

# PHARMACY PHILE

University of Waterloo Society of Pharmacy Students  
ISSUE 71 | September & October 2017

## PRESIDENT & VP'S MESSAGE

With November just around the corner, you would think the seasons would change - but they haven't. Despite this, the University of Waterloo School of Pharmacy has seen many changes and additions, namely the new members of the SOPhS Council. Throughout the last 2 months, SOPhS held its annual elections. A variety of talented and eager students campaigned for a variety of positions, showcasing their enthusiasm for getting involved. With elections wrapping up at the end of this month, we would like to thank everyone for their participation in this year's elections. We would also like to extend a warm welcome and congratulations to the newest representatives on Council, as well as recognize and thank the outgoing Council for their commitment and hard work.

September is always a busy month at the School of Pharmacy. The Rx2020 class began their first IPFC course, and underwent their first round of co-op applications and interviews— an obstacle each cohort before them has faced. We hope that the members of the Rx2020 class found the experience rewarding, and hope they received the position that they desired. Despite the workload that September inevitably brings along, our students always have room for some fun! For September, this meant Waterloo's Next Top Pharmacist. Contestants from each year stood on stage, and showcased their talents in front of their peers for a night of laughter and bonding within and between cohorts. Waterloo also held the second

annual soccer tournament against the University of Toronto where we, once again, displayed our generosity in providing them a win (seriously though, congratulations to them - but we'll get 'em next year!)

Over the past month, the SOPhS social representatives were hard at work in planning this year Phormal - and the hard work definitely paid off! Students enjoyed their night of looking amazing and making valuable memories. October also marked the official convocation of the Rx2017 class. Friends and families of our graduating class collectively gathered to participate with the school in congratulating our Pharm.D. and M.Sc. Pharmacy graduates. With that, we would like to officially congratulate and recognize the Rx2017 class for their contributions to the school and wish you the best in your PEBCs in November. Don't forget your uWaterloo phamily!

With only half the term remaining, there is still much in store for our students and faculty, namely the Annual Professor Auction that is planned by the SOPhS Graduation Committee. During this event, students bid on various activities provided by our School's amazing (and generous) professors. We look forward to seeing you at our upcoming events!

*- Naushin Hooda and Pauline Bal,  
SOPhS President and VP*



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# CAPSI CORNER

Here we are again mid-semester with no idea how time in pharmacy school flies by so fast! CAPSI decided to kick-off the new school semester with Waterloo's Next Top Pharmacist. A big congratulations goes out to Rx 2018 Megan Spence for taking home the crown and sharing her victory Regina George style with fellow contestants and audience!

As a part of her prize, \$250 has been donated to **Stonehenge Therapeutic Community** on Megan's behalf. Stonehenge Therapeutic Community in Guelph provides services for chronic or acute substance abuse treatment to men and women.

The PDW competitions continued October 28<sup>th</sup>/29<sup>th</sup> as CAPSI held it's annual Compounding, Patient Interview, and OTC counselling challenges. Thank you to all who participated and congratulations to our winners!

## Compounding Competition Winners:

Jeremie Lacroix  
Krista Jones  
Shams Ismaeil  
Ridwaan Safi

## Patient Interview Competition Results:

First Place: Angel Deng  
Second Place: Cathy Zhang  
Third Place: Jenna Jenkins

## OTC Counselling Competition Results:

First Place: Kelly Nguyen  
Second Place: Kristina Kozlovsky  
Third Place: Kris Mendoza

We will be hosting our annual High Stake Mock OSCEs for the Rx2018 class in preparation of their last OSCE of pharmacy school! Stay tuned for details!

-Blake Houle,  
UW CAPSI Junior Representative

# PHRESH FROM THE PHARM

## Vegan Peppermint Hot Chocolate

Ingredients:

- \* 2 cups non-dairy milk (soy/almond/coconut)
- \* 1 3.2 (or close) ounce quality non-dairy dark chocolate bar, chopped
- \* 1-2 Tbsp raw sugar
- \* 1/8-1/4 tsp quality peppermint extract
- \* *optional*: coconut whipped cream + crushed peppermint for topping

Instructions:

1. Add milk to a small saucepan over medium-low heat and stir occasionally until warm - about 5 minutes. You don't want it to boil, just get hot enough to melt the chocolate.
2. Once hot, add the chocolate and sugar and whisk to melt. Do so vigorously to ensure everything gets combined. Once it has reached your desired temperature, sample a bit to determine if it's sweet enough for your liking.
3. Remove from heat and add peppermint extract, starting with only 1/8th tsp since it can be very strong and overpowering. Once it's to your liking, transfer to small serving glasses and top with a dollop of coconut whipped cream and a sprinkle of crushed peppermint candies/candy canes.

Recipe from: <https://minimalistbaker.com/vegan-peppermint-drinking-chocolate/>



# CSHP

## Continuous Renal Replacement Therapy (CRRT) - What's the role of a hospital pharmacy student?

For those of you who had a hospital co-op, from time to time you may have seen a patient requiring hemodialysis. Most likely, these patients are transferred to ICU for CRRT and constant monitoring. If you haven't been in a hospital rotation yet, you might be wondering: What is CRRT? And what is hemodialysis?

Essentially, hemodialysis replaces the normal kidney functions - it maintains fluid and electrolyte balance while removing waste products. So, the dialysis machine pumps blood out of the patient into a porous filter, which removes excess fluid and waste (urea, creatinine) via diffusion. At the same time, solutes from the dialysate (potassium, bicarbonate) move into the blood. The resulting effects are: reducing the blood urea nitrogen and creatinine level, and maintaining normal plasma electrolyte concentrations.

CRRT is a continuous, 24-hour dialysis treatment. While intermittent hemodialysis (often used by chronic renal failure outpatients) rapidly removes large amounts of fluid in a short time, CRRT allows for a gentle removal of solutes - therefore, it's better tolerated by critically ill patients who are often hemodynamically unstable (ie. hypotensive).

So the patient requires CRRT - what kind of fluids are we giving them? The type of dialysate for the patient depends on their anticoagulation modality. The goal of anticoagulation in CRRT is to prevent clotting in the filter to avoid interruptions in the therapy.

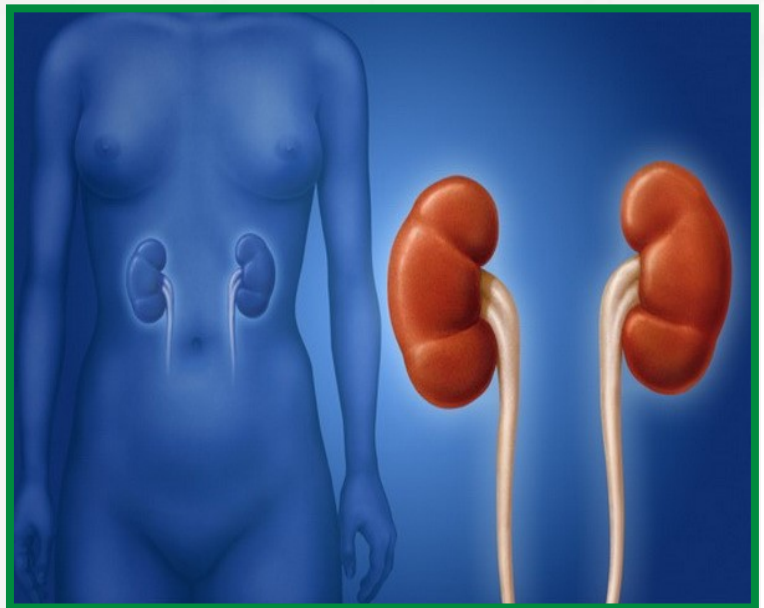
First, the patient's risk of bleeding is assessed. If the risk is low and the patient doesn't have contraindications (bleeding, HiT), then unfractionated heparin is given. In this case, we give the patient PrismaSol dialysate, which contains potassium and calcium.

If the patient has a high risk of bleeding, then sodium citrate anticoagulation is generally chosen. The citrate infusion chelates calcium to inhibit clot formation. Separate IV calcium is given to maintain serum ionized calcium levels. However, the dialysate should be calcium free to avoid reversing the citrate mechanism. In this case, we choose Prismocal for the patient - which surprisingly, contains zero calcium.

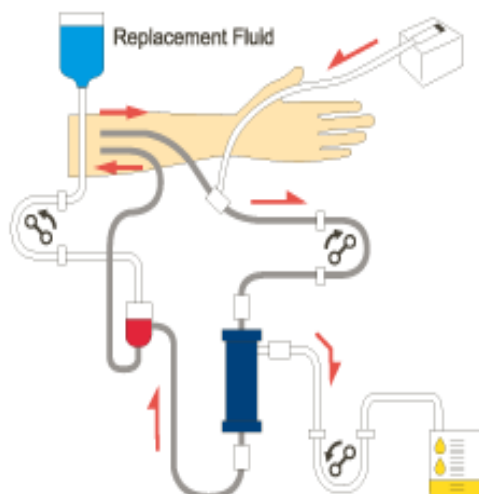
We've covered the basics of CRRT! But where might a pharmacy student fit in all of this? They may monitor the patient for electrolyte and fluid balance, and perhaps aid in medication dose-adjustments for hemodialysis - after all, the drugs are also being filtered through the porous hemofilter. You'd need to consider drug dialyzability factors like molecule size, pore size, flow rate, and volume of distribution (PK is becoming familiar, huh?) As

for me, an ICU student, I prepare Prismocal by manually injecting in potassium since it is missing from the solution. Each patient usually requires between 1-3L of dialysate per hour - preparing Prismocal is not a *light-weighted* joke. In any case, I hope this quick intro to hemodialysis has been interesting for you, especially if you're looking into a hospital co-op placement in the future.

- Eunice Ku , UW CSHP



### Continuous Renal Replacement Therapy (CRRT) treatment diagram





# FACULTY SPOTLIGHT

## Tom McFarlane

Interviewer: Sonya Dhanjal, Rx2018



**SD: Tell us a little bit about your pharmacy background - where did you earn your pharmacy degree? Aside from teaching at the School, where else do you currently practice pharmacy?**

**TM:** I got my undergraduate pharmacy degree from the University of Toronto in 1996. At the time, we were the very last pharmacy class in North America to do pharmacy as a 4-year baccalaureate degree, so I got in straight out of high school (U of T changed to a one-year pre-pharmacy minimum the next year). As a result, I was pretty young when I started out as a pharmacist in community. I stayed in community for almost a decade, but various circumstances led to me switching to a hospital-based practice, specializing in oncology care. I eventually went on to do a post-bac PharmD at Idaho State University several years later, as a means of refreshing my interest in the profession and in order to open up wider opportunities for myself, especially in academia, which has always been an interest of mine. In addition to my duties here at UW, I have a clinical role at Odette Cancer Centre at Sunnybrook in Toronto, and I do a lot of development of continuing education programs for clinicians in oncology, often in partner-

ship with industry.

**SD: Where do you feel pharmacy has the biggest potential to make a clinical impact on the lives of patients?**

**TM:** Everybody talks about this, but we are the easiest point of contact to the healthcare system for patients, and often the first when they have a problem. We are going to have a critical role in managing the complex medication regimens of the aging population in Canada. This includes managing medications for cancer, which is obviously my area of expertise, and given that cancer is primarily a disease of the aged, we are going to have to deal with it a lot more as clinicians as our national demographic changes to a higher proportion of elderly people. We're uniquely positioned to make a difference, but we have to be advocates for ourselves and our profession, and be ready to take the reins.

**SD: Why did you decide to pursue oncology pharmacy? Were there any life changing moments that pushed you towards this direction, or did it kind of gradually happen?**

**TM:** It was serendipity, primarily. I had a community position at an independent pharmacy fall through because of loss of several nursing home contracts. We had an occasional locum pharmacist who happened to work at Cambridge Memorial Hospital and she asked me if I was interested in trying hospital pharmacy, as they were desperate for personnel (those were different times!). I decided to take the position, and as it happened they needed someone to staff the oncology clinic there. I found oncology to be a fascinating area to practice in, and the rest, as they say, is history.

**SD: How was transitioning from community pharmacy to hospital?**

**TM:** For me, it was brutal. I had never done a residency, or had any hospital experience at all outside of my clinical block time as a student at U of T (which was two weeks at Toronto General if you can believe it). I had to re-

learn a huge chunk of what I had forgotten from pharmacy school 10 years prior. Fortunately for me, Cambridge Memorial was very patient and allowed a lot of time for training. What compounded the problem was I also had to become an expert in oncology, which was like learning a whole new language. It took me at least a year to feel like I was competent, and probably another year or so to feel comfortable. I think it would probably be a bit easier for students at UW to change to hospital given the co-op exposure, but doing it after spending several years in another setting presents some serious challenges.

**SD: What kind of research do you do?**

**TM:** My research is focused on pharmacist interventions as a means of improving cancer care for patients, mostly in supportive care and symptom management. My main project currently is as principal investigator on a study that is ongoing at Grand River Regional Cancer Centre, which is looking at the use of the Ontario Telemedicine Network to do remote patient assessments for men with prostate cancer on oral hormonal treatment. This has broad application in Ontario, since it would allow for follow-up appointments with patients who are remote from the cancer centre and would prevent the need for them to make long trips for routine appointments. We received a major grant from Prostate Cancer Canada for the study and are accruing patients right now. It's very exciting.

*Continued on next page ...*

# FACULTY SPOTLIGHT

## Tom McFarlane

*Interviewer: Sonya Dhanjal, Rx2018*

**SD: Briefly describe your teaching philosophy.**

**TM:** I've never been comfortable with the traditional division between professor and student where the professor is supposed to be this font of knowledge giving dictums from on high, never to be questioned. When I started teaching, it was with colleagues, doing continuing education programs as part of my clinical role. I like to think I bring a little bit of that to the classroom here - I tend to see myself as more of a mentor than as an ivory tower academic. I try to use humour in the classroom and interject a lot of personal stories from my clinical practice, because I think it's a good way to illustrate what it's really like to be a clinician out there. I also endeavor to make myself as approachable as possible, because being a student is hard. I'm not that far removed from being a student myself (I completed my PharmD in 2011) and I know well that sometimes support and encouragement is needed. I try to provide that.

**SD: What was your favourite class as a student? What (if any) was the most challenging and why?**

**TM:** This is a bit of an esoteric choice, but when I was an undergrad I really liked a course we had at U of T called Aboriginal Issues in Health and Healing. It was taught (and still is, if I'm not mistaken) by a guy named David Burman, and we did some very interesting things, including going to a healing ceremony on the Six Nations Reserve. It was a great way to get a non-Western perspective on medicine. My fourth year thesis project on the ethnobotanical uses of medicine was also done in alignment with the course and that was a lot of fun. As far as challenging classes, I was not particularly enamoured with the pharmacy management courses we had to take - my brain just shuts down when I'm faced with those sorts of things. I'd make a lousy entrepreneur and that's probably one reason why I'm no longer in a community setting.

**SD: If you weren't a pharmacist and professor, you would be...**

**TM:** I suspect I would be a writer of some description. I've always loved language. Maybe a music journalist - that way I could combine two of my favourite things, writing and music. Or a food critic, although that might not be good for my waistline...

**SD: The job market is a bit crowded currently for pharmacists. How/where would you suggest students find opportunities?**

**TM:** What I've always told students is that the co-op rotations you do at UW are incredible opportunities for networking that students at other schools don't get. Talk to as many people as you can, and get to know them. The best source of employment opportunity comes from those who know you. Also, don't be afraid to stay in touch with those of us working at the school. We tend to be pretty connected people in our various realms and may be able to help you.

**SD: Any words of wisdom or advice for UW students?**

**TM:** Know what you can do for patients, and own it. And I'm going to say this again - do not be afraid to be self-advocates. We as a profession have historically been notoriously poor at doing this. If people don't know what you can do, they are not going to think of you. Show them, and be vocal about it.

UNIVERSITY OF  
**WATERLOO**





# SOPhs Social Buzz

"Here's to the ones who dream"

SOPHS SOCIAL PRESENTS

## PHORMAL 2017

Join us for an evening of unicorns, rainbows, dinner and dance!

On Saturday, October 14th, 2017  
At the Delta Waterloo  
110 Erb St W, Waterloo, ON N2L 0G6  
at 6:30pm

Ticket price: 50\$

### What has SOPhs Social been up to this term?

With the beginning of November already here, it is hard to imagine the term has passed so quickly! Over the past few months, SOPhs Social has been organizing multiple events for the Fall semester students. After this summer's beach day and social events, the SOPhs Social Committee focused on planning events that would bring students together through a tough academic semester this fall. Along with ordering Pharmacy Spiritwear for the students early in the term, the social representatives main focus was to organize our annual Pharmacy Formal, which took place this past October 14, 2017 at the Delta Waterloo. With the help of the decorators and the staff at the Delta Waterloo, along with music by DJ White Gold, the lala land and unicorn themed event was a success! Students enjoyed a three course meal, games and prizes, a photo booth and took part in the vote for our annual pharmacy awards. A big thank you to all those who came out to enjoy Phormal on behalf of SOPhs!

### What's next?

PHARMACY LOVES MOVEMBER! In the goal of getting our school together to raise funds and awareness for men's health, SOPhs is teaming up with CAN and CAPhO, and we've organized challenges, social media posts, fundraising initiatives and prizes for everyone who participates in supporting the cause. Movember focuses on the mustache theme in order to raise funds and awareness, focusing on three major health issues: prostate cancer, testicular cancer and suicide prevention. As of Wednesday, November 1<sup>st</sup>, we're encouraging students, alumni, and faculty to join us in supporting this cause.

At the end of the month, we'll be hosting our End of Term social event where all prizes for the Movember campaign will be awarded to prize winners for top fundraisers, thickest and most stylish mustaches!

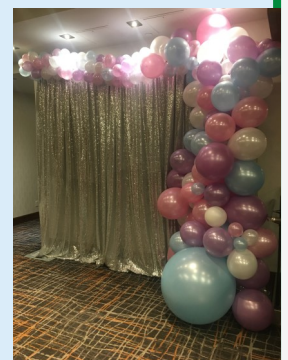
- Erika Martire, Social Director

### The UW Pharmacy Movember Facebook Page:

<https://www.facebook.com/uwpharmacymovember/>

### Our Movember fundraising page:

[https://ca.movember.com/team/2294497?utm\\_medium=share&utm\\_source=dynamic&utm\\_campaign=copy-clipboard](https://ca.movember.com/team/2294497?utm_medium=share&utm_source=dynamic&utm_campaign=copy-clipboard)







## SOPhS Communications

Have an opinion about our expanded scope of practice? Experience something on co-op that you'd like to share?

SOPhS encourages you to submit an article for the **Pharm Phile** newsletter! Submissions can be sent to [pharmsoc@uwaterloo.ca](mailto:pharmsoc@uwaterloo.ca) by the end of every month for inclusion in the next edition!

If you have any interest in becoming involved with the SOPhS Communications Committee please send an email our way! We are especially looking for individuals interested in helping out with the SOPhS website.

**Pharmacy Phile**  
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**September & October 2017**



Please check out the calendar on the next page, or the weekly SOPhS Updates, for information about all of our 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](mailto:pharmsoc@uwaterloo.ca).




**Society of Pharmacy Students (SOPhS)**

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 Kitchener, Ontario N2G 1C5  
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# SOPhS 6 WEEK CALENDAR

	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
Week 1	October 29	30	31	November 1	2	3	4
				CAPSI x WHPC Interprofessional Case Study at 7:00 pm	CAPSI Lunch & Learn 1-2 pm	Interactive Booth 11am–1pm	
Week 2	5	6	7	8	9	10	11
			MOCK Osce at 7:30 pm	Rx2018 Career Fair at 5:00 pm Annual Professor Auction at 7:30 pm			
Week 3	12	13	14	15	16	17	18
		CAN Operation Christmas Child				WHPC Code Blue at 7:00 pm	Rx2021 Meet and Greet at 2:00 pm
Week 4	19	20	21	22	23	24	25
					Pharmacy Santa Photos at 12:30 pm		
Week 5	26	27	28	29	30	December 1	2
		CAN Food Drive		High Stakes Mock OSCE at 5-8 pm	High Stakes Mock OSCE at 5-8 pm CSHP Symposium at 7:00 pm		
Week 6	3	4	5	6	7	8	9
			Last day of classes			Exams begin	

## SOPhS Calendar Notes

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

You may also find this information on the SOPhS Google Calendar (<http://tinyurl.com/jo3awk7>). It is our hope that this calendar will provide you with all of the event and deadline information you need during each term. If you would like to add an event to the SOPhS calendar please email the SOPhS Secretary at [secretary@sophs.ca](mailto:secretary@sophs.ca).