

The Monograph

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Vol. 9 No. 6

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Homeopathy - There's nothing to it p.15

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Narrow Minds Revisited 20

Holistic Horrors 14

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

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

LETTER FROM THE EDITORS

It seems as though Murphy's Law strikes again. The last issue was supposed to be a breeze to put together – we've done it five times before and have pretty much perfected the process. However, when you think pharmacy students are too busy studying to write, they pull a fast one on you. That is not to say we were disappointed with receiving so many articles, but it just made our job *slightly* more challenging. As a result of the overwhelming number of submissions, you are now reading the first-ever 28-page Monograph!

We had a variety of articles with many centred around similar topics. This month's feature article, entitled **Homeopathy: There's Nothing To It**, by 1T1 Monograph representative, Adam Calabrese explores homeopathy and its potential to do harm. Interestingly, there were two other articles on alternative medicine – a general one on holistic health and another on ear candling – all with a similar type of conclusion. Another hot topic was sparked by last month's article called *Narrow Minds*. There were a number of rebuttals to this article as well as a clarification from the author. In this issue, you will also find the fourth year anti-calendar, pain week recap, article about CAPSI, and much more!

As for the winner of the last prize this year – two movie passes – the prize goes to Evgenia Cheveleva (0T9) for her article '**Holistic Horrors**'.

We would like to take the time to thank all of you for your articles, poems, and drawings. Without you, we couldn't have done this! We would also like to congratulate the next Monograph Co-Editors: **Yuan Zhou and Ruby Liang** of 1T0. We have no doubt that they will do an excellent job at continuing this pharmacy tradition.

We'll end this in our usual fashion - a few words of encouragement to get you through the next month of exams - Keep on truckin'!

Have a great summer!

Matt Fong Lara Tran
Co-Editors – The Monograph

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

UPS CORNER

And so another year winds down to an end! Time sure does fly when you're having fun! First and foremost, we would like to thank the UPS council for all their hard work and dedication. For without such a team, we would not have had such a great time ushering in a new class of pharmacists-to-be's, a fun-filled Semi-formal 2007, a remarkably successful Pharmacy Awareness Week, a generous Charity Week, such robust athletic teams to represent our faculty, and a completely made-over website, among so many other things! And a big thank you also to the entire student body for your participation in life outside of academics as well as to the faculty and administrative staff who have helped UPS in every way possible.

Congratulations to James Morrison, next year's UPS President! We are pleased to see some new faces and new talent inject some new blood into UPS. We are thrilled for next year's UPS and class councils and are confident they will continue a tradition of bringing the student body together, be it through academics, athletics, or social events!

Best of luck on exams and have a wild summer!

Alexander Vuong
UPS President 2007-08

Stacy Yeh
UPS Vice-President 2007-08

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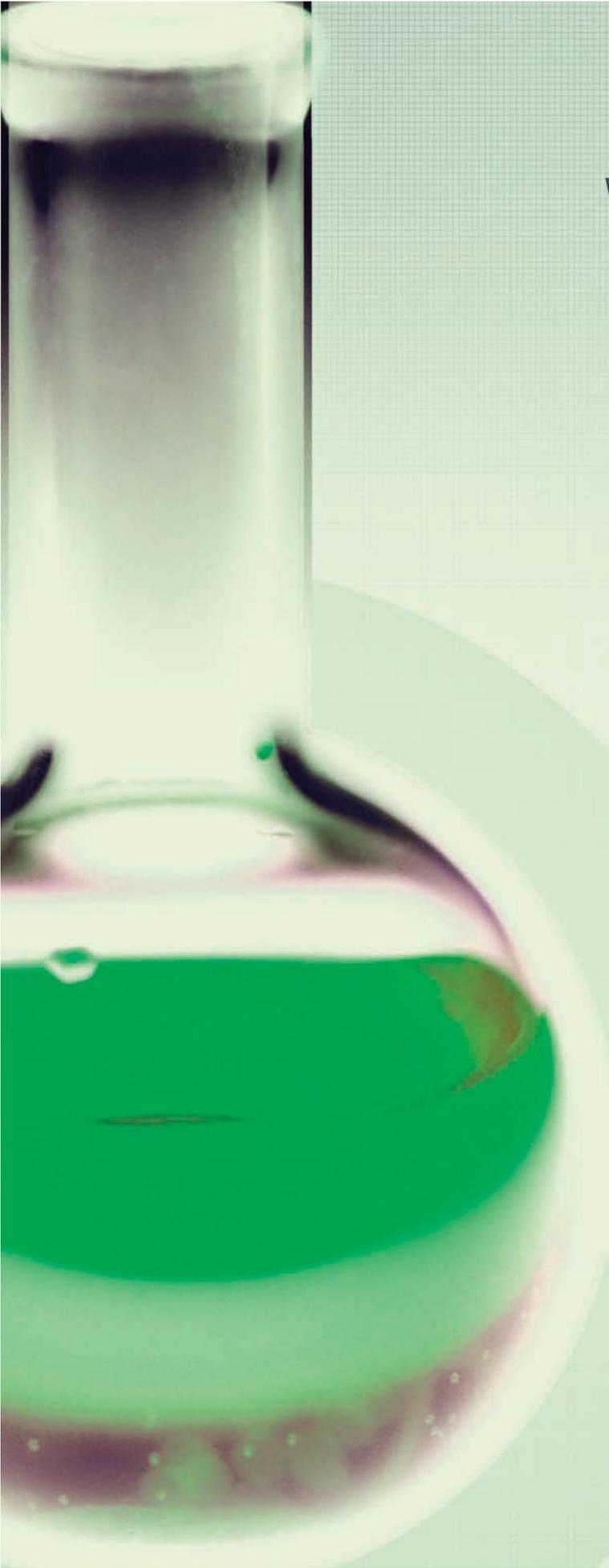
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Interfaculty Pain Curriculum Week

By Evgenia Cheveleva (0T9)
IPSHA, VP Curriculum

The week of March 24th was dubiously called 'Pain Week' – named so after the topic of focus for over 800 students in different healthcare professions. I, on the other hand, think that it was named so for the 8:30am start time each morning.

Students from Physical Therapy were making fun of me – they have 8:30am classes frequently. Apparently, PT noted that a number of us pharmacy students were struggling to stay awake, even though we were rattling off dosages of painkillers with textbook-like precision.

Apart from the 8:30 start, pain week, or officially the Interfaculty Pain Curriculum, was a great event. We had lectures from prominent leaders in the healthcare field about pain and its management, and patients with chronic pain who told their stories and made us see real cases and real patients. Then students moved to smaller groups to use their knowledge to work up cases of patients, coming up with care plans for different instances. For the first time we were sitting together with students from Dentistry, Medicine, Nursing, Pharmacy, Physical Therapy and Occupational Therapy (we finally found out the difference between the two), and using our knowledge to work up a patient's case.

The interesting thing was that we were able to come up quite a comprehensive plan, and at one point, my group had a moment where we realized just how much we were able to come up with. I guess all the things

that we learn in class, even if we claim "to know nothing" before an exam, somehow we managed to come up with pretty impressive suggestions.

I would like to tell you about the Interprofessional Healthcare Students' Association (IPHSA), the student organization that has been involved with the social and academic student-run events behind Pain Week. IPHSA is a student group dedicated to bring together students of various healthcare professions for academic, athletic and social events in order to promote collaboration amongst students at the pre-licensure level. We had two great events for Pain Week – on Wednesday the 26th, we had a large student display from the various healthcare professions. A number of professions that were not part of Pain Week were also represented, such as Chiropractic (they had a whole army of people along with a massive display), Medical Radiation Sciences and Speech-Language Pathology. It was interesting to hear from these dedicated students about their professions, and take a look at the impressive display boards, most of them very skillfully made by the students. It was also fun for the presenters to meet each other and learn more about each different profession.

On Thursday night, to celebrate the end of a week of hard work (and early awaking), there was an awesome pub night, held at the stylish and cozy Ferret and Firkin pub. There was a great turnout – at one point there were almost 90 people from all healthcare professions at the event. There was pool and darts, good food and some amazing prizes. However, to enter the draw, students needed to fill out a fill-in-the-blanks sheet, where they had to find a student of a particular profession, and ask them a question. Questions ranged from asking what a pharmacy student's favorite drug is, inquiring of an OT student if saving up popcan tabs really added up to a wheelchair, or finding a PT student to determine their Range of Motion. This generated lots of discussion and interaction in a relaxed atmosphere, as people had



a good laugh and found out interesting facts about one another.

The winners of the prizes were all happy, and it seemed like the dentistry students, who won a giant Donkey from Shrek were the happiest bunch of all (even happier than the medical student who won an mp3 player, the top prize of the night). Overall, it was a fun night, and students stayed late into the evening, talking away and making new friends. There are not many opportunities for students to simply spend time together, and once we graduate and begin practicing our professions, it could be hard to learn which profession to turn to and how to work together for the betterment of the patient. As mentioned previously, this is exactly why IPHSA coordinates such events, and a pub night or a bowling night can aid to foster interprofessional collaboration in the future.

Financial support was generously provided by the Office of Interprofessional Education, and we also thank the Interfaculty Pain Curriculum Committee for allowing us to work with them. And of course, a big thank-you for all the students who created the student displays and helped out at the pub night, members of the IPHSA council and those who woke up before me to hand out our print materials to all students on Monday!

Look out for future events from IPHSA in the next year, and consider running for a position in the upcoming IPHSA election, as there are many opportunities for student involvement. You can join our Facebook group (IPHSA), or email us at UofTIPHSA@gmail.com with any questions. Good luck with the upcoming exams! ■



Should I Join the Ontario Pharmacists' Association?

By Jonathan Lu (1T0)

Around September, we students get bombarded with a slew of presentations and free lunches. Hopefully, we aren't there just for the gratis munchies. In any case, one of those presentations would involve the OPA student membership. Advertised discounts include private insurance plans, car rentals, gym memberships, and various attractions, not to mention all the money you put into your membership is rebated when you join as a practicing pharmacist. So, let's say you spend \$150 on student memberships throughout your university career – once you graduate, that amount is subtracted from your first year as a full member – you get your money back. Even still, at a temporary setback of a whopping fifty-some odd dollars for a yearly membership, a student may reconsider forking out the money to join.

But do consider: monetary benefits aside, you receive the quarterly Ontario Pharmacist magazine, along with helpful editions of the Pharmacist's Letter. And here's an unadvertised benefit: you have the opportunity to work (yes, for money) with the OPA. Each reading

week, student positions are made available, and they are quite flexible. Personally, I was able to take advantage of this provision for the past two years, and through this, was able to work with the neighboring DIRC (Drug Information and Resources Centre) during the implementation of Bill 102's Pharmacists' Professional Services. The staff who hail from the wide spectrums of hospital, retail and industry are friendly and don't just talk about benzodiazepine contraindications – they're pretty down to earth people who can give helpful advice regarding your career or where to find good Thai food on the weekend.

Lastly, joining allows you to attend the OPA's annual conference at a special rate. A series of exhibits to lectures on topics like super-bugs to financial planning to obesity are helpful for students to have a feel for what their futures will be. And hey, they even have a casino night. So, instead of just having retail pharmacy technician experience on your resume, how about joining the OPA?

To find out more, check out www.opatoday.com and see what you could be missing. ■

The CAPSI "Bug"

By Alexander Vuong, 2008-2009 CAPSI Executive Secretary

My fascination with CAPSI dates back to before pharmacy school started. Being one of the keeners on the UPS forums, which was regularly used back-in-the-day, I read fascinating posts on what an amazing experience PDW would be. So when the opportunity to register came early in 1st year, I signed up immediately! I also signed up by myself-unsure of whom I would be rooming with. I didn't care, because I googled up CAPSI's website and I was with pleased with what they had to offer.

I read that it was "an association of pharmacy students, pharmacy interns, and undergraduate pharmacy organizations across Canada, developed to promote and advocate the interests of Canadian pharmacy students before organized bodies in pharmacy, other professions, government, industry, hospital and the community". I was one of the rare 1st year students who knew and was PROUD of automatic CAPSI membership with UPS from the get-go. Checking on the website for the first time, I got bit by the CAPSI "Bug".

My CAPSI-centric persona has led me to participate in almost every single CAPSI competition since first year, and to attend every single symposium in my 3 years here. I never held a formal position on the CAPSI committee but I helped out where I could - at CPhA book tours, CAPSI charity week bake sales, competitions, symposiums, etc. Last year, I wanted to channel that CAPSI passion and drive and ran for a position on the National CAPSI Executive. I was not elected, but that did not end my relationship with CAPSI. Losing that position was motivational. I knew that I had to build up my portfolio and work on my leadership skills before I represented U of T on a national level.

The CAPSI Representatives that held office at U of T in my 3 years here was phenomenal. The leadership and passion that Jessica Auyeung, Alexandra Marcil and Marie Irvine had for CAPSI was something I wanted to emulate. I built up my portfolio as UPS President this year, and prepared myself to run for a spot on the National CAPSI Council once again. It was nerve-racking. To lose once was upsetting. To lose twice would have been devastating. Fortunately, I was elected this year and I will be joining the CAPSI Executive as the Executive Secretary.

The National CAPSI Council consists of approximately 30 members.

There is the executive council, and then the Sr/Jr Reps from all of the faculties. There are two face-to-face meetings in my term, starting with the CPhA Conference in the summer, and then at PDW. Throughout the year, other meetings are held via videoconference or teleconferences and the council keeps in touch regularly via email and an online forum. To compensate for the Executive's time and efforts; transportation, registration and accommodations to the CPhA and PDW conferences are provided by CAPSI. These conferences bring long hours in meeting rooms, social nights and an awesome opportunity to network with pharmacists and pharmacy students from across the country.

It is extremely humbling that next year's CAPSI Executive will have 3 members from U of T! This is the highest in recent memory. Sara Lavoratore was elected as VP Interprofessional Affairs and Marie Irvine for VP Education. Nationally and locally, Rachel Knott will be our Sr. Rep and Meaghan Linseman as our Jr. Rep. I am so excited to work with these ladies and bring forth the U of T perspective to CAPSI National. As Executive Secretary, I will work hard to disseminate minutes of CAPSI National Council to all members in a timely manner, increase membership, run CAPSI National elections, review & update the constitution, maintain the membership database, and increase student awareness of CAPSI at U of T.

I encourage all of you to start thinking about CAPSI and what it represents. It is more than just competitions, books, symposia, charities, textbooks, agenda, backpacks, iPharmacists coupons, Awards, lunch & learns and PDW. It is OUR national voice and connects us to almost 3000 other pharmacy students. Now if only every one of us could be bitten by that "bug"... ■

The UofT CAPSI council would like to thank the following sponsors for contributing prizes for this year's successful CAPSI charity week:

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PharmaFiles

Your Rx for Success

By Angeline Ng (0T8) and Mike Pe (0T9)
UPS External Affairs

Hi Pharmacy,

We can't believe the year has flown by so quickly and exams are just around the corner!

This month's Pharmafiles feature is Tony Huynh, an 0T7 grad who many of you may know. We hope you will be able to relate to Tony's hard work and experiences as we all move one step closer to being pharmacists.

It has been our pleasure profiling pharmacists in The Monograph this year and we wish you all good luck on your exams! Congratulations to the Class of 0T8 – hopefully we will see YOU featured in The Monograph in the near future!

Demographic Info

Name: Tony Huynh

Year of Graduation: 2007

Which pharmacy school did you graduate from? University of Toronto

Have you completed any advanced training or certification? No

Do you participate in any other professional activities (eg. committees, professional associations)?

Current member of OPA, was part of the OPA membership standing committee in 2006-2007. Participated in a Cardiovascular Wellness clinic at the GM Assembly plant, which is featured in the February issue of Pharmacy Post

Job Description

What position do you hold or what is your current practice?

Pharmacist/Owner ("Associate") of Shoppers Drug Mart #811 in Scarborough

How did you get to where you are today? What was your career path?

After I finished my first degree from U of T (HonBsc – Toxicology), I got a temporary job as a cashier at Shoppers Drug Mart to help repay some student loans while I was still job hunting for something related to my studies. This was when I learned of the Shoppers Drug Mart Associate concept. The idea of being a franchise owner with a six figure salary was enough to lure me back to U of T for my pharmacy degree. During my time as a pharmacy student, I maintained full-time hours with Shoppers Drug Mart as a Pharmacy Technician and Front Store Supervisor. After graduation, I completed my internship with Shoppers Drug Mart and subsequently assisted with the grand opening of 2 new stores in Scarborough before being appointed to my current position.



What is your best memory of pharmacy school?

All the free stuff in first year and all the free meals in fourth year!

What is your most embarrassing pharmacy moment?

I fell asleep in Anatomy and started snoring. Professor Ballyk stopped her lecture and asked the person sitting next to me to wake me up. As I woke up, oblivious to the fact that the whole class was staring at me, I started to stretch. Midway through the stretch with both arms above my head, I noticed the unusual silence in the room and everyone's heads pointed in my direction!

What is your favourite drug and why?

Biaxin because it smells like vanilla.

What advice do you have for current pharmacy students or new graduates?

For current pharmacy students, I encourage you to spend a little less time with the books and a little more time getting involved in extra-curricular activities within the faculty. It is also very beneficial to get some work experience in a community or hospital pharmacy because what you learn in school and what actually happens in practice can be very different.

As for new graduates, be nice to your technicians and help them out when you can. Just because you are now a licensed pharmacist, it doesn't mean that you no longer need to count pills or cash patients out at the cash register.

~profile coordination: Angeline Ng (0T8)

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4TH YEAR ANTICALNDAR

By Alena Hung (OT8 - Monograph Rep.)

Contributions by: Emily Lam, Amanda Ng, Charlene Quan, Gloria Seto, Peter Shalvardjian, Kim Truong, Ann Varickanickal, and Lisa-Kaye Williams.

PHM421—Therapeutics II

Instructor: Amita Patel

This course is the direct continuation of PHM321 from third year. The teaching style is virtually identical except now, instead of 2 cases per week, there will be three. The topics covered generally tend to be relatively straight-forward and give you a good taste of topics commonly encountered in practice (e.g., dyslipidemia, post-MI management, schizophrenia, dementia, depression, etc.). Because there are three cases per week, and the level of detail is high, my advice is to split the cases up amongst your group members and focus on preparing your assigned case. Then, for the rest of the topics, try to read what you can. The midterm and final exam are very similar to those in third year (written and oral respectively). In addition, there are two CSS sessions (the topics this year were hypertension and heart failure).

The Big Picture: Overall, the material that you learn in this course is very relevant to SPEP and practice, so despite the incredibly heavy workload of 4th year, it is worth investing time and effort into doing well in this course.

PHM425—Pharmacy Practice Research

Instructor: Paul Grootendorst

This course is intended to teach you the fundamentals of conducting, evaluating, and making sense of Pharmacy Practice Research. Sound confusing? It is. The good news is that the material itself is not that difficult. The bad news is that you may not realize this until it is too late. Prof. Grootendorst tries his very best to enthusiastically explain the basics of conducting research, but you will probably find that you cannot follow a word he says. To get around this, try to read his lecture notes ahead of time, and if you can't do that, then definitely read them before the exam. Your mark in this course will basically be comprised of your midterm, final exam, and research protocol marks. The midterm is fairly basic and you can do relatively well as long as you understand and learn his lecture notes. The final exam is slightly more challenging, but still, doable. Finally, the research protocol—this is a huge project that can be very time-consuming and demanding. The final protocol must be individually completed, but most components of it can be generated as a group. So if you manage to find good reliable group members, you can dramatically decrease your workload.

The Big Picture: This course is manageable and

the material really is not too difficult. The important thing is to try to stay on top of this course. Otherwise, you'll find yourself in a downward spiral of confusion.

PHM427—Health Systems in Society II

Instructor: Linda MacKeigan

This course is supposed to be the continuation of PHM227. Remember 227? The course is mostly taught using a didactic lecture style, with two tutorials during the term. Evaluations consist of an assignment (worth 10%), a midterm (worth 50%), two pharmacoeconomic quizzes (worth 10% together), and the final exam (worth 30%). The assignment is intended to give you a sense of where your writing skills stand—in other words, it is supposed to help you. In reality, the assignment is graded rather harshly, so to avoid disappointment, make sure that you follow the directions exactly! The midterm covers quite a bit of material and make no mistake, it is not a light test. You will need to know your material and write as fast as you can possibly write. The final exam is slightly better than the midterm in that it is non-cumulative and really only covers a few lectures.

The Big Picture: This course does not have an extremely heavy workload, but do try to stay on top of the readings. Also, although sometimes dry, try to attend the lectures as you will find your lecture notes very bare if you don't.

PHM428—Professional Practice IV

Instructor: Zubin Austin

This course is different from the other professional practice classes you've had so far. The course does not touch upon jurisprudence. Rather, it goes through psychology models, law, and a survey based on the characteristics of your class. The two evaluations in the course are a midterm (worth 40%) and a final exam (worth 60%). The midterm focuses on the material from the psychology section whereas the final exam will focus on the law section and the results of your class' survey. The material in this course can either seem really interesting or really dry. In any case, my advice is to show up to lecture. If for no other reason, Prof. Austin's jokes are a real mood-booster.

The Big Picture: This class is a good way for you to expose yourself to a side of pharmacy practice that you don't get to see in the other courses. It's only 1.5 hours a week, so take the time to hear some jokes and learn about some new "stuff".

PHM429—PPL IV

Instructor: Debra Moy

This is the final installment in the PPL series. This is what you've been working up to during the last three years. This PPL series is by far the most challenging of them all. There are several

differences from the PPLs you've had in past years. First, the 4th year PPLs are solely based on patient interactions. There are no technical components—no prescription checking, no verbal prescriptions, no written prescriptions—strictly patient role plays. Second, there are professional actors that play the role of the patient. As such, the situations seem a lot more realistic and it is actually, believe it or not, easier for you to identify the DRP and to make a recommendation. In total, you must pass two out of three A roles, and at least 3 out of the 5 B roles (although, things may be different next year). The point is, your chances of passing are pretty good so long as you are prepared, confident, and professional during the labs. In general, preparation for the lab is straight-forward as you will be given the topics for each lab session in advance and will also be referred to relevant readings (if there is anything that stands out for that topic). In addition, the lab itself is an open-book session, so if you really don't know something, you can just tell the patient "I just want to double check something so that I can give you the best possible advice". Now don't get me wrong, the labs are stressful, but they are the best way to prepare for practice.

The Big Picture: Make sure you do the pre-lab questions and pre-lab preparation so that you are adequately prepared for the lab. Then, once you're there, just used a structured approach and you should be fine. Finally, if you don't manage to pass the first lab, it's okay!!! Just take it as a learning experience and try to improve the next time.

PHM450—Aboriginal Issues in Health and Healing

Instructor: David Burman

This class will be completely different from any other class you have every taken in Pharmacy. Whether or not this is a good thing will depend on your learning style. There are 2 hours of class per week in the form of a small group/round circle discussion/storytelling forum. That's right...storytelling. Evaluations consist of a birth story about yourself (worth 30%), a book report (worth 30%), and a final group case study (worth 40%) [note: this mark breakdown may be slightly incorrect—but it should be close]. There are weekly readings that can generally be considered optional; however, they do maximize your learning experience in the course. The best part is there are no exams or midterms. In terms of difficulty, this depends on how involved you want to become in the course since the class is developed as an open forum for discussion rather than as a didactic lecture. The difficulty also depends on what type of learner you are. If you're the type of person that gets the most out of didactic lectures, then you may find this course challenging as there are no structured

lectures, but rather a long running symposium on Aboriginal culture and healing.

The Big Picture: Overall, the workload for this course is quite light, but it does require a lot of self-learning for those who are keen about getting the most out of the experience.

PHM454—Selected Topics in the Pharmaceutical Industry

Coordinator: Dianne Azzarello

This course is intended to provide an overview of the potential roles for pharmacists in industry. Classes (3 hours/week) are set up as small, interactive, informal lectures/discussions and each lecture is given by guest speakers from various pharmaceutical companies and government agencies (class size <20). This year, weekly topics included regulatory affairs, drug safety, drug information, marketing, the drug approval process, and drug development. The speakers are usually experts in their area and are generally quite good. The instructor does not actually teach any of the lectures, but has a lot of experience in the pharmaceutical industry. As far as evaluations go, there are no exams! But don't get too excited—there are two large projects/assignments worth 40% each. Group presentation and class participation are worth 10% each. The weekly workload is minimal and there are rarely readings required to prepare for lectures. The lectures are casual but participation in discussions is encouraged for participation marks. Projects/assignment instructions can initially appear quite vague and unclear, but put some time and effort into them and you'll do fine. The final project is usually due on New Year's Eve, so for you procrastinators, you can do your final assignment after December Exams...in the Dominican.

The Big Picture: This course provided a good introduction to the pharmaceutical industry and potential roles for pharmacists outside of the traditional hospital/retail settings.

PHM456—Introduction to Pediatric Pharmacy Practice

Instructors: Sandra Bjelajac Mejia (primary contact) plus lots of guest lecturers

This course discusses the use of medications and non-pharmacological treatments in children. Some topics that were covered include: drugs in pregnancy, infant nutrition, children with HIV/AIDS, parenteral drug administration, substance abuse, eating disorders, and pediatric therapeutic drug monitoring. Classes are given as didactic lectures with 2 guests/topics per class (2 hours of class per week). Because there were 2 topics (with 2 different lecturers) per class, the amount of information was sometimes too much to handle. There is no required textbook for the course, and readings assigned in class are strictly OPTIONAL—however, if there are any areas that you need more information in,

then you should do the readings. Evaluations consist of 1 midterm exam (worth 30%), 1 assignment (worth 25%), and a final exam (worth 45%). In terms of material covered, 10 hours of lecture were covered on the midterm exam and 16 hours of lecture were covered on the final exam. The midterm/exam were pretty straight forward and reflected material found in the notes, but, the marking was picky (i.e., looked for exact wording). The assignment was not difficult—this year, it was to create an exam question (and answer it) about a side effect of a drug that is specific to the pediatric population. Part of the marks for the assignment was allotted for creativity. All in all, memorization is key in this course.

The Big Picture: This course has a fairly high workload in terms of studying and memorizing facts. The wide range of topics covered makes it a very informative course, but somewhat stressful. Overall, the material is interesting and will likely be useful later in your practice.

PHM457—Natural Health Products

Instructor: Heather Boon (and a few guest lecturers)

This course is intended to give you an overview of common herbal products, which in today's practice, can be very valuable. The class size was fairly small (~17-20 people) which was good because it allowed for interactive discussions to occur. Lectures consist of one 2-3 hour session per week. Initially, the lectures focus on selected herbals (e.g., Garlic, Echinacea, horse Chestnut seed) that are commonly used or inquired about in community practice. A fairly large emphasis is placed on how to analyze information and respond to patients appropriately. Some of the guest lecturers presented cases for group discussion, and overall, the majority of sessions were very interactive. Evaluations in this course consisted of a critical analysis of a scientific paper (worth 15%), a midterm (worth 45%) consisting of mostly applications questions (short answer, fill in the blanks, listing, etc.), a Natural Health Product presentation (worth 10%), and a Natural Health Product project report (worth 30%). The final project takes a fair amount of time, but Prof. Boon is open to questions and is very flexible if students feel overwhelmed. Sound overwhelming? Just try to start working on the final project early and have a sense of what sort of evidence is available for your proposed topic, ask about sample midterm questions, and don't be afraid to ask questions or see Prof. Boon during her office hours. Also, there is NO final exam in this course, which is very beneficial during the hectic final exam period.

The Big Picture: This course is not a breeze, but it is definitely worth taking if you have limited knowledge about herbal products and other modalities (e.g., naturopathy, homeopathy, etc.)

PHM458—Pharmacy Practice Management in the Community

Instructor: Harold Segal

This course is intended to give you an overview into community pharmacy practice. The course is delivered using didactic lecture style (2 hours per week). Evaluations consist of 1 midterm and 1 final exam, each worth 50%, and both consist of MCQs. Both exams are 1 hour in length, and while the midterm was relatively straightforward, the final exam included calculations (formulae need to be memorized), and most people were hard-pressed to finish on time. There are assigned readings from a required textbook that you should definitely complete (since if it is in the readings, it is testable material). The other point you should be aware of is that while Prof. Segal uses PowerPoint to present his slides, these slides are not available for students to print out—so attendance is highly recommended.

The Big Picture: The workload for this course is fairly light and there is not a lot of preparation to complete before each class. The material itself is not that difficult and provides a good foundation in community pharmacy.

PHM459—Institutional Pharmacy Practice Management

Instructor: Bill Wilson

This course is the continuation of Bill Wilson's PHM326 in third year. As its name suggests, it focuses on the management of institutional pharmacies (i.e., hospital). The lecture style is very much similar to that used in PHM326, with mostly didactic lectures. The material is not difficult to understand and Prof. Wilson does an excellent job at keeping the mood light. Evaluations in this course are simple: one assignment worth 40% and one final exam worth 60%. This year, the assignment was an 800-1200 word essay that had to do with issues in hospital pharmacy management. The final exam was based on the entire term's lectures, but, compared to other courses, this was a relatively small amount of material.

The Big Picture: This course has a relatively light workload, and with its Friday afternoon (at least it was this year) timeslot, was a nice way to end the week. My advice is to attend the 2 hours of lecture each week because as usual, Prof. Wilson provides hard copies of his handouts that may not otherwise be available before the exam.

PHM462—Alcohol and Substance Use Disorders

Instructor: Beth Sproule

This course is designed to provide an overview of alcohol and substance use disorders. The course was delivered using a didactic lecture style (2 hours per week) with numerous different guest lecturers in addition to Prof. Sproule. In terms of workload, this course was not overwhelming and

generally the topics were very interesting. Also, attending class is highly recommended as Prof. Sproule tends to tell the class what topics will be tested on the midterm or exam. Also, since there is no required textbook for this course, you will need to rely on your lectures notes for studying. If you do happen to miss a class, make sure you get notes off of a friend. Evaluations in this course include: one written assignment on a drug information question (worth 25%), one midterm (worth 35%), and a final exam (worth 40%). The midterm and final exam both consist of MCQs and short answers. When studying, focus on the lecture notes and you should do just fine.

The Big Picture: The material covered in this course is not difficult to comprehend and the workload is relatively light. More importantly, it was very interesting and exposed students to an aspect of alcohol and substance abuse disorders that they may not otherwise get to see.

PHM463—Pharmacotherapy in Obstetrics and Gynecology

Instructor: Tom Brown and Lisa McCarthy

This course is designed to give you a fundamental understanding of the medications used from menarche to menopause and to encourage you to develop a practice that provides quality of care to women. It is set up as 2 hours of lecture per week with the actual lecture style varying from didactic lectures to case discussions to problem based learning. The first half of the course is taught by Tom Brown while the second half is taught by Lisa McCarthy. Evaluations are comprised of 2 midterms (worth 30% each) and the final exam (worth 40%). Most of the questions on the midterm and final exam were short answer questions. The workload for this course can be considered moderate and the test questions were fair for the most part.

The Big Picture: To do well in this course, go to lecture and take good notes. And when it comes to midterm / exam time, be sure to pay attention to the wording of your answers and read each question carefully.

PHM468—Self-Directed Online Problem Based Learning Elective in Self-Medication

Instructor: Debra Sibbald

This course is unique for several reasons: 1) there are no class hours (that's right...0 hours of class per week) and 2) there is no exam component. However, there are some small group tutorials to review course expectations at various times throughout the semester. Other than these sessions, the course is entirely based on independent learning. The weighting of assignments may vary from year to year, but for the Fall 2007 session, there were three assignments: 1) Critical appraisal of key articles; usually between 8 – 15 articles (worth 20%), 2)

Flow-chart outlining the flow of your online case and the types of MCQ questions you will have (worth 20%), and 3) Creating your online case and the MCQ questions (worth 60%). The workload is moderate if you plan your time well—and for those of you who enjoy critically appraising articles, you will get a lot of practice here. Prof. Sibbald is very flexible with due dates. However, if you are the procrastinating type, then the workload may prove to be very heavy near the end of semester. In addition, Prof. Sibbald expects students to develop complex type questions that will integrate knowledge not only learned in PHM220 and PHM320, but from other courses as well, such as therapeutics. Creating the online case requires some knowledge of HTML coding, but if you have no experience, don't worry because you can easily learn as you go.

The Big Picture: This course has a moderate workload if you are able to plan your time and activities wisely. It requires discipline because it is largely independent in nature. Finally, keep in mind that enrollment in this course is very limited, so if you want to take this course, act quickly and contact Prof. Sibbald.

Preparedness for SPEP

Instructors: Andrea Cameron and Annie Lee

This course (really, it's just a series of lectures) is intended to give you a brief overview of what SPEP is, what is expected of you during SPEP, and a description of the various tasks you will complete during SPEP. The sessions are generally scheduled during a lunch hour between classes and as such, probably just seemed worse than they were (???). There is a test that you have to pass and the pass mark is 80%, but don't worry about it. It's open book, and as long as you have your

SPEP manual there, you should be fine. All in all, this course has no workload associated with it, so that's a bonus!

The following courses were cancelled this year due to a lack of interest:

- PHM451—Radiopharmaceuticals in Diagnosis and Therapy
- PHM453—Specific Topics in Nuclear Pharmacy
- PHM460—Pharmaceutical Marketing (not cancelled, but only one student took the course, so it would be difficult to get a comprehensive review of the course).

Other Elective Courses:

- PHM489—Research Project I
- PHM499—Research Project II



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How I learned to stop worrying and love the curriculum

By Adam Calabrese (IT1 - Monograph Rep.)

In contemplating writing a year-end article summarizing what I thought of my first year of pharmacy school, I had initially considered an enormous and long rant on the irrelevance, disengagement and general uselessness of most courses that began with a P. After three pages and having exhausted my ability to compare the teaching ability of various professors to be unworthy of remedial high school courses and explaining how various PhD (candidates') presence in the school making me ashamed of being a student here, something dawned on me: the faculty doesn't have it wrong, I do. You see, it's not just that current pharmacy practice is wrong; it doesn't exist altogether.

While PHM 128 started out as a course focusing on acquiring technical jargon related to pharmacy practice like medical terminology, prescription shorthand and the basics of jurisprudence, it has since morphed into a highly disorganized and trademarked lecture on something called patient-centered pharmaceutical care, heavily influenced by a book entitled "Pharmaceutical Care Practice". Here, we learned a trademarked and propriety process of providing patient care focused solely on the area of the patient's medications. While a casual reading might make you wonder which clown college the three authors' four doctorates came from (adding on an honorary doctorate of science), a closer inspection reveals the unbridled genius of the authors. So powerful was this realization that I blacked out instantly, waking up four hours later in a ditch missing a kidney. You see, pharmaceutical care is all about making money. The more problems a patient has, the more you're allowed to charge them. How else does one make money in the pharmaceutical care business? By coming up with a process of patient care activities, jumbling it around, changing words at random, adding in responsibilities entirely indistinguishable from their accompanying activities, add a © logo in random places, calling it the Pharmacotherapy Workup™ (being sure to use that phrase as many times as grammatically possible), and selling it to pharmacy schools who are credulous and lazy enough to buy it. I'm pretty sure that's how science is supposed to work.

Reaching this realization, courses like PHM 120, 127 and 128 don't bother me any more. Irrelevant content, you say? Why, how the hell do you expect to provide patient-centered care if you don't know what the Edict of Frederick was? I've lost count of the number of patients who have asked me that very question in my

community site visits, and you could see in their eyes that they simply wouldn't take me or my pharmacist mentor seriously were I unable to respond. And speaking of caring, the subject of PHM 129 arises. Scheduling two hour orientation seminars with perhaps thirty minutes of valuable information presented is the very foundation of caring about students. I mean, patients.

"But Adam!" you're saying. "Aren't there other subjects we could learn that would really help us understand patients better? Like languages, or cultural studies detailing various cultures' views on medicine that we could use to tailor how we counsel with patients?" What are you people, high? Are you suggesting that you would rather make the patient interaction process easier, rather than rise to a challenge? If I may provide an anecdote to back up my opinion, a second cousin of mine is a paramedic who speaks both Italian and English fluently. In responding to the house of an elderly Italian couple where the husband suffered a heart attack, his wife was not put at ease by the paramedic's ability to speak Italian; she was further confused and scared. I am personally convinced that, were the paramedic able to recite the history of paramedicine at that moment, a whole lot of grief would have been avoided. Further, if you will walk but a few blocks west of our faculty building, you may find medical clinics staffed by multilingual doctors, nurses and receptionists. These sad relics of the medical world persist, for some reason beyond my imagination, and the sad faces of patients who come in and out tell me everything I need to know. Much for the same reason hipsters shop at independent bookstores, these old loyalists still patronize multilingual medical practices out of a nostalgia for mom-and-pop medical shops of a day gone by, and to protest corporate medicine.

Back to my original point; the rest of the curriculum is simply illuminated by PHM 128's brilliant concept of pharmacy (...eutral care). It may take time to realize, but pharmacy practice doesn't really consist of filling hundreds of prescriptions per day, dealing with impatient patients (who, for some reason, insist on thinking of themselves as customers – they must be re-educated about their medication experience) or being frustrated with patients who tell you that you only know what pharmaceutical companies want you to know, or declare ticks to not be the source of Lyme disease, or think that homeopathy is a good way to treat a child who may be suffering from pneumonia. What really happens is that after a patient has a prescription filled (by pharmacy robots; rxbots, if you will), they come in to see a pharmaceutical practitioner about their

medication. This pharmaceutical practitioner then gets to know the patient as a person, so that the patient does not feel like a sum of organ systems. The pharmaceutical practitioner then elicits information from a patient. I particularly like this step. Jana Bajcar's one-woman recitations of conversations of pharmacists attempting to elicit information from patients who confuse drug names with dead relatives thrilled me in ways no play ever could. Soon after, the pharmaceutical practitioner makes rational decisions about the patient's drug therapy. Then, as thirty or forty dollars is clearly not enough to pay for a Z-pack for the treatment of a simple sinus infection, a bill is charged and another appointment is made. Frankly, I don't know why I held such wild misconceptions about pharmacy practice in the first place. Community pharmacists must be acting as some major front group for what really happens in pharmacy, and the deception is so great as to not even be revealed to their student understudies.

Moving back to PHM 120, I feel it is necessary for me to atone for the many harsh things I have said about it in the past. Frankly, having accepted pharmaceutical care as the one true model of pharmacy, the vast knowledge gained there is simply indispensable (pun intended). What knowledge, you ask? Perhaps I should start with the writing seminars. I haven't been on the receiving end of such high quality writing and presentation advice since my high school teachers discovered that a hamburger was an apt metaphor for the structure of an essay. I've also learned that sans-serif fonts are ideal for presentations, as they create a solid line along the bottom of a string of characters, and direct the audience's attention towards it, though I am compelled to wonder why the lecturer's own use of a sans-serif font didn't direct the class' attention towards her presentation. What else have I learned? Well, the life of Ernest B. Shuttleworth and the history of pharmacy in Ontario (and Canada... and Europe) has had a profound impact on my life. Jennifer Beales and Zubin Austin co-authored an article on the subject, and it was a piece of writing so blindingly brilliant that its complex organization remains elusive to most who had read it, and its syntax and voice, which might normally be reserved for late-night infomercials, was a bold protest against the simple, chronological manner in which historical information is normally presented. While I must admit that the "point", as it were, of the article is not quite within my grasp, I am not one to challenge the establishment. The only rational conclusion to be drawn is that this dense tome written on such an obscure topic represents a key part of pharmaceutical care yet to be revealed

to the public. I have since taped a poster of Ernest Shuttleworth to the ceiling over my bed in preparation for what I can only assume will be the day when Shuttleworth's zombie re-takes his rightful place as dean of this faculty. I, for one, welcome our brain-eating overlords, as they should provide exciting practical applications for neuroanatomy. Some sources on the inside tell me the zombie invasion has already begun, as evidenced by the mindless marking scheme of that course's assignments, or essays that are required to be one page long being docked marks for not going into enough detail.

In conclusion, I've become quite satisfied with current pharmacy curriculum. In-class writing assignments that can be summarized with "My mom thinks pharmacy is a profession!" are preferable to real academic disciplines like history or languages, with all that thinking required. Who wants their health care providers to be well-rounded human beings? Patients would no doubt be put at ease knowing that a considerable portion of a pharmacist's first year of education is dedicated to justifying the

professionality of the profession, its role in the health care system, and learning the details of a practice mode which does not yet exist beyond small and isolated outposts. Can't you just imagine the many conversations I'll one day have with patients because of my first year education?

"Excuse me, I have a question about these pills you dispensed. See, I'm not sure that they're the same kind that the doctor prescribed..."

"No, these are correct."

"But my husband said that these markings aren't what should be on the pills."

"In patient-centered pharmaceutical care, the practitioner's first responsibilities are to meet the patient, evaluate drug therapy problems and make rational drug therapy decisions. I've met you, evaluated your drug therapy problem, and have made the rational decision that these pills are the correct ones as prescribed by your doctor. What time is clinically appropriate and convenient for you to make another appointment?"

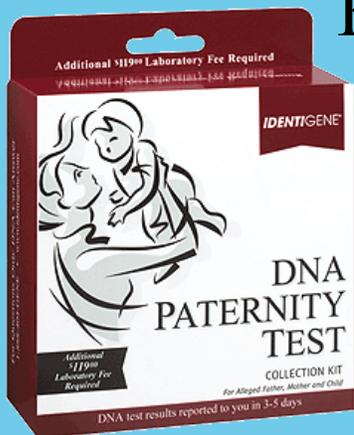
"What are you talking about? I just want to make sure these pills are right."

"Ma'am, I'm a professional because I am licensed by an autonomous governing and licensing body, am viewed as a professional by the public and by other professions, and am granted professional status under provincial legislation. Are you calling my core competencies into question?"
"Go play with the chemicals under your kitchen sink."

The wonderful world of Chlorine gas aside, my patient-centered skills should be tested this summer as I train under the supervision of a senior military pharmacist at a Canadian Forces base, and I have every confidence that my education thus far in dealing with patients won't result in me being shot at. ■

...AND ON THE 18TH BIRTHDAY HE FOUND IT WASN'T HIS

By T. Kazmierski (1T0)



Kanye West will have nothing left to sing about if pharmacists in the U.S. can have a word with him. Identigene® is a product that will provide you with DNA paternity testing results in just 3-5 business days. It is currently being offered at two major pharmacy chain stores (Rite Aid and Meijer) across the United States. Patients using the product would buy the kit, take a cheek swab, and send it in for lab processing. That's right, for a low price of \$29.99US for the take home kit and an extra

\$119.00US for the laboratory processing fee, you, too, can find out who's your daddy.

Now, how is this important to pharmacists? If you are a pharmacist working in the U.S. at one of these stores, you may experience an increase in numbers of patients asking you about the product. These patients may include fathers who have been on the waiting list for The Maury Povich Show for some time now and who are anxious to find out whether or not they are being cuckolded.

As a pharmacist, it is your responsibility to ensure that patients are using the product appropriately and not unnecessarily. For example, you may discover an increasing number of socially awkward adolescent boys coming to determine if all these years their father was not really their father. In these cases, it may be best to tell them that, actually, their relationship with their father is not to blame for

their social awkwardness, they just need to get laid and then proceed to counsel them on condoms and how to increase condom sensitivity. (For 1T0s, the ONLY right answer is to add a little bit of lube inside the condom, yes, even if the condom slips and he contracts herpes, it is still the only right answer).

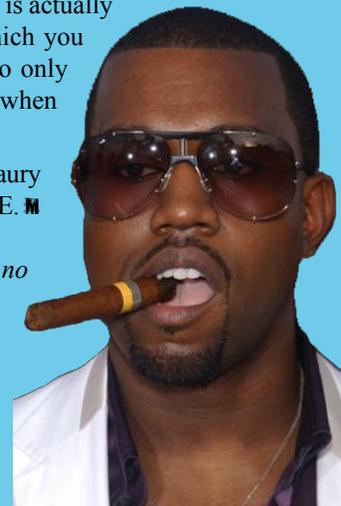
On the other hand, you may find yourself in the middle of the aisle counseling a 17-year-old mother of a 3 month old who has yet to determine who from the football team is really the father or whether it is, indeed, her boyfriend. In this kind of situation, you may want to counsel on such things as how to discreetly extract saliva from the suspected father's cheek. You may suggest such things as making popsicles out of Q-tips and collecting the used Q-tips after he finishes his treat. You may also suggest things such as following the potential father to the dental office and perusing the trash bin for used cotton swabs after his dental treatment.

Finally, in terms of follow-up, this is actually one of those exceptional cases in which you may not want to follow-up. Better to only follow-up when things are good, than when the sh*t hits the fan.

In unrelated news, stocks for The Maury Povich Show fell 2 points on the NYSE. ■

Warning: The author takes no responsibility if you follow the advice and lose your pharmacy license.

References: www.dnatesting.com



Case Report: The Efficacy of Ear Candling

Michael Pe¹, Diana Law¹, Jennifer Do¹, Janet Chow¹, Lara Tran¹

¹B.Sc Candidate, Class of 2009

Leslie Dan Faculty of Pharmacy, University of Toronto

Abstract: Ear wax (or cerumen) is a protective mechanism of the body to help defend against foreign materials by cleaning and lubricating the ear canal. However, buildup of ear wax can occlude the ear canal leading to hearing impairment and potential social embarrassment. In this case report, we demonstrate that one method of ear cleaning, namely ear candling, is ineffective and potentially hazardous to users.

Introduction: Ear wax (also known as cerumen) functions to protect and lubricate the ear canal. However, in many cultures it is seen as gross and embarrassing. The ear canal itself is self-cleaning in that the small hairs (cilia) inside the canal move the ear wax out of the canal. Yet we are faced with the paradox that if the ear is self-cleansing, why then would we want to physically remove the ear wax ourselves? It is known that excess accumulation of ear wax can result in impaction leading to hearing loss and discomfort. More importantly though, since ear wax may be visually distracting and unappealing, risking the potential embarrassment when that big golden nugget falls out of your ear on a date is just not worth it. Today, several methods exist to clear out ear wax but in this study, we focus on ear candling and its effectiveness in removing ear wax.

Methods: Three pharmacy students and one toy panda bear volunteered to have their ears candled. The volunteers were not randomized and the panda bear was placed in the control group by default. Ears were examined before and after the process using a makeshift otoscope (i.e. LED flashlight). Figure 1 is a picture of the candling process. In both groups, each candle was burned for approximately 10 minutes over a Styrofoam plate to catch any ashes that may fall. The candle was put out in a dish of water. Then, the candle was opened up to reveal the contents.

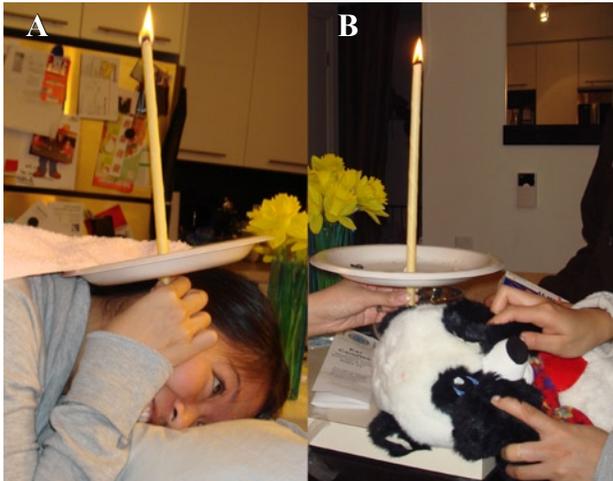


Figure 1. The ear candling process. Each candle was burned for 10 minutes and the contents were examined thereafter. A. Treatment subject. B. Control subject.

Results: Candling was first carried out on the students and upon inspection of the candle contents, there were two types of substances found in the candle interior. One was a dark orange and slightly gummy substance; the other was a flaky off-white coloured substance (Figure 2). When candling was performed on the toy panda bear (control), the exact same contents were found in the candle interior. Although some claim that ear wax may have a bitter taste, the investigators did not use

this analysis method nor support its use. Also, upon visual examination of the ear canal before and after the candling process, it was found that there was no significant reduction in ear wax and debris ($P > 0.05$).



Figure 2. Candle contents. No differences were seen between the treated and control groups. The candling in both groups produced a dark-orange gummy substance (arrowheads) and a flaky off-white substance (arrow).

Discussion: Ear candling is a form of alternative medicine whereby a hollow candle is placed into the ear canal, while the opposite end of the candle is burned. Its proposed mechanism of action is that as the candle burns, it creates negative pressure that draws ear wax and debris out of the canal and into the hollow candle. Through visual inspection of the ear canal, as well as visual comparison of the treatment group and control group, it was found that ear candling is an ineffective method for removing ear wax and debris. Furthermore, some claim that ear candling “sucks the evil humors of the canal”. Although the investigators did not test for this, we believe that this would be a surrogate marker and should not be tested. Also, several references report that ear candling may potentially be harmful to the user since the wax from the candle could fall into the ear. In fact, Health Canada has stated: “There is no scientific proof to support claims that ear candling provides medical benefits. However, there is plenty of proof that ear candling is dangerous.” To this end, ear candles are illegal for sale in Canada. This explains why the investigators could only find ear candles after finally asking a clerk at a Natural Health store, which hides them behind the counter.

Several other alternative practices exist for ear cleaning that include using Q-tips, the Asian ear pick (typically a wooden device shaped as a small spoon), and irrigating the canal with warm water or saline. Using the Asian ear pick has been reported to be a pleasant feeling, which is comparable to having your back scratched. Also, it has been reported that the act of cleaning another person’s ears is considered an act of intimacy. At this time, the investigators will not comment on the use of Asian ear picks as they are all of Asian descent (conflict of interest).

Conclusions: Based on the experiments carried above, ear candling is an ineffective and potentially dangerous method in removing ear wax and debris. Should ear wax be a concern, a visit to the family physician or ENT (ears nose throat) specialist is appropriate.

Acknowledgements

No animals were harmed in this experiment.

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HOLISTIC HORRORS

By Evgenia Cheveleva, OT9

Recently, I had the opportunity to work at an event called the Holistic Show. I figured that it would be a show with booths from the ‘green guys’, vegetarian/vegan societies, natural supplements and more of the same – however, when I arrived there, I was proven quite wrong.

The show consisted of the most bizarre booths – aura imaging, past lives reading, horse spiritual healing, and other things that I cannot even describe in words. There were people selling ‘health’ bars, natural creams with no chemicals (what that means I do not know), strange yoga practitioners, and dozens of different vitamin/supplements booths.

I felt extremely uncomfortable at this show – I would consider myself to be somewhat conservative in ‘treatments’, but I do believe that if a patient thinks something is helping, I would not tell them to stop it, as long as it is not harmful.

What made me uncomfortable weren’t the 3 offers to have my charka read or the strange yoga man who foretold your future and then gave a kiss on the nose. What bothered me were some supplement/healing booths that were telling people information that was inexcusably wrong, and that grown people, educated at least with a high school degree were ‘following along’, as if they did not know better.

I was neighbors with a supplement booth that claimed that they are top ranked in some ranking system of vitamins. Whoever walked by was interrogated as to the supplements that they used, and then told that they should be using their brand (a month’s supply was approximately \$55-\$100). The label did not have anything impressive, just what you would find in a regular multivitamin with some ‘bioactive substances’. Consumers were told some very ‘interesting facts’, such as if you take their \$100 vitamin for a month, it will reset your blood sugar (?), and that another multivitamin is so good, it’ll pull all the toxins from your body and your urine will turn bright yellow (read: Vitamin B12 colors your urine yellow).

After being well-behaved for 2 days of work (these were long hours), I could not take it anymore on the last day. I told the vitamin people that Vitamin B12 turns your urine yellow – they just made a “meh” sound. I told the person trying to sell me some amulet that protects you against electromagnetic radiation that I like my EMR just fine, especially the light bulb that is just bathing me in it. I refused the kissing yoga man, and told a few people loudly (so the vitamin people hear me) that anti-oxidants are only believed to be overly protective to the body, and they are not a magic cure, and too much is not a good idea. I told the Chinese medicine man that I will not try smoking what he was offering me (honestly). This was the same man who told me he recommended a woman give her 3 year-old child some cocaine in the nose for a nosebleed.

The only people I managed to hold my tongue for were my other neighbors, who were claiming that music should be recorded at the frequency of light (432Hz), because it resonates with the universe and DNA. After thinking back to some high-school physics, trying desperately to tell myself I’m not crazy, and that music is a mixture of many frequencies ($v=\lambda f$ was all that flashed through my mind

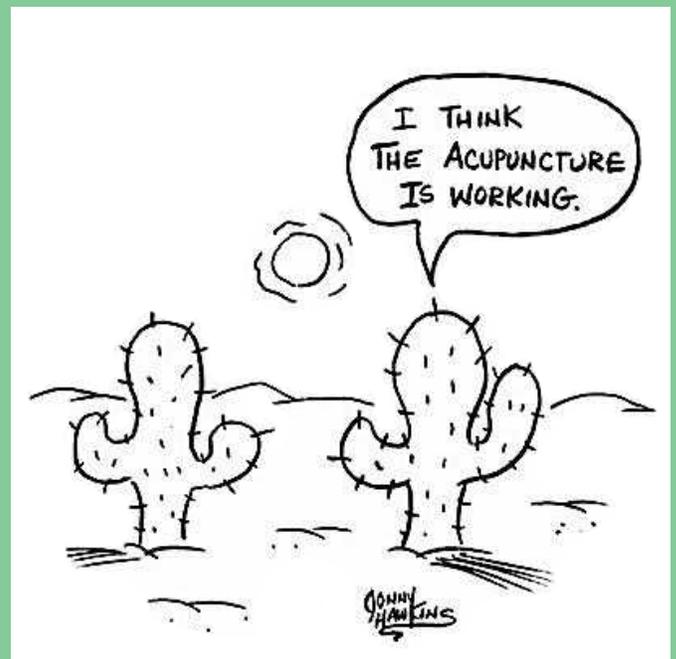
– but maybe I’m wrong?), I decided not to say anything, because the people were overly nice and I’m not a physics expert.

Why am I saying all this? So what if people believe this crazy stuff, and waste hundreds of dollars on weird color-filled bottles that resonate with your inner aura? Why – because these people, the general public, get their brains filled with horribly wrong information - like the B12 urine business, or the hemorrhoids ‘cure’ which consists of inserting a probe up your anus and massaging. This information was given by people who haven’t the slightest clue about the human body, basic medicine or medications that you’d expect a reasonably educated person to have, and passing on these ideas to the general public. And you can bet they were bashing doctors and other “traditional medicine”, making people followers of whatever they were selling.

You can imagine who will have to deal with these poor consumers once they take enough of whatever the Chinese Medicine man was selling (not TCM, he was making up his own stuff), or, excuse my language, how many anal probes they insert into themselves before damaging something (if only you’d see what their prostate treatment looked like). Yes, it’s us, the ‘traditional’ healthcare practitioners that they’ll turn to, and we will have to figure out what they took or did, and often, the sellers themselves don’t know what it is.

The media endorses such misinformation to people under the pretense of “Holistic Health”. Why isn’t there a show of “Normal Health”, where there are licensed, educated practitioners there that can provide unbiased, truthful information to consumers that would not cause them to become poor and/or damage to internal organs? There is no answer, I imagine, and that is probably why I felt so helpless to watch as people were lied to, and I wish I knew what to do.

I guess my only friends at the show became a nice lady that makes hand-made soaps and a young jewelry maker – and the soap was not magic, and the jewelry did not have any healing powers...and we’d get together and vent. I felt much better after I left this show, but the questions stayed behind – who will deal with these people later? **M**



Picture from cartoonstock.com

Homeopathy: there's nothing to it...

By Adam Calabrese (1T1 Monograph Rep.)

In my recent foray into the ethics module for PHM 120, my group was assigned a case that centred around homeopathy. The details of the assignment are, as you might imagine, boring and irrelevant (and not just to this article) but there was a small wrinkle in it which was horribly misguided. The doctor in the case was enraged that a pharmacy attached to his medical practice was selling homeopathy because it lacked any sound medical basis. The doctor did admit, though, that it was unlikely that homeopathic “remedies” could do any harm. This was the only part of the case that caught my attention, and it is something I will delve into later.

It is first important to explain what homeopathy is. Most of us are probably familiar with its use of extremely dilute solutions as medicine, and its position that when substances are diluted to extreme amounts they have the opposite physiological effect when ingested, such as caffeine aiding sleep or snake poison curing stiffness. However, the sheer scale of these dilutions is often skipped over altogether. Dilutions in homeopathy are denoted using a number followed by the letter C. The C stands for the roman numeral of that letter, one hundred, and the preceding number indicates the number of times that a solution has been diluted by a factor of one hundred; a 30C dilution, common in homeopathy, means that a given solution has been diluted by a factor of one hundred a total of thirty times. Some dilutions are even more powerful; a duck liver dilution of 200C is used for treating the flu. Consider how dilute that substance must be. Wikipedia phrases this scale by saying that one millilitre of an original substance having undergone a 30C dilution would occupy a cube having a side length of approximately 106 light years. Noted Oxford geneticist Richard Dawkins tackled homeopathy in a recent documentary entitled “The Enemies of Reason” (available for viewing on Google video), and expressed that, “for the true proved homeopathic remedies” (it is uncertain if he refers specifically to 30C dilutions, or higher dilutions) that, when started from simply one original molecule, the final solution would as a result contain more atoms than are present in the solar system. Homeopaths, however, maintain that an essential healing force or substance is left within the water, even if no active molecules are present. While such a metaphysical claim is probably beyond the realm of current science to test, you might do well to consider that if true, this proposition means that every drop of water you consume, no matter how well treated or filtered, is still polluted with the substances that the water has in the past been a part of, including human waste, raw meat juices, and on a more upbeat note, alcoholic beverages. It might be suggested, then, that ordinary tap water presents the ultimate homeopathic remedy, capable of curing every imaginable disease and malady, including dysentery, food poisoning and hangovers, just to use my examples*. Although to be fair to homeopathy, those kinds of dilutions are not even close to the dilutions used in proper homeopathic remedies. To be fair again, many homeopaths today do not use such extreme dilutions, but will use dilutions equivalent to 1.5 or 3C. Dilution is also not the only step in the process of preparing a mixture. During the process of diluting, the sample will, multiple times, be struck against a hard surface so as to release the aforementioned healing force.

To move back to the relevant part of my ethics case, homeopathy may seem innocuous enough. From my experience it does not have a particularly large (or at any rate, vocal) following in Canada, and I am not one to disallow

someone to treat themselves however they wish and spend their money on whatever it is that pleases them. However, homeopathy has a much larger and established following in other parts of the world, particularly in the United Kingdom. Five homeopathic hospitals operate there, four of which are supported by taxpayer dollars through the National Health Service, at a cost of anywhere between fifty to four hundred and fifty million pounds, or approximately one hundred to nine hundred million Canadian dollars (although to put this in perspective, it is a tiny fraction of the total NHS budget). Standards of competency are also being introduced for homeopathy practitioners in the U.K., presenting a gold mine of comparisons for PHM 120's continuous discussion of what does and does not constitute a “professional”. The practise is even endorsed by Prince Charles. Worldwide, some five hundred million people claim to use it.

Now, going back to the original ethics case, there does not seem to be much potential for harm in homeopathy when taken at face value, as even a harmful medication will be diluted to the point that the patient is highly unlikely to swallow even one molecule of active substance. However, it is difficult (for me, at any rate) to take homeopathic claims at face value. The process of compounding, as it were, a homeopathic remedy involves many, many steps of a 1:99 dilution – up to thirty, or even two hundred, as indicated by the dilution nomenclature. These remedies are not simply diluted



medications, either. As previously mentioned, homeopathy operates under the ideology of “like cures like”; while inactivated bacteria and viruses have the capacity to render a person immune to a specific pathogen, homeopathy is far from comparable. I have already mentioned the rather odd therapeutic choices, and it should be self-evident that there is a lack of readily available physiological explanation for homeopathic medicine. The very nature of homeopathy should also drive us to be suspicious of it. While all homeopathic remedies fall under the Natural Health Products regulations and therefore are required to have a drug information number, this was not always so. While not directly related to homeopathy, other so-called natural health products have had a bad history. An uncle of mine used to work in Health Canada drug labs, and in his tenure there, there were only 9 or so top-level recalls, at least half of which consisted of these natural or traditional Eastern being contaminated with Western medicine, such as herbal diet pills containing methamphetamines, which as you can guess made them particularly effective at suppressing the appetite and

raising metabolism, and people like to buy diet pills that work and are “safe”. While new regulations and the requirement to have DIN numbers essentially invalidate this as an effective argument against homeopathy, it certainly does not mean that homeopathic products, or even homeopaths go without the capacity to cause harm.

First, consider the money that is spent and wasted on homeopathic products. While an appreciable amount of labour and effort goes into preparing the substances, they are by far the most expensive medicines in terms of what they actually contain. Whether or not an individual homeopath or vendor of homeopathic products genuinely believes in what he or she is making or selling, educated people should consider it nothing short of extortion to sell scientifically meaningless products to the general public without at least advising them that these products are not in line with serious science and that they are better off buying products backed by evidence or saving their money. Secondly, homeopaths are considerably more active in Europe and the UK. Some universities in the UK, for example, offer science degrees in homeopathy. You did not read that incorrectly. Proper institutions of higher learning are awarding a degree in homeopathy that is equivalent to a degree in chemistry or physics. Unfortunately I do not have the space to

go into detail on the sheer volume of quackery spouted by homeopaths in the UK, and with considerable public attention. Have a look at Guardian columnist Dr. Ben Goldacre's website and its homeopathy section, <http://www.badscience.net/?cat=35> for news stories and editorials on homeopathy in the UK. Even a brief look at some of the stories will make you gape that such stunning ignorance of basic science exists in a first world country in this day and age; particularly outstanding (and credibly sourced) examples include claims to heal malaria, clear evidence that published homeopathic studies are either cherry-picked or simply poorly designed, wild speculation about quantum physics and its relation to the homeopathic "mechanism of action", and more speculation about the aforementioned memory of water. As ridiculous as this all seems, there are people who genuinely believe it, and there are those who believe that homeopathy can be used to treat serious diseases such as malaria and cancer. In the name of fairness, the official position of the Society of Homeopaths (the largest homeopathy organisation in Europe) is that homeopaths should send patients with such diseases to proper medical doctors; however, there is not a clear record of disavowal or dismissal of members who disregard this policy.

I have, in this article, tossed the word "ideology" around in reference to homeopathy. I use that term because it is an idea held without evidence at best and against evidence at worst. While experiences in this faculty sometimes make me forget, we should all consider ourselves scientists and bound to have our ideas and practices reflect the best available evidence and reason with a healthy (excuse the pun) dose of scepticism. As powerful as the placebo effect can be, wishful thinking does not replace any aspect of medicine. It would

be wonderful if homeopathy were true, as diseases and afflictions could be cured safely and without side effects, and more importantly we wouldn't have to learn so much to become pharmacists. However, the evidence says that homeopathy is simply not true, and even most homeopaths are reasonable enough to send patients with life-threatening diseases to real medical doctors, which I think speaks volumes about how much homeopaths truly believe in their own practice. As a final logical test, consider the following proposition. If, as homeopathy suggests, a properly prepared and diluted solution has the opposite effect that it would in high concentrations, a dilute solution of penicillin should cause a bacterial penicillin-sensitive bacterial infection, and cure MRSA infections; a dilute solution of morphine will cause pain, and dilute Prozac will cause depression. Nothing of the sort will happen. I might be accused here of oversimplifying the underlying concept of homeopathy, but the concept is inherently simple and susceptible to such logical black holes. If the opposite effect of a substance occurs in high dilutions, then it must be true for all substances without exception, not simply for substances that can have a positive effect. ■

* This comparison exists on the Wikipedia page about homeopathy, but I had come up with it myself before reading it. Trust me.

- 1 http://en.wikipedia.org/wiki/homeopathy#High_dilutions
- 2 <http://video.google.com/videoplay?docid=6004927014381716642>
- 3 http://commentisfree.guardian.co.uk/alan_sokal/2008/02/taking_evidence_seriously.html
- 4 I am writing this in an LMP lecture about vaccines
- 5 http://www.hc-sc.gc.ca/dhp-mps/prodnatur/legislation/docs/ehmg-nprh_e.html
- 6 <http://www.dcsience.net/improbable.html>

- PHARMACY - *More than You Imagine*

By Alena Hung, (0T8, Monograph Rep.)

I realize that the title sounds incredibly cheesy and more like a recruiting slogan than an original article title, but, as I come to the end of my four years at the Faculty, it seems to sum everything up. Way back, almost 4 and a half years ago, I found myself miserable and feeling lonely as I tried to find my place in a large first-year life sciences program. The days were long, the people were ridiculously competitive, and the classes were impersonal. That's when the two pharmacy reps (in hindsight, I think they were the UPS Events Coordinators) came to my first year Organic Chemistry class and invited everyone to attend the Pharmacy Info Night. This in itself was not enough to entice me to go; after all, I had to study right? It wasn't until they mentioned the magic words..."free pizza"...that I decided "I'm there".

So, a week later I found myself slipping in late for the info session only to catch the last half. I missed a whole bunch of information regarding the academic portion, the curriculum, etc...and as it were, all I heard was "we're one big group of friends in Pharmacy...we get along, we don't compete, and we support each other". Again, in my head, I'm thinking "I'm so there". I applied. The acceptance letter came, and when

September rolled around, I found myself in a new program, learning new material, and most importantly, amongst new people.

It seems that the past four years have flown by and, as many of you who are in second or third year will attest to, the courses themselves are like a whirlwind. Between the seemingly never-ending tests, assignments, quizzes, labs, and papers, it's definitely hard to take a moment and reflect on your time at the faculty. Now I'm not saying that you should all sit there and daydream about how rosy life at the faculty is. No. I wholeheartedly agree that a much better use of your time would be to memorize the statement "It must be frustrating...", to figure out what that elusive medical condition is for Henderson's biochemistry course, to memorize a dose-response curve, to memorize the millions of antibiotics and what they cover, to figure out that rate-limiting step, to pretend you understand medchem, etc. But, when things get really tough, and you're thinking about how hard the curriculum is, think about how nice it is to have a class of 240 (200 in our class, but the same effect) peers that encourage, rather than discourage, that work with, rather than against, that are friendly, rather than cold to you.

Now perhaps most of you did not have as miserable a time in university before Pharmacy as I did, and so, the difference may not seem as apparent. However, I think it would be hard for any one of us students at the faculty

to deny just how supportive the students and instructors are, and for that I would dare say that we are indeed a fortunate group and that in fact, Pharmacy is more than you imagine. So as I report for the Monograph for the last time as a student, I just want to say thank you to everybody in 0T8 for your support, encouragement, and help over the years! As we march on through our journeys, all the best to you!

And just to end it off in true Alena flavour, here's another terrible little rhyme:

*It's been 4 years, they've gone by so fast,
but we've all made memories
that are sure to last.*

*Through thick and thin, we persevered,
over hurdles we jumped and
obstacles we cleared.*

*As we embark on our journeys ahead,
I remind you to think of words
that have been said.*

*"Dose-response curve, peak-trough levels,
pseudoplastic flow",*

*What do these mean? We may never know.
But one thing's for sure, without a doubt,
It's time for 0T8 to graduate,
and move it on out!*

Congratulations to everyone in 0T8!!! We made it!

Sincerely,

Alena Hung

Pharmacy Prescribing Rights Debate

by Allegra Connor (0T9)

In early March, four brave pharmacy students from the University of Toronto's Leslie Dan Faculty of Pharmacy engaged in a debate on pharmacist prescribing in Ontario. I was one of them, and although I am wildly pro in this hot debate, I volunteered to take up the con point of view when no one else would, playing the devil's advocate to broaden my perspective as a third year pharmacy student. After the official debate ended, I joined the pro side when a second year medical student revealed himself from the audience and rose to the podium to support the con side of the debate with his own arguments against pharmacist prescribing.

After admitting our pro-prescribing sentiments and poor preparation for the debate, the pro team assured my partner and me that confrontation and conflict would be avoided. However, we advised them to withhold their kindness as we were not planning to afford them the same courtesy. If pharmacists want the right to prescribe, they should earn it.

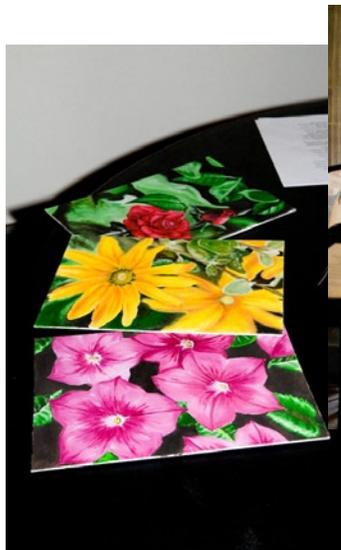
I was actually frightened at the large number of arguments we brainstormed against pharmacist prescribing. The basis of our approach revolved around cost, in terms of higher rates of liability insurance, increased training and curriculum changes, introducing receptionists and waiting rooms in pharmacies, government reimbursement per prescription written, and the likely overall increased drug use in the general population as a result of increased access to medications. On the other hand, we warned of the danger of pharmacist under-prescribing. Currently, we are able to hide under the blanket of legal prohibition to justify our apparent lack of a "role" in health care. If this blanket is removed, we will be expected by the public to make full use of our skills. There also exists the risk that pharmacist prescribing actually restrict access for some to their medications, as it may present as a mere transfer of the wait time from the doctor's office to the pharmacy, an increased average waiting time per prescription dispensed, a pharmacist shortage, and possibly speaking to the pharmacist by appointment only. Finally, opening the Pandora's box of pharmacist prescribing may mark the advent of "double pharmacisting", whereby patients with a given diagnosis present to two different pharmacies for a prescription to treat their condition.

The official debate ended rather comically with my partner's closing line, "And that is why we believe pharmacists should not have the legal right to prescribe but not really." Then, the only medical student attendee approached the podium to speak, and my partner and I joined the pro team. In retrospect, this is when the real debate began, that of the four pharmacy students against the medical student. By sheer virtue of

our numbers, we should have intimidated him, but in fact, it was he who interrogated and scrutinized us. He raised the famous "conflict of interest" issue, that pharmacists may unethically prescribe in order to then profit from dispensing. However, pharmacists, like all health care professionals, take an oath to put the best interest of the patient first. And in fact physicians can legally dispense and compound! To my dismay, the entire congregation and the medical student began to laugh out loud at the prospect, but it is true and often overlooked.

We advocated the time-saving benefits of prescribing drugs for "simple cases", giving the example of prescribing ciprofloxacin for a patient heading on vacation, to be used if traveller's diarrhea occurs. The medical student disagreed with this recommendation, claiming most cases of traveller's diarrhea to be viral, and that this condition should not be treated at all. We clarified that blood in the feces is an indication, and that ciprofloxacin has been shown to decrease the duration of diarrhea, which can ruin a vacation. He continued to argue, but it was a futile argument, since the clinical evidence is only one third of evidence-based medicine, the other two thirds being clinical judgement and patient values, such that pharmaceutical care is very individualized and varies greatly from patient to patient. Perhaps the medical student, being only in second year, is too young to realize this. He went on to say, "If pharmacists want to prescribe, they should learn something about pathophysiology." I retorted that medicine and pharmacy are both 4-year programs, and inquired as to the last time he attended a pharmacy class. Not one pharmacy student in the room questioned his competence to acquire the right to prescribe as a physician. And yet just because one has the right to do something, doesn't make it right. Ideally, we should have been debating both pharmacist and physician prescribing. In the end, we share a common source of information, and that is the evidence in the literature, so there really was no traveller's diarrhea debate, as these students interpreted the same evidence in two different ways. I am quite confident that pharmacists have the ability to make clinical judgements for each individual patient.

Overall, the con argument of the pharmacy students revolved around cost and convenience, whereas the medical student questioned our ethics and competence. These are barriers we must be aware of as pharmacists, and we must constantly demonstrate that we have a real crucial role to play in the health care of our patients, by using our skills to the fullest. It takes one small step at a time to pave the way to a future of collaboration in patient-centred health care practice. **M**



Pharmacy Arts Night (left and top) and St. Paddy's Day at O'Grady (right).

The Dispensary



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

This marks the final Dispensary of the year, but it will not be the last Dispensary you see in this newspaper. After two years of writing regular articles for the Monograph, the compiler has decided to do the exact same thing next year, but as part of the 1T0 Class Council. Apparently this Monograph Rep job involves going to meetings of some sort and having to represent the class. All of us here at the Dispensary hope that other Pharmacy students will take this lesson to heart; that you, too, can write silly articles for the Monograph on a regular basis and people will get the idea that you can be trusted with something important like a seat on class council. We will continue, as we always have, to be the Faculty of Pharmacy's only news source that is verified by multiple scientific sources. Here is one last look at what's making Pharmacy News this hour that we hope you'll remember this summer even as you forget everything you learned this year with the help of lots and lots of alcohol.

Overachieving Pharmacy Students Cause Faculty To Overhaul Grading System: Anything Under 75% Is Now A Failure

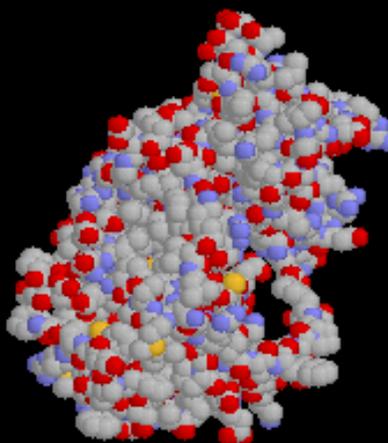
As the students at the Faculty of Pharmacy head into their final exams, the distribution of marks for many classes have stopped resembling bell curves and have started to look like bell curves that have been squished so that practically everyone is getting above 90%. (It's the last article of the year, OK? I'm running out of adjectives.) Pharmacy professors have decided that it is time to make the widely held perception that anyone who gets in the B range is practically at the bottom of the class into a reality by declaring all marks below 75% to be automatic failures.

"How are we ever going to make enough money to afford a private teacher's parking garage and day spa here at the Faculty if we can't get these kids to fail our classes and be forced to contribute extra years worth of tuition?" griped a professor who asked not to be named, as they are in the running for the Excellence in Teaching Award.

Police Investigate Phosphorylation of MAP Kinase Kinase by MAP Kinase Kinase Kinase

An innocent transcription factor became the latest victim of the recent cascade of phosphorylations that have been plaguing PHM222 as of late. In an emotional statement made to reporters, MAP Kinase Kinase said he was just floating in the cytosol and minding his own business when he was phosphorylated by MAP Kinase Kinase Kinase. "Now I have this capital letter 'P' attached to me by a little black line," MAP Kinase Kinase said. "The other transcription factors keep pointing and laughing at me. I tried covering it up with a sweater, but it didn't do any good. It's really annoying- I was hoping to work on my tan at the beach this weekend."

Police could not confirm or deny rumours that these phosphorylations are part of a larger pattern masterminded by RAS proteins and the epidermal growth factor receptor.



Police released this composite sketch of MAP Kinase Kinase Kinase, the primary suspect in yesterday's phosphorylation. (<http://www.chm.bris.ac.uk/sillymolecules/map2k3.gif>)

Multiple Choice Question-Answering Among Important Pharmacy Skills Class of 1T0 Has Learned At Halfway Point

The Class of 1T0 has two more years and quite a lot of learning ahead of them before they graduate, but they've been working hard to master the professional skills that they will need to serve their patients as true health care professionals. A survey of these budding pharmacists found that they have mastered everyday pharmacy skills such as answering multiple choice questions, drawing dose response curves, formulating acetaminophen tablets using a high shear granulation, and being

able to explain the difference between normal phase and reverse phase high pressure liquid chromatography.

Students commented that they had never expected to go to pharmacy school and learn that a solution to a patient's DRP can be solved by choosing between five predetermined multiple choice options, or that they would be questioned on a daily basis about whether G proteins have 7 or 8 trans-membrane helices. They were also surprised but pleased to see that pharmacists apparently need to have an in-depth knowledge of Fick's first law and the factors governing diffusion across membranes, while being able to tell which drugs will kill the patient if not used correctly is something that can be left until third year.

"When I get to my hospital job and start telling the doctor that I learned in pharmacy school that the flowering parts of *echinacea augustifolia* - but not the roots- should be used to treat colds, there will be no more doubts about whether pharmacists are effective members of the health care team," one pharmacy student said.

That's it for this year's instalment of Pharmacy News. Tune in next time for our predictions about which will last longer; the battle between Hillary Clinton and Barack Obama for the Democratic nomination, or the filling of all the spots on the 1T0 Class Council.

Special Bonus Feature: Awards We'd Like To See Presented At Awards Night

The All-Nighter Award: A \$250 bursary that is presented to the student who skips the most classes in Pharmacy while still somehow maintaining a 4.0 GPA.

The Shopper's Drug Mart Counter Jockey Scholarship: Presented to the student who works at the most part-time jobs at Shopper's over the course of the year. Students who work at fewer than 7 locations will not be considered. The prize is: yet another part time job at Shopper's.

The Wesley P. Epidermis Bursary: Mr. Epidermis was a student of the class of 4T2 who nobody has ever heard of, but has an award at the Faculty for some reason. Value: \$100.

The Hook-Ups Gold Medal: Presented to the student who contributes the most to the circulating body of past tests, assignments, and labs that sustain Pharmacy students from year to year, under the radar of the professors.

The Bitter Leafs Fan Award: Presented to the student who will be spending the entirety of the NHL playoffs cheering for a team from the States just so another Canadian team won't win the Cup this year. (Anybody but the Habs.... please!) ■

AN UNAWARE TRUTH

By Matthew Lee (0T9 - Monograph Rep.)

The website wouldn't load, so I pressed the refresh page again and again. "This internet connection blows. Damn it! Why do I still have this piece of junk? I need an iPhone. That's where it's at." I thought to myself as I sat impatiently writing a text on my Blackberry.

"ROGER! Come down for dinner NOW!" My mom yelled to me. "She is such an *itch with a capital B!" I thought as I stormed down the stairs.

My mom's meatloaf blows. I couldn't bear to look at food that night and my appetite was completely gone. "YOU eat that food RIGHT now young man! You've been looking like a toothpick recently and I won't let my precious son look like that!" she squawked.

I was going to get my piiiiiiiiimp on that night at this bumpin' party, so I needed to get the 'F' out of my house as fast as possible. Candy was going to be there and I needed to prep my game. I put the gel in my hair, slipped on my illest chain, and damn did I look fresh!

I live with my parents for now, but I've been saving up to get my own place soon. It's time to get on with my life. I wasn't a baller, but I had some flow stashed up below the bed. I wanted to see the world, start a family in a nice neighbourhood, and have kids who go to college. But for now, all that matters is graduating, and this mother truckin' party!

Before crusin' over, I need to stop off at the pharmacy for two reasons. My throat was feeling kind of messed so I needed lozenges, and I defs needed plenty of condoms for the after party. I always felt the pharmacy was a place where people would look at and judge me in some sort of snooty way. So I would finish my business and jet as soon as possible. But I remember that one night I visited the pharmacy, it changed my life forever.

I was checking out the aisles trying to find the lozenge that would provide me with minty breath to get it on. I picked up a package of RICOOLAAA, found my condoms, and headed for the cashier. Just as I turned around to leave, I heard a voice behind me. "Did you find everything you need?" asked the pharmacist. "Uhh yeah, I was just getting some of these lozenges for my sore throat" I replied. "Do you have any other symptoms with that? Maybe a headache, cough, or fever... or is just the sore throat?" I was quite surprised at the service I was getting, but at the same time relieved because I knew something was wrong, but I didn't really have a doctor to go to.

"Nahh, none of those sort of things, I know I don't have a cold or anything. My mouth just really hurts like a mother. I don't know what's wrong. Recently I've been seeing these yellowish spots in my mouth, and it just hurts too much to swallow so I've been losing a lot of weight too. I'm getting these lozenges because they cool my mouth and help with the pain a bit."

The pharmacist then asked me if I had a few minutes to spare to

talk about it. I stood there in the aisle thinking about Candy and her sweet body waiting for me, but I made a decision there to talk to this pharmacist about my problem, because it was something really bothering me. Was I on any drugs, did I have any diseases, he just kept asking me questions about myself. I told him no, to his questions and he seemed to be flustered.

"Well, it seems like you may have a condition in your mouth called thrush, and you really should go see your doctor about getting an anti-fungal to help you before it gets too serious". I felt kind of weird that I had an infection, so decided to immediately head to the walk-in clinic down the street. After waiting several hours, I finally saw the doc and he asked me similar questions to the pharmacist. He gave me a prescription, said he would run some tests on me, and to expect a call in about a month. I thought nothing of it, and left to get crunked out at the party.

"ROGER! Get the PHONE!" my mom yelled from downstairs. It had been the month since that night and I had forgotten all about it. Then I heard the voice on the phone...

"Hello Roger, this is Dr. Smith from the clinic you visited. I'm sorry to tell you this, but you've tested positive for HIV. And you've had it for quite some time now. It's important that you come back to the clinic to run further tests and get you the proper treatment you need."

I'd never forget those words, and the way it changed the way I lived and who I am right now.

I revisited the pharmacist which had helped me in the first place, and presented him with a number of prescriptions the doctor had given me.

"Can you please help with these?"

I was scared and helpless.

"I would be glad to..." the pharmacist answered.

In 2003, it was estimated there was slightly over a million people living with HIV/AIDS in the United States. Of these, approximately 25% were undiagnosed and unaware of their HIV infection. ■

<http://www.cdc.gov/hiv/topics/surveillance/basic.htm>



Wyeth
Consumer Healthcare

Limited Insight from Narrow Minds

*A response to last month's "Narrow Minds"
(that grew in length of its own accord)*

By Yuan Zhou (1T0)

In response to the opinion article which called for people to be more open-minded, I just wanted to say that although the general concept that the author pushed for sounds like a good idea, the arguments/claims that were put forth were somewhat disappointing.

In the case that this piece is unable to interest you until the end, I'll move up the two most important points I wanted to get across to the front of this article:

In regards to discussing what the author's opinion of God should be like in order for him to be "worth believing in" – that's fine and dandy, but the arguments that follow about what should constitute as sin really break down. The biggest problem in logic (and I muse over whether this problem is simply a result of "narrow mindedness") I see here (so I admit I might be wrong), is that the author has set her own standards of right and wrong to be correct and demands that if, indeed, there is a God, he should change his principles to match them. Where do I get this idea from? From this part in the article: *"The fact is that 99% of people fornicate, so maybe it's time for religions to change the rules on what is considered a sin."* However, in the theistic religions, it's not believed that *people* are the ones setting the bar – the deity or the deities are. I guess the view taken in "Narrow Minds" was one that took all religions to be merely human creations, and so, should be and can be changed to conform to society. I guess that's not being too narrow minded – to be closed off to the idea that there may be an ultimate power who's not going to *"change the rules"* on what's wrong. (FYI, I took "sin" to mean something we do that separates us from God (relationship-wise), or simply breaking God's law.)

For the argument that said God can't be against condom use because they weren't around when the Bible was written – well, were cars, computers, pornography, VISA, sky-diving, liposuction and a myriad of other things we have today available back then, either? Can some of these things lead to sin? Maybe, maybe not. The point is that those teachings can still be relevant today when you're looking at principles. For example, if indeed God *were* against contraception, then he would still be against contraception today (assuming that he does not change in his nature/standards). Another idea that I've heard from a Roman Catholic friend is that even though sex is condoned in marriage, perhaps God did not intend for an "uncontrollable" desire for it in marriage – planning for a(nother) child and efforts to not have sex when the woman is most likely to get pregnant may be options.

Now here's the rest (not all will seem to apply as much in light of the author's clarification – printed elsewhere in this issue of The Monograph – but these had been my thoughts originally):

Using the examples of being gay, Muslim, and black (which, I'd expected to see with a capitalized "B"), *"categories"* are condemned to be filled with *"prejudices and hate."* Excuse me – really? For these particular descriptions, I believe it is by personal choice what the connotations are when you call people any of these things and they do not necessarily have to be negative. The simplest example: when someone uses these terms to refer to their friends or themselves. I find it *highly* unlikely that they'd be disgusted by such adjectives – rather, for some, there's probably some pride associated with knowing who they are, in terms of their sexual orientation (think how long it's taken, and how it's still an ongoing battle for non-heterosexual people to gain public acceptance), belief system (someone may very well like being Muslim), and ethnicity or culture (enough said?).

The first paragraph of "Narrow Minds" closes with *"Well I say he is an individual who has found ultimate happiness in his soulmate. And isn't*

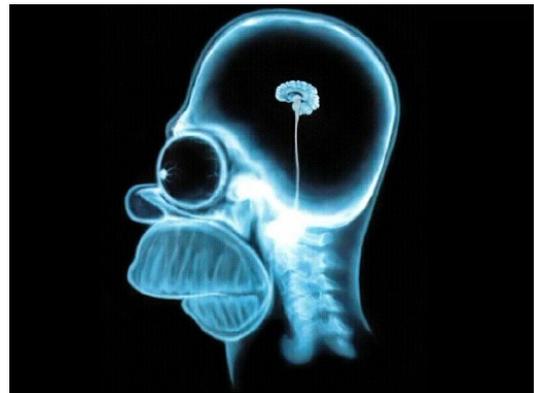
that the meaning of life?" It seems like more assumptions are being made here. Even if we assume that the author did not mean that everyone's life mission ought to be find a soul mate (it can be with a space, too), but rather to find "ultimate happiness," I'm sure that we'll find disagreement, but this is an opinion article, after all, and I worry that I've started to get too nitpicky.

Next point: *"If there were no discrete religions, the world would be a much more peaceful place."* Really? Perhaps the assumption here is that religions are one form of differences people have in their opinions and beliefs – one that is strong, or too strong, that they create wars. However, I then believe such an argument would naturally extend to discourage differing political regimes as well as varied philosophical thinking, since these, too, have shown to cause international (not to mention local) conflict. People follow different religions (and others don't) based on what they believe to be true. I would be convinced that even if you took out religions from the equation, some other convictions would rise to take its place.

As for the part about *"We live in a world where a Protestant wouldn't be caught dead reading the Catholic version of the Bible because there is a comma instead of a semicolon in the book of Genesis chapter 12, verse 2, line 7."* This paragraph is really just for those who've never cracked open a Bible and had no idea. A couple things here: 1) There is no "line 7" (this verse is quite short) and the Bible is organized into chapters, then verses, but no "lines." 2) The fundamental differences between the Roman Catholic and Protestant beliefs do not rest on something so small as punctuation (for the record, there are also more modern translations of the Bible, such as "The Message" that, instead of "Hallelujah" use "Raise the roof" and are read and well-accepted by many denominations of Protestants). Rather, Protestants do not believe that the many traditions practiced by the Catholics are Biblically instated, nor necessary for salvation. Reading a bit of the history of Christianity might help shed more light on the issue, but please be assured that these two groups do not call themselves different names because of matters as trivial as commas and semi-colons. If that were the case, it would seem pretty ridiculous.

Oh yeah, about the *"Logically, if God wanted man to save himself for conception, he would not have provided him with 280 million sperm per ejaculation until his dying day"*. I don't see this necessitating a direct correlation, much less an exclusive one.

Classifications don't have to be as restrictive if we use them together to create a more complete picture of individuals. Like the author of "Narrow Minds," I also believe that it's important to be open-minded and accepting people's differences. However, I think there should also be more emphasis on trying to do this with awareness and not ignorance. It's like the time when I was asked by someone what ethnicity I was. I answered, "Chinese." The person then replied enthusiastically, "Oh, I love sushi!" Acceptance is more complete when it comes hand in hand with some understanding, or at least, an effort thereof.



<http://www.matthewcrowe.com/homer-simpson-wallpaper-brain-1024.jpg/homer-simpson-wallpaper-brain-1024-full.jpg>

*From a conversation with the author of "Narrow Minds," I received a clarification that she was actually saying the exact opposite of what I'd interpreted as her meaning. Her opinion is "we shouldn't name more labels" nor have anymore labels at all, although she also acknowledges the inconvenience this would cause. Also, although I'd obviously not picked up on it myself (sarcasm and hyperboles are one of my weak points), she assures me that her article had not been meant to be taken literally.

Narrow Minds Revisited

By Sharjeel Syed (1T0)

Although this article is ostensibly a rebuttal to the opinion piece "Narrow Minds" that appeared in the March Issue of The Monograph, it is not intended to be its antithesis. I'm not writing to say that religion is better than secularism or that I necessarily disagree with every assertion the author made. Rather, it is to critique certain ideas that were mentioned that I found misleading.

Firstly, the issue of dietary restrictions proposed by some religions. I am not sure to which religions the author was referring, but from the Islamic perspective, at least, the prohibition against eating pork has nothing to do with how well it is cooked. More accurately, it reflects the fact that what you eat has physical, mental, and spiritual effects. Pigs are notorious for wallowing in their own filth and for being promiscuous. The basic premise then is that eating the flesh of swine would impart those qualities and lead to moral and spiritual degradation, thus it should be avoided. This constraint can be lifted in extreme cases (i.e. starvation), when the immediate needs of the body become of higher importance than the spiritual ones.

My second point addresses the argument that discrete religions antagonize peace and lead to such problems as racism, intolerance and discrimination. In that case, how can you account for the following Qur'anic verses: "There is no compulsion in religion" (Chapter 2: Al-Baqarah: verse 257) and "For you your religion, and for me my religion" (Chapter 109: Al-Kafirun: verse 7)? How do you explain the Biblical teachings: "Love our neighbors as ourselves" (James 2:8), and "Be kind and compassionate to one another, forgiving each other, just as in Christ God forgave you" (Ephesians 4:32)? Religions do not promote hatred, bigotry, and inequity. People do. People who are ignorant, people who wish to amass power, people who are only religious in name. Historically, religion has often been used as a political tool by individuals who wished to gain dominion over others. Nonetheless, I doubt that if religions were not around such persons would not find another ideology to pervert for their own ends. Fortunately, these people who taint their religious beliefs do not represent the bulk of believers. It should be kept in mind that most adherents are good people and that one cannot judge a religion based on the actions of a few. To do otherwise would be narrow-minded, would it not?

Lastly, I wish to focus on the statements relating to fornication. The author makes the argument that God would rather you practice safe sex than bring a child into this world prematurely, or overpopulate the Earth. To engage in sexual activities is to accept the possibility of pregnancy since no safe-sex practices are foolproof (i.e. condoms have a 12% pregnancy rate). Hence, if someone is so concerned about having a baby when they are not ready, maybe they ought to practice a method of contraception that is 100% safe (i.e. abstinence). As for overpopulating the Earth, I'm pretty sure that's not the biggest reason people use contraception when they're engaging in sexual acts.

The second line of reasoning suggests fornication is acceptable under the guise that the majority practices it. This is akin to saying that if everyone else is jumping off a bridge then it must be okay. Why don't we extend this argument to other impulses? For instance, is it not human nature to get angry, to fight, and to possess what we want? Yet we try to avoid acting on

such destructive feelings. Given that, why should the pursuit of pleasure be treated as the sole natural urge whose impetus cannot be ignored? Is it because it does no harm? So is the author suggesting that the high rates of teenage pregnancies, STDs, and AIDS have no consequence on the individual, family, and societal peace of mind? We continuously seek sexual liberation, flagrantly display promiscuity and permissiveness as a way of life, and indulge in self-gratification. Then we scratch our heads and wonder why family values are crumbling and kids are losing their virginity at 14, 13, 12 years of age. The uninhibited pursuit of pleasure or any other natural drive leads to the disintegration of other values. You cannot have your cake and eat it too. By forbidding fornication, religions are not trying to deny natural sexual compulsions that human beings are subject to, but instead have them expressed within a medium (i.e. marriage) where the fulfillment of such desires can take on a more noble quality. Maybe there's something to religion after all.

Narrow Minds Clarification from the Author

By Allegra Connor (0T9)

It has come to my attention that my article "Narrow Minds" from the previous issue of the Monograph has aroused confrontation and rebuttal. So I'd like to clarify that, like the Bible, my article was not intended to be taken literally. Now that I've completely offended you again by presuming to compare my article to the Bible, after having played God in my article with what should be considered a sin, know that I never intended to offend anyone. Now, obviously not "every" problem in the world is due to narrow-mindedness. I was really referring to prejudice, which is completely avoidable if we taught our kids to be more open-minded. And obviously we cannot live without categorizing labels, since we would be excluding every noun in the English language if we eliminated categorizing words from our speech. Basically, my article was intended to inspire you to be more open-minded and question everything you are told using your own reasoning. Taking the example of what is a sin, it is reasonable to us that hurting others is clearly a sin. However, what one chooses to wear on one's penis is less clearly a sin. It's debatable because one has to ask, "Is it really hurting someone or is it only a sin because I've been told so by someone calling themselves an authority in the matter (ie. the Church)?" You can choose to believe them or not, but in my humble opinion, the truly important thing to gain favour with God is to live your life by being good to others, and that includes abandoning prejudice.

Disclaimer: I am a baptized member of the Catholic Church, have attended both Catholic school and Protestant school my entire life (the Protestant school was closer to my house), and have studied the Bible and religion from grades 1 through 12 from those two different perspectives. I do not regularly attend Church because I do not think geographical location bears any impact on a prayer's validity (and then who knows which Church is the right Church anyway?)

One last comment...

I really liked Allegra O'Connor's article about closed-mindedness being the cause of all the world's problems. So on my PHM 128 exam, when asked about drug-related problems, I responded with "closed-mindedness". I failed the exam. This presents a bit of a problem, as my job won't let me stay in Toronto to re-take the course in the summer. Allegra, if you're out there, find me. I need your advice about how being open-minded will solve this problem for me. ■

Counselling Corner: Year in Review

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

This has been an exciting year for The Pharmacy Mentorship Program: the program granted undergraduate students access to over 50 mentors that were willing to share their expertise on pharmacy courses, extra-curricular activities, job hunting, residencies, PEBCs and more! Students of the Faculty benefited from an information booth at Phrosh Week, monthly columns in The Monograph, advice on the UPS website and help from mentors 24 hours a day / 7 days a week via email.

As we wrap up the program for the 2007-2008 school year, we would like to know what you think. Your feedback is important to us so we can continue to improve the program and make it more useful to the students. Please email any feedback to pharmacy.mentorship_ut@gmail.com.

I would also like to take this opportunity to thank our current mentors. Your hard work and dedication to the program made life easier to navigate for your colleagues.

If you would like to volunteer to be an undergraduate mentor or graduate mentor for the next school year keep your eyes out for an invite in August of 2008.

Also, a reminder to current mentors in second and third year to submit your applications to myself and Gloria for the position of Pharmacy Mentorship Program Director by June 1st 2008.

On behalf of Gloria and I, thank you for a great year and good luck in your future endeavours! ■



http://www.middletownschools.org/uploaded/Board_of_Education/calendar.jpg

MY PERSPECTIVE - Integrity



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

Before we even officially started classes we were given lectures about what perfect little professionals-in-training we are. We are then instilled with values such as one must always uphold the integrity of the profession. They define integrity to us as adherence to moral and ethical principles. These ethical principles are later taught to us in great detail. But nonetheless, we are taught from day 1.

So why is it that I question the integrity of this profession sometimes? Is it because upholding integrity is too hard and beyond our capabilities? Or is it simply because the faculty is made up of a diverse group of people and people are not perfect?

Either way, it sits a little uneasy with me. Even in myself, I sometimes question how honest, how professional, how reliable and how respectful I am. I do admit it is quite a battle to balance integrity in such a competitive setting sometimes. U of T is known for its competitiveness but up until recently, I used to believe pharmacy was an exception to this. Aren't we supposed to be fostering an environment where everyone works together? After all, we all applied to this program for some reason or another. And we all were offered acceptance and took it. We also all took a pledge of professionalism indicating the importance of integrity. As much of a joke this was, I do feel there was a great deal of significance to it.

There are so many aspects to integrity. Mainly, there's the academic, but there's also the social aspect. The academic one is more well-defined. For example, you uphold integrity by being sincere and not cheating or lying. On the other hand, this program has a pretty challenging curriculum and one of the ways to get by is helping each other. There are so many ways to 'help' each other... some more ethical than others. So when asked how we justify these less ethical behavior, most say "well, everyone is going to do it,

so I will just be of disadvantage if I don't too." Peer pressure? No, not really. No one is making you share your answers or notes. No one is making you look at old tests or assignments. It's your own doing because sometimes we decide that sacrificing integrity is worth aiding in a friend in need. Other times the reason for giving up integrity is not so obvious or merely unknown.

I also do realize that integrity means different things to different people. I believe this is the basis why it doesn't feel so abundant sometimes. Just because I don't see it, it doesn't mean it's not there, right? Because, we all know that we are more prone to notice the wrong doings than the good. The reward and attention received for doing something good is nowhere as great as the news of an unpleasant event.

So what does this lead to? An imperfect society? Maybe. But who's to say an imperfect society is such a bad thing?

Anyway, this is just a thought that has been poking at my brain as I watch, and even participate in, the different events that involve the upholding of integrity in this profession.

I've come to realize that I tend to use this column to provide myself with the opportunity to conduct informal rants. Really though, it's just a way to speak what's on my mind. Wouldn't it be cool if I could write like Carrie Bradshaw, take all the experiences of my life and write them down as thought provoking questions so that the reader can translate every statement into a memoir of their own life? It's a great way to just release tension or just simply gather your thoughts.

I do hope that some of the things I write about make some sense. And I also hope people can relate and understand or just simply get enjoyment out of reading. Anyhow, seeing as this is the last issue of the year, I would like to wish everyone good luck on their exams and have an amazing summer!!

See you in the fall!

It's All In The Way You Look At It

By Gigi Wong (1T0)

Suzy sat down in her chair, exhausted. She stared momentarily at the monitor before her and felt a wave of exhaustion. The Word document was blank with the invisible pressure of needed words to fill the spaces. The empty whiteness reminded her of the bottomless workload. Another report to write, another exam to study for, another assignment to do. The academic workload just never ceases to end. She felt so stressed, and sleep-deprived. "I hate my life as a student," she thought.

Her phone rang. Her friends wanted her to come out to the Ontario Science Centre with them. She couldn't. Suzy replied that she simply had too much work to do. She couldn't spare a couple hours for fun. However, she felt that she needed a mental break... she wasn't a robot that could continue doing work. Even robots overheat and need resting time... so Suzy agreed to make a visit to the science centre.

At the Ontario Science Centre, Suzy was amazed. In the few hours she spent there, she wandered to various exhibits that highlighted many areas of science that amazing people had dedicated their lives to. She was reminded of the lush, green and humid rainforest, and how much life and diversity it contained. Then she wandered through the human body exhibit, and was amazed to learn things she already knew – that the human body was an intricately designed system where components interacted with each other in an interweaving relationship. Upstairs she explored the wonders of space. She looked at how the earth was only

the tip of a pin revolving around a sun the size of a large grapefruit. She was reminded of how small the earth is, and how our sun is only one star among many. Zooming out and beyond gave her a sense of infinity. How small the people were... how small her Toronto was... how small her little academic workload crisis was... Does the stress really mean that much? Was her stress really necessary? It did not make sense for life to be stressful. "Life should be taken as an adventure and discovery," she thought. Regardless of the outcome, she concluded, the outcome itself would be intriguing.

Her break from her studies dawned upon her a new perspective on her view of life as a student. First, she realized that she was fortunate to experience this stress, because others may not have the opportunities or the experiences that she has. By reflecting on how small the world was helped her to make one important realization. "I need to live in the moment," she thought to herself. To cherish her daily experiences. To feel the warmth of the sun on her skin and the wind as it ran across her face. To savour her food. To smell the fresh cut grass. To hear the songs of the birds. To find delight in something beautiful.

Later that evening Suzy found herself seated at her desk. With contentment and serenity, Suzy looked at her monitor with the blank document. She could feel the smile on her face as she turned on her computer and opened her books. Instead of being reminded of the work that she needed to get done, she saw that each thing she did was an invitation to adventure, enjoyment or learning. ■

ATHLETICS

COED Sports

Sadly, another year of intramural sports has come to an end. Now only textbooks and course notes will occupy the nights of pharmacy students.

Many of the COED teams had successful seasons on the court, field and pool, but none were able to bring home a championship. However, the frustration of a shortened playoff run has only driven the desire to win championships next year! There are more than a few students that are counting the days to the next year of intramural sports and retribution!

A big thank you to Vishal Ravikanti (0T9) and Brandon Thomas (1T1) for stepping up and taking charge of a few intramural teams. I would like to welcome Brandon as next year's COED Athletics Director. He has played on almost all of pharmacy's intramural teams and has the motivation and enthusiasm to excel in his new position next year. Vishal has been no slacker either this year, his improved work ethic and leadership skills in both men's and COED intramural teams has won him this year's COACH of the YEAR!

On a side note, the UPS athletic directors recently attended the intramural awards banquet. This is the final event of intramural season and celebrates the achievements of all athletes from every college and faculty at the University of Toronto. I am proud to inform you that some graduating 0T8s took home some nice hardware! Congratulations to the 2008 Intramural 'T' award winners Rosanna Yan, David Zhao and Vijay Rasaiah. Also, Dave won the David Breech award for the COED intramural athlete in his/hers graduating year! Great work guys! We'll miss you!

Remember to take a break during your exam cramming! A healthy body equals a healthy mind!

"DRUGS on three!"

Rene Mader
COED Athletics Director



U of T Intramural Awards Banquet. Back row (left to right): Vijay Rasaiah, David Zhao, Rene Mader. Front row: Rosanna Yan, Linda Plong.

MVPs

Team	Player
Div 1 Basketball	Rene Mader (0T9)
Div 1 Inner Tube Waterpolo	Andrew Tolmie (0T8)
Div 1 Volleyball	Kaspar Ng (0T8)
Div 2 Volleyball	Sarah Baird (1T0)
Div 3 Volleyball	Brandon Thomas (1T1)
Div 1 Ultimate	Brandon Thomas (1T1)

Male Sports Recap

Well, sports this semester were a little grim. Almost none of the teams made the playoffs except two. Those two being Division 2 Basketball and Hockey. In saying that, I think it's important to focus on the positives that came out of this year.

Division two Basketball had fierce competition in their playoffs but were unfortunately ousted before the championships. This is a great year for this extremely veteran team. Led by captain Vishal Ravikanti (0T9), they have consistently improved their performance and are eagerly awaiting the arrival of the always-exciting phrosh. The team has mostly been made up of 0T9s but will hopefully welcome new faces from both the 1T1 and 1T2 classes. This should give them new blood to hurdle over their current standing. Good luck next year.

Men's hockey had another successful season this year winning its second championship this year. Even in the highest division pharmacy hockey has ever been in this team dominated the competition in another undefeated season. A great job was done by all three of the team's captains who are non-coincidentally 1T0. The 1T0 class sure has contributed some great hockey players and some have even heard the word "Dynasty" being muttered throughout the school in regards to this class. However, with winning this title in such a dominant fashion has resulted in another move in division. They will now be in the feared "Division ONE", were the players are bigger, faster, and stronger.

I'm also pleased to announce this month's athlete of the month to Ryan Fullerton from the 0T9 class. When the goaltender for the pharmacy hockey team had to leave the team for personal reasons, he stepped up to the plate. Congrats on backstopping the team to an undefeated season and championship.

Lastly, this is my last article for The Monograph as the UPS Male Athletic Director. It's been a great year filled with many struggles and successes. I'd like to thank everyone for their support this year and to all the players who made this year the success it was. I'd also like to welcome the new Director; 1T1's Paul Bazin. Welcome him with open arms, as I'm sure he'll do an amazing job and develop this into an even stronger program. And with that, I say farewell...

Bryan Langel
Male Athletic Director

Athletes of the Month

Month	Player
January	Peter Chiu (1T0)
February	Brandon Thomas (1T1)
March	Ryan Fullerton (0T9)

MVPs

Team	Player
Div 2 Basketball	Peter Azer (0T9)
Div 3 Basketball	Andrew Donald (1T1)
Div 4 Basketball	Andrew Pylypiak (1T0)
Hockey	Earl Kim (1T0)
Indoor Soccer	Vishal Ravikanti (0T9)
Volleyball	Rene Mader (0T9)

March Female Athlete of the Month

Stephanie Chan (1T0) has shined this past year as one of Pharmacy's top female athletes. Steph's endurance, speed and agility have made her one of the top defenders in all sports, most notably basketball and indoor soccer. Her superb athleticism combined with her positive, upbeat attitude and endless energy make her a well-liked team player and an obvious choice for March's female athlete of the month.

Women's Intramurals Playoff Recap

One of the most exciting stories to come out of Pharmacy intramurals this year has to be that of our Women's Div 2 Basketball team. With the exit of the SPEP-bound 0T8s and the addition of new faces, it was difficult to foresee how well this group would play together in the winter season. 1T0 newcomers Tatyana Depcinski, Amanda Tieu and Stephanie Chan were welcomed additions to the team as they provided depth and intensity that helped the team finish 4th overall.

Pharmacy's playoff run began with quarter-final action against St Mike's where they handily beat their opponents, advancing themselves to semis. The next round pitted our women against the heavily favoured first place (and undefeated) SGS squad. The game was a close one as the lead was exchanged frequently between the two teams. With a slim lead for Pharmacy, veterans Lori Tribe (0T9), Shauna Forsey (0T9) and Lisa Levangie (1T1) did an awesome job of maintaining possession of the ball to kill the final minutes of the game and send their team into

the finals. Unfortunately, Pharmacy's offense struggled throughout the final game against Law, ending their bid for the championship title. Despite the loss, this team should be proud of their successful playoff run and being one of the best women's basketball teams Pharmacy has seen in recent years. Congratulations girls and hope to see everyone back on the court next year!

Game, set, match – all season long Pharmacy's women's volleyball teams have shown their opponents that not only can future pharmacists predict when drug serum concentrations will spike, they can also hit a mean spike on the court as well. Pharmacy was fortunate enough to field two volleyball teams this semester, a Pharmacy team and a combination Pharmacy-Grad House squad. The extremely spirited Pharmacy-GH team, led by 1T1s Jenny Kotsidis and Giana Tassone, battled their way through playoffs – winning a hard fought game against Law to advance to semi-finals. Despite strong hitting and digging with all their might to fend off their opponents, the team could not defeat an unwavering St. Mike's squad and was eliminated from playoff action. The Pharmacy-GH team should be proud of their season as they continuously improved throughout the season and show strong promise for next year.

Our second Pharmacy team went undefeated in the regular season and rolled into the playoffs with a first round bye. Though the girls were confident that no one could stand in the way of a championship title, they faced some adversity when in the semi-finals they struggled midway through the game. But strong hitting by power Melodie Lau (0T9) and setting by Nancy Omdara (0T9) and captain Megan Barkway

(OT9) rallied the girls late in the third set of the game to advance the team to the finals. Displaying their grit, the girls showed everyone why they deserved to be champions by capping off an amazing season winning the championship game against St Mike's, two sets to none. Congratulations to both women's volleyball teams on a great season!

I'd like to take this opportunity to congratulate our women on a successful year in sports: three championships, plenty of wins and tonnes of fun. Thanks to all the captains who helped make this season run so smoothly and to all the participants who came out to the games.



Finally, I'd like to welcome the incoming UPS Female Athletic Director for 2008-09, Anna Huisman (1T0). It's been a pleasure being your rep this year and I hope to see everyone out at games in September!

Linda Plong
UPS Female Athletics Director
Co-written by Ruby Liang

Athletes of the Month

Month	Player
January	Christa Connolly (1T0)
February	Tatyana Depcinski (1T0)
March	Stephanie Chan (1T0)

MVPs

Team	Player
Div 2 Basketball	Lori Tribe (0T9)
Div 1 Hockey	Hayley Fleming (1T0)
Div 1 Indoor Soccer	Shauna Forsey (0T9)
Div 2(A) Volleyball	Megan Barkway (0T9)
Div 2(B) Volleyball	Jenny Kotsidis (1T1)

< **Women's Div 2 Volleyball Champions.** *Back row (left to right): Nancy Omdara, Melodie Lau, Tatyana Depcinski, Kayla Castonguay, Elnaz Haddadi.* *Front row: Linda Plong, Megan Barkway, Michelle Peters.*

INTRAMURAL OPPORTUNITIES OUTSIDE OF PHARMACY

by Lisa Levangie (1T1) LISA_M_L@yahoo.com

Most students are familiar with the U of T intramural program that pharmacy is a big part of, and many students have taken advantage of the opportunity to play for pharmacy teams in the intramural leagues. As for the sports that pharmacy doesn't have a team in, pharmacy students can play in those as well.

I have spent the last two years in a work-study position in the intramural office as a program assistant, so I have become pretty familiar with the intramural program, how it runs, and the weird rules involved. For example, a group of students can put together an independent team not associated with any faculty, but they cannot play in division 1 or 2. Also, faculty members and up to two alumni can play in Division 3 and lower as long as they have paid their athletic membership fees. Imagine Dean Hindmarsh on the basketball court in a red Pharmacy Athletics pinny.

To start a new season, the intramural administrators look at the statistics from the past year. The top 75% of teams from a given league are offered a spot in the same league for the next season. If there are four teams in a league, the top three will be offered a spot for the next year, leaving 1 spot open. If one of those 3 teams decides to move up a division, then two spots would be open. These remaining spots are balloted for by any team that would like to play in the division, and the names are basically drawn from a hat.

So that brings me to this year. Women's pharmacy athletic rep Linda Plong balloted for a team in the Women's Field Hockey league. Unfortunately, our name wasn't drawn for entrance into the league, but Linda took it upon herself to email the team captains of the Field Hockey teams to see if anyone needed players. The UTM captain responded and Linda informed all those who signed up that they could join that team if they still wanted to play, as long as they filled out a player's pool form. A pharmacy student

must play with a pharmacy team in division 1 or 2, but if there is no pharmacy team, the student may join another team after filling out a player's pool form in the Program Office. For example, if someone wanted to play division one soccer but Pharmacy only had a division two team, they could join any team in division one. The idea of the player's pool is that captains in need of players will contact you if you have filled out a form. However, it is usually more effective to go to the team to see if they need any players, fill out the form and indicate that you have been picked up by whichever team has agreed to take you on.



In the end, three Pharmacy students joined the UTM team. I had never played Field Hockey before and was really nervous for the first few games, but by the end of the season I had found a new sport to love. I really want to thank Linda for going that extra step, as I probably wouldn't have tried Field Hockey if it wasn't for her and I wouldn't have met so many new people on the UTM team. Hopefully next year we will have a successful ballot and a Field Hockey team of our own, and if not I will definitely be entering the player's pool and finding my own team. In fact, UTM has already asked us to come back.

If anyone has any questions about the Players Pool or other intramural programs, feel free to contact me or any of the athletic reps. The Intramural Handbook is also available at www.uoftintramurals.ca/handbook/

The Arts

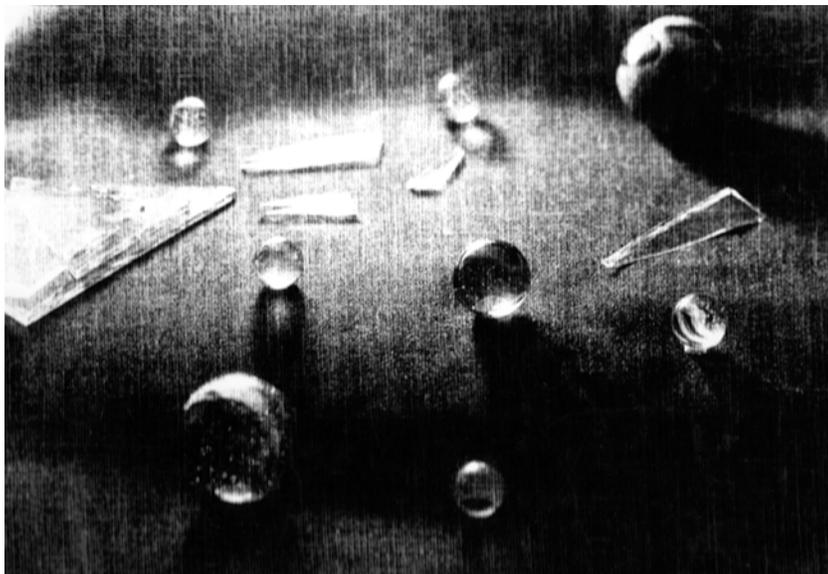
One of a Kind
by Mavra Zvenigorodskaya (1T0)



Christian Bale - Step-by-step
by Timothy Luk (1T1)



Fabric of the Universe
by Mavra Zvenigorodskaya (1T0)



when falling

love is a rosebush.

land softly.

by Jon Lu (1T0)

Word Search

Wasaga
Eurotrip
travel
golfing
beaches
tanning
sunblock
picnic
lemonade
bikinis

camping
biking
summer-thing
cruise
Wonderland
air-conditioning
popsicles
BBQ
Pool-parties
Freedom

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

Still J.A.D. - (Still D.B.E. Remix) - Narc-Z feat. MB Aprazo and Bough Paulie MB

[Intro]

Still J-Dogg and J-A-D (guess who's back)
Still, still playing Halo, right?
Oh for sure, check me out

It's still J Day jigga, A.K. jigga

I love my x-box so I stay at home a lot
So when I frequent the spots that I'm known to rock,
You can smell my chinese roll from around the block
Gamers, they pay homage, but Narc-Z says I fell off
How? Last night I filled up a pint glass

They want to know if I still got it

They say Joel's changed, they want to know how I feel about it

If you ain't up on jits

JD is the name, I'm ahead of my game
Still, flippin the wrists, still getting the hits
Still not loving the mids (Uh huh)
Still rock my shoe with a motown wing
Still reppin 613 -makin that pharmacy bling
Still the Moxy bangs, still doing my thang
Since I left ain't too much changed, still

[Chorus]

I'm representing for them 'Sounders all across the world
Still hitem them waves in the Starcraft girls
Still taking my time to perfect karaoke

And I still got love for the chinese, its the JAD

Since the last time you heard from me I lost some friends
Well, hell, me and my x-box, we dipping again
Kept my ear to the streets, got a girlfriend
She's a pharmacist earning 1050 a week

Still, I stay close to the heat

Cuz when O-towns full of sleet my furnace warms up my feet

My life is like a pill box, I fill it each week
Treat my nyquil like Cali weed, I drink till I sleep

Dose in the A.M., check my B.P.

I take my nitro when I'm still in ma seat

Its not a fluke, EBM's the truth

Its "Summer '08" from the 0T9 rap crew

But I'm still at it, no longer asthmatic

In the home of methadone and drug addicts

Drug reps, sticky green, and bad traffic

I dip through then I get skin, JAD

[Chorus]

[Outro]

Like that, right back up in ya
'04 plus four capsules
Compound that up, JAD right back up on top of things
Fill some with your girl
No stress, no seeds, no stems no sticks
Some of that real tetrahydrocannabinoid
a little weed, put it in the air
For you's a fool JD

Do You Sudoku?

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

Instructions: Fill in the grid so that every row, every column, and every 3x3 box contains the digits 1 through 9.

Because we do!

Like Sudoku, Pharmasave is a name that is synonymous with fun, creativity and innovative approaches. As you know, the practice of pharmacy is constantly evolving which is why Pharmasave has a Pharmacy Innovation Team that creates leading edge programs designed to keep our practitioners at the forefront of our dynamic profession. These patient-focused programs enable our Live Well pharmacists to help their patients achieve their personal health goals.

As a student employed by Pharmasave, you can expect competitive pay and the opportunity to work in a unique environment where pharmacists and pharmacy students integrate professional services such as consultations, community seminars, and disease management clinics into daily practice.

If you're interested in this and more, consider a summer position with Pharmasave!

For more information, contact:

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Manager, Pharmacy Innovation
Pharmasave Ontario

Tel: 905.477.7820 ext 232

Email: pzawadzki@on.pharmasave.ca

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Shout Outs

Dear Stacy;

Thanks so much for being my other half on UPS this year. Couldn't have got through all of it without ya. I don't think any other duos have ANYTHING on us...Hopefully Elmo and Grover can fill our shoes.

-Alex

Yingers!

Thanks so much for a fantastic year with all our adventures - both in and out of school!!!

Your Friend,
Giers.

Dear Anti-hobbit,

How I love and respect thee!
I laugh, I laugh.
Pfffffffffffffffffffft!

Cheers,
Yin H.



Dec 29th, 2007

Under The Sun
by Catherine Chung (0T9)