

Date: May 26, 2023

THE UNIVERSITY OF BRITISH COLUMBIA  
Curriculum Vitae for Faculty Members

Date: May 26, 2023

Initials: PSL

Peter S. Loewen, B.Sc.(Pharm), ACPR, Pharm.D., R.Ph., FCSHP

1. **SURNAME:** Loewen **FIRST NAME:** Peter  
**MIDDLE NAME:** Shane
2. **DEPARTMENT/SCHOOL:** N/A
3. **FACULTY:** Pharmaceutical Sciences
4. **PRESENT RANK:** Associate Professor **SINCE:** July 2017
5. **POST-SECONDARY EDUCATION**

University or Institution	Degree	Subject Area	Dates
University of British Columbia	Pharm.D.	Pharmacotherapeutics	1994-1996
University of British Columbia / Canadian Society of Hospital Pharmacists Pharmacy Practice Residency Program	ACPR	Pharmacy Practice	1993-1994
University of British Columbia	B.Sc.(Pharm)	Pharmacy	1988-1993

**SPECIAL PROFESSIONAL QUALIFICATIONS**

1. Academic Leadership Development Program ([link](#)), University of British Columbia (2012-13)
2. Scholarship of Teaching & Learning Certificate Program ([link](#)), University of British Columbia (2010-2011)
3. Fellow, Canadian Society of Hospital Pharmacists (granted 2004)
4. Pharmacy Examining Board of Canada (qualified 1993)
5. College of Pharmacists of British Columbia (License #7173) (1993-present)

**6. EMPLOYMENT RECORD**

(a) *Prior to coming to UBC*

University, Company or Organization	Rank or Title	Dates
Lower Mainland Pharmacy Services	Coordinator, Pharmacy Practice Residency Programs	March 2011-June 2012
Vancouver Coastal Health Authority/Providence Health Care Regional Pharmacy Services	Regional Coordinator of Education & Research	March 2006 – March 2011
Vancouver Coastal Health/Providence Health Care Pharmacy Practice Residency Program	Residency Program Coordinator	March 2006 – March 2011
Pharmaceutical Sciences Clinical Service Unit, Vancouver General Hospital	Clinical Pharmacy Specialist (Medicine)	June 1996 – January 2018
Pharmaceutical Sciences Clinical Service Unit, Vancouver Hospital & Health Sciences Center	Clinical Coordinator	2001- March 2006

Pharmaceutical Sciences Clinical Service Unit, Vancouver Hospital & Health Sciences Center	Vancouver Hospital Pharmacy Residency Program Co-Coordinator	2001 – March 2005
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*(b) At UBC*

Rank or Title	Dates
Associate Professor (Tenured), Faculty of Pharmaceutical Sciences	July 2017 - present
Assistant Professor, Tenure Track, Faculty of Pharmaceutical Sciences	July 2012 – June 2017
Director, Doctor of Pharmacy Programs (PharmD Graduate Program, PharmD Entry-to-Practice Program, PharmD Flexible Program), Faculty of Pharmaceutical Sciences	July 1, 2012 – June 30, 2015
Associate Professor (Part Time), Faculty of Pharmaceutical Sciences <i>20% (2005-2009) and 40% (2009-2012) cross-appointment with Vancouver Coastal Health Authority / Lower Mainland Pharmacy Services</i>	April 2005 – June 2012
Clinical Associate Professor, Faculty of Pharmaceutical Sciences	Sept 2004 – March 2005
Clinical Assistant Professor, Faculty of Pharmaceutical Sciences	Aug 1996 – Aug 2004

An overarching personal and professional goal throughout my career has been to advance patient care through innovation, helping pharmacists develop and advance their skills, and expanding the professional boundaries for pharmacists. I made great strides in this in my capacities as a clinician, researcher, educator, and leader with the health authorities and the Faculty as a Clinical appointee and Associate Professor-Part time for the first 16 years of my career. I was excited to seize the opportunity to join the faculty full-time in 2012 as Assistant Professor & Director, Doctor of Pharmacy Programs and further this goal at among the highest levels possible: creating an entirely new, more advanced degree program for entry-to-practice (E2P) pharmacy programs than had previously been done in Canada, and a pathway for Bachelors-trained pharmacists to upgrade their skills to this new level. I spent approximately 80% of my time during the first 3 years of my appointment (2012-2015) fulfilling my primary mission of building these two new degree programs. I led the faculty through the creation of and saw the E2P PharmD Program through university and governmental approval, and the Flexible PharmD program to UBC Board & Senate Approval in 2015. It was approved by the BC government in February 2017 (details begin on p.14).

Since completing my 3-year term in the largely administrative/leadership role as Director, since 2015 I have deepened my commitment to elevating the profession of pharmacy and my goals of enhancing patient care through innovation and clinical translational research in cardiovascular pharmacotherapy and pharmacy practice, education of pharmacists, and making contributions to the profession that expand the positive impacts of pharmacists on patients' health (see "Major Professional Contributions", "Memberships on scholarly societies" and "Works in Progress" below).

**OTHER UBC-AFFILIATED APPOINTMENTS**

Organization and Title	Dates
Researcher, UBC Center for Cardiovascular Innovation ( <a href="#">CCI</a> )	2021 – present
Principal Investigator, UBC Collaboration for Outcomes Research & Evaluation ( <a href="#">CORE</a> )	2012 – present
Affiliated Researcher, Fraser Health Authority	2014 – present
Affiliated Investigator, Vancouver Coastal Health Research Institute	2014 – present

*(c) Date of granting of tenure at U.B.C.*

July 1, 2017

## 7. LEAVES OF ABSENCE

None taken.

## 8. TEACHING

I believe in bringing my experiences as a clinician, pharmacy practice leader, and researcher to my teaching at all levels. I have been most significantly influenced by the *Developmental* perspective, [Arseneau R, Rodenberg D. *The Developmental Perspective*. In Pratt D, ed. Five perspectives on teaching in adult & higher education. Kreiger. Malabar, FL. 1998], and when I am coaching and mentoring in a patient care setting, by the *Apprenticeship* perspective [Johnson J, Pratt DD. *The Apprenticeship Perspective*. In Pratt D, ed. Five perspectives on teaching in adult & higher education. Kreiger. Malabar, FL. 1998]. My commitment to shaping how my students *think, make decisions, and act* in the interest of patients led to my desire to lead the creation of the new PharmD degree programs. I am continuing to develop my skills as my clinical practice, research, and work to advance the profession continue to inform my perspectives. I will always bring those into my teaching, which is continuously refreshed by what I learn nearly every day through these activities. This philosophy and practice have led to my receiving many awards for teaching, precepting, and mentorship.

### (a) *Areas of special interest and accomplishments*

- Recipient of several **awards** for teaching, precepting, and mentorship.
- Designed, developed, and implemented the **Medication Management curriculum** a new approach to teaching patient care skills for pharmacy practice that comprises 75% of coursework in the first 3 years of the new E2P PharmD program, and which I am overseeing the second year of implementation of as Course Coordinator for PHRM 211 & 212. This is an innovative module-based curriculum that integrates 13 essential elements for care provision and includes time for integrating knowledge and skills vertically across the program. For this work my team was nominated for the 2016 **Association of Faculties of Pharmacy of Canada Janssen Award for Educational Innovation**. (<http://medman-pharmacy.sites.olt.ubc.ca>)
- Designed, developed, and implemented an innovative **Cognitive Model** that describes student progression through the year levels of pharmacy training across the professional role domains in terms of level of performance required for skill and knowledge outcomes, and the complexity of problems to be solved. This model is the basis for course design and student assessment in the UBC E2P and Flexible PharmD programs, has been adapted by the BC Pharmacy Practice Residency Programs, and has influenced the national conversation about the purposes of pharmacy programs and the relationships between them. (<https://www.dropbox.com/s/lp1pdo45fbcwr29/CognitiveModelResources.pdf?dl=0> ; <http://medman-pharmacy.sites.olt.ubc.ca/guide-to-building-a-medication-management-module/cognitive-model/>)
- Created and led **Canada's largest pharmacy practice residency program**, encompassing teaching sites across 10 institutions in BC with 23 residents. (<http://www.lmpsresidency.com>)
- Developed a curriculum and method of teaching patient assessment and therapeutics of **sodium and water homeostasis**, a particularly complex area, now integrated into the UBC Doctor of Pharmacy Graduate program, UBC Entry to Practice PharmD program, the Lower Mainland Pharmacy Services Residency Program, and other continuing education programs for pharmacists. (<http://www.peterloewen.com/nah2o-therapeutics/>)
- **Course Coordinator, PHAR 501** (Advanced Pharmacotherapeutics) Developed and implemented a contemporary case-based teaching format based on principles of adult learning. Coordinated all aspects of curriculum design, scheduling, instructor selection, student evaluation, course & instructor evaluation.

### **Other areas of special interest:**

- Stroke prevention, particularly in atrial fibrillation.
- Training pharmacists to interpret ECGs for application to patient decision-making.
- Enhancing individual patient pharmacotherapeutic decision-making by integrating clinical prediction rules with RCT evidence of drug effects.

- Patient values and preferences and their relation to drug therapy, particularly the therapeutics of prevention.
- Evidence-based shared patient decision-making applications to pharmacotherapeutics.
- Pharmacologic cardiovascular risk reduction.
- Experiential learning by pharmacists and models to enhance its efficacy and efficiency.
- Teaching about professional integrity, conflicts of interest, research ethics, professional ethics.
- Critical appraisal of the pharmacotherapeutic literature.

(b) *Courses Taught at UBC***COURSES TAUGHT**

Session	Course Number	Scheduled Hours	Class Size	Hours Taught			
				Lectures	Tutorials	Labs	Other
<b>2022-23</b>							
2022-23	PHRM 111	247	224	2			
2022-23	PHRM 211	247	224	15.5		9	
2022-23	PHRM 212	247	224	3			
2022-23	PHRM 231	26	224	2			
<b>2021-22</b>							
2021-22	PHRM 211	247	224	16		10.5	
2021-22	PHRM 212	247	224	4			
2021-22	PHRM 231	26	224	2			
2021-22	PHRM 302	26	2				supervised 2 research projects
<b>2020-21</b>							
2020-21	PHAR 463	26	8	6			
2020-21	PHRM 211	247	224	16		10.5	
2020-21	PHRM 212	247	224	4		3	
2020-21	PHRM 231	26	224	2			
2020-21	PHRM 111	247	224	4			
<b>2019-20</b>							
2019-20	PHAR 463	26	13	6			
2019-20	PHRM 211	247	204	16		10.5	
2019-20	PHRM 212	247	204	4			
2019-20	PHRM 231	26	204	2			
2019-20	PHRM 111	247	224	4			
<b>2018-19</b>							
2018-19	PHRM 211	247	204	18		10.5	
2018-19	PHRM 212	247	204	4			
2018-19	PHRM 231	26	204	2			
2018-19	PHRM 111	247	224	4			
2018-19	PHRM 131	13	224	2			
2018-19	PHAR 453	26	1				supervised 1 research project
<b>2018-19</b>							
2017-18	PHAR 533	12 months of full-time clerkships	6				4 weeks precepted in Medicine
2017-18	PHAR 535b	22	6	1.5			

Session	Course Number	Scheduled Hours	Class Size	Hours Taught			
				Lectures	Tutorials	Labs	Other
2017-18	PHRM 211	247	204	17		10.5	
2017-18	PHRM 212	247	204	2.5			
2017-18	PHRM 231	26	204	4			
2017-18	PHRM 111	247	224	8.5			
2017-18	PHRM 131	13	224	2			
<b>2016-17</b>							
2016-17	PHAR 451	26	224	10			
2016-17	PHAR 461	13	224	1			
2016-17	PHAR 501	156	6	12			
2016-17	PHAR 453	26	1				supervised 1 research project
2016-17	PHAR 506	78	6	1.5			
2016-17	PHAR 533	12 months of full-time clerkships	8				4 weeks precepted in Medicine
2016-17	PHAR 535b	22	6	1.5			
2016-17	PHAR 554	39	6	3			
2016-17	PHRM 211	247	204	12		11	
2016-17	PHRM 212	247	204	2			
2016-17	PHRM 231	26	224	4			
2016-17	PHRM 111	247	224	5.5			
<b>2015-16</b>							
2015-16	PHAR 451	26	224	10			
2015-16	PHAR 461	13	224	1			
2015-16	PHAR 501	156	8	10			
2015-16	PHAR 506	78	8	1.5			
2015-16	PHAR 533	12 months of full-time clerkships	8				4 weeks precepted in Medicine
2015-16	PHAR 535b	22	8	1.5			
2015-16	PHAR 554	39	8	3			
2015-16	PHRM 111	247	224	6.5		4	
<b>2014-15</b>							
2014-15	PHAR 299	78	224	3			
2014-15	PHAR 451	26	224	10			
2014-15	PHAR 461	13	224	1			
2014-15	PHAR 501	156	8	10			
2014-15	PHAR 506	78	8	1.5			
2014-15	PHAR 533	12 months of full-time clerkships	8				4 weeks precepted in Medicine
2014-15	PHAR 535b	22	8	1.5			
2014-15	PHAR 554	39	8	3			
<b>2013-14</b>							
2013-14	PHAR 299	78	224	3			
2013-14	PHAR 399	78	224	1			
2013-14	PHAR 451	26	224	10			
2013-14	PHAR 461	13	224	1			

Session	Course Number	Scheduled Hours	Class Size	Hours Taught			
				Lectures	Tutorials	Labs	Other
2013-14	PHAR 499	65	224	1			
2013-14	PHAR 501	156	8	10			
2013-14	PHAR 506	78	8	1.5			
2013-14	PHAR 533	12 months of full-time clerkships	8				4 weeks precepted in Medicine
2013-14	PHAR 535b	22	8	1.5			
2013-14	PHAR 554	39	8	3			
2012-13	PHAR 299	78	150	3			
2012-13	PHAR 399	78	154	4			
2012-13	PHAR 451	26	150	10			
2012-13	PHAR 461	13	150	1			
2012-13	PHAR 499	65	150	1			
2012-13	PHAR 501	156	8	10			
2012-13	PHAR 506	78	8	1.5			
2012-13	PHAR 533	12 months of full-time clerkships	8				4 weeks precepted in Medicine
2012-13	PHAR 535b	22	8	1.5			
2012-13	PHAR 554	39	8	3			

### Teaching Prior to July 2012

Prior to my tenure-track appointment, I taught and coordinated courses at UBC for many years in various courses and programs. This helped inform my goals and objectives as a new full-time faculty member.

2011-12	PHAR 299	78	150	3			
2011-12	PHAR 399	78	154	4	6		
2011-12	PHAR 451	26	150	10			
2011-12	PHAR 461	13	150	1			
2011-12	PHAR 499	65	150	1			
2011-12	PHAR 501	156	8	14			
2011-12	PHAR 506	78	8	1.5			
2011-12	PHAR 533	12 months of full-time clerkships	8				8 weeks precepted in Medicine
2011-12	PHAR 535b	22	8	2			
2011-12	PHAR 554	39	8	3			
2010-11	PHAR 299	78	155	3			
2010-11	PHAR 351	26	154	1			
2010-11	PHAR 361	13	154	1			
2010-11	PHAR 399	78	154	4	6		
2010-11	PHAR 451	26	150	10			
2010-11	PHAR 461	13	150	1			
2010-11	PHAR 499	65	150	1			
2010-11	PHAR 501	156	8	14			
2010-11	PHAR 506	78	8	1.5			

Session	Course Number	Scheduled Hours	Class Size	Hours Taught			
				Lectures	Tutorials	Labs	Other
2010-11	PHAR 533	12 months of full-time clerkships	8				12 weeks precepted in Medicine
2010-11	PHAR 535b	22	8	2			
2010-11	PHAR 554	39	8	3			
2009-10	PHAR 299	78	150	3			
2009-10	PHAR 351	26	154	1			
2009-10	PHAR 361	13	154	1			
2009-10	PHAR 399	78	154	4	6		
2009-10	PHAR 451	26	148	10			
2009-10	PHAR 454	39	148	1			
2009-10	PHAR 461	13	148	1			
2009-10	PHAR 498	78	148	1			
2009-10	PHAR 499	65	148	2			
2009-10	PHAR 501	156	8	15			
2009-10	PHAR 533	12 months of full-time clerkships	8				12 weeks precepted in Medicine
2009-10	PHAR 535b	22	8	3.5			
2009-10	PHAR 554	39	8	3			
2008-09	PHAR 299	78	150	3			
2008-09	PHAR 351	26	154	1			
2008-09	PHAR 361	13	154	1			
2008-09	PHAR 399	78	150	4	6		
2008-09	PHAR 451	26	154	11			
2008-09	PHAR 454	39	154	1			
2008-09	PHAR 461	13	154	1			
2008-09	PHAR 498	78	154	1			
2008-09	PHAR 499	65	154	2			
2008-09	PHAR 501	156	8	15			
2008-09	PHAR 533	12 months of full-time clerkships	8				12 weeks precepted in Medicine
2008-09	PHAR 535b	22	8	3.5			
2008-09	PHAR 554	39	8	4			
2007-08	PHAR 351	26	150	1			
2007-08	PHAR 361	13	150	2			
2007-08	PHAR 399	78	150	2			
2007-08	PHAR 451	26	150	9			
2007-08	PHAR 454	39	150	1			
2007-08	PHAR 498	78	140	1			
2007-08	PHAR 501	156	8	15			
2007-08	PHAR 533	12 months of full-time clerkships	8				4 weeks precepted in Medicine
2007-08	PHAR 535b	22	7	4.5			

Session	Course Number	Scheduled Hours	Class Size	Hours Taught			
				Lectures	Tutorials	Labs	Other
2007-08	PHAR 554	39	7	4			
2006-07	PHAR 351	26	140	1			
2006-07	PHAR 361	13	140	1			
2006-07	PHAR 451	26	140	9			
2006-07	PHAR 499	65	154	2			
2006-07	PHAR 501	156	8	11			
2006-07	PHAR 533	12 months of full-time clerkships	8				16 weeks precepted in Medicine
2006-07	PHAR 535b	26	8	3			
2006-07	PHAR 554	39	8	4			
2005-06	PHAR 351	26	140	1			
2005-06	PHAR 361	13	140	1			
2005-06	PHAR 451	26	140	7			
2005-06	PHAR 471	13	140	2			
2005-06	PHAR 501	156	8	15			
2005-06	PHAR 533	12 months of full-time clerkships	8				12 weeks precepted in Medicine
2005-06	PHAR 535b	22	9	2			
2004-05	PHAR 361	13	140	1			
2004-05	PHAR 501	156	8	15			
2004-05	PHAR 533	12 months of full-time clerkships	8				16 weeks precepted in Medicine
2004-05	PHAR 535b	22	6	2			
2003-04	PHAR 403	4-week hospital experiential rotation					coordinate d rotations for 5 students
2003-04	PHAR 501	156	8	15			
2003-04	PHAR 533	12 months of full-time clerkships	8				8 weeks precepted in Medicine
2003-04	PHAR 535b	22	6	2			
2002-03	PHAR 301	78	120	2			
2002-03	PHAR 403	4-week hospital experiential rotation					coordinate d rotations for 6 students
2002-03	PHAR 501	156	8	16			
2002-03	PHAR 533	12 months of full-time clerkships	8				24 weeks precepted in Medicine
2002-03	PHAR 535b	22	6	2			



Session	Course Number	Scheduled Hours	Class Size	Hours Taught			
				Lectures	Tutorials	Labs	Other
2001-02	PHAR 403	4-week hospital experiential rotation					coordinate d rotations for 4 students
2001-02	PHAR 501	156	6	12			
2001-02	PHAR 533	12 months of full-time clerkships	8				20 weeks precepted in Medicine
2001-02	PHAR 535b	22	6	2			
2000-01	PHAR 501	156	6	14			
2000-01	PHAR 533	12 months of full-time clerkships	8				20 weeks precepted in Medicine
2000-01	PHAR 535b	22	6	4			
1999-00	PHAR 501	156	6	15			
1999-00	PHAR 533	12 months of full-time clerkships	8				32 weeks precepted in Medicine
1999-00	PHAR 535b	22	6	4			
1998-99	PHAR 405	26	1				Supervised 1 project
1998-99	PHAR 501	156	6	10			
1998-99	PHAR 533	12 months of full-time clerkships	8				8 weeks precepted in Medicine
1998-99	PHAR 535b	22	6	11			
1997-98	PHAR 405	26	1				Supervised 1 project
1997-98	PHAR 501	156	6	5			
1997-98	PHAR 533	12 months of full-time clerkships	8				20 weeks precepted in Medicine
1996-97	PHAR 403	4-week hospital experiential rotation					Precepted 1 student, coordinate d rotations for 9 others in general medicine
1996-97	PHAR 533	12 months of full-time clerkships	8				8 weeks precepted in Medicine
1996-97	PHAR 508	52	6	1			

**COURSES COORDINATED**

Session	Course	Credits	Comment
2021 - present	Course# TBA Evidence Appraisal in Healthcare	N/A	New course being developed for the proposed Diploma of Pharmacy Leadership program
2019 - present	PHAR 463 Cardiovascular Pharmacotherapy	2	Developed and coordinated this course in the UBC Flexible PharmD Program
2017 - present	PHRM 211 Endocrinology module	~57 contact hour module) within PHRM 212 (15-credit course)	Module Leader
2016- 2018	PHRM 211: Medication Management II	15	I created this course as Director, Doctor of Pharmacy Programs, and I co-led its development for first delivery in Sept 2016. It constitutes 75% of the curriculum for Professional Year 2 Entry-to-Practice Doctor of Pharmacy students.
2016-17	PHRM 212: Medication Management III	15	I created this course as Director, Doctor of Pharmacy Programs, and I co-led its development for first delivery in January 2017. It constitutes 75% of the curriculum for Professional Year 2 Entry-to-Practice Doctor of Pharmacy students.
2005-2014	PHAR 451: Therapeutics III	2	Overall course coordinator.
2007-12	PHAR 501: Advanced Pharmacotherapeutics	Gastroenterology section coordinator – 9 hours	Coordinator of this section of the course.
2005-06	PHAR 471: Pathophysiology II	1	Overall course coordinator.
1998-2004	PHAR 501: Advanced Pharmacotherapeutics	12	Overall course coordinator.

#### NON-COURSE GRADUATE PHARM.D. PROGRAM TEACHING

Session	Program component	Scheduled Hours	Class Size	Hours Taught			
				Lectures	Tutorials	Labs	Other
2015-16	PharmD Program Director Seminar Series	8	8	2			
2014-15	PharmD Program Director Seminar Series	8	8	4			
2013-14	PharmD Program Director Seminar Series	8	8	4			

#### BC PHARMACY PRACTICE RESIDENCY PROGRAMS - ACADEMIC DAY PROGRAM TEACHING

- Sodium & Water Therapeutics (4h) - annually 2007 - present.

- ECG Interpretation (4h) - annually 2010 - 2022.
- Research planning (2h) - annually 2007 - 2016.
- Teaching and Precepting Skills (2h) – annually 2007 - 2016.
- Practical Skills in Literature Searching and Information Management (3h) - twice annually 2000 - 2005.
- Stroke Prevention (2h) - annually 2004 - 2006.
- Clinical Pharmacist as Information manager (2h) - annually 2003 - 2005.
- Conflicts of Interest – Walking The Line (2h) - annually 2006 - 2010.

### UBC CANADIAN PHARMACY PRACTICE PROGRAM (“CP3”) TEACHING

- Secondary prevention of myocardial infarction, stroke and anticoagulation management (3h) - 2004-05
- Hospital Pharmacy Practice (2h) – 2010, 2011

(c) *Graduate Students Supervised and/or Co-Supervised*

Student Name	Program Type	Year		Supervisory Role (supervisor, co-supervisor, committee member)	Thesis Title
		Start	Finish		
Aashiq Shukkoor	MSc	Sept 2023		Supervisor	TBA
Mahsa Eslami	MSc	Sept 2023		Supervisor	TBA
Minh-Tri Van	MSc	Sept 2021	Aug 2023 (expected)	Co-supervisor	An analysis of heart failure treatment sequencing
Astou Thiam	PhD	Sept 2022	March 2023 (withdrew)	Member, research supervisory committee	
Adenike Adelakun	MSc	Sept 2020	July 2022	Supervisor	Oral Anticoagulant Switching Events in Patients with Atrial Fibrillation: A Retrospective Cohort Study
Shahrzad Salmasi	PhD	Sept 2018	Nov 2021	Supervisor	Adherence To Oral Anticoagulants In Patients With Atrial Fibrillation
Shahrzad Salmasi	MSc	Sept 2016	May 2018	Supervisor	Assessment of atrial fibrillation patients' education needs
James Hicklin	MSc	Jan 2016	Jun 2018	Member, research supervisory committee	How do current approaches to communicating ambiguity in risk estimates influence decisions?

#### *Additional Graduate Student Contributions*

1. Chair, Final Doctoral Examination for David Kim, Dept of Anesthesiology, Pharmacology & Therapeutics, UBC Faculty of Medicine. February 2023
2. Chair, MSc research supervisory committee for Rana Madani Civi, student in the Faculty of Pharmaceutical Sciences (September 2022 - present).
3. University Examiner, Final Doctoral Exam for Seraphine Zeitouny, Center for Health Services and Policy Research, UBC Faculty of Medicine. September 2022

4. Chair, Final Doctoral Examination for Natasha Orr, Reproductive Developmental Sciences, UBC Faculty of Medicine. July 2022
5. Chair, MSc research supervisory committee for Joseph Ho, student in the Faculty of Pharmaceutical Sciences (September 2021 – April 2023).
6. Chair, PhD research supervisory committee for Nevena Rebić, student in the Faculty of Pharmaceutical Sciences (September 2020 - present).
7. External Examiner, MSc thesis defense, Khalid Saad El Din, student in the Faculty of Pharmaceutical Sciences. June 2019.
8. Chair, MSc research supervisory committee for Nevena Rebić, student in the Faculty of Pharmaceutical Sciences (September 2018 – graduated May 2020).

(d) *Continuing Education Activities (selected)*

1. Completed the UBC Equity Diversity Inclusion for Years—Search & Selection Online Training course. Completion ID: EIO\_EDISS\_Fe2023wen13Pet3. February 1, 2023.
2. Completed the Course on Research Ethics based on the Tri-Council Policy Statement: Ethical Conduct for Research Involving Humans (TCPS 2: CORE 2022). Certificate# 0000806676. February 2022.
3. Attended the Canadian Cardiovascular Congress annually since 2015, Canadian Cardiovascular Society.
4. Using NVivo for qualitative research (4h), UBC Library Research Commons, UBC. September 2017.
5. Canadian Cardiovascular Congress 2016, Canadian Cardiovascular Society, Montreal, QC, October 2016.
6. Canadian Cardiovascular Congress 2015, Canadian Cardiovascular Society, Toronto, Ontario, October 2015.
7. Drug Therapy Course, Therapeutics Initiative / Therapeutics Education Collaboration, Vancouver, BC, annually every April or May. Attended as an invited speaker every year from 1998 - present.
8. Canadian Pharmacy Education & Research Conference, Association of Faculties of Pharmacy of Canada, Saskatoon, SK, June 2014.
9. Professional Practice Conference, Canadian Society of Hospital Pharmacists, Toronto Ontario, annually every January. Have attended as a delegate or speaker nearly every year since 1998.
10. UBC Academic Leadership Development Program (<http://aldp.ubc.ca>). Completed September 2013.
11. Canadian Pharmacy Education & Research Conference, Association of Faculties of Pharmacy of Canada, Niagara-on-the-Lake, June 2013.
12. UBC Scholarship of Teaching & Learning Certificate Program (<http://isotl.cltl.ubc.ca>). Graduated May 2011.
13. 8th Annual Interprofessional Workshop for Clinical Educators: Moving To Mastery. UBC College of Health Disciplines, Vancouver, May 2008.
14. Practice Makes Perfect: 1st International Conference for Clinical Educators. Vancouver, November 2007.
15. 7th Annual Interprofessional Workshop for Clinical Educators: Moving To Mastery. UBC College of Health Disciplines, Vancouver, May 2007.
16. BCNet Connections Conference: Sharing Knowledge for Greater Innovation. Vancouver, April 2007
17. Project Management Skills Workshop, Vancouver Coastal Health. Facilitator: Sonia Norman. March 2007
18. Grants 101: Professional Grant Proposal Writing (Program Development and Evaluation, Professional Grant Writing, and Grant Research). Certificate program by The Grant Institute. Completed September 2006.

19. Tricouncil Policy Statement for Human Subjects Research Tutorial. Certification completed August 2006.
20. "Understanding regression analysis in research" workshop by Dr. M. Schultzer hosted by Vancouver Coastal Health Research Institute, May 2006.
21. UBC e-Learning Conference 2006. Faculty development workshop to enhance teaching using innovative electronic tools. June 2007.
22. "Keys to a Successful CIHR Grant Application" Workshop hosted by UBC Health Research Resource Office, Vancouver, January 2006.
23. Consistent and sustained participation in continuing education via Canadian Society of Hospital Pharmacists, National Council on Ethics in Human Research, other professional organizations. See later under "Invited Presentations" for specific contributions to continuing education.

(e) *Visiting Lecturer (indicate university/organization and dates)*

N/A

(f) *Other*

#### STUDENT ADVISING & MENTORSHIP

1. Faculty Mentor, UBC Integrated Sciences program (2023 – present)
 

I was selected by a student to serve as their faculty mentor for this program's formal [faculty-student mentorship program](#).
2. Faculty Advisor, UBC Doctor of Pharmacy Graduate Program (2001-2018)
 

I was chosen by these professional doctoral degree students to serve as their faculty advisor as part of program's Faculty Advisor program. This involved coaching, advising, and mentoring the students throughout their 20 months in the program. I was Advisor to 15 students in this capacity until the program closed in 2018.
3. Faculty Liaison, UBC Pharmaceutical Sciences Faculty-Student Engagement Program (2015-2019)
 

I was a volunteer faculty member in this program which assigned first year Entry-to-Practice Doctor of Pharmacy students to volunteer faculty members for advising, mentorship, and coaching. I was a Liaison for 15 students since the program began in 2015.
4. Faculty Advisor, Pharmacy Evidence Appraisal Club (2015-present)
 

I am a volunteer faculty advisor to the students leading and participating in these student-initiated evidence appraisal sessions.
5. Director, UBC Doctor of Pharmacy Graduate Program (2012-2015)
 

In this role I advised, mentored, planned, and administered the program for 32 professional doctoral degree students.
6. Coordinator, UBC / Lower Mainland Pharmacy Services / Vancouver Coastal Health / Providence Health Care Pharmacy Practice Residency Program (2001-2012)
 

In this role I advised, mentored, planned, and administered the residency program for 120 post-baccalaureate pharmacy practice residents in this nationally accredited program.

#### STUDENT CLINICAL & RESEARCH PRECEPTORSHIP

As a Clinical Pharmacy Specialist practicing in Medicine at UBC Hospital and Vancouver General Hospital, throughout my career I have supervised residency and graduate-level trainees during the required clerkship components of their programs. I continued this even after becoming a full-time faculty member because I could thereby contribute to the advancement of the profession and our post-graduate training programs,

continue to sharpen my skills as a clinician, and identify authentic clinical and practice-based problems as research targets. Beginning in 2019, I accepted the invitation of the Lower Mainland Pharmacy Services Residency Program to develop and deliver a Patient-oriented Research clerkship for pharmacy residents.

1. Preceptor, Patient-oriented Research Rotation, Lower Mainland Pharmacy Services Pharmacy Residency Program (2020 - present)

As their primary preceptor, I coach, mentor, and supervise post-baccalaureate residents in a 4-week clerkship focused on patient-oriented research in my lab. This role requires coaching, teaching, mentoring and evaluating residents. **I have precepted 3 residents in this capacity since its inception in February 2020.**

2. Clinical Preceptor, Medicine, UBC Doctor of Pharmacy Graduate Program (1996-2018)

As their sole preceptor, I coached, mentored, and supervised these professional doctoral degree students in the day-to-day provision of patient care in an adult inpatient general medical unit for 4 weeks per student at UBC Hospital or Vancouver General Hospital. Precepting is a full-time activity (~8 hours per day) while on duty, and requires coaching, teaching, and taking responsibility for the patient care activities of students supervised. **I precepted 63 students, including 6 since becoming a full-time faculty member.**

3. Clinical Preceptor, Medicine, UBC / Lower Mainland Pharmacy Services / Vancouver Coastal Health / Providence Health Care Pharmacy Practice Residency Program (2000-2018)

As their clinical preceptor, I coached, mentored, and supervised these post-baccalaureate residents in the day-to-day provision of patient care in an adult inpatient general medical unit for 4 weeks per student at UBC Hospital or Vancouver General Hospital. Precepting is a full-time activity (~8 hours per day) while on duty, and requires coaching, teaching, and taking responsibility for the patient care activities of students supervised. **I precepted 25 residents, including 9 since becoming a full-time faculty member.**

4. Clinical Preceptor, Medicine, University of Montreal Clinical Pharmacy M.Sc. Program (2003-2004)

I precepted 2 M.Sc. students in this capacity.

5. Clinical Preceptor, Pharmacokinetics, BC/UBC Hospital Pharmacy Residency Program (1996-1998)

I precepted 10 pharmacy practice residents in this capacity.

I was awarded the 2016 **Canadian Society of Hospital Pharmacists – BC Branch Mentorship Award** in recognition of my contributions to the mentorship and precepting of these students.

## 9. SCHOLARLY AND PROFESSIONAL ACTIVITIES

- (a) *Areas of special interest and accomplishments*

### MAJOR PROFESSIONAL CONTRIBUTIONS

1. **Richmond Preventable Adverse Drug Events (pADE) program** (2015 – present)

Working with an Emergency Department clinical pharmacy specialist (Dr. Jane de Lemos) based at Richmond Hospital in Richmond BC, I am part of the core team of researchers, physicians, and pharmacists working to identify and prevent adverse drug events in the City of Richmond, BC. Richmond is unique in that it is a major metropolitan area within the Lower Mainland with a single tertiary care hospital and a tight-knit community of community based primary care and specialist physicians, pharmacists, and community nurses. Beginning in 2016 we recognized the significant problem of patients presenting for emergency care at the hospital for medical issues that were due to preventable adverse drug events. So far we have done significant research and developed interventions and programs to reduce hospitalizations due to pADE, including:

- procuring grant funding from Vancouver Coastal Health Research Institute and the Vancouver Hospital Foundation to study the problem and implement solutions (see 9(b) below)
- conducted a multi-disciplinary clinical study to identify root causes of preventable adverse drug events (pADEs) contributing to hospital admission, to develop key messages which identify actions patients/ families and healthcare providers can take to prevent common pADEs found, and to develop a surveillance learning system for the community. (de Lemos J, Loewen P, Nagle C, McKenzie R, Dong Y, Dabu A, Zed P, Ling P, Chan R. Preventable adverse drug events causing hospitalisation: identifying root causes and developing a surveillance and learning system at an urban community hospital, a cross-sectional observational study. *BMJ Open Quality* 2021;10:e001161. doi: 10.1136/bmjopen-2020-001161) <https://bmjopenquality.bmj.com/content/bmjopen/10/1/e001161.full.pdf>
- developed and implemented, in collaboration with Vancouver Coastal Health's Information Technology unit, an Emergency-Department based surveillance system into which all actual and potential pADEs presenting to ED are entered
- developed several "Provider Messages" based on the epidemiology of pADEs detected at Richmond Hospital to communicate the issues to community-based physicians, pharmacists, and nurses, along with strategies to prevent them. [Provider Message publications](#) so far include: Medication Sick Day Plans, Preventing Bleeding Events, Community Acquired Pneumonia and Nursing Home Acquired Pneumonia), Medication Mix Ups, How to write an Asthma Action Plan, Intentional Non-Adherence, and Heart Failure Action Plan [\[https://www.vchri.ca/richmond/pADE\]](https://www.vchri.ca/richmond/pADE)
- developed several "Patient/Family Messages" based on the epidemiology of pADEs detected at Richmond Hospital to communicate the issues to patients (in several languages) along with strategies to prevent them. [Patient/Family Message publications](#) so far include: Your medication plan for sick days, COPD Flare Up Plan, How to prevent worsening of heart failure symptoms, Measuring blood pressure at home (and recognizing orthostatic hypotension), and a tool to help discharged patients communicate with community pharmacists about medication changes that occurred while hospitalized. [\[https://www.vchri.ca/richmond/pADE\]](https://www.vchri.ca/richmond/pADE)
- developed an outreach program from the hospital to community pharmacists about patients with heart failure who are admitted to hospital for a preventable reason, with advice to pharmacists on how to help the patient avoid future admissions
- developed in-hospital educational resources for nurses to increase detection of pADEs
- delivered many live education sessions to community-based physicians and pharmacists about pADE prevention in Richmond, BC.
- created an interactive learning module to help providers coach patients with asthma/COPD correct inhaler device technique, assess non-adherence and explore action plan use on the Vancouver Coastal Health Learning Hub.
- "Richmond Hospital team develops key messages to help prevent adverse drug events" <https://bcpslscentral.ca/richmond-hospital-team-develops-key-messages-to-help-prevent-adverse-drug-events/>

## 2. Stroke Prevention in Atrial Fibrillation Decision Tool (SPARCTool) (2003 - present)

I invented, developed, and continue to improve this web-based decision aid ([www.sparctool.com](http://www.sparctool.com)) for helping patients and clinicians choose the most appropriate therapy for atrial fibrillation stroke prevention. This is a complex clinical decision made exponentially more challenging in recent years by the emergence of 4 new oral anticoagulants. The choice of therapy depends upon many patient and medication factors and requires making trade-offs. I created this tool in 2003 and have continuously evolved and improved it since. I filed an invention declaration with the UBC University-Industry Liaison Office in December 2012. Based on analytics and feedback I receive from users, the tool is used around the world by physicians, nurses, pharmacists and patients. I have received dozens of testimonials from users about its usefulness and uniqueness as a decision aid and I regularly incorporate their feedback into the tool.

- Site analytics: over 44,500 unique users of sparctool.com in the past 12 months.
- The American College of Cardiology (ACC) licensed my intellectual property in 2012 and collaborated with me to develop iOS (<https://itunes.apple.com/ca/app/anticoagevaluator/id609795286?mt=8>) and Android (<https://play.google.com/store/apps/details?id=org.acc.AnticoagEvaluatorV2>) mobile applications and a web app (<http://tools.acc.org/anticoag/#!/content/calculator/>) called **AnticoagEvaluator** based on SPARCTool. Documentation is available here: <http://www.acc.org/tools-and-practice-support/mobile-resources/features/anticoag-evaluator/faq>
- AnticoagEvaluator has been included among the “Top 10 Apps for Cardiology” <http://www.imedicalapps.com/2014/10/top-10-medical-apps-cardiology/8/>
- The American College of Cardiology promotes SPARCTool to cardiologists as part of its Atrial Fibrillation Toolkit ([http://www.acc.org/tools-and-practice-support/clinical-toolkits/atrial-fibrillation-afib?w\\_nav=MN](http://www.acc.org/tools-and-practice-support/clinical-toolkits/atrial-fibrillation-afib?w_nav=MN)) and AnticoagEvaluator as part of ACC’s Anticoagulation Initiative (<https://www.acc.org/tools-and-practice-support/quality-programs/anticoagulation-initiative>)
- SPARCTool is integrated into the OSCAR electronic medical record software used in over 4,000 medical practices across Canada. (<http://oscarcanada.org/oscar-users/emr-resource/eform/eform-examples/calculators>)
- The UK’s National Institute for Health and Care Excellence (NICE) advises use of SPARCTool for risk assessment and prescription of a suitable oral anticoagulant [Atrial fibrillation: the management of AF (cG180). London: NICE, June 2014. <http://www.nice.org.uk/guidance/cg180>].
- SPARCTool is a component of the [Michigan Anticoagulation Quality Improvement Initiative’s](http://www.anticoagulationtoolkit.org) Anticoagulation Toolkit (<http://www.anticoagulationtoolkit.org>)
- SPARCTool is the risk tool referenced on GANFYD’s Atrial Fibrillation page ([http://www.ganfyd.org/index.php?title=Atrial\\_fibrillation](http://www.ganfyd.org/index.php?title=Atrial_fibrillation)).
- Use of SPARCTool is also advocated in the primary literature: e.g., Kovacs RJ, et al. Journal of the American College of Cardiology; 2015;65(13):1340–60, Hargroves D. Br J Cardiol 2015;22:(2), Lewis LS. BMJ 2013;347:f4910.
- **Publications involving SPARCTool:** Loewen P, Sprague D. [Am J Health-Syst Pharm 2003;60:427–9](#); Loewen PS, Bansback N, Hicklin J, et al. [Ann Pharmacother 2019;53:665–674](#)
- SPARCTool undergoes regular updates as the evidence and technology evolves.

### 3. UBC Entry-to-Practice Doctor of Pharmacy Program (2012-2015)

Few activities have as significant an effect on a profession as the complete redesign of its entry-to-practice degree program. Taking on this uncertain and monumental task, which occupied approximately 65% of my time between July 2012 and June 2015, was consistent with my long-term career ambitions to advance the profession, and thereby patient care, through educational innovation. These contributions are distinct from scholarship, service, and teaching.

The replacement of the bachelor’s degree program with a professional doctoral program (PharmD) as the entry-to-practice program for pharmacists in British Columbia is **the most significant advancement in pharmacist training in the last 50 years, one which will profoundly change pharmacy practice and how pharmacists contribute to the care of patients in Canada**. As Director, Doctor of Pharmacy Programs, UBC Faculty of Pharmaceutical Sciences, **I was responsible for leading all aspects of the creation and implementation of the new entry-to-practice (E2P) PharmD degree program**. This was an extremely complex task which involved provincial and national-level work involving multiple stakeholder groups within and outside both the profession of pharmacy and the university. My work and accomplishments included:

- Engaging our faculty and fostering dialogue and understanding across disciplines;
- Traveling around BC engaging with pharmacists, pharmacy educators, and pharmacy leaders about a transformed vision for a continuum of training for pharmacists from entry-to-practice through advanced practice residency training and graduate degrees and fellowships;



- Creating and overseeing the program's Task Force and 9 program development working groups;
- Managing the relationship and navigating to approval with two provincial ministries (Advanced Education and Health) whose resistance to the scale of change we proposed was overcome;
- Forming a network of Associate Deans and Directors from all 10 Canadian pharmacy schools to discuss strategies and progress regarding E2P PharmD program development in our jurisdictions;
- Designing a completely new program with an innovative competency-based curriculum that replaces traditional disciplined-based courses with multidisciplinary integrated curricular structures, including beginning with a large Foundations of Pharmacy course, and progressing through 17 innovative modified body-systems Medication Management patient care modules that integrate multiple disciplinary elements required to competently manage patients with an array of health issues;
- Underpinning the entire program with a Cognitive Model describing the progression of knowledge and competency from year 1 through 4 in terms of levels of performance and complexity of problem-solving across the seven competency-based roles required of pharmacists;
- Expanding Experiential Learning from 20 to 46 weeks and including it in all year levels;
- Designing a state-of-the-art competency-based assessment program fully aligned with the competencies, learning activities, and the Cognitive Model;
- Designing all 24 courses, all of which are new, and writing their syllabi;
- Ensuring that the curriculum is fully aligned with the Canadian Council on Accreditation of Pharmacy Programs (CCAPP) accreditation standards, the Association of Faculties of Pharmacy of Canada (AFPC) learning outcomes, and the National Association of Pharmacy Regulatory Authorities (NAPRA) licensing standards;
- Leading numerous Town Hall forums for consultation with faculty, stakeholders, and students;
- Leading several curriculum development and faculty development workshops and retreats;
- Presenting at numerous fora in BC and across Canada about our work to promote it and receive feedback;
- Working with UBC Finance to develop the program budget, which necessitated a faculty global budget review to assess the program's impact;
- Explaining and defending the budget and the substantially higher tuition for the program in numerous forums with prospective students, current students, the College of Pharmacists of BC, the BC Pharmacy Association, the UBC Alma Mater Society, UBC Senate, UBC Board, and the Ministries of Advanced Education and Health. The increased tuition will approximately double our faculty's annual revenue at steady state in 2019;
- Eliciting the explicit support of all UBC health programs, UBC Science, UBC Arts, UBC Library, UBC College of Health Disciplines, the BC Pharmacy Residency Programs, the BC Pharmacy Association, the Canadian Society of Hospital Pharmacists, the Canadian Association of Chain Drug Stores, the BC Health Authorities, the BC Pharmacy Association, and the College of Pharmacists of BC;
- Shepherding the program through unanimous Faculty approval, UBC Senate Health Programs subcommittee, Senate Curriculum committee, UBC Admissions committee, UBC Senate, UBC Student Tuition Consultation process (the first program to go through it), Provost's office, and the UBC Board;
- Appointing faculty to dozens of curricular leadership roles, most of which were new, and supporting the development of course content for delivery;
- Designing roles for and hiring faculty and staff to support the program (several instructors, learning design analyst, project manager, program assistants, assessment manager).

The detailed UBC-approved program proposal **begins on p.154** at [http://senate.ubc.ca/sites/senate.ubc.ca/files/downloads/20140416\\_va\\_materials.pdf](http://senate.ubc.ca/sites/senate.ubc.ca/files/downloads/20140416_va_materials.pdf) [paste into browser if clicking this link does not work] or on **p.1** at:

<https://www.dropbox.com/s/um2gkxgg167y8/E2PPharmD-SenateProposal-16APR14-full.pdf?dl=0>

Other Canadian universities transitioning to the PharmD as their entry-to-practice degree made (or are making) relatively minor adjustments to their existing B.Sc. programs. Ours is a completely new degree program with many innovative components. **Originally slated for implementation in 2016, we received government approval in October 2014 and the first class commenced in September 2015, a year ahead of schedule.** I completed my 3-year appointment as Director in June 2015.

The faculty's Curriculum Retreat in June 2016 comprehensively reviewed the first year of delivering this new program. The evaluation evidence and opinions expressed overwhelmingly affirmed the soundness of the structures and curricular systems we created.

**The first cohort of entry-to-practice PharmD degree recipients graduated on May 30, 2019.** <https://pharmsci.ubc.ca/news/first-class-graduates-ubc-entry-practice-doctor-pharmacy-program>  
The program received **full (6-year) accreditation from the Canadian Council on Accreditation of Pharmacy Programs (CCAPP) in June 2020.**

This professional contribution has had and will continue to have a significant impact on pharmacy practice in British Columbia and wherever the program's graduates practice.

#### 4. **UBC Flexible Doctor of Pharmacy Program (2012-2015)**

Over its lifetime, this program will have a major impact on patient care and the pharmacy profession in BC by advancing the skills of the 5,400 pharmacists who are eligible to undertake it. Every aspect of creating this program required innovation because we were among the first in Canada to create a post-baccalaureate PharmD program for working professionals which could be completed part-time mostly through distance learning. Taking this on was consistent with my long-term career objectives to advance the profession and patient care through educational innovation. These contributions are distinct from scholarship, service, and teaching. This work occupied approximately 15% of my time from 2012-2015.

A critical component of securing approval for our entry-to-practice (E2P) PharmD program was a commitment to pharmacists, the university, and the provincial government that we would create a pathway for BC's 5,000 pharmacists with a B.Sc.(Pharm) degree to obtain a PharmD. We chose to create a new post-baccalaureate doctoral degree program for working pharmacists, the "UBC Flexible PharmD", of which I led the design and approval from 2012 to 2015.

As Director, Doctor of Pharmacy Programs, UBC Faculty of Pharmaceutical Sciences, **I was responsible for leading all aspects of the development of the program**, including:

- Engaging our faculty;
- Conducting a BC-wide survey of pharmacist perceptions and preferences about the program;
- Traveling around BC engaging with pharmacists, pharmacy educators, and pharmacy leaders about a new vision for the continuum of training for pharmacists from entry-to-practice through advanced practice residency training and graduate degrees and fellowships;
- Creating and overseeing the program's Steering Committee and 4 program development working groups;
- Managing the relationship with the Ministry of Advanced Education;
- Designing a completely new program with a competency-based curriculum with mostly asynchronous distance delivery so all pharmacists in BC (and eventually, Canada) can participate;
- Creating a pharmacotherapeutics curriculum based on the current Graduate PharmD program and the one we developed for the E2P PharmD;
- Designing all 20 courses, all of which are new, and writing their syllabi;

- Leading numerous Town Hall forums for consultation with faculty, stakeholders, and students;
- Designing a state-of-the-art Prior Learning and Recognition system for the program;
- Working with UBC Finance to develop the tuition model and program budget;
- Engaging with the UBC Center for Teaching, Learning & Technology for course development;
- Engaging with UBC's Flexible Learning Initiative (FLI), subjecting the proposed program to a "Dragon's Den" evaluation event hosted by FLI, and receiving FLI's nod as one of two programs most likely to succeed (out of 12 proposed), for which we received FLI's full support;
- Eliciting the explicit support of all required UBC faculties and programs;
- Shepherding the program through unanimous Faculty approval, the UBC Senate Health Programs subcommittee, Senate Curriculum committee, Admissions committee, UBC Senate, Provost's office, and the UBC Board.

The detailed UBC-approved program proposal begins on **p.58** at [http://senate.ubc.ca/sites/senate.ubc.ca/files/downloads/20141217 Vancouver Senate Materials.pdf](http://senate.ubc.ca/sites/senate.ubc.ca/files/downloads/20141217_Vancouver_Senate_Materials.pdf) [paste into browser if clicking this link does not work] or on **p.1** at: <https://www.dropbox.com/s/y91ihvmec1z1cji/FlexPharmD-Senate-17DEC14-full.pdf?dl=0>

The Flex PharmD is a completely new post-baccalaureate doctoral degree program which received UBC Senate and Board approval in December 2014 and February 2015, respectively, and **was approved by the BC Ministry of Advanced Education in February 2017**. Posters about our work and evaluations and publications thereof will be undertaken when the program launches.

#### 5. **Advanced Practice Education Programs for Pharmacists** (2013-present)

This work is part of my career-long ambition to elevate the profession, and thereby patient care, through advancing pharmacist education and training. This professional contribution has impacted advanced pharmacist training Canada-wide.

As Vice-Chair of the Standards Committee of the Canadian Pharmacy Residency Board, I contributed to the creation, national consultation, and implementation of national standards for a new level of pharmacy residency training, the "ACPR2" (Advanced Practice Residency, Accredited Canadian Pharmacy Residency, year 2). For the previous 40 years since residency training began in Canada, only 1 year of residency training was recognized. Because of the profound changes in pharmacist training occurring in Canada (to which I have been a contributor at the provincial and national levels), a more advanced level of residency training was required to replace post-graduate Doctor of Pharmacy programs, to expand the number of advanced-practice training opportunities, and to foster more specialization options for pharmacists. Development of the new Standards involved consultation all post-ACPR and unaccredited residency programs in Canada, consultation with CANMEDS, several stages of consultation with hospital pharmacists and residency programs across Canada about the proposed new standards, writing the new standards, and guiding them through to approval by the Board of the Canadian Society of Hospital Pharmacists to publication in May 2016

[\[http://www.cshp.ca/programs/residencyTraining/CPRBinfo\\_e.asp\]](http://www.cshp.ca/programs/residencyTraining/CPRBinfo_e.asp). Subsequently, we undertook an update of the ACPR (Year 1) Standards to align with the learning outcomes of entry-to-practice PharmD programs. These revised standards will be published in summer 2017. This dovetails with my work on the Association of Faculties of Pharmacy of Canada (AFPC) Education Committee and Educational Outcomes Review Steering Committee (2015-present), in which we recently completed a major revision to the Learning Outcomes used for designing and accrediting pharmacy first professional degree programs, expected to be published in summer 2017.

My work on developing the framework for pharmacist training in Canada on the entry-to-practice, bridging to the new E2P PharmD, residency training, and advanced practice residency training fronts is tied together by my having developed a competency- and standards-based framework vision for pharmacist training in Canada. I also developed a competency-based cognitive model

as a framework to rationalize the spectrum of available and needed training programs. After much refinement and consultation with pharmacists and universities across Canada, this framework has become central to the pharmacist education system in BC from entry-to-practice through residency training. This is exemplified by my work with the BC pharmacy residency programs to create a competency assessment rubric that aligns with the UBC's E2P PharmD program cognitive model. My work has influenced the national vision and roadmap for pharmacist training in Canada via my work on CPRB, my presentations at other universities and conferences, and through the national network of all 10 Canadian pharmacy schools which I created and led.

I am also continuing this work at the national level via a working group formed in September 2016 to foster a "National Discussion on Advanced Practice Education". This group composed of leaders in the field from across Canada is working to shape a national vision for advanced practice education in pharmacy.

**6. Working Group Leader & Subject Matter Expert, Certified Pharmacist Prescribing Initiative, College of Pharmacists of British Columbia (2015-2016)**

This professional contribution is consistent with my objective of enhancing the role of pharmacists in patient care by expanding their professional boundaries.

I was recruited by the College of Pharmacists of British Columbia's Certified Pharmacist Prescriber Initiative (<http://www.bcpharmacists.org/certified-pharmacist-prescriber>) to lead a team of pharmacists from a variety of practice settings in the creation of patient cases illustrating the capabilities and impacts on patients and the health care system of pharmacist prescribing. These cases are a key part of the framework we are using to engage the public, other health professions, and the Ministry of Health to expand the scope of practice for pharmacists to include prescribing Schedule 1 drugs. Consequently, I worked as one of two Subject Matter Experts in BC to lead several stakeholder engagement sessions with pharmacists, physicians, and the public on the project.

This work led directly to the recommendation by the College's Board to the Minister of Health in fall 2016 that pharmacists in collaborative practice settings be granted prescribing privileges. Achievement of Certified Pharmacist Prescribing in BC will significantly change the scope of practice for pharmacists, and positively impact the patients whom they care for. I am honoured to contribute to this from a patient care, elevation of the profession, and educational viewpoint.

**7. Reforming the institutional experiential learning system for pharmacists in BC (AGILE - Advancing Experiential Learning In Institutional Pharmacy Practice)**

Based on my experience as a clinician, preceptor, PharmD program Director, and residency program coordinator, I helped create and continue to contribute to this major program aimed at increasing the capacity for meeting the increased student placement demands created by the doubling of experiential learning requirements in the new UBC entry-to-practice PharmD program. A secondary objective is to lead these reforms by example in BC, as other provinces face similar challenges. AGILE is a consortium of clinicians, administrators, preceptors, faculty members, health authority partners, students, residents, and researchers. I am a member of the Steering Committee that laid the foundation for and designed the AGILE initiative, I am an investigator on several AGILE-related research projects, and **I am the principal investigator on two UBC TLEF grants (total \$237,000) which have supported the many projects and evaluations in the overall effort.** Domains of the project include readiness for institutional practice preparation for our students, mutually-beneficial activities alignment between students and preceptors, changing the dominant learner-preceptor model to peer-learning models, preceptor preparation and recognition, and strategic deployment of Experiential Education Facilitators to health authorities. Our work focuses on making this capacity increase possible and positive for all stakeholders, especially patients. The impacts of our work will propagate nationally as other provinces adopt the practices that we are pioneering. Our work continues to be disseminated via posters, papers, and presentations. This professional contribution has significantly impacted pharmacy students and practitioners in hospitals and other inpatient settings in BC. Taking on this challenge was

consistent with my objective to advance the profession, and thereby patient care, through educational innovation.

**8. Conceived, developed, researched, and implemented a model of pharmacy practice centered around “quality actions” to enhance the quality of patient care by pharmacists. (2007-2017)**

I developed and implemented an innovative strategy and outcome tool to measure the quality of drug therapy among inpatients (the Ideal Medication Intervention Index) and implemented and evaluated it in a large urban health authority. This work is the basis for the quality of care improvement and evaluation program being used in several residential care facilities served by Lower Mainland Pharmacy Services. I contributed to the Canadian Clinical Pharmacy Key Performance Indicators Task Force (2011-2013), which influenced the development of Canadian Clinical Pharmacy Key Performance Indicators [Fernandes O, et al. *Ann Pharmacother* 2015;49: 656-669] that are rapidly being integrated into practice across Canada.

Related publications:

- Loewen P, de Lemos J, Woo S. Clinician-driven value scoring to prioritise quality actions: a study of general medicine hospital pharmacists. *Journal of Pharmaceutical Health Services Research* 2014;5(2):103-108.
- Bruchet N, de Lemos J, Loewen P. Improving the quality of clinical pharmacy services: a process to identify and capture high value “Quality Actions”. *Can J Hosp Pharm* 2011;64:42-47.
- Barry A, Loewen P, deLemos J, Lee KG. Reasons for non-use of proven pharmacologic interventions in hospitalised patients: A systematic review. *Journal of Evaluation In Clinical Practice*. 2010; doi:10.1111/j.1365-2753.2010.01524.x (August 2010).
- Barry A, Loewen P, de Lemos J, Lee KG. Reasons for non-use of proven pharmacologic interventions in hospitalised patients: Pharmacists’ perspectives. *Can J Hosp Pharm* 2009;62(5):381–385.
- Huang C, Loewen P, Pelletier T, Slater J, Chung M. Implementation of Proven Interventions in General Medical Inpatients: Development and evaluation of a new quality indicator for drug therapy. *Qual Saf Health Care* 2008;17:269-274.]

This professional contribution has impacted how health care systems deploy pharmacists, how the quality of pharmacy services is measured, and on how individual pharmacists triage their patients’ drug-related needs.

**9. Drug Benefits Council (2007-2014)**

By taking on this leadership role, I was able to apply my knowledge of patient care and drug therapy to impact all British Columbians by helping to ensure that appropriate therapies are covered by PharmaCare and that the limited PharmaCare budget was appropriately stewarded. This contribution is distinct from scholarship, service, and teaching.

I was appointed by Premier Gordon Campbell and reappointed by Premier Christy Clark to the Drug Benefits Council (DBC), which advises the BC Ministry of Health on PharmaCare coverage policies and the provincial drug formulary, a \$1.1 billion program. As Member, Vice-Chair, and Chair of DBC, and Chair of its Drug Resources Review Subcommittee, I made major professional contributions to the people of BC by making complex decisions impacting patients and care providers, all in the interests of responsible stewardship of limited public funds. This work involved leading a collaboration of physicians, pharmacists, lawyers, ethicists, economists, the lay public, and ministry staff in balancing important public interests of access to care, critical evaluation of the potential health impacts of drugs, the cost-effectiveness of drugs, and the impacts of coverage policies on the management of diseases in BC. During my time on the Council we made significant policy and coverage decisions affecting the management of hepatitis B and C, rheumatoid and juvenile arthritis, chronic obstructive pulmonary disease, venous thrombosis, atrial fibrillation, pulmonary hypertension, multiple sclerosis, smoking cessation, and dozens of other conditions.

## SCHOLARLY CONTRIBUTIONS

**REWarDS:** Developed and published a new method (**REWarDS / daySupply**) for determining average daily dose and days supply of warfarin using multiple methods from large administrative prescription databases. Published as an [R package in CRAN](#), and on [GitHub](#). (2021)

Salmasi S, Hoëgg T, Safari A, De Vera MA, Lynd LD, Koehoorn M, Barry AR, Andrade JG, Loewen PS. The Random Effects Warfarin Days' Supply (REWarDS) model: Development and validation of a novel method to estimate exposure to warfarin using administrative data. *American Journal of Epidemiology* 2022; <https://doi.org/10.1093/aje/kwab295>

**Created BC's first research network spanning Cardiac Services BC's Atrial Fibrillation Clinics.**  
(2013-present)

I created a research collaboration network involving all 5 of BC's specialized atrial fibrillation clinics (Royal Columbian Hospital, Vancouver General Hospital, St. Paul's Hospital, Kelowna General Hospital, Royal Jubilee Hospital) and Cardiac Services BC. This is a unique platform for interprofessional and multidisciplinary clinical research that can be rapidly translated into practice change for patient care improvement. A pilot project was launched in Fall 2014 [*Persistence with and adherence to stroke prevention therapy at 1 year in patients assessed at a specialized atrial fibrillation clinic: New oral anticoagulants vs. warfarin*], which attracted funding from the Canadian Cardiovascular Society in 2015 and is now a large multi-year ongoing study [*Long-term persistence and adherence with new oral anticoagulants vs. warfarin in newly-anticoagulated atrial fibrillation patients*]. We have also developed an innovative patient decision aid (SPARC-DT) and evaluated its effects on patient decision-making about stroke prevention therapy, developed an evidence-based AF patient education program currently being adopted by Cardiac Services BC, and generated numerous presentations and publications based on our work. This network of clinics continues to be a valuable platform for patient-centered clinical research.

(b) *Research or equivalent grants*  
(indicate under COMP whether grants were obtained competitively (C) or non-competitively (NC))

Most of my practice-based and outcomes-oriented scholarly work has not required external funding and has been completed using infrastructure and resources available to me in my practice environment. I have successfully attracted funding for major projects that demand it, and continue to do so. I have maintained a consistent record of scholarly productivity throughout my career, including while >80% of my time was devoted to curriculum development between 2012 and 2015. I have taken a scholarly approach to all my work, as is evidenced by my publications, grants, and presentations. I have major externally-funded projects ongoing, and more in the planning stages. (see under Works In Progress on p. 66)

Granting Agency	Subject	COMP	\$ Per Year	Year	Principal Investigator	Co-Investigator(s)
See "Works In Progress" (p.66) for grants currently under review or in preparatory stages.						
Canadian Institutes of Health Research (CIHR)	Atrial fibrillation stroke prevention: New insights from anticoagulant adherence thresholds and trajectories <a href="#">[link]</a>	C	\$267,750 over 2.5 years	October 2022 – April 2025	Loewen P	Andrade J, De Vera M, Deyell M, Filion K, Safari A, Tadrous M, Salmasi S.

Michael Smith Foundation for Health Research	Enhancing Patient Self Care and Management of Atrial Fibrillation within Primary Care	C	\$15,000 over 18 months	October 2021-April 2023	Rush, K	<b>Loewen P</b> , Oelke N, Hilsmann N, Baskerville J, Orwaard-Wong K, Maltby K, Towle C, Jake R, Tooby R, Andersen T, Hruska P, Neill K, Decleva D, Whalley B
Canadian Institutes of Health Research (CIHR)	Preventable strokes and deaths in atrial fibrillation patients: Understanding the impacts of anticoagulant nonadherence and nonpersistence <a href="#">[link]</a>	C	\$260,161 over 3 years	April 2020-2023	<b>Loewen P</b>	Andrade J, Rush K, Chen W, Sadatsafavi M, De Vera M, Zhao Y, Deyell M, Salmasi S.
Canadian Institutes of Health Research (CIHR)	The Virtual Atrial Fibrillation Clinic: Improving Specialty Care Delivery in Rural Communities <a href="#">[link]</a>  [P Loewen added as a co-investigator December 2019]	C	\$267,575 over 3 years (extended to 2022)	April 2016-2022	Rush K	Andrade J, <b>Loewen P</b> , MacGillivray J, Costigan J, Eves ND, Gorman NE, Halperin F, Harris DR, Hatt L, Louann L, Jones GR, O'Connor BP, Polasek P, Regier DA.
Vocera / Island Health	Evaluation of a Secure Mobile Clinical Communication Solution (SMCCS) in Acute and Community Practice Settings on Vancouver Island	NC	\$25,000	Aug 2017-2018	Spina P	<b>Loewen P</b> , Atwood K.
Canadian Cardiovascular Society	Long-term persistence and adherence with new oral anticoagulants vs. warfarin in newly-anticoagulated atrial fibrillation patients	C	\$100,000	July 2015-July 2018	<b>Loewen P</b>	Kwan L, De Vera M.
Vancouver Coastal Health Research Institute & Richmond Hospital Foundation	Preventable adverse drug events causing hospitalization: Identifying root causes, and developing a surveillance and learning system at Richmond Hospital	C	\$90,000	2016-18	De Lemos J	Dillon R, Chan R, <b>Loewen P</b> , Zed P, Dabu A, Gabra G, You YD.
UBC Teaching & Learning Education Fund	Enhancing Student Learning and Expanding Institutional Experiential Clerkship Opportunities Across UBC's Pharmacy Programs – Phase 2	C	\$140,995	2014-16	<b>Loewen P</b>	Assen K, Bruchet N, Fu P, Gerber P, Harder C, Kim-Sing A, Law E, Legal M, Man S, Nolan S, Thornhill A, Yeung J, Zed P.

UBC Faculty of Pharmaceutical Sciences SoTL Mini-Grant	Online Summative Assessment in an Undergraduate Therapeutics Course	C	\$665	2013	<b>Loewen P</b>	Marchand JP.
UBC Teaching & Learning Education Fund	Enhancing Student Learning and Expanding Institutional Experiential Clerkship Opportunities Across UBC's Pharmacy Programs – Phase 1	C	\$96,550	2013	<b>Loewen P</b>	Assen K, Bruchet N, Fu P, Gerber P, Harder C, Kim-Sing A, Law E, Legal M, Man S, Nolan S, Thornhill A, Yeung J, Zed P.
UBC Faculty of Pharmaceutical Sciences Research Stream Innovation Fund	Integrating patient values into a comprehensive stroke prevention predictive model for antithrombotic therapeutic decision-making in patients with atrial fibrillation	C	\$5,000	2012	<b>Loewen P</b>	Legal M, McCormack J, Zed P, Slavik R.
Canadian Patient Safety Institute	Derivation of a Clinical Decision Rule to Identify Patients at Risk of Drug-Related Morbidity in the Emergency Department	C	\$96,000 (per year x 2 years)	2008	Hohl C	Sheps S, Abu-Laban R, <b>Loewen P</b> , Brubacher J, Hunte G, Anis A.
Michael Smith Foundation For Health Research	Detecting, Treating and Preventing Drug-Related Morbidity: An Emergency Department Based Medication Optimization Program (Team Award)	C	\$75,000 (per year x 3 years)	2007	Hohl C	Sheps S, Abu-Laban R, <b>Loewen P</b> , Brubacher J, Hunte G, Anis A.
Vancouver Coastal Health/Provide Health Care Pharmacy Services	Implementing and evaluating a quality indicator for drug therapy in a multi-site health region: The Ideal Medication Intervention (IMI) Index.	NC	\$30,000 (per year x 3 years)	2006-2010	<b>Loewen P</b>	Lun E, Lee, KG, Low A, Drummond I.
Heart & Stroke Foundation: BC & Yukon Chapter	Cost-Utility Analysis of Tissue Plasminogen Activator Therapy for Acute Ischaemic Stroke: A Canadian Healthcare Perspective	C	\$5,500	1997	<b>Loewen P</b>	Sinclair S, Frighetto L, Sunderji R, Marra CA, Teal P, Fagan S
Vancouver Hospital & Health Sciences Center Breast Cancer Research Fund	For clinical trial of antiemetics for prevention of postoperative nausea and vomiting in TRAM flap breast reconstruction surgery.	C	\$5,000	1999	<b>Loewen P</b>	Lamb S, Clugston P



- (c) *Research or equivalent contracts*  
(indicate under COMP whether grants were obtained competitively (C) or non-competitively (NC)).

Granting Agency	Subject	COMP	\$ Per Year	Year	Principal Investigator	Co-Investigator(s)
American College of Cardiology Foundation	Licensure of SPARCTool.com intellectual property and development of AnticoagEvaluator mobile applications	NC	US\$3,333 (x 3 years)	2013-2015	<b>Loewen P</b>	N/A
American College of Cardiology Foundation	Enhancing atrial fibrillation stroke prevention through point-of-care risk stratification.	NC	\$10,000 (total over 3 years)	2013	<b>Loewen P</b>	
Vancouver Coastal Health-Providence Health Care Pharmacy Services	Implementing and evaluating a quality indicator for drug therapy in a multi-site health region: The Ideal Medication Intervention (IMI) Index.	NC	\$30,000 (per year x 3 years)	2006-2010	<b>Loewen P</b>	Lun E, Lee KG, Low A, Drummond I.

- (d) *Invited Presentations (Presenter is underlined)*

#### NATIONAL/INTERNATIONAL

1. Loewen P, Gerber P. Resources, tools, and frameworks for building a modular pharmacy medication management curriculum. Workshop for faculty presented at the Qatar University College of Pharmacy. Doha, Qatar. January 24, 2023.
2. Gerber P, Loewen P. Team decision-making to design and deliver learning activities in a modular pharmacy curriculum. Workshop for faculty presented at the Qatar University College of Pharmacy. Doha, Qatar. January 24, 2023.
3. Gerber P, Loewen P. Principles and practices for Integrating science and practice in a modular pharmacy medication management curriculum. Workshop for faculty presented at the Qatar University College of Pharmacy. Doha, Qatar. January 24, 2023.
4. Loewen P, Gerber P. Scaffolding tools for student assessment in an integrated modular pharmacy curriculum. Workshop for faculty presented at the Qatar University College of Pharmacy. Doha, Qatar. January 25, 2023.
5. Gerber P, Loewen P. Systems and structures for building a student assessment program in an integrated modular pharmacy curriculum. Workshop for faculty presented at the Qatar University College of Pharmacy. Doha, Qatar. January 25, 2023.
6. Salmasi S, Högg T, Safari A, De Vera MA, Lynd LD, Koehoorn M, Barry A, Andrade JG, Loewen P. The Random Effects Warfarin Days' Supply (REWarDS) model: development and validation of a novel method to estimate exposure to warfarin using administrative data. Oral presentation, International Society of Patient Outcomes Research (ISPOR) 2021 Congress. June 1, 2021.
7. Loewen P. Insights and advances in understanding patients' experiences with atrial fibrillation stroke prevention therapy. Presented at the 71<sup>st</sup> Canadian Cardiovascular Congress, Montreal, QC. October 26, 2019.
8. Loewen P, Salmasi S, Kapanen A, Kwan L, MacGillivray J, De Vera M. Persistence, switching, self-reported adherence and satisfaction with anticoagulant therapy in atrial fibrillation clinic patients: results

of a long-term prospective cohort study. Presented at the 70<sup>th</sup> Canadian Cardiovascular Congress, Toronto, ON. October 24, 2018. *Can J Cardiol* 2018;34(10):S5.  
DOI: <https://doi.org/10.1016/j.cjca.2018.07.380>

9. **Loewen P**, Bansback N, Andrade J, Bonet J, Deyell M, Hicklin J, Kapanen A, Kwan L, Lynd L, McClean A, McGillivray J, Salmasi S. Individualizing AF stroke prevention therapy using a risks and preferences-based decision aid to promote shared decision-making: Results of beta-testing. Highlighted Oral Abstract Presentation, Canadian Cardiovascular Congress, Vancouver, BC. October 22, 2017.
10. **Loewen P**, Mysak T. The continuing story of clinical pharmacy training. Presented at Canadian Society of Hospital Pharmacists' 43<sup>rd</sup> Annual Banff Seminar, Banff, AB. March 17, 2017.
11. **Loewen P**. Patient values and preferences for antithrombotic therapy for stroke prevention in atrial fibrillation: a systematic review. Highlighted Oral Abstract Presentation, Canadian Cardiovascular Congress, Montréal, QC. October 24, 2016.
12. **Loewen P**. Persistence, switching, and self-reported adherence with anticoagulant therapy in atrial fibrillation clinic patients: Interim results from a large prospective cohort study. Presented at the Canadian Cardiovascular Congress, Montréal, QC. October 23, 2016. *Can J Cardiol* 2016;32(10):S187-8. DOI: <https://doi.org/10.1016/j.cjca.2016.07.295>
13. **Loewen P**. Designing Curriculum to Support Innovation. Presented at the Social & Administrative Pharmacy Educators of Canada Annual Meeting, Montréal, QC. October 18, 2013.
14. **Loewen P**. Demystifying hyponatremia assessment and management. Presented at Canadian Society of Hospital Pharmacists' 39<sup>th</sup> Annual Banff Seminar, Banff, AB. March 23, 2013.
15. **Loewen P**, Tisdale J, Hiltz A, Chong J. Pharmacists, Ethics, Professional Integrity, and Conflicts of Interest. Presented at the Canadian Society of Hospital Pharmacists' 43<sup>rd</sup> Annual Professional Practice Conference, Toronto, ON. February, 2012.
16. **Loewen P**. New Oral Anticoagulants: Goodbye warfarin - We hardly knew ye. Presented at the Canadian Pharmacists Association National Conference, Calgary, AB. May 17, 2010.
17. **Loewen P**. Technology at the Bedside. Presented at the Canadian Society of Hospital Pharmacists 41<sup>st</sup> Annual Professional Practice Conference, Toronto, ON. January 20, 2010.
18. **Loewen P**. A dogma in need of new tricks: How challenging conventional wisdom about lipids and cardiovascular risk reduction can make the world safer for your patients. Presented at the Canadian Society of Hospital Pharmacists Banff Seminar. Banff, AB. March 2009.
19. **Loewen P**. "This medication will prevent strokes..." and other lies we tell ourselves and our patients: Understanding and communicating about effect sizes of drug therapy. Presented at Canadian Society of Hospital Pharmacists National AGM, Regina, SK. August 2007.
20. **Loewen P**. Postoperative Nausea & Vomiting: Predict it, Prevent it. Presented at Canadian Society of Hospital Pharmacists 37th Annual Professional Practice Conference, Toronto, ON. February 2006.
21. **Loewen P**. Acute Management of Ischemic Stroke, with an ounce of Prevention. Canadian Society of Hospital Pharmacists 35th Annual Professional Practice Conference, Toronto, ON. February 2004.
22. **Loewen P**. Side effects of talking about side effects: Are there any? Presented to family physicians at SHARP Community Medical Group CME conference, Palm Desert, California. September 2003.
23. **Loewen P**. An evidence-based approach to migraine treatment and prevention. SHARP Community Medical Group Annual CME Conference, Palm Desert, California. September 2003.
24. **Loewen P**. Ethical Review Case Study. National Council on Ethics in Human Research Workshop, Vancouver, BC. January 2003.
25. **Loewen P**. Clinical Pharmacist as Information Manager: Accessing the Evidence Where and When you Need It. Canadian Society of Hospital Pharmacists Annual General Meeting, Vancouver, BC. August 13, 2002.

26. **Loewen P.** Ethical Issues for Investigators in Industry Sponsorship of Anaesthesiology Research. Canadian Anaesthesiologists Society 58th Annual Congress. Victoria, BC. June 23, 2002.
27. **Loewen P.** Effective Teaching for Residency Preceptors. Presented to Canadian Society of Hospital Pharmacists Hospital Pharmacy Residency preceptors at the Residency Preceptor's Workshop, Canadian Society of Hospital Pharmacists National Professional Practice Conference, Toronto, ON. February 2001.
28. **Loewen P.** Postoperative Nausea & Vomiting: the Big Little Problem. Presented at the Canadian Society of Hospital Pharmacists 26th Annual Banff Seminar, Banff, AB. March 2000.
29. **Loewen P.** Cost-effectiveness of prophylactic dolasetron or droperidol vs. rescue therapy in the prevention of post-operative nausea and vomiting (PONV) in ambulatory gynecology patients. Presented at the Canadian Society of Hospital Pharmacists National Professional Practice Conference, Toronto, ON. February 1999.
30. **Loewen P.** Continuity to Community: Taking the Next Step. Presented at the Canadian Society of Hospital Pharmacists 24th Annual Banff Seminar, Banff, AB. March 1998.
31. **Loewen P.** Preparing for the next millennium: Using online technologies to enhance your clinical practice and your business. Presented at Unipharm Inc.'s Annual Meeting, Cancun, Mexico. February 1998.
32. **Loewen P.** Thrombolytic therapy for acute stroke. Presented at the 23rd Annual Canadian Society of Hospital Pharmacists Banff Conference, Banff, AB. March 1997.
33. **Loewen P.** New Uses for Old Drugs. Teleconference presented to pharmacists across Canada for a Canadian Council for Continuing Education in Pharmacy continuing pharmacy education series. May 1996.

#### PROVINCIAL/STATE outside BC

1. **Loewen P.** Developing an Entry-to-Practice PharmD Curriculum at UBC. Presented to the University of Manitoba's Faculty of Pharmacy, Winnipeg, MB. May 21, 2014.
2. **Loewen P.** Sodium & Water Therapeutics: Taking some of the mist out of the mystery. Canadian Society of Hospital Pharmacists Alberta Branch Annual General Meeting, Calgary, AB. October 15, 2010.
3. **Loewen P.** Assessing stroke and bleeding risk in your patients with atrial fibrillation. Presented at the 44<sup>th</sup> Annual Pharmacist's Refresher Conference, Halifax, NS. October 2008.
4. **Loewen P.** Monitoring statin therapy: What's that pain in your gluteus maximus?. Presented at the 44<sup>th</sup> Annual Pharmacist's Refresher Conference, Halifax, NS. October 2008.
5. **Loewen P.** Dispatch from the far left: Pharmacy in British Columbia. Presented at the 44<sup>th</sup> Annual Pharmacist's Refresher Conference, Halifax, NS. October 2008.
6. **Loewen P.** Strategies for Staying Current with the Clinical Evidence. Presented at the 3rd Annual Peter & Anna Zbeetnoff Memorial Drug Therapy Decision-Making Conference, Saskatoon, SK. March 2006.
7. **Loewen P.** NSAIDS / COXIBs: Understanding and Managing the Risks. Presented at the 3rd Annual Peter & Anna Zbeetnoff Memorial Drug Therapy Decision-Making Conference, Saskatoon, SK. March 2006.
8. **Loewen P.** Pharmacologic Stroke Prevention: Navigating Toward Rational Drug Therapy. Presented at the 3rd Annual Peter & Anna Zbeetnoff Memorial Drug Therapy Decision-Making Conference, Saskatoon, SK. March 2006.
9. **Loewen P,** Rangno R. The Placebo Effect – Is it all in your head?. Presented at MCE Meridian Conferences "Just Say Know to Drugs" conference for U.S. physicians, Ketchikan, AK. August 13, 2005.

10. **Loewen P**, Rangno R. OTC Drug Therapy for Common Conditions – What does the evidence support?. Presented at MCE Meridian Conferences “Just Say Know to Drugs” conference for U.S. physicians, Ketchikan, AK. August 13, 2005.
11. **Loewen P**, Rangno R. Communicating with Patients about Benefit & Harm of Drug Therapy. Presented at MCE Meridian Conferences “Just Say Know to Drugs” conference for U.S. physicians, Ketchikan, AK. August 11, 2005.
12. **Loewen P**, Rangno R. Osteoporosis: Drugs, BMD, Calcium, & Vitamin D. Presented at MCE Meridian Conferences “Just Say Know to Drugs” conference for U.S. physicians, Ketchikan, AK. August 11, 2005.
13. **Loewen P**. Responding to Aspirin “Failure” – Rational Antiplatelet Strategies. Presented at MCE Meridian Conferences “Just Say Know to Drugs” conference for U.S. physicians, Ketchikan, AK. August 11, 2005.
14. **Loewen P**. Rangno R. Inhaled Steroids for COPD. Presented at MCE Meridian Conferences “Just Say Know to Drugs” conference for U.S. physicians, Ketchikan, AK. August 11, 2005.
15. **Loewen P**. Antibiotic Zingers. Presented at MCE Meridian Conferences “Just Say Know to Drugs” conference for U.S. physicians, Skagway, AK. August 9, 2005.
16. **Loewen P**. Type II Diabetes: A review of glucose and BP-lowering therapeutics. Presented at MCE Meridian “Just Say Know to Drugs” conference for U.S. physicians, Skagway, AK. August 9, 2005.
17. **Loewen P**. The COX-2 Inhibitor Drama. Presented at MCE Meridian “Just Say Know to Drugs” conference for U.S. physicians, Skagway, AK. August 9, 2005.
18. **Loewen P**, Rangno R. Primary Cardiovascular Risk Reduction with Drugs & Diet. Presented at MCE Meridian “Just Say Know to Drugs” conference for U.S. physicians, Juneau, AK. August 8, 2005.
19. **Loewen P**, Rangno R. Therapeutic Beliefs & Understanding the Numbers. Presented at MCE Meridian “Just Say Know to Drugs” conference for U.S. physicians, Juneau, AK. August 8, 2005.
20. **Loewen P**. Unholy Alliances: Drug-Herb interactions. Presented via videoconference to physicians in 23 sites around Alberta as part of University of Alberta’s Continuing Medical Education program. Sept 2004.
21. **Loewen P**. Osteoarthritis: Symptom Management & The Role of the Pharmacist. Presented to pharmacists in Calgary, Edmonton, Lethbridge, and Red Deer on behalf of the University of Alberta / Alberta Continuing Pharmacy Education. December 1999.
22. **Loewen P**. Acute interventions for ischemic stroke. Presented at Canadian Society of Hospital Pharmacists Saskatchewan Branch AGM, Moose Jaw, SK. October 1997.

#### PROVINCIAL within BC

1. **Loewen P**, presenter and expert panelist at the 10th annual "Okanagan Embrace Aging Month" café scientifique "Living your best atrial fibrillation life: the importance of self-care", Kelowna, BC. Hosted by the UBC Okanagan School of Nursing and supported by the UBC Institute for Healthy Living and Chronic Disease Prevention, Michael Smith Foundation for Health Research, and CIHR. March 7, 2023.
2. **Loewen P**. Hot topics in atrial fibrillation care. Presented to Primary Care Clinical Pharmacists in Primary Care Networks across BC as part of their continuing education program. Presented live online. October 2022.
3. **de Lemos J**, **Loewen P**, Zed P, Dabu A, Ling P, You YD, Nagle C, McKenzie CR, Chan R. Richmond Hospital Preventable Adverse Drug Event (pADE) Program. Presented at the Richmond Hospital Foundation Board meeting, Richmond, BC. June 16, 2021.
4. **Loewen P**. Update in Cardiology. Presented at the UBC Continuing Pharmacy Professional Development Update 2020 Conference, Vancouver, BC. March 7, 2020.

5. **Loewen P.** Lipid Targets for Cardiovascular Risk Reduction. Presented at the Canadian Society of Hospital Pharmacists BC Branch Annual General Meeting, Vancouver, BC. November 24, 2019.
6. **Loewen P.** Stroke Prevention Pearls. Presented at the 30th Annual Best Science Medicine Course, Vancouver, BC. May 4, 2019.
7. **Loewen P.**, Salmasi S. Update on research initiatives, and Design and development of an individualized, evidence-based education program for atrial fibrillation patients in BC's atrial fibrillation clinics. Presented at the Cardiac Services BC Atrial Fibrillation Clinics Annual Meeting, Vancouver, BC. October 20, 2017.
8. **Loewen P.** Bleeding in patients on antithrombotic therapy: the short and long of it. Presented at the Best Science Medicine 28th Annual Drug Therapy Course, Vancouver, BC. April 7, 2017.
9. **Loewen P.** Developing follow-up and monitoring plans for your patients. Presented at the College of Pharmacists of British Columbia's 125th Anniversary Event: The Future of Pharmacy. Kelowna, BC. September 17, 2016.
10. **Loewen P.** BC's Certified Pharmacist Prescriber Framework– UBC Faculty Stakeholder Workshop. Vancouver, BC. June 28, 2016.
11. **Loewen P.** Evaluating SPARC-DT: an innovative patient decision aid for antithrombotic therapy for atrial fibrillation. Presented at UBC Faculty of Medicine Electrophysiology Research Rounds, Vancouver, BC. June 14, 2016.
12. **Loewen P.** Antidotes for anticoagulants – are they a case of “Take The Money And Run”? Presented at the Best Science Medicine 27th Annual Drug Therapy Course, Vancouver, BC. May 6, 2016.
13. **Loewen P.** BC's Certified Pharmacist Prescriber Framework– Pharmacy Leaders of Tomorrow Stakeholder Workshop. Vancouver, BC. April 28, 2016.
14. **Loewen P.** Always in Motion is the Future: Changes in pharmacist training pathways and impacts on hospital pharmacists. Presented at Vancouver Island Health Authority's 8<sup>th</sup> Annual Pharmacy Education Conference, Parksville, BC. April 16, 2016.
15. **Loewen P.** BC's Certified Pharmacist Prescriber Framework– Community & Residential Care Perspectives. Vancouver, BC. April 6, 2016.
16. **Loewen P.** BC's Certified Pharmacist Prescriber Framework– Clinician Perspectives. Vancouver, BC. March 24, 2016.
17. **Loewen P.** BC's Certified Pharmacist Prescriber Framework– Health Authority Leaders' Perspectives. Harrison Hot Springs, BC. February 27, 2016.
18. **Loewen P.** Postcards from the future of pharmacist training in Canada. Presented at the Interior Health Authority education conference for pharmacists. Kelowna, BC. May 2, 2015.
19. **Loewen P.** IronMan to the Rescue: Contemporary management of anemia. Presented at the Best Science Medicine 26th Annual Drug Therapy Course, Vancouver, BC. April 17, 2015.
20. **Loewen P.** The UBC Entry-to-Practice PharmD program Cognitive Model: Guiding learning in the experiential setting. Presented at the UBC Office of Experiential Education Practice Educators Workshop. Vancouver, BC. March 7, 2015.
21. **Loewen P.** Entry-to-Practice PharmD: Implications, Opportunities, and Challenges. What Will It Mean for Me? Presenter & panelist at Canadian Society of Hospital Pharmacists – BC Branch Annual General Meeting, Vancouver, BC. November 2014.
22. **Loewen P.** Only the Beginning: Reflections on Pharmacy Education. Keynote Presentation at the Pharmaceutical Sciences Student Journal Issue Launch, Vancouver, BC. September 2014.
23. **Loewen P.** Salt and Water go together like a horse and carriage. Presented at the Best Science Medicine 25th Annual Drug Therapy Course, Vancouver, BC. April 2014.

24. **Loewen P.** Building UBC's Flexible Doctor of Pharmacy Program. Presented at UBC Flexible Learning Initiative Inaugural Event, Vancouver, BC. May 8, 2013
25. **Loewen P.** Postcards from the Future: Pharmacist Training in Canada. Presented at the BC Pharmacy Association Annual Meeting, Kelowna, BC. June 1, 2013
26. **Loewen P.** The Changing Landscape of Pharmacist Training in Canada: The UBC Perspective. Presented at UBC Alumni Event. Vancouver, BC. October 23, 2013
27. **Loewen P.** Unstuck: Pathways to the future of clinical pharmacy research. Keynote at Canadian Society of Hospital Pharmacists/UBC Pharmacy Practice Resident Research Day, Vancouver, BC. May 2013
28. **Loewen P.** Stroke prevention: Uncertainties, Controversies, and Intelligence for better decision-making. Presented at Vancouver Island Health Authority 5<sup>th</sup> Annual Education Conference, Parksville, BC. February 2013.
29. **Loewen P.** Pharmacist Training in Canada: Postcards from the Future. Presented at UBC Pharmacy Alumni education event, Victoria, BC. February 2013.
30. **Loewen P.** Pharmacist Training in Canada: Postcards from the Future. Presented at UBC Pharmacy Alumni Annual General Meeting, Vancouver, BC. November 2012.
31. **Loewen P.** New oral anticoagulants. Presented at the Therapeutics Initiative's 23rd Annual Drug Therapy Course, Vancouver, BC. April 2012.
32. **Loewen P.** Technology in Clinical Pharmacy Practice: Finding INTELLIGENCE in a hostile environment. Canadian Society of Hospital Pharmacists-BC Annual General Meeting, Vancouver, BC. November 19, 2011.
33. **Loewen P.** Update on the Recent Changes to the Lipids Clinical Practice Guideline. BC Continuing Professional Development Update 2011 conference, Vancouver. March 12, 2011.
34. **Loewen P.** Anticoagulation Update - Dabigatran. BC Continuing Professional Development Update 2011 conference, Vancouver. March 12, 2011.
35. **Loewen P.** Thrombolysis in Acute Ischemic Stroke. Vancouver General Hospital Emergency Department Pharmacology Rounds, Vancouver. March 3, 2011.
36. **Loewen P.** Thrombolysis in Acute Ischemic Stroke - The long and winding road. Presented at the Canadian Society of Hospital Pharmacists-BC Branch Spring Therapeutics Update, Richmond, BC. April 20, 2010.
37. **Loewen P.** Using statins – making it sweet and simple. Presented at the Therapeutics Initiative's 21st Annual Drug Therapy Course, Richmond, BC. April 10, 2010.
38. **Loewen P.** Leaving warfarin to the rats? Presented at the Therapeutics Initiative's 21st Annual Drug Therapy Course, Richmond, BC. April 10, 2010.
39. **Loewen P.** The UNIVERSE of antiplatelet therapies. Presented at the Therapeutics Initiative's 20th Annual Drug Therapy Course, Richmond, BC. March 2009.
40. **Loewen P.** Enhancing Learning With Netcasts. Presented at the UBC Faculty of Pharmaceutical Sciences' 1st Annual Celebrate Learning event, Vancouver, BC. October 2008.
41. **Loewen P.** A clot, a clot. I want it not. Presented at the Therapeutics Initiative's 19th Annual Drug Therapy Course, Richmond, BC. April 2008.
42. **Loewen P.** The Zen of Q10. Presented at the Therapeutics Initiative's 19th Annual Drug Therapy Course, Richmond, BC. April 2008.
43. **Loewen P.** Illuminating the quality of drug therapy: The IMI-Index as Swiss Army Knife. Presented at the British Columbia Community Hospital Pharmacy Directors Association Meeting, Harrison Hot Springs, BC, February 2008.

44. **Loewen P.** Understanding and communicating about effect sizes of drug therapy. Presented at Canadian Society of Hospital Pharmacists–BC Branch Vancouver Island Chapter Conference. Nanaimo, BC. October 2007.
45. **Loewen P.** Enhancing resident learning through electronic learning portfolios. Presented at BC Pharmacy Practice Residency Programs Preceptor Workshop. Richmond, BC. October 2007.
46. **Loewen P.** Heparin -- no monitoring? Warfarin – self monitoring? Presented at the Therapeutics Initiative's 18th Annual Drug Therapy Course, Richmond, BC. March 2007.
47. **Loewen P.** For Lovers, HOPErs, and DREAMers: Faith-based management of Diabetes. Presented at Canadian Society of Hospital Pharmacists BC Branch Annual General Meeting. Vancouver, BC. November 2006.
48. **Loewen P.** Postoperative Nausea & Vomiting: The State of the Art. Presented at UBC Hospital Surgical Education Day, Vancouver, November 2006.
49. **Loewen P.** Pharmacologic Stroke Prevention: Navigating Toward Rational Drug Therapy. Presented at Independent Pharmacies Inc. continuing education series, Vancouver, November 2006.
50. Jewesson P, **Loewen P.** Walking the Line: Pharmacists and professional fidelity. Presented at the 9<sup>th</sup> Annual British Columbia Health Services Pharmacy Business Practices Conference, Richmond, BC. June 2006.
51. **Loewen P.** NSAIDs: Understanding and Managing the Risks. Presented at Independent Pharmacies Inc. continuing education series, Vancouver, May 2006.
52. **Loewen P.** NSAIDs – What to do when you are between a rock and a hard place. Presented at the Therapeutics Initiative's 17th Annual Drug Therapy Course, Richmond, BC. April 2006.
53. **Loewen P.** NSAIDs: Practical approaches to reducing harm. Presented at Richmond General Hospital Grand Rounds, Richmond, BC. February 2006.
54. **Loewen P.** Drugs in the elderly: Effects on physical function, safety, and balance. Presented at UBC Hospital Physiotherapy & Occupational Therapy Education Rounds. June 23, 2005.
55. **Loewen P.** Pharmacologic Controversies: COX-2 Inhibitors, Statins, and Beyond. Presented at the Vancouver Island Internal Medicine Refresher Course, Victoria, BC. April 23, 2005.
56. **Loewen P.** Aspirin, Warfarin, or LMWH for Atrial Fibrillation: The Clot Thickens. Presented at the Therapeutics Initiative's 16th Annual Drug Therapy Course. Richmond, BC. April 16, 2005.
57. **Loewen P.** Balancing Risks & Benefits in Clinical Research: Ethical Issues. Presented at Vancouver Coastal Health Research Institute Education Rounds, Vancouver. February 2005.
58. **Loewen P.** COX-2 Inhibitors and cardiovascular events: Current Controversies. Presented at Vancouver General Hospital Obstetrics & Gynaecology Rounds, Vancouver BC. January 2005.
59. **Loewen P.** Stroke Prevention. Presented at Richmond General Hospital Grand Rounds, Richmond, BC. December 2004.
60. **Loewen P.** Drugs 101: The thick and thin of anticoagulation. Presented at UBC Hospital Nursing education rounds, Vancouver BC. November 2004.
61. **Loewen P.** Drugs 101: Practical issues when using opioid analgesics. Presented at UBC Hospital Nursing education rounds, Vancouver BC. November 2004.
62. **Loewen P.** What is Research? What is Evaluation? Presented at BC Center for Disease Control Research Education Rounds, Vancouver, BC. October 2004.
63. **Loewen P,** McCormack J. Top 100 Research Ethics Challenges: An REB Perspective. Presented at Fraser Health Authority Research Ethics Education event, Surrey, BC. October 2004.
64. **Loewen P.** Clinical Research in Canada: The Regulatory Environment. Presented at Fraser Health Authority Research Ethics Education event, Surrey, BC. October 2004.

65. **Loewen P.** Advances in ulcer and gastrointestinal bleeding prevention. Presented at UBC Hospital Pharmacy Education Rounds. Vancouver, BC. May 2004.
66. **Loewen P.** Ulcers & Bleeds: As the stomach turns. Presented at the 15th annual Drug Therapy Course. Richmond, BC. May 2004.
67. **Loewen P.** Meet the CREB Chair: What was new in 2003?. Presented at Vancouver Coastal Health Research Institute Education Rounds, Vancouver, BC. May 2004.
68. **Loewen P.** Drugs 101: Pain Medications. Presented at UBC Hospital Physiotherapy & Occupational Therapy Education Rounds, Vancouver, BC. May 2004.
69. **Loewen P.** Questions and Answers from the Chair of the Research Ethics Board. Presented at BC Children's Hospital BMT/Leukemia Research Rounds, Vancouver, BC. April 2004.
70. **Loewen P.** KEYNOTE: Hindsight is 20/20: A look back a 2003's Drug Therapy Revelations. Canadian Society of Hospital Pharmacists BC Branch Annual General Meeting. Vancouver, BC. November 2003.
71. **Loewen P.** Primary and secondary prevention of stroke. Presented at Vancouver Hospital & Health Sciences Center Family Practice Grand Rounds. Vancouver, BC. November 2003.
72. **Loewen P.** Primary and secondary prevention of stroke. Presented at Vancouver Hospital & Health Sciences Center Hospitalist Education Rounds. Vancouver, BC. November 2003.
73. **Loewen P.** Drug-Herb Interactions: An Unholy Alliance?. 49th Annual St. Paul's Hospital CME Conference for Primary Care Physicians, Vancouver, BC. October 2003.
74. **Loewen P.** Postoperative Nausea & Vomiting: Fighting the Wave. Vancouver General Hospital's Trauma Cycle and Orthopaedic Conference. Richmond, BC. October 2003.
75. **Loewen P.** Clinical Pharmacist as Information Manager: Accessing the Evidence Where & When You Need It. Canadian Society of Hospital Pharmacists BC Branch Vancouver Island Event, Nanaimo, BC. September 2003.
76. **Loewen P.** Clinical Pharmacist as Information Manager: Accessing the Evidence Where & When You Need It. Presented to Vancouver Hospital & Health Sciences Center residents, Vancouver, BC. August 2003.
77. **Loewen P.** Drugs 101: Narcotic and Steroid Pharmacotherapy. Presented to UBC Hospital Nursing Education Rounds, Vancouver, BC. July 2003.
78. **Loewen P.** Drugs 101: Central Nervous System Pharmacotherapy. Presented to UBC Hospital Nursing Education Rounds, Vancouver, BC. July 2003.
79. **Loewen P.** Drugs 101: Cardiovascular Pharmacotherapy. Presented at UBC Hospital Nursing Education Rounds, Vancouver, BC. July 2003.
80. **Loewen P.** The Role of the Pharmacist in Headache Management. Canadian Pharmacists Association Annual Conference, Vancouver, BC. June 2003.
81. **Loewen P.** The UBC Clinical Research Ethics Board: What's new since 2002? Presented at Vancouver Coastal Health Research Institute Education Rounds, Vancouver, BC. April 2003.
82. **Loewen P.** Drug therapy in the elderly: Dispatches from the Risk/Benefit Frontlines. BC Association of Physical Therapists Annual General Meeting, Richmond, BC. April 2003
83. **Loewen P.** Is it logical to switch from aspirin after aspirin "failure"? Presented at the 14th annual Drug Therapy Course. Richmond, BC. April 2003.
84. **Loewen P.** Critically Evaluating Clinical Trials. Fraser Valley Internists' Society Annual Meeting, Whistler, BC, September 22, 2002.
85. **Loewen P.** Secret remedies for drug-induced adverse effects. Presented to physicians and pharmacists at the Therapeutics Initiative's 13th Annual Drug Therapy Decision Making Course, Richmond, BC. May 2002.



86. **Loewen P.** Therapeutic Substitution: The Good, the Bad, and the Ugly. Presented to W.H. Mercer Inc. staff. Vancouver, BC. May 2002.
87. **Loewen P.** Ethical Issues in Clinical Research. Presented at Vancouver General Hospital Emergency Medicine Research Rounds, Vancouver, BC. May 2002.
88. **Loewen P.** Advantages, Disadvantages and Insights into Drug Formularies. Presented to W.H. Mercer Inc. staff. Vancouver, BC. April 2002.
89. **Loewen P.** Primary and secondary prevention of stroke: Navigating the evidence and making excellent decisions. Presented at Canadian Society of Hospital Pharmacists BC-Branch Spring Therapeutics Update, Burnaby, BC. April 2002.
90. **Loewen P.** Eptifibatide in Acute Coronary Syndromes. Inservice education to Clinical Teaching Unit Nurses at UBC Hospital, Vancouver, BC. Mar-Apr 2002.
91. **Loewen P.** Migraine Management in the Emergency Department. Presented at Vancouver Hospital & Health Sciences Center Emergency Department Pharmacology Rounds. Vancouver, BC. November 2001.
92. **Loewen P.** Literature searching skills. Presented to BC Hospital Pharmacy Residents. Vancouver, BC. July 2001, February 2002, July 2002, February 2003.
93. **Loewen P.** Current Issues in Prevention and Treatment of Migraine. Presented as a teleconference to hospitals in B.C. for the Registered Nurses Association of British Columbia. Vancouver, BC. October 2001.
94. **Loewen P.** Pharmacotherapy for Migraine Prevention. Presented to physicians and pharmacists at the Therapeutics Initiative's 12th Annual Drug Therapy Decision Making Course, Richmond, BC. May 2001.
95. **Loewen P.** Pharmacotherapy for Acute Stroke. Presented at UBC Hospital ACE Unit Nursing Education Day, Vancouver, BC. March 2001.
96. **Loewen P.** Keeping up with the medical literature: Using information technology to your advantage. Presented to UBC Family Practice Residents as part of a UBC Faculty of Medicine Education Series. Vancouver, BC. February 2001.
97. **Loewen P.** Clot-busting therapies for Stroke. Presented at UBC Hospital Physiotherapy & Occupational Therapy education rounds. Vancouver, BC. December 2000.
98. **Loewen P.** Effective Teaching for Residency Preceptors. Presented to BC Hospital Pharmacy Residency Preceptors at the Residency Preceptor Workshop, Burnaby, BC. October 2000.
99. **Loewen P.** Gastrointestinal Toxicity of NSAIDs: Strategies for Risk Reduction. Presented to Hospital & Community Pharmacists as part of CCCEP-approved education event. Vancouver, BC. October 2000.
100. **Loewen P.** Prevention and Treatment of Deep Venous Thrombosis & Pulmonary Embolism. Presented to nurses at Medicine Nursing Education day, Vancouver BC. June 2000.
101. **Loewen P.** Preventative therapies in the elderly: How far does the evidence stretch? Presented to pharmacists at the annual "New Ideas for Old Friends" conference on behalf of the University of British Columbia Continuing Pharmacy Education Program, Burnaby, BC. June 2000.
102. **Loewen P.** Prevention and Treatment of Atrial Fibrillation. Presented to nurses at Medicine Nursing Education day, Vancouver, BC. June 2000.
103. **Loewen P.** Osteoarthritis: Symptom Management & The Role of the Pharmacist. Presented to pharmacists in Vancouver, Surrey, Nanaimo, Victoria and Kelowna on behalf of the University of British Columbia Continuing Pharmacy Education program. May 2000.
104. **Loewen P.** Managing the Maze of Acute Migraine Therapies. Presented at the Canadian Society of Hospital Pharmacists-BC Branch Spring Therapeutics Update, Vancouver, BC. April 2000.
105. **Loewen P.** Rational use of analgesics and antiemetics in hospitalised patients. Presented to physiotherapists and occupational therapists at UBC Hospital. Vancouver, BC. April 2000.

106. **Loewen P.** ACE-Inhibitors in CHF: How much is enough? Presented to physicians and pharmacists at the 11th Annual Drug Therapy Decision Making Course, Richmond, BC. March 2000.
107. **Loewen P.** Antiplatelet therapies for secondary prevention: When is another rose not a stinker? Presented to physicians and pharmacists at the 11th Annual Drug Therapy Decision Making Course, Richmond, BC. March 2000.
108. **Loewen P.** Understanding the role of COX-2 inhibitors in osteoarthritis and rheumatoid arthritis. Presented to community pharmacists in Richmond, BC. March 2000
109. **Loewen P.** Managing Postoperative Nausea and Vomiting on the surgical ward. Presented to nurses at UBC Hospital on behalf of the Nursing Education & Support Services, Vancouver Hospital & Health Sciences Center, Vancouver, BC. March 2000.
110. **Loewen P.** Postoperative Nausea and Vomiting: the Big Little Problem. Presented to nurses during UBC Hospital Nursing Education Day, Vancouver, BC. November 1999.
111. **Loewen P.** Antiplatelet therapies for prevention of cardiovascular events: the role of clopidogrel. Presented to pharmacists at Vancouver General Hospital, Vancouver, BC. October 1999.
112. **Loewen P.** Enoxaparin for Acute Coronary Syndromes. Presented to Emergency Department physicians at UBC Hospital, Vancouver, BC. October 1999.
113. **Loewen P.** Current topics in Diabetes, Hypertension, Hormone Replacement therapy, and Osteoarthritis. Presented to Family Practitioners in Vernon, Kelowna (KGH Grand Rounds), and Penticton on behalf of the Therapeutics Initiative. October 1999.
114. **Loewen P.** Developing an Institutional Approach to Managing Postoperative Nausea and Vomiting. Presented as a teleconference to hospitals in B.C. on behalf of the Registered Nurses Association of British Columbia, October 1999, repeated June 2000.
115. **Loewen P.** Drug therapy for acute migraine headache. Presented at VHHSC Emergency Department Pharmacology Rounds, Vancouver General Hospital, Vancouver, BC. October 1999.
116. **Loewen P.** Postoperative Nausea and Vomiting: The Big Little Problem. Presented at Canadian Society of Hospital Pharmacists-BC Branch Clinical Skills Symposium, Vancouver, BC. September 1999.
117. **Loewen P.** Clopidogrel for prevention of cardiovascular events: Defining its place in therapy. Presented at Canadian Society of Hospital Pharmacists-BC Branch Fraser Valley Chapter Continuing Education Event, Surrey, BC. August 1999.
118. **Loewen P.** Clopidogrel: Ticlopidine's nemesis? Presented at Canadian Society of Hospital Pharmacists-BC Branch Okanagan Spring Update 1999, Kelowna, BC. May 1999.
119. **Loewen P.** Antidepressants, anxiolytics and antipsychotics in acute care: a practical approach to their use and monitoring. Presented to surgical and family practice/palliative care nursing staff at UBC Hospital, Vancouver, BC. March 1999.
120. **Loewen P.** An evidence-based approach to treatment of acute migraine headache. Presented at the 10th Annual Drug Therapy Decision Making Course, Richmond, BC, March 1999.
121. **Loewen P.** Postoperative nausea and vomiting in patients undergoing TRAM breast reconstruction surgery. Presented to UBC Hospital Anaesthesiologists, Vancouver, BC. March 1999.
122. **Loewen P.** Homocysteine: Implications for cardiovascular risk assessment and reduction. Presented at the British Columbia Community Hospital Pharmacy Directors Association Meeting, Harrison Hot Springs, BC. February 1999.
123. **Loewen P.** PONV in TRAM-flap breast reconstruction patients: an update on recent changes in practice. Presented to UBC Hospital Surgical Patient Care Team, Vancouver, BC. February 1999.
124. **Loewen P.** PONV in TRAM-flap breast reconstruction patients: a review of 140 cases at UBC Hospital. Presented to UBC Hospital Surgical Patient Care Team, Vancouver, BC. January 1999.

125. **Loewen P.** Appropriate use of antibiotics for preventing post-surgical infections. Presented to Operating Room nurses at UBC Hospital, Vancouver, BC. November 1998.
126. **Loewen P.** Developed curriculum and conducted a case-based workshop with community pharmacists on heart failure, osteoporosis, hypertension, hyperlipidemia. Vancouver, BC. November 1998.
127. **Loewen P.** Seamless care: Partnerships between hospital & community pharmacists. Presented to community pharmacists at Unipharm Inc.'s continuing education conference. Richmond, BC. September 1998.
128. **Loewen P.** Use of combination warfarin and ASA therapy: an update of current guidelines. Presented at Coronary Care Unit Grand Rounds at Vancouver General Hospital, Vancouver, BC. June 1998.
129. **Loewen P.** Low molecular weight heparins – in with the New? Presented on behalf of Education Support Services to staff at UBC Hospital, Vancouver, BC. June 1998.
130. **Loewen P.** Thrombolytic therapy for acute ischemic stroke. Presented at Pharmacy Rounds, Vancouver General Hospital, Vancouver, BC. June 1998.
131. **Loewen P.** Appropriate drug therapy for managing the aggressive patient. Presented on behalf of Education Support Services to nursing staff at UBC Hospital, Vancouver, BC. June 1998
132. **Loewen P.** A rational approach to post-operative nausea and vomiting management. Presented to surgical nurses at UBC Hospital, Vancouver, BC. May 1998.
133. **Loewen P.** Homocysteine: Cholesterol for the next millennium?. Presented at Canadian Society of Hospital Pharmacists BC Branch AGM, Vancouver, BC. November 1997.
134. **Loewen P.** The role of methadone in the treatment of narcotic withdrawal. Presented to nursing staff of Vancouver Hospital – UBC Site on behalf of the hospital's Educational Services Committee, Vancouver, BC. December 1996.
135. **Loewen P.** Acarbose in the management of Type II diabetes. Presented at the Canadian Society of Hospital Pharmacists Spring Drugs Update, Vancouver, BC. April 1996.

(e) *Other Presentations*

1. **Loewen P, Salmasi S, Högg T, Kapanen A.** Atrial fibrillation patients' real world persistence with oral anticoagulants: a retrospective Canadian cohort study. Presented at the UBC Faculty of Pharmaceutical Sciences Graduate and Post Doctorate Research Symposium, Vancouver BC. May 16, 2019.
2. **Salmasi S, Tandun R, De Vera M, Loewen, P.** Atrial fibrillation patients' real-world adherence to oral anticoagulants: a systematic review and meta-analysis of burden, determinants and impacts. Presented at the UBC Faculty of Pharmaceutical Sciences Graduate and Post Doctorate Research Symposium, Vancouver BC. May 16, 2019.
3. **Salmasi S, Loewen P.** Optimizing stroke prevention pharmacotherapy for atrial fibrillation patients. Presented at the UBC Collaboration for Outcomes Research and Evaluation retreat. Vancouver, Canada. May 30, 2018.
4. **Salmasi S, Loewen P.** Assessment of atrial fibrillation patients' education needs. Presented at the UBC Faculty of Pharmaceutical Sciences student seminar series. Vancouver, Canada. April 4, 2018.
5. **Salmasi S, Loewen P.** Persistence, switching, self-reported adherence and satisfaction with anticoagulant therapy in atrial fibrillation clinic patients: results of a long-term prospective cohort study. Presented at the UBC Faculty of Pharmaceutical Sciences Graduate and Post Doctorate Research Symposium, Vancouver BC. May 17, 2018.
6. **Loewen P.** Episode 315: A way to think about antidotes for anticoagulants-PART II. Therapeutics Education Collaboration podcast. Invited presenter. June 20, 2016.  
<https://therapeuticseducation.org/podcast/episode-315-way-think-about-antidotes-anticoagulants-part-ii>

7. **Loewen P.** Episode 314: A way to think about antidotes for anticoagulants. Therapeutics Education Collaboration podcast. Invited presenter. June 13, 2016.  
<https://therapeuticseducation.org/podcast/episode-314-way-think-about-antidotes-anticoagulants>
8. **Loewen P.** Episode 68: The "heart of the matter" for stroke prevention in atrial fibrillation. Therapeutics Education Collaboration podcast. Invited presenter. Sept 30, 2009.  
<https://therapeuticseducation.org/podcast/episode-68-heart-matter-stroke-prevention-atrial-fibrillation>
9. **Loewen P.** Overview of the Entry-to-Practice PharmD Curriculum and Cognitive Model. Commissioned by the UBC Faculty of Pharmaceutical Science Office of Experiential Education to create this video module for online delivery to practice educators in the "OEE Practice Educator Resource Centre"  
<https://modules.oeo.pharmacy.ubc.ca>
10. **Loewen P.** Episode 67: A clot, a clot, I want it not – prevention of stroke with antiplatelets. Therapeutics Education Collaboration podcast. Invited presenter. Sept 24, 2009.  
<https://therapeuticseducation.org/podcast/episode-67-clot-clot-i-want-it-not---secondary-stroke-prevention-antiplatelets>
11. **Loewen P.** Episode 66: A clot, a clot, I want it not – secondary prevention with antiplatelets. Therapeutics Education Collaboration podcast. Invited presenter. Sept 16, 2009.  
<https://therapeuticseducation.org/podcast/episode-66-clot-clot-i-want-it-not---secondary-prevention-antiplatelets>
12. **Loewen P.** Episode 65: A clot, a clot, I want it not – primary prevention with antiplatelets. Therapeutics Education Collaboration podcast. Invited presenter. Sept 9, 2009.  
<https://therapeuticseducation.org/podcast/episode-65-clot-clot-i-want-it-not-primary-prevention-antiplatelets>
13. **Loewen P.** Medical information and the Media. Invited guest on Art Hister's "House Calls" radio program on the Corus radio network (CKNW) February 18, 2006.
14. **Loewen P.** Drug Interactions. Invited guest on Art Hister's "House Calls" radio program on the Corus radio network (CKNW) August 27, 2005.
15. **Loewen P.** Using your osteoarthritis medications more safely and effectively. Invited guest on Art Hister's "House Calls" radio program on the Corus radio network (CKNW) April 3, 2004.
16. **Loewen P.** Drug Interactions. Invited guest on Art Hister's "House Calls" radio program on the Corus radio network (CKNW) February 21, 2004.

(f) *Other*

(g) *Conference Participation (Organizer, Keynote Speaker, etc.)*

1. Keynote Speaker: "Unstuck: Pathways to the future of clinical pharmacy research". Canadian Society of Hospital Pharmacists/UBC Resident Research Day, May 25, 2013. Vancouver, BC.
2. Organizer, Keynote Speaker & Moderator, UBC-Affiliated Research Ethics Boards Annual Forum 2012. Vancouver, BC. October 17, 2012.
3. Organizer, UBC Pharm.D. & B.C. Residency Programs Preceptor Workshop 2011. Burnaby, BC. November 18, 2011. Moderated two panel sessions: "Precepting in a Tiered Model" and "Learning Portfolios: What, Why, and How for Preceptors".
4. Organizer, UBC Clinical Research Ethics Board Educational Retreat 2011. Vancouver, BC. October 17, 2011.

5. Organizer, UBC Pharm.D. & BC Residency Programs Preceptor Workshop 2009. Segal Graduate School of Business, Vancouver. November 20, 2009. Also facilitated a session, "Precepting in the Context of the Coaching Model" with Helen Roberts.
6. **Loewen P.** KEYNOTE: Hindsight is 20/20: A look back a 2003's Drug Therapy Revelations. Canadian Society of Hospital Pharmacists BC Branch Annual General Meeting. Vancouver, BC. November 2003.
7. As Member of Education Working Group, Therapeutics Initiative, University of British Columbia (1999-2001), participated in organization of: 11<sup>th</sup> & 12<sup>th</sup> Annual Drug Therapy Courses, Richmond, BC. April 2000 and 2001.
8. As Chair of Canadian Society of Hospital Pharmacists-BC Branch Programs Committee, organized the following continuing education conferences:
  - Canadian Society of Hospital Pharmacists-BC Winter Education Conference, Vancouver, February 1997
  - Canadian Society of Hospital Pharmacists-BC Spring Drugs Update, Vancouver, April 1997
  - Canadian Society of Hospital Pharmacists/UBC Hospital Pharmacy Residency Program Residency Presentation Night, Vancouver, May 1997
  - Canadian Society of Hospital Pharmacists-BC Clinical Skills Symposium, Vancouver, September 1997
  - Canadian Society of Hospital Pharmacists-BC Annual General Meeting, Vancouver, November 1997
9. As Member of National Education Services Committee, Canadian Society of Hospital Pharmacists participated in organization of the Canadian Society of Hospital Pharmacists Professional Practice Conference, Toronto, January 1998.
10. As Member of the Canadian Society of Hospital Pharmacists -BC Branch Programs Committee, organized the following continuing education conferences:
  - Canadian Society of Hospital Pharmacists-BC Winter Education Conference, Vancouver, February 1998
  - Canadian Society of Hospital Pharmacists-BC Spring Drugs Update, Vancouver, April 1998
  - Canadian Society of Hospital Pharmacists/UBC Hospital Pharmacy Residency Program Residency Presentation Night, Vancouver, May 1998
  - Canadian Society of Hospital Pharmacists-BC Clinical Skills Symposium, Vancouver, September 1998
  - Canadian Society of Hospital Pharmacists-BC Annual General Meeting, Vancouver, November 1998

## **10. SERVICE TO THE UNIVERSITY**

### *(a) Areas of special interest and accomplishments*

#### Evaluation Lead - Quality of Care, Pharmacists in Primary Care Network (PCN) Program (2021 – 2024)

In collaboration with the program's leadership, I am leading the quality of care component of the evaluation of this program which is embedding 50 clinical pharmacists in primary care clinics across BC. I am leading a team of clinicians and researchers who are providing input into the evaluation goals, parameters, and methods. The evaluation spans the period 2020-23 and includes several evidence-based indicators of quality of care provided by the clinical pharmacists in the primary care setting. The evaluation program is funded by the BC Ministry of Health.

#### UBC Clinical Research Ethics Board (2001 – 2005; 2009 – 2014)

As chair, my work positively impacted the system of ethical oversight for the protection of human participants in research, ensured UBC was in compliance with Canadian and US research ethics

regulations, and increased the efficiency and transparency of the ethical approval process for UBC researchers. This work was consistent with my desire to apply my knowledge of pharmacotherapy and clinical research and my leadership skills to improving the experience and the safety of participating in research for participants, to making the oversight process easier for researchers, and to enhance UBC's reputation.

When I began my first term as Chair of the UBC Clinical Research Ethics Board (CREB) in 2001, UBC's research enterprise was threatened by a Tricouncil audit which found serious deficiencies in the research ethics oversight system at UBC, and which threatened to result in suspension of all Tricouncil funding to UBC.\* I was appointed by UBC's VP Research, Indira Samarasekera, to evaluate and overhaul the clinical research oversight process to remedy this situation. Under my leadership, the integrity of the process was restored and the Tricouncils' concerns were allayed. My accomplishments in this role included:

- Performed a complete rewrite of Board policies and guidance to investigators, with UBC-wide consultation, to improve clarity and efficiency;
- Developed and implemented Canada's first comprehensive policy on recruitment of incompetent subjects in research, an area of considerable legal and ethical debate; ([http://rise.ubc.ca/helpCenter/GN/CREB\\_Guidance\\_Notes.html#Policy17](http://rise.ubc.ca/helpCenter/GN/CREB_Guidance_Notes.html#Policy17))
- Substantially improved efficiency and quality of ethical reviews of human subjects research;
- Managed several difficult cases of research misconduct;
- Lobbied for and oversaw implementation of a program of Ongoing Review of clinical and behavioural research at UBC and its affiliated hospitals; ([https://ethics.research.ubc.ca/sites/ore.ubc.ca/files/documents/SOP%20405%20ONGOING%20REVIEW%20AND%20REPORTING\\_0.pdf](https://ethics.research.ubc.ca/sites/ore.ubc.ca/files/documents/SOP%20405%20ONGOING%20REVIEW%20AND%20REPORTING_0.pdf))
- Beginning in 2002, I produced the first-ever annual reports of the CREB to enhance transparency and integrity of the ethical review process, and to document the progress of the CREB in serving research subjects and UBC researchers. (<https://ethics.research.ubc.ca/clinical-research-ethics/creb-membership-annual-reports>)

When I completed my first term as Chair in 2005, the UBC's human subjects research ethical oversight program was on solid footing. I was approached in 2009 by UBC's Ethics Director, Laurel Evans, and UBC VP Research & International, John Hepburn, to once again take over leadership of the CREB, which had run into some difficulties in the interim. In my second term as Chair I led improvements in efficiency and in the relationship between the clinical research community and the Board, and the revision of several UBC ethics policies.

As Chair of the CREB, I contributed in other ways:

- As Chair of the UBC Research Ethics Policy Advisory Board (2002-2004), I led the authorship of "*Human Tissue Banks and their Use for Research Purposes: Guidance to UBC-Affiliated Custodians of Human Tissues*"; ([https://ethics.research.ubc.ca/sites/ore.ubc.ca/files/documents/tissue\\_collection\\_banking.pdf](https://ethics.research.ubc.ca/sites/ore.ubc.ca/files/documents/tissue_collection_banking.pdf))
- Led the development of a policy on research-related radiation exposure (Guidance note #17) (<https://ethics.research.ubc.ca/ore/ubc-clinical-research-ethics-general-guidance-notes>)
- In response to several difficult cases of financial conflicts of interest in human research I managed at CREB, I prompted UBC's VP Research to undertake and I contributed to the revision of UBC's longstanding Policy 97 (Conflict of Interest and Conflict of Commitment) to embrace contemporary principles of financial conflicts of interest in research. As such, I was Member, UBC Conflict of Interest (Policy 97) Committee, 2005 – 2007. (<http://universitycounsel.ubc.ca/files/2012/02/policy97.pdf>)
- I served on the UBC Policy 89 Research Involving Human Participants Revision Committee (2011 – 2012), which tackled difficult issues of secondary uses of research data and tissues

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\* Kinsella TD, Keyserlingk EW. Review of The Clinical Research Ethics Board, University of British Columbia: Final Report. August 1, 2001. On file with UBC Office of Research Services.

and research ethics oversight jurisdictional issues.  
<http://universitycounsel.ubc.ca/files/2012/06/policy89.pdf>)

My work as chair of the UBC Clinical Research Ethics Board represents a major professional contribution to UBC's research enterprise, to the protection of research subjects at UBC, and to the enhancement of the public's trust in UBC's human subjects research activities.

(b) *Memberships on committees, including offices held and dates*

1. Chair, Faculty of Pharmaceutical Sciences Dean's Advisory Committee on Clinical Appointments and Promotions (DACCAP) (March 2022 – present)
2. UBC Faculty of Pharmaceutical Sciences Associate Dean – Practice Innovation Search Committee (Jan 2022 - present)
3. UBC Faculty of Pharmaceutical Sciences Liaison to the BC Pharmacy Residency Committee (2021-present)
4. Member, Graduate & Post-doctoral Studies Awards Committee, UBC Faculty of Pharmaceutical Sciences (2019 – 2022)
5. Member, Office of Educational Support & Development Program Evaluation Committee (2017-2018)
6. Member, PY2 Program Assistant Selection Committee (2017)
7. Member, UBC Faculty of Pharmaceutical Sciences Flexible Pharm.D. Program Committee (2014 – present)
8. Member, UBC Faculty of Pharmaceutical Sciences Flexible Pharm.D. Student Progress and PLAR Committee (2018 – present)
9. Member, UBC Faculty of Pharmaceutical Sciences Merit Committee (2012 – 2016)
10. Member, UBC Faculty of Pharmaceutical Sciences Killam Teaching Prize selection committee (2010 – 2020)
11. Member, Assessment Manager selection committee (July 2015)
12. Chair, E2P PharmD Cognitive Model Working Group (2015-2016)
13. Co-Chair, UBC Faculty of Pharmaceutical Sciences Entry-To-Practice Doctor of Pharmacy Program Development Task Force (2012-2014)
14. Co-chair, Medication Management Working Group, UBC Faculty of Pharmaceutical Sciences Entry-To-Practice Doctor of Pharmacy Program (2012-2014)
15. Chair, UBC Clinical Research Ethics Board (2001 – 2005; 2009 – 2014)
16. Member, UBC Faculty of Pharmaceutical Sciences B.Sc.(Pharm.) Program Advisory Committee (2013-2015)
17. Member, Institutional Experiential Education Reform Steering Committee (AGILE) (2012-present)
18. Member, Pharmacists Clinic Implementation Advisory Group (2013)
19. Member, Member, UBC Faculty of Pharmaceutical Sciences Pharmacists' Clinic Director Search Committee (2013)
20. Member, Pharmacist Clinic Lecturer and Practitioner Search Committees (June 2014, Sept 2014, Oct 2014)
21. Member, UBC Policy 89 Research Involving Human Participants Revision Committee (2011 – 2012)
22. Member, UBC Faculty of Pharmaceutical Sciences Assessment Committee (2012-2014)
23. Member, UBC Faculty of Pharmaceutical Sciences Technology Committee (2012-2013)

24. Member, UBC Faculty of Pharmaceutical Sciences Pharmacists' Clinic Consultant Selection Committee (2012)
25. Member, Ministry of Health/UBC Special Provider Engagement Expert Delegate – Upcoming Professionals (SPEED-UP) Committee (2006 – 2008)
26. Member, UBC Conflict of Interest (Policy 97) Committee (2005 – 2007)
27. Member, UBC Faculty of Pharmaceutical Sciences Doctor of Pharmacy Program Strategic Planning Committee (2005 – 2015)
28. Member, Graduate Doctor of Pharmacy (PharmD) Program Awards Committee (2012 – 2015)
29. Member (1999-present), Chair (2013-2015), UBC Faculty of Pharmaceutical Sciences Doctor of Pharmacy Program Selection Committee
30. Chair, UBC Research Ethics Policy Advisory Board (2002 – 2004)
31. Member, UBC Ethics Policy Task Group (2001)
32. Member, UBC Clinical Research Ethics Board (1999 – 2001)
33. Member & Chair, Canadian Society of Hospital Pharmacists/UBC Pharmacy Practice Residency Committee (2001 – 2012)
34. Secretary & Webmaster, Canadian Society of Hospital Pharmacists/UBC Hospital Pharmacy Residency Committee (2002 –2005)
35. Member, Education Working Group – Therapeutics Initiative, University of British Columbia (1999-2001)

(c) *Other service, including dates*

1. Peer Reviewer, UBC Faculty of Pharmaceutical Sciences Teaching and Learning Enhancement Fund grant competition (2019 – present)
2. Peer Reviewer, UBC Scholarship of Teaching & Learning Certificate Program (2011-2013)
3. Peer Reviewer, Peer Review of Teaching Program, UBC Faculty of Pharmaceutical Sciences (2014 – present)

## **11. SERVICE TO THE COMMUNITY**

(a) *Memberships on scholarly societies, including offices held and dates*

1. Member, Canadian Pharmacy Residency Board, Canadian Society of Hospital Pharmacists (2011 – 2015)  
 Led accreditation surveys of pharmacy practice residency programs across Canada, including Horizon Health Care, Moncton NB, Capital District Health Authority - Queen Elizabeth II Health Sciences Center, Halifax NS, William Osler Health System, Brampton ON, The Hospital for Sick Children, Toronto ON, The Ottawa Hospital, Ottawa ON. Contributed to the progression of national residency training standards and accreditation procedures.
2. Vice-Chair (August 2012-January 2016), and Member (August 2012-March 2018), Standards Committee, Canadian Pharmacy Residency Board, Canadian Society of Hospital Pharmacists.  
 This national committee sets accreditation standards for pharmacy practice residency programs in Canada. Our most prominent recent accomplishments are publication of a major revision to the Accreditation Standards for General (Year 1) Pharmacy Residencies [Canadian Pharmacy Residency Board. Accreditation Standards for General (Year 1) Pharmacy Residencies. Canadian Society of Hospital Pharmacists. 2018. Translation in progress, publication pending] and publication of the first set of Advanced Practice Year 2 (ACPR2) Residency Program Standards



[Canadian Pharmacy Residency Board. Accreditation Standards for Advanced (Year 2) Pharmacy Residencies. Canadian Society of Hospital Pharmacists. 2016.  
<https://www.cshp.ca/sites/default/files/residency/CPRB-Accreditation-Standards-for-Advanced-Pharmacy-Residencies.pdf> ]

3. Chair (2012 – 2013) and Member (2008 - 2015), Board of Fellows, Canadian Society of Hospital Pharmacists.

This national committee sets standards for and awards Fellow status (Fellow of the Canadian Society of Hospital Pharmacists, FCSHP) to worthy nominees.

4. Member, Canadian Cardiovascular Society (2016-present)
5. Member, Cochrane Collaboration – Renal Group (2012 – present)
6. Member, American Association of Colleges of Pharmacy (2013-2016)
7. Member, Association of Faculties of Pharmacy of Canada (2012 – present)
8. President-Elect, President and Past-President, Canadian Society of Hospital Pharmacists - BC Branch (1998-2000)
9. Chair, Programs Committee, Canadian Society of Hospital Pharmacists – BC Branch (1996-1997)
10. Member, Canadian Society of Hospital Pharmacists National Website Committee (1998)
11. Member of the Canadian Society of Hospital Pharmacists (1993-present)
12. On Register of Pharmacists with Pharmacy Examining Board of Canada since 1993.
13. Pharmacist Licensure with BC College of Pharmacists (1993-present)

(b) *Memberships on other societies, including offices held and dates*

(c) *Memberships on scholarly committees, including offices held and dates*

1. Member, Canadian Cardiovascular Congress Research Abstract review committee, Canadian Cardiovascular Society (April 2021 – present)
2. Chair, Educational Pathways to Advanced Pharmacy Practice working group. (Member, 2016-2017; Chair, 2017-2022)

This group composed of leaders in the field from across Canada is working to shape a national vision for advanced practice education in pharmacy. After a multi-year consultation process, the the framework document we developed was endorsed by the Association of Faculties of Pharmacy of Canada (AFPC) in February 2020. We are currently working on dissemination activities to foster discussion and adoption of the ideas in the framework by pharmacy faculties in Canada.

3. Member, Association of Faculties of Pharmacy Education Committee (2015-present)

This national committee oversees the Learning Outcomes used for design and accreditation of pharmacy programs in Canada, and advises on the educational content of AFPC events, such as the AFPC Canadian Pharmacy Education & Research Conference.

4. Member, Association of Faculties of Pharmacy Educational Outcomes Review Steering Committee (2016-2018)

This national committee designed and revised the Learning Outcomes used for accreditation of pharmacy programs in Canada.

5. Awards Appraiser, Association of Faculties of Pharmacy of Canada (2013-present)
6. Appraiser, Canadian Society of Hospital Pharmacists National Awards Committee (2005-2017)

*(d) Memberships on other committees, including offices held and dates*

1. Member, BC Health Authorities Pharmacy & Therapeutics Committee (January 2016-January 2020)  
I represented the Faculty of Pharmaceutical Sciences on this consortium which makes formulary decisions affecting all BC health authorities.
2. Vice-chair, Expensive Drugs for Rare Diseases Advisory Committee, British Columbia Ministry of Health / Provincial Health Services Authority (2015-present)  
I was invited by the Ministry of Health and the Provincial Health Services Authority to serve on this committee which is responsible for stewardship of the provincial budget devoted to its namesake. A collaboration of clinicians, ethicists, and administrators, we review individual patient data and advise the Ministry on whether or not it should pay for drug therapy for that patient. All of our decisions involve serious and often life-threatening rare diseases for which drug therapy costs hundreds of thousands of dollars annually.
3. Chair (November 2009 - May 2010, January - December 2011, November 2012 - February 2013, January - December 2014), Vice-Chair (2009- 2014), and Member (2007- 2009) Drug Benefits Council, British Columbia Ministry of Health, Medical Benefits & Pharmaceutical Services Division.
4. Chair, Drug Review Resource Committee, British Columbia Ministry of Health, Pharmaceutical Services Division. (2009 –2014) leading the process of anticipating and meeting the decision-making information needs of the DBC.
5. Member, National Clinical Pharmacy Key Performance Indicators (cp KPI) Task Force (2011-2013)
6. Member, AFPC Task Force on NAPRA competencies. (2013)
7. Member, RxCARE Redesign Task Force, College of Pharmacists of British Columbia (2001)

*(e) Editorships (list journal and dates)*

1. Member, Editorial Board, UBC Pharmaceutical Sciences Student Journal (2012-2015)
2. Founding & Publishing Editor, The Journal of Informed Pharmacotherapy (1999-2006)  
The world's first online journal devoted to pharmacotherapy. Co-founded with Jewesson P, Marra C, and Zed PJ. Before any mainstream journals in our field had any online presence, we developed and published 12 issues of this peer-reviewed pharmacotherapy journal entirely online at informedpharmacotherapy.com. Other established journals eventually made our work obsolete and we disbanded. However, the Journal is archived in the National Library of Medicine.
3. Editor, Vancouver Hospital & Health Sciences Center Drug & Therapeutics Newsletter (1997-2006)

*(f) Reviewer (journal, agency, etc. including dates)*

1. Reviewer – BC Ministry of Health Research Seed Grant Program (2022-23)
2. Peer Reviewer, National Killam Program Dorothy Killam Fellowships (2022 – present)
3. Reviewer – Mitacs Accelerate grant program (2019 – present)
4. Panel Member – Biomedical 3 Research Postdoctoral Fellowship Evaluation Committee, Michael Smith Foundation for Health Research (2013)

**Peer Reviewer, Journals**

1. Risk Management & Healthcare Policy (2020-present)

2. The Patient - Patient-Centered Outcomes Research (2019-present)
3. Journal of the American College of Cardiology (2018-present)
4. Patient Preference and Adherence (2018-present)
5. Health and Quality of Life (2018-present)
6. Reviewer: Journal of the American Pharmacists Association (2016-present)
7. Reviewer: BMC Medical Informatics and Decision Making (2016-present)
8. Advances in Health Sciences Education (2016 - present)
9. Thrombosis Research (2017 – present)
10. AIMS Public Health (2016 - present)
11. Currents in Pharmacy Teaching and Learning (2015 - present)
12. BiomedCentral (2015 – present)
13. Currents in Pharmacy Teaching and Learning (2015 – present)
14. European Journal of Pharmacology (2013 – present)
15. Canadian Journal of Cardiology (2013 – present)
16. Canadian Journal of Diabetes (2009 – present)
17. Canadian Journal of Hospital Pharmacy (2003 – present)
18. American Journal of Health-System Pharmacy (1997 – present)
19. The Journal of Pharmacy Technology (2000- present)
20. Thrombosis & Haemostasis (2007-present)
21. Annals of Pharmacotherapy (2001 – present)
22. Pharmacotherapy (2001 – present)
23. Hospital Pharmacy (2005 – present)
24. Clinical Drug Investigation (2005 – present)
25. PLoS Medicine (2021 – present)
26. Clinical Pharmacology & Therapeutics (2021 – present)
27. Psychology Research and Behavior Management (2021 – present)

### **Expert Reviewer**

1. Expert Reviewer, Tools for Practice program, Alberta College of Family Physicians ([www.acfp.ca/tools-for-practice](http://www.acfp.ca/tools-for-practice)) (2017-present)
2. Expert Reviewer, RxFiles ([www.rxfiles.ca](http://www.rxfiles.ca)) (2009 – 2014)
3. Expert Reviewer. Laboratory Tests. BC Continuing Pharmacy Professional Development Program. (2015-2016)
4. Expert Reviewer. Simplified Lipid Pathway: Primary Prevention & Management of CVD Risk in Primary Care. Alberta College of Family Physicians. (2014)
5. Expert Reviewer – Canadian Council for Continuing Education in Pharmacy Home Study Program #814-0202 – “Acute Ischemic Stroke”, (2002)
6. Expert Reviewer – RxBriefcase® education module (CCCEP File #: 263-0405) – “Asthma”, <http://www.rxbriefcase.com/process/view.asp?cid=9> (2005)

7. Reviewer, MediaDoctor Canada ([www.mediadoctor.ca](http://www.mediadoctor.ca)), (2005- 2007)

(g) *External examiner (indicate universities and dates)*

External Examiner, Lower Mainland Pharmacy Services Pharmacy Practice Residency Program. Supervise 1-4 oral comprehensive clinical exams of residents each academic year (2012-2016)

(h) *Consultant (indicate organization and dates)*

1. Expert Witness, Ministry of Attorney General of British Columbia. Wrote a report at the request of the Province for a case before the Supreme Court of BC. (December 2021 – June 2022)
2. Working Group Leader and Subject Matter Expert, Certified Pharmacist Prescribing Initiative, College of Pharmacists of British Columbia (2015-2018)
3. Academic Detailing Program, Pharmaceutical Services Division, Ministry of Health, Government of British Columbia (2009)
 

Development and delivery of educational modules for academic detailing pharmacists to deploy to physicians as part of BC's Academic Detailing program. Wrote an academic detailing therapeutics module ("*Antithrombotic Therapy in Atrial Fibrillation*") and provided staff training and support.
4. Expert Witness, Heenan Blaikie LLP, Toronto, Ontario (2005 –2007)
 

Provided expert testimony on several legal cases related to pharmacotherapy and medical practice.

(i) *Other service to the community*

1. President, Tsawwassen Masters Softball League (2016-2019)
2. Youth Baseball Coach, Tsawwassen Amateur Baseball Association (2007-2016)
3. Judge (Health Sciences Category), Canada-Wide Science Fair 2005. National Science Fair Program of the Youth Science Foundation of Canada. Held at UBC (May 2005)
4. Mentor, Canadian Society of Hospital Pharmacists student mentorship program (2007 – 2011)

## **12. AWARDS AND DISTINCTIONS**

(a) *Awards for Teaching (indicate name of award, awarding organizations, date)*

1. **Canadian Society of Hospital Pharmacists BC Branch Mentorship Award.** "In recognition of significant contributions to the profession of pharmacy through teaching or mentorship in Hospital Practice, based on having a positive influence on pharmacy practice to students, residents and Pharm D students, ability to motivate and encourage students, peers, and staff, readily creating opportunities for students, peers or staff to gain valuable experiences, enhancing the professional image of pharmacists through recognized patient care activities, pharmacy services, research activities, publications, invited presentations, and active participation in various professional committees." November 2016.
2. **UBC Killam Teaching Prize.** Killam Teaching Prizes are awarded annually, from the Killam Endowment Fund, to faculty nominated by students, colleagues, and alumni in recognition of excellence in teaching. May 2015.
3. **Master Teacher Award,** UBC Faculty of Pharmaceutical Sciences. Selected by the B.Sc.(Pharm.) graduating class in recognition of outstanding teaching. May 2011.
4. **3<sup>rd</sup> Year Teaching Award,** UBC Faculty of Pharmaceutical Sciences. Selected by students as the most outstanding teacher in the 3rd year course stream of the B.Sc.(Pharm) program. May 2010.

5. **Preceptor of the Year Award**, UBC Faculty of Pharmaceutical Sciences Doctor of Pharmacy Program. "In recognition of outstanding contributions to the teaching and professional development of the Pharm.D. students." June 2007.
6. **Preceptor of the Year Award**, UBC Faculty of Pharmaceutical Sciences Doctor of Pharmacy Program. "In recognition of outstanding contributions to the teaching and professional development of the Pharm.D. students." June 2006.
7. **Preceptor of the Year Award**, UBC Faculty of Pharmaceutical Sciences Doctor of Pharmacy Program. "In recognition of outstanding contributions to the teaching and professional development of the Pharm.D. students." June 2005.

(b) *Awards for Scholarship (indicate name of award, awarding organizations, date)*

1. **American College of Cardiology William W. Parmley Prize** to Dr. Shahrzad Salmasi (Student) and Dr. Peter Loewen (Mentor). For "Longitudinal Oral Anticoagulant Adherence Trajectories in Patients with Atrial Fibrillation," published in the December 14, 2021, issue of the Journal of the American College of Cardiology. The award was conferred at the 2022 American College of Cardiology Scientific Sessions in Washington, DC, April 2, 2022. "Papers are judged on originality, methodology, presentation and importance. The award commends not only the young investigator but also the program in which he or she is working." <https://www.jacc.org/doi/10.1016/j.jacc.2022.02.005>
2. **David H MacDonald Professorship in Clinical Pharmacy**, established by Shoppers Drug Mart and awarded by the UBC Faculty of Pharmaceutical Sciences in recognition of my body of work being deemed "particularly creative, innovative, exemplary, or contributes significantly to the study of important issues in clinical pharmacy". July 2019 – June 2024.
3. **Canadian Society of Hospital Pharmacists National Management and Leadership Best Practice Award**, in recognition of excellence in hospital pharmacy practice for "Health-Authority Pharmacists' Perception of Independent Pharmacist Prescribing." Prasad M, Loewen P, Shalansky S, Barry A. (2018)
4. **Canadian Society of Hospital Pharmacists BC Branch Pharmacy Practice Residency Research Award** for "Health-Authority Pharmacists' Perception of Independent Pharmacist Prescribing." Prasad M, Loewen P, Shalansky S, Barry A. (2017)
5. **Canadian Society of Hospital Pharmacists BC Branch Pharmacy Practice Residency Research Award** for "Opportunities To Enhance Institutional Experiential Education: Mutually Beneficial Activities Analysis." Luong W, House N, Legal M, Loewen PS, Gerber P, Kim-Sing A, Zed PJ. (2014)
6. **Canadian Society of Hospital Pharmacists 2015 National Hospital Pharmacy Residency Project Award** for "Integration of Smartphones into Clinical Pharmacy Practice: An Evaluation of the Impact of Pharmacists' Efficiency". Spina S, Power J, Forbes D, Harder C, Lalli S, Loewen P, Zed PJ. (2014)
7. **Canadian Society of Hospital Pharmacists BC Branch Pharmacy Practice Residency Research Award** for "The Agile Survey: Health Authority Pharmacists' Perceptions On Precepting." Collins K, Rahmatian D, Legal M, Bruchet N, Granberg J, Gerber P, Kim-Sing A, Zed PJ, Loewen PS. (2013)
8. **Canadian Society of Hospital Pharmacists 2008/2009 National Patient Care Enhancement Award** for "a project or program implemented in a hospital or healthcare system that promotes rational prescribing to enhance patient care or advances health care practitioners' knowledge of drug therapy" for "Incidence, Severity and Preventability of Drug-Related Visits to the Emergency Department: A Prospective Study." (2009)
9. **Canadian Society of Hospital Pharmacists BC Branch Pharmacy Practice Residency Award** "for a major project judged to be the most deserving in terms of representing a significant innovation, practical application and/or development in an institutional pharmacy practice setting" for Zed PJ, Abu-Laban R, Balen RM, Loewen PS, Hohl CM, Brubacher JR, et al. Incidence, Severity and Preventability of Drug-Related Visits to the Emergency Department: A Prospective Study. CMAJ 2008;178(12):1563-9. (2007)

10. **Canadian College of Clinical Pharmacy (CCCP) Original Research Award** for Raybardhan S, Balen R, Loewen P, Partovi N, Liu G, Jewesson P. Implementation of a Personal Digital Assistant-based Drug-Problem Documentation Tool for Pharmacy Practice in a Multi-site Healthcare Organization Setting. (2005)
11. **Canadian Society of Hospital Pharmacists / BAXA Award** for “Most positive impact on the future of hospital pharmacy practice; a new idea or new application, or an idea that has been used in another field but is new to pharmacy” for “Implementation of a Personal Digital Assistant-based Drug-related Problem Documentation Tool for Pharmacy Practice in a Multi-site Healthcare Organization Setting“ (2005)
12. **Canadian Society of Hospital Pharmacists / Bristol Meyers Squibb Award** for “An original scholarly paper or publication on the development of a clinical pharmacy program; Demonstrating significant innovations and developments in a clinical pharmacy program which may require further development; or Original research which will contribute to the improvement of a clinical pharmacy program” for “Implementation of a Personal Digital Assistant-based Drug-related Problem Documentation Tool for Pharmacy Practice in a Multi-site Healthcare Organization Setting.” (2005)
13. **Fellow, Canadian Society of Hospital Pharmacists** “in recognition of exemplary achievements and outstanding contributions to Canadian Society of Hospital Pharmacists and the profession, demonstrating noteworthy service, practice excellence, leadership and commitment.” (2004)
14. **Canadian Society of Hospital Pharmacists Publication Award** in recognition of an “outstanding contribution to the pharmacy literature” for Loewen P, Marra C, Marra F. Influence of presentation of clinical trial data on pharmacists willingness to recommend drug therapy. Can J Hosp Pharm 1999;52(3):145-149, (1999)
15. **Canadian Society of Hospital Pharmacists / Novartis Prize for excellence in Pharmacoeconomics Research** for Frighetto L, Loewen P, Dolman J, Marra C. Cost-effectiveness of prophylactic dolasetron or droperidol vs. rescue therapy in the prevention of post-operative nausea and vomiting (PONV) in ambulatory gynaecology patients. Can J Anaesthesia 1999;46(6):536-43. (1999)

(c) *Awards for Service (indicate name of award, awarding organizations, date)*

1. **Fellow, Canadian Society of Hospital Pharmacists** “in recognition of exemplary achievements and outstanding contributions to Canadian Society of Hospital Pharmacists and the profession, demonstrating noteworthy service, practice excellence, leadership and commitment.” (2004)
2. **BC Branch Past-President’s Award**. Canadian Society of Hospital Pharmacists (1999)

(d) *Other Awards*

1. **Merck Frosst Pharmacy Doctoral Prize** awarded to Head of the graduating class in the Doctor of Pharmacy Program (1996)
2. **Canadian Society of Hospital Pharmacists Doctor of Pharmacy Prize** for highest standing in Pharm.D. class in therapeutics course (1995)
3. **Sandoz Doctor of Pharmacy Award** (1996)
4. **British Columbia Pharmacy Association Centennial Bursary** (1995)
5. **Resident of the Year**. ICN Canada award for highest performance in British Columbia’s Hospital Pharmacy Residency Program (1994)
6. **University Graduate Fellowship** for Excellence in Undergraduate Studies (1994)
7. **LePatourel Hospital Pharmacy Fellowship Award** for top undergraduate academic standing of B.C. Hospital Pharmacy Residents (1994)
8. **Charles and Jane Banks Scholarship** for undergraduate academic performance (1990-1992)

**13. OTHER RELEVANT INFORMATION (Maximum 1 Page)***Press Clippings*

To provide an indication of some societal impacts of my work:

1. "Ozempic shipments to U.S. leave Canadian pharmacists fearing impact on drug supply". <https://www.cbc.ca/news/health/pharmacists-canada-drugs-united-states-ozempic-1.6807776> CBC News. April 12, 2023
2. "Mentor profile of Peter Loewen". Published by the Canadian Society of Hospital Pharmacists BC Branch in recognition of mentorship impact. <https://cshp-bc.com/peter-loewen/> March 18, 2023
3. "Calculating the risk of stroke: New tool offers a possible breakthrough in prevention". <http://news.ubc.ca/2013/11/28/calculating-the-risk-of-stroke/> UBC News. November 29, 2013.
4. "UBC to introduce new doctor of pharmacy program" The Ubyyssey. September 29, 2013. <http://ubyssey.ca/news/ubc-doctor-of-pharmacy-946/>
5. "Smartphones Help Pharmacists" <http://hqcomoxvalley.com/news/local/news/v/Local/194200/Smartphones%E2%80%90help%E2%80%90Pharmacists> Comox Valley News. May 27, 2013.
6. "Hospital Pharmacists Use Smartphones to Improve Care." [http://www.viha.ca/about\\_viha/news/news\\_releases/pharmacist\\_smartphone\\_23May2013.htm](http://www.viha.ca/about_viha/news/news_releases/pharmacist_smartphone_23May2013.htm) Vancouver Island Health Authority news release. May 23, 2013.
7. Bains D. "Trust the science? Take a look at it first." and "UBC professors question effectiveness of Cold-fX." Vancouver Sun, Victoria Times Colonist, Calgary Herald, Edmonton Journal, Saskatoon Star Phoenix Feb 25, 2006. p.A1, C1-3. (<http://www.canada.com/calgaryherald/news/story.html?id=b2b79113-24b1-42cc-bb5e-05e31980f47d&k=13640>)

**This story won the 2006 Jack Webster Award for Science & Technology Reporting.**

8. Bains D. "Article about popular cold and flu remedy kicks up some dust" Vancouver Sun. Mar 8, 2006. p.D4.
9. Gillis C. "Cold Medication Offers More Hype than Health" Maclean's Magazine, May 8, 2006. <http://www.thecanadianencyclopedia.ca/en/article/cold-medication-offers-more-hype-than-health/>

**THE UNIVERSITY OF BRITISH COLUMBIA**  
***Publications Record***

**SURNAME:** Loewen

**FIRST NAME:** Peter

**Initials:** PSL

**MIDDLE NAME(S):** Shane

**Date:** May 26, 2023

## 1. **REFEREED PUBLICATIONS**

My scholarly work so far is largely in the areas of **pharmacotherapeutics** (particularly cardiovascular therapeutics) and **pharmacy practice** (particularly hospital practice). I have published in many of the major journals in these fields. My work related to **pharmacy education and curriculum development** is published in the top pharmacy education journals and in Medical Education. In pharmacy practice and education, impact factors are not the best signifiers of the influence, scope, or impact of the work, and I have chosen to publish my work in the journals read where it will be read, considered, and acted upon by my colleagues in these fields. There is no JCI category for pharmacy practice or hospital pharmacy. I also publish my work in medical journals tailored to the content of the work when physicians are the main target audience.

*(a) Journals [by category (2021 Journal Impact Factor or equivalent metric)]*

### **Pharmacy Practice/Pharmacotherapy**

- American Journal of Health-System Pharmacy (JIF 2.980)
- Annals of Pharmacotherapy (JIF 3.463)
- Canadian Journal of Hospital Pharmacy (SJR 2-year cites per doc [equivalent to JIF]\*: 0.753)
- Drugs (JIF 11.431)
- Expert Opinion on Investigational Drugs (JIF 6.498)
- Hospital Pharmacy (SJR 2-year cites per doc [equivalent to JIF]\*: 0.382)
- International Journal of Clinical Pharmacy (JIF 2.305)
- Journal of Pharmaceutical Health Services Research (SJR 2-year cites per doc [equivalent to JIF]\*: 0.574)
- Pharmacoeconomics (JIF 4.579)
- Pharmacy Practice (SJR 2-year cites per doc [equivalent to JIF]\*: 1.075)
- Research in Social & Administrative Pharmacy (JIF 3.348)

### **Pharmacy Education** (rank in JCI category / impact factor):

- American Journal of Pharmaceutical Education (JIF 2.876)
- Medical Education (JIF 7.647)
- Pharmacy Education (SJR 2-year cites per doc [equivalent to JIF]\*: 0.299)

### **Medical Journals** (rank in JCI category / impact factor):

- Journal of the American College of Cardiology (JIF 27.203)
- European Heart Journal (JIF 35.855)
- American Journal of Epidemiology (JIF 5.827)
- Annals of Emergency Medicine (JIF 6.762)
- Annals of Hematology (JIF 4.030)
- Annals of Plastic Surgery (JIF 1.763)
- Canadian Family Physician (JIF 3.025)
- Canadian Journal of Anaesthesiology / Canadian Journal of Anesthesia (JIF 2.306)
- Canadian Journal of Cardiology (JIF 6.617)
- Canadian Journal of Cardiology Open (new journal - JIF TBA)
- Canadian Journal of Emergency Medicine (JIF 2.929)

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\* <http://scimagojr.com>



- Canadian Medical Association Journal (JIF 16.876)
- Cochrane Database of Systematic Reviews (JIF 11.874)
- Health Policy and Technology (JIF 5.211)
- Journal of Evaluation in Clinical Practice (JIF 2.336)
- Journal of Medical Internet Research - Cardiology (JMIR Cardio) (JIF 2.85)
- Quality & Safety in Health Care / BMJ Quality & Safety (JIF 7.429)
- Thrombosis & Haemostasis (JIF 6.830)
- Thrombosis Research (JIF 10.409)
- PLoS One (JIF 3.752)
- BMJ Open (JIF 3.007)
- BMJ Open Quality (TBA)
- BMJ Innovations (SJR 2-year cites per doc [equivalent to JIF\*]: 0.327)
- Heart, Lung, and Circulation (JIF 2.838)
- Health & Social Care in the Community (JIF 2.395)

Principal Investigator / Lead Author is underlined below. Works that are particularly prominent or impactful based on influencing patient care, being highly cited by other authors or referenced in international or national consensus guidelines are marked with an asterisk (\*) at the end of the citation. “JIF” = journal impact factor. “SJR 2-year cites per doc” is equivalent to JIF (<http://scimagojr.com>).

1. Adalakun A, Turgeon RD, De Vera MA, McGrail K, Loewen P. Oral anticoagulant switching in patients with atrial fibrillation: A scoping review. *BMJ Open* 2023;13(4):e071907.
2. Burton L, Wilson R, Loewen P, Moroz L, Andrade JG, Singh S, Rush K. Patient experiences with the fit of virtual atrial fibrillation care during the pandemic: A qualitative descriptive study. *JMIR Cardio* 2023 Jan 30;7:e41548. doi: 10.2196/41548.
3. Salmasi S, Safari A, Kapanen A, Adalakun A, Kwan L, MacGillivray J, Andrade JG, Deyell MW, Loewen P. Oral anticoagulant adherence and switching in patients with atrial fibrillation: A prospective observational study. *Res Soc Administrative Pharm*. 2022; <https://doi.org/10.1016/j.sapharm.2022.06.002>
4. Salmasi S, Hoëgg T, Safari A, De Vera MA, Lynd LD, Koehoorn M, Barry AR, Andrade JG, Loewen PS. The Random Effects Warfarin Days' Supply (REWarDS) model: Development and validation of a novel method to estimate exposure to warfarin using administrative data. *American Journal of Epidemiology* 2022; <https://doi.org/10.1093/aje/kwab295>
5. Salmasi S, De Vera MA, Safari A, Lynd LD, Koehoorn M, Barry AR, Andrade JG, Deyell MW, Rush K, Zhao Y, Loewen PS. Longitudinal oral anticoagulant adherence trajectories in patients with atrial fibrillation. *J Am Coll Cardiol*. 2021;78:2395–2404.\* <https://www.jacc.org/doi/full/10.1016/j.jacc.2021.09.1370> | *Editorial about this work:* <https://www.jacc.org/doi/10.1016/j.jacc.2021.10.016> | *Podcast by the Editor in Chief about this work:* <https://www.jacc.org/doi/10.1016/podcast-jacc-78-24-1/full/>  
*This paper was selected by the JACC Editor-in-Chief as one of its [Top papers of 2021](#).*  
This paper earned the **American College of Cardiology William W. Parmley Prize** for Dr. Shahrzad Salmasi (Student) and Dr. Peter Loewen (Mentor) based on “*Originality, methodology, presentation and importance. The award commends not only the young investigator but also the program in which he or she is working.*”  
<https://www.jacc.org/doi/10.1016/j.jacc.2022.02.005>
6. Salmasi S, Adalakun A, Safari A, Kwan L, MacGillivray J, Andrade JG, Deyell MW, Kapanen A, Loewen P. Satisfaction with oral anticoagulants in patients with atrial fibrillation: A prospective observational study. *Can J Cardiol Open* 2021; [https://www.cjopen.ca/article/S2589-790X\(21\)00180-3/fulltext](https://www.cjopen.ca/article/S2589-790X(21)00180-3/fulltext)
7. Garrett B, Caulfield T, Murdoch B, Kumar Kapur, A, Murphy S, Reardon R, Harrison MJ, Hislop J, Wilson-Keates BJ, Anthony J, Loewen PS, Musoke RM, Braun J. A taxonomy of risk associated alternative health practices: A Delphi study. *Health & Social Care in the Community*. 2021; <https://onlinelibrary.wiley.com/doi/10.1111/hsc.13386>
8. de Lemos J, Loewen P, Nagle C, McKenzie R, Dong Y, Dabu A, Zed P, Ling P, Chan R. Preventable adverse drug events causing hospitalisation: identifying root causes and developing a surveillance and learning system

at an urban community hospital, a cross-sectional observational study. *BMJ Open Quality* 2021;10:e001161. doi: 10.1136/bmjopen-2020-001161

9. Spina SP, Atwood KM, **Loewen P**. Evaluation of Secure Mobile and Clinical Communication Solution (SMaCCS) across acute and community practice settings. *BMJ Innov* 2020;0:1–8. <http://dx.doi.org/10.1136/bmjinnov-2020-000436>
10. Bolt J, **Loewen P**. For primary prevention, should all moderate- to high-risk patients be considered candidates for acetylsalicylic acid? *Can J Hosp Pharm.* 2020;73. <http://dx.doi.org/10.4212/cjhp.v73i1.2959>
11. Salmasi, S., Kapanen, A., Kwan, L., Andrade, J., Vera, M., **Loewen, P**. Atrial fibrillation patients' experiences and perspectives of anticoagulation therapy changes. *Research in Social and Administrative Pharmacy.* 2020; <https://doi.org/10.1016/j.sapharm.2020.01.004>
12. **Salmasi S, Loewen P**, Tandun R, Andrade JG, De Vera MA. Adherence to oral anticoagulants among patients with atrial fibrillation: A systematic review and meta-analysis of observational studies. *BMJ Open* 2020;10:e034778. DOI: 10.1136/bmjopen-2019-034778 <https://bmjopen.bmj.com/content/10/4/e034778.info>
13. **Rush KL**, Burton L, Oliver R, Wilson R, **Loewen P**, Janke R, Schaab K, Lukey A, Galloway C. Transitions in atrial fibrillation care: A systematic review. *Heart, Lung, & Circulation* 2020; <https://doi.org/10.1016/j.hlc.2019.11.022>
14. **Loewen PS**, Bansback N, Hicklin J, Andrade J, Kapanen AI, Kwan L, Lynd LD, McClean A, McGillivray J, Salmasi S. Evaluating the effect of a patient decision aid for atrial fibrillation stroke prevention therapy. *Ann Pharmacother* 2019;53:665-74. <doi.org/10.1177/1060028019828420>
15. Turgeon R, Kolber M, **Loewen P**, Ellis U, **McCormack J**. Higher versus lower doses of ACE inhibitors, angiotensin-2 receptor blockers and beta-blockers in heart failure with reduced ejection fraction: Systematic review and meta-analysis. *Plos One* 2019;14:e0212907. <https://doi.org/10.1371/journal.pone.0212907>
16. **Loewen P**, De Vera M, Barry A, Bansback N, Harrison M, Lynd LD, **Salmasi S**. Assessment of condition and medication knowledge gaps among atrial fibrillation patients: A systematic review and meta-analysis. *Ann Pharmacother* 2019;53:773-85. <https://doi.org/10.1177/1060028019835845>
17. **Barry A, Loewen P**, Shalansky, S, Prasad M, Salmasi S. Hospital Pharmacists' Perception of Independent Pharmacist Prescribing. *Canadian Journal of Hospital Pharmacy* 2019;72: <http://dx.doi.org/10.4212/cjhp.v72i3.2898>
18. Salmasi S, Kwan L, MacGillivray J, Bansback N, De Vera M, Barry AR, Harrison MJ, Andrade J, Lynd LD, **Loewen P**. Assessment of atrial fibrillation patients' education needs from patient and clinician perspectives: a qualitative descriptive study. *Thrombosis Research* 2019;173:109–116. <https://doi.org/10.1016/j.thromres.2018.11.015>

*This work earned a 2019 ImpactBC Scholarship in Health Care Research and Development, and the 2019 AFPC/CFP Graduate Student Award for Pharmacy Practice Research.*

19. **Loewen PS**, Kapanen A, Ji AT, McClean A. Patient Values and Preferences for Antithrombotic Therapy in Atrial Fibrillation: A Systematic Review. *Thrombosis & Haemostasis* 2017;117(6):1007-1022. DOI: 10.1160/TH16-10-0787 [JIF 5.255]

*I conceived and designed the study, analyzed the results, and wrote the manuscript.*

20. Edwards NT, Greanya ED, Kuo IF, **Loewen PS**, **Culley CL**. Patient preferences regarding atrial fibrillation stroke prophylaxis in patients at potential risk of atrial fibrillation. *International Journal of Clinical Pharmacy* 2017; 28: 973–1. [SJR 2-year cites per doc 1.424]

*I contributed to the design, analysis, interpretation, and manuscript of the study.*

21. **Loewen P**, Gamble A, Shah K, Tkachuk S, Legal M, Zed PJ. Learner-Preceptor Ratios for Practice-Based Learning Across Health Disciplines: A Systematic Review. *Medical Education* 2016;51:146–57.\* [JIF 3.369]

*I was PI on the grant that funded this study, and I conceived and designed the study, analyzed the results, and wrote the manuscript.*

22. **Loewen P**, Gerber P, MacDonald G, McCormack J. Design and implementation of an integrated medication management curriculum in an entry-to-practice doctor of pharmacy program. *Pharmacy Education* 2016;16(1):122-130. [SJR 2-year cites per doc 0.286]

*I was lead author and led the design and implementation process described in the paper.*

23. **Dahri K**, Gong Y, **Loewen P**. A quantitative and qualitative assessment of the utilization of mobile computing devices by clinical pharmacists. *Health Policy and Technology* 2016;5:285-290. [SJR 2-year cites per doc 0.820]

*I contributed to the design, analysis, and interpretation of the study, and led the manuscript writing.*

24. **Loewen P**, Mills A, Harder C, Walus AN, Woloschuk DMM. Should the Postgraduate Year 2 (PGY-2) Residency Be Focused on Advanced Pharmacy Practice Training? *Canadian Journal of Hospital Pharmacy* 2015;23;68(6):485-488. [SJR 2-year cites per doc 0.753]

*I was lead author on the "pro" side of this invited "pro/con" manuscript.*

25. **Tejani AM**, **Loewen P**, Bachand R, Harder CK. Pharmacists' Perceptions of the Influence of Interactions with the Pharmaceutical Industry on Clinical Decision-Making. *Canadian Journal of Hospital Pharmacy* 2015;68(5):378–85. [SJR 2-year cites per doc 0.753]

*I contributed to the design, analysis, and interpretation of the study, and led the writing of the manuscript.*

26. **Bolt J**, Semchuk B, **Loewen P**, Bell A, Strugari C. A Canadian survey of pharmacist participation during cardiopulmonary resuscitation. *Canadian Journal of Hospital Pharmacy* 2015;68:290-5. [SJR 2-year cites per doc 0.753]

*I contributed to the design, analysis, and interpretation of the study, and led the writing of the manuscript.*

27. Schwenger EM, **Tejani AM**, **Loewen PS**. Probiotics for preventing urinary tract infections in adults and children. *Cochrane Database of Systematic Reviews* 2015, Issue 12. Art. No.: CD008772. DOI: 10.1002/14651858.CD008772.pub2\* [JIF 6.035]

*I contributed to the design, analysis, and interpretation of the study, and helped revise the manuscript.*

28. **Loewen, P**. Are the New Guidelines for the Use of Lipid-Lowering Agents Sound, and Should Their Adoption Be Encouraged? *Canadian Journal of Hospital Pharmacy* 2014;67(3):256-7. [SJR 2-year cites per doc 0.753]

*I was lead author of this invited manuscript.*

29. **Loewen P**. Ethical Issues in Pharmacy Practice Research: An Introductory Guide. *Canadian Journal of Hospital Pharmacy* 2014;67(2), 133–137. [SJR 2-year cites per doc 0.753]

*I was lead author of this invited manuscript.*

30. **Loewen P**, Jelescu-Bodos A, Yeung J, Lau T. The Effect of Transitioning from Residency to Pharmacy Practice on Learning Style. *American Journal of Pharmaceutical Education* 2014;78(8):Article 147. [JIF 1.196]

*I conceived and designed the study, analyzed the results, and wrote the manuscript.*

31. Power J, **Spina SP**, Forbes DA, Harder CK, **Loewen PS**, Zed PJ, Lalli SL. Integration of smartphones into clinical pharmacy practice: An evaluation of the impact on pharmacists' efficiency. *Health Policy and Technology* 2014;3(4):296–305. [SJR 2-year cites per doc 0.820]

*I contributed to the design, analysis, interpretation, and manuscript of the study.*

32. **Loewen P**, de Lemos J, Woo S. Clinician-driven value scoring to prioritise quality actions: a study of general medicine hospital pharmacists. *Journal of Pharmaceutical Health Services Research* 2014;5(2):103-108.\* [SJR 2-year cites per doc 0.574]

*I conceived and designed the study, analyzed the results, and wrote the manuscript.*

33. **Loewen P**, Jelescu-Bodos A. Learning Styles and Teaching Perspectives of Canadian Pharmacy Practice Residents and Faculty Preceptors. American Journal of Pharmaceutical Education. Am J Pharm Educ 2013;77(8):Article 163. [JIF 1.196]

*I conceived and designed the study, analyzed the results, and wrote the manuscript.*

34. Taylor R, **Jung J**, **Loewen P**, Spencer C, Dossa A, de Lemos J. Online versus Live Delivery of Education to Pharmacists in a Large Multicentre Health Region: A Non-inferiority Assessment of Learning Outcomes. Canadian Journal of Hospital Pharmacy 2013;66:233-40. [SJR 2-year cites per doc 0.753]

*I designed, and contributed to the analysis, interpretation, and manuscript of the study. The first author was a resident, who was made first author based on data collection and drafting the manuscript, per the residency program's practice at the time to foster trainees' publication record.*

35. Chernushkin K, **Loewen P**, Jung J, Dahri K, Aulakh A, de Lemos J. Diagnostic reasoning by hospital pharmacists: Assessment of attitudes, knowledge, and skills. Canadian Journal of Hospital Pharmacy 2012;65(4):258–264.\* [SJR 2-year cites per doc 0.753]

*I conceived and designed the study, analyzed the results, and contributed to the manuscript. As the PI and supervisor of the resident, I am listed as second author and the resident first author, per the residency program's practice at the time to foster trainees' publication record.*

36. Ariano RE, **Loewen P**. Should all pharmacists responsible for pharmacotherapeutic management of patients with complex or special drug therapy needs have certification from the board of pharmacy specialties? Canadian Journal of Hospital Pharmacy 2012;65(3):231-233. [SJR 2-year cites per doc 0.753]

*I was lead author on the "con" side of this invited "pro/con" manuscript.*

37. **Buna D**, McGloin R, **Loewen PS**, Thornhill AK, Dillon ED, Hawkes J. Survey of Graduates of the British Columbia Pharmacy Practice Residency Programs, 1973–2009. Canadian Journal of Hospital Pharmacy 2011;64(6):419–425. [SJR 2-year cites per doc 0.753]

*I contributed to the design, analysis, interpretation, and manuscript of the study.*

38. **Loewen P**, Dahri K. Risk of bleeding with oral anticoagulants: An updated systematic review and performance analysis of clinical prediction rules. Annals of Hematology 2011;90:1191–1200.\* [JIF 3.022]

*Dr. Dahri and I conceived and designed the study, analyzed the results, and wrote the manuscript.*

39. Bruchet N, **de Lemos J**, **Loewen P**. Improving the quality of clinical pharmacy services: a process to identify and capture high value "Quality Actions". Canadian Journal of Hospital Pharmacy 2011;64:42-47. [SJR 2-year cites per doc 0.753]

*I contributed to this manuscript, which was based on work and intellectual property created by me and Jane de Lemos.*

40. **Loewen P**. Should a process be developed to recognize "pharmacy practice residency equivalency" for pharmacists with substantial clinical experience who have not completed a pharmacy practice residency? Canadian Journal of Hospital Pharmacy 2010;63:30-1. [SJR 2-year cites per doc 0.753]

*I was lead author on this invited manuscript.*

41. Barry A, **Loewen P**, deLemos J, Lee KG. Reasons for non-use of proven pharmacologic interventions in hospitalised patients: A systematic review. Journal of Evaluation in Clinical Practice 2010; doi:10.1111/j.1365-2753.2010.01524.x (August 2010). [JIF 1.053]

*I conceived and designed the study, analyzed the results, and contributed to the manuscript. As the PI and supervisor of the resident, I am listed as second author and the resident first author, per the residency program's practice at the time to foster trainees' publication record.*

42. **Loewen P**, Merrett F, de Lemos J. Pharmacists' perceptions of the impact of care they provide. Pharmacy Practice 2010;8(2):89-95. [SJR 2-year cites per doc 1.075]

*I conceived and designed the study, analyzed the results, and contributed to the manuscript.*

43. Mountford C, Lee T, de Lemos J, **Loewen P**. Quality and Usability of Common Drug Information Databases. Canadian Journal of Hospital Pharmacy 2010;63(2):130–137. [SJR 2-year cites per doc 0.753]

*I conceived and designed the study, analyzed the results, and contributed to the manuscript. As the PI and co-supervisor of the resident, I am listed as last author and the resident first author, per the residency program's practice at the time to foster trainees' publication record.*

44. **Hohl CM**, Zed PJ, Brubacher JR, Abu-Laban RB, **Loewen PS**, Pursell RA. Do Emergency Physicians Attribute Drug-Related Emergency Department Visits to Medication-Related Problems?. Annals of Emergency Medicine 2010;55(6):493-502.\* [JIF 5.008]

*I contributed to the design and recruitment procedures for this study.*

45. Barry A, **Loewen P**, de Lemos J, Lee KG. Reasons for non-use of proven pharmacologic interventions in hospitalised patients: Pharmacists' perspectives. Canadian Journal of Hospital Pharmacy 2009;62(5):381–385. [SJR 2-year cites per doc 0.753]

*I conceived and designed the study, analyzed the results, and contributed to the manuscript. As the PI and supervisor of the resident, I am listed as second author and the resident first author, per the residency program's practice at the time to foster trainees' publication record.*

46. **Loewen P**. Should the window for intravenous administration of tissue plasminogen activator in the treatment of acute ischemic stroke be extended to 4.5 hours? Canadian Journal of Hospital Pharmacy 2009;62(3):248-51. [SJR 2-year cites per doc 0.753]

*I was lead author on this invited manuscript.*

47. **Zed PJ**, Abu-Laban R, Balen RM, **Loewen PS**, **Hohl CM**, Brubacher JR, et al. Incidence, Severity and Preventability of Drug-Related Visits to the Emergency Department: A Prospective Study. Canadian Medical Association Journal 2008;178(12):1563-9.\* [JIF 9.015]

*I contributed to the design, recruitment system, data analysis, interpretation, and manuscript for this study.*

48. Huang C, **Loewen P**, Pelletier T, Slater J, Chung M. Implementation of Proven Interventions in General Medical Inpatients: Development and evaluation of a new quality indicator for drug therapy. Quality and Safety in Health Care 2008;17:269-274.\* [JIF 4.996]

*I conceived and designed the study, analyzed the results, and contributed to the manuscript. As the PI and supervisor of the resident, I am listed as second author and the resident first author, per the residency program's practice at the time to foster trainees' publication record.*

49. Dahri K, **Loewen P**. The Risk of Bleeding with Warfarin: A systematic review and performance analysis of clinical prediction rules. Thrombosis & Haemostasis 2007;98:980-7. [JIF 5.255]

*I conceived and co-designed the study with Dr. Dahri, analyzed the results, and wrote the manuscript.*

50. **McCormack J**, **Loewen P**. Adding "value" to clinical practice guidelines. Canadian Family Physician 2007;53:1326-1327.\* [JIF 1.584]

*I contributed to the conception, design, data collection, analysis, interpretation, and manuscript for this study.*

51. Patel K, **Loewen P**, Wilbur K. A retrospective evaluation of adherence to guidelines for prevention of thromboembolic events in general medical inpatients. Canadian Journal of Hospital Pharmacy 2006;59:258-63. [SJR 2-year cites per doc 0.753]

*I conceived and designed the study, analyzed the results, and contributed to the manuscript. As the PI and supervisor of the resident, I am listed as second author and the resident first author, per the residency program's practice at the time to foster trainees' publication record.*

52. Saran MK, **Loewen PS**, **Zed PJ**. Opportunities for optimizing pantoprazole therapy in patients with acute upper gastrointestinal bleeding. Hospital Pharmacy 2006;41:354-60. [SJR 2-year cites per doc 0.382]

*I conceived and designed the study, analyzed the results, and contributed to the manuscript. As the PI and supervisor of the resident, I am listed as second author and the resident first author, per the residency program's practice at the time to foster trainees' publication record.*

53. Raybardhan S, Balen RM, Partovi N, **Loewen P**, Liu G, Jewesson PJ. Documenting drug-related problems with personal digital assistants in a multisite health system. American Journal of Health-System Pharmacy 2005;62:1782-7.\* [JIF 2.451]

*I co-conceived, contributed to the design, data collection, analysis, interpretation and manuscript of this study. Winner of the **Canadian Society of Hospital Pharmacists / Bristol Meyers Squibb Award, Canadian Society of Hospital Pharmacists / BAXA Award, and the Canadian College of Clinical Pharmacy (CCCP) Original Research Award***

54. Sprague DA, **Loewen PS**, Raymond CB. Selection of atypical antipsychotics for the management of schizophrenia. Annals of Pharmacotherapy 2004;38:313-9. [JIF 2.119]

*I contributed to the design, analysis, interpretation and manuscript of this study. As the supervisor of the resident, I am listed as second author and the resident first author, per the residency program's practice at the time to foster trainees' publication record.*

55. Zed PJ, Rowe B, **Loewen PS**, Abu-Laban RB. Systematic reviews in emergency medicine: Part II. Critical appraisal of review quality, data synthesis and result interpretation. Canadian Journal of Emergency Medicine 2003;5:406-11. [JIF 1.106]

*I wrote the first draft of this manuscript, and contributed to its revision.*

56. Zed PJ, Rowe B, **Loewen PS**, Abu-Laban RB. Systematic reviews in emergency medicine: Part I. Background and general principles for locating and critically appraising reviews. Canadian Journal of Emergency Medicine 2003;5:331-5. [JIF 1.106]

*I wrote the first draft of this manuscript, and contributed to its revision.*

57. **Loewen P**, Lamb S, Clugston P. Randomized, double-blind, trial of dolasetron versus droperidol for prophylaxis of postoperative nausea and vomiting in patients undergoing TRAM flap breast reconstruction surgery. Annals of Plastic Surgery 2003;51:472-7.\* [JIF 1.535]

*I conceived and designed the study, recruited participants, collected data, analyzed the results, and led the writing of the manuscript.*

58. **Loewen P**, Sprague D. Bedside calculation of stroke risk in patients with atrial fibrillation. American Journal of Health-System Pharmacy 2003;60:427-32. [JIF 2.451]

*I conceived and designed the study, analyzed the results, and wrote the manuscript.*

59. **Loewen P**. Antiemetics in development. Expert Opinion on Investigational Drugs 2002;11:801-5. [JIF 4.408]

*I wrote this invited manuscript.*

60. **Loewen P**. Review of the selective COX-2 inhibitors celecoxib and rofecoxib: focus on clinical aspects. Canadian Journal of Emergency Medicine 2002;4:268-75. [JIF 1.106]

*I wrote this manuscript.*

61. Zed PJ, **Loewen PS**, Jewesson PJ. A response to the ACP-ASIM position statement on pharmacists scope of practice. American Journal of Health-System Pharmacy 2002;59:1453-7. [JIF 2.451]

*The authors contributed equally to the conception and writing of this manuscript.*

62. Zed PJ, **Loewen PS**, Slavik R, Marra CA. Meta-analysis of proton pump inhibitors in the treatment of bleeding peptic ulcers. Annals of Pharmacotherapy 2001;35:1528-34. [JIF 2.119]

*I co-conceived and contributed to the design, data collection, analysis, interpretation and manuscript of this study.*

63. Sinclair S, Frighetto L, **Loewen PS**, Sunderji R, Marra CA, Teal P, Fagan S. Cost-utility analysis of tissue plasminogen activator for acute ischemic stroke: a Canadian healthcare perspective. *Pharmacoeconomics* 2001;19(9):927-36.\* [JIF 2.566]

*I co-conceived and contributed to the design, data collection, analysis, interpretation and manuscript of this study.*

64. **Loewen PS**, Marra CM, Zed PJ. 5-HT<sub>3</sub> receptor antagonists versus traditional agents for the prophylaxis of postoperative nausea and vomiting: a meta-analysis. *Canadian Journal of Anaesthesiology* 2000;47:1008-18.\* [JIF 2.139]

*I co-conceived, contributed to the design, collected the data, analyzed the results, and led the writing of the manuscript for this study.*

65. Frighetto L, **Loewen P**, Dolman J, Marra C. Cost-effectiveness of prophylactic dolasetron or droperidol vs. rescue therapy in the prevention of post-operative nausea and vomiting (PONV) in ambulatory gynaecology patients. *Canadian Journal of Anaesthesia* 1999;46(6):536-43.\* [JIF 2.139]

*I co-conceived, contributed to the design, analyzed the results, and contributed to the writing of the manuscript for this study. **Winner of the Canadian Society of Hospital Pharmacists / Novartis Prize for excellence in Pharmacoeconomics Research.***

66. Zed PJ, **Loewen PS**, Robinson G. Medication-induced headache: overview and systematic review of therapeutic approaches. *Annals of Pharmacotherapy* 1999;33:61-72.\* [JIF 2.119]

*I co-conceived, contributed to the design, collected the data, analyzed the results, and co-wrote the manuscript for this study.*

67. **Loewen PS**, Marra CA, Marra F. Systematic review of the treatment of early Lyme disease. *Drugs* 1999;57(2):157-73. [JIF 4.883]

*I contributed to the design, collected the data, analyzed the results, and led the writing of the manuscript for this study.*

68. **Loewen P**, Marra C, Marra F. Influence of presentation of clinical trial data on pharmacists willingness to recommend drug therapy. *Canadian Journal of Hospital Pharmacy* 1999;52(3):145-149.\* [SJR 2-year cites per doc 0.753]

*I contributed to the design, collected the data, analyzed the results, and contributed to writing of the manuscript for this study. **Winner of the Canadian Society of Hospital Pharmacists Publication Award***

69. Esmail ZN, **Loewen PS**. Losartan as an alternative to ACE inhibitors in patients with renal dysfunction. *Annals of Pharmacotherapy* 1998;32:1096-8. [JIF 2.119]

*I co-conceived, contributed to the design, collected the data, analyzed the results, contributed to the manuscript for this study, and supervised the trainee who is first author.*

70. **Loewen P**, Sunderji R, Gin K. The efficacy and safety of combination warfarin and ASA therapy: a systematic review of the literature and update of guidelines. *Canadian Journal of Cardiology* 1998;14(5):717-26.\* [JIF 3.112]

*I contributed to the design of the study, collected the data, analyzed the results, and contributed to the manuscript.*

71. **Loewen P**, McCormack J. Treatment of Acute Migraine Headaches. *Therapeutics Initiative Therapeutics Letter* 22a,b Nov/Dec 1997. [refereed]

(b) *Conference Proceedings [presenter underlined]*

1. Zhou L, Wang E, Chua D, **Loewen P**, Barry A. Patients' beliefs about their cardiovascular medications after acute coronary syndrome. Poster presented at the CSHP National Together 2023 Conference. March 11, 2023. Banff, Canada.
2. Wilson R, Marini N, Kathy K, Burton L, **Loewen P**, Aujla N. Assessing the Impact of Atrial Fibrillation Self-Care Interventions: A Systematic Review. Poster presentation at CAG2022, the 51st Annual Scientific and Educational Conference of the Canadian Association on Gerontology. Regina, Saskatchewan. October 2022.
3. Adelakun A, Turgeon R, De Vera M, Harrison M, McGrail K, Salmasi S, Safari A, **Loewen P**. Development and application of a taxonomy on the benefits of oral anticoagulant switching in atrial fibrillation. Poster presented at the Canadian Cardiovascular Congress 2022, Ottawa, Canada. October 2022.
4. Salmasi S, Safari A, De Vera MA, Högg T, Lynd LD, Koehoorn M, Barry AR, Andrade JG, Deyell M, Rush K, Zhao Y, **Loewen P**. Stroke, death, and adherence to oral anticoagulants in AF: a retrospective observational study with adherence as a continuous variable. Poster presented at the Canadian Cardiovascular Congress 2022, Ottawa, Canada. October 2022.
5. Salmasi S, Safari A, De Vera MA, Högg T, Lynd LD, Koehoorn M, Barry AR, Andrade JG, Deyell M, Rush K, Zhao Y, **Loewen P**. Impact of oral anticoagulant class on adherence in patients with atrial fibrillation: A 23-year population-based cohort study in Canada. Oral abstract presented at the Society for Epidemiologic Research, Chicago, USA. June 2022.
6. Salmasi S, Safari A, De Vera MA, Högg T, Lynd LD, Koehoorn M, Barry AR, Andrade JG, Deyell M, Rush K, Zhao Y, **Loewen P**. Comparative adherence between DOAC and VKA in patients with atrial fibrillation: a 23-year retrospective observational study in Canada. Poster presented at the European Society of Cardiology Congress 2021. August 27-30, 2021. European Heart Journal, Volume 42, Supplement 1, October 2021, ehab724.0563, <https://doi.org/10.1093/eurheartj/ehab724.0563>
7. Salmasi S, Safari A, De Vera MA, Högg T, Lynd LD, Koehoorn M, Barry AR, Andrade JG, Deyell M, Rush K, Zhao Y, **Loewen P**. Characterization of long-term oral anticoagulant adherence trajectories among patients with atrial fibrillation: A retrospective observational study. Poster presented at the European Society of Cardiology Congress 2021. August 27-30, 2021. European Heart Journal, Volume 42, Issue Supplement\_1, October 2021, ehab724.0564, <https://doi.org/10.1093/eurheartj/ehab724.0564>
8. Salmasi S, Safari A, De Vera MA, Högg T, Lynd LD, Koehoorn M, Barry AR, Andrade JG, Deyell M, Rush K, Zhao Y, **Loewen P**. Impact of oral anticoagulant class on adherence in patients with atrial fibrillation: a 23-year population-based cohort study in Canada. Poster presented at the Canadian Cardiovascular Congress (Virtual) 2021. October 20-23, 2021. Canadian Journal of Cardiology 2021; 37: S41-S42. DOI: <https://doi.org/10.1016/j.cjca.2021.07.088>.
9. Salmasi S, Safari A, De Vera MA, Högg T, Lynd LD, Koehoorn M, Barry AR, Andrade JG, Deyell M, Rush K, Zhao Y, **Loewen P**. Longitudinal oral anticoagulant adherence patterns in patients with atrial fibrillation: a retrospective observational study. Poster presented at the Canadian Cardiovascular Congress (Virtual) 2021. October 20-23, 2021. Canadian Journal of Cardiology 2021; 37: S42. <https://doi.org/10.1016/j.cjca.2021.07.089>
10. Salmasi S, Högg T, Safari A, De Vera MA, Lynd LD, Koehoorn M, Barry A, Andrade JG, **Loewen P**. The Random Effects Warfarin Days' Supply (REWarDS) model: development and validation of a novel method to estimate exposure to warfarin using administrative data. Value in Health 24:S241. June 2021. DOI: 10.1016/j.jval.2021.04.1210 (Oral presentation, ISPOR 2021 Congress)
11. Spina SP, Atwood KM, Loewen P Evaluation of a Secure Mobile and Clinical Communication Solution (SMaCCS) in Acute and Community Practice Settings on Vancouver Island. Abstract presented at the International Society for Quality in Health Care Annual Conference. Florence, Italy (virtual). July 2021.
12. Li K, Cardwell S, Pachev G, Gerber P, **Loewen P**, Tkachuk S, Verma A. Validating the educational use of a patient case complexity measure with students: Study design and preliminary results. Poster and oral presentation at the UBC Faculty of Pharmaceutical Sciences Summer Student Research Program, virtual conference. October 7, 2020.
13. Cardwell S, Li K, Pachev G, Gerber P, Loewen P, Tkachuk S, Verma A. Validating the educational use of a patient case complexity measure with teachers: Study design and preliminary results. Poster and oral



presentation at the UBC Faculty of Pharmaceutical Sciences Summer Student Research Program, virtual conference. October 7, 2020.

14. Salmasi S, Kapanen AI, Kwan L, Andrade JG, De Vera MA, **Loewen P**. Atrial fibrillation patients' experiences and perspectives of anticoagulation therapy changes: a descriptive qualitative study. Presented at the 71<sup>st</sup> Canadian Cardiovascular Congress, Montreal, Canada, October 26, 2019. Can J Cardiol 2019;35(10):S149 DOI: <https://doi.org/10.1016/j.cjca.2019.07.572>
15. **Loewen P**, Salmasi S, Kapanen AI, Högg T. Atrial fibrillation patients' real-world persistence with oral anticoagulants: a retrospective Canadian cohort. Presented at the 71<sup>st</sup> Canadian Cardiovascular Congress, Montreal, Canada, October 26, 2019. Can J Cardiol 2019;35(10):S149 DOI: <https://doi.org/10.1016/j.cjca.2019.07.571>
16. **Loewen P**, Gerber P, Trinajstic B, Pachev G, Taheri A, Tkachuk S, Corrigan S. "COMPLEX": Development and evaluation of a patient case complexity measurement tool. Presented at the UBC Centre for Health Education Scholarship Celebration of Scholarship, Vancouver, BC. October 2, 2019.
17. Salmasi S, De Vera MA, Lynd LD, **Loewen P**. Quantitative exploration of AF patients' knowledge gaps: a systematic review. Poster presented at the AFPC Canadian Pharmacy Education & Research Conference, Edmonton AB. June 13, 2019.
18. Salmasi S, Kwan L, MacGillivray J, Bansback N, De Vera M, Barry AR, Harrison MJ, Andrade J, Lynd LD, **Loewen P**. Assessment of atrial fibrillation patients' education needs from patient and clinician perspectives: a qualitative descriptive study. Poster presented at the AFPC Canadian Pharmacy Education & Research Conference, Edmonton AB. June 13, 2019.
19. Shahzad S, Mary A. De Vera MA, Tandun R, **Loewen P**. Atrial fibrillation patients' real-world adherence to oral anticoagulants: A systematic review and meta-analysis of incidence, magnitude, determinants and impacts. Poster presented at the UBC Faculty of Pharmaceutical Sciences Graduate and Post Doctorate Research Symposium, Vancouver BC. May 16, 2019.
20. de Lemos J, Chan R, You YD, McKenzie R, Nagle C, Ling P, Dabu A, **Loewen P**, Zed P. The Richmond Hospital Preventable Adverse Drug Event (pADE) Program. Presented at the BC Pharmacists Association Annual Conference, Vancouver, BC. May 10, 2019.
21. Spina A, Atwood K, **Loewen P**. Evaluation of a Secure Mobile and Clinical Communication Solution in Acute and Community Practice Settings on Vancouver Island. Quality Forum 2019, BC Patient Safety & Quality Council. Vancouver, BC. Feb 27, 2019
22. **Loewen P**, Salmasi S, Kapanen A, Kwan L, MacGillivray J, De Vera M. Persistence, switching, self-reported adherence and satisfaction with anticoagulant therapy in atrial fibrillation clinic patients: results of a long-term prospective cohort study. Presented at the Canadian Cardiovascular Congress, Toronto, Canada, October 22, 2018. Canadian Journal of Cardiology 2018 Oct 1;34(10):S5.
23. Salmasi S, **Loewen P**, Lynd L. Quantitative exploration of AF patients' knowledge gaps: a systematic review and meta-analysis. Canadian Journal of Cardiology. Presented at the Canadian Cardiovascular Congress, Toronto, Canada, October 22, 2018. Canadian Journal of Cardiology 2018 Oct 1;34(10):S192–3.
24. Bansback N, Hicklin J, Lynd LD, Salmasi S, **Loewen P**. Development and evaluation of an individualized decision aid for atrial fibrillation. Abstract presented at the International Academy of Health Preference Research, Montreal, October 13, 2018.
25. Salmasi S, **Loewen P**, Lynd LD. Quantitative exploration of atrial fibrillation patients' knowledge gaps: a systematic review and meta-analysis. Poster presented at the Canadian Cardiovascular Congress, Toronto, ON. October 2018.
26. Salmasi S, **Loewen P**. Persistence, switching, self-reported adherence and satisfaction with anticoagulant therapy in atrial fibrillation clinic patients: results of a long-term prospective cohort study. Poster presented at the UBC Faculty of Pharmaceutical Sciences Graduate and Post Doctorate Research Symposium, Vancouver BC. May 17, 2018.

27. Choi J, Choy A, Hu E, Shen W, **Loewen P**, Salmasi S. Patients' knowledge and beliefs about oral anticoagulants: a systematic review of the literature. Poster presented at the UBC Multidisciplinary Undergraduate Research Conference. March 23, 2018
28. **Loewen P**, Bansback N, Andrade J, Bonet J, Deyell M, Hicklin J, Kapanen A, Kwan L, Lynd L, McClean A, McGillivray J, Salmasi S. Patient preferences for atrial fibrillation stroke prevention therapy using an individualized risks and preferences-based decision aid. Poster presented at Canadian Society of Hospital Pharmacists 27th annual Professional Practice Conference, Toronto, Ontario, February 5, 2018.
29. **Loewen P**, Bansback N, Andrade J, Bonet J, Deyell M, Hicklin J, Kapanen A, Kwan L, Lynd L, McClean A, McGillivray J, Salmasi S. Performance of an innovative patient decision aid for atrial fibrillation stroke prevention therapy. Poster presented at Canadian Society of Hospital Pharmacists 27th annual Professional Practice Conference, Toronto, Ontario, February 5, 2018.
30. Salmasi S, **Loewen P**. Atrial Fibrillation Patient Knowledge Gaps: A Systematic Review. Poster presented at Canadian Society of Hospital Pharmacists 27th annual Professional Practice Conference, Toronto, Ontario, February 4, 2018.
31. Que L, Dahri K, **Loewen P**, Spina S. A Framework for the Evaluation and Use of Smartphone Clinical Decision Support Applications. Poster presented at the Canadian Society of Hospital Pharmacists – BC Branch Annual General Meeting, Vancouver, BC. November 24, 2017.
32. **Loewen P**, Bansback N, Andrade J, Bonet J, Deyell M, Hicklin J, Kapanen A, Kwan L, Lynd L, McClean A, McGillivray J, Salmasi S. Individualizing AF stroke prevention therapy using a risks and preferences-based decision aid to promote shared decision-making: Results of beta-testing. Poster presented at the Canadian Cardiovascular Congress, Vancouver, BC. October 22, 2017. *Can J Cardiol* 2017;33(10):S60 [abstract]
33. Prasad M, Barry A, **Loewen P**, Shalansky S. Health-Authority Pharmacists' Perception of Independent Pharmacist Prescribing. Poster presented at Canadian Society of Hospital Pharmacists-BC/UBC Residency Research Night, Vancouver, BC. May 18, 2017. **Winner of the Canadian Society of Hospital Pharmacists BC Branch Pharmacy Practice Award (2017) and the Canadian Society of Hospital Pharmacists National Management and Leadership Best Practice Award (2018)**
34. **Loewen P**, Ji A, Kapanen A. Patient values and preferences for antithrombotic therapy for stroke prevention in atrial fibrillation: a systematic review. Poster presented at the Canadian Cardiovascular Congress, Montréal, QC. October 24, 2016.
35. **Loewen P**, Kwan L, De Vera M. Persistence, switching, and self-reported adherence with anticoagulant therapy in atrial fibrillation clinic patients: Interim results from a large prospective cohort study. Poster presented at the Canadian Cardiovascular Congress, Montréal, QC. October 23, 2016.
36. MacDonald GP, **Loewen P**, Gerber P, Lee MHP, McCormack JP. Brain Gain: Evaluation of Prior Learning Assessment and Recognition (PLAR) in a Canadian Doctor of Pharmacy Program. Poster presented at Canadian Pharmacy Research & Education Conference, Richmond, BC. June 1, 2016.
37. Leung M, Guenter J, Tse K; Legal M, **Loewen P**, Kim-Sing A, Zed PJ. The Experiential Education Facilitator Model: A Novel Strategy to Support Learners and Preceptors and Build Capacity in Inpatient Pharmacy Practice Settings. Poster presented at Canadian Society of Hospital Pharmacists 25th annual Professional Practice Conference, Toronto, Ontario, February 2, 2016.
38. Leung M, Guenter J, Tse K; Legal M, Thompson A, MacDonald, Mulherin K, **Loewen P**. Development of Preceptor Guidebooks to Support the Adoption of Non-traditional Learner-Preceptor Models: A National Initiative. Poster presented at Canadian Society of Hospital Pharmacists 25th annual Professional Practice Conference, Toronto, Ontario, February 2, 2016.
39. **Loewen P**, Shen C. Current State of the Lipid Hypothesis: A Systematic Review to Assess the Effect of Low Density Lipoprotein Cholesterol on Cardiovascular Health. Poster presented at the Canadian Society of Hospital Pharmacists – BC Branch Annual General Meeting, Vancouver, BC. November 20, 2015.
40. **Loewen P**, Gerber P, MacDonald G, McCormack J. Developing a Modular Integrated Medication Management Curriculum in a Doctor of Pharmacy Program., Poster presented at the American Association of Colleges of Pharmacy Annual Meeting, *Pharmacy Education 2015*, National Harbor, MD, July 13, 2015.

41. Luong W, House N, Legal M, **Loewen PS**, Gerber P, Kim-Sing A, Zed PJ. Opportunities To Enhance Institutional Experiential Education: Mutually Beneficial Activities Analysis. Poster presented at the American Association of Colleges of Pharmacy Annual Meeting, *Pharmacy Education 2015*, National Harbor, MD, July 13, 2015.
42. Dahri K, Gong Y, **Loewen P**. Utilization of Mobile Computing Devices by Clinical Pharmacists. Poster presented at the 2<sup>nd</sup> Annual BC eHealth Innovation and Technology Showcase (BC eHITS), Vancouver, BC. May 9, 2015.
43. Edwards N, Culley CL, Greanya E, Kuo I, **Loewen P**. Patient Preferences in Decision Making for Stroke Prophylaxis in Atrial Fibrillation. Poster presented at Canadian Society of Hospital Pharmacists-BC/UBC Residency Research Night, Vancouver, BC. May 14, 2015
44. Spina S, Power J, Forbes D, Harder C, Lalli S, **Loewen P**, Zed PJ. Integration of Smartphones into Clinical Pharmacy Practice: An Evaluation of the Impact on Pharmacists' Efficiency. Poster presented at the 2<sup>nd</sup> Annual BC eHealth Innovation and Technology Showcase (BC eHITS), Vancouver, BC. May 9, 2015. **Winner of the Canadian Society of Hospital Pharmacists 2015 National Hospital Pharmacy Residency Project Award**
45. Bolt J, Semchuk B, **Loewen P**, Bell A, Strugari C. A Canadian Survey of Pharmacist Participation during Cardiopulmonary Resuscitation. Poster presented at the Canadian Society of Hospital Pharmacists Western Branches Banff Conference, Banff AB, March 21, 2015.
46. Luong W, House N, Legal M, **Loewen PS**, Gerber P, Kim-Sing A, Zed PJ. Opportunities To Enhance Institutional Experiential Education: Mutually Beneficial Activities Analysis. Poster presented at Canadian Society of Hospital Pharmacists BC Branch Annual General Meeting, Vancouver, BC. November 22, 2014. **Winner of the Canadian Society of Hospital Pharmacists BC Branch Pharmacy Practice Award.**
47. Legal M, Rahmatian D, Collins K, Gerber P, Kim-Sing A, Zed PJ, **Loewen PS**. Institutional Pharmacists' Perspectives on Precepting: A Comprehensive Province-Wide Study. 115th Annual Meeting of the American Association of Colleges of Pharmacy, Grapevine, TX, July 26-30, 2014. *American Journal of Pharmaceutical Education*: Volume 78, Issue 5, Article 111. doi: 10.5688/ajpe785111
48. Kertland H, Kwan D, **Loewen P**, Sheehan N. Survey of Canadian Advanced Practice Training Opportunities. Poster presented at Canadian Pharmacy Research & Education Conference, Saskatoon, SK. May 31, 2014.
49. MacDonald GP, Vallee GM, Marchand JP, Gerber P, **Loewen P**. British Columbia Pharmacists' Perceptions and Preferences for a Flexible PharmD Program. Poster presented at Canadian Pharmacy Research & Education Conference, Saskatoon, SK. May 31, 2014.
50. Legal M, Rahmatian D, Collins K, Billingsley M, Carriere F, Gerber PE, Kim-Sing A, Zed PJ, **Loewen PS**. Opportunities to enhance institutional experiential education in British Columbia: Learner perspectives. Poster presented at Canadian Pharmacy Research & Education Conference, Saskatoon, SK. May 31, 2014.
51. Gamble A, Shah K, Tkachuk S, Legal M, **Loewen PS**, Zed PJ. Exploring innovative institutional learner-preceptor models across health disciplines: A systematic review. Poster presented at Canadian Pharmacy Research & Education Conference, Saskatoon, SK. May 31, 2014.
52. Legal M, Rahmatian D, Collins K, Gerber PE, Kim-Sing A, **Loewen PS**, Zed PJ. A comprehensive framework for university-health authority engagement around experiential education. Poster presented at Canadian Pharmacy Research & Education Conference, Saskatoon, SK. May 31, 2014.
53. Spina S, Power J, Forbes D, Harder C, Lalli S, **Loewen P**, Zed PJ. Integration of Smartphones into Clinical Pharmacy Practice: An Evaluation of the Impact on Pharmacists' Efficiency. 2014 EHealth and Innovation Technology Showcase in Health - EHITS. Vancouver, BC. May 9, 2014.
54. Hwang S, Bruchet N, Gorman S, **Loewen P**. Assessment of Clinical Pharmacist-Delivered Education as part of Patient Self-Management of Chronic Obstructive Pulmonary Disease in Internal Medicine Patients: A Pilot Project. Presented at Canadian Society of Hospital Pharmacists-BC/UBC Resident Research Day, Vancouver, BC. May 15, 2014.

55. **Loewen P**, Yearwood C. Stroke prediction in atrial fibrillation: Meta-analysis of the predictive performance of the CHADS2 and CHA2DS2-VASc clinical prediction rules. Poster presented at Canadian Society of Hospital Pharmacists 25th annual Professional Practice Conference, Toronto, Ontario, February 3, 2014.
56. **Loewen P**, Higgins J. Laboratory test ordering by pharmacists in Canada: A nationwide study of policies and practices. Facilitated Poster presented at Canadian Society of Hospital Pharmacists 25th annual Professional Practice Conference, Toronto, Ontario, February 2, 2014.
57. **Loewen P**, Yeung J, Jelescu-Bodos, Lau T. Do Learning Styles of Pharmacy Practice Residents Change When They Enter Practice? Facilitated Poster presented at Canadian Society of Hospital Pharmacists 25th annual Professional Practice Conference, Toronto, Ontario, February 2, 2014.
58. **Legal M**, Rahmatian D, Collins K, Gerber P, Kim-Sing A, Zed PJ, **Loewen PS**. Institutional Pharmacists' Perspectives on Precepting: A Comprehensive Province-Wide Study. Poster presented at Canadian Society of Hospital Pharmacists 25th annual Professional Practice Conference, Toronto, Ontario, February 3, 2014.
59. **Legal M**, Rahmatian D, Collins K, Billingsley M, Carriere F, Gerber P, Kim-Sing A, Zed PJ, **Loewen PS**. Opportunities to Enhance Institutional Experiential Education in British Columbia: Learner Perspectives. Poster presented at Canadian Society of Hospital Pharmacists 25th annual Professional Practice Conference, Toronto, Ontario, February 3, 2014.
60. Gamble A, Shah K, Tkachuk S, **Legal M**, **Loewen PS**, Zed PJ. Exploring Innovative Institutional Learner-Preceptor Models Across Health Disciplines: A Systematic Review. Poster presented at Canadian Society of Hospital Pharmacists 25th annual Professional Practice Conference, Toronto, Ontario, February 3, 2014.
61. **Legal M**, Rahmatian D, Collins K, Gerber P, Kim-Sing A, **Loewen PS**, Zed PJ. The Path Forward: Solutions from a Province-Wide University-Health Authority Engagement Initiative. Poster presented at Canadian Society of Hospital Pharmacists 25th annual Professional Practice Conference, Toronto, Ontario, February 3, 2014.
62. **Power JMH**, Spina SP, Forbes DA, Harder CK, Lalli SL, **Loewen PS**, Zed PJ. Integration of Smartphones into Clinical Pharmacy Practice: An Evaluation of the Impact on Pharmacists' Efficiency. Poster presented at Canadian Society of Hospital Pharmacists 25th annual Professional Practice Conference, Toronto, Ontario, February 3, 2014.
63. **Legal M**, Rahmatian D, Collins K, Gerber P, Kim-Sing A, Zed PJ, **Loewen PS**. Institutional Pharmacists' Perspectives on Precepting: A Comprehensive Province-Wide Study. Poster presented at Canadian Society of Hospital Pharmacists BC Branch Annual General Meeting, November 24, 2013. Vancouver, BC.
64. Gamble A, Shah K, Tkachuk S, **Legal M**, **Loewen PS**, Zed PJ. Exploring Innovative Institutional Learner-Preceptor Models Across Health Disciplines: A Systematic Review. Poster presented at Canadian Society of Hospital Pharmacists BC Branch Annual General Meeting, November 24, 2013. Vancouver, BC.
65. **Legal M**, Rahmatian D, Collins K, Gerber P, Kim-Sing A, **Loewen PS**, Zed PJ. The Path Forward: Solutions from a Province-Wide University-Health Authority Engagement Initiative. Poster presented at Canadian Society of Hospital Pharmacists BC Branch Annual General Meeting, November 24, 2013. Vancouver, BC.
66. **Collins K**, Rahmatian D, Legal M, Bruchet N, Granberg J, Gerber P, Kim-Sing A, Zed PJ, **Loewen PS**. "The Agile Survey: Health Authority Pharmacists' Perceptions On Precepting." Poster presented at Canadian Society of Hospital Pharmacists BC Branch Annual General Meeting, November 24, 2013. Vancouver, BC. **Winner of the Canadian Society of Hospital Pharmacists BC Branch Pharmacy Practice Award**
67. **Power JMH**, Spina SP, Forbes DA, Harder CK, Lalli SL, **Loewen PS**, Zed PJ. Integration of Smartphones into Clinical Pharmacy Practice: An Evaluation of the Impact on Pharmacists' Efficiency. Presented at Canadian Society of Hospital Pharmacists Residency Research Day, Vancouver, May 2013.
68. Lai P, Chong G, **de Lemos J**, **Loewen P**, MacDonald K. Using Quality Actions to Perform, Measure, Report and Improve the Quality of Clinical Pharmacy Services in Residential Care. Poster presented at BC Patient Safety & Quality Council Forum 2013: Inspiring Improvement, Vancouver, BC. March 2013.
69. **Loewen P**. Marchand JP. Online Summative Assessment in an Undergraduate Therapeutics Course. Poster presented at Canadian Pharmacy Education & Research Conference, July 2013. Niagara-on-the-Lake, ON.

70. Jelescu-Bodos A, **Loewen P**. Pharmacy Residents and Faculty Learning Styles: A study of BC Pharmacy Practice Residents and Faculty Learning Styles. Presented at Canadian Society of Hospital Pharmacists Residency Presentation Night, Vancouver, May 2012.
71. Wong B, **Loewen P**, Eccott L. Interprofessional Learning and Practice: A study of pharmacy institutional practitioner and learner perspectives. Presented at Canadian Society of Hospital Pharmacists Residency Presentation Night, Vancouver, May 2012.
72. Woo S, **Loewen P**, deLemos J. Value Index of Quality Actions (VIQAs): Is the "Value Index" a useful way to guide which clinical pharmacy services should be provided? Presented at Canadian Society of Hospital Pharmacists Residency Presentation Night, Vancouver, May 2012.
73. Chernushkin K, **Loewen P**, Jung J, Dahri K, Aulakh A, de Lemos J. Diagnostic Reasoning by Hospital Pharmacists: An study of attitudes, knowledge, skills, and learning needs. Presented at Canadian Society of Hospital Pharmacists Professional Practice Conference, Toronto, February 2012.
74. Lai P, de Lemos J, McDonald K, **Loewen P**. Developing a quality actions report that can help inform managers on ways to improve the quality of clinical services. Presented at Canadian Society of Hospital Pharmacists Residency Presentation Night, Vancouver, May 2011.
75. Taylor R, Jung J, Dossa A, **Loewen P**. Online vs. live practice education delivery to hospital pharmacists: a comparison of learning outcomes. Presented at Canadian Society of Hospital Pharmacists Residency Presentation Night, Vancouver, May 2011.
76. Chernushkin K, **Loewen P**, Jung J, Dahri K, Aulakh A, de Lemos J. Diagnostic Reasoning by Hospital Pharmacists: An study of attitudes, knowledge, skills, and learning needs. Presented at Canadian Society of Hospital Pharmacists Residency Presentation Night, Vancouver, May 2011.
77. Cartwright A, de Lemos J, **Loewen P**, Collins M, Roberts JM. Evaluation of the effectiveness of a program for hospital pharmacists to improve the management of chronic diseases reflected by the IMI index: closing the gap. Presented at Canadian Society of Hospital Pharmacists Residency Presentation Night, Vancouver, May 2009.
78. Merrett F, **Loewen P**, de Lemos J. Pharmacists' perceptions of the impact of care they provide. Presented at Canadian Society of Hospital Pharmacists Residency Presentation Night, Vancouver, May 2009.
79. Mountford C, Lee T, de Lemos J, **Loewen P**, Evaluation of quality and usability of common drug information databases. Presented at Canadian Society of Hospital Pharmacists Residency Presentation Night, Vancouver, May 2009.
80. Zed PJ, Abu-Laban RB, Balen RM, **Loewen PS**, Hohl CM, Brubacher JR, Wilbur K, Pursell R, Wiens MO, Samoy L, Lalaria K. Incidence, severity, and preventability of medication-related visits to an emergency department: a prospective study. Qatar University Research Forum, Doha, Qatar (May 2009)
81. Barry AR, **Loewen P**, de Lemos J, Lee KG. REaSons for Non-use of ProvEn Clinical Therapies in Hospital Inpatients (RESPECT). Presented at Canadian Society of Hospital Pharmacists Residency Presentation Night, Vancouver, May 2008.
82. Zed, PJ, Abu-Laban RB, Balen RM, **Loewen PS**, Hohl CM, Brubacher JR, Wilbur K, Pursell RA. Drug-related Visits to the Emergency Department of a Large Canadian Hospital: A Prospective Study. Presented at the Canadian Association of Emergency Physicians Annual Scientific Meeting, Victoria, BC, Canada, June 2-6, 2007
83. **Loewen P**, Lee KG, Lun E. Implementing and evaluating a quality indicator for drug therapy in a multi-site health region: The Ideal Medication Intervention (IMI) Index. Presented at Canadian Society of Hospital Pharmacists Residency Presentation Night, Vancouver, May 2007.
84. Balen RM, Zed PJ, **Loewen PS**, Jewesson PJ. Using Personal Digital Assistant-Based Electronic Forms to Facilitate Research Data Collection at the Point-of-Care. (poster) Canadian Society of Hospital Pharmacists 38<sup>th</sup> Annual Professional Practice Conference, Toronto, ON, January 31, 2007.

85. Huang C, **Loewen P**, Pelletier T, Chung M, Slater J. Implementation rates of proven interventions in general medical inpatients (iMPROVE). Presented at Canadian Society of Hospital Pharmacists Residency Presentation Night, Vancouver, May 2006.
86. Balen RM, Zed PJ, **Loewen PS**, Jewesson PJ. Using Personal Digital Assistant-Based Electronic Forms to Facilitate Research Data Collection at the Point-of-Care. *Can J Emerg Med* 2006;8(3 Suppl):S42. Presented at the joint Canadian Association of Emergency Physicians (CAEP) / International Conference of Emergency Medicine (ICEM). June 3-7, 2006. Halifax, NS
87. Raybardhan S, Balen R, **Loewen P**, Partovi N, Liu G, Jewesson P. Implementation of a Personal Digital Assistant-based Drug-Problem Documentation Tool for Pharmacy Practice in a Multi-site Healthcare Organization Setting. (Poster #140) 2nd Canadian Therapeutic Congress Joint Scientific Meeting, Vancouver, BC. April 15, 2005. **Winner of the Canadian College of Clinical Pharmacy Original Research Award**
88. Raybardhan S, Balen R, Partovi N, **Loewen P**, Jewesson P. Implementation of a Personal Digital Assistant-based Drug-Problem Documentation Tool for Pharmacy Practice in a Multi-site Healthcare Organization Setting. Poster and "60 Seconds of Poster Fame" Podium Presentation. 31st Annual Banff Seminar, Canadian Society of Hospital Pharmacists, Banff, AB. March 4-6, 2005. **Winner of the Canadian Society of Hospital Pharmacists / BAXA Award**
89. Raybardhan S, Balen R, Liu G, **Loewen P**, Partovi N, Jewesson P. Implementation of a Personal Digital Assistant-Based Drug-Related Problem Documentation Tool for Pharmacy Practice. Presented at Canadian Society of Hospital Pharmacists BC Branch Residency Presentation Night, Vancouver. May 2004.
90. Patel K, **Loewen P**, Wilbur K. Study of thromboprophylaxis in medical patients. Presented at Canadian Society of Hospital Pharmacists BC Branch Residency Presentation Night, Vancouver. May 2004.
91. Saran M, **Loewen P**, Zed P. Study of Pantoprazole Intravenous Therapy in Acute Gastrointestinal Bleeding (SPIT 2) (podium & poster). Presented at Canadian Society of Hospital Pharmacists BC Branch Residency Presentation Night, Vancouver. May 2003.
92. Pelletier T, **Loewen P**, Wilbur K. Effects of Hospital Pharmacist Intervention on Non-Steroidal Anti-inflammatory Drug Use Following Hospital Discharge (INSTEAD). Presented at Canadian Society of Hospital Pharmacists BC Branch Residency Presentation Night, Vancouver. May 2003.
93. **Loewen P**, Balen RM. Making Vancouver Hospital's Parenteral Drug Therapy Manual available on a Personal Digital Assistant (PDA). (poster) Canadian Society of Hospital Pharmacists (Canadian Society of Hospital Pharmacists) 34th Professional Practice Conference, Toronto, ON, February 3, 2003.
94. **Loewen P**. Development of "Bedside EBM": A handheld tool for storing, retrieving, and applying clinical trial data at the point-of care. (poster) Canadian Society of Hospital Pharmacists (Canadian Society of Hospital Pharmacists) 34th Professional Practice Conference, Toronto, ON, February 3, 2003.
95. **Loewen P**, Balen RM. Making Vancouver Hospital's Formulary handbook available on a Personal Digital Assistant (PDA). (poster) Canadian Society of Hospital Pharmacists (Canadian Society of Hospital Pharmacists) 34th Professional Practice Conference, Toronto, ON, February 3, 2003.
96. **Loewen P**, Sprague D. A handheld tool for estimating individualized risk of stroke and serious bleeding with warfarin or aspirin in atrial fibrillation patients. (poster) Canadian Society of Hospital Pharmacists (Canadian Society of Hospital Pharmacists) 34th Professional Practice Conference, Toronto, ON, February 3, 2003.
97. Sprague D, **Loewen P**, Wilbur K. Feasibility of implementing an individualized, evidence-based stroke prevention counseling program for patients with atrial fibrillation. (podium abstract presentation / poster). Canadian Society of Hospital Pharmacists-BC Branch. Residency Presentation Night 2002. Vancouver, May 8, 2002.
98. Zed PJ, **Loewen PS**, Slavik RS, Marra CA. Proton-pump inhibitors in acute upper gastrointestinal bleeding peptic ulcer disease: a meta-analysis. Presented at the 2001 Canadian Association of Emergency Physicians Annual Scientific Meeting, Calgary, AB, March 21-24, 2001 (*Can J Emerg Med* 2001;3:139)
99. Zed P, **Loewen P**, Slavik R. Proton pump inhibitors for acute gastrointestinal bleeding: A Meta-analysis. Canadian Society of Hospital Pharmacists Annual General Meeting, Winnipeg, MB. July 2000.

100. Low A, Loewen P, Marra F. Transfer of information via the PharmaNet as a model of continuity of pharmacy services from the hospital to the community setting. Poster presented at the Canadian Society of Hospital Pharmacists Western Branches Banff Seminar, Banff, AB. March 2000.
101. Loewen P, Zed P, Marra C. 5-HT3 receptor antagonists versus traditional antiemetics for prophylaxis of postoperative nausea and vomiting: a meta-analysis. Poster presentation at the 20th Annual General Meeting of the American College of Clinical Pharmacy, Kansas City, MO. October 1999.
102. Low A, Loewen P, Marra F. Transfer of information via the PharmaNet as a model of continuity of pharmacy services from the hospital to the community setting. Poster presented at the Canadian Society of Hospital Pharmacists-BC Branch Clinical Skills Symposium, Vancouver, BC. September 1999. Won "Honorable Mention"
103. Low A, Loewen P, Marra F. Transfer of information via the PharmaNet as a model of continuity of pharmacy services from the hospital to the community setting. Poster presented at the Canadian College of Clinical Pharmacy Annual General Meeting, Whistler, BC, June 1998.
104. Loewen P, Sunderji R, Gin K. Combination warfarin and ASA therapy: a critical re-evaluation of the available literature. Poster presented at the Canadian Society of Hospital Pharmacists B.C. Branch AGM, Vancouver, BC, November 1996.
105. Loewen P, Warkentin D, Shepherd J. G-CSF for ganciclovir-induced neutropenia in bone marrow transplant patients. Poster presented at the Canadian College of Clinical Pharmacy Conference, London, Ontario, September 1995.

(c) *Other*

1. **Loewen P**. Antithrombotic therapy for stroke prevention in atrial fibrillation. BC Ministry of Health Prescription PAD. May 2009. [refereed]
2. **Loewen P**. Evidence-Based Pharmacotherapy: A Practical Guide for Pharmacists. Canadian Council on Continuing Education in Pharmacy, 2003. [Educational module]

2. **NON-REFEREED PUBLICATIONS [P.I. / lead author underlined]**

(a) *Journals*

1. McCormack J, **Loewen P**, Jewesson P. Dissemination of results needs to be tracked as well as the funding is. [Letter]. British Medical Journal 2005;331:456.
2. McCormack J, **Loewen P**. The other side of the bezafibrate infarction prevention trial data [Letter]. Archives of Internal Medicine 2005;165:2432-3.
3. McCormack J, **Loewen P**. Misplaced allegations [Letter]. Canadian Medical Association Journal 2004;170:1207.
4. **Loewen P**. Evidence that COX-2 Inhibitor is a Reasonable Alternative to Diclofenac Plus Omeprazole in High Risk Patients...Finally! Journal of Informed Pharmacotherapy 2003;14:201.
5. Balen RM, **Loewen PS**. Using Personal Digital Assistants In Clinical Pharmacy Practice: Commonly Asked Questions. Journal of Informed Pharmacotherapy 2003;13:200-202.
6. **Loewen PS**. Can Vitamins Improve Clinical Outcomes after Percutaneous Coronary Intervention? Journal of Informed Pharmacotherapy 2003;12:200.
7. **Loewen PS**, Balen RM, McCormack JP. Redefining and Refining the JIP. Journal of Informed Pharmacotherapy 2002;9:1.
8. **Loewen PS**, Zed PJ. Pharmacist Scope of Practice: A Response to the 2002 ACP-ASIM Position Paper. Journal of Informed Pharmacotherapy 2002;8:1.

9. **Loewen PS**. Warfarin or Aspirin for Recurrent Ischemic Stroke: Prophylaxis WARSS! *Journal of Informed Pharmacotherapy* 2001;9:201.
10. **Loewen PS**, Zed PJ. The Journal - One Year Later, and the Changing Culture of Academic Publishing. *Journal of Informed Pharmacotherapy* 2001;5:1.
11. **Loewen P**, Runikis A. Citalopram: an newer antidepressant. *Drug & Therapeutics Newsletter (Vancouver Hospital)* 2001;1(4):5-6.
12. **Loewen PS**. Amiodarone to Prevent Recurrence of Atrial Fibrillation: Its all a matter of rhythm. *Journal of Informed Pharmacotherapy* 2000;3:200-202.
13. Jewesson PJ, **Loewen PS**, Marra CA, Zed PJ. The Birth of an Online Pharmacotherapy Journal. *Journal of Informed Pharmacotherapy* 2000;1:1.
14. **Loewen P**. Ketorolac (Toradol) for Donor Nephrectomy Patients. *Drug & Therapeutics Newsletter (Vancouver Hospital)* 2000;7(4):5-6.
15. **Loewen P**. Postoperative nausea and vomiting. *Drug & Therapeutics Newsletter (Vancouver Hospital)* February 1999.
16. Shalansky K, Hughes C, **Loewen P**. Treatment of Helicobacter pylori in association with peptic ulcer disease. *Drug & Therapeutics Newsletter (Vancouver Hospital)* 1997;4(2):2.
17. **Loewen P**. Use of E-mail for conducting surveys [Letter]. *American Journal of Health-System Pharmacy*. 1997;54(11):1334.
18. Letwin S, **Loewen P**, Marra F. PharmaNet database and seamless care [Letter]. *Canadian Journal of Hospital Pharmacy* 1997;50(4):160.
19. **Loewen P**, Marra C. Internet resources of interest to pharmacists. *BC Pharmacy* 1997;6(2):30-33.
20. **Loewen P**. Two new formulary antidepressants: Venlafaxine and nefazodone. *Drug & Therapeutics Newsletter (Vancouver Hospital)* 1996;3(3):5-6.

(b) *Conference Proceedings [presenter underlined]*

1. de Lemos J, Chan R, Nagle C, McKenzie R, You YD, Ling P, Zed P, **Loewen P**. Richmond Hospital Preventable Adverse Drug Event Program. Presented at the Richmond Division of Family Practice Educational Symposium, Richmond BC. June 4, 2019.
2. de Lemos J, Chan R, Nagle C, McKenzie R, You YD, Ling P, Zed P, **Loewen P**. Richmond Hospital Preventable Adverse Drug Event Program (pADE). Presented at the Richmond Hospital Patient Quality & Patient Safety Council Richmond BC, May 23, 2019.

(c) *Other*

### 3. **BOOKS**

(a) *Authored*

(b) *Edited*

(c) *Chapters*

**Loewen P**. Nausea & Vomiting. In Repchinsky C, ed. *Patient Self Care: Helping patients make therapeutic choices*, 1st edition. 2002, Canadian Pharmacists Association, Ottawa, Canada. p. 207-220.



#### 4. PATENTS

Invention disclosure for SPARCTool ([www.sparctool.com](http://www.sparctool.com)) filed with UBC University Industry Liaison Office (December 2012)

#### 5. SPECIAL COPYRIGHTS

#### 6. ARTISTIC WORKS, PERFORMANCES, DESIGNS

#### 7. OTHER WORKS

1. Developed and published a new method (**REWarDS / daySupply**) for determining average daily dose and days supply of warfarin using multiple methods from large administrative prescription databases. Published as an [R package in CRAN](#), and on [GitHub](#).
2. [www.sparctool.com](http://www.sparctool.com) An internationally recognized tool for estimating stroke and bleeding risk in patients with atrial fibrillation. Intellectual property licensed by the American College of Cardiology April 2013 and developed into iOS and Android apps. Invention disclosure filed with UBC University Industry Liaison Office in Dec 2012. SPARCTool undergoes regular revisions as data and technology evolves. Details at <http://www.sparctool.com>
3. **AnticoagEvaluator** - <https://itunes.apple.com/ca/app/anticoagevaluator/id609795286?mt=8> iOS and Android mobile applications and website (<http://tools.acc.org/anticoag/#!/content/calculator/>) developed by the American College of Cardiology based on my SPARCTool intellectual property, which ACC licensed from me.
4. **Atrial Fibrillation Patient Education Program**. Cardiac Services British Columbia. <http://www.cardiacbc.ca/health-info/heart-conditions/abnormal-heart-rhythm>
5. **Virtual Atrial Fibrillation Clinic** (vAFC) <https://vafc.ok.ubc.ca/> [password required. Affiliated patient and clinician access only]
6. **SPARC-DT**: Atrial Fibrillation Stroke Prevention Patient Decision Aid. [https://dcida2.cheos.ubc.ca/#/decision\\_aid/SPARC-DT?access\\_password=nostrokes](https://dcida2.cheos.ubc.ca/#/decision_aid/SPARC-DT?access_password=nostrokes)

#### 8. WORKS SUBMITTED (including publisher and date of submission) [P.I. underlined]

1. Safari A, Helisaz H, Loewen P. Major bleeding with OACs in patients with atrial fibrillation: effects of co-prescribed bleeding risk modifying drugs. Abstract submitted to Vascular 2023, October 2023. Montreal, Canada.
2. Adalakun A, Turgeon RD, De Vera MA, McGrail K, Safari A, Loewen P. Oral anticoagulant switching in patients with atrial fibrillation: a long-term cohort study using population-level administrative data. Abstract submitted to Vascular 2023, October 2023. Montreal, Canada.
3. Safari A, Helisaz H, Salmasi S, Andrade J, Deyell M, Loewen P. Effects of adherence to warfarin vs. Doacs on atrial fibrillation outcomes. Abstract submitted to Vascular 2023, October 2023. Montreal, Canada.
4. Barry A, Helisaz H, Safari A, Loewen P. Cardiovascular outcomes with P2Y12 inhibitors after coronary artery bypass graft surgery. Abstract submitted to Vascular 2023, October 2023. Montreal, Canada.
5. Barry A, Helisaz H, Safari A, Loewen P. Cardiovascular outcomes with angiotensin-converting enzyme inhibitors and angiotensin receptor blockers after coronary artery bypass graft surgery. Abstract submitted to Vascular 2023, October 2023. Montreal, Canada.
6. Minh-Tri (Tri) Van, Loewen P, Turgeon RD. A cost-utility analysis of heart failure reduced ejection fraction (HFREF) sequencing strategies. Abstract submitted to Vascular 2023, October 2023. Montreal, Canada.

7. Minh-Tri (Tri) Van, **Loewen P**, Turgeon RD. A scoping review of heart failure reduced ejection fraction sequencing strategies. Abstract submitted to Vascular 2023, October 2023. Montreal, Canada.
8. Rush KL, Burton L, **Loewen P**, O'Connor B, Moroz L, Seaton CL, Corman K, Smith MA, Andrade JG. Telehealth Satisfaction in Patients Receiving Virtual Atrial Fibrillation Care: A Quantitative Exploratory Study. Submitted to International Journal of Medical Informatics [February 2023]
9. Salmasi S, Safari A, De Vera MA, Högg T, Lynd, LD, Koehoorn M, Barry AR, Andrade JG, Deyell M, Rush K, Zhao Y, **Loewen P**. Adherence to direct and vitamin K antagonist oral anticoagulants in patients with atrial fibrillation: A long-term observational study. Submitted to Journal of Thrombosis and Thrombolysis [February 2023]
10. Adelakun A, De Vera MA, McGrail K, Turgeon RD, Barry AR, Andrade JG, MacGillivray J, Deyell MW, Kwan L, Chua D, Lum E, Smith R, **Loewen P**. Oral anticoagulant switching in patients with atrial fibrillation: a long-term cohort study using population-level administrative data. Submitted to Journal of Thrombosis and Hemostasis [May 2023].
11. Adelakun A, De Vera MA, McGrail K, Turgeon RD, Barry AR, Andrade JG, MacGillivray J, Deyell MW, Kwan L, Chua D, Lum E, Smith R, **Loewen P**. Development and application of an attribute-based taxonomy on the benefits of OAC switching in atrial fibrillation. Submitted to PLOS ONE [March 2023]
12. Rush KL, Seaton CL, Burton L, **Loewen P**, O'Connor B, Moroz L, Corman K, Smith MA, Andrade JG. Quality of life among patients with atrial fibrillation: A Theoretically-guided Cross-Sectional Study. Submitted to PLOS ONE [March 2023].
13. Rush KL, Seaton CL, O'Connor B, Andrade JG, **Loewen P**, Corman K, Burton L, Smith MA, & Moroz L (Submitted). Managing with atrial fibrillation: An exploratory model-based cluster analysis of clinical and personal patient characteristics. Submitted to Canadian Journal of Cardiology [April 2023]

## 9. **WORKS IN PROGRESS (including degree of completion) [P.I. underlined]**

### GRANTS IN DEVELOPMENT / UNDER REVIEW

### RESEARCH IN PROGRESS

1. **Loewen P**, Andrade J, Rush K, Chen W, Sadatsafavi M, De Vera M, Zhao Y, Deyell M, Salmasi S. Preventable strokes and deaths in atrial fibrillation patients: Understanding the impacts of anticoagulant nonadherence and nonpersistence.
  - *Clinical outcomes results being disseminated via conferences and manuscripts. Economic outcomes analysis underway*
2. **Loewen P**, Andrade J, De Vera M, Deyell M, Filion K, Safari A, Tadrous M, Salmasi S. Atrial fibrillation stroke prevention: New insights from anticoagulant adherence thresholds and trajectories.
  - *Project Grant funded by CIHR (October 2022 x 2.5 years). Analyses ongoing.*
3. Barry A, **Loewen P**. Coronary Artery Bypass Grafting: P2Y12 inhibitors and ACEI/ARBs To Corroborate Health outcomes (CABG-PATCH).
  - *Analyses complete. Manuscript in preparation*
4. Eslami M, **Loewen P**. Analysis of relationships between OAC adherence and major bleeding outcomes in patients with atrial fibrillation: A systematic review. *Protocol development underway.*
5. Dahri K, Pammet R, Ragsdale, P, Barry A, **Loewen P**, Wong J. Community Based Pharmacists' Perspectives on the Expansion of Prescribing Authority in British Columbia. *Survey design underway.*
6. **Loewen P**. AF Sensations: Bridges to Diagnosis. *Protocol design underway.*

7. Wilson R, Rush K, **Loewen P**, Janke R, Williams O, Neill K, Kenzie C. Self-Care in AF: A scoping Review. *Manuscript in preparation for submission.*
8. De Lemos J, Klaasen A, **Loewen P**. Improving community outreach to providers to reduce preventable adverse drug events resulting in hospitalization. *Project based at Richmond Hospital. Data analysis and program delivery underway.*
9. De Lemos J, Mouhajer M, Al-Olabi N, **Loewen P**. Improving in-hospital detection of preventable adverse drug events: Focus on Medicine and Emergency Department nurses. *Project based at Richmond Hospital. Data analysis and program delivery underway.*
10. Alibhai J, Lau K, **Loewen P**. Factors affecting choice of oral anticoagulant prescription for stroke prevention in atrial fibrillation: a scoping review. *Data analysis in progress.*
11. **Loewen P**, Chohan H. International stroke risk estimates in atrial fibrillation treatment decisions: meta-analysis and integration into a decision aid. *Data collection and analysis in progress.*