

# SYMPOSIUM

## 5th Annual McMaster Waterloo-Wellington Clinical Research and Quality Improvement Symposium

10B Victoria Street South, Kitchener, ON, Canada N2G 1C5

Wednesday,  
May 30,  
2018



 Michael G. DeGroot  
SCHOOL OF MEDICINE

HEALTH SCIENCES

McMaster  
University 

[crqi.mcmaster.ca](http://crqi.mcmaster.ca)

# WELCOME

## Dear Community Members,

Welcome and thank you for joining us at the Fifth Annual Waterloo Wellington Clinical Research and Quality Improvement (WWCRQI) Symposium at McMaster University's Waterloo Regional Campus.

This exciting event is devoted to showcasing local research, quality improvement initiatives, and technology innovations within the Waterloo-Wellington region. Each year, we look forward to bringing together local trainees, clinicians, professionals, researchers, and health technology entrepreneurs who are working to improve health care and delivery in our community.

We produce outstanding research and quality improvement work in our region. This work spans the continuum from small projects undertaken by individuals to large programs completed by multidisciplinary teams. Clinical research and quality improvement is taking place at our universities, hospitals, research institutes, and clinical practices. However, we have few opportunities to collaborate, exchange ideas,

and learn together. These opportunities are what drive us to host the WWCRQI Symposium each year – to connect a diverse group of stakeholders in health care, research, delivery, and technology.

We invited local trainees, clinicians, professionals, researchers, and health-technology entrepreneurs to share their work and be recognized for their clinical and scientific excellence. The response has been overwhelming, with over 60 abstracts submitted and accepted to this symposium from institutions across Southwestern Ontario. We are excited to welcome Dr. Kelly Grindrod to deliver our keynote address today. Dr. Grindrod, an associate professor at the University of Waterloo's School of Pharmacy, will be discussing her research about how physicians and pharmacists can better engage patients in making decisions about medications.

We would like to take this opportunity to thank you for attending the 2018 WWCRQI and supporting local research.

## ACKNOWLEDGEMENTS

### PLANNING COMMITTEE

Dr. Andrew Costa  
Graham Campbell  
Rebecca Correia  
Sarah Penhearow

Carolyn Minnick  
Daryl Dash  
Dr. Mike Lee-Poy  
Lirije Hyseni

Sarah Laferriere  
Catherine Arruda  
Glenda Gilliland  
Cristian Hertzner

Dr. Cathy Morris  
Certina Ho  
Dia Rahman  
Amy Doris

# CONTENTS

Thank you for making this event a success!  
Sincerely,

**Andrew Costa** PhD  
Research Lead,  
Michael G. DeGroot School of Medicine,  
Waterloo Regional Campus

**Graham Campbell** MA  
Research Coordinator  
Michael G. DeGroot School of Medicine,  
Waterloo Regional Campus

**Rebecca Correia**  
Research and Education Assistant  
Michael G. DeGroot School of Medicine,  
Waterloo Regional Campus

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## SPECIAL THANKS

Tami Everding  
Penny Schmiedendorf  
Shauna Boniface

Stephen Bailey  
WRC Staff and  
Administration

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# PROGRAM

12:00-12:30 P.M. **CHECK-IN** and **NUTRITION & COFFEE BREAK**  
WRC Lecture Theatre (2018), Second Floor

12:30-12:45 P.M. **Welcome, Introduction and Overview**  
WRC Lecture Theatre (2018), Second Floor

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**1-Minute Technology Pitches**, WRC Lecture Theatre (2018)

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12:45-1:30 P.M. **KEYNOTE ADDRESS: Dr. Kelly Grindrod**  
WRC Lecture Theatre (2018), Second Floor

1:30-2:30 P.M. **POSTER/NETWORKING SESSION 1** and **LUNCH**  
WRC Third Floor Atrium

2:30-3:30 P.M. **CONCURRENT BREAKOUT SESSION 1**  
**Kitchener Waterloo Society for Innovation in Medicine: Panel**  
Pharmacy Building (PHR 1008)

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2:30-3:30 P.M. **CONCURRENT BREAKOUT SESSION 2**  
**Interprofessional Healthcare Teams Improving Care**  
WRC Lecture Theatre (2018), Second Floor

3:30-4:30 P.M. **POSTER/NETWORKING SESSION 2**  
WRC Third Floor Atrium

4:00\*-5:30 P.M. **CONCURRENT BREAKOUT SESSION 3**  
**Family Medicine Residents**  
Pharmacy Building (PHR 1008)

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4:30\*-5:30 P.M. **CONCURRENT BREAKOUT SESSION 4**  
**Assessments, Outcomes, and Quality Improvement**  
WRC Lecture Theatre (2018), Second Floor

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5:30-5:35 P.M. **Voter's Choice Online Poll**, WRC Lecture Theatre (2018)

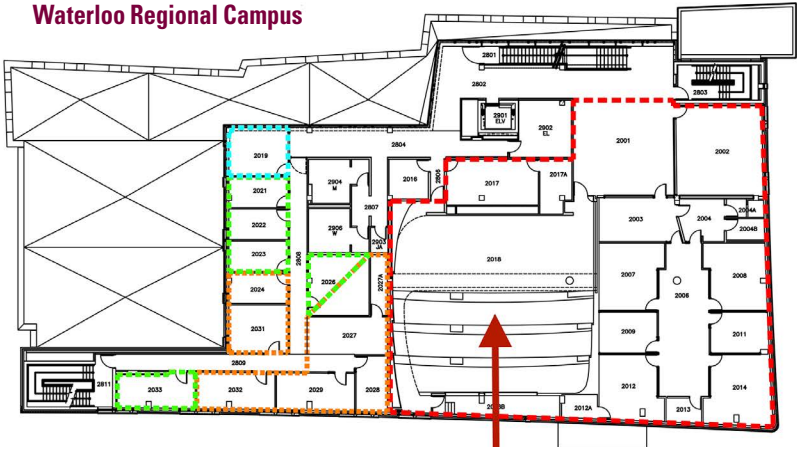
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5:35-6:00 P.M. **Closing Ceremony & Awards**  
WRC Lecture Theatre (2018), Second Floor

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*\*Please note that Concurrent Session 3 begins at 4:00 p.m. whereas Concurrent Session 4 begins at 4:30 p.m. Modify your time spent at the Poster Networking Session 2 accordingly.*

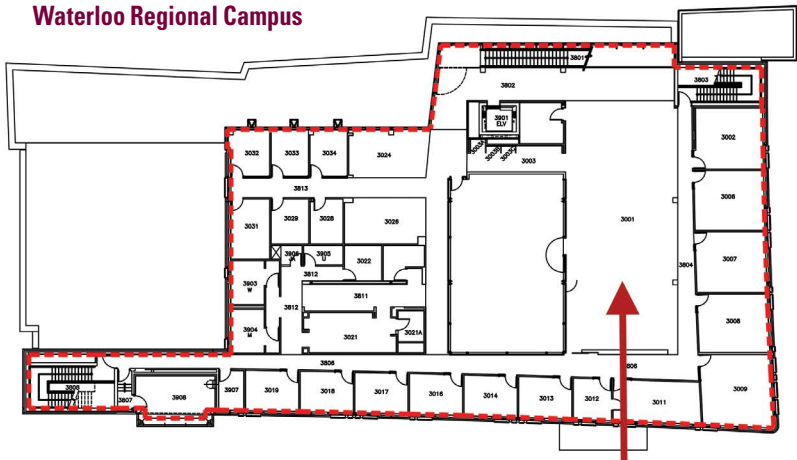
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Waterloo Regional Campus**



WRC LECTURE THEATRE (2018)

SECOND FLOOR

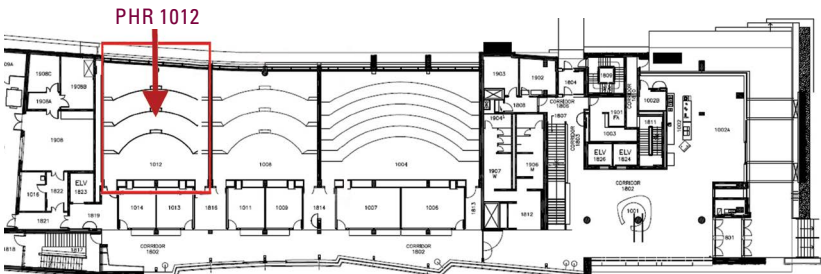
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WRC ATRIUM

THIRD FLOOR

■ **University of Waterloo,  
School of Pharmacy**



PHARMACY

# KEYNOTE PRESENTATION

## Dr. Kelly Grindrod

### Engaging Patients in Decisions about Medications



**Kelly Grindrod**

Dr. Grindrod is an associate professor at the University of Waterloo's School of Pharmacy. She is also a licensed and practicing pharmacist with the Ontario College of Pharmacists. Dr. Grindrod works part-time as a clinical pharmacist at the Kitchener Downtown Community Health Centre and is a member of the Ontario Pharmacy Association.

In her keynote presentation, Dr. Grindrod will discuss her research examining how pharmacists and physicians can better engage patients in making decisions about medications. She works closely with researchers in systems design engineering and decision making to identify new strategies for engagement. Building on this research, Dr. Grindrod developed the Pharmacy5in5.ca educational platform. 5in5 aims to provide practical information on common but poorly understood problems in primary care. She will discuss the design process for 5in5, including the development of tools for topics such as QT prolongation, serotonin syndrome, and adjusting medications for Ramadan.

#### **Learning Objectives:**

1. To examine how pharmacists, physicians, and patients differ in how they make decisions about medications.
2. To consider how an interdisciplinary team can bring new perspectives to old problems.
3. To discuss potential strategies to better support patients in making medication decisions.
4. To discuss ways pharmacists can be better engaged to support patients.
5. To describe the development of the Pharmacy 5in5 multimedia platform that aims to simplify complex medication problems for busy pharmacists.

# OUR PARTNERS AND SPONSORS

We are proud to welcome the following local health & technology innovators:



Thank you to our sponsors:



# ORAL PRESENTATIONS



Scan for full abstract listing

**SESSION ONE** – 2:30-3:30 P.M.  
Pharmacy Building (PHR 1008)

**SESSION TWO** – 2:30-3:30 P.M.  
WRC Lecture Theatre

**Kitchener Waterloo Society for Innovation in Medicine (KW SIM): Panel**  
Collaborative Innovation: Bridging the Gap between Healthcare and Tech

**Moderator**

Dr. Sophiya Benjamin, Psychiatrist

**Tech Executives**

Dr. Farnoud Kazemzadeh, CEO of Euclid Labs  
Michael Millar, CEO of Verto

**Researcher**

Dr. Alex Wong, Associate Professor and Canada Research Chair at University of Waterloo

**Hospital Executive**

Tina Mah, VP Innovation and Research at Grand River Hospital (GRH)

**Clinician**

Dr. Christopher Dainton, Emergency Medicine Physician and Founder of Medical Service Trip Inc.

**Interprofessional Healthcare Teams Improving Care**

**O-1: Anticholinergic Potential Risk Assessment Scales: Comparison of Drugs and Risk Scores**

Huyee Chan\*, PharmD cand;  
Tejal Patel, PharmD  
University of Waterloo,  
School of Pharmacy

**O-2: Will I lose my license for that? A closer look at Canadian disciplinary hearings and what it means for pharmacists' expanded scope**

Ai-Leng Foong\*, Kelly Grindrod,  
Sheryl Houle  
University of Waterloo,  
School of Pharmacy

**O-3: Delirium Undetected: The impact of allied health care professional documentation on delirium detection in hospitalized elders**

Sheryl Hodgson\*, Joanne Ho, Saraubh Kalra, Jennifer Tung, Chantelle Archer  
McMaster University, Internal Medicine

**O-4: Predicting Alternate Level of Care (ALC) Status in Acute Hospitals Based on Pre-morbid Home Care Client Characteristics**

Stella Arthur, PhD(c)\*, John Hirdes, PhD  
University of Waterloo,  
Aging, Health and Wellbeing





# FAMILY MEDICINE QUALITY IMPROVEMENT SESSIONS

**SESSION THREE** – 4:00\*-5:30 P.M.  
Pharmacy Building (PHR 1008)

## Family Medicine Quality Improvement Sessions

### **0-5: Efficacy of Simulation Training at McMaster University Waterloo Regional Campus**

Marion Che, M.D.,  
Scott Foley, M.D.,  
David Ritcey, M.D.  
Department of Family Medicine,  
McMaster University

### **0-6: Mind the Gaps: An e-learning pilot project improving residents' perceived preparedness for guideline-recommended opioid tapering in family practice**

Bridget Campbell, M.D.,  
Deirdre Lapper, M.D.,  
Samantha Thompson, M.D.  
Department of Family Medicine,  
McMaster University

### **0-7: The Best Laid Plans: A simple intervention for initiating advance care planning in primary care**

Will Caron, M.D.,  
Julianne Rastin, M.D.,  
Natalie Munn, M.D.  
Department of Family Medicine,  
McMaster University

### **0-8: Family Medicine Residents' Perspectives and Educational Needs Regarding Medical Cannabis**

Jessie Allison, M.D.,  
Payman Charkharin, M.D.  
Department of Family Medicine,  
McMaster University

### **0-9: Evaluating the Effectiveness of an EMR based tool for Metabolic Monitoring of Primary Care Patients on Atypical Antipsychotics**

Daniel Brewster, M.D.,  
Saurabh Kalra, M.D.,  
Mohini Patel, M.D.,  
Timothy Rudd, M.D.  
Department of Family Medicine,  
McMaster University



**SESSION FOUR** – 4:30-5:30 P.M.  
WRC Lecture Theatre (2018), Second Floor

**Assessments, Outcomes, and Quality Improvement**

**0-10: Clinical Measures and Resource Utilization among Psychiatric Inpatients with Personality Disorders in Ontario, Canada**

Jerrica Little\*, John P. Hirdes, Tess Naus, Eva Neufeld, Magnus Haraldsson, Johanna de Almeida Mello, & Peter Chan  
University of Waterloo, School of Public Health and Health Systems

**0-11: The Development of a Physical Activity Screening and Counselling Tool for Primary Care**

Clark R\*, Milligan J., Ashe MC., Faulkner G., Canfield C., Funnell L., Brien S., Butt D., Samson K., Windt A., Mehan U., Papaioannou A., Giangregorio LM.  
University of Waterloo,  
Department of Kinesiology

**0-12: Assessing performance of the Smart Audit tool for assessing quality of short-term medical missions (STMMs)**

Christopher Dainton\*, William Cherniak, Christina Gorman, Charlene Chu  
McMaster University,  
Emergency Medicine

**0-13: Assessing Nutrition Risk in the Community: A Pilot Workshop Connecting Pharmacists and Dietitians**

Cynthia Richard\*, Catherine Joyes, Rosemary Killeen, Christine Wellington, Janet Madill  
University of Waterloo,  
School of Pharmacy



# POSTER PRESENTATIONS



Scan for full abstract listing

**SESSION ONE** – 1:30-2:30 P.M. and **SESSION TWO** – 3:30-4:30 P.M.  
WRC Third Floor Atrium

**P-1: Waterloo Regional Campus Psychotherapy Program Process Review**  
Jasmine Tsang MD\*, Amanda Ritsma MD\*,  
Madeleine Wootton MD,  
Ewa Talikowska-Szymczak MD  
McMaster University, Department of  
Psychiatry and Behavioural Neuroscience

**P-2: Antipsychotic Medication, Pro Re Nata Use, And Mortality In Older Adults: A Scoping Review Regarding The Current State Of The Evidence**  
Jason Randle, Msc., Dr. George Heckman,  
Dr. Mark Oremus, Dr. Joanne Ho  
University of Waterloo,  
Applied Health Sciences, School of Public  
Health and Health Systems

**P-3: “That Collaboration Piece Isn’t Working”: Developing Knowledge Translation Interventions To Promote Exercise In Long-Term Care Based On Behaviour Change Theory**  
Caitlin Mcarthur\*, Christina Ziebart,  
Alexandra Papaioannou, Sid Feldman,  
Angela M. Cheung, Judi Laprade,  
Linda Lee, Ravi Jain, Lora M. Giangregorio  
McMaster University and  
Geras Centre for Aging Research

**P-4: Using Machine Learning Algorithms For Population Health Decision Support: A Case Example For Predicting Falls In The Elderly Population**  
Sameen Ateeq, Reza Samavi  
McMaster University,  
DeGroot School of Business

**P-5: Pharmacy5in5: Never Stop Learning**  
Ashley Bancsi, PharmD (C)\*;  
Kelly Grindrod, PharmD MSc ACPR  
University of Waterloo,  
School of Pharmacy

**P-6: Mood Disorder in Older Adults: A Proposed Model of Relationship Between the Disease and Disability**  
Atul Sunny Luthra\*, Shannon Remers,  
Trevor Semplonius, Heather Millman  
McMaster University,  
Behavioural Neuroscience

**P-7: A Pilot Study Of A Nurse And Pharmacist Led Otn (Ontario Telemedicine Network) Based Clinic For Management Of Prostate Cancer Patients On Oral Therapy**  
Carla Girolametto\*, Tom Mcfarlane, Anna Granic, Jennifer Lounsbury, Stacey Hubay  
Grand River Hospital,  
Research and Clinical Trials

**P-8: Introducing A Simulation-Based Learning Curriculum Into The Internal Medicine Clerkship Rotation At A Distributed Medical School Campus**  
Shelley Kuang, Zara Khalid, Daniel Brandt Vegas, Rebecca Krusselbrink  
McMaster University, Internal Medicine

**P-9: Removing Barriers To Accessing Primary Care: Implementation Of Videoconferencing For Persons With Spinal Cord Injuries**  
Dr. James Milligan, Dr. Matthew Smith, Dr. Craig Bauman  
The Centre for Family Medicine

**P-10: Clinician Heal (Know) Thyself - A Quality Improvement Initiative For Mindfulness In Emergency Medicine**  
Gillian Dyck BScN RN, Dr. Arthur Eugenio, Dr. Andrea Alvarez, Linda Rodrigues BA  
Cambridge Memorial Hospital, Patient Experience

**P-11: Strategies For Sustaining And Spreading Nutrition Care Changes In Acute Care: A Thematic Analysis From The More-2-Eat Study**  
Celia Laur\*, Heather Keller, Renata Valaitis, Sumantra Ray, Jack Bell  
University of Waterloo, School of Public Health and Health Systems

**P-12: Primary Care Collaborative Memory Clinics: Improving Care Coordination For Persons Living With Dementia**  
Lee, L., Lu, S.\*, Hillier, L. Gregg, S., Kaufman Carlin, G.  
The Centre For Family Medicine, McMaster University

**P-13: Improving Nursing Students' Clinical Skills Using Video Assessment**  
Allison Van Bakel, Breanna Armstrong, Andrea Miller  
Conestoga College, School of Nursing

**P-14: Managing Harassment In The Clinical Learning Setting: Interprofessional, Inter-Institutional Blended Learning Model Yields Promising Results**  
\*Elaine Lillie, Margo Mountjoy  
University of Waterloo, School of Pharmacy

**P-15: Ereferral Solution: Exploring Effectiveness And Benefits To Providers And Patients**  
Heba Tallah Mohammed, PhD\*, and Lori-Anne, M.Ed  
eHealth Centre Of Excellence, System Coordinated Access



**P-16: Mal De Debarquement Syndrome As A Differential Diagnosis For Post Concussion Dizziness**

Jennifer Guan\*, Teresa Gambale, Adrienne Atayde, Michel Rathbone  
McMaster University,  
Michael G. DeGroot School of Medicine

**P-17: Evaluating the Use of Tablets for Conducting Mental Health Assessments in Primary Care**

Mohamed Alarakhia, BSc, MD, CCFP, Jennifer La\*, MASC, Lirije Hyseni, MSc, Meghan Brenner-Burgoyne, RN, MPH, Danika Walden, PMP, MSc  
eHealth Centre of Excellence,  
Benefits Realization

**P-18: (Teach Me About The) ...Baby One More Time: Student Perceptions Of Paediatrics Learning Opportunities In Preclerkship**

Sarah Peters\*  
McMaster University, School of Medicine

**P-19: Assessment Of Limitations By Instruments That Measure Capacity To Manage Medications In Older Adults**

Jessica Ivo\*, BSc (C), Maheen Farooqi, BSc (C), Tejal Patel, Bsc Pharm, PharmD  
University of Waterloo, School of Pharmacy

**P-20: "I Know The Issues, But What Can I Do About Them?": A Needs Assessment Of Teaching And Learning About How To Address Health Inequalities In The McMaster Medical School Clinical Skills Curriculum**

Jason Profetto, Rebekah Baumann, Brenden Murphy, Devon Stride, Genya Oparin, Yotakahron Jonathan, Anvita Kulkarni, Nisha Kansal, Janice Lee, Brittany Graham\*, Michael Kruse, Talveer Mandur\*, Priya Gupta, Claire Bodkia, Albina Veltman  
McMaster University,  
Faculty of Health Sciences

**P-21: The Effects Of Yoga On Global Cardiovascular Risk: A Three Month Intervention**

Ashok Pandey\*, Nisar Huq, Mike Chapman, Antonio Fongang, Paul Poirier  
Cambridge Cardiac Care Centre

**P-22: The Use Of Video Aids In Code Status Discussions: A Pilot Single-Centre Quality Improvement Study.**

Yassmin Behzadian\*, Dr. William Cumming, Dr. Rebecca Kruisselbrink  
McMaster University, School of Medicine

**P-23: Remote Pacemaker Interrogation Technology Leads To Increased Patient Satisfaction And Equal Safety, And Cost Savings For Hospitals And Patients: A Retrospective Chart Review Of Guelph Patients Implanted At St. Mary's Hospital, Kitchener Using Carelink At A Remote Ymca Guelph Clinic**

Shoshana Grossman, Umjeet Jolly, Claus Rinne  
McMaster University,  
School of Medicine



**P-24: Interprofessional Outreach Team For High Risk Patients: Who Is Served?**

Linda Lee\*, Loretta M. Hillier Kelly Niall, Maria Bohem, Kay Weber, Jillian Bauer  
Centre For Family Medicine Family Health Team

**P-25: Using Electronic Medical Record Data To Better Understand And Provide Quality Care For Patient Populations**

Alexandra Piatkowski\*, Billy Bostad\*, Michelle Cousins, Sunny Ng, Dr. Mohamed Alarakhia, Kathryn Flanigan, Jillian Bauer, Barb Lather, Dr. Ambreen Moazzam, Debi Page, Dr. Kirk Hollohan  
eHealth Centre of Excellence

**P-2: Non-Vka Oral Anticoagulants Versus Vitamin K Antagonists In Patients Undergoing Cardioversion For Atrial Fibrillation**

Saurabh Gupta, Arjun Pandey\*, Kevin J Um, William F Mcintyre, Marina Ivanova, Emilie P Belley-Cote, Richard P Whitlock  
McMaster University  
Faculty of Health Sciences

**P-27: Repetitive Transcranial Magnetic Stimulation For Chronic Central Neuropathic Pain: A Scoping Review**

Mei Lin Chen\*, Maxwell Ng\*, Ning Jiang  
McMaster University, School of Medicine; University of Waterloo, Systems Design Engineering

**P-28: Using Standardized Patients In A Teaching Setting To Enhance Optometric Specific Communication Skills**

Aaron Geekie-Sousa BA, PMP\*; Jenna Bright BSc, MSc, OD\*  
McMaster University  
School of Medicine

**P-29: Recovery And Analysis Of Circulating Tumour Cells From The Peripheral Blood Of Stages Iii And Iv Colorectal And Breast Cancer Patients**

Deep Patel, MPharm\*, Mala Bahl, MD MSc FRCP, and Jonathan Blay, PhD FRSM FRSB  
University of Waterloo, School of Pharmacy

**P-30: Improving Interprofessional Collaboration Through Integration Of Nursing Experiences In Pre-Clerkship Medical Curriculum At A Community Based Hospital**

\*David Nguyen, \*Mark Xue, Lisa Buttazoni  
McMaster University, School of Medicine

**P-31: Exploring How “Reason To Use” Information Can Be Shared Among Pharmacist, Physicians And Patients: Preliminaries Results**

Reicelis Casares Li, Thana G. Hussein\*, Cassandra Sum, Kelly Grindrod, Catherine M. Burns  
University of Waterloo

**P-32: Commercialization Of mHealth and eHealth In Canada**

Dia Rahman, Dr. Plinio Morita  
University of Waterloo, Faculty of Applied Health Sciences





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