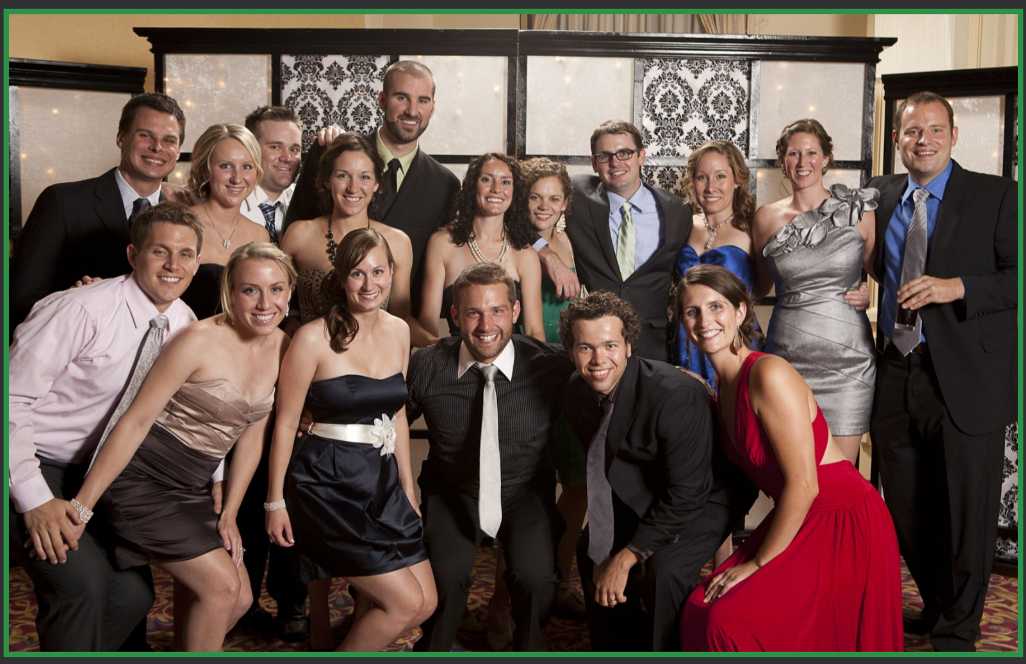
Pharmacy Phile

University of Waterloo School of Pharmacy
ISSUE 26 - September 2011



In This Issue (Click to View)

SOPhS President's Message P.1
This is Africa P.2
Vanguard Awards Night Photos P.3,4
Student Spotlight P. 4
Journal Club: Echinacea P.5
Kick Ball & BBQ Event Photos P.6
Blurbs on Herbs P.7
Fresh From The Pharm P.8
Are You A Clinical Pharmacist? P.8
News & Events P.9
SOPhS 6 Week Calendar P.10

SOPhS President's Message

Where did the summer go...? I can't believe how fast time has flown by since beginning in the pharmacy program and this past summer was no exception. Through spending time with many of the vanguard students over the summer months in preparation for the school's first ever graduation ceremony and through my involvement with the alumni development committee, I have truly grown to appreciate the concept of making the most out of our time spent here in the pharmacy program. Why, you might ask yourself, was that last comment relevant. Well no matter what stage you are currently in along this path to becoming a pharmacist, our time spent within this program is short lived. At the beginning, we probably thought that our four years were going to drag on and feel like forever but when watching the vanguards at their graduation formal, I realized how little time we do have to make the most out of our student years.

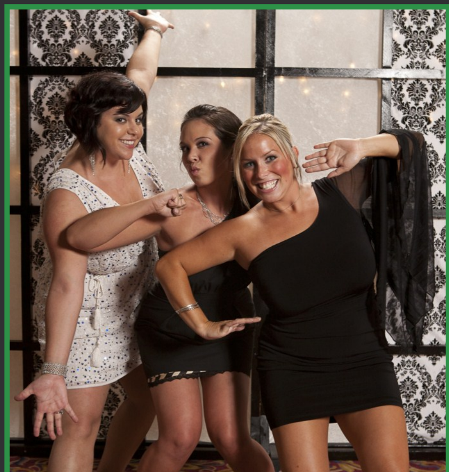
We are presented with so many countless opportunities as pharmacy students. We get discounted rates to attend all the provincial and national pharmacy conferences. We have faculty and administration available on site to answer our questions. We have access to journal articles and resources through our library, all for free! We get the unique opportunity that no other pharmacy students in Canada get the experience by having four, 16 week co-op terms to better prepare us for our future. We are presented with various networking opportunities where pharmacists from organizations across Canada, come and speak to us in classes or are arranged through extracurricular groups. As I list a few examples of the opportunities we are presented with, I wonder if we can honestly say that we have utilized many of these.

Let us all learn through the vanguard's previous experience, to fully appreciate that our time here is short, and make the most of it. No matter what stage of the game you are in right now, it is never too late to become fully engaged in the student experience that is offered to us.

I wish everyone the best of luck this term, whether you are starting an internship, co-op term, or just getting back to classes. I do hope that we all take the extra time to make the most out of the experiences and opportunities that are presented to us.

--
Kaitlin Bynkoski
President - Society of Pharmacy Students (SOPhS)

Vanguard Awards Night Photo Booth



Vanguard Awards Night Photos by Mark Drewe

This is Africa - Zimbabwe 2011 By: Mike Collins Rx2011

In August of 2011, six members of the Global Medical Aid team (4th-year elective) travelled to Zimbabwe on an adventure filled with life-long memories, fantastic scenery and incredible communities full of hope and strength. The team spent 10 days volunteering at the Howard Hospital and surrounding communities followed by a weekend in Victoria Falls before returning home.

After arriving in Harare, the nation's capital, we travelled approximately 100 km north along a dirt road to the Howard Hospital. A pillar in this rural African community, Howard serves a population of nearly 250,000 people with 3 physicians and a diverse team of passionate and hard-working healthcare workers. Led by fellow Canadian Dr. Paul Thistle, the hospital is well known and respected throughout the country. Dr. Thistle has been a stable fixture in this community for the last 17 years, where he resides with his wife and two young children. Ravished by unstable political turmoil, a dismal operating budget and a high incidence of HIV/AIDS, the hospital must continue to be creative in finding solutions to providing a high-standard of healthcare – a lesson many Canadian health organizations could learn from. All Hospital workers are provided with lodging within the Hospital's compound. As visitors wondering around compound, we were always greeted with a smile.

Our main role was to help the pharmacy department with inventory management, including the destruction of likely millions (USD) in expired drugs donated from foreign counties. Although done so with the best of intentions, many donations go unused as they are either the wrong drugs, sent too close to expiration to be used in time or drugs the local workers are unfamiliar with. A good example of this was nearly $800,000 (estimate) worth of Arthrotec that wasn't used before expiration because the local nurses (who do most of the prescribing) and physicians were unfamiliar with this Western drug. In response, the pharmacy team also held in-services for the nursing staff on which drugs were current in the inventory and how to use them appropriately. In addition, we were able to attend inpatient rounds, watch surgeries and provide pharmacy services on community outreach clinics.

Although there as volunteer healthcare workers, our biggest memories were not that of poverty and disease but rather the way in which the community embraced our presence. Whether it be through our involvement in local soccer games, hanging out at the shops, hosting dinners, attending various church services or just wondering around the community, we always felt safe and welcome at Howard.

Lastly, we were fortunate to end off our adventure with a vacation to Victoria Falls, one of the 7 natural wonders of the world. Our first day there, we ventured across the border to Botswana for a breathtaking safari where we viewed the world's largest population of elephants, among many other animals including, antelope, hippos, buffalo, crocodiles, giraffes, and warthogs to name a few. Once back on the Zim side we spent our last day exploring the falls, a stretch of 1.7 km of unbelievable views.

Two weeks is never long enough, but during this short time in Zimbabwe we were able to experience third-world healthcare, African culture and some breathtaking scenery. When speaking to one of the local guys at the shops just outside the hospital compound, he said to me "many tourists come to African to stay in fancy hotels, go on Safaris and see the animals but this – this is Africa".

Left to right: Veneta Anand, Katherine Guse, Stephanie Voss, Michael Collins, Venita Harris, Denise Kreutzwiser

Vanguard Awards Night Photos

Top Right: One of our very own Professors, Grant Bunston, makes a special guest performance pipping in the Masters of Ceremonies, Marc -Andre Gravel and Maruka Lee as a wonderful tribute to the vanguards.

Top Middle: Key note speaker, Dr. Olavo Fernandes who is the Director of Clinical Pharmacy at the University Health Network, delivers an inspirational address to the vanguard class.

Top Left: The Hallman Director and Associate Dean of Pharmacy for the University of Waterloo, Dr. David Edwards, addressing the vanguard class with a few key messages.

Above Left: Ken Potvin presenting the Academic Proficiency Award to Faiza Ahmad-Butt. She was awarded for her academic excellence.

Middle Left: John Thai and John Sewell presenting the Student Support Recognition Award to Cynthia Richard. Selected by the vanguard students for the positive influence that she had on their undergraduate experience.

Bottom Left: Dr. Nancy Waite presenting the Community Engagement Award to Naomi Dore for dedicating her time to be involved in the community outside the School of Pharmacy requirements.

Bottom Middle: Cynthia Richard presenting the Undergraduate Student Experience award to Mathew DeMarco for going out of his way for assisting the school in various endeavors that were not for credit.

Bottom Right: Elaine Lillie presenting the Co-operative Education Award to Ashley Gubbels for going above and beyond the expectations and requirements for co-op.

Continued on Page 4

Student Spotlight

Nicole Seymour from Rx2013 had her Spring 2011 co-op term at Sobey's in Kitchener this past summer. She had the opportunity to provide a respiratory disease clinic for her patients. Here is an interview with the Pharmacy Phile about her experience.

What is a "respiratory disease clinic?

A respiratory disease clinic is an educational event for patients that have any sort of respiratory disease including COPD, asthma, and allergies. I personally called patients to invite them to this clinic, and I reviewed medication use for those patients that showed interest. Specifically, I looked at inhaler and respiratory medication use to determine compliance and disease control. Patients then dropped in at their convenience during the 8 hour clinic for a one-on-one personalized meeting with me. My tactic was to ask patients what respiratory condition they had, then have them describe the history of their condition, triggers, and symptoms. I would then explain more about the patients' respiratory disease depending on their knowledge, then ask them about their medication use. Patients would show me how they use their puffers and take their medications, and I would offer suggestions when appropriate. Finally, I completed an action plan for patients to achieve better control of their condition.

How/why did you come up with this idea?

I came up with this idea after noticing that many patients were complaining about the hot weather affecting their breathing. I remembered Dr. Kelly Shaw teaching our class that most patients use their puffers improperly or have poor compliance and decided that this may be a problem I could help resolve.

Describe the impact that your clinic had with patients?

3) Many patients told me that they learned a lot at my clinic and that they felt much better about managing their condition because of the information they received. Many patients with asthma did not understand the importance of their controller medication. When appropriate, I faxed family doctors with suggestions for better control of patient symptoms. One doctor agreed with my suggestion to add tiotropium to the drug therapy of a patient with poorly controlled COPD. I counseled several patients regarding smoking cessation, and found a solution for one patient who was very picky about nicotine replacement products. Surprisingly, an elderly woman with poorly-controlled COPD hugged me and told me she loved me after I finished my meeting with her.

What items/information/resources did you need to put on the clinic?

I used my notes from IPFC to review conditions and help plan the event. I then visited http://www.asthma.ca and http://www.lung.ca for patient education and resources. The pharmacy I worked at had brochures and demonstrator inhaler devices. I put together an information package for each patient including a brochure, trigger management sheet, COPD or asthma control scale and an action plan sheet.

Vanguard Awards Night Photos Continued

Top Right: Laura Manning presenting the Future of Pharmacy Award to Sheri Howard who the graduating class saw as someone who has great potential to make a difference in the profession.

Bottom Left: Kaitlin Bynkoski presenting the SOPhS Leadership Award to both John Thai and Jeannine Oliver.

Bottom Right: Dr. Edwards presenting the Valedictorian Award to Bridget Braceland. Who was selected by her peers as someone who is seen as a leader, actively engaged in the profession, and who portrays an exemplary reflection of the class as a whole.

Journal Club: Echinacea for Treating the Common Cold

Presented By: Victor Tsang and Dina Danial - Rx2014

Reference

Barrett, Bruce, Roger Brown, Dave Rakel, Marlon Mundt, Kerry Bone, and Tola Ewers. "Echinacea for Treating the Common Cold: A Randomized Trial." Annals of Internal Medicine 153.12 (2010): 769-77. Print.

Clinical Question:

Is Echinacea a beneficial over-the-counter product as a treatment of the common cold?

Study overview and objective:

- Randomized controlled trial with 4 parallel groups at 2 sites in Dane County, Wisconsin
- To assess the potential benefits of Echinacea as a treatment of the common cold
- Nasal wash analysis, symptoms severity analysis

Inclusion Criteria:

- Participant must have a cold
- 12 years or older
- Symptom duration <36 hours prior to enrollment
- Jackson and colleague's criteria minimum score of 2

Exclusion Criteria:

- Pregnancy, autoimmune disease, immune deficiency disease
- Receiving any antibiotics, antivirals, nasal steroids, decongestants, antihistamines, combination cold formulas, Echinacea, zinc, vitamin C
- History of **allergic rhinitis or asthma**

Outcomes:

Primary Outcomes

1) Illness severity: Wisconsin Upper Respiratory Symptom Survey (Reporting twice daily):

21 item survey assessing symptom severity and quality of life based on a scale.

2) Illness duration: From enrollment to the last "yes" answer to, "Do you think you still have a cold?" (This yes must have been followed by "no" for 2 consecutive days)

Secondary Outcomes

1) Immune response and inflammation (interleukin-8 and neutrophil levels) analyzed at enrollment and 2 days later.

2) 5 surveys regarding general health, interpersonal optimism and stress

Results:

Primary Outcomes

Mean severity – 28 points difference: P = 0.089

Median severity – 13 points difference: P = 0.170

Mean illness duration (0.53 days): P = 0.075

Secondary Outcomes

Change in IL-8 levels – 19 ng/L: 95% confidence

Change in neutrophil counts – 1 cells/hpf: 95% confidence

Critical Appraisal:

Pros

- Randomized
- High retention
- Unbiased funding sources (Mediherb did not contribute financially)
- Wide age range (12-80)
- Similar baseline characteristics among four parallel groups
- Low levels of nonadherence to pill regimen
- Authors discussed limitations of the study
- Appropriate conclusion based on the results of the study

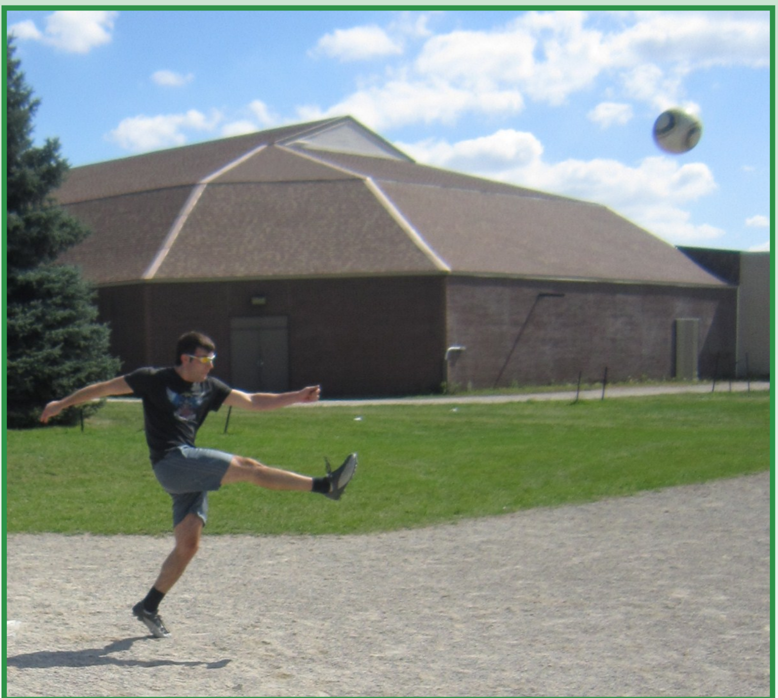
Cons

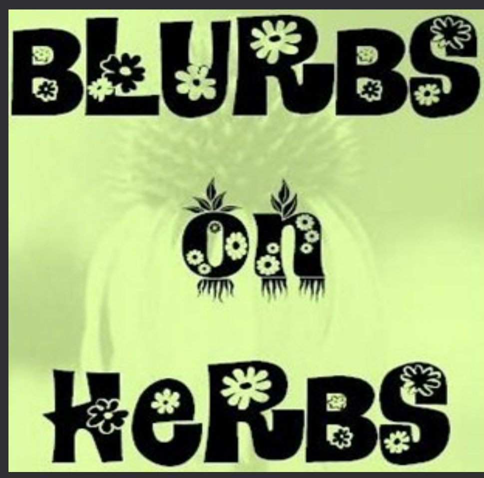
- All participants from Dane County, Wisconsin
- Community acquired colds
- Self-reported colds
- Slightly underpowered
- Inclusion not based on viral cause of the cold
- Low ethnic and racial diversity
- Specific to 1 echinacea formulation (root-based aqueous-ethanolic extract)
- Different dosage of Echinacea could give different results
- Nasal wash analysis not well completed by all participants

Bottom Line:

- No statistical significance to suggest Echinacea reduces the severity and duration of the common cold
- Keep in mind this only applies to the specific Echinacea used in the study (MediHerb)
- No significant adverse effects were reported, so Echinacea may be a good recommendation for patients that are determined to try an NHP
- As always, use your professional judgment when recommending NHPs

Kick Ball & BBQ Event





An ad I saw online:

"Does anyone have information on ways to dry medicinal plant leaves and equipment used to carry out the process? Specifically, we are looking for drying information and equipment to process: Eleutherococcus senticosus... *The roots and leaves are collected, in autumn. It is a substitute for ginseng (*Panax ginseng*)... The Udege people of the Russian Far East collect them and are looking for better drying equipment to enhance the medicinal values of the leaves. Their current drying method is to let them dry on the roofs of their homes in warmer, dryer times of the year. Any information on equipment, including power requirements, would be useful."*

(Newsgroups: alt.folklore.herbs; 1994)

Issue 19 – Siberian Ginseng (*Eleutherococcus senticosus*)

(aka: Acanthopanax, Ci Wu Jia, Eleuthero Ginseng, Russian Root, Devil's Bush, Ussuri)

Famed Russian botanist Carl Johann Maximowicz (1827 - 1891) spent most of his life studying flora from countries he visited in the Far East, describing many new species. He is credited for the "discovery" of Siberian ginseng in 1854 (a rediscovery actually - the herb has been used medicinally for 1000s of years by indigenous peoples throughout Asia), after having mistaken it for *Panax ginseng*.

In reality, Siberian ginseng is not a true ginseng but a distant relative from the same plant family (Araliaceae). It garnered its name because it resembles many ginseng species and shares adaptogenic properties. "Adaptogen" is a non-medical term used to describe substances (such as ginsengs) that supposedly strengthen the body and increase general resistance to daily stress. Siberian ginseng has thus been popular among herbalists and consumers, regarded as a cheaper alternative to *Panax* species. Clearly its place as the third and final instalment of the ginseng series is deserved.

Description and Habitat: Siberian ginseng is a hardy shrub native to south-eastern Siberia but has spread throughout the world. It grows abundantly in Russia, East Asia, and the Pacific Northwest from northern California to British Columbia. Siberian ginseng grows in mixed and coniferous mountain forests, forming low undergrowth, or in thickets at cliff bases. It is tolerant of many soil types, growing in sandy, loamy, and heavy clay soils with acid, neutral, or alkaline pH, and in soils of low quality. It thrives in well-drained, rich, moist soil in sun or partial shade where it grows to a height of 2 m. It flowers in July in most habitats; flowers are hermaphroditic, pollinated by insects.

Medicinal Constituents: Phytochemical constituents of Siberian ginseng include a variety of amino acids, carbohydrates, vitamins (e.g. vitamin E, niacin, β-carotene), minerals, and eleutherosides, considered responsible for its medicinal properties. Both roots and leaves are used medicinally, but the root is preferred as it contains more eleutherosides. Eleutherosides are diverse (A to M); eleutheroside B (syringin) & eleutheroside E (syringaresinol) are the most plentiful, used as marker compounds for Siberian ginseng products. Eleutherosides also include saponins (e.g. ß-sitosterol), coumarins (e.g. isofraxidin), lignans (e.g. syringaresinol), phenylpropanoids (e.g. caffeic acid), & others.

Medicinal Use: Like ginsengs, older roots are purported to have superior healing properties; plants harvested after two or more years of age are preferred. In Traditional Chinese Medicine (TCM), it is known as *ci wu jia* and used to invigorate *qi*, strengthen the spleen, nourish the kidney, provide energy and vitality, and treat hypertension, inflammation, respiratory tract infections, ischemic heart disease, spasms, and hepatitis. Indigenous peoples of NE Asia to far eastern Russia use it traditionally as a tonic to stimulate the immune system. Modern usage include as an adaptogen for stress, for treating high blood pressure, immune deficiency, colds and flu, various infections, and improving athletic performance (it has been used extensively for decades by Russian athletes).

Typical Dosages: There is no agreed upon dosage for Siberian ginseng. Modern daily dosages and formulations include: tea (9-30 g of fresh root or 2-3 g of dried, powdered root/rhizome in boiling water); solid extract (300-400 mg capsule/tablet standardized to 0.3% eleutherosides B/E); tincture (60-100 drops of a 1:4 tincture 3-4X/day OR 20-40 drops of fluidextract (1:1) 3X/day. In research up to 3 g per day dried quantity equivalent has been used. Anecdotally, Siberian ginseng use for longer than 2 months without a 2-3 week break is not recommended as it is associated with inflamed nerves leading to muscle spasms.

Evidence: *In vitro* data involving various eleutherosides have demonstrated antioxidant and possible anticancer effects; root extracts seem to have an anti-proliferative effect on leukemia cells and may potentiate the effect of anti-metabolites. Some eleutherosides increase lymphocyte counts and phagocyte activity. Eleutherosides A through G appear to have hypoglycemic activity. Other constituents have anti-inflammatory, sedative, diuretic, gonadotropic, estrogenic, and protein-anabolic properties, and stimulate the pituitary-adrenocortical system. Root extracts also inhibit RNA-type viruses including human rhinovirus, respiratory syncytial virus, and influenza A virus. Limited clinical trial data is weak but suggest that taking Siberian ginseng may help reduce the frequency, severity, and duration of herpes simplex type 2 virus infection. There is a lack of reliable evidence for the effects of Siberian ginseng on athletic performance, chronic fatigue syndrome, and other conditions.

Siberian Ginseng in Pharmacy Practice: Siberian ginseng may cause insomnia taken too close to bedtime and is generally not recommended for persons with uncontrolled high blood pressure or cardiovascular disorders (may cause palpitations, tachycardia, and hypertension). Higher than normal doses may cause anxiety, irritability, melancholy, mastalgia, and uterine bleeding. Theoretically concomitant use with anticoagulants, antidiabetic medications, lithium, alcohol, and CNS depressants may increase the risk adverse drug reactions.

Jason Budzinski (Pharm 2011)

Fresh from the Pharm

A Culinary Blog by Chelsea Barr

Black Bean-Chicken "Burger" with Over Easy Egg

I found this recipe on foodgawker earlier this week and knew I needed to try it! After our jurisprudence exam this summer, myself and my roommate Yannan went a great place in Toronto, Burger Bar, and ever since I've been dreaming of a gourmet burger with a lil' something unique, which this recipe clearly achieves! The chicken can easily be omitted without sacrificing any of the flavour, making it a wonderful vegetarian meal. Another great addition to this "burger" would have been a slice of fresh avocado, or some Sriracha mayo, although there was none of that to be found in my fridge today!

1 (15-ounce) can low-sodium black beans, drained and rinsed

1 cup frozen corn kernels, thawed

¼ cup red onion, diced

Pinch of ground cumin

2 teaspoon garlic powder

Fresh lime juice, to taste (optional)

Sweet chili pepper sauce

1 cooked chicken breast, chopped

1 tablespoon olive oil

1 slice aged Cheddar cheese

3 seven grain rolls, halved

3 large eggs

Iceberg lettuce

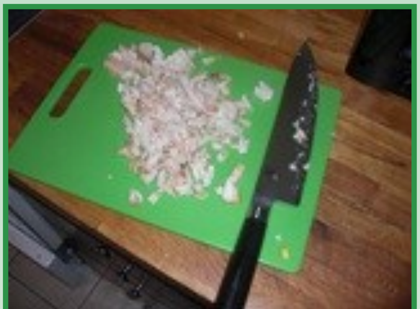
1.Combine first 6 ingredients in a small bowl, and mash with a potato masher (or fork, if you are like me and don't have a potato masher at your house). Set aside.

2.Combine chicken and black bean mixture; shape into a patty. Heat oil in a nonstick skillet over medium-low heat; add patty, and cook 1 to 2 minutes on each side or until lightly golden and heated through. Top with cheese, cover, and cook until cheese melts.

3. Place lettuce on bottom half of roll; top with cooked burger.

4.Crack egg into skillet; cook, over medium-low heat, until whites are almost set but yolk is still runny. Flip egg and cook another 30 seconds. Top burger with cooked egg. (P.S. I'm sure you know how to cook eggs better than I do. The original recipe called for a sunny-side up egg, which I hate making. Over-easy are much more my style, I never have to fear the too-runny undercooked egg!)

5.Layer black bean "patty", egg, lettuce, and top with chili pepper sauce. Put the top on the burger, and enjoy!! Makes 3 servings.



Are you a clinical pharmacist?

There's no doubt that the terms clinical pharmacy and clinical pharmacists get tossed around like loose change in a washing machine but do WE (ahem, students) really know what a clinical pharmacist or clinical pharmacy mean?

Don't get me wrong, it sounds pretty cool to be a clinical pharmacist, right? I mean WOW, being a pharmacist is great by itself but to also be clinical too? It's like having hot-Ice to soothe an ache, the best of both worlds! (The first person to email me the name of the movie where that's from gets a loonie).

But if you search back far enough, you find that *clinical* dates back to the late 1960's when the profession of pharmacy began its long and winding road moving away from strictly dispensing medications all the way to providing patient-focused care. It was then that the term *clinical* began to appear in academia and literature as "having direct contact with the patient" or "ensuring appropriate medication use and safety" over and above just giving them medications.

So what does this mean to you? Well, you may see pharmacists that work in FHT's or hospitals refer to themselves as "clinical pharmacists" and rightfully so, according to the definition above. They are routinely working directly with patients and other health care practitioners to promote patient health and proper medication use. But what we do not usually see are community pharmacists refer to themselves as clinical pharmacists. Are community pharmacists considered clinical pharmacists?

Absolutely.

Being a clinical pharmacist is *independent* of your practice setting but *dependent* on the way you practice. Identifying and correcting medication errors during hospital rounds, inquiring about medication allergies upon dispensing a prescription at a community pharmacy, recommending a therapy change to a physician at your FHT, or providing condition specific education to patients; they are all clinical actions!

There is no standard or qualification to become a clinical pharmacist. In fact, some might say you become a clinical pharmacist once you become a pharmacist! Working in a FHT, hospital, long term care facility or community pharmacy (forgive me if I've missed any other settings) you ARE a clinical pharmacist.

As long as you are optimizing medication use and patient health you are a clinical pharmacist or rather, a *Pharmacist*!

Nick Malian & Kaitlin Bynkoski

Photos to the left: Rx 2013 students at a back to school social event at the Firkin at the Tannery.

Call for Content & News

If you have an upcoming event or an announcement for the School of Pharmacy please let us know! The deadline for submissions in the next newsletter is October 9th, 2011.

Thank you to all of the staff members and students who provided content for this newsletter.

If you have any questions, comments, or concerns about this newsletter or The Society of Pharmacy Students at the University of Waterloo School of Pharmacy please send an email to: pharmsoc@uwaterloo.ca.

Thank you for reading and good luck with the rest of the term!

Pharmacy Phile
ISSUE 26 - September 2011

Upcoming Events

Run For The Cure Bake Sale

Rx 2013- come out and enjoy some pink-themed baked goods to support UW's Run for the Cure Team! Also enjoy some steaming hot Starbuck's coffee.
Date: September 22, 2011
Where: Room 1004 - BEFORE and AFTER IPFC!

PDW & CAPSI Competitions Lunch & Learn

On Monday September 26, from 12:30-1:00, come out to learn more about this year's PDW in Halifax, and how you can sign up to become one of the delegates from UW.

Also, get more information about how you can participate in this years local CAPSI competitions, including:

- Patient Interview Competition
- Student Literature Challenge
- Evidence-Based Medicine Competition
- OTC Counselling Competition
- Compounding Competition

Competition winners get a cash prize to go towards PDW costs, and a guaranteed spot at this years PDW conference in Halifax where you will compete against winners from other schools across Canada!!

Run For The Cure

Time is running out to sign up for this year's UW Run for the Cure team! UW is currently leading all pharmacy schools in Canada with the most money raised, but UBC is close behind, and gaining ground fast! To sign up to walk or run the 5 km run with a group of other UW students:

1) Go to www.runforthecure.com
2) Select Kitchener-Waterloo as "Location"
3) Select "Join a Team"
4) Select "CAPSI" under National Team Affiliation
5) Select "UW School of Pharmacy

Please check out the calendar on the next page, or check out the weekly SOPhS Updates for information about all other events. If you have an event coming up that you would like to inform students about please submit an article for a SOPhS Update to pharmsoc@uwaterloo.ca using the guidelines available on the SOPhS website.

Society of Pharmacy Students (SOPhS)
University of Waterloo School of Pharmacy

SOPhS
SOCIETY OF PHARMACY STUDENTS

10A Victoria Street
Kitchener, Ontario N2G 1C5
www.sophs.uwaterloo.ca

SOPhS 6 Week Calendar

	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
Week 2	18 Terry Fox Run Pharmacy Kick-Ball & BBQ Event	19 La Roche Posay Lunch & Learn	20	21	22 Run For The Cure Bake Sale	23	24
Week 3	25	26 PDW & Competitions Lunch & Learn	27	28 Co-op Interview Day (Round 1)	29	30	October 1 Code Blue @ Bobby O'Briens
Week 4	2 Run For The Cure	3	4	5	6	7 KW Oktoberfest Begins	8
Week 5	9 Newsletter Submission Deadline	10 Thanksgiving Day (Holiday)	11	12	13	14	15 KW Oktoberfest Ends
Week 6	16 Newsletter Release Date	17	18	19	20	21 Convocation Reception @ Pharmacy School	22 Vanguard Class Convocation
Week 7	23	24	25	26	27	28	29

SOPhS Calendar Notes

Please note that event dates may be subject to change. Contact SOPhS if you are unsure of an event date

Beginning in the Fall Term the new SOPhS Office will have a hard copy of the calendar for students to use. In addition, there will be dedicated calendars for each class on the new SOPhS website in January.

If you would like to add an event to the SOPhS calendar please email Caitlin at c3meyer@uwaterloo.ca