CHANGIN’ DA GAME
Read about MC Bharadia’s first rap tour in Toronto!

DAY IN THE LIFE
* Learn what it’s like to work in a hospital pharmacy!

BOWDEN SYCH, MR. PHARMACY 2014
Relive the excitement of this year’s competition!

WIN A STARBUCKS CARD!

IN THIS ISSUE: The New INT D | CAM Corner | Amanda’s Kitchen | Horoscopes | and more!
So it's that time of the year again, fellow pharmers: the semester is over and exams are upon us. Don't forget to get some R&R amongst the cramming – reading the PQ+2 is a great way to start with that! From event recaps to winter activities in YEG, this issue has it all - and will even teach you how to cook (see pg. 22!). Good luck with your exams, and remember, to quote a group of wise musical philosophers, "We're all in this together!" Happy holidays :)

Grace Wong

Tis' the season for endless cups of coffee, less frequent self-hygiene and long nights of crying into your notes. That is why the PQ+2 is here to provide you with a much needed study break. We hope that this issue will provide some comedic relief (stuff pharmacy students say & horoscopes) and will inspire you to see the big picture (day in the life). Good luck with your finals everyone!

Morgan Basiuk
APSA EVENTS:
GOOD LUCK ON EXAMS!

GET INVOLVED - WRITE FOR THE PQ!

Like to write? Join the PQ Column Club by submitting a piece about anything that’s on your mind to the 3rd and 4th year PQ editors Grace Wong (ggw@ualberta.ca) or Morgan Basiuk (basiuk @ualberta.ca), and get ready to see your name in the spotlight!

STUFF PHARMACY STUDENTS SAY
(AROUND EXAM TIME)

BY MORGAN BASIUK

Do we have a final this week? (in September)
Have you started studying yet?
What lecture you on?
I've only gone through the notes once.
What do I need to memorize?
Do we have to memorize doses?
Do we have to memorize percentages?
Did you memorize that?
Do we have to know that?
Is there short answer?
Is the test cumulative?
Its only 1.5 credits...
Its 4 credits!!!

I had 20 exams in one semester
This exam is worth more than that whole class is worth
This exam is only worth 0.1 of your grade
Do we need a calculator?
Is there a special code for this exam?
Man I totally failed that test. (gets 95%)
I thought we didn't have to memorize structures.
I bombed the med chem.
What was the average?
Our class averages are so high...
Why aren't marks up yet?
Marks are up. (even when they aren't)
Saturday, November 29, 2014, gave us yet another reason to be proud members of this faculty as we cheered, laughed and roared to Mr. Pharmacy 2014. November ended with a bang as eight talented and bold young men strutted their stuff at the Myer Horowitz Theatre to help raise money for prostate cancer research and education. The annual event was generously sponsored by PharmaChoice and Kit Poon.

Hosts Madeleine Durrant and APSA President Brad Snodgrass kept the energy alive throughout the show with their electrifying onstage chemistry. The night began with Pharmily Feud, hosted by Law & Ethics professor Ubakau Ogbogu. The contestants’ quick thinking were put to the test by the Pharmacy-related questions during the game show. Knowledge and vision of the profession was also assessed during the vigorous Q&A portion of the evening. The contestants answered tough questions about the profession and pulled through with impressive, enlightening answers.

The talent portion of the evening showcased the contestants’ entertainment skills. Morgan Moffat’s performance got the theatre groovin’ and swingin’ to Beyonce’s Single Ladies as Savin’s beats just proved the Class of 2018 has some world-class talent. Will Chan broke hearts during his rendition of Leona Lewis’ Bleeding Love as Yasir Iqbal shared his signature humor with a rap. A natural performer, Ang kept the entire theatre on the edge of their seats as he performed a 911-worthy magic trick. Meanwhile, Mutch tore the stage with his notable break-dancing skills. Jaspreet Jhajj got the crowd roaring during his lip-synch battle with Dr. Mike Doschak as Bowden Sych showed us how to Shake It Off with his aerobics routine.

Legs were shaking and ladies were cheering during the much-awaited beachwear competition. The eight daring contestants clearly knew how to make the audience swoon as they (shamelessly) paraded their beachwear onstage. At the end of the night, Synch brought pride to the Class of 2015 as he was crowned Mr. Pharmacy 2014. Bowden Sych will also be representing the University of Alberta in Quebec for the first ever Mr. Pharmacy Canada. Mr. Pharmacy’s success put the Faculty of Pharmacy on the top of fundraising rankings, surpassing our goal and raising over $25,000. Helen Marin, APSA’s VP External, has plenty to thank for the show’s success. “This could not have been possible without everyone’s efforts and fundraising. Thank you!”
From counting down to graduation to overnight sensation—this year’s Mr. Pharmacy win goes to the fourth years’ Bowden Sych! If you haven’t had enough of this dashing gentleman, you can always catch his next performance in the national Mr. Pharmacy Competition happening during Professional Development Week (PDW) this coming January. For now, you’ll have to make do with this PQ+2 exclusive interview:

**How does it feel to win Mr. Pharmacy?**
Dream come true. I have been training since before I wrote my letter of intent.

**How will you put your new-found celebrity status to use?**
Mr. Pharmacy is all about men’s health, so I hope I can continue to raise awareness throughout the year.

**Are you going to change anything up for the national competition? How are you going to prepare?**
I am adding a few major pieces to my routine. Let’s just say there may be a "golden addition" and a "presidential touch". If that wasn’t obvious enough, it’s Doug and Brad... I am adding Doug and Brad.

**What do you think your chances are for winning the national competition (answers <90% are not acceptable)?**
I mean come on, all I have to do is show up. Who is gonna challenge? BC? HA!

**Are you single following that amazing performance?**
Sorry ladies, already taken.

Congratulations Bowden, and best of luck in the national competition!
During the month of Movember the AHS Pharmacy Team located at the Seventh Street Plaza in Edmonton hosted a brown bag lunch, and explored their moustache-y side. They managed to raise a total of $105 towards our U of A Pharmacy Movember team!

Thank you for the support Sheena Neilson and the gang at the Seventh Street Plaza!
CHANGIN’ DA GAME:
AN INSIDE LOOK AT THE SHOPPERS DRUG MART STUDENT CONTEST

BY RAJ BHARADIA

This past summer, Shoppers Drug Mart (SDM) sent out an email about a student competition for an all-expenses paid spot at their pharmacist conference this year. The conference is held annually for all full-time pharmacists that work for SDM. The focus is on continuing education and new innovations in pharmacy practice. This year, the theme of the conference was “Game Changers”. Fittingly, the question that was asked of the student competition was: “what have you done that makes you a pharmacy game changer?”

The first thing that popped into my head when I saw the contest was that I should make a rap video. So I did... eventually... I may have had to be reminded numerous times to actually do it. OK, more than numerous – A LOT of times. Somehow, I did manage to complete it, and in September I received an email saying I was one of the students from Western Canada selected to go to the Calgary SDM Conference. Morgan Basiuk and Katie Swan also made it in for their respective poetry and story-writing skills. U of A represent! SDM selected 10 students from Western Canada to attend the Calgary conference and 10 from Eastern Canada to attend the Toronto conference.

Some days later, I received an exciting call from James Ying, Pharmacy Category Manager at SDM Headquarters in Toronto. He asked if I would be interested in performing the rap LIVE at the Toronto Conference in front of 1400 attendees. I also learned that I may be collaborating with Ted Bisaillion, a stand-up comedian who runs his own business entertaining at conferences for a variety of corporations across North America and Europe; he has been MCing SDM conferences for 15+ years! Despite the two looming midterms following the conference weekend, I knew this was an opportunity I just couldn’t pass up! Over the next while I felt like Ari from Entourage, since I was basically acting as my own agent – constantly answering phone calls and emails about my rap debut. The decisions had been made for me to attend and perform at both conferences (on consecutive weekends). The day finally came for me to fly out to TO and bust some rhymes.

Onboard the plane, I soon realized that my attempt to read neurology notes was anything but successful. I was star struck as I met some of the Presidents and Vice Presidents of SDM. Fast forward to a delicious dinner and the best dessert I’ve ever had. Let’s just say it involved a lot of caramel AND chocolate pop rocks... can’t get better than that! To finish off an exhilarating day was cocktails and the entertaining Michael and Amy Dueling Piano Show. After more mingling with pharmacists and corporate leaders as well as some time on the dance floor, I was definitely ready for bed.

On the morning I met Ted for dress rehearsal and boy was he fun to work with! I’d say he’s basically a younger (maybe) version of Will Ferrell. We then spent the majority of the afternoon sorting out the performance and I may or may not have read some neuro notes backstage. At lunch they had reserved a spot for me the corporate table (you read right – THE CORPORATE TABLE!) and I was able to talk more with the influential leaders of the company. About halfway through my lunch, I realized I was pretty darn nervous...IBS for days! Once I got that out of the way, I prepared backstage...
with Ted. I overheard some of the excellent speeches and presentations on the evolution of pharmacy practice. Jeannette Wang, SVP professional Affairs and Services and Dr. Dorian Lo, EVP, Pharmacy & Healthcare were some of many inspiring speakers that afternoon. Before I knew it, it was time to perform... and we CRRRUSHED IT. Right after the performance, I caught a cab straight to the airport like a true rock star, ready to do it all again the following weekend in Calgary.

The Calgary conference was another terrific experience. Morgan, Katie and I were able to chat with some pharmacists and meet the other students from BC, Manitoba and Saskatchewan. It was really interesting discussing the different scopes of practice pharmacists have in each of the provinces. We then attended “Becoming Partners in Health” by a familiar speaker – Dr. Lisa Guirguis where she discussed her research and expanded on the communications skills and tools we were taught in First Year. Next we browsed the Product Fair exhibits from various companies where we got TONS OF FREE STUFF and received some samples... I loved trying my new oral hemorrhoid NHP – so far I'm hemorrhoid free! We also went to a continuing education talk by Jamie Kellar, from the University of Toronto and Centre for Addiction and Mental Health, about “Making and Owning Clinical Decisions.” It was fascinating to see the differing opinions surrounding the course of action to take in the clinical scenarios we discussed, since the attendees varied in age, experience and province they practiced in. It was impressive listening to the presentations, including Morgan's poetry reading, at the student reception – it was obvious that I was not the only game changer in the room. After another night of fun, morning of dress rehearsals and certified gangster performance, we were on a plane back to the real world in Edmonton.

I am grateful for the opportunities that Shoppers' has provided me, both working as a pharmacy student and attending these two conferences. I was able to see a whole new side of the pharmacy world and meet some inspirational individuals. Technically, I can say that I was “on tour” since I had more than one show. That's inspirational individuals. Technically, I can say that I was “on tour” since I had more than one show. That's right, I'm not the only game changer in the room. After another night of fun, morning of dress rehearsals and certified gangster performance, we were on a plane back to the real world in Edmonton.

I feel lucky to be able to do almost solely clinical work at the Shoppers I currently work at, as it has been a great learning experience and confidence builder for when I go out into practice. Overall, I had a blast and I wish “the tour” wasn't over. Wait! Actually, it isn't. I recently found out that I will be going to the SDM Associate and Front Store Manager's Conference in Orlando, Florida this coming January to perform my next single. Another rap video will be in the making soon...if I am able to make it out of the ID final alive! The journey continues!

“Changin' da Game” Lyrics:
I said I'm fresh...I'm fresh like the mint smell of spironolactone out the bottle, dawg...

Hey yo my main man Mike, got me up on the scene, he let me job shadow with his shoppers pharmacy team Before I knew it, I was getting mad experience, now I'm proud to represent: Shoppers 306!

Must've done something right cause almost 4 years have gone fast, been filling counseling bookin' med reviews like I got 10 hands I'm gonna outlast, pharmacy's changing fast, it ain't like the past cause if u ain't first man, you're last!

Chorus:
I'm tryna change the game so my patients all win, gonna put my heart and soul into this pharmacy biz I got 99 adjudications waiting for me...no problems though, cause pharmacy makes me feel free

I'm never gonna stop tryna' make a difference First step: win a trip to the Shoppers conference I'm gonna bring my A-game to this whole career... Started from the bottom? Nah Drake, we at the top here!

D-R-P, C-A-C-P, S-M-M-A, Diabetes education eh? We got it all on lock, takin' it all the way, I'll get my APA before you say wait!

So here I go, switch the flow, pharrm school year three, yo my mentors help me learn everyday and we keep it real yo! If there's one thing to know about me, my passion gets it right I'm never gonna stop like I'm constantly drinkin' COLYTE

Got a passion for this profession that is like no other, I strive to improve the lives of everybody's grandmothers! Patient centered care yo, that's goal number one... And pharmacy ain't nothin' if you don't make it FUN!

I said I'm tryna' change the game so my patients all win, gonna put my heart and soul into this pharmacy biz I got 99 adjudications waiting for me... no problems though, cause pharmacy makes me feel free

Check out Raj's game-changin' rap:
Music video: http://goo.gl/mr8q5Z
Live performance: http://goo.gl/0Rhebl
COMING SOON!
ESSENTIALS OF COLLABORATIVE PRACTICE: THE NEW AND IMPROVED INTD

BY AZRA MUSTAJABASIC

Many of the students have been asking for an improved INTD experience, and you should be happy to know that the people in charge have been listening and taking action. When I started the VP Academic position I thought I would have to really fight to see change, but what was refreshing was when I went into the meeting with HSERC to discuss the problems with INTD 410, they were very aware and already had many plans underway to try to address student concerns and improve the course drastically. They will be working on this in stages, with the end goal in a few years to scrap the INTD 410 course and replace it with The Essentials of Collaborative Practice.

A lot of the work right now is logistics, paperwork and having things in writing, including course objectives, outlines, hours spent in each area, technology and resources, etc. I’m sure you guys aren’t super excited about wording issues in a course objective (or maybe you are, but I don’t think it makes for good newsletter stuff), so I will give you a run down of some of the major changes and new things they are moving towards doing.

1. Simulations and experience.
Many people took part in things like Save Stan and expressed the value in something similar to be provided in INTD. So, that is exactly what they want to do! They want to provide a number of experiences like shadowing existing teams in the community and simulations of cases at the school, and then have a drop-down menu so that students can select which experience/simulation they would like to go to, and each student would have one required “experience.” This will give a more hands-on component to the course that feels more relevant.

2. More online lectures. The goal here is to have more consistency in what we are taught, since they have a lot of turnover with facilitators and they all have very different teaching methods. They also want the time in class to be even more focused and efficient on the team activities, with less lecturing. This wouldn’t be just assigned readings, but plans to make the lectures with audio and video aspects and live discussion. This would be for the basic knowledge they teach about the team roles, and the professional roles. Therefore a few hours of the course would shift into the online component. Speaking of shifting...

3. Spreading out the course to full year. Kinda. I just told you about the simulations and the online component, and these would be moved in the fall semester (so you wouldn’t have actually class time in the fall), which they foresee as the product course being 1 credit in the fall and 2 credits in the winter. Why do they want to do this? Many complaints on the course evaluation were about the three-hour evening lectures being very time-consuming. The students and the facilitators would get restless, and this would lead to the time you pay for the course being used inefficiently. This way, the courses would be cut down to 2 hours. Another reason for the full year course is to help bridge the time gap between IP launch and INTD, and hopefully provide more continuity.

Overall, the new course objectives appear to be more focused on relevancy and having students be more in control of their learning. Some of the other changes that are being looked at include changing the streams to a few classes in a stream instead of an entire course, enabling students to pick more than one stream. Another idea I brought forth is to have more class time devoted to learning other professional roles.
Keep in mind that these changes take time, since course times are finalized a year in advance and they need the faculty to buy into these changes. Some online portions will be introduced this year to start blending the course, and then likely some pilot groups will be launched next year. The goal is to have the new ECP course available by 2016.

What I find assuring is that HSERC are really valuing student opinions when shaping this new course. In the near future, I will be presenting a feedback form to the health science students regarding the information above. So if you agree or disagree with these changes presented, or if you have ideas of your own, send in some feedback and consider taking part in the INTD/ECP focus group! The more advocates we have for this the better, because how often can you talk face to face with the creators of a course and really fix things at the root? Anyways, that was my shameless plug! Enjoy your winter break and happy studying!

-Azra Mustajbasic
hssaacad@ualberta.ca

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The Canadian Association of Pharmacy in Oncology (CAPhO)

BY ROXANNE DOBISH

Are you interested in oncology? Would you like to network with oncology pharmacy professionals across the country? Consider joining the Canadian Association of Pharmacy in Oncology (CAPhO)! Student membership is $25/year.

• Be part of a member directed association that promotes, supports and advances oncology pharmacy practice
• Enhance your career by increasing your network & knowledge

CAPhO is about:

• Inclusivity and Accountability to members - pharmacists, technicians and pharmacy assistants involved in oncology pharmacy services working in any pharmacy setting
• Quality - Excellence in the provision of safe and effective oncology pharmacy services to oncology patients
• Collaboration and Engagement - With health care providers, patients and other organizations
• Knowledge Advancement and Innovation
• Professional development: mentorship, education, research

CAPhO hosts an annual oncology pharmacy conference and members receive a substantial discount on registration. Mark your calendars - the next CAPhO conference will be held in St. John's, Newfoundland in May 2015!

Learn more through our website (www.capho.org) or Twitter (@CAPhO_ACPhO) and become a member today!
DAY IN THE LIFE

MARIE FROEHLICH

PHARMACY ASSISTANT

MEDICINE HAT REGIONAL HOSPITAL

QUESTIONS BY

MORGAN BASIUK

What made you choose to become a pharmacy assistant?

Marie was a hospital Unit Clerk for 12 years before working for a family business. When she came back to the hospital 12 years later, a pharmacy assistant job was available and she was hired at the Medicine Hat Regional Hospital (MHRH). She believes that she was “meant to be in pharmacy” because she enjoys being busy, multitasking and being on the move. Within the pharmacy assistant role itself there are many different positions and she really enjoys rotating through these positions to bring variety into her job.

Can you tell me about your role as a pharmacy assistant?

Marie explained that pharmacy assistants are part of the “pharmacy team” and that assistants have their designated jobs within this team. The team relies on assistants for their specialized knowledge of wardstock, the Pacmed® machine and their awareness of the products and current back-orders.

What are some of your major responsibilities?

Major responsibilities of a pharmacy assistant involve “the proper flow of stock,” Marie described. “Each ward is very specific” and it is “important to the wards that the medications are there when [the nurses] need them.” Assistants promote the smooth flow of medication distribution in an efficient and safe manner.

Has your role changed throughout the years?

“At the MHRH, a new role that the assistants have taken on is the issuing of narcotics to the wards from Monday to Friday.” Marie explained that “taking on this new responsibility of working with controlled substances requires accuracy and knowledge.”
Editor's Note: Just as the pharmacist’s role is expanding and changing, the roles of the other members in the team are no exception! Marie looks at change as a good thing and declares “change is inevitable, so embrace it!”

Tell me more about your role in Bow Island?

MHRH prepares and checks medications for rural satellite pharmacies including acute and long-term care in Bow Island, Brooks, Bassano and Oyen. Marie has been working at the Bow Island Hospital for the past while to assist with wardstock and help with the changes that are currently being implemented to make hospital pharmacies more consistent province-wide.

What are some challenges in your job?

Marie says that “staying on top of the constant changes in pharmacy” is one challenge, but as you can tell she is someone who embraces and thrives in a continuously changing environment. “Even in a matter of weeks things change quite a bit” (new drugs are on the market, drugs are discontinued, drugs are added to formulary etc.). It requires a strong team that can work together and inform each other of changes and Marie explained that they have just that here in Medicine Hat.

Editor’s Note: I too have noticed that the environment at the MHRH is very supportive and adaptable and they encourage you to ask any question you may have!

What is your favourite floor at the MHRH? Why?

Marie has known many of the ICU staff for over 30 years and truly appreciates the way they are able to work in some of the most intense situations and stay so positive and fun-loving. Marie really enjoys working with the diversity and special talent each floor brings and states that “every ward has its complexities.”

What is your advice to future pharmacists?

She hopes that all future pharmacists get time to work with and learn from the assistants and technicians. Here at the MHRH, as a newly hired pharmacist, you train with the assistants initially. Since pharmacy students get less hands-on in school, it is very important to get training with the assistants. “At 2 am on a Sunday morning, they are calling you (the pharmacist). You need to know where things are and what the procedures are. Having time with the pharmacy assistants gives you the understanding of the whole system so that you can be confident as you enter you career.” Marie explained a situation when a pharmacist had missed their narcotic training day with the pharmacy assistants. This pharmacist took the time to make sure he spent a morning with Marie. After that, he had a deeper understanding and felt much more confident about the narcotic vault and how what he would be doing as a pharmacist would affect the other members of the pharmacy team.

Editor’s Note: I think as future pharmacists, even if it is not part of your training as a newly hired hospital pharmacist, it is so important to take the time to learn the entire system and what each person’s role in the pharmacy is!
As pharmacy students, we are all trying to balance multiple things at once. For instance in fourth year, we are trying to balance studying for the exam that threatens to eat up the remains of our student loan and convincing ourselves we are ready to be a pharmacist. In third year, we are torn between the fear of the cephalosporins and fear of losing a pharmacy friend after stabbing them with a needle during our first injection ever. In second year, our time is split between counting the number of exams we have and bragging about that number on Facebook. All the while first years are balancing... who am I kidding? First years have it easy. Well, none of those things come close to the balancing act the talented and ambitious Jodi Kerr performs daily.

Jodi also works as a renal pharmacist. This role has changed throughout the years, which is no surprise in the pharmacy world; change in pharmacy is inevitable. Originally the renal clinic focused on patients with chronic kidney disease as an outpatient program. Now, she focuses on inpatients that are on hemodialysis. This role encompasses a whole different pharmacy expertise. Her repertoire does not stop there! She is part of a team that educates practitioners about medication reconciliation and the Best Possible Medication History (BPMH) while empowering them to use these tools. Jodi explains that the BPMH is not just an admission prescription; it is a document that needs to be referred to time and time again during a patient’s hospital stay. Through performing audits and educating staff, Jodi is ensuring patients are receiving seamless care. On top of all of that, Jodi is part of a Patient Flow Committee. On this committee she promotes effective, efficient and thorough care from admission to discharge and provides vital pharmacy input. Jodi is a true leader at the MHRH and a valuable role model and resource for her colleagues. Jodi admits that wearing so many hats does have its
challenges, but she enjoys the variety of work and mixture of outpatients and inpatients. For her, every day is something new and she is never bored!

The profound impact that just one individual can have at one hospital over 10 years, is inspirational. So, what more does Jodi see for the future of hospital pharmacy in another 10 years? She sees even more opportunities for pharmacists: an increasing number of pharmacists with injection certification and APA. Even she confesses that change involves a lot of growing pains, but she believes AHS is coming together, encouraging sharing between districts and forming a consolidated group of pharmacists. Jodi also sees a future where pharmacists are removed completely from the dispensary (do I hear cheers from the students?). With continued patient satisfaction with pharmacists and the increasing number of Regulated Technicians, further clinical growth for pharmacists will be possible.

Whether you are in first year: unsure of what a pharmacist does... or in fourth year: unsure of where you want to work, Jodi's advice is valuable. "Pharmacy is not just community vs. hospital. There are so many different ways of practicing, so see what is out there! Don't be afraid to take on new jobs. You don't have to continue working at the same store." Jodi encourages students not to be afraid to take on new challenges. She for one has not been afraid of new challenges and has shaped a remarkable career from that very bravery and enthusiasm. In fact, Jodi admits that she is excited to continue moving forward and trying new things in her career. Change is a word that is familiar to pharmacy students – whether it is the pharmacist's scope, reimbursement model or the types of medications available.

The ability to embrace change and seize the opportunities that are the product of change is necessary for all future pharmacists, and Jodi Kerr embodies this ability.
CAM CORNER: NATURAL HEALTH PRODUCTS IN OSTEOARTHRITIS

Sponsored by the Branch Out Neurological Foundation
http://branchoutfoundation.com/

BY MORGAN BASIUK

Reader’s Digest

• A Canadian survey done in 2012 found that Natural Health Products (NHPs) ranked 2nd in terms of yearly sales (393 million dollars)¹
• Approximately 73% of Canadians have tried an NHP and use is even higher in Alberta at 82%²
• Incidence of NHP use is higher with increasing levels of education and income, in women and people aged 35 to 54 years²
• A survey of >1000 patients in pharmacies determined 59% of patients use NHPs with prescription medications³
• In general, there is only weak evidence for the use of NHPs in osteoarthritis (OA); the evidence that is available is limited by heterogeneity, bias, small sample size, lack of allocation concealment, industry funding and at times lack of blinding and intention-to-treat analysis
• NHPs have not been studied in the combinations that are available OTC making it difficult to extrapolate
• It is important to note that while their efficacy may be limited, most (not all!) have few adverse effects

Research Spotlight

Glucosamine:
• Multiple meta-analyses indicate that glucosamine does not reliably improve pain or function in osteoarthritis⁴
• Some statistically significant pain results but not necessarily clinically significant⁴
• Variable results about improvement in function⁴
• No adverse effects – however, don’t use if shellfish allergy⁴,⁵
• Limitations: industry funding and less effect in studies with longer duration or higher quality⁴
• Products may vary from 41-138% of their labeled content⁶

Chondroitin:
• A systematic review of 10 RCTs indicate that chondroitin appears ineffective for reducing pain in patients with osteoarthritis of hip or knee⁷
• Clinically important pain difference = -0.9 cm on 10 cm visual analog scale (VAS)⁷
• -0.3 cm (95% CI -0.7 to 0 cm) with chondroitin⁷
• No significant differences between chondroitin vs. placebo in adverse events⁷
• Limitations: high dropout rate and unclear allocation concealment⁷
• Effects on function and quality of life inconsistent⁵

Combination glucosamine + chondroitin:
• The GAIT Trial (RCT) indicated a possible benefit with combination in patients with moderate-to-severe pain⁸
• 20.5% dropout rate⁸
• Primary outcome = 20% improvement in WOMAC pain severity at 24 weeks⁸
• Combination was more effective vs. placebo (79.2% vs. 54.3%, p = 0.002, NNT 4)⁸
Other NHPs:
Cochrane review of 49 RCTs\(^9\) indicated that the following may reduce pain or improve function in OA →
- Avocado-soybean unsaponifiables
- Boswellia serrata
- Pinus pinaster

Systematic review of 56 RCTs\(^10\) indicates that treatments with at least some consistent evidence of efficacy are →
- Capsaicin gel
- S-adenosylmethionine (SAMe)
- Boswellia serrata
- Methylsulphonylmethane (MSM)
- Rose hip

Systematic review of 53 RCTs\(^11\) indicates there is →
- Good evidence for avocado/soybean unsaponifiables
- Moderate evidence for methylsulfonylmethane (MSM)
- Moderate evidence for SK1306X (cocktail of plant extracts)

NHPs to Avoid:
- Zingiber officinale + Alpinia galanga vs. placebo\(^9\)
  - Significantly decreased pain but increased adverse events\(^9\)
- Salix purpurea + Salix daphnoides vs. diclofenac\(^9\)
  - Significantly increased pain\(^9\)
- Japanese Boiogito + Ioxoprofen (NSAID not in Canada) vs. Ioxoprofen\(^9\)
  - Significantly reduced functional capacity\(^9\)

For Your Patients:
- Take into account patient specific factors when assessing NHP use in OA:
  - What is their degree of pain or loss of function?
  - What has worked for them in the past? (conventional or NHPs)
  - Can they afford these products? (approx. $30 per 3 months)
  - What has been their experience with medications?
  - What are their beliefs about medication?

- Try conventional treatments as per guidelines\(^12\) first
- NHP use is high in Alberta (approx. 80%)\(^2\) so just saying “don’t use this” isn’t enough
- Is there evidence for efficacy?
- Is it safe for the patient? medication interactions? risk of adverse effects or allergy?
- Is the product of high quality? Look for NPN or DIN-HM13 and subscribe to MedEffect™ at www.healthcanada.gc.ca/medeffect\(^14\)

Are you *aching* for more information about NHPs in OA or CAM Corner in general? I would love to hear from you - email me at basiuk@ualberta.ca.

References:
Tobogganing: Cost – free!
The City of Edmonton maintains the following hills, which have reduced hazards and safety signs:

- Emily Murphy Park: Emily Murphy Park Road and Groat Road (close to the University)
- Gallagher Park: 97 Ave and 92 Street (Connor’s Hill, very famous!)
- Government House Park - Groat Road and River Valley Road (crowded, may be too tame)
- Castledowns Park: 11520 - 153 Ave
- Rundle Park: 113 Ave & 29 Street (Family Friendly)
- Whitemud Park North: Keillor Road and Fox Drive (not as good, since the top portion of the hill is closed off)
- Sunridge Tubing Hill: 10980 - 17 Street (tubing rental required)
- Mill Woods Park: 23 Ave and 66 Street (good for nighttime tobogganing, lighted)
- Bears Paw: Wagner Road & 75 Street (fast, with hill deviations)
- Riverbend Hill: Riverbend Road NW and 43 Ave (lit at night for nighttime tobogganing)
- Mill Woods Golf Course: Whitemud and 66 Street
- Belmead Storm Water Reservoir: 95 Ave and 189 Street (steep hill, great speed)
- Lansdowne Crazy Shoot: Lansdowne Drive NW (fast and good for exercise)
- Millcreek Ravine: Argyll and 83 Street (good with many options)
- Capilano Park: Goldbar/Capilano Park (nice bowl, with steep sections)
- Beaumaris Park: 155 Ave and 102 Street (some large, steep hills)

These hills were found on the Great Canadian Tobogganing Hills Map (please Google for more info!)

Outdoor skating: Cost – free! Please check the status of these rinks at http://www.edmonton.ca/activities_parks_recreation/outdoor-ice-rinks.aspx, or call 311, to make sure these are open!

- Castle Downs: 153 Ave & 115 Street
- William Hawrelak Park: 9330 Groat Road, near shelter #2
- City Hall: Winston Churchill Square
- Jackie Parker: 50 Street & 44 Ave
- Rundle Park: 113 Ave & 29 Street
Also: check out community rinks!

Light up the Legislature: Alberta Legislature Building, Cost: free!
- From Dec 4-23, come see the lights and enjoy daily choral performances. More info at http://www.assembly.ab.ca/visitor/WhatsNew_ListEvents.html

Improv Comedy – Theatresports or CHiMPROV by Rapid Fire Theatre:
Citadel Theatre, Cost: $12
- Beat the winter blues with Edmonton's best improv comedians! Theatresports, a competitive improv battle, happens every Friday at 7:30 and 10pm. For long-from
comedy, check out CHiMPROV every Saturday at 10pm. More info at http://rapidfiretheatre.com/buy-tickets/

Candy Cane Lane: 148 Street, between 100 & 92 Ave, Cost: free; $15 for sleigh rides (Food Bank donations accepted)
• Enjoy the residential light displays down Candy Cane Lane! Got a special someone to impress? Grab some hot chocolate and book a 60 min sleigh ride for a memorable date night!  
http://candycanelane.trav-graphics.com

Festival of Lights: Edmonton Valley Zoo. Cost: $9.50 per adult, $5.50 per child, $30 per family
• From Dec 5-14 at 5-10PM, see live music, dancers, skating, and more!

ETS 2014 Christmas Lights Tours:  
99 St, 103 A Ave (stop #1123), Cost: $5
• Check out the ETS Tours, which stop by Candy Cane Lane and the Alberta Legislature, among other spots. Tours are from Friday – Sunday, Dec 12-14 and Dec 19-21. Check http://www.edmonton.ca/transportation/ets/seasonal_events_attractions/ets-christmas-light-tours.aspx for times

Muttart Conservatory: Cost $12 per adult, $36.50 per family
• Miss seeing the colour green? Come to the Muttart to view their polar bear poinsettia pyramid and other fancy botanicals. Special events include Music at Muttart on December 18th, and their NYE Muttart Masquerade. More info at:  
http://www.edmonton.ca/attractions_events/muttart-conservatory.aspx

A Christmas Carol at the Citadel:  
Citadel Theatre, Cost: starts at $30
• Now in its 15th year of production, watch Charles Dickens’ classic about Ebenezer Scrooge unfold onstage from November 29 – December 23. Tickets at: http://www.citadeltheatre.com/show/a-christmas-carol/

The Nutcracker: Jubilee Auditorium, Cost: starts at $29; discounted “rush” seats available to students on the day of (call 780-428-6839 for more info)
• Set to Tchaikovsky’s music, watch Alberta Ballet’s production of this holiday classic about Klara and her Nutcracker’s battle against the Rat Tsar from December 12-14. Tickets at: https://ticket.albertaballet.com/single/EventListing.aspx

Christmas at Fort Edmonton Park: Costs variable. See http://www.fortedmontonpark.ca  
Events include:
• Christmas Reflections: Shop for gifts, visit costumed interpreters and warm your hands by a bonfire. From December 12-14, 19-23rd and 27-31st. Cost: $16 for students
• Cinderella Pantomime: A musical comedy from the UK. Showing from Dec 10 - Jan 3. Cost: $12 - $22
Alyssa Aco
Tried: Krafty Dinner
Menu description: "Macaroni tossed in a creamy "cheese" sauce"
Thoughts? Kids size, adult taste!

Jon Hung
Tried: Pad Thai
Menu description: "Fresh seasonal greens stir-fried with rice noodles in an delightful almond-satay sauce. Finished with crushed almonds, green onions, lime and vegan fish sauce."
Thoughts? I literally can't even. It's so granola. The adjective.

Morgan Basiuk
Tried: Quinoa Salad
Menu description: "A medley of tri-colored quinoa, figs, tomatoes, toasted almonds, raisins, fresh mint and parsley in a Moroccan herb infusion. Finished with fresh sprouts, green onions and shredded carrots."
Thoughts? It's so fluffy, I'm gonna die!

Yasir Iqbal
Tried: Hummus 'n Crackers, orange juice
Menu description: "Raw zucchini hummus, olives, housemade corn-hemp and sunflower-beet living crackers with a sprinkle of smoked paprika."
Thoughts? Orange juice: Stimulating Hummus: More fibre than a box of Metamucil. Excuse me...

You've gotta try this: Noorish

Named after the Arabic word for divine light, noor, Noorish Conscious Eatery serves up a healthy dose of organic and vegetarian cuisine. Noorish isn't just a restaurant, however; it also features an interactive teaching kitchen, retails specialty foods (including a rather intriguing “herbal ecstasy”) and hosts yoga and mediation workshops. Check them out with your APSA card to get 10% off yoga, and 10% off your meal – just make sure you tell your server about your APSA card before you order!

Grace Wong
Lindsey Spruyt
Tried: Buddha Bowl
Menu description: "A rich green coconut curry bursting with select vegetables, basil, toasted almonds, cilantro and lime on quinoa."
Thoughts? It’s Buddhaful - a flavourful CAM experience!

Grace Wong
Tried: Quinoa Salad, Dipping Trio, chai tea + vanilla
Menu description; see above
Thoughts? Tea: I'm liking this combination!
Dipping Trio: One of these dips is uncomfortably minty
Quinoa: Can't quit the quinoa, though!

Stacy Wizniuk
Tried: Monkey Crepe, Dipping Trio, mint matcha tea latté
Menu description: "Raw banana crepe filled with almond butter and fresh bananas. Topped with a chocolate drizzle."
Thoughts? Tea: I don't know matcha about it, but I like the mint flavour!
Dipping Trio: Pretty tasty, love the jalapeno cheddar
Crepe: A delicious portion of the kid's menu, don't judge me!
QUICK & EASY STUFFED PORTOBELLO MUSHROOMS

BY AMANDA LEONG

Serves: 2
Time: 30min

Ingredients

- 2 Portobello mushrooms, cleaned by wiping the surface of dirt using a wet paper towel
- 1/2c Crab meat (real or imitation)
- 1c Quinoa, Couscous or Stuffing (yes, you decide which you want!). Use leftovers or make it!
- 1/2c Grated Cheese (what’s your favourite? I like aged smoked cheddar or a flavoured Havarti)
- Tin foil (really big piece – you’re going to tent your Portobello mushroom in this)
- Olive Oil

What to do

1. Preheat oven to 400°C. (if you love the BBQ, you can use that too!)
2. Rub some olive oil all around the tops of your Portobello mushrooms. Put the Portobello mushroom upside down on a big sheet of tinfoil.
3. Set aside some cheese for toppings. In a bowl mix your crab meat, remaining grated cheese, and quinoa or couscous or stuffing.
4. Pile those Portobello mushrooms as high as you can with your crab meat filling.
5. Sprinkle the set aside cheese on top of your Portobello mushrooms.
6. Now wrap your stuffed Portobello with the tinfoil, making sure that you leave space at the top so the stuffing doesn't stick to the tin foil.
7. Cook in the oven or BBQ for 20minutes or until cheese is bubbling and the Portobello mushroom has reduced in size.
LIBRA (SEPT 23 - OCT 22)
No amount of bisoprolol will slow your new onset Afib post Mr. Pharmacy swimsuit competition. This month try non-pharmacological options such as avoiding direct eye contact with contestants and cold showers top BID prn.

SCORPIO (OCT 23 - NOV 21)
If you HAVE NOT taken PHARM 437, Bone and Joint, please refrain from trying to dance like any of our Mr. Pharmacy Contestants. If you HAVE taken Bone and Joint, please refrain from dancing like any of our Mr. Pharmacy Contestants.

SAGITTARIUS (NOV 22 - DEC 21)
Santa Claus is coming to town with back pain and a severe milk addiction, CAGE score of 4. Begin with the end in mind by using your empathy skills and patient care process to create a care plan and maybe next year he will give you the gift you have always wanted – a normal class average.

CAPRICORN (DEC 22 - JAN 19)
The meteor shower in Venus stimulates your desire to travel. After this semester you deserve to get away. Whether you are spending time with family and friends or lying on a beach this holiday season, try to soak it all in. Don't forget to pack your new edition of Therapeutics Choices® ... it's basically travel size right?

AQUARIUS (JAN 20 - FEB 18)
The stars in your path are turning blue and your fortune will be going up this week. You should be very excited – but be aware, if it stays up for more than 4 hours you should seek medical attention immediately!

PISCES (FEB 19 - MAR 19)
The crescent moon has left your concentration zone this month. You may be very distracted. During Will's “keep bleeding” dance routine all you could do was worry about his high HASBLED score. Although it may be difficult, try to concentrate and find a quiet space to study for your finals. Remember once you are done exams, you won't have warfarin (or studying warfarin) to limit your ETOH intake...

ARIES (MAR 20 - APR 19)
A full moon in Aries means that you will have good fortune this month. In fact, it is very possible that you will get an 85% in one of your classes... even if it will be a C+ with the curve.

TAURUS (APR 20 - MAY 20)
You have been feeling especially psyched for the holidays and have been making PANSS left and right. We are too, but don't hit up any BARS just yet – you've still got finals to get through before you can get those dopamine receptors firing! Keep your BALANCE and you'll be back to partyin' in no time!

GEMINI (MAY 21 - JUN 20)
Earth's orbit this month has heightened its gravitational pull. You may feel heavier and a little dragged down, Gemini. Although it is possible this lethargy and fatigue is due to iron deficiency anemia, the most common contributor is burnout from all those exams. Try new relaxation techniques such as yoga, pet therapy, or the world's oldest medicine: laughter. These activities will help you feel regenerated and correct your enthusiasm to baseline.

CANCER (JUN 21 - JUL 22)
Don't eat yellow snow.

LEO (JUL 23 - AUG 22)
While Jupiter's storms are building, a storm is brewing for you too Leo. There is a good chance you will be reunited with an enemy from your past. It's impossible to read her or know enough to figure her out. Just accept that there is never an easy answer with her – and at times there seems there may be no right answer at all! Just hope that she, your rival K-type, won't show up to ruin all of your exams...

VIRGO (AUG 23 - SEP 22)
After seeing all the abs in Mr. Pharmacy, you realize it's time you move more than from MS 231 to a PBL room to Tim Horton's. This semester break find a new way to stay active #fitpharm. If you are unsure where to start, try “rockin’ around the Christmas tree” or “dashing through the snow.”
POETRY CONTEST

Win a $20 gift card to Starbucks!

Coffee, tea, and carbs - Starbucks has the fuel you need to get you through those brutal final exams. Get your venti Americano on us! We’ve upped the ante this issue - win one of five $20 gift cards to Starbucks by writing a poem (minimum 3 lines long) about pharmacy. Submit your beautiful haiku/limerick/free-verse/any-style poem you can think of, your name and your year of graduation to pqcontest@gmail.com by January 16 and we will pick FIVE winners at random! Plus, your poem might be published in our next issue - can you say famous? So, what are you waiting for - start writing!

Sponsored message

Did you know: Pharmacare is an Edmonton owned and operated Specialty Pharmacy Group. The pharmacy boasts: over 20 clinical pharmacists, a state of the art fulfillment centre, a Specialty Compounding Division, 3 retail locations—1 in Calgary and 2 in Edmonton, 24/7 on call service, in house bonded delivery, disaster protocols, policy and procedure training, online training courses, AADL home medical partnership, Immunization services, Health and Wellness assessments, Blister and Pouch automated packaging and Medication Detection Machine Technology.