

CPERC 2019

Canadian Pharmacy
Education and Research
Conference

JUNE 11-14
Edmonton



Association of Faculties
of Pharmacy of Canada
Association des facultés
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ROUNDTABLE SESSIONS

Current Topics in Pharmacy Education

Session overview: AFPC's roundtable discussions are informal platforms designed to allow for interactive information exchange on current topics in pharmacy education. They provide a venue to meet colleagues with similar interests and with varying perspectives. The session will be a "speed-dating" format of dialogue, networking and collaboration, with 1-2 discussion facilitators at each table. Participants take a seat at a table of their interest and share their experiences, ideas, concerns, solutions, and learn about what others are doing or thinking around the topic. Participants will rotate to different tables at 30-minute intervals, for a total of three rotations.

Moderator: Christine Hughes, University of Alberta

Table #1: **Preparing students for value-based practice**

*Facilitators: Natalie Kennie-Kaulbach, Dalhousie University
Todd Sorensen, University of Minnesota*

Table #2: **Gamification in pharmacy education**

*Facilitators: Renette Bertholet, University of Alberta
Marie Rocchi, University of Toronto*

Table #3: **Scholarship of Teaching and Learning**

*Facilitators: Simon Albon, University of British Columbia
Kristin Janke, University of Minnesota*

Table #4: **Keeping curriculum current: incorporating hot topics (e.g. cannabis, opioid crisis, deprescribing)**

*Facilitators: Kelly Grindrod, University of Waterloo
Julie Méthot, Université Laval*

Table #5: **Graduate student/research trainee supervision**

*Facilitators: Beverly FitzPatrick, Memorial University
Ed Krol, University of Saskatchewan*

Table #6: **Entrustable Professional Activities**

*Facilitators: Andrea Cameron, University of Toronto
Kerry Wilbur, University of British Columbia*

Table #7: **Addressing new CCAPP accreditation standards**

*Facilitators: Isabelle Lafleur, Université de Montréal
Lavern Vercaigne, University of Manitoba*

Table #8: **Stigma training (e.g. mental health, STBBIs)**

*Facilitators: Christine Hughes, University of Alberta
Jason Perepelkin, University of Saskatchewan*

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Roundtable 1 Preparing students for value-based practice

Facilitators: **Natalie Kennie-Kaulbach, BSc(Pharm), ACRP, PharmD, RPh**

University Teaching Fellow

Coordinator, Skills Lab II

College of Pharmacy, Dalhousie University

Todd D. Sorensen, Pharm.D., FAPhA, FCCP

Professor and Associate Department Head

Department of Pharmaceutical Care and Health Systems

College of Pharmacy, University of Minnesota

Overview:

We are in the midst of an era where the factors that influence decision makers with respect to distribution of resources associated with the delivery of health and compensation for services is shifting. The previous model of restricting eligibility to provide certain health care services to specific providers and simply providing payment for the delivery of that service is dissipating. New models of care and compensation are seeking to align the most effective and efficient provider with the opportunity to deliver services. "Value-based care" is a principle that is driving changes in health care delivery in today's marketplace. As a result, pharmacists must focus on delivering services through which they can produce more value in the health system than other health care personnel.

In preparing pharmacists for the health care workforce, educators must consider how students understand and convey the unique value they bring to a health care team. The purpose of this roundtable discussion is to explore educational strategies, opportunities and current efforts to prepare graduates who understand the dynamics of value-based decision making in health care and are able to articulate the manner in which pharmacists create value.

Discussion Questions:

1. To what degree do graduates of your program understand what value pharmacists contribute to health care in Canada? How well can new graduates present a compelling case of value for services delivered by pharmacists to non-pharmacist administrator?
2. How does your program help students understand the unique elements of a pharmacist's patient care process compared to other health disciplines?
3. To what degree is there consistency across Canadian schools of pharmacy in teaching a common patient care process that can clearly differentiate the patient care work of pharmacists from other health disciplines?
4. What examples of value-based decision making in health care making are present in your province? How is this affecting pharmacy practice or how might it affect it in the future?
5. What role should experiential education play in preparing students for practice in a health system that is becoming more focused on the value that disciplines provide?

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Roundtable 2 Gamification in pharmacy education

Facilitators:

Marie Rocchi B.Sc.Pharm., M.Ed.

Associate Professor, Teaching Stream

Academic Director, International Pharmacy Graduate Program

Leslie Dan Faculty of Pharmacy

University of Toronto

Renette Bertholet, BScPharm, PharmD

Associate Clinical Professor

Faculty of Pharmacy and Pharmaceutical Sciences

University of Alberta

Overview:

Evidence has shown that active learning promotes social skills, general knowledge and practical competencies (Umbach & Wawrzynski, 2005). Gamification is one type of active learning and has emerged in recent years as a learning strategy with great potential for motivating millennial learners. In pharmacy education, the Academic Affairs Committee of AACP recommended the development of "serious games" (the use of game principles for learning, skill acquisition and training) in US colleges and schools.

Discussion Questions:

1. Have you considered using games or gamification as an active learning strategy in your course/faculty/school? If so, what motivated you? What did you consider in the development of your activity? Can you explain the "game(s)"? What were the results?
2. What do you consider as potential benefits of using gamification? What are the barriers or risks you might or have encountered? What strategies did you use to seek buy-in? Implement? Assess the activity?
3. Now that we have explored gamification, do you think this strategy will play a significant role in higher education in the years to come? Are you considering incorporating elements of gamification in your course or program?

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Roundtable 3 Scholarship of Teaching and Learning

Facilitators: **Simon Albon, PhD**
Professor of Teaching
Faculty of Pharmaceutical Sciences
University of British Columbia

Kristin Janke, PhD
Professor, Pharmaceutical Care & Health Systems
Director, Wulling Center for Innovation & Scholarship in Pharmacy Education
College of Pharmacy
University of Minnesota

Overview:

Evidence suggests that educational scholarship and the Scholarship of Teaching and Learning (SoTL) are gaining traction in academic pharmacy in Canada and the US. In the past two years for example, both AFPC and AACP have sponsored events aimed at advancing the quality of pharmacy education through educational scholarship and research, the Rx Writing Challenge offered twice a year now attracts well over 1000 participants in Canada, the US and beyond, new funding opportunities have appeared (AACP's SoTL grant program) and a broader national and international conversation has emerged about the importance of the field in academic pharmacy reflected, in part, by conference keynote addresses, panels, presentations, and posters. While all positive signs of growth and interest, emerging pharmacy education researchers often feel isolated, require more training and support, and don't know who to turn to for help. In short, the field is still in its infancy.

This roundtable discussion intends to explore these issues with the intent of moving the field forward. Following a series of guiding questions, we hope to gather success stories, establish needs and set a game plan for advancing educational scholarship and SoTL in academic pharmacy. Lessons learned, challenges and current strategies for success will be an important part of the conversation. Themes generated will be shared with roundtable participants and during large group discussions.

Discussion Questions:

1. How are you advancing the quality of pharmacy education in your school through educational scholarship and research? What areas of curriculum and pedagogical practice have you focused on? What are your research success stories?
2. What are some of the most promising areas for education related inquiry in pharmacy education today? What teaching-learning challenges keep you up at night? What are your students most struggling to master in your disciplinary area? How will this research focus help advance the quality of pharmacy education and practice?
3. What would you most like to learn that would strengthen your ability to engage in and contribute to education-related scholarship? What skills are you actively building/acquiring? If you are not currently involved but would like to, what is holding you back?
4. What conditions and capacity-building strategies within Faculties/Schools are allowing people to be successful educational researchers? How did you make these happen?
5. What suggestions do you have for moving the field forward? Where should we focus our energies?

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Roundtable 4 Keeping curriculum current: incorporating hot topics (e.g. cannabis, opioid crisis, deprescribing)

Facilitators: **Kelly Grindrod, BScPharm, PharmD, MSc**

Associate Professor
School of Pharmacy
University of Waterloo

Julie Méthot, BPharm, PhD

Professeure agrégée,
Directrice du programme de Maîtrise en pharmacothérapie avancée
Faculté de pharmacie
Université Laval

Overview:

The pharmacy profession is constantly evolving. With each change, the curricula must also change, often with very little notice. For example, pharmacists' scopes of practice are expanding, as are the scopes of practice for students and technicians. From a clinical standpoint, new and emerging topics that have been important for pharmacists in recent years have included the opioid crisis, deprescribing, and the legalization of both cannabis and medical abortion. Pharmacists are also becoming frontline public healthcare professionals and need to be trained to provide a growing number of vaccinations and harm reduction services. The purpose of this roundtable discussion is to explore strategies, opportunities and current efforts to keep content current in our entry-to-practice curricula.

Discussion Questions:

1. Which topics have you added to your curriculum over the last 5 years?
2. How has your own program managed to adapt to the changes? How quickly were you able to add a new topic?
3. Sometimes when something is added, something else must be removed. How does your program decide what you will focus on in the coming year?
4. Think back to the last time your program was a bit slow in adding a new and emerging topic. What held you back the most? What helped?
5. Can you think of any examples of out-dated content that we continue to teach in pharmacy?
6. Over the next 5 years, which topics should we consider adding to our curricula?

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Roundtable 5 Graduate student / research trainee supervision

Facilitators: **Beverly FitzPatrick, PhD**

Assistant Professor
School of Pharmacy
Memorial University

Ed Krol, PhD

Professor
College of Pharmacy & Nutrition
University of Saskatchewan

Overview:

Pharmacy schools have traditionally offered graduate programs in science, drug discovery, and health outcomes. More recently, a few Schools are including the scholarship of teaching and learning. Faculty members in the science streams of our pharmacy schools have PhDs and strong research backgrounds. They are experienced in research methodologies and methods, and prepared to supervise Masters and PhD students. But what about many of our clinical faculty who have PharmDs? Many are expected to supervise graduate students, but do they have the academic backgrounds to do so? Is this a reasonable requirement? What can be done to help faculty who want to supervise graduate students but do not have the pre-requisite skills?

Discussion Questions:

1. What academic and experiential backgrounds should faculty have to supervise a Masters or PhD student? Should there be criteria?
2. What are the responsibilities of a supervisor of a graduate student, Masters or PhD, in a School of Pharmacy?
3. How do supervisors determine which applicants would be an appropriate fit for graduate studies in their group?

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Roundtable 6 Entrustable Professional Activities

Facilitators:

Andrea Cameron, BScPhm, MBA

Associate Professor, Teaching Stream

Leslie Dan Faculty of Pharmacy

University of Toronto, Toronto, ON

Kerry Wilbur BSc(Pharm), ACPR, PharmD, MScPH, FCSHP

Associate Professor & Executive Director | Entry-to-Practice Education

Faculty of Pharmaceutical Sciences

The University of British Columbia, Vancouver, BC

Overview:

Entrustable professional activities (EPAs) represent a relatively new assessment framework first proposed and adopted internationally by graduate medical education; it is now garnering interest in other healthcare professions, including pharmacy. CCAPP accreditation standard criterion 1.2 now describes aspects of a program's EPAs as examples of evidence supporting student demonstration of practice-readiness (CCAPP 2018).

The premise of this concept is that the competencies possessed by a health professional trainee must be those applied in clinical contexts. An EPA has been defined as "a unit of professional practice" that, according to the opinion of leaders in the respective health professional field, must be assessed and approved during training (ten Cate 2013). An EPA is therefore a discrete collection of tasks that a clinical supervisor entrusts to a student with unsupervised responsibility once the student has demonstrated the necessary competence.

The purpose of this roundtable discussion is to engage participants in a pragmatic exploration of why and how pharmacy educators should be familiar with the concept.

Discussion Questions:

1. What are the origins and rationale for entrustable professional activities as a workplace-based assessment strategy in health professions education?
2. Has your school begun to explore EPAs? How?
3. How can schools collaborate nationally on EPA initiatives/approaches to workplace-based assessment?

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Roundtable 7 Addressing new CCAPP accreditation standards

Facilitators: **Isabelle Lafleur, M. Sc.**
Assistant to vice-deans (Academic)
Faculté de pharmacie
Université de Montréal

Lavern Vercaigne, BSc(Pharm), PharmD
Associate Dean (Academic)
College of Pharmacy
Rady Faculty of Health Sciences
University of Manitoba

Overview:

The new CCAPP accreditation standards were effective in January 2018. The focus of the new accreditation standards is on continuous quality assurance of the program with an organized educational framework that facilitates development of graduates. Since CCAPP considers evaluation of accredited pharmacy programs to be a continuous process, schools need to put structures in place to support this. Schools of pharmacy have developed different strategies, tools and methods to address the new standards. How is your school addressing the new CCAPP accreditation standards? Come to our roundtable in order to share your experience and hear ideas from other schools.

The purpose of this roundtable discussion is to explore different ways to address new CCAPP accreditation standards.

Discussion Questions:

1. The new standards introduce the demonstration of practice-readiness in Criterion 1.2. Have you thought of examples of evidence to support this new criterion? Are you planning to utilize entrusted professional activities for your curriculum?
2. Standard 22 requires that governance structures are in place to conduct regular systematic reviews of the curricular content, structure, process and outcomes. What structures do you have in place to address this requirement for program evaluation and continuous quality improvement? Do you need to review your governance structures? If yes, how are you planning to do that?
3. Wellbeing of students is becoming more and more important in universities. CCAPP standards address this in Standard 23: "Students are supported and have a positive, safe, inclusive, non-discriminatory, inspiring experience while enrolled in the professional program of pharmacy". Do you have an increase in accommodations for students? If so, what types of accommodations are most common? What are you doing to support the wellbeing of students in your school?
4. The new standards may require more resources (e.g. human, financial and time). What resources do you have in place at your school to help support faculty in addressing these standards? Can you provide some examples?

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Roundtable 8 Stigma training (e.g. mental health, STBBIs)

Facilitators: **Christine Hughes, BScPharm, PharmD**
Professor
Faculty of Pharmacy and Pharmaceutical Sciences
University of Alberta

Jason Perepelkin, BA, BComm, Msc, PhD
Associate Professor
College of Pharmacy and Nutrition
University of Saskatchewan

Overview:

Stigmatization of people living with mental illness, substance use, as well as those living with or vulnerable to sexually transmitted and blood-borne infections (STBBIs) is common, including in the healthcare environment. Stigma is well recognized as a barrier to patient care, both in terms of individuals seeking care as well as continuing treatment. Research has shown that additional training on reducing stigma within the undergraduate pharmacy program as well as post-graduate training programs can reduce negative attitudes and improve comfort level when providing patient care.

Pharmacists are increasingly providing expanded pharmacy services that may be particularly valuable for vulnerable populations that may have stigmatized illnesses and complex health needs. However, pharmacists' lack of awareness of stigma can not only impact patient care, but also impact learners who observe stigmatizing behaviour. Thus, both the formal curriculum and "hidden" curriculum are important in shaping future pharmacy professionals.

Are students adequately prepared in the entry-to-practice program to provide care for patients with stigmatized illnesses? What about other populations that experience stigma based on sexual orientation, gender identity, ethnicity, or religion?

The purpose of this roundtable discussion is to explore strategies, opportunities and current efforts to incorporate stigma training in our entry-to-practice curricula.

Discussion Questions:

1. Has stigma training been added to the entry to practice curriculum at your university? If so, is training provided within a specific area or context? (e.g., mental illness, HIV, substance use, LGBTQ2S, etc)
2. How is stigma training delivered in the curriculum at your university? (e.g., teaching methods). Are there specific curricular outcomes or does each instructor decide what to cover on their own?
3. To what degree do you think graduates of your program are prepared to deal with stigmatized populations?
4. How do you think graduates of your program could be better prepared to deal with stigmatized populations?
5. Are there any resources or tools that you have found useful for providing education/training on stigma?

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MINI-SESSION ABSTRACTS

Mini-Session #1: Alternatives to didactic lecturing

Moderator: Ann Thompson, University of Alberta

1. Using educational games to develop inter-professional collaboration skills
Terri Schindel, University of Alberta
2. Teaching communication skills: straightforward ways to incorporate student made videos into your classroom
Lisa Guirguis, University of Alberta

Mini-Session #2: Evidence and competency make for quality

Moderator: Beverly FitzPatrick, Memorial University

3. Basing pharmacy education on evidence: a quality improvement framework
Gilles Leclerc, Université de Montréal
4. Entrustable professional activities: exploring implementation into competency-based assessment of pharmacy experiential learning
Samuel Chan, University of Toronto

Mini-Session #3: A panoramic view of two educational initiatives

Moderator: Ann Thompson, University of Alberta

5. Marijuana content in Canadian undergraduate pharmacy programs: a national survey
Kerry Wilbur, University of British Columbia
6. Small but mighty: the current state of educational scholarship and SoTL in academic pharmacy
Simon Albon, University of British Columbia

Mini-Session #4: Complexities in learning and teaching

Moderator: Jason Perepelkin, University of Saskatchewan

7. Stress-o-meter: understanding pharmacy student anxiety
Gilles Leclerc, Université de Montréal
8. Curriculum design, workload, and learning: a conundrum seeking for time
Gilles Leclerc, Université de Montréal

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Using educational games to develop interprofessional collaboration skills

Theresa J. Schindel¹, Jill Hall¹, Teresa Paslawski²

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Interprofessional collaboration is recognized as an important strategy in health care. It is associated with efficiencies in healthcare, quality outcomes for patients, and greater satisfaction for care providers. As the focus of health professionals' roles shift to emphasize interprofessional collaboration, effective instructional strategies are needed to meet educational requirements for collaboration as a core competency in pharmacy programs. Various teaching approaches have been delivered through interprofessional education, laboratory, simulation, and experiential education. However, additional strategies for delivery in the classroom are needed to prepare students for collaboration. Games have been associated with enhancing student engagement, increasing motivation, and supporting the learning process. The use of games also provides opportunities for critical thinking and problem solving. Educational games have potential in teaching teamwork and collaboration skills in the classroom setting. The purpose of this presentation is to describe our experiences using educational games to further develop the skills required for effective collaboration including teamwork, leadership and communication. We based our approach on the work of academic clinicians representing three health professions (Lake, Berg & Paslawski, 2015) directed towards a uni-professional audience in the Doctor of Pharmacy programs at the University of Alberta. The games were delivered through interprofessional collaboration of instructors that modeled collaboration in the clinical setting. Descriptions of the educational games, our approach to teaching, adaptations for small and large groups, the process and importance of debriefing, and students' experiences will be highlighted.

Summary: As the focus of health professionals' roles shift to emphasize interprofessional collaboration, effective teaching approaches are needed to meet educational requirements for collaboration as a core competency in pharmacy programs. Descriptions of the educational games, our approach to teaching, adaptations for small and large groups, the process and importance of debriefing, and students' experiences will be highlighted.

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Teaching communication skills: straightforward ways to incorporate student made videos into your classroom

Lisa M Guirguis

Faculty of Pharmacy and Pharmaceutical Sciences, University of Alberta

Goals: 1) To share easy low tech and low budget approaches to using student-made videos to rehearse communications skills. 2) Illustrate a layered debriefing structure and 3) Share resources that are adaptable to other pharmacy learning environments.

Description: This presentation will share three examples of a student-driven approach to using videos to teach communication skills. Today's students do not require you to provide a video camera - it's in their back pocket - nor instructions on how to make, edit, or post videos. These activities were all conducted in under two hours, with time for group work in teams of eight followed by a large group debrief. Students were provided with a case stem and specific communication skill. Each group produces one video under three minutes in length, typically featuring a pharmacist and patient. Creativity, humour, and full group participation in the video are encouraged, but not required. Students share links with the entire class by posting links to their videos in the class online learning management system using google drive or host site of their choice. Before the large group debrief, students exchange videos and feedback with another group a guided feedback form. In the large group debrief, a selection of videos are reviewed with "expert" feedback providing the consistency students crave and usually quite a few laughs. I will share examples using empathy, patient education, and shared decision-making skills as the focus. The patient situations include using eye drops, choosing a coffee shop or becoming a new parent.

Relevance to Pharmacy Education: Students require practice and feedback to develop strong communication skills. However, large class sizes and limited teaching resources can make it challenging to engage students in multiple opportunities to rehearse their skills. This student-driven approach allows for practice and tailored feedback before students encounter more resource intensive lab simulations or experiential education.

Session summary: How do we provide sufficient opportunities for our students to develop strong communication skills with limited resources? This session will illustrate three examples of using student-made videos in your classroom to provide tailored class feedback in less than two hours. You will be provided with materials to adapt to your learning environments including learning objectives, assignment instructions, and debriefing tools.

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Basing pharmacy education on evidence: a quality improvement framework

Gilles Leclerc¹, Isabelle Lafleur¹, Nathalie Letarte^{1,2,3}, Ema Ferreira^{1,4}

¹*Faculté of Pharmacie- Université de Montréal,*

²*CHUM - Centre hospitalier de l'Université de Montréal*

³*CRCHUM – Centre de recherche du CHUM*

⁴*CHU Ste-Justine*

Goals: Curriculum governance constantly struggles with constraints, demands and resource availability in order to adapt the pharmacy curriculum to the current educational and professional standards. Our assumption is that efficient information gathering provides support to evidence-based decisions in pharmacy education. How the University of Montreal, Faculty of Pharmacy plans to use evidence for curriculum quality improvement will be presented in this session.

Description: Evidence must inform academic decision makers and drive educational interventions just as it has done in clinical practice. Academic institutions have a duty to consider proper evidence and, in their absence, to generate, store and communicate such evidence in order to support sound educational decision-making processes. The University of Montreal Faculty of Pharmacy Quality improvement Framework (UMFP-QIF) binds to these principles and plans to put into contribution data with high probity level in program evaluation. The UMFP-QIF will be presented. The challenges and benefits of using high probity data in program evaluation will be outlined. The current availability of such data in pharmacy education will be discussed.

Relevance to Pharmacy Education: Though Faculties of Pharmacy across Canada may be struggling with some specific local issues, they are undoubtedly facing common challenges, sharing many goals, and looking to achieve similar outcomes. Reflecting further on the benefits and challenges of evidence-based quality improvement decision making will guide Canadian Faculties of pharmacy toward the implementation of quality improvement programs adapted to their educational and professional needs.

Session Summary: Continuous quality improvement is of growing importance in pharmacy education. Our assumption is that evidence must inform academic decisions makers and drive educational interventions. How the University of Montreal, Faculty of Pharmacy plans to use evidence for curriculum quality improvement will be presented in this session.

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Entrustable professional activities: exploring implementation into competency-based assessment of pharmacy experiential learning

Samuel C. Chan, Andrea J. Cameron

Leslie Dan Faculty of Pharmacy, University of Toronto, Toronto, Ontario, Canada

Goals: Entrustable professional activities (EPAs) represent a relatively new assessment framework first proposed and adopted internationally by graduate medical education; it is now garnering interest in other healthcare professions, including pharmacy. This session will introduce the concept of EPAs, briefly review current evidence of EPAs in pharmacy education, and highlight its benefits and criticisms. Within the context of the University of Toronto's experiential program, an example of how EPAs could be implemented into experiential assessments will also be provided.

Project Description: A literature search was conducted to find relevant articles reviewing EPAs and studies implementing an EPA assessment framework into pharmacy experiential learning. Using insights from other programs and consultation with course coordinators, an example of how EPAs could be integrated into existing experiential assessments was developed. The proposed EPA framework would focus on assessing patient care processes, such that it functions as a developmental roadmap for learners by identifying discrete assessment outcomes for task-oriented professional activities, creating value to both students and preceptors. Implementing EPAs in concert with an existing broader competency-based assessment tool should increase the likelihood of developing graduates that can complete specific professional tasks, yet also embody the profession itself.

Relevance to Pharmacy Education: The need to ensure that students graduate with specific minimum competencies is important in order to maintain the established public trust between pharmacists and patients. This is especially true amidst the current landscape in Canada where pharmacists are increasingly expected to assume more clinical responsibilities. With Canadian pharmacy schools all adopting the Doctor of Pharmacy curriculum, which has a stronger component of experiential learning, having a solid competency framework for experiential assessment is critical to developing pharmacy graduates able to meet educational outcomes.

Session Summary: To maintain a high level of public trust, pharmacy programs must ensure that learners graduate with a minimum level of competency in the stated educational outcomes. The entrustable professional activities (EPAs) assessment framework is increasingly being adopted by healthcare professional programs. The goals of this presentation are to review the EPA concept and provide an example of how it can be implemented into an existing competency-based assessment of pharmacy experiential learning.

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Marijuana content in Canadian undergraduate pharmacy programs: a national survey

Garrett Tang, Jonathan Schwarz, Karen Lok, Kerry Wilbur

University of British Columbia - Faculty of Pharmaceutical Sciences

Background: The *Cannabis Act* marks marijuana's transition from a largely illicit substance to a publicly available product presenting new responsibilities for pharmacists in Canada. However, in existing studies students and practitioners self-report poor knowledge and low confidence in patient and interprofessional encounters associated with marijuana. We conducted a national survey of pharmacy programs to inventory curricular content in any way related to marijuana in order to further guide approaches to overcome such deficits.

Methods: Key informants at each of the 10 faculties were identified and emailed a questionnaire. The items were informed by a literature search and included questions pertaining to the types of courses where content might be delivered, the focus of topic coverage, instructional modality and devoted time. Respondents were asked to offer their own views of perceived barriers to marijuana incorporation in their curriculum and any future plans. Questionnaire data was submitted through a web-based platform and the findings anonymized and aggregated.

Results: We received responses from all ten faculties and nine identified marijuana content in their curriculum. Rank order topics included: pharmacology and associated therapeutic and adverse effects; evidence for current indications; dosage formulations; patient counseling; regulation and access; and societal implications. Instructional time was often lecture-based (52%) within required courses and ranged from 0.5 to 12.5 hours. Most key informants indicated plans to add or increase future content. Reported barriers were inadequate time available in the curriculum (60%), perceived lack of strong therapeutic evidence (40%), absence of local content expert (20%), and uncertainty regarding evolving legislation and policy (20%).

Conclusions: Our survey of marijuana content in Canadian undergraduate pharmacy education found disparity across current program curricula. Despite challenges associated with an unfolding regulatory framework and perceived lack of instructor expertise, greater integration of communication and commercial topics to complement existing emphasis on cannabis pharmacologic properties and effects is likely warranted as programs continue to revise content.

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Small but mighty: the current state of education scholarship and SoTL in academic pharmacy

Simon P. Albon,¹ Kristin K. Janke²

¹*University of British Columbia Faculty of Pharmaceutical Sciences*

²*University of Minnesota College of Pharmacy*

Goals/Intent of the Presentation: This oral presentation will report on participant feedback collected from the AFPC CPERC 2018 Symposium and 2017 AACP Institute on educational scholarship. Findings from pre-event and 6-month follow-up surveys will provide Canadian and US perspectives on the current state of educational scholarship and SoTL in academic pharmacy as well as recommendations for strengthening the field.

Description of the Project: Education scholarship and the Scholarship of Teaching and Learning (SoTL) are gaining traction in academic pharmacy as legitimate forms of scholarly activity. Recognizing the intellectual work of teaching as scholarship and growing expectations for context-specific, evidence-based and research-informed curriculum decision-making are driving interest and engagement in the field. Improvements in student achievement, curriculum and pedagogical practices, and the student experience are important aspects of the emerging research agenda. Recently, both AFPC and AACP have sponsored events aimed at supporting and building capacity for educational scholarship and SoTL in academic pharmacy. Attracting small but enthusiastic groups of faculty with varying backgrounds, research experience, and understanding of educational scholarship and SoTL, these events have provided a window into the energy and commitment faculty are bringing to their scholarly endeavors, what they are struggling with, and the faculty development needs and institutional supports required to improve. This oral presentation will report on findings from pre-event and 6-month follow-up surveys collected from participants in the AFPC CPERC 2018 Symposium and 2017 AACP Institute on educational scholarship. Canadian and US perspectives on the current state of educational scholarship and SoTL in academic pharmacy will be shared along with recommendations and strategies for continued growth of the field. Audience members will be encouraged to join the conversation.

Session Summary for Conference Program: Are you interested in educational scholarship? Do you ever wonder how much traction the Scholarship of Teaching and Learning has in academic pharmacy? Are you looking to improve your knowledge and skills as an educational researcher? This presentation will report on participant feedback collected from the AFPC CPERC 2018 Symposium and 2017 AACP Institute on educational scholarship. Findings from pre-event and 6-month follow-up surveys will provide Canadian and US perspectives on the current state of educational scholarship and SoTL in academic pharmacy as well as insights and recommendations for strengthening the field.

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2019 AFPC Canadian Pharmacy Education and Research Conference

June 11-14 • Edmonton, Alberta

Stress-O-Meter: Understanding pharmacy student anxiety

*Gilles Leclerc*¹, *Myriam Grefford*¹, *Antoine Marquis*¹, *Nathalie Letarte*^{1,2,3}, *Isabelle Lafleur*¹,
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³*CRCHUM – Centre de recherche du CHUM*

⁴*CHU Ste-Justine*

Goals: Issues about stress, anxiety, and mental health are becoming more prevalent in higher education. Student well-being is now an unavoidable driver of policy making, program development, service delivery and resource allocation in academic institutions. Such actions aim to create a more inclusive environment and supportive climate in order to help students cope and manage stress, anxiety or mental issues. Several initiatives have been undertaken by the University of Montreal, Faculty of Pharmacy to better understand the stakes of this issue in pharmacy education and to eventually adapt the learning experience accordingly. In this session, one initiative, the Stress-o-meter (SOM), will be presented.

Description: The SOM is an initiative, developed and managed by the Faculty of pharmacy in collaboration with the pharmacy student association. This web-based tool was initially designed to capture in real time the intensity, the circumstances, and the causes of pharmacy students' stress but it has also been used to provide a free round-the-clock access to self-managed stress preventive resources. It was made available as a pilot project to Pharm. D. students and to the International Pharmacists Program Students during the Fall 2018 and Winter 2019 semesters. This session will display the SOM and will present its implantation process, the evaluation protocol and the pilot project results. Furthermore, the interest shown in this resource by other faculties, the challenges of its implementation and the next upcoming steps will be discussed and outlined.

Relevance to Pharmacy Education: This session offers pharmacy educators the opportunity to better understand the challenges of student stress, anxiety, and mental health in pharmacy education, and to reflect on a promising approach easily implementable in all academic environment.

Session Summary: Issues about stress, anxiety, and mental health are becoming more prevalent in higher education. Many initiatives have been undertaken by the University of Montreal Faculty of pharmacy to better understand the stakes of this issue in pharmacy education. One of them, the Stress-o-meter (SOM), will be presented.

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2019 AFPC Canadian Pharmacy Education and Research Conference

June 11-14 • Edmonton, Alberta

Curriculum design, workload and learning: a conundrum seeking for time

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Goals: Students' time spent studying is an undeniable predictor of learning. When delivering a curriculum, making a fair fit between workload and allocated study time is essential. A measurement tool implemented to initially raised awareness and eventually guide the adjustment of course workload and its allocated time has been developed. The implementation process, evaluation protocol and examples of workload calculation will be presented.

Description: Pharmacy curricula are demanding and often perceived as overloaded. In a field where the body of scientific and clinical knowledge is constantly growing and evolving, where new scientific disciplines and learning domains are emerging, such situation could be considered unavoidable. With students' wellbeing issues drastically increasing in higher education due to stress, this overloading of curriculum should be addressed and avoided. Insofar as the interaction between workload and study time has been defined as critical for learning, simply recognizing that time is needed for learning is not sufficient. Actions must be taken. Determining sufficient time and proper conditions supportive of in-depth learning and effective knowledge integration is imperative but must be done carefully. Inspired by the Determining Study Time Model of the University of Oulu (Finland), the University of Montreal, Faculty of Pharmacy has developed a Course Workload Measuring Tool (CWMT). The CWMT has been tested, reviewed and is being implemented.

Relevance to Pharmacy Education: The CWMT will provide professors, program managers and curriculum designers' insight into proper course and program workload estimation. Its implementation will give a portrait of the student workload and advocate for proper learning conditions and sufficient study time. It is hypothesized that it will contribute in enabling in-depth learning of the curriculum core components, support professional development in pharmacy education and improve student wellbeing.

Session Summary: Students' time spent studying is an undeniable predictor of learning and curricular achievement. When delivering a curriculum, balancing between workload and allocated study time is essential but difficult. A measurement tool developed to estimate the program workload and to guide curriculum adjustment will be presented.

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SIG EDUCATION SESSION ABSTRACTS

Truth & Reconciliation SIG

Moderator: Jaris Swidrovich, University of Saskatchewan

1. Co-developing a transformative indigenous health practicum in community
Presenter: Larry Leung, University of British Columbia
2. The pharmacy experience of embedding an interprofessional UBC health-wide indigenous cultural safety curriculum
Presenter: Jason Min, University of British Columbia
3. The state of indigenization in Canadian pharmacy programs
Presenter: Jaris Swidrovich, University of Saskatchewan & Elaine Lillie, University of Waterloo

Program Evaluation SIG and Educational Assessment SIG

Moderator: George Pachev, University of British Columbia

4. Evidence of practice-readiness for culminating practice experience: from documentation describing program policy and design to indicators of competency achievement
Presenters: Isabelle Lafleur, Université de Montréal & Aleksandra Bjelajac Mejia, University of Toronto
5. Evaluating the impact of additional PharmD bridging curriculum on The Pharmacy Examining Board of Canada (PEBC) licensing exam results
Presenter: Ken Cor, University of Alberta
6. Continuous Quality Assurance Frameworks in Pharmacy Education
Presenters: Isabelle Lafleur, Université de Montréal & Anne Marie Whelan, Dalhousie University & Robert Renaud, University of Manitoba

PEP-C Experiential Education SIG

Moderator: Kenneth Manson, University of Waterloo

7. Peer assisted learning in experiential placements: the perspective of pharmacy students
Presenter: Michelle MacDonald, University of Alberta

Self-Care Therapeutics & Minor Ailments SIG

Moderator: Kenneth Manson, University of Waterloo

8. Empowering students in the classroom to raise the bar for practical patient self-care in the community
Presenter: Nardine Nakhla, University of Waterloo

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Medicinal Chemistry SIG

Moderator: Ed Krol, University of Saskatchewan

9. Teaching drug metabolism – a tale of two courses

Presenter: Ed Krol, University of Saskatchewan

10. Why should I care? – student snapshots of learning medicinal chemistry in a PharmD program

Presenter: Simon Albon, University of British Columbia

Informatics SIG

Moderator: Theresa Charrois, University of Alberta

11. Using technology to promote interprofessional learning about informatics

Presenters: Lisa Bishop, Memorial University & Marie Rocchi, University of Toronto

Skills Lab SIG

Moderator: Theresa Charrois, University of Alberta

12. Using gamification in practice skills lab: implementation and value in student learning

Presenter: Renette Bertholet, University of Alberta

13. Using a fictional malpractice case to build documentation skills

Presenters: Kelly Grindrod & Cynthia Richard, University of Waterloo

Social & Administrative Pharmacy SIG

Moderator: Jason Perepelkin, University

14. A novel way to engage students in experiential preventive health education at a university-owned, pharmacist-led patient care clinic

Presenter: Jamie Yuen, University of British Columbia

15. It's all about the BASE: a new approach to teaching social, administrative and information sciences across the entry to practice

Presenter: Lisa Guirguis, University of Alberta

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2019 AFPC Canadian Pharmacy Education and Research Conference

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Co-developing a transformative indigenous health practicum in community

Larry L. Leung,¹ Jason Min,¹ Gilly Lau,¹ Glenda Phillips²

¹*Faculty of Pharmaceutical Sciences, University of British Columbia*

²*Hailika'as Heiltsuk Health Centre Society*

Description: In response to the Truth and Reconciliation Commission of Canada Calls to Action and the shared desire to create more immersive learning opportunities, UBC's Pharmacists Clinic, Office of Experiential Education and Indigenous community partners have collaborated to create a novel 4-week elective practicum in Indigenous Health. This presentation will focus on our key learning lessons in the co-development of this practicum.

In this practicum, students travel to Bella Bella and Mount Currie, Indigenous communities in British Columbia, to work alongside the Hailika'as Heiltsuk Health Centre Society and Lil'wat Health and Healing in the delivery of culturally-safe care. Through intensive community engagement, students will be impactful participants and experience the importance of knowledge keepers and community contexts in the understanding of pharmacy practice. Students will gain an appreciation for Indigenous perspectives on health and healing and explore the significance of working respectfully and collaboratively with Indigenous people.

The presenters will share their experiences and process in building this practicum and discuss the following learning lessons:

- 1) Fostering meaningful partnerships based on mutual respect and trust to address community-identified needs.
- 2) Preparing students with appropriate community-identified resources, readings and cultural safety and humility training.
- 3) Collaborating with community to build learning objectives and activities that reflect community values.

The presenters will also share student, preceptor, and community perceptions of their experiences and provide specific examples of the unique and transformative learning opportunities available.

Goals: 1. Discuss key learning lessons in fostering meaningful collaboration and partnerships with Indigenous community partners. 2. Describe practicum learning objectives and activities. 3. Share student, preceptor, and community perceptions of the 4-week Indigenous health elective practicum.

Relevance to education: As pharmacy schools across Canada modify curricula to include greater indigenous health content, meaningful application in experiential education is an important component that comes with different pedagogical opportunities. This presentation will share the lessons learned of a practicum that can be translated and utilized by faculties across Canada.

Session summary: The UBC Faculty of Pharmaceutical Sciences' Pharmacists Clinic and Office of Experiential Education has partnered with two Indigenous communities to build a 4-week experiential practicum in Indigenous health. Presenters will share learning lessons in building this experiential learning opportunity and student, preceptor and community perceptions of the transformative experience thus far.

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The pharmacy experience of embedding an interprofessional UBC health-wide indigenous cultural safety curriculum

*Jason Min*¹, *Larry Leung*¹

¹*Faculty of Pharmaceutical Sciences, University of British Columbia*

Description: In alignment with Institutional strategic priorities for enhanced interprofessional education and impactful response to the Truth and Reconciliation Commission of Canada Calls to Action, this presentation will describe the development and implementation of a 6-part, Indigenous Cultural Safety (ICS) curriculum at the University of British Columbia (UBC).

This innovative curriculum was a collaboration between internal and external Indigenous knowledge keepers, and all 13 health discipline programs at UBC, including pharmacy, medicine, and nursing. ICS spans 11.5 hours of instruction and consists of two different learning environments: (i) two face-to-face interprofessional workshops co-facilitated by one Indigenous knowledge keeper and one trained faculty member, and (ii) four online interactive learning modules. Topics covered included cultural safety, Indigenous people and land, and allyship.

The presenters will share the process, lessons-learned and measured impact on student learning throughout the process from conceptualization to implementation. Specifically, the content development, pilot testing, facilitator training, integration in to existing curricula, and impact on students will be reviewed.

In this interactive session, the presenters will demonstrate some of the activities that students experience and will challenge participants to be advocates in advancing their institution's process of reconciliation. Cross collaboration and sharing of ideas will be encouraged.

Goals:

1. Discuss key learning lessons in the development and implementation of an Indigenous Cultural Safety curriculum
2. Walk-through a sample of the activities and resources to immerse participants in the student experience
3. Describe how this content fits with existing PharmD curricula, how future content could be built, and student feedback

Relevance to pharmacy education: As pharmacy schools across Canada modify curricula to include greater indigenous and cultural safety content, barriers of time, Faculty expertise, integration with pharmacy topics, and the interprofessional aspect of this learning persists. This presentation will share the foundations and lessons learned as an example of how these barriers can be overcome and stimulate discussion on how similar content can be utilized meaningfully by faculties across Canada.

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2019 AFPC Canadian Pharmacy Education and Research Conference

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The state of Indigenization in Canadian pharmacy programs

Jaris P. Swidrovich¹, Elaine Lillie²

1. College of Pharmacy and Nutrition, University of Saskatchewan

2. School of Pharmacy, University of Waterloo

Indigenizing education has become a national priority. The Truth and Reconciliation Commission of Canada called on educational institutions and programs, including health professions programs, to respond meaningfully and in transformative ways to their Calls to Action. Universities Canada lists Indigenous Education as one of its five major priorities and the Association of Faculties of Pharmacy of Canada (AFPC) published a special note regarding the Truth and Reconciliation Commission of Canada's Calls to Action in its 2017 publication of the AFPC Educational Outcomes for First Professional Degree Programs in Pharmacy in Canada.

By implementing the AFPC Educational Outcomes 2017, the AFPC endorses that "every Canadian first professional degree in pharmacy program curriculum will place a high priority on advancing the process of reconciliation with Canada's First Nations, Métis and Inuit peoples by incorporating curriculum content in the first professional degree in pharmacy program, minimally to include "...Aboriginal health issues, including the history and legacy of residential schools, the United Nations Declaration on the Rights of Indigenous Peoples, Treaties and Aboriginal rights and Indigenous teachings and practices." (Truth and Reconciliation Commission of Canada, 2015). To the greatest extent possible and practical, curriculum will emphasize "skills-based training in intercultural competency, conflict resolution, human rights and anti-racism." (Truth and Reconciliation Commission of Canada, 2015) in relation to the key and enabling competencies defined in the AFPC Educational Outcomes 2017."

This concurrent session will share the results of a national survey conducted by the Truth and Reconciliation Special Interest Group (TRC SIG) regarding the state of Indigenization in Canadian pharmacy programs and will update delegates on the current and future plans of the TRC SIG.

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2019 AFPC Canadian Pharmacy Education and Research Conference

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Evidence of practice-readiness for culminating practice experience: from documentation describing program policy and design to indicators of competency achievement

*Isabelle Lafleur*¹, *Aleksandra Bjelajac Mejia*², *Lachmi Singh*², *Gilles Leclerc*¹, *Kerry Wilbur*³, *George Pachev*³, *Kerry Alcorn*⁴, *Yvonne Shevchuk*⁴, *Ken Cor*⁵

1 Faculté de pharmacie - Université de Montréal

2 Leslie Dan Faculty of Pharmacy– University of Toronto

3 Faculty of Pharmaceutical Sciences– University of British Columbia

4 College of Pharmacy and Nutrition– University of Saskatchewan

5 Faculty of Pharmacy and Pharmaceutical Sciences– University of Alberta

Goals: The Canadian Council for Accreditation of Pharmacy Programs (CCAPP) updated its standard in the *Accreditation standards for Canadian first professional degree in pharmacy programs* in January 2018. A new criterion (Standard 1, criterion 1.2.) specifies, «*Students demonstrate practice-readiness that enables them to provide patient care as collaborative member of a care team before starting culminating direct patient care required practice experience*». Faculties are now required to generate evidence to support that students demonstrate practice readiness prior to starting culminating practice experiences. The goal of the presentation is to describe the different approaches used at five schools of pharmacy across the country to generate evidence in support of the practice ready standard.

Description: From the development of indicators on the achievement of competencies to documentation about program design as well as descriptions of relevant program policy, schools will share their differing approaches to generating evidence. This initiative arose out of discussion in the AFPC Program Evaluation Special Interest Group (SIG) that identified a need to support collaboration on how to generate evidence for ongoing program evaluation based on the CCAPP accreditation standards. The presentation will include brief summaries of the approaches employed at Université de Montréal, University of Toronto, University of British Columbia, University of Saskatchewan and University of Alberta along with a summary of similarities and differences.

Relevance to pharmacy education: This presentation will benefit the whole pharmacy education community by illustrating various approaches complying with the standards of the Canadian Council for Accreditation of Pharmacy Programs.

Session Summary: The presentation compares five different approaches to generate evidence that students demonstrate practice readiness prior to starting their culminating practice experiences. The session includes a brief summary of each school's approach and highlights the similarities and differences.

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Evaluating the impact of additional PharmD curriculum on The Pharmacy Examining Board of Canada (PEBC) licensing exam results

M. Ken Cor, Dion Brocks, Ravina Sanghera

Faculty of Pharmacy and Pharmaceutical Sciences, University of Alberta, Edmonton Alberta

Background: The University of Alberta (UofA) offers the only PharmD for Bachelor of Science Students (PBS) program in Canada. This program provides students an option to acquire a PharmD degree after having completed the first three years of the Bachelor of Science program. The PBS program adds 16 weeks of practice experience, two seminars, and replaces two options and three specialty electives with one specialty elective and three required courses titled: *Critical Analysis of Evidence, Patient Assessment, and Advanced Therapeutics, Collaboration, and Professional Learning*. There is a need to evaluate the impact of this curriculum on student performance.

Goals: The session demonstrates a method to evaluate the impact of curriculum change on student performance based on PEBC licensing exam results. Using the context of the new UofA PBS program, the session will explain how aggregate overall and competency-based PEBC licensing exam results for two sub-sets of students who graduated in consecutive years were used to assess impact of the PBS curriculum on student performance. The session will explain how comparison groups were created using admissions criteria along with methods to identify differences in overall and competency-based PEBC performance across the two groups. Results that detail differences in the strength of identified impacts will be presented. Limitations on inferences that can be drawn based on the analysis will also be described.

Relevance to Pharmacy Education: Evaluating the impact of large-scale curricular change on student learning is a challenging but necessary part of ongoing program evaluation efforts. The PEBC licensing exam offers a reliable and standardized outcome that can be used to support this type of evaluation. By demonstrating how PEBC licensing exam results were used to evaluate the impact of the UofA PBS program on student performance, this session provides a model for other schools of pharmacy across Canada to potentially conduct similar types of analyses.

Summary of Session: This session demonstrates a method to evaluate the impact of curriculum change on student performance based on PEBC licensing exam results. Using the context of the new University of Alberta PharmD for Practicing Pharmacists program, the session explains how aggregate overall and competency-based PEBC licensing exam results for two sub-sets of students were used to assess impact of the PBS curriculum on student performance.

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June 11-14 • Edmonton, Alberta

Continuous quality assurance frameworks in pharmacy education

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2 College of Pharmacy, Dalhousie University

3 College of Pharmacy, University of Manitoba

Background: The Canadian Council for Accreditation of Pharmacy Programs (CCAPP) has placed greater emphasis on continuous quality assurance (CQA) in the *Accreditation standards for Canadian first professional degree in pharmacy programs* (January 2018). The continuous quality assurance of pharmacy programs involves regular systematic reviews of curriculum content, structure, process and outcomes. In order to achieve this, most Faculties of pharmacy are developing and implementing a framework for CQA.

Objectives: The goal of this presentation is for three Canadian Faculties of Pharmacy to each present their current CQA approach and to identify plans for an expanded program evaluation framework.

Description: This initiative came from members of the AFPC Program Evaluation Special Interest Group (SIG) following discussion of these CQA CCAPP Standards at SIG meetings. Specifically, this presentation will include a brief summary of the CQA approaches and frameworks applied by Université de Montréal, Dalhousie University and University of Manitoba. This will include, as appropriate, approaches to developing the framework as well as major components (such as evaluation questions, indicators, data sources, data collection methods and timelines). The presentation will also include a comparison of the three CQA approaches to identify similarities and differences.

Relevance to pharmacy education: Excellence in pharmacy education must go beyond annual course specific feedback from students. Effective evaluation requires not only ongoing and comprehensive review of curriculum content, structure, process and outcomes but also development and implementation of improvement strategies to improve noted weaknesses. This is not an easy task. By hearing the various approaches to CQA, this presentation promises to stimulate discussion around best practices in compliance with the CCAPP standards

Session Summary: The presentation will explore frameworks for continuous quality assurance from three pharmacy programs across Canada. The session includes a brief summary of each framework and highlights the similarities and differences between the frameworks.

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Peer assisted learning in experiential placements: the perspective of pharmacy students

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With the implementation of PharmD programs, expanding experiential education placements is required. Peer-assisted learning (PAL) has become an important, expanding preceptor model utilized in experiential education to grow capacity, enhance student learning, and allow preceptors to expand their precepting practice and skills. Approximately 20% of placements offered to pharmacy students in Alberta utilize this model. There is little information available describing pharmacy students' perspectives and feedback on the use of PAL. This presentation will review the findings of a research project to explore student perspectives of PAL. The primary objective is to describe what pharmacy students have identified as the advantages and challenges of participating in PAL placements. Secondly, students were asked to provide feedback regarding how to optimize future peer assisted learning experiences. Students from the University of Alberta pharmacy program, who participated in peer-assisted learning placements in the past 2 years, were provided a survey with questions to address the primary and secondary objectives. A summary of findings from this research will be presented, outlining student perspectives that may enhance the delivery and participation within these models.

Summary: Does your pharmacy program use peer assisted learning in experiential placements? Is this preceptor model being used with increasing frequency to expand capacity? This presentation will share research findings on the pharmacy student perspective of this model, and provide suggestions for optimizing its use.

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Empowering students in the classroom to raise the bar for practical patient self-care in the community

Nardine Nakhla, Paul Malik

University of Waterloo School of Pharmacy

Session Description: We will present strategies for increasing the practical value of course content for students while simultaneously advancing practice standards in self-care. The opportunity to impact professional practice from the classroom motivates students not only toward better learning outcomes but also toward innovation, inspiring a sense of belonging in the classroom and in the profession. We demonstrate the application and evaluation of an infographic assignment which recognizes the diversity and creativity of students in the classroom.

Presentation Goals: To discuss solutions to the following thematic questions:

- *How can we increase the practical value of clinical course content for students?*
- *How can practice innovations in the classroom be shared with the broader pharmacy world?*
- *What teaching and community-building strategies can increase students' sense of belonging?*
- *How can we recognize the diversity of learners?*

Project Description: We empowered upper-year students to develop and publish innovative tools that will shape the standards of the retail pharmacy practice that they are about to enter. In the "Spotlight on Self-Care" assignment, each student was assigned one condition that would typically be treated from the self-selection area of the pharmacy. Each student created a two-page magazine infographic, a patient-friendly handout and a practice companion checklist to guide pharmacists in innovative, evidence-based and financially sustainable ways of providing medical care on that topic. A special emphasis was placed on practicality.

Relevance to pharmacy education: The diverse spectrum of assignments submitted spoke volumes to how each learner in the classroom took unique ownership over their topic and expressed how they personally envisioned the future of pharmacy practice. The top assignments are set to be published in issues of the Pharmacy Practice and Business magazine. The possibility for tangible impact on the profession stirred enthusiasm in students that has never been seen before by the course instructors. Following completion, the practice tools were collated into one document covering over 20 minor ailments and distributed to students for use in their professional futures.

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Teaching drug metabolism – a tale of two courses

Ed S. Krol

College of Pharmacy & Nutrition, University of Saskatchewan, Saskatoon, SK

In 2014, a new medicinal chemistry course (PHAR 310) was created for the second year of the BSP program at the University of Saskatchewan. The course was designed to encourage students to take control of their learning in a subject area that few students value. Students were required to come prepared to classes by reading specific material in advance. Several activities and assessment methods were then used to ensure that the students could demonstrate their understanding of each learning module. Student evaluations generally indicated that they found this approach to be very helpful in learning the material and in preparing for assessments.

In contrast, a new first year course (PHAR 122, Introduction to the Pharmaceutical Sciences) was created in 2017 for the PharmD program at the University of Saskatchewan. Many of the learning modules from PHAR 310 continued in the PHAR 122 curriculum and although different teaching methods were utilized, pre-reading of course material was not an expectation. In 2018, pre-reading of material for the module on drug metabolism was introduced along with activities and assessments. Student evaluations were almost universally negative, with many focusing on the volume of material to be learned. There was no difference in the amount of material to be learned in this module between the two courses, the 2017 and 2018 delivery or the amount of time given to learn the material. There are several potential reasons for this change in perception some of which include the level of learner engagement, clarity of expectation from the instructor, student educational maturity and knowledge synthesis skill. I will review these reasons for the difference in perceptions and propose strategies to improve the student's learning experience.

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Why should I care? Student snapshots of learning medicinal chemistry in a PharmD program

Simon P. Albon, Kane Larson, Adam Frankel

UBC, Faculty of Pharmaceutical Sciences

Goals/Intent of the Presentation: This oral SIG presentation will share the findings and curriculum enhancement implications of a study exploring student's perceptions of learning medicinal chemistry in Year 1 of UBC's new PharmD program.

Description of the Project: The UBC Faculty of Pharmaceutical Sciences introduced a new entry-to-practice Doctor of Pharmacy (PharmD) degree program in September 2015. One of the foundational sciences in the program is medicinal chemistry, a subject students often find challenging and irrelevant in their training. To address this issue, we designed a study during the 2017W session with two aims: 1) to evaluate student's perceptions of learning medicinal chemistry in the first medicinal chemistry module in the new program, and; 2) to enhance the medicinal chemistry curriculum and teaching practices in the module where necessary. Three surveys, called Snapshots, comprising two numeric response and four written comment questions were developed and administered at the beginning, middle and end of the Term 1, 2017W session (September-December). FluidSurveys® was used for survey administration and generating descriptive statistics; student comments were analyzed for codes, themes, data discrepancies and critical quotes using the constant comparative method. Study findings (response rate: 92%; 207/224) indicated that the medicinal chemistry curriculum and teaching practices in the module were well received. Approximately 95% of students "agreed" or "strongly agreed" that medicinal chemistry was relevant to their education as pharmacists, scoring 4.4 on a 5 point scale (strongly disagree to strongly agree); 64% of students felt the medicinal chemistry curriculum and teaching practices had positively impacted their perceptions about the importance of the subject in their education (3.9 on a 5 point scale). For approximately 2% of students (5/224) learning medicinal chemistry was irrelevant. Analysis of student comments indicated that initial anxiety and nervousness about learning medicinal chemistry shifted towards a positive perception of its relevance and usefulness in their understanding of drugs, education and future careers. The curriculum design and emphasis, practice problem sets and in-class active learning strategies were cited as particularly useful for student engagement and learning. Findings remained constant throughout the Term.

Session Summary for Conference Program: Are you struggling to find meaningful connections between medicinal chemistry and pharmacy practice in your teaching? Do issues of irrelevance seem permanently etched in your teaching and course evaluations? In spite of your best efforts, are you feeling your students just don't care about learning medicinal chemistry? If you answered yes to any of these questions this session might be for you. The findings and curriculum enhancement implications of a study exploring student's perceptions of learning medicinal chemistry in Year 1 of UBC's new PharmD program will be shared. Participants will leave this session with promising strategies for teaching medicinal chemistry in their own contexts and institutions.

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Using technology to promote interprofessional learning about informatics

*Lisa D Bishop*¹, *Marie A Rocchi*², *Janet M Cooper*³, *Harold G Lopatka*³, *Seema Nayani*⁴

¹ Memorial University of Newfoundland

² University of Toronto

³ Association of Faculties of Pharmacy of Canada

⁴ Canada Health Infoway

Description of session: The session will begin with an overview of the AFPC informatics project, highlighting the new interprofessional chapters: e-medication reconciliation and e-prescribing. The session will include a tour of the new e-Learning for Healthcare Professionals platform and a discussion about how it can be used for interprofessional learning.

Description of project: AFPC has partnered with Canada Health Infoway on several successful pharmacists-in-training projects over the past seven years. Their current work is a component of the Digital Health Faculty Associations Content & Training Solutions ([FACTS](#)) initiative, aimed at improving graduate's preparedness for work in technology-enabled environments by integrating digital health into curricula on a pan-Canadian level.

A national, online, competency-based, educational resource has been created, called e-Learning for Health Care Professionals (<http://elearnhcp.ca/>). It is designed to advance digital health in education by developing informatics competencies and associated resources to support clinical faculty and students in Canada. Effective marketing/promotion will be key to encouraging the uptake of the resource by medicine, pharmacy, and nursing students. Feedback from these students will be essential for evaluating the content for future modification.

Relevance to Pharmacy Education: This initiative will help prepare graduates to work in technology-enabled environments. It is a tool that can help pharmacy faculties meet AFPC's educational outcome around the importance of using health informatics to improve the quality of care, manage resources, and optimize patient safety. Recognizing the importance of this outcome, AFPC produced a document outlining [national entry-to-practice competencies for pharmacists](#) related to information and communication technology. The e-Learning platform is a tool that can be used by faculties as a way to help meet these competencies and influence future clinicians through e-learning approaches that are both highly engaging and educational.

Summary for conference program: As faculty members, we must prepare our students to work collaboratively in technology-enabled environments. The session will highlight the advantages of interprofessional learning, how the use of technology can be used to educate students about information and communication technology, and will include a tour of an e-Learning for Healthcare Professionals platform that can be used for interprofessional learning.

SESSIONS INFORMATION

2019 AFPC Canadian Pharmacy Education and Research Conference

June 11-14 • Edmonton, Alberta

Using gamification in practice skills lab: implementation and value in student learning

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Description of the session: There is interest in games as an active learning strategy; however, there is limited published information on their use in pharmacy education. Three “low tech” games were created for the practice skills lab to engage and encourage students to work together to problem solve practice issues.

Goals of the presentation: To briefly review the evidence on the impact of gamification on student motivation and learning. To describe implementation of game activities in a practice skills lab. To illustrate the value of games based on an evaluation project undertaken to assess student engagement.

Description of initiative and relevance to pharmacy education: There is increasing evidence that gamification in health sciences education leads to better student motivation and achievement. Adding games to the practice skills lab was thought to be a worthwhile strategy to employ with the second year cohort of approximately 130 students to increase student engagement. The lab was conducted in two half day sessions, with half the class in each session. Three sequential games, “The Amazing Race”, “Who’s Drug Is It Anyways” and “Jeopardy” were created and students were tasked to complete each game for points. On completion of the first game students were given the instructions or “clues” to the next game. The group with highest number of points were the “winners”. This lab activity has been run across 3 consecutive academic years.

Although this is a “low tech” activity, it required time to set up for the two lab times. Anecdotal and verbal feedback seemed positive. To evaluate if this activity provided value to student learning in a practice skills environment, a student in the Pharm D for Practicing Pharmacist program (completing an experiential elective rotation) conducted a survey to solicit student feedback. This presentation will discuss evidence for gamification and the games in more detail. High level evaluation results will be discussed with the details presented in a separate poster. (Le, K et al)

Summary: Does a gamification strategy engage students in learning more effectively? This presentation will discuss how gamification impacts student motivation and learning, and the development and implementation of three low-tech games, in a second year practice skills lab.

SESSIONS INFORMATION

2019 AFPC Canadian Pharmacy Education and Research Conference

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Using a fictional malpractice case to build documentation skills

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Background: Our final skills lab/course is focused on problem solving and documentation. The course includes a 2-hour weekly lecture and a 2-hour weekly lab. Students write weekly SOAP notes and receive periodic peer and instructor feedback using a documentation rubric. Over the last five years, the course evaluations have indicated that students feel this level of documentation is inconsistent with "real world" practice. Thus, a 2-week lecture/lab activity was developed to demonstrate the medico-legal value of documentation.

Objective: To describe a novel method of teaching documentation using a fictional medical malpractice case.

Description of activity: The 2-week activity occurs mid-way through the term. It begins with a 90-minute interactive lecture on the elements of documentation. Students are then provided with a fictional invitation letter from a lawyer to be an expert witness in a malpractice case involving a patient who died from a drug-related cause. The students generate a list of questions for the lawyer to ask the fictional pharmacist defendant in a discovery interview. The next day in lab, students are provided with a package that includes a discovery interview transcript, prescription hard copy (including documentation typical of community practice), photo of the dispensed product, coroner's report, and patient dispensing history. The students review the material and use the NAPRA standards of practice to identify which standards the pharmacist breached. The following week, malpractice lawyers provide a 2-hour overview of the elements of a malpractice lawsuit. The students then complete a 2-hour "apology" lab to develop strategies for apologizing for errors made in the pharmacy.

Conclusion: The described malpractice activity has been useful for engaging students in building stronger documentation skills that align with the standards of practice. It targets student ambivalence about documentation by shifting the student focus from a lack of time for clear documentation to a clear example of the ways documentation is used in practice.

SESSIONS INFORMATION

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A novel way to engage students in experiential preventive health education at a university-owned, pharmacist-led patient care clinic

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Description: The practice of pharmacy in BC includes promoting health and preventing diseases. Student pharmacists at UBC have few real-world opportunities to develop preventive health skills. A novel collaboration between the Pharmacists Clinic, Health Wellbeing and Benefits unit and student pharmacist volunteers brings preventive health services to UBC employees while supporting student learning.

Goals/Intent of Presentation: The goal of this presentation is to provide inspiration and practical strategies for other Canadian faculties of pharmacy to achieve the dual goals of improving the health of fellow employees while providing student pharmacists with experiential preventive health education.

Project/Initiative: The Clinic team coordinates several preventive health initiatives for the UBC employee population including: immunization clinics, smoking cessation services, naloxone training and kit distribution, health screening and awareness events, educational seminars and workshops, and pharmacist-led cardiovascular risk reduction services. Over the past 5 years, student pharmacists have helped provide over 4500 preventive health services to UBC employees and employees have become educated, engaged and activated to optimize their lifestyle choices and behaviours to prevent disease.

Relevance to Pharmacy Education/Research: Participant feedback shows that they are receiving services from pharmacists and pharmacy students in the workplace that are not available elsewhere, the services are highly valued, they are having success implementing positive health behaviours, they want to contribute to student learning and they have a greater appreciation of pharmacist roles.

Student feedback shows that participation in structured preventive health initiatives for UBC employees improves their competence and confidence providing preventive health services, conversing with patients, managing time during a patient interaction, and applying classroom learnings with real patients.

Summary: A novel collaboration between the Pharmacists Clinic, Health Wellbeing and Benefits unit and student pharmacist volunteers brings preventive health services to UBC employees while supporting student learning. This presentation provides inspiration and practical strategies for other Canadian faculties of pharmacy to achieve the dual goals of improving the health of fellow employees while providing student pharmacists with experiential preventive health education.

SESSIONS INFORMATION

2019 AFPC Canadian Pharmacy Education and Research Conference

June 11-14 • Edmonton, Alberta

It's all about the BASE: a new approach to teaching social, administrative and information sciences across the entry to practice PharmD curriculum

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Goals: 1) To describe a new approach to integrate social, administrative and information sciences across the pharmacy curriculum, 2) To compare the design of the original and redesigned courses.

Description: In the BScPharm Program at the University of Alberta, there were 10 courses (18 credits) focused on social, administrative, and information sciences. Over half of the credits were taught in the first year which limited integration and opportunities for building on concepts over the curriculum. The redesign introduced six integrated BASE courses with one delivered each semester for three years (6 courses; 18 credits) in four content streams, Behavioural (i.e., professional identity, communication, and leadership), Administrative (i.e., healthcare systems, dispensing, law, ethics, management), Social (i.e., biopsychosocial models, social determinants of health), and Evidence-based (i.e., informatics, evidence-based clinical practice, and pharmacoepidemiology) pharmacy practice. Each BASE course incorporates the four content streams and employs team teaching to allow for scaffolding of topics. Each BASE course considers issues facing pharmacy and society through a different lens. The first year starts with a personal focus on pharmacists and interpersonal interactions. In the second year, the focus will be broadened to include pharmacies, professional groups, hospitals, and the communities. The third year focuses on societal issues and the role of policy in creating health. Future evaluation of BASE courses will examine the influence of the redesign on the achievement of student competencies in the AFPC Educational Outcomes for First Professional Degree Programs.

Relevance to Pharmacy Education: The knowledge, skills and attitudes developed in BASE underly a larger proportion of the Educational Outcomes for First Professional Degree Programs in Pharmacy. A coordinated approach to teaching the social, administrative and information sciences will provide a strong foundation (or may we say BASE) for pharmacy education in Canada.

Summary: It's all about the BASE - the new Behavioural, Administrative, Social and Evidence-Base Pharmacy Courses at the University of Alberta. This session will highlight our approach to teaching the social, administrative and information sciences pharmacy courses to facilitate more thoughtful pharmacist practice that reflects personal, community and societal perspectives.