

# CPERC 2018

JUNE 12-14

Ottawa

Canadian Pharmacy Education and Research Conference



Association of Faculties  
of Pharmacy of Canada

Association des facultés  
de pharmacie du Canada

Co-hosted by:



UNIVERSITY OF TORONTO  
LESLIE DAN FACULTY OF PHARMACY



UNIVERSITY OF  
**WATERLOO**

## CPERC 2018

# Sessions Information

- Faculty Updates
- Mini-Sessions
- SIG Education Sessions
- Roundtable Sessions

## TABLE OF CONTENTS

### FACULTY UPDATES ON INNOVATION IN EDUCATION

page 2

1. **Memorial University:** Using reflective thinking and visual representations to improve first year pharmacy students' ethical thinking
2. **Dalhousie University:** IPE at Dal – introduction to immersion
3. **Université Laval:** Innovations in the PharmD program at Laval University: Focus on exploration projects and tutors
4. **Université de Montréal:** Community pharmacy practice site accreditation process
5. **University of Toronto:** Team-based learning – a strategy for collaborative learning
6. **University of Waterloo:** Has a regional approach to rotations delivered?
7. **University of Manitoba:** Expanding PharmD practice experiences in primary care, interprofessional education and northern and rural communities
8. **University of Saskatchewan:** Experiential immersions in year 1 of the PharmD program
9. **University of Alberta:** Health aisle blog publication in the therapeutics module – dermatology, ears, eyes, nose and throat (Year 1)
10. **The University of British Columbia:** Seminar series in entry to practice PharmD program at the University of British Columbia

### MINI-SESSION ABSTRACTS

page 4

- Mini-session #1** – Melding AFPC outcomes with teaching in the classroom
- Mini-session #2** – Teaching and learning in clinical and online environments
- Mini-session #3** – Specific skill sets for pharmacy students
- Mini-session #4** – Challenges for educational excellence

### SPECIAL INTEREST GROUPS (SIG) EDUCATION SESSIONS

page 18

1. **Truth & Reconciliation SIG**
2. **Medicinal Chemistry SIG**
3. **PEP-C Experiential Education SIG**
4. **Skills Lab SIG**
5. **Assessment & Program Evaluation SIG**
6. **Informatics SIG**

### ROUNDTABLE SESSIONS

page 26

- Table #1:** Keeping curriculum current
- Table #2:** Remediation approaches
- Table #3:** Innovative approaches to teaching
- Table #4:** Incorporation of new AFPC outcomes
- Table #5:** Transition to academic life
- Table #6:** Graduate programs for pharmacists
- Table #7:** Strategies for interprofessional education and collaborative learning
- Table #8:** Humanities in pharmacy education

## SESSIONS INFORMATION

2018 AFPC Canadian Pharmacy Education and Research Conference  
June 13-14 • Ottawa, Ontario

# FACULTY UPDATES ON INNOVATION IN EDUCATION

**Session overview:** Each faculty of pharmacy across Canada will provide a brief update on an innovative initiative at their university.

**Moderators:** *Rosemary Killeen, University of Waterloo; Natalie Crown, University of Toronto*

## 1. Using reflective thinking and visual representations to improve first year pharmacy students' ethical thinking

*Beverly FitzPatrick, Memorial University*

Students collected data on their own and others' positive and negative ethical behaviours for a full semester. They completed six reflections, one every two weeks, in which they had to write and draw. They received individual written feedback and explicit class instruction to improve their ability to think critically about ethical behaviours.

## 2. IPE at Dal: introduction to immersion

*Kim Sponagle, Dalhousie University*

In this presentation we will briefly outline the IPE approach at Dalhousie. Two prominent events, Dalmazing Interprofessional Team Challenge, and the Collaborative IPE Stroke Event, that illustrate their approach will be discussed.

## 3. Innovations in the PharmD program at Laval University: focus on exploration projects and tutors

*Julie Methot, Université Laval*

Exploration projects for last-year pharmacy students will be presented. Tutors' involvement in the program will be discussed.

## 4. Community pharmacy practice site accreditation process

*Nathalie Letarte, Université de Montréal*

This school update will outline how a structured practice site accreditation process has allowed to increase community pharmacy accreditation rate by limiting site visits, financial support and human resources involvement.

## 5. Team-based learning: a strategy for collaborative learning

*Natalie Crown & Heather Kertland, University of Toronto*

Given that collaborative learning has been shown to increase the depth of understanding of material or content, increase in student responsibility and increased in understanding of diverse perspectives we thought it important to enhance collaborative learning within our second-year cardiovascular disease pharmacotherapy course. Working with a class size of 240 students team-based learning (TBL), a structured active and collaborative learning strategy, was the chosen instructional delivery method for our workshops. Student feedback has been positive since the implementation of TBL in our workshops.

## SESSIONS INFORMATION

2018 AFPC Canadian Pharmacy Education and Research Conference  
June 13-14 • Ottawa, Ontario

### **6. Has a regional approach to rotations delivered?**

*Nancy Waite, University of Waterloo*

Our 4th year direct patient care PharmD rotations (6 months/student) are delivered through fourteen Ontario regions that have been in place for four years. We will provide an update on key aspects of this model including how our Regional Clinical Coordinator (RCC) pharmacists integrate our students into their region, local community of practice and patient care responsibilities, and build preceptor relationships. Recent implementation of a province-wide assessment tool has been greatly facilitated by having our RCCs conduct hands-on training with their local preceptors.

### **7. Expanding PharmD practice experiences in primary care, interprofessional education, and northern and rural communities**

*Lavern M. Vercaigne, University of Manitoba*

This update will discuss organizational structures and initiatives at the University of Manitoba to expand practice experiences in primary care, interprofessional education and northern and rural communities.

### **8. Experiential immersions in year 1 of the PharmD program**

*Yvonne Shevchuk, University of Saskatchewan*

Immersion is a three-hour time period to 'immerse' students in a specific aspect of pharmacy practice; they focus on the AFPC competencies of professional and communicator and evaluate a discreet task.

### **9. Health Aisle Blog publication in the therapeutics module – dermatology, ears, eyes, nose and throat (Year 1)**

*Ravina Sanghera, University of Alberta*

Uses DI, communication and therapeutics to help students publish an article on a trending self-care product. The editors of this blog review and coach the students throughout the course. Activity co-developed with Aliya Kassamali.

### **10. Seminar series in Entry-to-Practice PharmD program at the University of British Columbia**

*Larry Leung, University of British Columbia*

The seminar series of courses span program year 1 to 4 in the Entry-to-Practice PharmD Program at the Faculty of Pharmaceutical Sciences, UBC. Seminar courses focus on contemporary issues in pharmacy practice and the role of the pharmacist and utilizes group and panel discussions, projects and discussion boards in its' unique pedagogical approach.

## SESSIONS INFORMATION

2018 AFPC Canadian Pharmacy Education and Research Conference  
June 13-14 • Ottawa, Ontario

# MINI-SESSION ABSTRACTS

## Mini-Session #1: Melding AFPC Outcomes with Teaching in the Classroom

**Moderator:** *Sandra Bjelajac-Mejia, University of Toronto*

1. Beyond drug therapy experts: nurturing communicator and collaborator roles in a large classroom setting (see abstract page 6)

*Natalie A. Crown, University of Toronto*

2. Teaching and assessing professionalism: a user guide to facilitate implementation of the professional role (see abstract page 7)

*Patricia Gerber, University of British Columbia*

3. Eleven years of experience with the Electives Program at the College of Pharmacy, University of Manitoba (see abstract page 8)

*Silvia Alessi-Severini, University of Manitoba*

## Mini-Session #2: Teaching and Learning in Clinical and Online Environments

**Moderator:** *Nardine Nakhla, University of Waterloo*

1. The Pharmacists Clinic: integration into academics and research (see abstract page 9)

*Larry L. Leung, University of British Columbia; Jason Min, University of British Columbia*

2. Inter-institutional collaboration addresses harassment in clinical practice settings for pharmacy and medical learners (see abstract page 10)

*Elaine Lillie, University of Waterloo*

3. Utilizing best practices in online learning: focus on patient/medication safety for healthcare professionals (see abstract page 11)

*Sonya Dhanjal, University of Waterloo; Certina Ho, University of Toronto*

## SESSIONS INFORMATION

2018 AFPC Canadian Pharmacy Education and Research Conference  
June 13-14 • Ottawa, Ontario

### Mini-Session #3: Specific Skill Sets for Pharmacy Students

**Moderator:** Heather Kertland, University of Toronto

1. Information seeking behaviours and needs of pharmacists and pharmacy students in the Maritime provinces (see abstract page 12)  
*Jennifer E. Isenor, Dalhousie University*
2. A national study of education about fetal alcohol spectrum disorder (FASD) in faculties of pharmacy in Canada (see abstract page 13)  
*Sharon Mitchell, University of Alberta*
3. Teaching medicinal chemistry in Canadian pharmacy schools: strategies for making content relevant to pharmacy practice (see abstract page 14)  
*Carlos A. Velázquez-Martinez, University of Alberta*

### Mini-Session #4: Challenges for Educational Excellence

**Moderator:** Jamie Kellar, University of Toronto

1. Educational leadership: mapping and establishing impact of teaching and learning activities (see abstract page 15)  
*Simon Albon, University of British Columbia*
2. The illusion (or mirage) of educational outcomes (see abstract page 16)  
*Gilles Leclerc, Université de Montréal*
3. Determining key quality assurance indicators for advanced pharmacy practice experiences (APPE) placements site visits (see abstract page 17)  
*Samantha Li, University of Toronto; Certina Ho, University of Toronto*

## SESSIONS INFORMATION

2018 AFPC Canadian Pharmacy Education and Research Conference  
June 13-14 • Ottawa, Ontario

# Beyond drug therapy experts: nurturing communicator & collaborator roles in a large classroom setting

*Natalie A. Crown, Heather R. Kertland*

*Leslie Dan Faculty of Pharmacy, University of Toronto*

*Goals of the presentation:* Health professional educators are increasingly seeking to incorporate active learning pedagogies into their curricula. The intent of this session is to:

1. Discuss elements of curriculum design that facilitate knowledge acquisition while supporting the non-medication expert roles (i.e. communicator, collaborator).
2. Describe the design and implementation of team based learning (TBL) modules within a pharmacotherapy course.

*Project Description:* TBL modules were implemented across 6 workshops in a cardiovascular pharmacotherapy course. TBL is a structured active learning strategy consisting of a three component sequence: 1) advanced preparation; 2) in-class readiness assurance process, and 3) application exercises; where the majority of class time is spent on decision-based application assignments in small teams.

For each workshop, students (n= 120) were provided with learning objectives, a reading list, and preparatory pharmacotherapy lectures. In class, students completed a readiness assessment quiz individually, and then in teams using "scratch cards" to provide immediate feedback. Teams then completed a series of application exercises that involve applying the pharmacists' care process to a patient case. Teams simultaneously report their responses to a series of questions at each phase of the application exercise using color-coded cards. After the session, students complete peer assessment online to provide their teammates qualitative and quantitative feedback on their contributions. Student feedback to TBL has been overwhelmingly positive. Students comment on the benefits of discussing and collaborating with their team on the quiz, and that listening to other's thought process augments their own learning. Less well received has been the quantitative peer assessment component, with some students reporting they feel uncomfortable assigning points to team members.

*Relevance to Pharmacy Education:* Facilitating the development on non-medication expert roles in undergraduate pharmacy education is integral to preparing graduates with the skills for effective pharmacy practice in an increasingly team-oriented health care environment. Less well established is how to provide students the opportunity to practice these skills in classroom-based courses, particularly with a large class size.

*Session Summary:* As Canadian pharmacy programs identify curricular priorities and consider curriculum design to address the 2017 AFPC Educational outcomes, instructional methods that encourage development of communication, collaboration and problem solving skills are increasingly relevant. This session describes the design and implementation of team based learning modules into a large classroom pharmacotherapy course. TBL represents one strategy for nurturing the Communicator and Collaborator roles in a classroom setting.

## SESSIONS INFORMATION

2018 AFPC Canadian Pharmacy Education and Research Conference  
June 13-14 • Ottawa, Ontario

# Teaching and Assessing Professionalism: a User Guide to facilitate implementation of the Professional Role

*Patricia Gerber*

*University of British Columbia*

Introduced as the “overarching ethos of the discipline of pharmacy”, the Professional Role of the AFPC Educational Outcomes outlines three key competencies: a commitment to applying best practices and adhere to high ethical standards, ability to recognize and respond to societal expectations of health care professionals, and a commitment to self-awareness in the management of personal and professional well-being. These competencies provide a roadmap of curricular priorities for faculties of pharmacy to support curricular design and development efforts. The AFPC AdHoc Professionalism Committee identified a need for a User Guide as a supporting document outlining principles for operationalizing the Professional Role. The intent was to develop a common platform to bring professionalism into focus at each institution, to support academic leaders in advocating for the importance of allocating time and resources to designing, developing, and implementing professionalism initiatives and activities, to help guide student achievement of key professionalism competencies. This presentation will describe the work of the Committee to-date in the development of the User Guide, including key aspects of its content (guiding principles, framework of defined milestones to mark student progress, assessment of professionalism), and next steps. It will also provide an opportunity for attendees to weigh in on the aspects of the Guide’s content that continue to challenge the Committee.



## SESSIONS INFORMATION

2018 AFPC Canadian Pharmacy Education and Research Conference  
June 13-14 • Ottawa, Ontario

# Eleven years of experience with the Electives Program at the College of Pharmacy, University of Manitoba

*Silvia Alessi-Severini, Colleen Metge and I fan Kuo*

*College of Pharmacy, Rady Faculty of Health Sciences, University of Manitoba*

*Background:* The Electives Program (PHRM4800) was implemented in 2007 at the College of Pharmacy (University of Manitoba). The offering was developed as a 10-credit hour course aimed at providing 4<sup>th</sup>-year students with opportunities to explore areas in research, professional practice and education that are not part of the required curriculum. Students can apply to conduct projects at pre-approved sites or to propose alternative avenues for self-directed learning. Students commit 7 weeks of full time work according to a 3-block schedule. Project proposals submitted by each student need to receive approval by the course coordinator before the beginning of the Fall term. Assessment (Pass/Fail) is based on individual reports submitted by students to the College and evaluations completed by the preceptors. Students also submit self- and site-evaluations.

*Methods:* Data regarding sites, type of projects, students' choices, assessment of sites and students' evaluations have been collected, anonymized and analyzed by descriptive statistics.

*Results:* More than 500 students participated in this offering since inception. Our pre-approved sites (more than 90% renewal rate) have grown in number (approximately 80 positions). Preceptors' backgrounds are mostly in medicine, nursing and pharmacy; however, expertise in education and business is also represented. Sites within the province include University of Manitoba units (e.g., Pharmacy, Medicine, Business), the National Microbiology Laboratories, the Addictions Foundation of Manitoba, the Winnipeg Adult Learning Centre. External sites include the Motherisk program at Toronto's Hospital for Sick Children, the International Pharmaceutical Federation (the Netherlands) and the Princess Alexandra Hospital at the University of Queensland (Australia). An average of 70% of students chose a pre-approved site; however, a significant number of students have also been pursuing alternatives opportunities particularly by engaging in humanitarian endeavors in developing countries (e.g., Nepal, Ecuador, Vietnam, and Ghana).

*Conclusion:* Students' comments have been very positive over the years (98% of students recommended their site to other students). Many projects have been published or presented to conferences.

*Relevance to Pharmacy education:* The experience of more than a decade with the Pharmacy Electives Program at the University of Manitoba is described in terms of successes and challenges. The evolution of the program in anticipation of the new Pharm. D. curriculum is discussed.

## SESSIONS INFORMATION

2018 AFPC Canadian Pharmacy Education and Research Conference  
June 13-14 • Ottawa, Ontario

# The Pharmacists Clinic – Integration into Academics and Research

Larry L. Leung<sup>1</sup>, Jason Min<sup>1</sup>

<sup>1</sup>Faculty of Pharmaceutical Sciences, University of British Columbia

*Description:* The Pharmacists Clinic at the UBC Faculty of Pharmaceutical Sciences is a licensed, university-owned, pharmacist-led patient care environment. Since 2014, pharmacy students and pharmacist learners have observed and provided patient-centered care to real patients and practice to the maximum of their scope in a supportive best practices environment.

A presentation introducing the concept of pharmacist-led clinics has been featured in past CPERC conferences, focusing on the purpose of such clinics. With more pharmacy schools across Canada building in-house clinics, there is an opportunity for further exploration and discussion. This presentation will focus on specific opportunities for integration of an established pharmacist-led clinic into the academic and research programs and the benefits to student learners and patients.

The presenters will describe the following academic and research opportunities based out of a pharmacist-led clinic: 1) case-based learning activities featuring mock and live patients; 2) elective experiential practicums in Indigenous health, health informatics, leadership, and specialty patient-care rotations; 3) student-led outreach initiatives, including immunization clinics and travelling health fairs; 4) practice-based research in Indigenous health and primary care.

The presenters will provide concrete examples of these unique opportunities and strategies for successful integration into the academic and research portfolios of pharmacy faculties. They will also provide student perceptions and evaluation data from the above activities.

*Goals:* To discuss specific opportunities for integration of an established pharmacist-led clinic into the academic and research programs and the benefits to student learners and patients.

To describe concrete examples of academic and research benefits and strategies for successful integration.

To share student perceptions of clinic-led activities in the academic and research programs.

*Relevance to pharmacy education:* With more pharmacy schools across Canada creating in-house clinics, we want to provide concrete examples and our experience with integrating clinic-led activities into the academic and research programs of the Faculty.

*Session summary:* The Pharmacists Clinic at the UBC Faculty of Pharmaceutical Sciences is a licensed, university-owned, pharmacist-led patient care environment. This presentation will focus on specific opportunities for integration of an established pharmacist-led clinic into the academic and research programs and the benefits to student learners and patients. They will provide student perceptions and evaluation data from clinic-led activities, which may help facilitate discussion and ideas for other faculties and their own clinic initiatives.

## SESSIONS INFORMATION

2018 AFPC Canadian Pharmacy Education and Research Conference  
June 13-14 • Ottawa, Ontario

# Inter-institutional Collaboration Addresses Harassment in Clinical Practice Settings for Pharmacy and Medical Learners

*Elaine Lillie<sup>1</sup>, Margo Mountjoy<sup>2</sup>*

<sup>1</sup>*Director of Interprofessional Education and Curriculum Development, University of Waterloo School of Pharmacy*

<sup>2</sup>*Director of Student Affairs, Michael G. DeGroot School of Medicine Waterloo Regional Campus, McMaster University*

*Goals of the Presentation:* The session will share findings from a collaborative pilot project between Waterloo Pharmacy and McMaster's Michael G. DeGroot School of Medicine that addressed harassment in clinical practice environments. Content, the blended learning approach and the interprofessional, inter-institutional model were all evaluated and have implications for both what and how we teach.

*Project Description:* Recognizing a shared need to prepare students to manage harassment in clinical practice settings, Waterloo Pharmacy and McMaster's Michael G. DeGroot School of Medicine collaborated in creating an online module and interactive workshop. Surveys and a focus group were used to evaluate the effectiveness of online and in-person components as well as the blended approach and the value of learning in an interprofessional environment. Initial feedback has been positive with 93% agreeing that they have a greater understanding of the impacts of harassment.

The larger vision for the project is to develop a professionalism platform that will address various aspects of professionalism that affect learners across healthcare programs. E-professionalism, conflict resolution and resilience are examples of future priorities.

*Relevance to Pharmacy Education:* Graduation survey data and the literature confirms that healthcare students in professional programs experience harassment while in training and need support to manage these encounters. This is especially true in high-stakes, final-stage assessments in clinical practice settings.

*Summary:* Preliminary results confirm that students valued the content and consistently reported a need for education and tools to help manage harassment. Lessons learned extend beyond content validity and offer insight regarding a desire for a blended learning approach that facilitates learning with colleagues in other programs. Medical and pharmacy students expressed a desire for more opportunities to learn together and to simulate environments where success as young professionals relies on an ability to work effectively with interprofessional colleagues.

*Program Summary:* The session will share lessons learned from an innovative pilot project between University of Waterloo School of Pharmacy and McMaster Michael G. DeGroot School of Medicine. The partners collaborated to design a blended learning program to help learners understand and manage harassment, particularly in clinical practice settings. Results were encouraging with 93% of learners agreeing that they have a greater understanding of the impacts of harassment.

## SESSIONS INFORMATION

2018 AFPC Canadian Pharmacy Education and Research Conference  
June 13-14 • Ottawa, Ontario

# Utilizing best practices in online learning: Focus on patient/medication safety for healthcare professionals

Sonya Dhanjal<sup>1,2</sup>, Certina Ho<sup>1,2,3</sup>

<sup>1</sup> *Institute for Safe Medication Practices Canada*

<sup>2</sup> *School of Pharmacy, University of Waterloo*

<sup>3</sup> *Leslie Dan Faculty of Pharmacy, University of Toronto*

*Goals:* Developing a culture of patient safety in practice begins with education. Enhancing the current teaching and learning strategy for patient/medication safety would make the materials more engaging and increase learners' appreciation for the subject. The objective of this session was to showcase the best practices in online learning and how we applied these practices through designing and storyboarding of a series of patient/medication safety online modules for healthcare professionals and students.

*Description:* During this presentation, we will share our findings and common themes identified from the literature and through consultation with subject matter experts in online learning development. In particular, we will discuss the overarching best practices in online training module development, which include: (1) Make it Easy to Learn; (2) Engagement is Key; (3) Equal Learning Opportunity for Everyone; and (4) Content Matters. These best practices are vital in ensuring the learner optimizes the learning potential and generates a positive attitude towards the learning experience. We will explain how to utilize and adopt them in the storyboarding of the various patient/medication safety online modules.

*Relevance to Pharmacy Education:* This presentation is highly relevant to pharmacy education as patient/medication safety is typically taught in a traditional, didactic model in the curriculum. We hope our insights and illustrations of how patient/medication education can be delivered utilizing the best practices in online learning may encourage others to consider applying these strategies to other subjects in the pharmacy curriculum. With the increased uptake of e-learning platforms, this presentation will explain how to optimize learning with technological shifts in teaching.

*Session Summary:* Evidence has shown that utilizing best practices in online learning will enhance learner engagement, satisfaction, and knowledge acquisition. The goals of this presentation are to demonstrate the best practices in online learning, and how we applied these practices through designing and storyboarding a series of patient/medication safety online modules for healthcare professionals and students.

## SESSIONS INFORMATION

2018 AFPC Canadian Pharmacy Education and Research Conference  
June 13-14 • Ottawa, Ontario

# Information seeking behaviours and needs of pharmacists and pharmacy students in the Maritime Provinces

*Jennifer E. Isenor<sup>1</sup>, Melissa Helwig<sup>2</sup>, Susan K. Bowles<sup>1</sup>, Anne Marie Whelan<sup>1</sup>*

*<sup>1</sup>College of Pharmacy, Dalhousie University, <sup>2</sup>W.K. Kellogg Health Sciences Library, Dalhousie University*

*Session description and intent:* A study designed to identify and describe information seeking behaviours and needs of pharmacists and pharmacy students in the Maritime Provinces will be presented, as well as the preliminary results and potential implications to pharmacy practice and education. The intent of the presentation is to provide a venue to discuss the study, its results, and how the results might lead to the potential for collaboration among Canadian pharmacy educators.

*Description of the project and relevance:* A self-completed online questionnaire was developed and validated to assess the health information seeking behaviours and needs of pharmacists and pharmacy students in the Maritime Provinces. The questionnaire was comprised of three main sections: 1) demographics; 2) information seeking behaviour, including access and use; and 3) information needs for changing practice and for faculty and preceptors. All pharmacists and pharmacy students were invited to complete the study. Summary statistics will be used to describe the demographics and answers to information seeking behaviour and information needs questions. Comparison among demographic groups will also be completed. The results will be used to identify gaps in the information seeking behaviours as well as information needs of pharmacists and pharmacy students and this data will be used to inform curricular decisions, continuing professional development programs, and further research in the area.

*Summary for conference program:* The ability to seek, find and utilize information at the point of need is a crucial element of evidence-based pharmacy practice. A study to assess the information seeking behaviours and needs of pharmacists and pharmacy students in the Maritimes Provinces will be presented, including preliminary results and the potential impact on curriculum, practice, and continuing professional development.

## **Previously presented**

Poster on study methodology presented by C. Kooka at College of Pharmacy/NSHA/IWK Student Research Event, Dalhousie University, Halifax, Nova Scotia, October 14, 2017.

## SESSIONS INFORMATION

2018 AFPC Canadian Pharmacy Education and Research Conference  
June 13-14 • Ottawa, Ontario

# A National Study of Education about Fetal Alcohol Spectrum Disorder (FASD) in Faculties of Pharmacy in Canada

*Nick Corbett, Jillian Breen, Michael Tiet, Sahiba Khurana, Seunga Han, Shaylin Shapka, Kevin Huang, Jack Novovic, Omar Saddik, Saleem Alsaadi, Ken Cor, Sharon Mitchell*

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

*Goals of the Presentation:* To describe the development, implementation and evaluation of a National survey to determine the quantity and quality of education about FASD in Faculties of Pharmacy across Canada.

*Relevance to Pharmacy Education:* Fetal Alcohol Spectrum Disorder (FASD) is a term used to describe a wide range of harms that may be caused by prenatal alcohol exposure. Individuals affected by FASD may face lifelong physical, developmental, behavioural, and learning disabilities, often cannot live independently, and have an alarmingly high rate of becoming involved with the criminal justice system.

FASD is common. Although it has previously been estimated to affect 1/100 Canadians, a 2018 study by Phillip May and Christina Chambers et al. regarding the prevalence of FASD among several countries, including the United States, find that rates of FASD to be as high as 5% of live births. By way of comparison, it is estimated that 4% of the populations of the G7 industrialized countries are affected by schizophrenia, bipolar disorder or recurrent major depression which are routinely covered in pharmacy curricula. The average estimated lifetime cost for supporting one individual with FASD is estimated to be CA \$1.8 million.

Pharmacists are in an ideal position to play key roles in prevention of FASD and/or support of individuals affected by FASD. To adequately fulfill these roles, it is crucial that they have access to current, evidence-based training and knowledge about FASD. The goal of this project is to determine the core educational FASD-related content in professional faculties across Canada.

*Session Summary:* The development, implementation, and results of a national survey to determine the education of pharmacy students about FASD at Faculties of Pharmacy across Canada will be presented.

## SESSIONS INFORMATION

2018 AFPC Canadian Pharmacy Education and Research Conference  
June 13-14 • Ottawa, Ontario

# Teaching Medicinal Chemistry in Canadian Pharmacy Schools – Strategies for Making Content Relevant to Pharmacy Practice

Carlos A. Velázquez-Martínez

*Faculty of Pharmacy and Pharmaceutical Sciences, University of Alberta. Edmonton, Alberta; Canada*

The implementation of PharmD curricula in Canadian Universities represents an opportunity for faculty members in Pharmaceutical Sciences to re-think teaching effectiveness across the disciplines. Topping this teaching improvement agenda is preparing student pharmacists to apply scientific principles to practice. One discipline needing attention at this time is Medicinal Chemistry. Historically, but particularly within the last two decades, medicinal chemists teaching in North American Pharmacy schools find it increasingly more difficult to overcome challenges associated with content relevance, low acceptance, and poor teaching evaluations despite being a knowledge domain unique to pharmacy education and one that differentiates pharmacists amongst health care professionals.

In September 2015, I was asked to coordinate and teach PHARM 301 (“Principles of Drug Action and Disposition”) at the Faculty of Pharmacy and Pharmaceutical Sciences. It did not take long for me to realize that I was caught between my comfort zone (a research-driven chemical laboratory) and the academic requirements of an entry level, soon-to-be pharmacy practice-oriented, undergraduate course. Consequently, in an effort to initiate the development of a PharmD-oriented medicinal chemistry course, I decided to implement significant changes to this course related to content, delivery, and scope. During my presentation at the AFPC conference, I will describe these changes, some results in terms of student and Faculty perception, as well as how this course has to offer to the first class of PharmD students starting in our program this 2018 fall term.

Finally, I will contextualize my seminar within the much broader context of the recently created SIG in Medicinal Chemistry, where we are discussing and working toward a unified front to improve the teaching of medicinal chemistry concepts in the ever-changing role of pharmacists in Canada. Whether we like it, or not, the implementation of a successful PharmD curriculum will have to deal with the demand that courses in pharmaceutical sciences adopt teaching methods that showcase application through the use of realistic, patient-centered scenarios.

## SESSIONS INFORMATION

2018 AFPC Canadian Pharmacy Education and Research Conference  
June 13-14 • Ottawa, Ontario

# Educational Leadership: Mapping and establishing impact of teaching and learning activities

*Simon P. Albon*

*Faculty of Pharmaceutical Sciences, University of British Columbia*

*Goals/Intent of the Presentation:* This oral presentation will share progress on an on-going initiative at UBC to re-conceptualize how we think about, identify, document and establish impact of teaching, learning and educational leadership activities.

*Description of the Project:* Educational leadership is becoming increasingly valued in research-intensive Universities for the improvement of teaching quality, student learning, and the student experience. Recently, UBC has addressed this issue, in part, by introducing the rank of Professor of Teaching for teaching-track and clinical faculty. Meant to mirror the rank of Professor in traditional research-track appointments, this newly-established teaching rank is accompanied by significant changes in requirements for educational leadership. While the Professor of Teaching rank has been well-received at UBC and the notion of educational leadership has generated much discussion, what it means, how to document it, and how it maps onto the teaching and learning activities of faculty remains unclear. These challenges, together with the emergence of similar approaches and ranks at other Canadian Universities, make it timely to reflect on and review our shared understandings of educational leadership, what it looks like in post-secondary contexts and how it contributes to achieving Faculty and University teaching and learning mandates. For pharmacy educators of all ranks, how we think about, identify, document, and establish impact of our educational leadership activities has important implications for student success and our professional growth and career advancement as teachers and scholars. The intent of this session is to describe an on-going project at UBC to re-conceptualize educational leadership for all faculty that teach. Drawing on work of Universitas-21 collaborators and validation efforts of a variety of groups at UBC, we have developed the educational leadership mapping (ELM) tool which allows faculty to map their teaching and learning activities by aligning dimensions of teaching activity with ways they are enacted. We have also created a Teaching and Learning Impact Framework (TLIF) for establishing educational impact and the types of evidence that can support impact claims. Initial consultations and discussions at UBC suggest that the ELM tool and TLIF offer ways to engage in more sophisticated discussions about educational leadership, documenting teaching and learning activities, and establishing evidence of impact.

*Session Summary:* How does your institution conceptualize educational leadership? How is it different from excellence in teaching and service? Who does it, how is it documented and evidenced, and what is its impact? This session will share how UBC has been wrestling with how to think about, identify, document, and establish impact of educational leadership activities for all faculty that teach. Pharmacy educators will be introduced to ELM, UBC's Educational Leadership Mapping tool and the Teaching and Learning Impact Framework (TLIF) for establishing educational impact and the types of evidence that can support impact claims. Participants will leave this session with a deeper understanding—and more nuanced view—of educational leadership and how the ELM tool and TLIF might be applied in their own contexts and institutions.



## SESSIONS INFORMATION

2018 AFPC Canadian Pharmacy Education and Research Conference  
June 13-14 • Ottawa, Ontario

# The Illusion (or Mirage) of Educational Outcomes

*Gilles Leclerc, B. Pharm. Ph. D.*

*Faculté de pharmacie, Université de Montréal*

In the past decades, educational outcomes have been presented as a panacea for reforming health science education and for improving the quality of curricula. Often presented as a practice-oriented approach appealing for professional development, outcome-based education appears, for most of us, innocuous and a pretty sensible path for faculties and institutions to engage in. But, what if educational outcomes and outcome-based education was just a mere illusion, a mirage misleading the pharmacy education community to an unavoidable deception or disillusion.

At the dawn of an all PharmD era, with the advent of revised educational outcomes and upgraded accreditation standards, a claim is made that our educational community is at an important crossroad. In fact, in its quest for quality improvement, the pharmacy educational community is under a constant pressure to perform, change, adapt, and evolve. Often staff members and faculties face these challenges with numerous other commitments, strongly restrictive deadlines, and limited resource and support. Many hoped that such eagerness and excitement around educational outcomes would lead to greater resource allocation in curricular development and program evaluation. Consequently, some changes are often driven by old habits, practical imperatives, convenient choices, trends or misleading understandings rather than by sound evidence or valid practices. Unfortunately, outcome-based education does not escape that bland reality.

In order to support this claim, this session will, first, provide a personal insight on how our commitment toward outcome-based education has changed pharmacy education, second, provide an overview of the current and upcoming challenges and issues related to outcome-based education, and finally, define conditions that must be met to avoid disillusion or deception in our educational community.

## SESSIONS INFORMATION

2018 AFPC Canadian Pharmacy Education and Research Conference  
June 13-14 • Ottawa, Ontario

# Determining Key Quality Assurance Indicators for Advanced Pharmacy Practice Experiences (APPE) Placement Site Visits

Certina Ho<sup>1,2</sup>, Aleksa Stankic<sup>2</sup>, Seo Woo Tim Hong<sup>2</sup>

<sup>1</sup> Institute for Safe Medication Practices Canada

<sup>2</sup> Leslie Dan Faculty of Pharmacy, University of Toronto

*Goals:* In order to perform effective experiential education placement site visits, there should be a standard set of key indicators to assess quality assurance (QA). There has been very limited published literature or consensus, specifically in key indicators for considerations during Advanced Pharmacy Practice Experience (APPE) site visits for QA purposes in pharmacy institutions across Canada. Our study strives to generate a consensus among experiential education faculty of Canadian pharmacy schools for the most important key indicators to be considered during APPE site visits. The objective of this session is to inform pharmacy educators a list of key QA indicators for APPE placement site visits that we identified.

*Description:* During this presentation, we will share our findings identified from the literature and through consultation with members of the Pharmacy Experiential Programs of Canada (PEP-C) via the use of a two-round Delphi online questionnaire. In particular, we will discuss the four main categories for key QA indicators that include: (1) indicators that contribute to a learning-centered environment; (2) preceptor-related indicators; (3) student-related indicators; and 4) indicators that demonstrate placement/rotation organization. Through consensus generation among PEP-C members, we are able to identify the top three critical and most appropriate indicators in each of these four categories.

*Relevance to Pharmacy Education:* This presentation is highly relevant to pharmacy education as the demand for quality APPE sites is increasing due to the offering of entry-to-practice PharmD programs by the various schools and faculties of pharmacies. Implementing a checklist of key QA indicators in assessing APPE sites for the PharmD curriculum in Canadian institutions is of high priority as we grow our experiential education programs.

*Session Summary:* There has been very limited published literature or consensus, specifically in key indicators for considerations during Advanced Pharmacy Practice Experience (APPE) site visits for quality assurance (QA) purposes in pharmacy institutions across Canada. The goals of this presentation are to share the top three critical and most appropriate indicators in each of the four main categories of key QA indicators for APPE placement site visits that were identified through consensus generation among members of the Pharmacy Experiential Programs of Canada (PEP-C).

## SESSIONS INFORMATION

2018 AFPC Canadian Pharmacy Education and Research Conference  
June 13-14 • Ottawa, Ontario

# SPECIAL INTEREST GROUPS (SIG) EDUCATION SESSIONS

## Truth & Reconciliation SIG

### 1. Indigenizing curriculum innovation in Canadian pharmacy education

*Presenter: Jaris P. Swidrovich, University of Saskatchewan*

Session overview: see abstract page 21

### 2. Incorporating the student voice when indigenizing curriculum

*Presenter: Elaine Lillie, University of Waterloo*

Session overview: In an effort to meet student needs Waterloo Pharmacy hosted a focus group with current students and alumni to elicit their views on curricular indigenization. The SIG presentation will share some preliminary findings. Our goal is to generate discussion about how programs are addressing curricular indigenization and how to make content resonate with students.

## Medicinal Chemistry SIG

### 1. Status of the special interest group in medicinal chemistry

*Presenter: Carlos A. Velázquez-Martínez, University of Alberta*

Session overview: We will present a summary of activities carried out by our SIG in the last year, as well as an overview of upcoming activities, tasks, action items and collaborative opportunities for professors in the medicinal chemistry field. This presentation will also highlight the feasibility of blending the science of Med Chem with therapeutic modules in pharmacy practice.

### 2. Overview of medicinal chemistry instruction in Canadian pharmacy programs

*Presenter: Ed Krol, University of Saskatchewan*

Session overview: This presentation is aimed at discussing the results of a recent study analyzing different teaching and evaluation strategies used in medicinal chemistry courses across Canada, and it is the basis for a proposal to standardize this discipline in Canadian PharmD programs. Moreover, once finalized, this study will be submitted as an academic research publication containing a "snapshot" of the current status of medicinal chemistry teaching, challenges and opportunities.

### 3. Synopsis of medicinal chemistry curriculum and pedagogical practices in Canadian schools of pharmacy

*Presenter: Simon Albon, University of British Columbia*

Session overview: In this presentation, the SIG will present a summary of the results obtained after a detailed analysis (a comparative study) of course syllabus of medicinal chemistry courses received from professor of all faculties and schools of pharmacy in Canada. We will discuss the different themes, topics, assessment methods and outcomes.

## SESSIONS INFORMATION

2018 AFPC Canadian Pharmacy Education and Research Conference  
June 13-14 • Ottawa, Ontario

### PEP-C Experiential Education SIG

#### 1. Survey of Atlantic Canadian hospital pharmacists preceptors: results and linkages to the Dalhousie University College of Pharmacy program evaluation strategy

*Presenters: Harriet Davies & Anne Marie Whelan, Dalhousie University*

Session overview: The objectives of this presentation are to: 1) report preliminary results from the first Atlantic Canadian hospital pharmacy preceptor survey focusing on responses from hospital pharmacists in direct patient care; and 2) describe the linkages between the survey and the Dalhousie University College of Pharmacy program evaluation strategy.

#### 2. Novel models of precepting: production of guidebooks for preceptors

*Presenter: Ann Thompson, University of Alberta*

*(Presenting on behalf of authors Michael Legal and Marianna Leung, University of British Columbia; Michelle MacDonald and Ann Thompson, University of Alberta; Katrina Mulherin, Association of Faculties of Pharmacy of Canada)*

This presentation will describe the process for creating preceptor guidebooks to aid in the use and implementation of novel models of precepting, namely, peer-assisted learning, near-peer model, and co-precepting. An update on work completed by the CanExEd Working Group #2: Novel Models of Precepting will be provided.

### Skills Lab SIG

#### 1. Survey of skills lab courses for pharmacy programs in Canada

*Presenter: Natalie Kennie-Kaulbach, Dalhousie University*

Session overview: see abstract page 22

#### 2. Learning through teaching: peer-assisted teaching across and within programs

*Presenter: Theresa L. Charrois (and Ann Thompson, Jack Novovic, Terri Schindel*

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

Session overview: The primary objective of this presentation is to describe the peer-assisted teaching and learning activities that are currently offered in the Practice Skills program at the University of Alberta. We have two distinct programs of peer-assisted teaching and learning: (1) Post-professional PharmD students and second year students, and (2) fourth-year students and second/third year pharmacy students. We will provide an overview of our training program for the student facilitators as well as early outcome data.

## SESSIONS INFORMATION

2018 AFPC Canadian Pharmacy Education and Research Conference  
June 13-14 • Ottawa, Ontario

### Assessment and Program Evaluation SIGs

- 1. Integrating validated non-academic measures for admissions selection: addressing local goals with multiple mini-interviews and national standards with situational judgment tests**

*Presenters: Harold Reiter, McMaster University; Andrea Cameron, University of Toronto; Nathalie Letarte, Université de Montréal*

Session overview: see abstract page 23

- 2. Using critical self-reflections and formative feedback to teach pharmacy students to think critically and self-assess**

*Presenter: Beverly FitzPatrick, Memorial University*

Session overview: see abstract page 24

- 3. Self-assessment: reframing the purposes**

*Presenter: Gilles Leclerc, Université de Montréal*

Session overview: see abstract page 25

### Informatics SIG

- 1. Panel: Successes and challenges in e-health related education – the student perspective**

*Moderator: Lisa Bishop, Memorial University*

*Faculty panelist:*

*Jason Min, University of British Columbia*

*Student panelists:*

*Jean-Félix Côté, Université de Montréal*

*Brett Hevenor, University of Toronto*

*Pierre Thabet, Dalhousie University*

Session overview: Technology is changing health care, with the introduction of digital records, mobile apps, e-prescribing, robotics, and artificial intelligence, to name a few. As pharmacy educators, it is our responsibility to ensure that students are appropriately prepared to practice in this technology-enabled world. This panel discussion will provide insights from students about the successes and challenges of their e-health education.

## SESSIONS INFORMATION

2018 AFPC Canadian Pharmacy Education and Research Conference  
June 13-14 • Ottawa, Ontario

# Indigenizing curriculum innovation in Canadian pharmacy education

*Jaris P. Swidrovich*

*College of Pharmacy and Nutrition, University of Saskatchewan*

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 University of Saskatchewan, specifically, has adopted Indigenization as one of its major foundational concepts and actions in its most recent University Plan.

The College of Pharmacy and Nutrition at the University of Saskatchewan identified five major goals in its most recent strategic plan. One of the five major goals identified is to increase Indigenous knowledges, voices, and practices within the College. While there have been and will continue to be considerable activity in all areas of the College, Indigenizing the curriculum is an area of high interest and ongoing commitment. In 2017, the College of Pharmacy and Nutrition received a Curriculum Innovation Fund Grant to embark on a journey to Indigenize the curriculum.

This concurrent session will illustrate the story, experience, and progress thus far in Indigenizing the curriculum in the College of Pharmacy and Nutrition. The importance of establishing and maintaining relationships with Indigenous community partners will be emphasized, as well as the criticality of performing consultations with a variety of stakeholders and how to perform such consultations. Highly actionable suggestions will be shared to assist Canadian faculties of pharmacy in progressing with Indigenization of their curriculum.

## SESSIONS INFORMATION

2018 AFPC Canadian Pharmacy Education and Research Conference  
June 13-14 • Ottawa, Ontario

# Survey of Skills Lab Courses for Pharmacy Programs in Canada

*Natalie R. Kennie-Kaulbach<sup>1</sup>, Cynthia Richard<sup>2</sup>, Theresa Charrois<sup>3</sup>, Jane Cassidy and Derek Jorgenson<sup>4</sup>*

<sup>1</sup>*Dalhousie University, Halifax Nova Scotia*

<sup>2</sup>*University of Waterloo, Kitchener Ontario*

<sup>3</sup>*University of Alberta, Edmonton Alberta*

<sup>4</sup>*University of Saskatchewan, Saskatoon, Saskatchewan*

*Goals of the Presentation:* This session will present the results of a national survey of professional practice skills lab programs in Canadian pharmacy schools that was conducted to help inform teaching practices. Discussion following the presentation will identify priority areas for further research.

*Description of the Project:* A survey was developed by the AFPC Skills Lab SIG working group to gather information regarding the structure, core activities, assessment, budget and resources for skills lab programs. An online survey was sent to voting members of the Skills Lab SIG for the ten pharmacy schools in Canada and surveys were completed between May and September 2017. Results of the survey were analyzed and summarized by the working group. All 10 pharmacy programs completed the survey. The results of the survey represent skills lab programs for Bachelor of Science, Doctor of Pharmacy and programs in transition. Results showed a significant variation in many skills lab components in programs across the country. Results were summarized for lab structure, human resources, types of activities (e.g. dispensing, pharmacy practice, calculations, physical assessment), assessment (e.g. OSCE) and program evaluation.

*Relevance to Pharmacy Education:* The final results of the project will be made available to pharmacy schools to help inform teaching and curricular design. Furthermore, this project will identify areas where further research is warranted as well as areas for collaboration across pharmacy schools.

*Session Summary:* This session presents the results of the Skills Lab SIG survey that was conducted to identify relevant information regarding the structure, human resources, core activities, assessment, and program evaluation for skills lab programs in Canadian Pharmacy Schools to help inform teaching and curricular design.

## SESSIONS INFORMATION

2018 AFPC Canadian Pharmacy Education and Research Conference  
June 13-14 • Ottawa, Ontario

# Integrating Validated Non-Academic Measures for Admissions Selection: Addressing Local Goals with Multiple Mini-Interviews and National Standards with Situational Judgment Tests

*Andrea Cameron<sup>1</sup>, Ema Ferreira<sup>2</sup>, Gilles Leclerc<sup>2</sup>, Nathalie Letarte<sup>2</sup>, Isabelle Lafleur<sup>2</sup>, Harold Reiter<sup>3</sup>, Kelly Dore<sup>3</sup>, Chris Zou<sup>4</sup>*

*<sup>1</sup>University of Toronto, <sup>2</sup>Université de Montréal, <sup>3</sup>McMaster University, Hamilton, <sup>4</sup>Altus Assessments, Toronto*

The AFPC Educational Outcomes 2017 demand personal and professional development, including key elements of student self-awareness, leadership, and professionalism. Other non-academic skills supporting the outcomes include collaboration, cultural sensitivity, communication, empathy, and behaviours development. Over the last 15 years, validated measures of non-academic skills were developed and implemented in the selection of applicants for admission to health professions. Both Multiple Mini-Interview (MMI) and Situational Judgment Tests (SJTs) demonstrate incremental predictive validity for outcome measures reflecting professional skills not otherwise predicted by cognitive measures like grade point average. The authors propose, based on recent literature (Reiter, *Eva Academic Medicine* 2017;Epub), that pharmacy schools consider complementary use of MMIs to address unique non-academic local goals and SJTs to address common non-academic national standards. Experience with both instruments will be discussed.

In 2010, Leslie Dan Faculty of Pharmacy, University of Toronto was one of the first pharmacy schools to use the MMI for undergraduate student selection, and has published correlations with subsequent performance on Canadian national pharmacy licensure examinations (Cameron et al, *Medical Education* 2017; 51(4)379-389). In 2017, Faculté de Pharmacie, Université de Montréal was the first pharmacy school to use an online, video-stem, constructed-response SJT, called Computer-based Assessment for Sampling Personal characteristics (CASPer). A study of CASPer correlation with Canadian medical national licensure was recently published (Dore et al, *AHSE* 2017;22(2)327-336); a validation study protocol at Faculté de Pharmacie, Université de Montréal is presently ongoing. Data regarding diversity implications of both MMI and CASPer implementation is available from American, and to a lesser extent, Canadian schools.

MMI use between different schools has demonstrated marked differences in reliability, predictive validity, and diversity, reflecting a tendency of schools to model their MMI upon their local mission statement. In contrast, SJT is feasible at low cost and with high access when implemented on a large national scale.

*Summary description for program:* Both multiple mini-interviews (MMIs) and situational judgment tests (SJTs) have been implemented at Canadian pharmacy schools in recent years to better select students to align with the non-academic AFPC Educational Outcomes 2017 of personal and professional development, student self-awareness, leadership, collaboration, cultural sensitivity, communication, empathy, and behaviours development. Emerging data on MMI and SJT correlation with other measures, group effects (diversity), and test feasibility promote the concept of complementary use of MMIs to address unique non-academic local goals and SJTs to address common non-academic national standards.



## SESSIONS INFORMATION

2018 AFPC Canadian Pharmacy Education and Research Conference  
June 13-14 • Ottawa, Ontario

# Using critical self-reflections and formative feedback to teach pharmacy students to think critically and self-assess

*Beverly Fitzpatrick<sup>1</sup>, Justin Peddle<sup>1</sup>, Tiffany Lee<sup>1</sup>, Terri Genge<sup>1</sup>, Ary Pevida<sup>1</sup>, Karina Arnold<sup>1</sup>, Amy Clarke<sup>1</sup>, Carla Dillon<sup>1</sup>, Henry Schulz<sup>2</sup>*

*School of Pharmacy<sup>1</sup>, Faculty of Education<sup>2</sup>, Memorial University*

*Goal of presentation:* To discuss an intervention that used critical self-reflections to improve critical thinking and self-assessment skills of pharmacy students.

*Project description:* We conducted a two year study with two cohorts of pharmacy students to improve critical self-reflective skills. The first cohort started the project in year 1 of their program and continued in year 2. The second cohort started in year 3 and continued in year 4. Students wrote eight self-reflections in an electronic portfolio over four semesters. They were given written formative feedback after each reflection, with the exception of the first one. They were also given formative feedback in the form of explicit instruction that used student work as exemplars between each reflection, starting after the second reflection.

Reflections were scored using a seven-component rating scale, and student learning was determined through quantitative analysis of the scores across the eight reflections. Students improved from their first to their final self-reflections in all components, including critical thinking, self-assessment, and meta-cognition.

Qualitative analysis revealed that some students valued the formative feedback and thought it improved their learning, but others, regardless of their improvement, did not like writing self-reflections or receiving formative feedback.

*Relevance to pharmacy education:* It is essential to explicitly teach students to self-reflect as part of critical thinking. Students who think critically are stronger students, and self-reflection is part of being a practising pharmacist. Critical self-reflection has been associated with student development of critical thinking skills. Students learning to self-assess improves their metacognition and helps them with self-regulation as they learn to set individual goals and develop independent strategies for improvement.

*Summary:* This session will describe how we used critical self-reflections to teach pharmacy students to self-assess and think critically. Examples of self-reflection prompts, rating scales, student work, and student quotes that represent their thoughts about this teaching and learning approach will be discussed.

## SESSIONS INFORMATION

2018 AFPC Canadian Pharmacy Education and Research Conference  
June 13-14 • Ottawa, Ontario

# Self-Assessment: Reframing the Purpose

*Gilles Leclerc, B. Pharm. Ph. D.*

*Faculté de pharmacie, Université de Montréal*

Criticisms of self-assessment regularly surface in publications or are often overheard in our classrooms, offices and clinical units. Repeatedly attacking the reliability and utility of such assessment approach. Consequently, in our curricula, the use of self-assessment is often sparse and its perceived value essentially negligible. But in fact, what exactly is self-assessment and what role should it play within our outcome-based pharmacy curricula.

By building on cognitive and motivational theories, this session will explore, first, how learners and professionals engage in self-assessment, second, how numerous unconscious patterns may forge the learners' self-perception and self-regulation capacities, and, finally, it will reflect on the role of metacognition to enhance students' and professionals' self-assessment capacities.

Inspired by painters artistic process, a new conceptual approach to self-assessment and self-assessment use in pharmacy education will be submitted to attendees for comments and review.

## SESSIONS INFORMATION

2018 AFPC Canadian Pharmacy Education and Research Conference  
June 13-14 • Ottawa, Ontario

# AFPC 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. See [CPERC 2018 Sessions Information](#) document on the AFPC website for details and discussion questions for each roundtable.

**Moderator:** *Kenneth Manson, University of Waterloo*

### **Table #1: Keeping curriculum current**

*Facilitators: [Rosemary Killeen](#), University of Waterloo; [Nardine Nakhla](#), University of Waterloo*

### **Table #2: Remediation approaches**

*Facilitators: [Gilles Leclerc](#), Université de Montréal; [Tom McFarlane](#), University of Waterloo*

### **Table #3: Innovative approaches to teaching**

*Facilitators: [Natalie Crown](#), University of Toronto; [Carlos A. Velázquez-Martinez](#), University of Alberta*

### **Table #4: Incorporation of new AFPC outcomes**

*Facilitators: [Jamie Kellar](#), University of Toronto; [Jaris Swidrovich](#), University of Saskatchewan*

### **Table #5: Transition to academic life**

*Facilitator: [David Edwards](#), University of Waterloo*

### **Table #6: Graduate programs for pharmacists**

*Facilitators: [Patricia Gerber](#), University of British Columbia; [Julie Methot](#), Université Laval*

### **Table #7: Strategies for interprofessional education and collaborative learning**

*Facilitators: [Della Croteau](#), University of Toronto; [Elaine Lillie](#), University of Waterloo*

### **Table #8: Humanities in pharmacy education**

*Facilitator: [Beverly FitzPatrick](#), Memorial University; [Allan Peterkin](#), University of Toronto*

## SESSIONS INFORMATION

2018 AFPC Canadian Pharmacy Education and Research Conference

June 13-14 • Ottawa, Ontario

### Table 1      **Keeping Curriculum Current**

**Facilitators:**      **Nardine Nakhla, PharmD, RPh**

Clinical Lecturer  
School of Pharmacy  
University of Waterloo

**Rosemary Killeen, BScPhm, PGCert, RPh**

Director, Distance Education and Continuing Professional Development  
School of Pharmacy  
University of Waterloo

#### **Overview:**

The pharmacy profession seems to be perpetually in a state of evolution. The Canadian regulatory environment with scopes of practice varying widely by province or territory adds to the complexity of educating and training new pharmacists. Medical and pharmacy literature is expanding at an ever increasing rate, with approximately 500,000 new PubMed records added each year. Against this backdrop, how do we keep our curricular content current and relevant to ever-shifting pharmacy practice environments?

Are students being adequately tested on emerging issues on their entry-to-practice assessments? What's the right balance between what's required vs. what's useful for today's practice settings?

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. What sources or strategies do you use in your faculty/school to keep the curriculum updated? How do you deal with emerging issues such as MAiD or scope of practice changes? (e.g., attending conferences, course evaluations, discussion groups with your peers, monitoring social media #FOAMED etc.)
2. Have you ever taught a course or given a presentation and received feedback that your content was outdated? How did you respond?
3. Have you ever attended a presentation or read a recently published article where you knew the content was out of date? How did you approach the subject with the author/presenter/editor?
4. Does your institution have any mechanism for utilizing clinical preceptors to assist in teaching or exposing students to emerging topics? Do you incorporate feedback from your clinical preceptors regarding students' knowledge of emerging issues?
5. What input/feedback does your faculty/school collect from external stakeholders re: the applicability of curricular elements in practice e.g., pharmaceutical sciences or emerging issues?

## SESSIONS INFORMATION

2018 AFPC Canadian Pharmacy Education and Research Conference  
June 13-14 • Ottawa, Ontario

### **Table 2      Remediation Approaches**

**Facilitators:**      **Thomas R.J. McFarlane, BScPhm, PharmD, RPh**

Clinical Lecturer  
Faculty of Science, School of Pharmacy  
University of Waterloo

**Gilles Leclerc, B.Pharm., Ph. D.**

Conseiller en évaluation et en intégration technopédagogie  
Faculté de pharmacie  
Université de Montréal

#### **Overview:**

Students' academic success is affected by many factors, making academic difficulties increasingly prevalent in higher education. Moreover, many barriers limit the development of remedial programs and affect students persistently in such programs. Literature suggests that identifying struggling students early, using proactive strategies to help them adopt methods supportive of academic success, and facilitating self-directed learning by combining academic counseling and mentoring have shown promise and should be considered as best practices. Nonetheless, the lack of data and evidence in pharmacy education on the prevention and detection of academic difficulties and on the efficiency of remedial approaches still poses a dilemma - how to respond efficiently to pharmacy students' remedial needs and to foster their academic and professional development. The efficiency of current remediation approaches need to be further evaluated to determine their impact on struggling students' academic and professional progression. Evidence is needed to determine conditions that would support the tailoring of individualized approaches to remediation. Such data would assist programs in developing efficient remedial programs.

#### **Discussion Questions:**

1. What would be valid criteria for probation and dismissal decisions?
2. Describe the characteristics of successful preventive approaches to probation and of effective detection methods of struggling students.
3. Provide insight on remedial approaches used in your schools - what are or would be the conditions for the instalment of efficient remedial approaches? What evidence would provide sufficient confidence in remedial approaches?
4. How do we reconcile students' remedial needs and barriers to remediation programs?
5. How can we support individualized remediation approaches for students on academic probation?
6. Have you in your institution done any evaluation of remedial programs? How did you do this and what did you find?

## **Table 3      Innovative Approaches to Teaching**

**Facilitators:**      **Carlos A. Velazquez, Ph.D.**

Associate Professor; Chair Special Interest Group in Medicinal Chemistry  
Faculty of Pharmacy and Pharmaceutical Sciences  
University of Alberta

**Natalie Crown, BScPhm, PharmD**

Assistant Professor  
Clinician Educator  
Leslie Dan Faculty of Pharmacy  
University of Toronto

**Overview:**

Institutions undergoing curricular change must develop organizational strategies that effectively evaluate and inform the improvement of core educational elements believed to be critical for student development. As Faculties and Schools of Pharmacy in Canada implement or update curriculum changes toward PharmD programs, assessing the extent to which such curriculum promotes practice readiness, requires careful consideration of innovative approaches to teaching.

The Canadian Council for Accreditation of Pharmacy Programs (CCAPP) requires the use and integration of teaching technologies that support the needs and learning preferences of diverse learners. However, these technologies are not always used in a systematic (or integrated) way by all Faculty, despite that Teaching & Learning Technologies (TLT) may be increasingly essential for a new generation of learners entering undergraduate programs. Nevertheless, we could argue whether or not these TLT are innovative (or useful) enough to satisfy the profile of students who have grown up with technology, and expect greater collaborative and experiential learning. We will discuss these and other topics related to innovative approaches to teaching, including TLTs.

**Discussion Questions:**

1. What is your definition of “innovative” when it comes to approaches to teaching and learning?
2. What are some of the innovative approaches currently used in your classroom?
3. What are your faculty’s/school’s success stories about innovative approaches to teaching and learning?
4. What direction would you like to see the AFPC take?

## SESSIONS INFORMATION

2018 AFPC Canadian Pharmacy Education and Research Conference

June 13-14 • Ottawa, Ontario

### Table 4 Incorporation of New AFPC Outcomes

**Facilitators:** **Jamie Kellar, RPh, BSc.HK, BSc.PhM, Pharm.D**

Assistant Professor – Teaching Stream

Acting Director, Doctor of Pharmacy Program

Leslie Dan Faculty of Pharmacy

University of Toronto

**Jaris Swidrovich, BSP, PharmD**

Lecturer

College of Pharmacy and Nutrition

University of Saskatchewan

**Overview:**

In the 2017 publication of the AFPC Educational Outcomes for First Professional Degree Programs in Pharmacy in Canada, the following special note is found on page seven:

AFPC recognizes that Canada is a society of diverse peoples and all peoples are entitled to access to compassionate, empathetic, culturally safe pharmacy care. AFPC also acknowledges that the health inequities among Canada's Indigenous peoples require special consideration in curriculum design and delivery. Therefore, the Association of Faculties of Pharmacy of Canada is committed to a national, special and significant reconciliatory response to the **Calls to Action** during the lifespan of the AFPC Educational Outcomes for First Professional Degree Programs in Pharmacy in Canada 2017.

Accordingly, by implementing the AFPC Educational Outcomes 2017, 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.

**Discussion Questions:**

1. Where is your faculty at in terms of incorporating educational outcomes related to the Calls to Action from the Truth and Reconciliation Commission of Canada?
2. What challenges exist for faculties in incorporating educational outcomes related to the Calls to Action from the Truth and Reconciliation Commission of Canada?
3. What ideas, strategies, and suggestions do you have for faculties to incorporate these new educational outcomes?

## **Table 5      Transition to Academic Life**

**Facilitator:**      **David Edwards, BScPharm, PharmD, MPH, FCCP**

Hallman Director and Professor

School of Pharmacy

University of Waterloo

### **Overview:**

The transition from being a student, post-doc or adjunct faculty member to a full-time academic position can be challenging. Most academic positions require contributions to research, teaching and service and it is not uncommon for new faculty members to have expertise in one of these areas but little experience or training in other areas. The reward system in academia, particularly in research-intensive universities, is also not always fully aligned with the job responsibilities of faculty members who have a significant clinical role or whose primary interest is teaching. Finally, the importance of mentorship to success in academic life cannot be overstated. Universities have made significant strides over the years in providing faculty development opportunities but getting good advice from a trusted mentor remains an important key to making the transition to academic life.

### **Discussion Questions:**

1. Does your job description clearly outline in writing the responsibilities, expectations and distribution of effort of your academic position? Are the expectations realistic?
2. How is performance evaluated? Are the criteria used for the annual performance review consistent with your job description? Does the School/College/Faculty value what you are doing?
3. Does the School, College, Faculty have a formal or informal mentorship program to support the transition to academic life? What resources does the university have to foster your development as a faculty member?
4. Are the requirements for promotion and tenure clear? Can they realistically be achieved given your teaching load and other requirements of the position?
5. What is the value of a sabbatical? What is the best time to take a sabbatical? How can a well-planned sabbatical support your continued growth as a faculty member?



## SESSIONS INFORMATION

2018 AFPC Canadian Pharmacy Education and Research Conference

June 13-14 • Ottawa, Ontario

### Table 6 Graduate Programs for Pharmacists

**Facilitators:** **Patricia Gerber, B.Sc.(Pharm), ACPR, Pharm.D., FCSHP, RPh**  
Associate Professor; Director, Graduate Doctor of Pharmacy Program  
Faculty of Pharmaceutical Sciences  
University of British Columbia  
Email: [patricia.gerber@ubc.ca](mailto:patricia.gerber@ubc.ca)

**Julie Méthot, B.Pharm, Ph.D.**  
Professeure agrégée, Directrice du programme de Maîtrise en pharmacothérapie avancée  
Faculté de pharmacie, Université Laval  
Email: [julie.methot@pha.ulaval.ca](mailto:julie.methot@pha.ulaval.ca)

#### Overview:

For some Canadian faculties/schools of pharmacy, entry-to-practice programs have changed from offering baccalaureate to offering doctorate degrees, for others plans are underway to make this change. In addition, pharmacy practice residency programs across the country are evolving, pharmacists' roles are expanding, and practice is advancing. There are new opportunities for advanced practice training.

Some Canadian faculties/schools of pharmacy are at various stages of planning, developing, implementing, and/or running new programs for pharmacists in practice (e.g., Clinical Master's, Informatics and Health Administration, etc.). The purpose of this roundtable discussion is to ascertain what programs exist, explore current efforts, successes, and challenges in developing new programs, and opportunities to support collaboration.

#### Discussion Questions:

1. What degree programs does your faculty/school currently offer?
  - a) Who are these aimed at?
  - b) How many students?
  - c) How is the program structured (e.g., format, duration, courses)?
  - d) Successes/challenges?
2. What degree programs is your faculty's/school planning to offer in the next 3-5 years?
  - a) Who are these aimed at?
  - b) How many students?
  - c) How is the program structured (e.g., format, duration, courses)?
  - d) Successes/challenges?
3. Accreditation: How? When? What is required?
4. What gaps and opportunities to support collaboration exist?

## SESSIONS INFORMATION

2018 AFPC Canadian Pharmacy Education and Research Conference  
June 13-14 • Ottawa, Ontario

### **Table 7 Strategies for Interprofessional Education and Collaborative Learning**

**Facilitators:** **Della Croteau RPh, BSP, MCEd**

Interprofessional Education Coordinator  
Leslie Dan Faculty of Pharmacy  
University of Toronto

**Elaine Lillie, MA, BEd, MBA**

Director, Interprofessional Education and Curriculum Development  
School of Pharmacy  
University of Waterloo

**Overview:**

One of the newer AFPC outcomes is that of Collaborator. "As Collaborators, pharmacy graduates work collaboratively with patients and intra- and inter-professional teams to provide safe, effective, efficient health care, thus fulfilling the needs of the community and society at large." Pharmacy students are expected to work effectively with members of the health team including patients, pharmacy colleagues and individuals from other professions, as well as to be able to hand over the care of a patient to other pharmacy team members and non-pharmacy team members to facilitate continuity of safe patient care.

As pharmacy faculty, our challenge is to create opportunities for students to develop and demonstrate these skills through interprofessional education and collaborative learning. All faculties have incorporated interprofessional education learning activities within their curricula, and this varies depending on the university and opportunities available for interprofessional education.

**Discussion Questions:**

1. Let's start with the positives. We'd like everyone to share something you've done in your program that you'd consider an IPE success story. Small victories welcome. What made it successful? How were you able to make it work?
2. Describe some challenges that you're dealing with and how you're working to overcome them. (Some examples: logistics, differences in Accreditation requirements between faculties, old practitioners vs new standards, ....)
3. How do you assess students' IPE competency? How satisfied are you that it captures their skill? Are all competencies adequately measured? How do students know if they are developing collaborative skills?

## SESSIONS INFORMATION

2018 AFPC Canadian Pharmacy Education and Research Conference

June 13-14 • Ottawa, Ontario

### **Table 8      Humanities in Pharmacy Education**

**Facilitators:      Beverly FitzPatrick, PhD**

Assistant professor

School of Pharmacy

Memorial University

**Allan D. Peterkin, MD, FCFP, FRCP**

Professor of Psychiatry and Family Medicine

Head, Health, Arts and Humanities Program and UGME/Post-MD Studies Humanities Lead

University of Toronto ([www.health-humanities.com](http://www.health-humanities.com))

Senior Fellow, Massey College, Toronto, ON

**Overview:**

The humanities examine human interactions and the social and natural forces that constantly influence and transform society, offering students opportunity to learn to succeed and adapt in an ever changing world. Academic disciplines within the humanities include languages, literature, philosophy, history, geography, anthropology, religion, art, the classics, musicology, the performing arts.

Through the humanities we can learn how to think creatively and critically, to reason, and to ask questions. The humanities provide an ideal foundation for exploring and understanding the human experience. For example, learning philosophy might get us thinking about ethical principles, learning about other cultures might steer us into thinking about diversity.

The purpose of this roundtable discussion is to discuss the role of the humanities in pharmacy education and how the humanities might positively influence professionalism and patient care, as well as other aspects of pharmacy education.

**Discussion Questions:**

1. How much are the humanities a requirement for admission in your school? How much should they be? What are the challenges in making the humanities an important pre-requisite?
2. What are faculty attitudes towards the humanities? How much understanding do faculty have of the humanities? If the attitude is less than optimal, how can we change this?
3. What are students' attitudes towards the humanities? What has influenced their attitudes? If the attitudes are less than optimal, how can we change this?
4. What should the humanities look like in pharmacy education?
5. What do the humanities have to do with professionalism or patient care?