Association of Faculties of Pharmacy of Canada

CPERC 2021 Virtual Conference

June 1-17

PROGRAM

CPERC 2021 Table of Contents
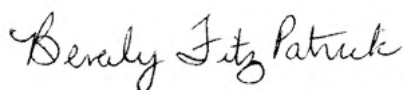
Welcome to CPERC 2021

On behalf of the AFPC Board of Directors, Council of Deans and Council of Faculties, we are very pleased to welcome you to our first virtual Canadian Pharmacy Education and Research Conference. These past 15 months have been exceptionally challenging for faculty, students, staff and our families, as we coped with the challenges of a global pandemic. Although we will miss seeing our colleagues and friends in person, CPERC 2021 provides many opportunities to virtually learn and share.

The conference has over 20 hours of programming, scheduled over 11 sessions from June 1-17. The 74 speakers and moderators will share innovations and research in pharmacy education, discuss current challenges and exchange ideas. Highlights include:

✓ Opening session on Equity-Diversity-Inclusion and Anti-Racism, featuring keynote speaker, Dr. Sean Wharton, faculty updates and discussion on AFPC's draft statement and action plan.

✓ Half-day Program Evaluation Symposium on June 9, co-hosted by Université Laval and Université de Montréal, and featuring keynote speaker Dr. Danielle Blouin, Queen's University (program attached)

✓ Faculty Updates on Innovation in Education

✓ Indigenous Initiatives across Canada's Schools of Pharmacy – Practical Tips to Aid Implementation, hosted by the AFPC Truth & Reconciliation SIG

✓ AFPC-UBC Academic Electronic Health Record (aEHR) Project

✓ 3 Mini Sessions and 3 AFPC Special Interest Group (SIG) Sessions

We trust that you will enjoy the conference, are able to attend many of the sessions, and are energized by the stimulating discussions and exciting innovations in pharmacy education shared by your colleagues. If you miss any presentations, they will be available as recorded sessions.

We're looking forward to reconnecting again with our friends and colleagues next June in St. John's, Newfoundland and Labrador, for CPERC 2022, co-hosted by Memorial University and Dalhousie University.

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AFPC President 2020-2021

Janet Cooper
AFPC Executive Director

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PEP-C Experiential Education SIG
Asal Taheri
University of British Columbia

Program Evaluation SIG
Isabelle Lafleur (July – December 2020)
Université de Montréal

Ken Cor (January - June 2021)
University of Alberta

Self-Care Therapeutics & Minor Ailments SIG
Emily Black
Dalhousie University

Skills Lab SIG
Ali Reza Ladak
University of British Columbia

Social and Administrative Pharmacy SIG
Jason Perepelkin
University of Saskatchewan

Truth and Reconciliation SIG
Jaris Swidrovich
University of Saskatchewan

AFPC Academic Electronic Health Record (aEHR) Working Group
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Jason Min, Co-chair
University of British Columbia

AFPC Opioid Working Group
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Association of Faculties of Pharmacy of Canada

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CPERC 2022

June 2022 | St. John's, Newfoundland

Co-hosted by:

MEMORIAL UNIVERSITY

DALHOUSIE UNIVERSITY

CPERC 2021 WEEK 1: June 1-4

Equity-Diversity-Inclusion and Anti-Racism

Tuesday, June 1: 1330-1530 h EDT

One of the strategic goals in the Association of Faculties of Pharmacy of Canada's (AFPC) Strategic Plan 2020-2025 is "To champion culturally safe, diverse and accessible pharmacy education for all". Over the past year, anti-black and anti-Asian violence, along with Black Lives Matter protests, focused our attention on racism embedded within the fabric of our society. We recognize that systemic barriers exist within universities. These need to be addressed through education, policy, curricular innovation, research and advocacy for equity, diversity and inclusiveness (EDI).

The keynote speaker is Dr. Sean Wharton. He is the Medical Director of the Wharton Medical Clinic and an Adjunct Professor at McMaster University and York University. In addition, Dr. Wharton obtained his BScPhm and PharmD degrees at the University of Toronto and a hospital pharmacy residency at the Ottawa General Hospital. Dr. Wharton is involved in activism to achieve health equity in Canada.

This session will include six updates highlighting pharmacy schools' endeavours to strengthen diversity, inclusion, cultural safety and equity. AFPC's draft statement and initiatives to support faculties' EDI and anti-racist efforts will be discussed.

Welcome to CPERC 2021

- *Janet Cooper, AFPC Executive Director*
- *Beverly FitzPatrick, Memorial University, AFPC President 2020-2021*

Moderators

- *Lalitha Raman-Wilms, University of Manitoba*
- *Michael Coughtrie, University of British Columbia*

Keynote Presentation: Bias and Systemic Racism in Healthcare

- *Dr. Sean Wharton, Medical Director, Wharton Medical Clinic, Burlington, ON*

   Dr. Wharton has his doctorate in Pharmacy and Medicine at the University of Toronto. He is the medical director of the Wharton Medical Clinic, a community based internal medicine weight management and diabetes clinic. He is an adjunct professor at McMaster University in Hamilton and York University in Toronto. He is also academic staff at Women's College Hospital and clinical staff at the Hamilton Health Sciences. Dr. Wharton's research focuses on bariatric medicine and type 2 diabetes. He is the co-lead author of the Canadian Obesity Guidelines.

   Dr. Wharton is involved in activism to achieve health equity in Canada. He founded the BMSA (Black Medical Students Association) at the University of Toronto in 2000. The BMSA is now a recognized mentorship organization across Canada.

Faculty Updates

1. Actions from UBC Pharmaceutical Sciences on Anti-racism and EDI Initiatives

    - *Brent Page, University of British Columbia*

      UBC's Faculty of Pharmaceutical Sciences has undertaken several recent initiatives to build our anti-racism and EDI capacity. These include a balance of grass-roots EDI initiatives, direct actions led by senior leadership, and efforts to implement change on a university-wide scale through UBC's Inclusiveness Action Plan. We have identified that the growth of our Faculty's EDI committee, as well as the move towards online workshops and seminars, have made major impacts towards strengthening our voices within the EDI space. Some ongoing priorities and next steps forward will also be discussed.

2. Equity, Diversity and Inclusion at the University of Alberta Faculty of Pharmacy and Pharmaceutical Sciences

    - *Ken Cor & Ravina Sanghera, University of Alberta*

      As issues of equity, diversity and inclusion (EDI) have emerged as a strategic priority in how the Faculty operates and runs its educational programs, the Faculty of Pharmacy and Pharmaceutical Sciences at the University of Alberta struck its first official EDI Advisory Committee in January of 2021. The committee has since approved its first official terms of reference that identifies that the committee will work towards developing a workplace and learning environment where values related to EDI are a shared responsibility and become integrated into all aspects of our work. Current and future initiatives of the committee will be presented.

3. Linking our Values of Equity, Diversity and Inclusion into our Strategic Priorities

    - *Lalitha Raman-Wilms, University of Manitoba*

      A core value underpinning the College of Pharmacy 's 2018-2023 Strategic Plan is a commitment to Equity, Diversity and Inclusion (EDI). Although EDI principles are embedded in all of our priorities, during this session, we will share the foundations of this commitment at the College and Faculty level including the development of EDI and anti-racism policies, and specific strategies undertaken with respect to faculty recruitment and retention.

4. Incorporating EDI during the Hiring of Faculty and Staff

    - *Lisa Dolovich & Tara Snyder, University of Toronto*

      This update will share processes and practices used to consider equity, diversity and inclusion when hiring faculty and staff. We will provide descriptions of advertising processes, the request for information from candidates before and during the interview, choosing and education of the hiring committee, meetings held as part of the interview process (for faculty), and reporting requirements of the search process. Challenges and benefits of these processes and practices will also be discussed.

5. Social Responsibility and Cultural Humility

    - *Beverly FitzPatrick, Memorial University*

      Memorial University's 4th year course titled Social Justice and the Pharmacist has a strong focus on equity, diversity and inclusion. The students learn these principles through Canadian examples of intersectionality theory, from historical to present day intersections of race, class and gender. Students were sometimes surprised and disturbed by what they learned about particular Canadian contexts, as expressed by one student, "I found much of the text not only eye opening but shocking". Students came to an increased understanding of their own privilege and the implications for their roles as pharmacists.

6. Using Narrative Medicine as a Framework to Discuss Empathy, Diversity and Equity with Pharmacy Students

- *Jeffrey Wong, University of Waterloo*

  Narrative Medicine is the practice of absorbing, interpreting and utilizing the stories of our patients to provide care. This framework provides a novel approach to discuss the topics of diversity and equity with students. In 2020, we ran an elective course for 4th year students that focused on strengthening their "empathy muscle" by learning how to listen to narrative. Poems, podcasts, novels and documentaries provided the creative material needed to spark discussion and reflection in weekly small group meetings. This talk will convey the evolution of how we use to teach about diversity and how we plan to move forward.

AFPC's Draft Statement and Actions on EDI & Anti-Racism

- *Janet Cooper, AFPC Executive Director*

  One of the goals under the Pharmacy Education priority in AFPC's 2020-2025 Strategic Plan is related to EDI: 1.3. To champion culturally safe, diverse and accessible pharmacy education for all. Examples of actions to achieve this strategic goal include:

  - Advance equity, diversity and inclusion through dialogue and collaboration among pharmacy faculties, organizations and stakeholders to identify systemic discrimination and strategies for change.
  - Drive Indigenous curriculum development by engaging faculty members and providing resources in response to the Truth and Reconciliation Commission Calls to Action
  - Identify best practices for recruitment and retention of students from equity-seeking groups.

  The AFPC Councils have drafted a position statement on equity-diversity-inclusion and anti-racism. The draft will be presented for feedback at the session.

Discussion & Wrap-up

AFPC Special Interest Group Session: Skills Lab SIG and PEP-C Experiential Education SIG

Wednesday, June 2: 1300-1445 h EDT

See abstracts in Appendix B, pages 24-28.

Moderators

- *Ali Reza Ladak, University of British Columbia*
- *Asal Taheri, University of British Columbia*

Use of Virtual Interactive Cases (VIC) in a Third-Year Pharmacy Skills Lab for Discharge Medication Reconciliation

- *Karen Cameron & Naomi Steenhof, University of Toronto*

Clinical Decision-Making: What Can We Learn from Indecisive Students?

- *Theresa Charrois, University of Alberta*

"Good job!" Feedback Training for Simulation Lab Instructors

- *Debbie Kwan, University of Toronto*

Developing a Novel Interprofessional Collaborative Practicum

- *Jason Min, University of British Columbia*

International Partnership on Experiential Education: A Toronto Experience

- *Certina Ho, University of Toronto*

Mini Sessions #1

Thursday, June 3: 1400-1530 h EDT

See abstracts in Appendix B, pages 29-32.

Moderator

- *Nardine Nakhla, University of Waterloo*

Learning to Give the Best of You, Instead of What's Left of You: An Active Learning Activity on Healthcare Provider Burnout for Pharmacy Students

- *Heidi Fernandes, University of Waterloo*

Understanding How Failure is Productive

- *Naomi Steenhof, University of Toronto*

Helping Pharmacy Students Use Social Media Platforms Professionally: The Pharmacy Digital Tattoo Project

- *Patricia Gerber, University of British Columbia*

Lessons Learned from Implementation of an Online Social Learning Platform in Pharmacy Experiential Education

- *Maria Zhang & Karen Cameron & Sameera Toenjes, University of Toronto*

Faculty Updates on Innovation in Pharmacy Education

Friday, June 4: 1100-1230 h EDT

Faculty members from across Canada will provide 7-minute updates on an innovative initiative at their university, with time for Q&A.

Moderators

- *Marie-Laurence Tremblay, Université Laval*
- *Kerry Wilbur, University of British Columbia*

1. Longitudinal Interprofessional Education

- *Erin Davis, Memorial University*

    Memorial University's School of Pharmacy has had a long-standing relationship with Memorial's Centre for Collaborative Health Professional Education (CCHPE). The CCHPE works with several Schools and Faculties at Memorial to provide interprofessional education. Pharmacy students participate in a number of condition-specific stand-alone modules including HIV care and Mental Health. More recently, the CCHPE, in collaboration with the participating academic units, has developed a longitudinal series of interprofessional modules focused on team dynamics, where students meet with the same

interprofessional group for 4 modules over a two-year period.

2. Sexual and Reproductive Health (SRH) Education in Pharmacy Curriculum

- *Nese Yuksel, University of Alberta*

  This presentation will discuss the spectrum of sexual and reproductive health (SRH) education in pharmacy curriculum, highlighting the importance of SRH on a global level. It will highlight our experience in the development of a new sexual and reproductive health course and how aspects of SRH are threaded throughout the curriculum.

3. Entering into a New PHASE (Pharmacy Students as Educators)

- *Fong Chan, University of British Columbia*

  This session will provide an update of the PHASE (Pharmacy Students as Educators) Program. This program, which fosters pharmacy students' roles as future educators, has been embedded in the UBC Entry-to-Practice Doctor of Pharmacy curriculum. PHASE provides fundamental educational principles in the form of didactic sessions and online modules. As well, it provides opportunity for practical application of these principles during academic-half day sessions and an elective teaching practicum. A comparison of the face-to-face versus virtual versions will be discussed as we pivoted online during the COVID pandemic.

4. Integrating Seminars

- *Yvonne Shevchuk, University of Saskatchewan*

  During year 4 placements it is easy to lose contact with students. Often the only contact is to provide support and remediation for students who are struggling. We have developed a structured touchpoint (Integrating seminar) mid-year for our students where we provide opportunities for both feedback and learning to all of the students. The activities involved a written reflection on a challenging situation experienced during a rotation and the opportunity to share and discuss this challenge with a small group of peers and, completion of a CPD of their choice. Use of the Canvas on-line platform provided a straightforward way to carry out these activities.

5. Implementing a Remote, Asynchronous, Two-Stage Therapeutics Exam

- *Michael Beazely, University of Waterloo*

  A two-stage exam is an active learning strategy that capitalizes on student engagement at the time of exams. Students write an exam as usual (stage 1) and immediately afterwards, work together in small groups to complete a second exam (stage 2). The second exam can consist of the same questions, different questions, or both. In 2020, we ran two-stage exams in an upper-year therapeutics course online. Over 70% of the students agreed with the statement "I learned a lot from my groups discussions" and, surprisingly, a majority indicated that the two-stage exam worked well online.

6. Entrustable Professional Activities (EPA) Evaluation in Experiential Learning, Basics and Challenges

- *Anne-Julie Frenette, Université de Montréal*

  Implementation of EPA in experiential learning is meant to evaluate student competencies in real clinical settings and uses a lexical field meant to reach clinical preceptors in their reality. Clear definition of evaluated activities is however warranted and should reach agreement between users of different specialties. Decoupling supervision levels from self-confidence and natural ability to delegate is also challenging.

7. Adapting a Skills-Based Simulation Course to a Virtual Setting

- *Naomi Steenhof, University of Toronto*

  Many pharmacy educators struggled with converting their previously in-person courses to a virtual format during the COVID-19 pandemic. The process has perhaps been most challenging for educators who teach in simulation-based professional practice labs. This 7-minute talk will provide an overview of converting a 240 student, third-year pharmacy course to a virtual setting. We will discuss choosing virtual platforms, supporting students, training staff, educating clinical instructors, partnering with standardized patients and adapting assessment materials. We will also address several serendipitous benefits of 'going virtual' and how we plan to leverage this new knowledge in future iterations of the course.

8. Fostering and Investigating Collaborative Learning in Virtual and In-Person Research Laboratory Settings

- *Hagar Labouta, University of Manitoba*

  Effective collaboration between pharmaceutical researchers and other disciplinary scientists, as well as in pharmacy practice has a positive impact on healthcare outcomes. We therefore need to embed collaborative learning opportunities in the Pharmacy Curriculum. We have developed a scaffolded self-directed project learning model to facilitate team work in a virtual setting. We are also investigating how a group of students working in mixed virtual and in-person lab settings communicate to solve an interdisciplinary research problem. This will enable us to understand how students collaborate and self-organize to better design learning contexts that foster effective student collaboration and interdisciplinary learning outcomes.

9. Adapting Immersive Simulation in Times of COVID

- *Geneviève Lesage, Université Laval*

  The COVID pandemic forced us to adapt our curriculum to comply with sanitary measures. Many efforts were made to maintain our immersive simulation activities while respecting these sanitary measures (e.g. social distancing, wearing personal protection equipment) without compromising on the educational principles of simulation (i.e. interacting with participants during debriefing). Both environmental and logistical changes were made to accomplish this task. Among these changes, chairs were organized to respect a 2-metre distance between participants during debriefing and Plexiglas were installed to minimize droplet transmission. Group size was reduced, leading to a surprisingly higher participation rate.

CPERC 2021 WEEK 2: June 7-11

Indigenous Initiatives across Canada's Schools of Pharmacy: Practical Tips to Aid Implementation – hosted by AFPC Truth & Reconciliation SIG

Monday, June 7: 1300-1445 h EDT

This session is hosted by AFPC's Truth & Reconciliation Special Interest Group. The ten pharmacy faculties will each provide a 5-minute update on how their program is addressing Indigenization, sharing lessons learned and providing practical tips for moving forward. Following the updates, Larry Leung and Jason Min will present on popular UBC student activities to support Indigenous health content. Before closing there will be time for Q&A and sharing.

Moderators

- *Elaine Lillie, University of Waterloo*
- *Lisa Guirguis, University of Alberta*

Faculty Updates on Indigenous Initiatives: Admissions

1. Experience and Challenges with Admission Process to Include Indigenous Applicants

   - *Sophie Lauzier, Université Laval*

     Since 2019, the Faculty of Pharmacy has implemented a process to include Indigenous applicants. We will present our experience, the challenges we faced and our ongoing thinking about what should be developed to enhance this process.

2. Update in Admission Process to Include Indigenous Applicants

   - *Nathalie Letarte, Université de Montréal*

     The Faculty of Pharmacy of Université de Montréal is working with three other entry-level doctorate programs in health sciences faculties in changing the admissions criteria to include reserved places for Indigenous applicants. The system is already used in Faculties of Medicine in Québec. This is in line with the University of Montreal's action plan: Place aux Premiers Peuples 2020-2023.

3. Equitable Admissions Pathway at Waterloo Pharmacy

   - *Kaitlin Bynkoski, University of Waterloo*

     In 2020 Waterloo Pharmacy introduced its Equitable Admission Pathway with customized requirements and processes for Indigenous applicants. The pathway includes a program to support Indigenous high school students interested in pursuing a career in Pharmacy. The pathway is supported by the School's Indigenous Working Group and Indigenization Advisory Council.

Faculty Updates on Indigenous Initiatives: Partnerships

4. The Indigenous Initiatives Committee

   - *Yvonne Shevchuk, University of Saskatchewan*

     The committee's responsibilities include implementing Indigenous initiatives, ensuring the College strategic plan aligns with the University of Saskatchewan Indigenous Strategy and the Truth and Reconciliation Calls to Action and liaising with other College committees, including the Indigenous Activities Fund Committee to support the implementation of strategic initiatives.

5. Prioritizing Reciprocity with Indigenous Partners

- *Larry Leung, University of British Columbia*

    As a non-Indigenous educator collaborating with Indigenous communities and partners, employing an ethical approach that prioritizes reciprocity for academic and research projects is critical. Practical examples of reciprocity will be explored, including community-based student projects, advisory committees and grant funding.

Faculty Updates on Indigenous Initiatives: Curriculum

6. Indigenous Curriculum in the First-Year PharmD Program

- *Lisa Walker, Dalhousie University*

    This presentation provides a brief look at three Indigenous Initiatives within the first-year PharmD program. Interprofessional education, simulation and the Non-Insured Health Benefits program will be discussed.

7. Medicine Wheels and their Role in Helping Pharmacy Students Respect Indigenous Healthcare

- *Beverly FitzPatrick, Memorial University*

    First year pharmacy students created medicine wheels to help develop their knowledge of and respect for Indigenous ways of health and healing. Memorial University's Aboriginal Resource Office and the First Light St. John's Friendship Center were consulted on this project.

8. The Blanket Exercise Goes Virtual: Experiences Engaging with Canada's Shared History

- *Lisa Guirguis, University of Alberta*

    The blanket exercise is an interactive way of learning the history most Canadians were never taught. Dr. Guirguis will share experiences and reflections on engaging first student year pharmacy students in Indigenous ways of learning about our shared history in both a live and virtual environment.

9. Introduction to Professional Practice: A 1 week course for 1st year students

- *Nancy Kleiman, University of Manitoba*

    First year pharmacy students had the opportunity to learn about the Medicine Wheel, online Talking Circles and systemic oppression and bias. Students were asked to watch each of the episodes of the First Contact Docuseries (Season 2) and after each episode would participate in a talking circle. The final day of the week had students complete a 3 hour online course through 4 Seasons of Reconciliation, which briefly reviewed history of colonization, residential schools, UNDRIP etc.

10. The Development, Implementation and Evaluation of an Interactive Online Unit in Indigenous Terminology

- *Marie Rocchi, University of Toronto*

    Following a needs assessment survey across four years of the PharmD. program, an interactive online unit on Indigenous Terminology was designed. This presentation will explore its inception through development and implementation. Evaluation data will be shared and next steps discussed, including the unit's availability on AFPC's e-Resource for Pharmacy Students.

Popular Student Activities in a UBC Indigenous Health Course

- *Larry Leung & Jason Min, University of British Columbia*

    See abstract in Appendix B, page 33.

Q&A and Sharing

Program Evaluation Symposium ● Colloque sur l'évaluation des programmes

Nurturing a Quality Culture in Pharmacy Education – Moving Beyond Accreditation

Instaurer une culture de qualité et de l'amélioration continue dans les programmes d'études en pharmacie – aller au-delà de l'accréditation

Wednesday, June 9: 1200-1630 h EDT

See Appendix A for detailed Symposium program

Hosted by / hébergé par : Université Laval & Université de Montréal

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Part 1: Setting the Table: Introductions & Keynote Speaker

Pharmacy Education Through a CQI Lens

- *Danielle Blouin, Queen's University*

Part 2: Faculty Updates on Program Evaluation

1. Principles-Focused Program Evaluation

   - *Beverly FitzPatrick, Memorial University*

2. Equity, Diversity and Inclusion Evaluation Plan at the Dalhousie University College of Pharmacy

   - *Anne Marie Whelan, Dalhousie University*

3. Structuring Continuous Quality Improvement (CQI) in Laval: A Helpful Tool to Implement Major Changes

   - *Karine Cloutier, Université Laval*

4. Implementation of a Bureau for Program Evaluation and Continuous Quality Improvement at the Faculté de pharmacie, Université de Montréal

   - *Ema Ferreira, Université de Montréal*

5. Annual Course Reports: A Comprehensive Tool to Inform Program Evaluation and Curriculum Renewal

   - *Sandra Bjelajac Mejia, University of Toronto*

6. Developing a User-Friendly Programmatic Assessment Plan

   - *Sarah Moroz, University of Waterloo*

7. Hierarchical Logic Model

   - *Robert Renaud, University of Manitoba*

8. Establishing Reporting and Process to Enable Better Decision Making

   - *Ken Cor, University of Alberta*

9. Evaluating Programs for a Post-COVID World: Using Data to Refine the Delivery of UBC's Entry-to-Practice PharmD Program

   - *Leonie Harper, University of British Columbia*

Part 3: CCAPP Presentation and Virtual Round Tables

- *David Edwards, University of Waterloo, CCAPP President*

Part 4: Plenary Session & Closing Remarks

Mini Sessions #2

Thursday, June 10: 1100-1230 h EDT

See abstracts in Appendix B, pages 34-37.

Moderator

- *Natalie Crown, University of Toronto*

Training for Collaborative Care: What are Team Expectations of Pharmacy Students?

- *Kerry Wilbur, University of British Columbia*

Creation of a Practice-Based Network to Support Emergent Pharmacy Practice in Quebec Family Medicine Groups

- *Marie-Claude Vanier, Université de Montréal*

Interprofessional case Management: Pharmacy and Nursing Students Learning Together

- *Brett Barrett, University of Waterloo & Jennifer Mohaupt, McMaster University*

Interprofessional Education in the PharmD Program: Perspectives and Lessons Learned from UBC

- *Larry Leung, University of British Columbia*

CPERC 2021 WEEK 3: June 14-17

AFPC – UBC Academic Electronic Health Record (aEHR) Project

Monday, June 14: 1200-1345 h EDT

This session will provide an overview of the project (background, needs assessment, working groups), followed by a demonstration of the academic electronic health record being developed by the Association of Faculties of Pharmacy of Canada and the Faculty of Pharmaceutical Sciences at the University of British Columbia. Results of pilots at four universities and development of a national case bank will be highlighted, closing with next steps. Following the presentation, participants will be given student access to the aEHR, so that they can further explore.

Moderators

- *Janet Cooper, Association of Faculties of Pharmacy of Canada*
- *Jason Min, University of British Columbia*

Overview of aEHR Project

- *Janet Cooper, AFPC*

aEHR Case Bank

- *Christine Hughes, University of Alberta*

Live Demonstration of AFPC-UBC aEHR

- *Jason Min & Leslie Guo, University of British Columbia*

aEHR Pilots

- *University of British Columbia: Tony Seet*
- *University of Waterloo: Brett Barrett & Wasem Alsabbagh*
- *University of Alberta: Christine Hughes*
- *University of Toronto: Marie Rocchi*
- *UBC Interprofessional Pilot: Larry Leung*

Wrap-up and Next Steps

- *Janet Cooper, AFPC*

Mini Sessions #3

Tuesday, June 15: 1400-1530 h EDT

See abstracts in Appendix B, pages 38-41.

Moderator

- *Christine Leong, University of Manitoba*

Beyond Stand and Deliver: a Critique of Pharmacy Education

- *Mike Chong, Memorial University*

Humanizing Patient Case Scenarios Using the Humanities

- *Marion Pearson & Tony Seet, University of British Columbia*

Integrating Public's Views, Experiences and Expectations of Community Pharmacy Services into Pharmacy Education

- *Terri Schindel, University of Alberta*

The Implementation and Benefits of a Faculty Policy and Procedure for Extracurricular Outreach Activities in Pharmacy

- *Gilly Lau & Paulo Tchen, University of British Columbia*

AFPC Medicinal Chemistry Special Interest Group Session: COVID Crusaders – Teaching Medicinal Chemistry during the Pandemic

Wednesday, June 16: 1300-1400 h EDT

The intent of this Medicinal Chemistry SIG session is to share the experiences of teaching and assessing medicinal chemistry during the pandemic with specific attention to:

1. How system change affected our teaching and assessing practices across Canada
2. What we learned about teaching and assessing medicinal chemistry during this time
3. Permanent changes in the way we teach and assess medicinal chemistry.

Moderator

- *Ed Krol, University of Saskatchewan*

Speakers

- *Simon Albon, University of British Columbia*
- *Ed Krol, University of Saskatchewan*
- *Ted Lakowski, University of Manitoba*
- *Carlos Velazquez, University of Alberta*

AFPC Special Interest Group Session: Educational Assessment SIG

Thursday, June 17: 1100-1230 h EDT

See abstracts in Appendix B, pages 42-45.

Moderator

- *Ken Cor, University of Alberta*

A Review of PharmD Admissions Processes: Current Practices and Considerations for Improvements

- *Robert Renaud, University of Manitoba*

Assessment of Practice Readiness: Measures and Processes in the Entry-to-Practice Doctor of Pharmacy Programs in Canada

- *George Pachev, University of British Columbia*

Using Automatic Item Generation Methodology to Create Multiple-Choice Questions Appropriate for Entry-to-Pharmacy Practice Assessment

- *Tara Leslie, University of Alberta*

Employing an Integrated Approach to Determining Student Progress in the Entry-to-Practice Doctor of Pharmacy Program at UBC

- *Ingrid Price, University of British Columbia*

Close of CPERC 2021

- *Janet Cooper, Association of Faculties of Pharmacy of Canada*

PROGRAM EVALUATION SYMPOSIUM
June 9: 1200-1630 h EDT

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Program Evaluation Symposium
Nurturing a Quality Culture in Pharmacy Education – Moving Beyond Accreditation

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Colloque sur l'évaluation des programmes
Instaurer une culture de qualité et de l'amélioration continue dans les programmes d'études en pharmacie – aller au-delà de l'accréditation

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UNIVERSITÉ LAVAL | Faculté de pharmacie

Faculté de pharmacie
Université de Montréal

Hosts:

Dr. Lyne Lalonde, Dean, Université de Montréal

Dr. Anne Dionne, Dean, Université Laval

Moderators:

Dr. Nathalie Letarte, Associate Dean, Université de Montréal

Dr. Julie Méthot, Associate Professor, Director of Master in Advanced Pharmacotherapy Program, Université Laval

Keynote Presentation: Pharmacy Education Through a CQI Lens

Dr. Danielle Blouin, Professor, Faculty of Health Sciences (Emergency Medicine) and Faculty of Education, Queen's University

Learning Objectives:

The symposium aims to inspire program teams in developing a culture of continuous quality improvement. It will enable participants to:

1. Enrich their understanding of curriculum quality
2. Appreciate some of the major achievements of Canadian faculties of pharmacy
3. Discuss key issues and challenges facing Canadian pharmacy programs
4. Identify opportunities and strategies for developing a culture of continuous quality improvement.

Objectifs d'apprentissage :

Le colloque vise à inspirer les équipes programmes dans le développement d'une culture d'amélioration continue de la qualité. Il permettra aux participants de:

1. Enrichir leur conception de la qualité des programmes d'étude

2. Apprécier certaines des principales réalisations misent en œuvre par les facultés de pharmacies canadiennes

3. Échanger sur les principaux enjeux et défis à relever par les programmes de pharmacie canadiens

4. Identifier des opportunités et stratégies propices au développement d'une culture d'amélioration continue de la qualité.

Part 1: Setting the Table (1200-1315 h)

Deans' Opening Remarks and AFPC Greetings

- *Janet Cooper, Association of Faculties of Pharmacy of Canada*
- *Lyne Lalonde, Université de Montréal*
- *Anne Dionne, Université Laval*

Introducing the Symposium

- *Nathalie Letarte, Université de Montréal*
- *Julie Méthot, Université Laval*

Keynote Presentation: Pharmacy Education Through a CQI Lens

- *Danielle Blouin, MD, FRCPC, MHPE, PhD; Queen's University*

  Dr. Blouin is a Professor in the Faculty of Health Sciences (Department of Emergency Medicine) and in the Faculty of Education at Queen's University. She completed a Master of Health Professions Education degree, a PhD in Curriculum and Instruction and a Certificate in Educational Research Methodology, all from the University of Illinois at Chicago. She has been involved as an educator and scholar in numerous projects at the provincial, national and international levels. Her research interests focus on program evaluation, in particular as it relates to accreditation. She has received several teaching awards including the inaugural Department of Emergency Medicine Teaching award, the prestigious Faculty of Health Sciences Education award and the CAEP Teacher of the Year award.

  Presentation overview: Quality Improvement has existed in business for nearly a century. Can its concepts be applied to pharmacy education? How is Quality Improvement linked with Program Evaluation? What role does accreditation play in Quality Improvement and in Program Evaluation? This session provides a brief overview of the history and defining concepts of Quality Improvement in the business world, discusses their applicability in health professions education, and relates the concepts of program evaluation, program accreditation and quality culture.

Part 2: Faculty Updates on Program Evaluation (1325-1435 h)

1. Principles-Focused Program Evaluation

   - *Beverly FitzPatrick, Memorial University*

     Principles-focused evaluation (Patton, 2018) is based on a guiding framework with principles that should 1) provide guidance; 2) be useful; 3) inspire; 4) support ongoing development and modifications; and 5) be evaluable, both quantitatively and qualitatively. Three core questions comprise a framework to evaluate effectiveness principles that provide the foundation for our program:
     - To what extent have meaningful and evaluable principles been articulated?
     - If principles have been articulated, to what extent and in what ways are they being adhered to in practice?
     - If adhered to, to what extent and in what ways are principles leading to desired results?

2. Equity, Diversity and Inclusion Evaluation Plan at the Dalhousie University College of Pharmacy

   - *Anne Marie Whelan, Dalhousie University*

     The College of Pharmacy follows a comprehensive Performance Management Framework (PMF) plan for regular systematic reviews of program content, structure, processes and outcomes. Occasionally, the College of Pharmacy identifies priority areas to add to the PMF which will impact program quality. For example, it was recognized in 2020 that a more comprehensive evaluation of Equity, Diversity and Inclusion (EDI) was important to the College as it moved forward. This presentation will review the development and implementation of an EDI evaluation plan.

3. Structuring Continuous Quality Improvement (CQI) in Laval: A Helpful Tool to Implement Major Changes

   - *Karine Cloutier, Université Laval*

     Program evaluation should be part of an on-going cycle of improvement and must be planned at an early stage of a program development. For the PharmD program at Laval university, an advisory committee arising from the curriculum committee assists the program director in implementing actions for continuous quality improvement. One of the responsibilities of the Comité d'évaluation continue du programme (CÉCP) – Continuous quality assurance committee is to ensure consistency between the faculty strategic plan and the dean's action plan. The CÉCP will propose a continuous improvement plan including program modifications, timeline and quality indicators.

4. Implementation of a Bureau for Program Evaluation and Continuous Quality Improvement at the Faculté de pharmacie, Université de Montréal

   - *Ema Ferreira, Université de Montréal*

     The mandate of the Bureau is to establish evidence-based evaluation and to promote continuous quality improvement of our programs. The main orientations of the Bureau are to monitor the quality of programs and the evolution of practices in health science education; to guide interventions; to assess the impact of the interventions; and to communicate decisions, results and experiences.

5. Annual Course Reports: A Comprehensive Tool to Inform Program Evaluation and Curriculum Renewal

   - *Sandra Bjelajac Mejia, University of Toronto*

     In recognizing the need for a comprehensive tool that captured important course changes, a course report template was developed and implemented in 2018. This tool, completed by course instructors, centralizes important quantitative and qualitative data to inform course and program improvements. It provides the opportunity for instructors to reflect on their teaching and assessment strategies, student performance, and discuss any changes they want to implement. Findings from two iterations of course

reports will be presented. Major themes around strengths, challenges and recommendations for quality improvement will be discussed in the context of informing program evaluation and curriculum renewal.

6. Developing a User-Friendly Programmatic Assessment Plan

- *Sarah Moroz, University of Waterloo*

    Developing a useful and usable programmatic assessment plan has been an long-standing challenge at the University of Waterloo. After several years of trial and error, we have developed and implemented a working plan based on collaborative goal-setting and establishment of metrics and milestones. This system involves monthly low-stakes check-ins that keep staff and faculty accountable and fully involved with the assessment process, while timelines and other information are tracked centrally by assessment staff. Buy-in has been excellent and the plan has functioned very well for the school since its full implementation in early 2020.

7. Hierarchical Logic Model

- *Robert Renaud, University of Manitoba*

    As the College of Pharmacy at the University of Manitoba is in the process of fully implementing its new PharmD program, we are developing a more comprehensive, integrated program evaluation plan. Briefly, we are developing hierarchical logic models to represent more effectively, the elements of our PharmD program. The overall logic model reflects the main elements (e.g., inputs, processes) that are linked to corresponding subordinate logic models that include relevant details (e.g., evaluation questions, data). The connected logic models, corresponding data files and reporting capabilities will be developed and managed using a relational database.

8. Establishing Reporting and Process to Enable Better Decision Making

- *Ken Cor, University of Alberta*

    The University of Alberta Comprehensive Program Evaluation Plan has been in place since 2014. While slight changes in data collection process have occurred since it was established, the system of reporting and processes of how results are considered remained consistent until 2019. A system of reporting and a process of curriculum oversight have been updated to focus reporting on the various roles individuals in the Faculty have in delivering the program. An overview of the reporting structure and processes that have been introduced is provided to demonstrate the importance of these systems in supporting evidence-based decisions.

9. Evaluating Programs for a Post-COVID World: Using Data to Refine the Delivery of UBC's Entry-to-Practice PharmD Program

- *Leonie Harper, University of British Columbia*

    Since March 2020, UBC has been delivering its Entry-to-Practice PharmD program in a predominantly virtual format during the COVID-19 pandemic. During that time our Faculty has learned a lot about educational activities that work well in a non-traditional format. Rather than returning entirely to our previous teaching approach, we are planning to use this unprecedented experience to support us in our move to a "post-COVID program". This session will describe data collection approaches that will inform our decision making to develop the most pedagogically sound principles for program-wide curricular change and seek input from other schools regarding their post-COVID future.

Part 3: Virtual Round Tables (1445-1540 h)

Canadian Council for Accreditation of Pharmacy Programs: Update on Current and Future CCAPP Activities

- *Dave Edwards, University of Waterloo, CCAPP President*

    This presentation will provide an overview of the vision and mission of the Canadian Council for the Accreditation of Pharmacy Programs (CCAPP). Current accreditation activities will be reviewed including an update on the transition to virtual site visits and the role of the CCAPP scorecard as a tool for assessing progress towards meeting standards. CCAPP will begin its next round of strategic planning within the next nine months and anticipates that the process of refreshing the current standards will begin in 2022 with new standards implemented in 2023.

Small Group Discussion on Program Evaluation Topics

- Topic 1 – Quality in pharmacy education: What is it? Concept, goals, outcomes.
- Topic 2 – Continuous quality improvement of Canadian Pharmacy curriculum: How can we achieve it? What should be done first?

Part 4: Plenary Session & Closing Remarks (1550-1630 h)

- Participants share their take-home messages
- Proposed initiatives to keep the ball rolling
- Deans' closing remarks

ABSTRACTS
AFPC Special Interest Group & Mini Sessions

Use of virtual interactive cases (VIC) in a 3rd year pharmacy skills lab for discharge medication reconciliation

Karen Cameron[1], *Naomi Steenhof*[1,2], *Cindy Natsheh*[1,2], *Erin Cicinelli*[1,2], *Gordon Tait*[2], *Miranda So*[1,2], *Henry Halapy*[1,3]

[1] *Leslie Dan Faculty of Pharmacy, University of Toronto;* [2] *University Health Network, Toronto;* [3] *Unity Health, Toronto*

Goals: This session is designed to show case the utility of Virtual Interactive Case (VIC) software in supporting a discharge medication reconciliation lab for third-year students.

Description: The VIC software is an innovative, interactive tool for creating simulated patient charts and patient and team encounters. VIC software was previously, successfully introduced into the second-year pharmacy skills lab to assist with information gathering skills.

Discharge medication reconciliation is an advanced skill that pharmacy students need to demonstrate in their experiential patient care rotations. Six VIC cases were developed for the third-year discharge medication reconciliation lab in the fall term of 2019. The cases were tested for appropriate difficulty level and clarity. In order to prepare students for the lab, a practice case with answer key was posted. Students completed a written feedback survey immediately post-lab.

Two hundred and twenty-five out of 241 students enrolled in the course participated in the lab. Two hundred and twenty students (98%) successfully used the VIC case to identify the correct discharge medication list and pass the lab. A post-lab questionnaire was completed by 203 (90%) of the participating students. The majority of students (64%) felt the allotted 20 minutes to review the case and identify the discharge medication list was not enough time. Most students (79%) agreed that the lab was a good experience and 64% agreed that the lab helped to prepare them for their hospital APPE rotations. No logistical concerns were noted by the course instructor in the running of the lab.

Relevance to Pharmacy Education: This experience highlights the successful use of VIC in a pharmacy skills lab to replace a patient chart and mimic patient and team encounters for teaching discharge medication reconciliation. These findings are applicable to other skills-based courses where patient charts and encounters are required.

Clinical decision-making: What can we learn from indecisive students?

Theresa Charrois[1]

[1]_Faculty of Pharmacy and Pharmaceutical Sciences, University of Alberta_

Background: Clinical decision-making (CDM), a necessary skill for pharmacists, is dependent on many internal, external and contextual factors. These factors need to be considered when investigating hesitancy and uncertainty in CDM by pharmacy students as we prepare them for future practice. This session will describe a study, from a social constructivist paradigm and using a case study approach, that investigates the hesitancy of CDM in pharmacy students at the University of Alberta.

Goals: The primary objective of the session will be to discuss how an investigation of CDM hesitancy of pharmacy students can be used to develop educational activities to assist students in overcoming hesitancy and uncertainty.

Description: Students selected through a purposeful sampling method were invited to participate. Students engaged in a simulated interaction with a standardized patient with a scenario that was meant to lead to uncertainty with no true right or wrong answer. Post-interaction, the researcher used stimulated recall with a video-recording of the interaction to investigate when uncertainty occurred during the interaction. In addition, participants completed a written reflection one-week post-interview. Data analysis was done initially using inclusive coding, followed by pattern identification and the discovery of inter-relationship of themes and across participants.

The findings showed that factors that help students in decision making are practice, observing role-models and using a structured process. Factors that lead to uncertainty in decision-making include poor relationships with patients, unclear boundaries of the pharmacists' role, traditional didactic teaching and assessment, perceived competence and personal confidence. Student participants did describe needing to defer to other decision-makers when they felt uncomfortable with an obvious solution and also noted the disconnect between what they learned and practiced in their formal education versus what they saw happening in real practice. Initial planning for educational activities to target these identified areas include mentorship programs, assessments that capture ambiguity and professional identity development.

Relevance to Pharmacy Education: By helping students learn to overcome hesitancy in CDM, they will be more prepared upon graduation for their ever-expanding roles and scope of practice.

"Good job!" Feedback training for simulation lab instructors

Debbie Kwan[1], *Naomi Steenhof*[1]

[1]*Leslie Dan Faculty of Pharmacy, University of Toronto*

Background: In pharmacy education, where a very specific set of knowledge, skills and abilities are being taught and assessed, feedback is an essential element for students on their path to professionalization. Feedback is particularly important and widely used in professional practice skills labs; however, students report that they receive poor quality feedback and their claims are backed by numerous studies.

In professional practice labs, our pharmacist clinical instructors (CIs) are selected based on clinical proficiency as opposed to teaching skills. Nevertheless, if CIs are not able to translate their clinical knowledge and observations in a form that is useful and meaningful for students, then it will be difficult to support student growth.

Goals: To describe an intervention rooted in a cognitive constructivist paradigm which successfully improved the quality of CI's written feedback.

Description: The Medication Therapy Management lab is a required course for third-year University of Toronto PharmD students and is facilitated by forty-five pharmacist CIs. Prior to the course start, CIs participate in one 3-hour orientation session. The session was re-organized to include experiential training on providing effective feedback. All CIs observed a role play involving a student-patient interaction and provided written feedback using the course rubric. CIs then conferred with each other in small groups to discuss their ratings and comments, and to reconcile or justify any differences. This activity was followed by a didactic session on best practices in feedback and writing comments.

A post-session survey indicated 100% of participants either strongly agreed or agreed that the session helped them prepare for their role. Specific comments included that CIs felt the feedback activity helped to align their expectations with other CIs and helped them gain a better understanding of the expectations of each component of the rubric. Respondents also reported an improved understanding of the types of comments that were useful to foster student development. Suggestions for improvement included increasing opportunities to practice. Anecdotally, students have reported improved satisfaction regarding the quality of CI's feedback.

Relevance to pharmacy education: A simple intervention incorporated into a workshop can improve the quality of feedback provided to pharmacy students.

CPERC 2021
Canadian Pharmacy Education and Research Conference
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Association des facultés de pharmacie du Canada

Developing a novel interprofessional collaborative practicum

Jason Min[1], *Serena Quan*[1], *Larry Leung*[1]

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

Goals: 1. Describe the development of the Interprofessional Collaboration (IPC) practicum activities, learning objectives and site information; 2. Describe the unique findings in onboarding, supporting and collaborating with the non-pharmacist sites; 3. Share student and preceptor opinions relevant for future implementation.

Description: Interprofessional Education (IPE) is a critical aspect of pharmacy programs and is a prominent component of pharmacy practice and accreditation standards. Despite the various creative attempts to provide students with meaningful IPE, challenges persist including: simulating an authentic patient environment, the disproportionate time and administrative burdens to coordinate IPE, and difficulties replicating the depth and complexities of interpersonal relationships in typical work settings.

To address these challenges, a novel Interprofessional Collaboration (IPC) experiential education practicum was developed as part of the elective practicum offerings for fourth year pharmacy students. The IPC practicum is a 4-week, non-direct patient care practicum where pharmacy students were paired with a non-pharmacist preceptor. Prior to the pilot offering, four new sites and preceptors were developed and onboarded representing medicine, nursing, chiropractic and naturopathy. Required learning activities were developed to maximize student immersion into the site and best support student safety and learning. Activities included the completion of an interprofessional-focused project, shadowing and participating in patient care within regulatory limits, and contributing to online peer discussions. Surveys, focus-groups and online student discussion transcripts provided primarily qualitative data on student and preceptor opinions of the pilot.

This presentation will describe the development of the IPC practicum, share unique aspects of onboarding and supporting non-pharmacist sites and preceptors, and discuss surprising findings related to student support, isolation, advocacy and leadership.

Relevance to Pharmacy Education: The growing importance of IPE in pharmacy education is underscored by the prominent reference in practice and accreditation standards. To address the complex issue of providing authentic and meaningful interprofessional experiences, this project created a novel practicum with non-pharmacist sites that has the potential to be replicated, scaled and utilized across other programs.

International partnership on experiential education: A Toronto experience

Certina Ho[1], Marvin James[1], Francine Phillips-Sheldon[1]

[1]Leslie Dan Faculty of Pharmacy, University of Toronto

Goals: Developing cultural competence and having an appreciation of global health, policies and regulations are fundamental for healthcare professionals to perform collaboratively in an inter-professional team. The University of Toronto Advanced Pharmacy Practice Experience (APPE) international elective rotations expose students to the various health systems that shape pharmacy practice around the world. These rotations provide a unique perspective on how pharmacists are well positioned to contribute globally to patient care through research, project management, teaching and learning, policy development and the delivery of drug/medical information. The objective of this session is to share our experience in international partnership on experiential education, from planning, facilitating and supporting our APPE students in international elective rotations, to hosting incoming exchange students for having their experiential learning at the Leslie Dan Faculty of Pharmacy (LDFP).

Description: During this presentation, we will share our guiding principles for arranging and monitoring APPE international elective rotations. In particular, we will discuss how we leverage our existing exchange agreements with international partners and facilitate hosting of their incoming pharmacy students at the LDFP. In the 2020/2021 APPE academic year, we have secured eight international partner sites, offering a total of 17 unique APPE rotations to our students. We will explain how to approach and develop these international partnerships in achieving a mutually beneficial experiential exchange program for our pharmacy students and also students from other institutions.

Relevance to Pharmacy Education: This presentation is highly relevant to pharmacy education as cultural competence and global health literacy are typically taught in a traditional, didactic model in the curriculum. We hope our insights and illustrations of how global health education and initiatives can be delivered in experiential learning and cross-cultural settings may encourage others to consider applying these strategies and expand their APPE program internationally. With an increased interest and uptake of international elective rotations by pharmacy students, this presentation will explain how to optimize experiential learning opportunities beyond Canada.

Learning to give the best of you, instead of what's left of you: An active learning activity on healthcare provider burnout for pharmacy students

Heidi Fernandes[1], Cynthia Richard[1], Kaitlin Bynkoski[1], Becky Ewan[1], Sherilyn Houle[1]

[1]School of Pharmacy, University of Waterloo

Goals: 1) Outline the motivation and creation of a check-in activity for pharmacy students to develop the knowledge and skills to identify and address burnout. 2) Share findings gained from the learning activity related to activity implementation, student feedback and curricular implications.

Description: Burnout is a form of extreme professional exhaustion prevalent in many caring professions. Pharmacy learners may be at a higher risk for burnout due to personality factors such as high self-expectations and "Type A" personalities. The condition also has practice implications, such as higher medical error rates and malpractice risk. To equip students with the knowledge and skills to identify and address pharmacist burnout, an active learning activity was implemented in the Winter 2020 offering of Professional Practice for 3rd year students at the University of Waterloo. An online video introduced students to burnout, including its origins, signs and symptoms, and prevention. Students then had the opportunity to meet one-on-one with a School of Pharmacy faculty or staff member to reflect on a series of questions that encompassed the concepts of burnout across several domains relevant to pharmacy students. Following the activity, students were surveyed online to gather feedback on the activity and its impact. Student feedback, including strengths and weaknesses of the activity, will be briefly presented.

Relevance to Pharmacy Education: Addressing student wellness and burnout aligns with both the current context of pharmacy practice as well as recommendations from a University of Waterloo Advisory Committee on Student Mental Health to incorporate concepts of wellness into course materials. As the best way to combat burnout is through prevention and early recognition, training students on this before entering practice is expected to be most beneficial. This activity represents the first learning activity implemented at the School of Pharmacy targeting burnout with an embedded research component to evaluate its impact and effectiveness.

Understanding how failure is productive

Naomi Steenhof[1,2], Maria Mylopoulos[2], Nicole N Woods[2]

[1]Leslie Dan Faculty of Pharmacy University of Toronto, [2]The Wilson Centre, University of Toronto, Faculty of Medicine and University Health Network

Goals: To introduce participants to this controversy and describe an instructional design approach, productive failure (PF), which may prepare novice students to construct new knowledge in the future.

Description: John Dewey stated that "the origin of thinking is some perplexity, confusion, or doubt." In pharmacy education, uncertainty is not only present during initial learning, but continues as learners figure out how to solve clinical dilemmas. Many educators tend to use instruction methodologies which give learners the answer quickly, perhaps before they have begun to understand the problem. This tendency might short-circuit opportunities to think about the conceptual aspects of the problem. Counterintuitively, the process of struggling in the form of cognitive incongruity may be a critical trigger for facilitating the development of reasoning skills.

PF is an instructional approach that requires learners to struggle as they attempt to generate solutions to complex problems before receiving instruction. PF has been shown to prepare students for later learning of new, related knowledge. But why do instructional design strategies like PF work? Does the act of generating solutions build conceptual understanding? This study compared the effectiveness of PF with indirect failure (IF) on a preparation for future learning assessment, immediately after learning and after a one-week delay.

Year one pharmacy students (N=42) were randomly assigned to a PF or IF learning condition. The problem of estimating renal function based on serum creatinine was described to participants in the PF learning condition, who were then asked to invent a solution. Participants in the IF condition learned about the same problem and were given incorrect solutions that other students had created, as well as the Cockcroft-Gault formula, and asked to compare and contrast the equations. Participants in the PF condition outperformed those in the IF condition, both on the immediate assessment and after a one-week delay.

Relevance to Pharmacy Education: These results emphasize the crucial role of struggle and generation in learning. When preparing novice students to learn new knowledge in the future, generating solutions to problems prior to instruction may be more effective than direct instruction.

Helping pharmacy students use social media platforms professionally: The Pharmacy Digital Tattoo Project

Patricia Gerber[1], Alexandra Kuskowski[2,3], Kathleen Scheaffer[4], Lucas Wright[5], Salma Abumeeiz[6], Laura Atiyeh[1], Emily Fornwald[7], Ursula Ellis[8], Eseohe Ojo[1]

[1]UBC Faculty of Pharmaceutical Sciences; [2]UBC Chapman Learning Commons; [3]Irving K. Barber Learning Centre; [4]University of Toronto; [5]UBC Centre for Teaching, Learning and Technology; [6]UBC School of Information; [7]UBC Education Library; [8]UBC Woodward Library

Background: Online communication tools and platforms for peer and professional connections are widely adopted by pharmacy students. Programs and professional standards, guidelines and codes, emphasize the importance of using social media professionally. However, there are limited pedagogical tools and strategies to highlight the importance of making informed decisions about aligning digital identities with the expectations for pharmacists. This project was aimed at addressing that gap. Faculty, staff, librarians and students collaborated to develop, implement and evaluate a digital identity workshop for pharmacy students.

Goals: In this presentation we will share our innovation, experiences and strategies to help support other health programs' efforts to enhance student development of professionalism in online platforms.

Description: We developed authentic case studies focused on digital identity with companion questions and resources, for use in a workshop for 224 first-year PharmD students. A facilitator guide was also developed. The workshop engaged participants in discussions regarding privacy risks, exercising ownership over data distribution, the impact of ethically questionable behaviour on patient care and the reputation of health professionals. The case studies, activities and resources aimed to support students' confidence in aligning their _emerging_ professional identities with their _existing_ digital identity. Pre- and post-workshop assessments were deployed to measure students' ability to navigate this terrain.

Relevance to Pharmacy Education: This collaborative project involved wide consultation with pharmacists and pharmacy faculty from within and outside UBC. All materials were made publicly available using a Creative Commons CC-BY license for use by other faculties/schools of pharmacy in their efforts to enhance student professionalism, in particular, as it pertains to their presence in social media platforms.

Lessons learned from implementation of an online social learning platform in pharmacy experiential education

Maria Zhang[1,2], *Karen Cameron*[1], *Sameera Toenjes*[1]

[1]*Leslie Dan Faculty of Pharmacy, University of Toronto,* [2]*Centre for Addiction and Mental Health*

Goals: This session aims to support pharmacy educators across Canada in building upon lessons learned from the implementation of an online social learning platform in experiential education at the Leslie Dan Faculty of Pharmacy.

Description: With its ample flexibility, online peer assisted learning has been cited as a model with potential to drastically improve engagement amongst learners in higher education. Concurrently, data on isolation in pharmacy experiential education describes the need for support for students due to feelings of increased isolation when they in leave the classroom. Therefore, providing a social, online platform for interactive learning may increase student engagement while decreasing feelings of isolation. As part of their second-year experiential rotation, 240 pharmacy students submitted short audio or video reflections using a free, mobile application designed for social learning (FlipGrid). A quality improvement project was undertaken to explore the functionality of FlipGrid, its uptake by students and its utility in supporting and measuring interactivity amongst students and faculty. This presentation will focus on the results from a two-part analysis: quantitative data and transcripts of the submissions extracted from FlipGrid and the results of an online survey distributed to students at the end of their rotation, which assessed their acceptance and utility of the platform.

Relevance to Pharmacy Education: Learners and educators are facing similar challenges across Canada – thoughtful utilization of technology, enhanced engagement between and with learners, and bridging classroom education with the real world. This session aims to generate ample discussion on these topics.

Popular student activities in an Indigenous health course

Larry L. Leung[1], Jason Min[1]

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

Goals: 1. Discuss key learning lessons in the development and implementation of student activities in an Indigenous health course. 2. Share student activity details, including individual design, set-up, assessment and student feedback.

Description: In response to the Truth and Reconciliation Commission of Canada Calls to Action and the United Nations Declaration on the Rights of Indigenous Peoples, pharmacy programs are striving to meet our responsibilities to increase Indigenous health learning opportunities. Development and delivery of meaningful activities that honour Indigenous ways of knowing and learning in a classroom setting can be challenging. There are untapped opportunities to utilize different pedagogical approaches to support student engagement with the content. This presentation will focus on the sharing of well-received examples of student activities co-developed with Indigenous community partners and experts that have been implemented in the Faculty of Pharmaceutical Sciences' Entry-to-Practice PharmD (E2P-PharmD) program.

In the E2P-PharmD program, students participate in mandatory Indigenous cultural safety and allyship content and have the option to further expand learning through an elective offering on Indigenous health. The presenters will share the following four examples of student activities that have been implemented in mandatory or elective course content: Indigenous book club, journal club, videoconference with rural and remote partners, and educational trips. The presenters will share the process, activity details, lessons learned and student feedback from these activities. In this interactive session, participants will be encouraged to share ideas and ask questions throughout.

Relevance to Pharmacy Education: As pharmacy schools across Canada continue to integrate Indigenous health, cultural safety and allyship curricula, educators must decide on different modalities for presenting content and engaging student learners. This presentation will share student activities to support Indigenous health content and lessons learned as an example of different pedagogical approaches to engage students and support learning of Indigenous health content.

Training for collaborative care: What are team expectations of pharmacy students?

Kerry Wilbur[1,2], Tila Pelletier[1,3]

[1]_Faculty of Pharmaceutical Sciences, University of British Columbia,_ [2]_School of Health Professions Education, Maastricht University,_ [3]_Vancouver Coastal Health_

Background: Interprofessional education (IPE) is increasingly emphasized in health professional training as campuses throughout Canada are incorporating activities in their curriculum whereby students from two or more disciplines learn about, from and with each other. However, high fidelity simulation and development of shared-care competencies are limited due in part to lack of representation from all consulting personnel. We know little about how fellow health professionals view our pharmacy students' collaborator roles in actual patient care settings.

Goals: As part of a larger study exploring multisource feedback in pharmacy workplace-based education, mixed-discipline members of an inpatient internal medicine team in a teaching hospital were interviewed.

Description: Dietitians (n=3), nurses (n=2), occupational therapists (n=2), physicians (n=4) and one social worker offered their expectations of learner competencies in collaboration. These respondents considered the performance of a student from their own profession as well as others training with their team, including pharmacy students. Interview audio-recordings were transcribed verbatim, verified and subjected to content analysis by two independent researchers.

Team members generally held pharmacy students' contributions to care in high regard, but many admitted to little actual interaction with them. Collaborative students were accessible for drug information questions, even if they were often "on a computer". Physicians reported most consistent direct observation during bedside rounds where students were expected to actively contribute to decision-making and not simply serve as a passive resource. Interestingly, other professionals used this proximity to prescribers as an information bridge; team members, especially nurses, valued students who shared findings and rationale for patient care with them. In multidisciplinary discharge rounds, students helped facilitate safe patient transition from the unit by confirming medication regimens and treatment plans. Conversely, participants also expected students to recognize their roles and proactively consult in-person to inform their drug recommendations and monitoring. All professionals highlighted the important, but often overlooked, first step to effective collaboration - for students to introduce themselves.

Relevance to Pharmacy Education: Team members underscored how decisions they make for patient care is impacted by information possessed and shared by pharmacy students. However, workplace-based supervisors could further structure intentional interactions with other professionals to promote positive collaboration.

Creation of a practice-based network to support emergent pharmacy practice in Quebec Family Medicine Groups

Marie-Claude Vanier[1], *Nicolas Dugré*[1], *Léonie Rouleau*[1], *Lyne Lalonde*[1], *Line Guénette*[1], *Anne Maheu*[1]

[1]*Faculté de pharmacie, Université de Montréal*

Goals: 1. Describe creation of a practice-based network to support emergent pharmacy practice in family medicine groups. 2. showcase ways PharmD students can be involved in such projects.

Description: In 2015, Quebec Ministry of Health recognized pharmacists as one of the core professions to include in Quebec Family Medicine Groups (FMG). As a result, a large number of pharmacists recently engaged in this new practice and could potentially benefit from a practice-based network. A faculty-led project was initiated in 2018 to create and evaluate such a community.

A working group of nine pharmacists working in FMG was created in January 2018, as well as a committee of partners from key pharmacy organizations. Network first year activities allowed to identify 277 pharmacists working in FMGs, survey their practice and needs and publish a directory. The second year focused on creating practice tools in response to needs identified in the survey, such as, bi-monthly newsletters, mentorship program, knowledge transfer short evidence-based communications, starter kit and tools to promote the FMG pharmacist role. The third year will look at impact of network activities on its members.

Clerkship opportunities were offered to PharmD students. Two teams of five 4th year students worked with research team as part of their integration course requiring a 6 weeks team project. First team (spring 2018) worked on identification and survey of FMG pharmacists and creation of a directory. Second team (spring 2019) developed a starter kit including 10 steps to facilitate integration into an FMG and links to relevant documents. As part of a four-week optional clerkship, two 3rd year Pharm D students worked on two different presentations to describe and promote role of FMG pharmacists, a one-pager describing the role of FMG pharmacist and key references and websites.

Relevance to Pharmacy Education: This project is an explicit example of a multi-faceted successful participatory action research project, ingrained in the pharmacy practice community, with a great potential to support high quality pharmaceutical care in a new practice setting, and providing enriching experiences to undergraduate pharmacy students.

Interprofessional case management: Pharmacy and nursing students learning together

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Goals: Interprofessional education (IPE) is a central strategy used to ensure pharmacy graduates have the skills necessary to excel in collaborative team environments. Although defined by the [World Health Organization](#) as education that "occurs when students from two or more professions learn about, from and with each other", many Canadian pharmacy schools struggle to provide a robust IPE curriculum that entirely meets this description.

Description: In order to address this gap, the University of Waterloo School of Pharmacy and Conestoga College School of Nursing developed a 12-week co-taught elective where RPN-BScN and PharmD students would explore interprofessional collaboration competencies and apply those to practice-based scenarios. The major competencies of role clarification, interprofessional communication, collaborative leadership, team functioning, client-centred care, and patient safety and quality care were threaded through course readings, lectures, and team-based activities. Using formative, realistic patient scenarios, interprofessional student teams applied these concepts to their delivery of care. Through the successes and challenges encountered in these scenarios, students were able to reflect on their personal and team behaviours and identify opportunities for professional growth.

Relevance to Pharmacy Education: The purpose of this presentation is to describe this novel elective, its activities and evaluations, and the the successes and challenges encountered within it.

Interprofessional education in the PharmD program: Perspectives and lessons learned from UBC

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Goals: 1. Discuss key learning lessons in the development and implementation of the Interprofessional Education (IPE) program structure, integration strategies and specific IPE activities. 2. Share faculty and student feedback of their experiences with the IPE program.

Description: The Faculty of Pharmaceutical Sciences' Entry-to-Practice PharmD Interprofessional Education (IPE) Program at the University of British Columbia has been developed and implemented over the past 6 years, offering many key lessons learned. This presentation will focus on the sharing of these perspectives in regards to the program structure, integration strategies, activity details and student feedback.

IPE is a curricular theme at the Faculty, under the portfolio of the Office of Experiential Education and is led by IPE Leads. Our vision for IPE is to become leaders in a competency-based program that is integrated and collaborative, to support students in becoming effective interprofessional collaborators in patient care. IPE is spiraled in all four years of the program and involves an integrative approach with other health disciplines in developing the knowledge, skills, attitudes and values required for collaboration. Students participate in IPE during regularly scheduled lecture- or lab- time, program enrichment activity days and on experiential practicums.

The presenters will share their perspectives and process in building IPE, by discussing the following three program components and key examples: 1. program structure: curricular theme, IPE Leads, advisory committee; 2. integration strategies: embedded, non-embedded and optional activities; and 3. activity details: shared integrated curricula, online and face-to-face case-based learning.

Relevance to Pharmacy Education: Interprofessional Education is a key component of health programs across Canada, as knowledge, skills, behaviours and attitudes developed through IPE will enable students to become interprofessional collaborative ready in the delivery of patient-centered care. This presentation will share the lessons learned from the perspective of IPE Leads at the Faculty of Pharmaceutical Sciences, UBC, that may serve as practical examples for faculties across Canada.

Beyond stand and deliver: A critique of pharmacy education

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Goals: An intricate relationship exists among knowledge, learning and teaching. Further, student learning is affected by what instructors think of as knowledge AND how they teach this knowledge. While there are many teaching styles, pharmacy education in Canada (also U.S.) has an acknowledged history of didactic classroom teaching.

Didactic teaching can best be described as lecturing, with students receiving knowledge as passive learners. However, knowledge building is a constructive process of actively co-generating knowledge with the teacher, not simply students being receivers. In addition, while critical thinking is deemed important for pharmacy practice, there is a strong claim from the literature that not many students are graduating with good critical thinking skills. Is this due to a predominance of didactic teaching with focus on content memorization?

My presentation will critique pharmacy education through three "moments" of education from the literature—standardized, authentic and democratic citizenship. I will combine theory and practical examples from my experiences teaching drug information. Drug information is an essential education topic because of its pragmatic role in pharmacy practice. I will not be discussing experiential education.

Description: Standardized education is characterized by didactic teaching of procedures and rules, resulting in surface learning. Authentic education focuses on the student and deep learning, taking into account students' prior knowledge. Democratic citizenship education emphasizes collective knowledge and diversity.

Where does pharmacy education fit within these moments? What do we, as instructors, believe constitutes knowledge? Do we think about how or why we teach in particular ways? My presentation will offer teaching drug information as an example of how we can create opportunities for students to learn actively and think critically. Too, it will describe how teaching should be situated within deliberate educational practices and moments.

Relevance to Pharmacy Education: In the scholarship of teaching and learning, we need more than interventions and outcomes that are defined and assessed from the realm of standardized, didactic teaching. Rather, I argue how deliberate educational practices can enhance student learning and thinking as students actively participate in their education.

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Humanizing patient case scenarios using the humanities

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Goals: 1. To share health humanities resources and approaches to incorporating humanities elements into patient case scenarios. 2. To describe benefits and challenges of integrating humanities into a pharmacy curriculum. 3. To demonstrate a scholarly approach to an educational innovation.

Description: To deepen students' understanding of patients' illness experience, humanities elements were embedded in case scenarios deployed in PY1 skills labs. Original digital "paintings" were added to a lower back pain case scenario and an autobiographical essay was added to a glaucoma case scenario, with associated questions incorporated into facilitators' guides for the case discussions. Most students felt these embellishments were valuable, contributing to their understanding of the patients' concerns and their ability to empathize. A few students had strong negative reactions, finding the embellishments unengaging, artificial, and/or a poor alternative to interacting with actual patients. Students marginally preferred the essay to the paintings, and suggested other media, including poetry, music and video for future cases. Pharmacist facilitators indicated that students were reasonably engaged in discussions of the embellishments and that session flow was unaffected.

Relevance to Pharmacy Education: Hippocrates said, "It's more important to know what sort of person has a disease than to know what sort of disease a person has." However, patient case scenarios used in clinical learning activities typically focus on biomedical details and do not provide a holistic picture of the individual. Further, didactic curricula provide little contact with actual patients and students rarely have personal experience of the conditions and therapies they are learning about. Nevertheless, students are expected to demonstrate empathy and to provide pharmaceutical care responsive to patients' individual needs. Integration of the humanities into the curriculum is a potential strategy to bridge these gaps.

Integrating public's views, experiences and expectations of community pharmacy services into pharmacy education

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Goals: Research points to low public awareness and utilization of expanded community pharmacy services. The goals of this oral presentation are to (1) present research on the public's views, experiences and expectations of community pharmacy services in a context of changing pharmacy practice and expanded scope of practice and (2) explore how research on public's perspectives can be integrated into pharmacy education.

Description: A total of 15 focus group interviews were held with 74 members of the public, representing patients and non-patients, in 11 locations in and around Edmonton, Alberta. Participants were recruited through posters in public places, social media and membership with community organizations. Data were recorded and transcribed verbatim, anonymized and analyzed using an inductive constant comparison technique. The study design followed an arts-informed methodology using an adapted Draw and Write Technique. The study was approved by the University of Alberta Research Ethics Board. Participants viewed community pharmacy services as accessible, changing and collaborative. Participants were most familiar with traditional pharmacy services related to products and prescription services. Experiences with extended services, such as prescribing and immunizations, were acknowledged by some participants. However, other participants were not aware of pharmacists' extended roles or services. Expectations for having pharmacists more involved in their care, spending more time with them, sharing information and teamwork were linked to participants' awareness of community pharmacy services, prior experiences and health care needs. Participants also expected an environment that is professional, welcoming and private. An arts-informed approach facilitated participants' ability to describe how community pharmacy services were experienced, emphasizing their emotions and feelings.

Relevance to Pharmacy Education: Understanding how the public experiences and views community pharmacy services can inform the development and delivery of pharmacy education. Findings can be integrated into instructional material for classroom and simulated environments for laboratory settings. Students' understanding of community pharmacy services from the public's perspective will further support their experiential learning and entry to practice.

The implementation and benefits of a faculty policy and procedure for extracurricular community outreach activities in pharmacy

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Goal: To discuss the implementation and benefits of a faculty policy and procedure for student pharmacists participating in voluntary student-led extracurricular community outreach activities.

Description: The delivery of community outreach activities (i.e., health and medication-related education, pharmacy advocacy and health promotion topics) by pharmacy students to the public have been long-standing in the Faculty of Pharmaceutical Sciences (FoPS) at the University of British Columbia (UBC). Despite the intended benefits to the public, the FoPS remained concerned about the accuracy of information conveyed by unsupervised pharmacy students. As such, a policy on community outreach was created in 2016 to ensure that all students participating in any community outreach activity must first submit a proposal to the FoPS with details of the activity that they intend to deliver. In the FoPS' review of student outreach proposals, feedback is provided to students on their content and a risk assessment is conducted to determine the level of support needed and if pharmacist supervision is required. If supervision is necessary, the FoPS will arrange for a licensed pharmacist to support the activity.

In the 2019-2020 academic year, despite the cancellation of scheduled events due to the COVID-19 pandemic, pharmacy students at UBC delivered 51 outreach events with 100 students participating; an estimated 650 people were reached through educational, advocacy and health topics. This demonstrates a need for a policy to provide students with support for their interest in these voluntary extracurricular outreach activities.

Relevance to Pharmacy Education: Implementation of a policy on community outreach activities has benefited pharmacy education in the following ways. Through Faculty involvement and support, students receive feedback on outreach content and delivery, including safety protocols associated with the COVID-19 pandemic. Where supervision is required for an outreach activity, students benefit from the knowledge, experience, guidance and mentorship of a pharmacist. The public benefits from receiving education, advocacy and health promotion content that has been reviewed and approved by the FoPS. For pharmacists, this structured process creates an opportunity to engage with pharmacy students and the community outside of the usual academic, experiential education and workplace settings.

A review of PharmD admissions processes: Current practices and considerations for improvements

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Background: Identifying the characteristics of applicants who will subsequently succeed in a PharmD program and after graduation, is an inherent challenge of the admissions process. Over the last decade, many Faculties of Pharmacy have increasingly explored the effectiveness of various predictors of students' success in their respective PharmD programs.

Goals: The goal of this presentation is to summarize the current admissions process, including pandemic-related adjustments, in eight Canadian Faculties of Pharmacy and to explore possible evidence-based improvements.

Description: This presentation will include three parts. First, a brief summary of the admissions process in eight pharmacy programs across Canada. Second, a highlight of admission factors that best predict success in the PharmD programs. Finally, recommendations for future consideration.

Relevance to Pharmacy Education: The main objective of the admissions process is to help maximize the percentage of accepted students who will subsequently succeed in the PharmD program. Admitting students who are more likely to have difficulty in the program can lead to various negative effects for both the program (e.g., significant amount of professor-directed remediation) and student (e.g., decreased self-efficacy). This presentation promises to stimulate discussion around best practices in the admissions process.

Assessment of practice readiness: Measures and processes in the entry-to-practice Doctor of Pharmacy programs in Canada

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Background: The Canadian Council for Accreditation of Pharmacy Programs (CCAPP) has more than doubled, compared to the BSc (Pharm) programs, the required number of weeks of experiential education for the entry to practice (E2P) Doctor of Pharmacy (PharmD) programs. In addition, Faculties are required to generate evidence to support that students demonstrate practice readiness prior to starting culminating practice experiences. In response to these requirements, some schools implementing PharmD curricula have introduced specific tools and processes designed to assess students' practice readiness.

Goals: The goal of the presentation (session) is to describe the different approaches and specific measures used by Faculties of Pharmacy across Canada to assess practice readiness.

Description: The session builds on presentations and discussions of general approaches to practice readiness from the 2019 CPERC/AFPC annual meeting. This session will focus on specific tools and the processes of their development (e.g., blueprinting, standard-setting) and use (e.g., review of results, remediation, promotion) as introduced in the context of the respective curricula to assess practice readiness. Modifications to the tools, related to the on-line format during the pandemic, will also be discussed. Schools participating include University of Montreal, University of Toronto, University of Waterloo and the University of British Columbia.

Relevance to pharmacy education: This presentation will benefit the whole pharmacy education community by illustrating various approaches to measuring and assessing practice readiness.

Using automatic item generation methodology to create multiple-choice questions appropriate for entry to pharmacy practice assessment

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Goals: Computer-based testing (CBT) using multiple-choice questions (MCQs) is an efficient method of assessing higher-order knowledge of a large body of content for numerous examination candidates in multiple locations. However, summative assessments, such as those required prior to pharmacy licensing, require a large item bank of quality test items to avoid item over-exposure. Automatic item generation (AIG) uses models and computer technology to create a large item bank efficiently and cost-effectively. This presentation will demonstrate the AIG process and discuss the substantial benefits this methodology can provide.

Description: AIG methodology was employed to generate 15,000 MCQs related to assessment and management of nausea and/or vomiting (N/V); a topic highly relevant to pharmacy practice and appropriate for the PEBC MCQ exam. The AIG multistep process involved:

1) developing a cognitive model – a visual illustration of the knowledge required to assess a patient with N/V and provide an appropriate recommendation
2) creating an item model – an MCQ scaffold with strategically placed variables and an algorithm to populate variables with cognitive model elements
3) systematic distractor generation – a process to ensure plausible distractors populate item options
4) automatic generation – application of computer technology to generate items based on algorithms informed by the item model.

A sample of the generated N/V items satisfy content-related validity requirements and stand as high quality when critiqued against established guidelines.

Relevance to Pharmacy Education: AIG methodology is a promising strategy to improve efficiency, access and cost-effectiveness of summative MCQ examinations. This exciting advancement is being operationalized in other health care disciplines, such as medicine, and its utility in pharmacy is compelling. An overview of how AIG methods created high-quality items related to assessment and management of N/V will provide foundational knowledge on this multi-step process and an awareness of the probable approach to future summative pharmacy assessments.

Employing an integrated approach to determining student progress in the entry-to-practice Doctor of Pharmacy program at UBC

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Goals: This session will: 1. provide an overview of the student progress process and policy that is used at UBC; 2. discuss the benefits of employing this process, lessons learned and areas for growth.

Description: The Faculty of Pharmaceutical Sciences at UBC implemented an entry-to-practice doctor of Pharmacy program in September 2015. This new program involved the creation and implementation of a programmatic approach to assessment that is integrated across the various learning experiences students participate in throughout their program. In order to support this programmatic approach to assessment and make decisions regarding student progress across learning experiences, a Student Progress Committee was created. The Committee is guided by a student progress policy that supports unbiased and procedurally fair decision-making that is in the best interest of the student. The Student Progress Committee meets at appropriate times throughout the year to make decisions regarding student progress that take into consideration academic performance, professionalism and any mitigating factors that may have affected student performance. Each year, the student progress committee reflects on cases discussed and collaborates with the associated faculty members to improve processes for future years.

Relevance to Pharmacy Education: This process has proven valuable in ensuring that decisions made regarding student progress are valid, unbiased and in the best interest of the student.