

Pharmacy Phile

IN THIS ISSUE:

PAGE 1

WELCOME

Back to school or off to work

PAGE 2

FEDS HEALTH & DENTAL

Info on what the plan offers and how to opt out

PHARMACY STUMPERS

Can you answer these common pharmacy questions?

PAGE 3

BLURBS ON HERBS

This month's herb is valerian.

PAGE 4

TRITURATING TRACKS

Matt Mays & Gavin DeGraw

SUMMER BBQ

An Rx2012 summer social

PAGE 5

CO-OP OPPORTUNITY

A summer in Parry Sound

PAGE 6

UNDERGRADUATE STUDENT AFFAIRS

Provisional Accreditation Status

PAGE 7

ELPE

When & where to write this fall

BRIEFS

Check out these important dates

PAGE 8

ONTARIO COMMUNITY PHARMACIES

Important practice changes

PAGE 9

PERFORMANCE ENHANCING DRUGS

What are they & why are they used?

PAGE 10

WHO IS THIS SOPHS GUY?

Overview of SOPhS & what we do

It's that time of year again...

Back to School!

The summer has come and gone; now it is time to get back to class for Rx2011 and off to co-op for Rx2012. There are still a couple of weeks left for many students, so enjoy your freedom while it lasts!

This month's Pharmacy Phile is full of great stories and new additions. Be sure to check out important deadlines and dates found throughout. In particular, make note of the Briefs on Page 7. Triturating Tracks is back with some great music for you to check out on Page 4. There is also a great future co-op opportunity on Page 5.

In this issue, there is a new section called *Pharmacy Stumpers* on Page 2. These are questions taken from the Drug Information and Research Centre's Telehealth calls. These questions are commonly encountered by pharmacists. Answers will be provided in the next issue, but try them for yourself first!

Good luck to Rx2012 as you head off to work. Take advantage of the amazing opportunities presented to you. As for Rx2011, I'll see you very soon!

Thank you to everyone who contributed this time around. If you are interested in getting involved with your newsletter or if you have any feedback, please contact me at pharmsoc@uwaterloo.ca

Jean Cameron
Communications Director

PHARMACY IN THE NEWS

A recent survey revealed that as much as 1 in 5 U.S. teens had either borrowed or lent a prescription medication. Commonly shared medications included antibiotics, birth control pills, and acne treatments, such as isotretinoin. An earlier study suggested as much as 40% of U.S. adults had also shared or borrowed prescription medications. (CBC)

A recent report revealed that as much as 80% of pharmacies advertising online through Yahoo are following illegal practices. Illegal practices include providing medications without prescriptions and illegally importing medications from India. (ChattahBox)

Pharmacists in Ireland are heading back to work following a strike prompted by government cuts to funding. Tentative agreements were struck, but pharmacists threaten another service disruption if remaining issues are not resolved. (PharmaTimes)



PHARMACY STUMPERS

The following are commonly asked questions on DIRC Telehealth calls. Give them a try! Answers will be in next month's issue.

- + A parent would like to buy DM cough syrup for a 12 year old child with asthma, but there is a warning with that disease state. How would you explain it to the parent and what is your recommendation?
- + An elderly man has accidentally swallowed his Spiriva capsule instead of inhaling the contents. Is this a problem?
- + You receive a call from a man that has accidentally injected himself with an EpiPen... in the finger. What should he do?

Important information from FEDS Your FEDS/GSA Health & Dental Plans

A growing number of important health care services are not covered by provincial health care. To help students pay for the health services they need, a collective health and dental plan has been put in place by your student associations. not reflective of responsible use.

The FEDS/GSA Health & Dental Plan automatically covers FEDS members who are full-time undergraduate students taking 3 or more on-campus courses and GSA members who are full-time or part-time graduate students on an academic term. Part-time undergraduate students taking at least one on-campus course or graduate students on co-op work term must self-enroll for coverage during the Change-of-Coverage Period.

Your coverage includes:

- + Health such as prescription drugs, vaccinations, chiropractor, massage therapy, etc.
- + Dental such as checkups, cleanings, fillings, root canals, extractions, etc.
- + Vision such as eyeglasses and contact lenses, eye exam, and laser eye surgery.
- + Travel including 150 days per trip and up to \$1,000,000 per lifetime.

The Change-of-Coverage Period is the period at the beginning of your first academic term in the school year when you can either opt out or enroll yourself or your spouse and/or dependents in the Health & Dental Plan. Visit www.ihaveaplan.ca and follow the on-screen instructions.

If you are already covered by another plan (i.e. parent or spouse's employee benefit plan) there are some important things to consider:

- + Being enrolled as a dependent usually requires your family member to pay additional costs to have you covered.
- + A parent's insurance plan could stop covering you completely if you're a part-time student over 21 or a full-time student over the age of 25.

- + Most employee benefit plans offer limited or no travel or vaccination coverage. If you are planning to travel on Exchange or Co-op Work Term, the Travel Plan is especially designed for you. As an Exchange/ Co-op student traveling abroad for more than 150 consecutive days, you can also extend the travel coverage before you leave by visiting the Health & Dental Plan Office or contacting Member Services Centre.
- + Costs for using the Health Services dispensary are automatically covered through this Plan.

The Fall Change-of-Coverage Period is from Sept. 1 - Oct. 2.

For complete details about your Plan, visit www.ihaveaplan.ca, the Health & Dental Plan Office located in the Student Life Centre, room 1121 A or call 1-866-369-8794.





“[Psychiatrists] gave electroshock only to ‘hysterics’ while prescribing strengthening and calming therapies, such as baths, bromide, and valerian, to two other categories of traumatic neuroses” – from the book *Madness and the Mad in Russian Culture* (Brintlinger and Vinitzky)

Issue 7 – Valerian

(aka: *Valeriana officinalis* All-Heal, Heliotrope)

My grandmother, who worked for many years as a nurse, once told me that hospitals in Russia routinely used valerian to sedate patients. This plant has long been touted for its powerful nervine, stimulant, carminative, and antispasmodic properties. It is also known to relieve irritability and pain, favouring rest and sleep.

Description and Habitat:

Valerian, native to Europe and Northern Asia, is common in marshes and on the borders of ditches or rivers. In the summer, its tall stems, one per root, tower above the typical grasses. Its flowers, appearing June to September are small, tinged with pink and peach colours. Leaves are arranged in pairs, and each one contains a series of lance-shaped segments, opposite to one another on each side of the leaf (pinnate). Leaflets vary from 6 – 10 pairs, and in breadth, being broad when few in number and narrower when numerous, usually 2 – 3 inches long with coarsely-cut teeth and soft



hairs. The roots merge into a short, conical root-stock (an erect rhizome) which is the medicinal part of the plant, typically gathered and dried after the leaves have fallen.

Medicinal Constituents: Multiple constituents are responsible for valerian’s pharmacological effects: valepotriates (iridoid esters), baldrinals, volatile oils, monoterpenes (the main one is borneol), and sesquiterpenes (e.g.: valerenic acid, valeranone, and kessel glycol). Standardized products typically contain 0.04 - 0.9% valerenic acids (the sum of valerenic acid, acetoxyvalerenic acid, hydroxyvalerenic acid and valerenal).

Medicinal Use: Traditionally, valerian was recognized as a cerebro-spinal stimulant; in medicinal doses it acts as a stimulant-tonic, antispasmodic and calmative. It has been used in St. Vitus’s dance (chorea, a disorder of involuntary movement), hysteria, fever, nervous overstrain, and neuralgia. Valerian allays pain and promotes sleep, without possessing any of the after-effects produced by narcotics. For valerian, the NHPD allows the following claims: ‘Traditionally used to relieve nervousness (calmative/ sedative)’ and ‘as a sleep aid’. Today, valerian is used orally for insomnia, dyssomnia, depression, attention deficit-hyperactivity disorder, chronic fatigue syndrome, and for conditions associated with anxiety and psychological stress.

Valerian is often used in combination with other sedative herbs.

Typical Dosages: Oral doses of root fluidextract (1:1), tincture BP and USP (1885), ammoniated tincture BP and USP (1898), ½ - 1 drachm, of

solid extract 5 – 10 grains (traditional formulations). For modern preparations (i.e.: capsules containing standardized extracts), most studies using valerian to treat insomnia have used 400 - 900 mg up to 2 hours before bedtime for as long as 28 days; others have used 300 - 450 mg given in three divided doses. The NHPD allows up to 3 g per day from various preparations.

Evidence: Much research demonstrates that taking valerian orally reduces the time to sleep onset (sleep latency), and improves subjective sleep quality. It does not relieve insomnia as fast as benzodiazepines, and continuous nightly use for up to 4 weeks may be needed for significant effect. Valerian also seems to improve the sleep quality of insomniacs who have recently withdrawn from benzodiazepines (after tapering the benzodiazepine over 2 weeks) and in intellectually impaired children. However, some studies also suggest that valerian does not significantly improve insomnia compared to placebo. There is insufficient evidence for valerian’s effectiveness in treating anxiety, dyssomnia, and other conditions it is purported to treat.

Valerian in Pharmacy Practice:

For the short term relief of insomnia, valerian may be a great option for adults and children alike. It should not be used however, to treat chronic insomnia, or by women who are pregnant or breastfeeding. Valerian also has a strong potential to interact with sedative and anaesthetic drugs including alcohol, benzodiazepines and other CNS depressants; counsel patients accordingly.

Jason Budzinski (Pharm 2011)



Your source for great music
Triturating Tracks

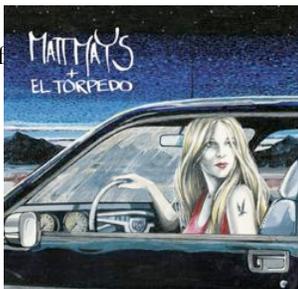
Album: Matt Mays and El Torpedo

Artist: Matt Mays

Date: 2005

Matt Mays' smooth and smoky voice mixed with electric guitar delivers a fine record of rock. Straight from the depths of Nova Scotia, this band has made a name for themselves, giving stellar performances across Canada and in the US. Check out *Travellin'* and *Cocaine Cowgirl*.

You know it Ontarians, there are other bands coming out of the East Coast- other than "Great Big Sea" (which, as a side note, happens to be Pawel Prezeracki's favorite band!).



Album: Chariot

Artist: Gavin DeGraw

Date: 2003

The success of Gavin DeGraw's debut album is primarily because of the title track *I Don't Want to Be*, being chosen as the theme for the "One Tree Hill" series, but this album offers other great songs as well. The title track isn't bad, but better songs include *Follow Through* and *Just Friends*. Gavin DeGraw's tracks are soulful, filled with guitar and piano, and most tracks are not too bouncy or pop-like to hide DeGraw's genuine sound.



Rx2012 Social News
Summer BBQ

On a sunny and relaxing Friday, the social committee organized a BBQ for students and faculty. The sun was out in full force as we arrived at Victoria Park in the mid-afternoon. After some struggles with the setup of the BBQs, the flame was lit and the first hamburgers and hot dogs began to sizzle on the grill. The menu included juicy hot dogs, sultry hamburgers, pop, chips, and refreshing



freezes. As more and more people began to arrive, including faculty members, we had a group lunch at the kitchen. After the delicious lunch and well deserved rest, socializing, and digestion, it was time to get on the move and burn off some calories. Thanks to Stacey B, who brought a volleyball net, a pick-up volleyball game was started. The game included huge blocks (ha! Stacey), kills, digs, and skill. There was even an audience

who enjoyed watching the excitement. Nearby, on the court, a bball game was happening. After a quick warm up game of HORSE, a full court pick-up game soon followed. The full court game quickly turned into a half court.

As the sporting activities were concluding and the sun was slowly migrating towards the horizon, we once again met by the BBQ for some more food and refreshments. In the meantime, additional students were arriving- fresh off of their canoeing/kayaking expedition trip of the Grand River. When the last burgers were finished grilling, the day and event were coming to an end. Overall, the BBQ was a huge success and special thanks go out to Stacey Bunyan, Brad Linton, and Dianna Sabbah, for helping make it happen.



Social Director



Co-op Opportunity West Parry Sound Health Centre

As the summer draws to a close, I can now reminisce on my co-op placement in Parry Sound and all that it had to offer. For those of you who aren't familiar with Parry Sound, it is a small town about 2.5 hours north of Toronto, situated on the shore of Georgian Bay. Over the summer I worked at the West Parry Sound Health Centre, a community hospital with about 75 inpatient beds serving Parry Sound and the surrounding outlying communities. My time at the WPSHC provided me with some very valuable hospital experience, while the recreation-based town always kept me busy during evenings and weekends. While at the WPSHC, I was involved with a number of projects, aimed at improving medication safety and general workflow for various medical staff.

One focus of my role at the WPSHC was medication reconciliation. Upon my arrival at the WPSHC, there was no formal, systematic procedure in place to collect patients' medication histories upon admission, which therefore increased the probability of an unintended change in therapy to occur. To address this, I first conducted an audit assessing the quality of medication histories taken on a collection of randomly selected closed charts, and proceeded to organize meetings with nurse managers to educate them on the concept of the 'best possible medication history' and the importance of having nursing staff conducting reliable medication histories. I also revamped the medication history form used upon admission, adding prompts for nursing

staff to ask key questions as patients are admitted. I also combined this form with the doctor's admission order form to streamline the admission process and facilitate the reconciliation of home meds.

Another aspect of medication reconciliation I was involved in was being in charge of conducting med history interviews for patients coming in for elective surgery. Doing this, I got a lot of practice probing for relevant information, and met a lot of interesting people.

Another project I was involved in was to conduct a business plan on the feasibility of switching our dispensing system from the traditional system (the weekly filling of vials) to a unit-dose system, where each dose of each drug would be sent to the floor daily. This turned out to be a pricey venture, but also presented a tighter distribution system, with fewer chances of errors occurring. I also conducted weekly audits, ensuring order entry in the MARs was consistent with that of the patient's pharmacy profile, and reconciled all discrepancies with the necessary medical staff. Another interested aspect of this job was being at ground zero for the antivenom crisis that Ontario went through this summer, with an unprecedented number of rattlesnake bites occurring as our province's resources for dealing with these bites were both limited and very uncoordinated. As the WPSHC used to act as a depot responsible for ordering and distributing rattlesnake antivenom around the province, we were very much involved in dealing with the critically low stock of the product, and managing the available resources as efficiently as possible. Luckily, with the odd clutch move made

along the way, no venomous bites were left untreated!

But the job proved to be only half of my experience in Parry Sound. This town is truly driven by recreation, and boasts beautiful hiking trails with scenic vistas of Georgian Bay, great beaches, mountain bike trails and rock climbing routes. I was able to take advantage of days with lighter winds and got into a kayak to do some island hopping in the bay. In addition to the pharmacist and techs, many nurses and doctors at the hospital take advantage of these 'after hours' activities, so it wasn't hard to get the local perspective on the recreation scene, and to get someone out there to show me around. Although I knew that this area was within an hour of the Muskokas (where ballers such as Tom Hanks and Steven Spielberg often opt to spend their summers), I had no idea the town itself had so much to offer in terms of leisure, sport and all around good living.

All in all, this was a great co-op term and without a doubt was a step up from last summer, which was spent in the bowels of RCH. With such a great co-op term under my belt, I urge all students to not be afraid of venturing into unfamiliar territory both practically and geographically. You just may stumble upon a diamond in the rough.

John Sewell, Rx2011



IMPORTANT DATES:

Fall 2009:

- Tuition Due (cheque, money order, promissory note): August 31st (Note: UW no longer accepts personal cheques; it must be a certified cheque)
- Tuition Due (bank payment, international wire transfer): September 9th
- Lectures Begin: September 14th
- Lectures End: Saturday, December 5th (Monday schedule)
- University Holiday (Thanksgiving): October 12th
- ELPE (on the Pharmacy campus): September 24th
- ELPE (on main campus): December 8th
- Exams: December 9th to 15th (see Exam Schedule for full details and exact dates)



Undergraduate Student Affairs

What does “Provisional Accreditation Status” mean for our students?

Excellent news arrived in our inbox recently! The Canadian Council for Accreditation of Pharmacy Programs (CCAPP) informed the university that it has awarded the School of Pharmacy the status of Provisional Accreditation for the three year term 2009-2012. This is the highest award for which we are currently eligible. The CCAPP Board noted “that Waterloo has made remarkable progress in a relatively short period of time.”

So what does this mean to undergraduate Pharmacy students?

In order to help protect the public, provincial Pharmacy licensing bodies must ensure that applicants have successfully completed a sufficiently robust academic program to prepare them for contemporary Pharmacy practice. In Ontario, after completion of your studies at UW, you will typically register as a Pharmacy Intern with the OCP, for a 12-week internship period. To qualify as an Intern, in most cases, students must be eligible to graduate or have graduated from an accredited pharmacy degree program in Canada or the United States (US) within the past three years. In this context, “accredited” refers to pharmacy degree programs accredited by either

CCAPP or the Accreditation Council for Pharmacy Education (ACPE) in the US.

Furthermore, to be registered as a Pharmacist in Ontario some of the criteria include having an undergraduate Pharmacy degree recognized by the Pharmacy Examining Board of Canada (PEBC), and holding a Certificate of Qualification from the PEBC. The Certificate of Qualification is awarded upon successful completion of the PEBC Qualifying Exam.

So then, which Pharmacy degrees does the PEBC recognize?

Students are eligible to apply directly for the PEBC Qualifying Exam if they are graduating from a program accredited by CCAPP, or ACPE in the case of US graduates. Graduates from non-accredited Pharmacy degree programs must first have their degrees assessed (document evaluation) and then successfully complete the PEBC Evaluating Exam, which is designed to determine if their educational program is comparable to one accredited by CCAPP. Once they pass the Evaluating Exam, candidates are then eligible to write the Qualifying Exam. CCAPP accreditation thereby allows Canadian graduates to bypass one national Board exam en route to obtaining that all important Certificate of Qualification!

CCAPP’s “Full Accreditation” status is the ultimate goal, but this can only be conferred once there are graduates from

Continued on Page 7.



IN BRIEF

OCP JURISPRUDENCE EXAM

One of the requirements for licensure as a pharmacist is the successful completion of the pharmacy jurisprudence exam approved by OCP. On October 22, 2009 this exam will be offered in Waterloo, for the convenience of our students. Students in the Class of Rx2011 are encouraged to register to sit the exam at that time. Details will be forthcoming, so for now - please make note of this in your personal calendars and watch for further information in your email inbox.

OSAP & FINANCIAL AID

OSAP cheques will be handed out by Student Awards office on October 6, 2009 from 10:30am-1pm in PHR 1009.

Visit UW's Student Awards & Financial Aid website for more information about OSAP, other loans, scholarships and bursaries. <http://safa.uwaterloo.ca/index.html>

PARKING ON CAMPUS

For those students planning on parking on campus this fall, purchase permits as early as possible as there are a limited number of spaces available. www.parking.uwaterloo.ca

Continued from Page 6.

the program. In response to UW's opening of a new School, CCAPP established two other categories of accreditation: Qualifying and Provisional. With the recent advent of CCAPP accreditation of Pharmacy Technician programs, these "pre-accreditation" categories are finding wide use across the country.

CCAPP summarizes Provisional Accreditation status as follows:

"A new program that has students enrolled [but] has not graduated a class of students may be granted provisional accreditation. The granting of the provisional accreditation award denotes a developmental program which is expected to mature in accord with stated plans and within a defined time period. Reasonable assurances are expected that the program will be eligible for full accreditation as programmatic experiences are gained, generally, by the time the first class has graduated."

"Graduates from a school designated as having provisional accreditation will be deemed by

CCAPP to be graduates of an accredited program if the program subsequently receives a full or conditional accreditation award at its first opportunity."

We will continue to work closely with CCAPP and the many other stakeholders to ensure that we achieve full accreditation status once we are eligible. Hopefully this short article has illustrated that it is critical that the School, on behalf of our students, meets the accreditation standards established by CCAPP. This will allow our graduates to be eligible for internship, write the PEBC Qualifying Exam, and ultimately become licensed as Pharmacists.

Sources: www.ocpinfo.com
<http://www.pebc.ca/>
<http://www.ccapp-accredit.ca/>

If you have any questions on this matter, or if you would like to suggest other topics for this regular Pharmacy Phile column, please send an email to kpotvin@uwaterloo.ca.

Writing the ELPE this fall The English Language Proficiency Exam

The English Language Proficiency Exam (ELPE) will be held at the Health Sciences campus for Pharmacy students on Thursday, September 24, 2009 from 5-6pm in PHR 1004. We need 25 confirmations of attendance in order to hold it in our building. Please contact Louise Buhlman (louise@uwaterloo.ca) no later than September 11, 2009 if you plan to take advantage of this session. If do not write it on this date, you will be

required to write it at a session on campus. See the ELPE website at www.elpe.uwaterloo.ca for more information regarding the exam and the dates available to write it. This milestone must be completed by the end of 2B or you will risk your academic progression in the program. Your transcripts (available on Quest) will indicate if this milestone has been completed or not.

For more information about the ELPE please see last month's Pharmacy Phile (Issue 12).



Health Care in your Neighborhood Community Pharmacy Awareness

Dear Pharmacy Students,

To Rx2012 – Good luck on your co-ops, I know many of you were chomping at the bit to begin working. To Rx2011 – Enjoy whatever break you have and be thankful UW chose to begin their classes September 14th/09!

Some news to put on your radar is changes being proposed to community pharmacy by the Ontario Government. The government is proposing a series of cuts deeper than those found in Bill 102. At this time the government stresses that these changes are neither on nor off the table; however, it is important for students to be aware of what is happening due to long term repercussions of such changes. These propositions would affect the province-wide demand for pharmacists and the wages at which pharmacists will be compensated.

Much of the debate is really just beginning and community pharmacies are working with the government to find an equitable solution for the need to control drug costs and our need to be compensated appropriately. The following are some online resources where you can learn more. These will keep you abreast of any new developments and how students can support community pharmacists in this ongoing discussion.

Ontario Pharmacies Campaign Important Web Links

- First Multicast: <http://www.multicast.tv/ocph>
- Official website: www.ontariocommunitypharmacies.ca
- Facebook page: <http://www.facebook.com/pages/Ontarios-Community-Pharmacies/107130994022?ref=ts>
- Facebook group: <http://www.facebook.com/group.php?gid=131571389601&ref=share>

Press Releases

- CACDS Press Release: Billings in Savings Forecast for Ontario Drug Plan <http://www.newswire.ca/en/releases/archive/August2009/11/c4047.html>
- Independent Pharmacists of Ontario Press Release: Ontario's Non-Transparent Drug System for Patients Act <http://www.newswire.ca/en/releases/archive/August2009/07/c3559.html>
- Independent Pharmacists of Ontario – YouTube Video “Ontario Plans More Cuts to Pharmacy Funding” www.youtube.com and search for Ontario Pharmacists

Media Articles

- CMAJ article: Ontario's Law Curbing the Cost of Generic Drugs Sparks Changes – not favourable to Pharmacy http://www.cmaj.ca/earlyreleases/4aug09_generic_drugs.shtml
- National Post. Tom Blackwell pick up from the Aug 5 CMAJ article on the same topic. Drug Firms Revamp Pricing <http://www.nationalpost.com/news/story.html?id=1867805>
- Letter to the CMAJ Editor – will be monitored for publishing date
- Toronto Sun. End of patent means huge \$2B windfall in cheap drugs <http://www.torontosun.com/news/canada/2009/08/12/10434241-sun.html>

PHARMACY IN THE NEWS

Alaska is suffering what has been described as a 'severe pharmacist shortage.' Approximately 1 of 4 pharmacist jobs is currently unfilled and with retirement trends and an aging population, this is continuing to worsen. Pharmacists in Alaska earn 30-40% more than in other states, but young recruits don't often stay in the northern state. (WorldNow)

UK Pharmacists will soon be selling DNA paternity tests for £30. The kits will have 2 sets of buccal swabs to collect DNA from the father and child in question. The swabs are sent to International Biosciences, which then analyzes the DNA and provides the results to the patient directly (for an additional £119 lab testing fee). The kits are already available for purchase online. (Telegraph)

Toronto and Ottawa have launched studies to assess the benefit of safe injection sites (similar to Vancouver's controversial Insite clinic). The sites are clean, medically staffed clinics where addicts can use illegal drugs, including heroine and crack cocaine. Results of the study will be released in the spring 2010. (The Toronto Star)



When good drugs are used badly Performance-Enhancing Drugs

Performance-enhancing drugs, according to Wiki, are “substances used by athletes to improve their performances in the sports in which they engage.” Athletes may be willing to risk their careers and health by taking prohibited substances. Routine testing among competitive athletes helps to detect these substances and hold the athletes accountable. The following is a brief summary of prohibited drugs that may be used by athletes. Drugs are prohibited when they give athletes an unfair advantage, pose a health risk to users or other competitors, or violate the spirit of the sport.

Stimulants (e.g., amphetamine, ephedrine) can aid athletes by preventing tiredness, suppressing appetite, and allowing them to exercise at an optimal level. These drugs increase heart rate, breathing and brain functions by stimulating the CNS. This stimulation of the body/mind can give athletes an unfair advantage by improving their performance.

Narcotics (e.g., oxycodone, fentanyl) are used by athletes to reduce or eliminate feelings of pain following injury or illness; this allows athletes to train harder and longer. Narcotics may also reduce anxiety and give athletes a mental advantage. These drugs can mask serious injury and the potential for addiction makes the health risks high.

Athletes use cannabinoids (e.g., marijuana) to speed recovery time after physical exertion, increase their heart

rate, and induce feelings of relaxation and inhibition. Although cannabinoids are generally not considered performance-enhancing substances, the potential safety risks for the user and the other competitors has lead to prohibition of these substances during competition.

Anabolic steroids (e.g., oxandrolone, methyltestosterone) are likely the most commonly known performance-enhancing substances. Athletes use these drugs to increase muscle mass, allow for longer training sessions, and reduce recovery time after physical exertion. These drugs are banned because they give athletes an unfair advantage, but also pose serious health risks for users.

Certain hormones are used by athletes to stimulate red blood cell formation, which improves the body’s ability to carry oxygen. As well, some hormones can be used to stimulate muscle growth, increase the production of naturally-occurring hormones, or affect sensitivity to pain. Examples include erythropoietin, growth hormone and insulin.

Beta-2 agonists (e.g., salbutamol, formoterol) are commonly used to treat conditions such as asthma or COPD; however, athletes may be using these medications to enhance their respiratory ability. If taken orally or by injection, these drugs can have powerful stimulatory or anabolic effects.

Diuretics and masking agents (e.g., furosemide, thiazides) are used by athletes to conceal the use of a prohibited substance in a urine sample.

Masking a prohibited substance gives the athlete an unfair advantage.

Corticosteroids (e.g., prednisone) are prohibited only when taken po, IV, IM or pr. They are used by athletes to reduce or eliminate pain felt by injury or illness. They can also induce a feeling of euphoria in athletes, giving them an unfair advantage.

Alcohol is prohibited in certain sports due to the risks associated with its consumption. In general, alcohol is not performance-enhancing because it decreases reaction time, reduces aerobic performance, dehydrates the body, and can increase the risk of muscle cramps.

Beta blockers (e.g., propranolol, metoprolol) may be used by athletes in certain sports to slow the heart rate and steady the nerves. When balance or a steady aim is required, beta blockers can give athletes an unfair advantage.

Pharmacists are in a position to monitor the use of these drugs by patients for potential abuse. It is also important for pharmacists to be aware of drugs that may be prohibited in a patient’s sport. The World Anti-Doping Agency (WADA) releases an annual list of these medications. This list could be very helpful when treating competitive athletes to ensure they are not taking prohibited substances unknowingly. Therapeutic Use Exemptions can be used if the medication is indicated in the patient. For more information, or to access this list, visit the WADA website at www.wada-ama.org.



A word from the President

Who is this SOPhS guy & why should I care?

During one of this summer's SOPhS (Society of Pharmacy Students) meetings, one critical problem was identified. Council members felt there was a lack of awareness among students about their council and what it was doing or could do for them. The following was written in an effort to dispel some of the confusion surrounding SOPhS and to spark discussion, questions and thought among students.

Why do have a student Council in the first place?

Student council serves as the representative body for students. It is a unified, organized and committed voice for advocacy on behalf of students on university-wide, local and national levels. Council members represent your interests on various committees, boards and in meetings with the School's administration on a regular basis. It is encouraged that students approach council members and share any question or concerns they may have so that they can leverage the most of out their student society. We are here to serve you, our constituents.

Where does SOPhS get its funding?

SOPhS receives \$35 (beginning in September 2009) per academic term, per student. Originally we received \$9 from every student, which in turn meant a great deal of limitation on our financial ability to offer free services to students. We hope that this increase in funds will help council members provide students with services at little or no cost, while creating a savings for each class's graduation.

Who are SOPhS members?

Currently SOPhS offers an older list of positions, members and contact information on its website: (http://www.sophs.uwaterloo.ca/?page_id=10)

Council members are elected or nominated officials. Council members recognize that this online list is inadequate for students to get to know their representatives and will begin posting pictures, names and descriptions both online and on the billboard in the student lounge this fall. Additionally we want to build on last year's "committee meet" that took place at CIF during Phrosh. The incoming student council will take this initiative come January, 2010.

I have a question/problem/concern, who do I speak to?

Whenever something is on your mind, do not hesitate to discuss it with your class representative. They are a great resource for identifying the best person, if not themselves, to help. Of course always feel free to approach your President and Vice-President with any concerns. Additionally, Student Issues Meetings are held every term and are an ideal forum to discuss your thoughts.

What are examples of what SOPhS is doing for me?

SOPhS is currently involved in a myriad of activities. These range from representing Waterloo's School of Pharmacy on national initiatives, such as the Blueprint for Pharmacy, and provincially providing support for Ontario's Community Pharmacies. Not to be overlooked, SOPhS is also in discussions regarding parking equity on the Waterloo campus and organizing school-wide events, such as the annual Summer Banquet. Furthermore, SOPhS meets regularly with the administration to discuss student issues. We recently asked (and received) for permission to install recreational equipment on the property, provide cable TV in the student lounge, and arrange for additional appliances and study space. In addition, leaders from SOPhS are attending meetings to give student input in the creation of an Investment Club, organizing Phrosh and producing emails, newsletters and yearbooks for our students.

These are only a sample of the work SOPhS is involved with and you can rest assured that as we mature in the coming years, SOPhS will only continue to offer more services and advocate harder on students' behalf. I encourage you to forward any additional questions/ thoughts/concerns to crcharbo@uwaterloo.ca and I will be sure to respond. Lastly, look forward to the publishing of several SOPhS Policies regarding the email list, posting in the student lounge and how to apply for funding for student initiatives.

Stay classy,
Claude R. Charbonneau

