly for the social awareness of pharmacy, what are they actually contributing?

At my summer pharmacy position, I had the interesting pleasure of meeting quite a few upper year students from our faculty (if someone you know just cringed while reading this, it's probably them). Some were heavily involved in student councils and faculty events. Some were heavily dedicated to their academic performance. A few were extremely good at cooking (unrelated, I know), while others were extremely well-educated. Then there were those that are new to the profession, like me. And lastly, a select few were leaders in extracurricular involvement and academic work. I remember staring in awe (perhaps misunderstood for other forms of stares), mouth agape at our upper years and realizing how far I was from their level of education and commitment to the profession. How do I find the time, the motivation or the resources to be an ideal pharmacy student, that is, both as an advocate and as a potential practitioner?

To find the time, I learned that I needed to be hardworking. There were upper years working 2 jobs

at once, where I was full-time. Some were so involved with our student happenings that they became hermits and refused to have lunch with us other students. Others jumped at opportunities to volunteer at extracurricular events and faculty events, while working fulltime.

Next, to find the motivation I realized that I had to be invested in my profession. Was I really in pharmacy to become a pharmacist, or am I in pharmacy because I'm just passing through? Some were in their half-dozen and beyond years of post-secondary education, yet still possess the drive to work hard and continue with their education to become pharmacy practitioners. A few students lead initiatives to expand their role as summer students, and were extremely baller at doing so. From talking to them, it's not difficult to see that they want to be pharmacists and they do it because they care about the profession.

Lastly, with regards to resources, this is the one thing I don't think I can generalize or trivialize. In any circumstance, people are rarely ever in similar footing. I'll be one of the first to acknowledge that there are multiple extraneous conditions (prior qualifications, financial restrictions etc.) that can affect how dedicated a student is to their education or to their involvement with school. But if you take a minute to answer the questions I posed above for yourself, you may understand what I'm trying to get across. There is a lot of capability in pharmacy students. We have a lot of capacity to do wonderful things both as people and as pharmacy students. Yet, we have 900 or so students but only a dozen clubs to be involved with. We are supposed to be "the most trusted" of the health professions, but as students we have very little exposure to outreach programs or even student advocacy groups. We have a curriculum that tries to mould us into pharmacy practitioners, yet there are a lot of students that are not sold on becoming pharmacists themselves.

However, what we do have is a faculty that is dedicated to its students. We are provided so many faculty resources that teach us to read and write, facilitate for us to study, provide space for us to relax, people working around the clock to maintain our incredible building, professors that are ridiculously accomplished and personnel that are invested in the profession. What we do have are a few advocacy and outreach clubs that can potentially spark interest in pharmacy students. And most importantly, what we have are students like those that I have met this past summer that will go on to become great pharmacy practitioners and advocates. As students we have a lot on our plate. But if we take what we're given, and we run far and wide with it, perhaps we can end up somewhere we belong.

THE PAST AND FUTURE OF SPACE FLIGHT AND EXPLORATION: LOOKING UP TO SOLVE THE PROBLEMS IN FRONT OF US

By Andrew Nguyen (1T4)

On July 20th, 1969, millions of households tuned in to the sight of Neil Armstrong and the Apollo 11 crew making history. After years of research and design, the first manned lunar landing was successful. In a mere 66 short years from 1903, the pinnacle of human technology had advanced from the glory days of the Wright brothers achieving manned flight to Armstrong's proclaimed "leap for mankind." Using the same timeline to look into the future, one can't help but wonder what marvels await us after 66 more years in 2035. However, with the recent cancellation of NASA's Space Shuttle Program, is this optimism rightly warranted?

NASA's history is a rich one. Since its establishment in 1958, NASA's space programs number just over 1000 unmanned missions along with just over 100 manned missions. Also noteworthy is the Russian Federal Space program, formerly the Soviet Space program, a major contender in the race to develop a manned mission to mars. Way behind, waving a small flag in the background is Canada's own Space Agency, boasting just under 600 employees. To date, 16 Canadian astronauts have been partaken in space flights, but always through collaboration with their American or Russian counterparts.

Public financing of unique endeavours such as space exploration is always a touchy subject. One question that is unavoidable during public discourse asks why we should invest so much money into outer space when we have so many problems back here on earth. Surely the applications of aeronautical engineering don't translate to practical uses back on land. Although I am not an expert on the subject, the technologies that have resulted from research and engineering have great potential to affect our daily lives. At the small, trivial scale, this writer is guilty of using Google's trusty satellite view to aid in the labyrinth that was his G2 road test. But on a more serious, encompassing scale, materials research done by aerospace institutions push human ingenuity to the limit. Engineering structures to withstand superhuman velocities and the relentless conditions of space

offers amazing opportunities for earthbound machines that demand the best in quality and efficiency - the possibilities are beyond imagination. However, when speaking to space exploration enthusiasts, the reasons behind their continued support are usually more philosophical than financial or political. For the uninitiated, listening to one of these spiritual arguments can feel akin to discovering an Elvis fan's unhealthy addiction by walking into a bedroom riddled with posters and paraphernalia. I will try my best to express one such viewpoint in a digestable manner. To many, space exploration represents the next positive step in human cultural evolution. The late Carl Sagan, astrophysicist and public figure, summed it up poetically in his television series *Cosmos* and book *Pale Blue Dot*. As the viewer is presented with a still photo of space, one is directed to the telltale bluish figure of earth, taking up a mere few pixels in the middle of the vast cosmic ocean. Sagan encourages the viewer to consider the implications of such a picture. On that pale blue dot lives everyone that you've ever met. It is home to every living person and everyone that has ever lived, as well as every single word that has ever been spoken and letter that has been written. Looking upon this image of earth, free from any political borders or socioeconomic/racial segregation, we are directly faced with our own actions as a global society. Amidst the numerous international wars and inequality, space exploration offers humanity a chance to band together for a moment and venture forth in the name of scientific discovery.

It is said that cosmology is a very humbling experience, and it drives many people to consider our place in the universe. To again quote Sagan, much like the tidal shores of the oceans that inspired many in a time before boats and planes, we have ventured knee deep into the cosmic shores of the universe, and the water seems inviting. Who knows what may be out there, but as it is often said: There are only two possibilities. Either there is intelligent life somewhere out there in the universe, or there is not. And the implications of either one are completely mind-boggling.

1 Minute Read: 5 Things You Need To Know

By Kenny Chan (1T4)

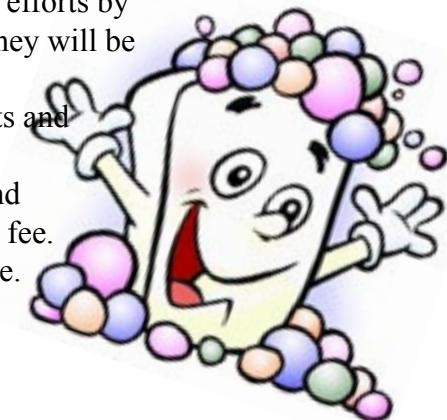
DISCLAIMER: This article will take less than 1 minute to read. So if you're looking for a long-term distraction during class, I suggest Angry Birds.

Since summer started, here's 5 quick updates on Pharmacy in Ontario you need to know:

1. Champix and Zyban (for smoking cessation) is covered under the Ontario Drug Benefit Plan (conditions apply). Community pharmacists may soon be able to prescribe them as well.
2. Community pharmacists can now support patients with their stop smoking efforts by providing smoking cessation expertise to Ontario Drug Benefit patients. They will be reimbursed.
3. Anaphylaxis Canada and Loblaw have developed a program to help parents and patients with allergies better manage food allergies
4. A pharmacist who identifies a concern with a new or repeat prescription and consults with the prescriber may be eligible for a professional intervention fee.
5. Since April 2007, more than 800,000 MedsChecks consults have been done.

References: Links supplied upon request

P.S: Stay tuned for more '1 Minute Read' articles brought to you by SOAPE



Recipes

Crispy-on-the-outside, ooey-gooey-on-the-inside French Style Cake

By: Evelyn Lau (1T2)

Ingredients:

2 tsp of baking powder
1 bag of glutinous powder (400g)
1 1/2 cup sugar
1 1/2 cup milk
1 cup oil
3 eggs

Directions:

1. Mix the sugar, milk, egg and oil together
2. Mix the glutinous powder and baking powder together
3. Mix the mixtures from step 1 and step 2 together
4. Pour the mixture into two square baking pans
5. Bake at 330 degrees F for 35 minutes
6. Continue baking but turn it down to 250 degrees F for an additional 10-15 minutes until the top is golden brown

Ingredients:

4 cups of water
1 cup of sugar
1 can of evaporated milk
2 tsp of coconut extract
3 packs of gelatin powder (Knox brand)

Directions:

1. In a medium-sized saucepan, boil the water and sugar until all the sugar is dissolved
2. Add the gelatin powder and stir until it's all dissolved
3. Remove the saucepan from the stove and add the evaporated milk and coconut extract
4. Refrigerate to set
5. Cut into cubes
6. Optional: Sprinkle coconut shreds on the outside

(If you like almond flavour more, substitute the coconut extract with almond extract)

Coconut Jello

(Tastes like the kind you get from DIM SUM!)

By: Evelyn Lau (1T2)

THE COLOUR BLIND COMME

By Tara Farquharson (IT3 Monograph Rep)

The city of Toronto, and even our faculty of Pharmacy is amazingly culturally diverse. Given this, many of us feel comfortable with our understanding of other people's cultures. This is a great experience, and is part of what makes our faculty so interesting and refreshing. I've also come to the conclusion that your understanding of culture sometimes only goes as far as the people you've met. By that I mean to say that you may believe you understand someone because you've met someone of a similar culture, when in fact you're not even close. This is most obvious in older generations, which makes sense given that many of them are immigrants themselves. I know I can't be the only one who has hilarious immigrant grandparents (or maybe even parents) that hold interesting beliefs about other cultures. As much as we love them dearly, there are times when the things they say bring this evidence painfully to light (and sometimes cause us to hold back laughter). Given their age and familial standing though, it really doesn't matter what they say, there's not much you can say to correct a loving grandparent.

My boyfriend, Patrick (a Canadian born Chinese) and I have come across this on several occasions, between our families. My grandmother in particular has lived in Scarborough since the age of 18 (before which she lived in the UK). Having lived the majority of her life in Scarborough she considers herself to be a well cultured individual and also considers herself a little more Canadian than most others. I would have believed this too, if it weren't for her reaction to Patrick. When Grandma discovered his name her face immediately brightened and she exclaimed, "Oh, lovely! A nice Irish boy", hmm... not quite. When I explained that he was Chinese she went quiet and looked to be deep in thought before changing the subject to what he was studying. Her confusion was mainly that she did not understand why Chinese people would ever choose to name their son Patrick (she once inquired if he was born on St. Patrick's day, because then it would make sense to her). Her experience with Chinese immigrants has been mostly with older, more traditional immigrants, so to meet Patrick, was a very interesting experience.

A few months later we invited Grandma to dinner to meet Patrick, she was very excited to meet him and was very talkative. Maybe a little bit too talkative. She started out by asking him what his favourite food was (a question she wouldn't have to ask a lovely Irish boy, mostly because it would be safe to assume the answer would be potatoes, right?) before he could answer the question she said, "Oh, it must be mung beans". Patrick grew up in Whitby (a smallish town 45 minutes outside of Toronto, with a mostly Caucasian population) and therefore is what we like to refer to as gwai lo (white washed). He had no idea what mung beans were and stared for a while before telling her he liked lasagna. This led to some confusion, so she tried again, asking what his favourite colour was (on account of she had offered to embroider a towel for him, something she enjoys doing in her past time), and again before he could answer she said, "Oh, it must be red!" Once again Patrick brought her expression back to confusion with his answer of blue. How dare he not live up to the stereotypes!

All joking aside, my grandmother is very fond of Patrick, but still believes his favourite food is mung beans and favourite colour is red (as was demonstrated by his new towel with "Patrick" embroidered in bright red communist thread, and the pair of bright red sweaters we both received for Christmas). As ridiculous as some of these assumptions might sound, similar ones can be found by almost any immigrant grandparents I've heard about. Early in our relationship, Patrick's parents warned him that "white girls" get divorced a lot, so he should be careful. Don't get me wrong, I'm not trying say that my grandmother or Patrick's parents are ignorant, sheltered people. They both moved to this country, worlds away from their home and worked hard to provide for their families and we appreciate everything they've done for us. I merely hope to highlight the fact that so much of what we expect from people comes from what we've been exposed to, or have heard about. This can lead to some confusion when strangers don't live up to our own stereotypical expectations. Personally, I think I need to start hanging out with more traditional Asians so they can tell me what mung beans are, I hear they're really good. But who knows, maybe by the time I'm 75 I'll still think I'm down with different cultures but I'll embarrass my granddaughter in front of her first generation immigrant boyfriend. But by then who cares, I could get away with anything.

Retail Pharmacy over this past Summer

By JiHye Han (IT4)

I don't know about you, but I was verging on hysteria during the last few weeks of first year, stressing about how I had no pharmacy experience. My hysteria grew like a positive feedback cycle. It made me have pharmacy-goggles; everyone seemed to have a job, a volunteer placement, or pharmacist relatives. I'm quite sure I'm not the only one who felt this way- and like many others, I eventually found a volunteer placement after many resumes. Volunteering turned into a summer job, and now it is almost September.



It was a very busy pharmacy, and I felt utterly incompetent for a long time. There was much more to learn than I imagined, and I'm grateful for the pharmacy team for putting up with my confusion. There was the computer aspect, like cycle-counting, making labels and taking care of expired products. Then there was dealing with various insurances (hello, ODB), last-minute reauthorizations, and of course, fixing my own mistakes. I learned the value of good communication between co-workers and also with patients. Getting to work with different pharmacists was an eye opener as well. What else? I learned it was worth it to wear ugly comfortable shoes. I'm still working on multi-tasking and not forgetting anyone in the process.

All in all, it was a great experience. I got a taste of what it's like to work in retail pharmacy and it kept me busy all summer. Now if only I could have a month of it back to go to the beach and play, that would be dandy.

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All About OPA

Welcome to the building, 1T5s, and welcome back to everyone else!! My name is Zenah Surani and I'm your Ontario Pharmacists' Association (OPA) Student Representative this year. If you have no idea what the OPA is, or if you need a refresher, here's a Q&A that should help you out.

1. OPA? OCP? What's with all the acronyms?

Here is a quick definition of both:

The OPA stands for the Ontario Pharmacists' Association, which is a voluntary association serving the interests of more than 12000 Ontario pharmacists in different practice settings (including community, hospital, industry, government, education and family health teams) and Ontario pharmacy students.

The OCP, or the Ontario College of Pharmacists, is the provincial licensing body for Ontario pharmacists, interns, and pharmacy students. The OCP is Ontario's regulatory body for pharmacy, and sets the standards of practice for the profession. One big difference between the OPA and OCP is that membership in the OPA is voluntary, while OCP's is mandatory. Also, the OPA serves pharmacist's interests, while the OCP is mainly concerned about protecting the public's interest.

2. What does the OPA do, anyway?

As the voice of pharmacists in Ontario, the OPA is committed to advocating on behalf of YOU to government, third party payers and other stakeholders. As you probably know by now, healthcare in Canada is mainly controlled provincially and having a body like the OPA voice the value of our profession on behalf of pharmacists has never been so important! The OPA has led provincial initiatives such as advocating for the new pharmaceutical opinion program and the new expanded scope of practice (Bill 179), and is currently involved in pharmacy practice research.

In addition to advocacy, OPA is a leader in providing education and training to pharmacists and students across the province. If you were at this year's conference in Deerhurst, you can probably attest to that! The conference included great training sessions like the nutrition certificate program for pharmacists and even an immunization training program! The OPA provides ongoing live and online continuing education sessions for pharmacists, and also hires pharmacists to work at its in-house DIRC (the Drug Information and Research Centre), which provides drug information to pharmacists, other healthcare professionals and other organizations.

The OPA also provides plenty of member benefits-one of the greatest ones for pharmacists is the insurance benefits. (more info about that on the website, at www.opatoday.com). Keep reading for more student membership benefits!

3. Why should I join?

It's an exciting time to be a pharmacy student in Ontario right now! While many things are changing, there are a lot of great opportunities on the horizon. There's never been a greater time for YOU to become involved in YOUR profession's advocacy body. By coming together as pharmacy students and pharmacists and voicing our opinions as a united front, we can work together to overcome the challenges and embrace the great opportunities that this profession has to offer.

There are awesome student networking events put on by the OPA each year that you can take advantage of as well, like the annual OPA Cup (a hockey game between U of T and Waterloo's schools of pharmacy--this year to be held in Waterloo), and we are also planning some exciting speaker events as well, so stay tuned for that!

4. How can I join?

Visit www.opatoday.com and download a student application. The membership fee for students is available at a discounted rate of \$60 and includes great benefits like a GREAT discount on an annual GoodLife membership, deals on Rogers phone plans, reduced rates on select Toronto attractions and a great deal on OPA's education offerings, including the annual conference! (Conference 2012 will be held in London, Ontario June 14-16!)

5. Who are you, anyway?

As your OPA rep, I attend OPA board meetings and I'm a voting member on the board. There is another student member on the board from the University of Waterloo, Nick Malian, who has observer status this year and will transition into a voting member next year. I also sit on UPS and keep the student body abreast about the latest on what's happening in pharmacy in the province. Please don't hesitate to get in touch with me at zenahsurani@gmail.com should you have any ideas/suggestions about how OPA can work to better serve YOU, or if you want to get more involved.

1T4 poll question: what is 1 thing that you learned this summer?

By Henry Leung (1T4 Monograph Rep)

- 20% THC is about the bunkest stuff you can get (in Amsterdam).
- I learned about the wide breadth of outstanding research that takes place right here in PB. I think being confined to the dingy subterranean world of B150 and B250 year-round causes students not only to fear natural light, but also to forget that there are 12 floors above us. It's pretty impressive to know what takes place in the labs and to see the expertise of the faculty in our building.
- August is the start of the ODB year. Be prepared to have once-friendly pharmacy patrons be outraged and distraught at having to pay their "unexpected" deductible. Smiling does not always help ease the blow.
- Taking 3 modes of transportation to get to your place of work is a complete PAIN.
- I learned that if you hold flowers (especially nice ones) in a mall, girls will approach you. FOR REALZ.
- Xylocaine Viscous is indeed viscous. When using it in a mixture remember to measure out less viscous liquids first, or you will look like a fool waiting for it to drain from your graduated cylinder.
- At the Taste of the Danforth, I learned that "S'agapo" (which sounds like 'Seeg-a-gha-po') means "I love you" in Greek. :)
- I learned this summer that while community pharmacy may be filled with very mundane tasks there are many reasons it is a rewarding environment!
- It is not always helpful when someone spells their entire name using inanimate/animate objects ('S' as in "Salmon", for example.) If you are like me, this will only induce strange images to occupy your mind and prevent you from actually knowing how to spell their name. Please use this spelling aid "prn" i.e. when distinguishing between the letters 'V' and 'B.' Thank you in advance!
- I learned this summer that the monthly insurance on line of credit loans is not actually mandatory, especially when you already have another insurance.

Rep's Note: Thank you everyone that generously participated in this issue's Poll Question! (I apologize for censoring words in some of your responses). As for what I personally learned this past summer, I learned that delivery systems implemented to distribute bulk medication-filled totes to different pharmacies throughout large hospitals is also a fantastic way to send drawings to unwitting pharmacy personnel. I hope everyone learned something new!

STEEP LEARNING CURVE



BY TARA FARQUHARSON
(1T3 MONOGRAPH REP)

My SEP Experience in Slovenia...

By Davin "the baller" Shikaze (1T4)

If I were to ask random Canadian students to point out Slovenia on a map and pronounce the capital (Ljubljana), most would probably fail miserably. LUB-JANA? ...or maybe the "l" is silent, JUB-JANA? The most frequently asked question I received from other SEP students and colleges at work was, "Why did you choose Slovenia?". To answer that question in perfect honesty, I didn't. Although Slovenia was not one of my 3 choices, I would like to tell you why it would now be my first choice if I were to apply to SEP again.

Firstly, the deals that students can get are amazing. In addition to discounted bus passes and movie tickets, students can get great deals on dining out. Around the city of Ljubljana (LOO-BLAH-NAH) many restaurants offer student meals which include a salad and/or soup, main course and desert for only a few Euros. Even McDonalds have student meals, and for 2.07 Euros I could get a Royale with Cheese, fries, salad, drink and a strawberry sundae!

The deals for students were great but the main reason why I would choose Slovenia again is the people. I spent 2 weeks in the community setting and 1 week in hospital. My preceptors at both sites were very knowledgeable and willing to show me how pharmacy practice operates in Slovenia. In the community, I prepared PEG-lyte mixtures and learned about their colorectal cancer screening program. I also got to review some medication regiments and discuss drug interactions. In the hospital, I learned about total parenteral nutrition and cytotoxic drugs. It was interesting to discover that one of the main references used for cytotoxic drugs was from Cancer Care Ontario. One of my preceptors even organized a trip for me and a couple other SEP students to Lake Bled, Lake Bohinj and Savica Falls- which was amazing!

During my stay, I lived in a dorm with other local students who also had very good English. We had a European-style pancake party and also checked out the Lasko beer festival. I also had the opportunity to meet many students from other European countries, such as Poland, Serbia, France and the Netherlands. Since many of the websites had an English option, we were able to plan trips around the country, including a white-water rafting trip to the Soca valley.

Looking back, I feel lucky that none of my original choices had placements and I was able to experience Slovenian culture and learn about pharmacy practice there. I definitely recommend you to check it out, and you too will feel sLOVEnia!



Gettin Fresh with SOAPE

SOAPE is a (somewhat) new but ambitious student-run organization. Our vision is to help the profession of Pharmacy evolve through pharmacy student advocacy. We want pharmacists to understand the importance of advocating for their profession. We want to inform the public of the competence of pharmacists to improve public health care. We want the students to have the opportunity to use their skills and talents to join in activities that promote tangible changes for their profession.

YOU are the key to SOAPE. The student voice is important, and active student advocacy can be very influential and powerful. At the risk of sounding corny, you are the future of Pharmacy so why not do something to make it even better?

If you are invested in your future as a pharmacist, we welcome you to join SOAPE to bring positive change to your profession. Activities that SOAPE has on its radar include: Blueprint for Pharmacy collaboration, Pharmacy Awareness Week talks, Monograph articles, Ontario Pharmacists' Association Conference presence and so much more.

If you're interested in SOAPE, please send us an email at SOAPE@utoronto.ca. We welcome and appreciate your support!

Students for Optimizing and Advocating Pharmacy Endeavours
Kenny Chan, 1T4
President 2011-2012

Life as a World Health Organization Intern

By Sarah Bonazza (IT3)



I am currently a third year student and have just returned from a summer in Geneva, Switzerland. I completed a nine-week internship at the World Health Organization (WHO) in the Essential Medicines and

Pharmaceutical Policies Department. The WHO is the directing and coordinating authority for health within the United Nations system. The above picture is of the Director-General Dr. Margaret Chan and the 2011 summer interns. The Secretariat of WHO contains approximately 8000 staff working at the headquarters, a regional office, or one of 193 member states. The Director-General and the 34 members Executive Board head the Organization. The opinions I am going to share are solely mine and not those of the WHO.

I arrived in Geneva on Saturday June 4th. It was my first time in Switzerland and from the airplane, Switzerland looked absolutely gorgeous. Mountains and lakes could be seen in every direction from the airplane. I had arranged to stay with a friend's family who live on the outskirts of Geneva. They greeted me at the airport and I soon became a new family member, attending my first ever field hockey game the following day. I was lucky to experience the Swiss culture and improve my French with the family.

I officially started my internship on June 6th. What was to become my regular bus and tram route to reach the WHO Head Quarters took me 45 minutes. I was shaking due to nerves walking up to the intimidating main WHO building on that first day. After gaining my access card, meeting my supervisor, department staff, and other interns, I quickly settled in. My supervisor was Dr. Dele Abegunde, who is a brilliant health economist in the WHO Medicine Access and Rational Use Cluster. The focus of my internship was to work on a literature review for the Good Governance for Medicines Programme (GGM).

The goal of GGM is to improve access to medicines, reduce vulnerability to corruption, and improve transparency in the health systems especially in the pharmaceutical subsector. They use a three-phase process to evaluate and improve a country's situation. To advance the work and prepare for an upcoming conference, I conducted a detailed and critical review of methodologies used to measure the impact of corruption, good governance, and transparency in a wide variety of organizations worldwide. I compiled my research into a background report for the conference and proposed a direction for GGM to take, to make

the current evaluation tool more standardized. The ultimate goal was to develop a quantitative or quasi-quantitative method of demonstrating changes at country or global levels of corruption in the pharmaceutical subsystem. Some of you readers may be thinking these goals are far-fetched, and yes I often felt the same way. BUT, I do believe this transparency in the pharmaceutical sector is a very important area in improving access to medicines, and thus improving the GGM assessment tool is necessary. I presented my research to a group of WHO staff and interns during my last week in Geneva and also re-formatted it into a journal article to educate others on these issues.

I worked approximately 40-50 hours a week (on GGM and other small projects for my supervisor) and spent the rest of my time enjoying Lake Geneva, my host family, and travelling around the country. The intern community at the WHO, and all partner UN organizations, is very strong and well organized.

I met amazing new friends from across the world with similar interests as me in pharmacy, public health, or medicine. There were weekly intern meetings and newsletters with opportunities both during and outside of work hours. There were many "Experts for Interns" talks, often on controversial issues such as funding of the WHO, the reputation of the WHO, the current WHO reform, the bureaucracy and politics involved in UN organizations, accountability in philanthropic foundations, and marketing of the WHO. I attended the launching of the World Disability Report, education sessions on publishing papers, and a question and answer session with the Director General, who was very down to earth and honest with her opinions. I believe that the most beneficial part of my experience was seeing first hand how the WHO functions daily and structure of the Organization. I highly recommend this internship to anyone interested in global health issues.

Thank you to Dr. Jillian Kohler, the Student Experience Fund, UPS Student Initiative Fund, and my WHO supervisor and Department for making this experience possible!



Global Medicines Initiative (GMI)

GMI is a student campus group with Dr. Jillian Kohler as the faculty advisor. If you are interested in learning more about global pharmaceutical issues, contributing ideas to our organization, attending our journal club, or would like to pursue opportunities abroad, please contact GMI by e-mail at globalmedicine.uoft@gmail.com.

Stay tuned for our monthly feature in the Monograph and announcements for our upcoming meetings!

THE PFEC ACCOUNT

Welcome one and all, (back) to Leslie Dan! I hope your summers were restful and you're ready to take on another year of phenomenal pharmaceutical phun (pokerface). And as much as we all value what this faculty provides for us, there are some areas of our interest which don't make it into the curriculum. Things like how to own your own business, choose an appealing career, make wise financial decisions or how to deal with money (once you start making some!). I know what you're thinking now, you're thinking "Oh no! Tara, you're right. Where will I gain such valuable knowledge?" Well my friends let me (re)introduce you to the Pharmacy Financial Education Club (PFEC). We're a student run not-for-profit organization which brings you expert speakers presenting topics ranging from international pharmacy careers, entrepreneurship, to continuing education and personal finance. Despite being a financial education club, we pride ourselves in presenting a broad range of business related topics of interest to the pharmacy faculty. Our events have been well received and well attended over the last few years. We've organized informative seminars such as those given by the ever popular Professor Zubin Austin on macroeconomics. He shared his insight on some interesting future social trends, such as the trend that women are increasingly becoming the primary breadwinner in a household. That is, in the future, it will become commonplace for women to earn higher incomes in men and to hold higher social status in society (cha-ching!). Other popular topics included, Mike Sullivan, president and founder, of Cubic Health. He presented a raw and informative seminar highlighting the importance of investing early, and the effect that it has on your bottom line years later. These and many other speakers are anticipated to return with new and interesting topics. And as if all that wasn't enough, the icing on the cake: Free food is often provided at our events, and students receive one ups point for each event attended!

But now that you know a little bit more of what we're about, let me introduce you to our new team for 2011-2012:

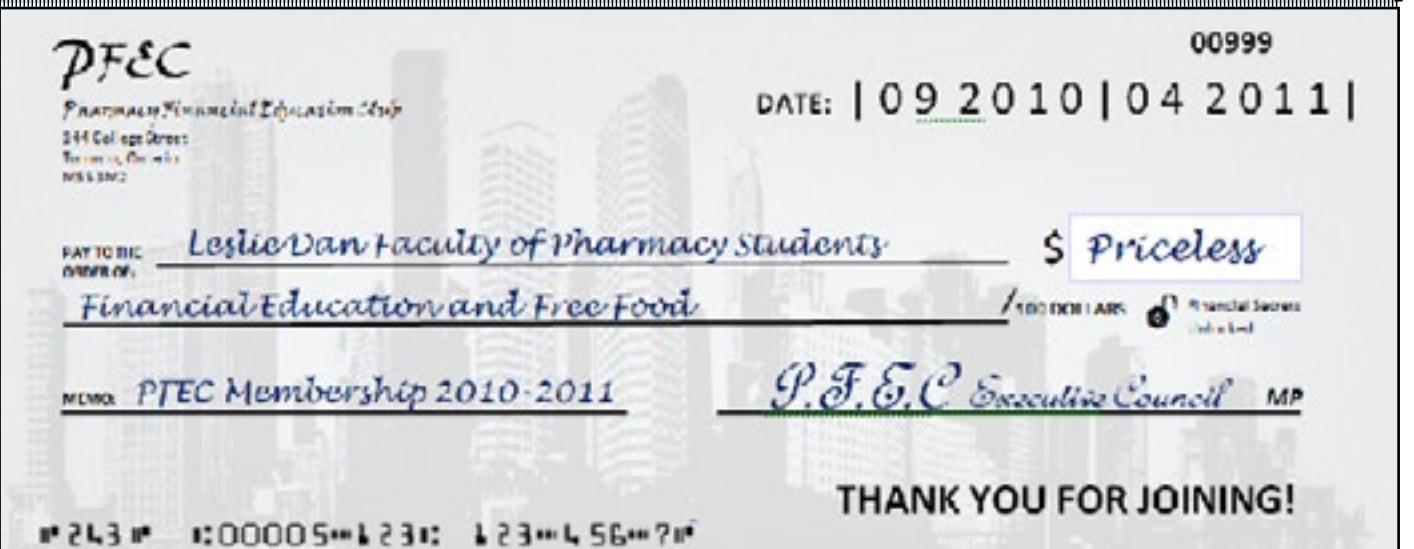
President: Dipti Tankala (1T2)
Vice President: Allan Choi (1T4)
Director of Public Relations: Tyler Robinson (1T2)
Webmaster: Chris Lee (1T3)
Photographer/Graphics Designer: Nancy Tieu (1T2)
3rd year rep: Tara Farquharson (1T3)
1st year representative: TBA

What's this TBA? Could it be? Yes it is. We've yet to select a first year representative for our club. We're looking for a student willing to promote PFEC events to his/her class, help organize events, obtain sponsors/speakers, and contribute to the monograph on behalf of the club. If this club sounds like something you'd be interested in, please send us a paragraph explaining why you'd make a good rep, as well as an up to date resume to pfec2009@gmail.com.

We look forward to seeing you at our events presented throughout the year. Keep an eye on your listserv emails for information on upcoming events. Also look out for "The PFEC Account" in each issue of the Monograph for informative business and finance-related columns. If you don't plan on using the information, you can at least use the words and pretend you're a savvy businessperson to impress your friends and family.

Got questions, or suggestions for future events? Direct all inquiries to pfec2009@gmail.com.

Tara Farquharson
1T3 PFEC Rep



EVERY CASE IS AN INTEGRATED CASE

By Sidika Dhalla (IT2 Monograph Rep)

As we enter the last year of our undergraduate pharmacy studies I think we need to take a moment to reflect on whether or not we are ready to be pharmacists. And since you 4th years probably don't have time to sit and reflect, maybe you can commiserate while you read the following.

This article is about being confident pharmacists. I truly believe that knowledge is wasted if not shared so I'm sharing with all of you what I learned this summer.

At this point, if you're able to go through the therapeutic thought process and come up with a solid plan for a patient with COPD or asthma, that's only a quarter of the battle. Remember those integrated cases we hated so much in 3rd year therapeutics? Newsflash – in life, every case is an integrated case. For example, a fellow student at work this summer was asked to work up a COPD patient. Seems easy enough. But this patient had a lung transplant and you slam on the brakes as you were just taking the on-ramp onto the TTP. Think about it though, if everyone in life had only one issue, things would get pretty boring right?

I saw a patient this summer, intubated and in the intensive care unit whose chart told me they had HIV, hypertension, COPD, type 2 diabetes and let's throw in grave's disease. There were no medications currently started for this patient. The pharmacist asked me to work up the patient and think about a care plan. I thought to myself forget a care plan, how am I even going to find out what medications he was on before? He's been admitted for a completely unrelated lung infection that has not been diagnosed so his sugars and blood pressures are completely thrown off. What would you do? What are the potential DTPs associated with delayed treatment of HIV and grave's disease? We learned about thyroid disorders five different times in school – but I still couldn't recall everything about Grave's disease? And thinking about antiretrovirals just made me want to run in the opposite direction! Maybe some of you who are brighter and have better memories than me would not have had trouble with a case like this, but I did. Never mind all the integrated therapeutics that had to go into the care plan. I realized that the most difficult part for me was that I wasn't able to speak to the patient and this made me feel like vital information was missing. What I ended up doing was looking up his ODB Drug Profile online and calling his pharmacy to find out information about his HIV medications. What I actually discovered was that he was non-compliant with his COPD medications and the 'infection' he was admitted for was actually an acute exacerbation of his COPD. Captain Obvious once taught me that the patient is the most important resource in their health care, but this is how I learned it in real life.

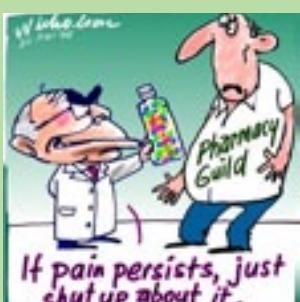
Then there was a patient who was brought into Emergency by a random person who said he was acting strange.

He was being kept alive with several different machines I had never seen or learned about in pharmacy school – his blood was being cycled through two of these machines – one for oxygenation and one for dialysis. Then his cultures grew streptococcus pneumoniae. I heard this during rounds and I thought great, I know this, beta lactam + macrolide = treatment for pneumonia. But how do all these machines he's hooked up to affect these drugs? Would you be able to recall immediately which antibiotics we can't use in patients with renal dysfunction? But he was so sick that we had to treat immediately. I was taught that I would have to use clinical judgement to make urgent decisions to treat and deal with the (potentially serious) consequences later, but this is how I learned it in real life.

Lastly, there was a patient about our age with cystic fibrosis who was admitted for a double lung transplant. After getting over the internal shock of seeing someone go through such a traumatic surgery at such a young age...I thought, well what do I do? What's the DTP? Patient has new lungs now... and requires no drug therapy...if all goes well? The pharmacy team still had to be a part of the case – not because of existing or 'urgent' DTPs but to know all the potential DTPs - what pathogens (viral, fungal, bacterial) a lung transplant patient is vulnerable to in a hospital, to make sure that appropriate prophylactic antimicrobial therapy is initiated, to promote antimicrobial stewardship and ensure that the patient comes off prophylaxis within a reasonable amount of time, and to monitor potential adverse effects of these just-in-case drugs. We are taught to look at the bigger picture when we're working up patients and to think about how important potential DTPs could be to the patient, but this is how I learned it in real life.

These may be extreme examples, and ones you may not have to deal with so thoroughly in a community setting, but they are all true stories. When I was given these patient profiles to go through and to 'work up' this summer I was struck by how little I knew. And then I quickly realized that was not true. In fact, DESPITE everything I know at this point, it wasn't enough for me. I wasn't confident enough in my knowledge to be able to use it immediately for real life patient care. The bits of knowledge were there in my mind but not integrated enough, with each other and with real life, to be immediately useful to me. We've studied all these topics, diabetes, lung infections, HIV, etc, but there is only so much we can be taught, and confidence is not something that can be taught. And being taught is not the only way to learn, my friends. Maybe this summer I became a Captain Obvious, but I'm hoping that these are some of those obviousities that you find helpful to read in words once in a while.

Confidence in your knowledge is essential to be a good pharmacist. Take every opportunity you can to build it because even though it can't be taught, it can be learned in real life.



PHARMA LIFE

Compiled by: Dipti Tankala, Senior External Affairs Director, UPS

Hi everyone, welcome back to school! Those of you, who've been avid Monograph readers for the last few years, will remember the "RxFiles" column, in which we interviewed pharmacists leading a variety of careers. This year, we have renamed the column to "PharmaLife" (no it has nothing to do with LavaLife.com) to avoid confusion with the handy reference guide called RxFiles. We have interviews with a lot of amazing pharmacists lined up for this year, so be sure to flip to PharmaLife, everytime you read the monograph. Best of luck for school!

Brought to you by Dipti Tankala and Pearl Le (UPS External Affairs)

Demographic Info

- Name: Kamran Nisar
- Year of Graduation: 1995
- Which pharmacy school did you graduate from? Memorial University of Newfoundland
- Have you completed any advanced training or certification? No
- Do you participate in any other professional activities (eg. committees, professional associations)? Yes:

Current:

- Council Member on The Nova Scotia College of Pharmacists (NSCP)
- NSCP Governance Committee
- NSCP Awards Committee (Chair)
- Pharmacy Association of Nova Scotia Pharmacy Practice Committee
- Dalhousie Pharmacy Endowment Fund Board

Past:

- Past President of the Pharmacy Association of Nova Scotia (PANS)
- Standards of Practice Methadone Maintenance Treatment: Pharmacy Services Task Force
- CPhA's Blueprint for Pharmacy Task Force
- CPhA's Blueprint for Pharmacy – Financial Viability & Sustainability Working Group
- PEBC OSCE assessor



Job Description

- What position do you hold or what is your current practice? I am a Talent Sourcing Manager for Ontario & Atlantic Canada for Walmart.
- Describe your typical work day? Most of my day is spent on the phone or meeting and interviewing pharmacists.
- What do you like most about your job? I enjoy meeting and talking to pharmacy students and Pharmacists.
- What is the most challenging aspect of your job? Finding the right pharmacist for a rural or northern location.
- What medications do you find the most challenging to manage? Methadone is one of the most challenging medications to manage but it does have the greatest impact on people's lives and society.

Job History

- How did you get to where you are today?
I began my community practice in 1995 in small rural community, Meteghan, Nova Scotia. It has a population of less than 500 people. In 1997, I joined Walmart pharmacy as a staff pharmacist in New Glasgow, and then became Manager a year later and eventually moved to manage the new Truro Location. In 2003, I was promoted to District Manager of Professional Services for Wal-Mart and just recently (about a year and a half ago) I took on my current role as Talent Sourcing Manager for Ontario & Atlantic Canada.
- What were some of the greatest challenges that you had to overcome along the way?
A lot of people are surprised when I tell them that I am based out of Nova Scotia in a town called Bible Hill. I sometimes find it challenging working out of the East Coast but thanks to modern conveniences like internet, cell phones and quick jet flights I can do my job from out here.
- What courses, degrees, or previous positions that you have held do you find the most relevant to your current job?
A few years back I won the Community Preceptor of the Year from Dalhousie University and it was one of the most proudest moments of my career. Being a preceptor has taught me a lot about what students look for from employers and

what they want to learn during their work terms. This knowledge has helped me manage our Pharmacy Student Work-Terms.

Pharmacy School

- Fondest Memory from Pharmacy School: When I went to school we had only 33 students in my class. We were a very close group and helped each other get through the tough & challenging curriculum but above all we had a lot of fun together. One of fondest memories was going to the PDW in Montreal. We had a big MUN contingent at the PDW and we really cheered loud (maybe even louder than UofT) at the CAPSI competitions where MUN was competing.
- Favorite Pharmacy Professor/Course: Pharmacokinetics.
- Summer Jobs held during Pharmacy School: I did enjoy my summer job at SmithKline Beecham (now GlaxoSmithKline). I worked in the various departments such as MedInfo and Marketing.

Advice Questions

- If you did your pharmacy degree all over again, what would you do differently? Nothing! I got involved in everything (CAPSI, our MUN Pharmacy Newsletter) and I still passed the PEBC's!
- What advice do you have for current pharmacy students or new graduates? Give back to the profession! Pharmacy is a wonderful profession but it is important to contribute and get involved in the profession. Join a committee in either the regulatory body (eg OCP) or the Advocacy groups (eg OPA). Be a preceptor or be an assessor for the OSCE's. It's really important that Pharmacists and Pharmacy Students take an active role in our associations and Boards. We all need to share our thoughts and ideas so the profession can continue to grow and evolve!
- What advice do you have for students searching for a job next summer? Research! One of the few times during pharmacy school that you can get and learn practice skills is during your Summer Work terms, so choose your jobs wisely! Make sure that you interview your potential preceptors and ask if they expanded their scope of practice. Also, consider working in other parts of the country! The Maritimes and Atlantic provinces are great places to practice! Also rural communities greatly value their Pharmacists, as often they are the most assessable health care professionals.
- What kind of skills/qualities should students focus on refining while still in school that will make them successful in practice? Nothing makes you a better pharmacist than counselling skills. Learn to relate and empathize with your patients. Also, across the country our scopes of practice are expanding and we are becoming true 'Medication Managers' so it is important that pharmacy students learn to identify and resolve DRP's (drug related problems).

Future of Pharmacy Questions:

- Where do you see the pharmacy profession in Ontario heading in the next five years?
I am very excited about the level of practice that will be evident in five years. We will be more involved with patient care as well as more involved in the prescribing of medications for our patients. I believe that pharmacists will be able to adjust and substitute medications for therapeutic reasons. I also believe that in 5 years Ontario pharmacist will be able to vaccinate patients and order diagnostic tests. I also believe that the Blueprint for Pharmacy's vision – "Optimal drug therapy outcomes for Canadians through patient-centred care" will be a reality and that Canadian Pharmacists and pharmacy technicians will practice to the full extent of their knowledge and skills.



Pharmacy in the Holy Land

By Chaya Taub (1T2)



For the 5th year in a row, I have had the privilege of spending my summer in Israel. I have always travelled to Israel as a tourist but this year I decided to become more a part of the society and culture and I worked in the pharmacy in the Shaare Zedek Medical Centre located in Jerusalem. This pharmacy serves both inpatients and some outpatients, so although I was working in a hospital there was some sort of “community pharmacy practice” as well.

Just to explain a little about the hospital – Shaare Zedek Medical Centre (which means “The Gates of the Righteous”) is 1 of 5 hospitals in Jerusalem. It caters to all health needs from cardiology to births to plastic surgery. It also has an exceptional dialysis program and is the largest pediatric dialysis centre in the country. There are unfortunately many citizens who suffer from a variety of kidney diseases (surprisingly many more Arabs than Jews and this is probably due to often marrying within the same gene pool. I once went to visit the patients and majority of them were related!) and these children may start needing their 3 hours of dialysis 3 times a week from a very young age. At least there are options available and socialized healthcare to make it accessible. Israel’s population growth rate is on average 1.8%, which doesn’t seem significantly high, but it is double the approximate rate in North America. Israel is a country that went from a population of 600,000 in 1948 to almost 8,000,000 today, and all parts of the country, certainly the healthcare system included, had to accommodate this boom. Hospitals are expanding and growing and Shaare Zedek, for example, needs to keep up with their 1400 births a month! (That’s A LOT of births!! In the year 2004, Mount Sinai Hospital in Toronto averaged 580 a month).

It was so interesting to see the differences between our practice here in Ontario and compare it to the standards of practice there. I would chat with the other interns about our schools and the pharmacy program and what struck me the most was that U of T focuses more heavily on patient care whereas Hebrew University focuses much more on the chemistry and pharmacology of the drugs. Shaare Zedek had only 7 pharmacists for this 800 bed hospital (Mount Sinai has approximately 20 pharmacists for 472 beds...), all of which stay in the pharmacy dungeon 99% of the time and 1% of the time are on the wards. Professionalism and professional code of conduct is something that has not completely made its way over to Israel in general, and professional attire is not really worn. It really hit me one day when I realized I was working in the pharmacy in sandals with open toes (that part was my favourite!) listening to a blaring Dr. Dre. They definitely did not understand the words. At least I hope they didn’t. But I laughed to myself because it would never happen here in North America. They have yet to master the arts and crafts of labeling with all the cutting and sticking and they are not nearly as cautious about labeling as we are here. Of course everything of relevance is included on the label, but they are much more lax about the process and details as a whole. The scripts have to be written in Latin letters so any prescription that comes into the pharmacy in Arabic or Hebrew can not be filled. Therefore all scripts are in “English”, but the spelling mistakes were definitely something to laugh at – I once received a script for Eyeodine. Cute. At least they try.

What was so nice to see was all health care professionals – regardless of their nationality, religion, ethnicity, race etc, collaborate together for the sake of the healthcare of ALL patients, regardless of their nationality, religion, ethnicity race etc. Not only did I witness the team work, but I was a part of it (as can be seen below)



Shout Outs!

- Dearest Med Chem, thanks for giving me a reason to pass - Scared to death pharmy.
- You lied to me leslie dan faculty of pharmacy. It's been three years since phrosh, and I still haven't found my soul mate - SickOfTheLies.
- Yo SM, my grandma's leaving in less then a month, so call her ASAP!!!!!!! LOL - SN

WORD SEARCH

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WORD BANK

SYRUP

PHARMACIST

PILLS

DROPS

SPRAY

DISPENSARY

DISPENSING

FDA

ANTIBIOTICS

CAPSULE

GENERIC

PHARMACY

CLINICAL

THERAPEUTICS

COPAYMENT

PHARMTECH

FORMULARY

MEDICATION

IV

BRANDNAME

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PHARMACY



"Take them until further testing shows they really aren't effective."

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"All those in favor of Zycloputzklamia..."

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