DECEMBER 2018



CHANGE THE WORLD

A monthly newsletter about clinician scientist development for students, residents, and everyone else in Manitoba's academic health sciences network.

From the Max Rady College of Medicine Clinician Investigator Program, PGME Resident Research (Dr. Shayne Taback and Phillip Snarr), and UGME Office of Advanced Degrees in Medicine (Dr. Mark Nachtigal, Dr. John Embil, and Allison Birch)

In this December edition

- 1. Welcome Message (p.2)
- 2. Trainee Spotlight on MD/PhD Student Andrew McDermid (p.3)
- 3. Trainee Spotlight on Cardiac Surgery Resident and Recent Graduate of MSc and CIP Dr. Carly Lodewycks (p.4)
- 4. Timelines for Advance Degree Programs in Medicine (p.5)
- 5. Question of the Month: Evidence-based Medicine: As a clinician and as a reseracher, what training or experience should I have in evidence synthesis? (p.6)
- 6. Upcoming Events (p.7-13)
- 7. Awards (p.11)

Rady Faculty of Health Sciences



WELCOME MESSAGE



Welcome to the December edition of the Change the World Newsletter! We are very excited that our December edition will feature two trainee spotlights which gives a great look into the training paths of clinician scientists. Our first trainee spotlight is on Andrew McDermid who is currently a student in the MD/PhD program at the University of Manitoba. Our second trainee spotlight is on Dr. Carly Lodewycks who is currently a Cardiac Surgery resident and recently completed her Masters of Science in Community Health Sciences in conjunction with the Clinician Investigator Program at the University of Manitoba. Both of our spotlight trainees are on different paths to their careers as Clinician Scientists and gave great insights into their training, career goals, and certainly both have very bright futures!

The December edition also features a great contribution from Dr. Ahmed Abou-Setta and Rachel Carlson from the Knowledge Synthesis platform at the George & Fay Yee Centre for Healthcare Innovation. If you would like to learn more about the Knowledge Synthesis platform, the George & Fay Yee Centre for Healthcare Innovation and all of the wonderful services they can provide, then you will want to read this issue's question of the month: Evidence-based Medicine: As a clinician and a researcher, what training or experience should I have in evidence synthesis?

Also, please make sure to read about our upcoming events like the Graduate Studies Open House, the upcoming Introduction to Network Meta-Analysis Workshop, and the next "Speed Date a Biostatistician" open house. Seven trainees attended our last open house and there lots of interesting discussions and collaborations taking place. The Awards section of the newsletter will provide you with information on upcoming PGME Awards and their deadlines.

We hope that you enjoy the December edition of the Change the World Newsletter and if you have any feedback regarding content you would like to see in upcoming issues or if you have any questions don't hesitate to reach out to us by email at: pgmerra@umanitoba.ca

Phillip Snarr



UNDERGRADUATE MEDICAL EDUCATION PROGRAMS

Trainee Spotlight with current MD/PhD student Andrew McDermid

Welcome to the new Trainee Spotlight section of our Undergraduate Medical Education Programs. This section will give you a bit of an inside look into one of our current students in Undergraduate Medical Education at the University of Manitoba. We will be featuring trainees within different training paths and at different stages of their medical training. Our first trainee spotlight features Andrew McDermid who is currently within the MD/PhD program at the University of Manitoba. Andrew shares a bit about what interested him in pursuing this path, advice he would give to students considering completing an MD/PhD, and how he would like to integrate research into his future clinical practice. Thank you very much to Andrew for this great Trainee Spotlight!



Q: What motivated you to pursue an MD/PhD?

A: An MD/PhD was the natural choice for me. I have always been interested in many aspects of both clinical medicine and research. I hope to use both to help people in the future and to keep my career exciting with my creativity. Research offers me an opportunity to direct my creativity by solving problems related to a specific research question. Creativity is lauded in basic research, whereas creativity within parameters set by not doing harm can be a real asset in a career in clinical medicine. Clinical medicine offers many opportunities for creativity, with the added benefit of being inspired by clinical experience. Being part of a team that improves peoples' quality of life is a powerful experience. It is an incredible motivator, both to help more people and to drive me to learn how to help them better. The MD/PhD program will better prepare me to make both research and clinical medicine a part of my career.

Q: Can you tell me a bit more about your Doctoral research?

A: My research focus is to tie genetic elements of Enteroviruses with opportunistic clinical surveillance to elucidate the relationship between recombination and outbreaks of different Enterovirus species. It incorporates more than 20 years of surveillance and links it to patterns within viral genomes of hundreds of representative strains within 4 species of Enterovirus. My research is unique, comprehensive. My project was only possible through access to both the largest repository of Enteroviruses in Canada and two national Enterovirus surveillance systems housed within our laboratory. I have the pleasure of working at the prestigious National Microbiology Laboratory with a fantastic team of researchers and technicians. I hope for my research to influence surveillance of Enteroviruses in Canada and how we think of outbreaks, which may lead to new strategies in prevention in the future.

Q: What advice would you give to someone thinking about pursuing an MD/PhD?

A: I would suggest that you have a discussion with potential supervisor(s) about your project before you commit. After this discussion you should have a good idea of what to expect and what their expectations are. You might also want to speak to students or lab members independently to gauge how compatible you'll be. A PhD is a huge commitment and you should be able to picture yourself in the role of a researcher for a long time. Next, take ownership of your project. A PhD isn't job training, but rather an exercise in using the literature to inspire creativity in problem solving. You won't be able to lean on your supervisor for solutions when you're working, so take advantage of the opportunity to do so, but strive to become an independent problem solver with your supervisor's feedback.

Q: Do you plan to integrate your research into your future clinical practice and experience?

A: I certainly plan to incorporate my new knowledge of how academic research works, many of my techniques and likely my connections to researchers into my future research. It is difficult to say where my next few years will take me, and which opportunities lie ahead. I'm keeping an open mind and will be looking for the right opportunity to incorporate a satisfying research project into my career. That may include integrating many other aspects of my research into my experience.

Thank you for the opportunity to answer your questions,

POST GRADUATE MEDICAL EDUCATION

Trainee Spotlight with current Cardiac Surgery Resident Dr. Carly Lodewycks

Welcome to the new Trainee Spotlight section of our Post Graduate Medical Education Program. This section will give you a bit of an inside look into one of our current trainees in Post Graduate Medical Education at the University of Manitoba. We will be featuring trainees within different training paths and at different stages of their clinician science training. Our first trainee spotlight is featuring Dr. Carly Lodewycks who is currently a Cardiac Surgery Resident and recently completed a Masters of Science Degree in Community Health Sciences and the Clinician Investigator Program at the University of Manitoba supervised by Dr. Navdeep Tangri and Dr. Rakesh Arora. Carly shares a bit about what led her to become interested in pursuing a career in clinician science, what challenges can face a person pursuing this path, and advice that she would give to those training to become clinician scientists. Thank you very much to Carly for such an educational and interesting trainee spotlight!



Q: What led you to become interested in Clinician Science?

A: I had experience with both basic science and clinical research prior to entering residency. I knew I wanted to pursue research in some capacity as part of my career. Additionally, the field of cardiac surgery highly values academic training with most major centres in Canada being University affiliated. I felt that extra graduate training and the CIP program would allow me to acquire the necessary skills to develop and maintain an active research practice upon completion of my residency training.

Q: At what point in your training did you decide that Clinician Science is the path that you would like to pursue?

A: Near the end of my first year of residency.

Q: How did you find the resources that were in place to provide information about pursuing a career as a clinician scientist?

A: I met with Dr Taback early on to learn about the CIP program and the opportunities available to me. This was extremely helpful. I was also fortunate in that previous residents in my program had completed CIP and were able to provide some advice as well.

Q: What resources helped you the most along your training path?

A: Through my involvement CIP, the Community Health Sciences department and Manitoba Centre for Health Policy I was able to meet so many new people with expertise in a variety of areas. This was helpful for both completing my own thesis project and also making connections for future research endeavours.

Q: What challenges did you encounter along the way?

A: I found it difficult initially to transition from busy clinical residency back to full time academic work. Eventually I figured out a new routine but I definitely missed the clinical work during my time as a grad student. The other major challenge for me was learning how to use SAS to manipulate and analyze my data... it is a very steep learning curve!

Q: How do you feel your research training will help in your clinical career?

A: My Masters in CHS has given me the confidence and skills to critically appraise relevant literature. This will allow me to evaluate data and determine what is appropriate for incorporation into my own clinical practice. Additionally, my experience working with population level data at the MCHP provides a solid foundation for ongoing research throughout my clinical career. I hope to work in Manitoba at the end of my clinical training, and continue to utilize MCHP to evaluate outcomes in cardiac surgery patients.

Q: What advice would you give to trainees who are interested in pursuing a career as a clinician scientist?

A: Find an area of study you are truly passionate about! Talk to people you know who have done grad studies/CIP program and ask for tips/advice. Try and plan ahead. Sometimes things (ethics, grants, applications, committees etc...) take longer to sort out than anticipated, it's always better to be prepared.

Q: What resources would you put in place to help trainees on their path to become a clinician scientist?

A: It may be interesting to establish a formal mentorship program for trainees with existing clinician scientists, even prior to a trainee's entrance into their academic years.

Interested in Advanced Degrees in Medicine?

Why do an Advanced Degrees in Medicine?

- Enhance critical thinking
- Develop advanced discipline specific expertise & technical skills
- · Learn experimental design and refinement
- Augment you interpretative capacity
- Advance your verbal and written communication skills
- All residency and fellowship programs have a research requirement
- Advanced degrees make you more competitive for residency, fellowship, and faculty positions

The combined-degree **MD/MSc Program** in the Max Rady College of Medicine is designed to begin development of academic clinician scientists by providing them advanced clinical, and research skills. The minimum program of study is the total required by the Max Rady College of Medicine for the MD program (4 years) **plus** the minimum requirements of the Faculty of Graduate Studies. Typically, students complete an MSc in 2-2.5 years; however the nature of the project, the supervisor and the student's motivation all factor into the time to complete.

The **MD/PhD Program** in the Max Rady College of Medicine is designed to produce academic clinician scientists who are interested in a career that combines both research and clinical medicine, providing them advanced clinical and research skills. As the MD/MSc, the program timeline is the total required by the Max Rady College of Medicine for the MD program (4 years) plus the minimum requirements of the Faculty of Graduate Studies. Typically, students complete a PhD in 4-6 years; however the nature of the project, the supervisor and the student's motivation all factor into the time to complete.

Timelines for the Advcaned Degrees in Medicine Program

Option 1: Pursue Graduate Training (PhD) once in medical school								
YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5	YEAR 6	YEAR 7	YEAR 8	М
MD	MD	Start PhD	PhD	PhD	PhD	MD	MD	D
Pre- Clerkship	Pre- Clerkship	Dual registered students, considered				Clerkship	Clerkship	/
Training	Training	full time graduate students while						Р
		pursuing PhD actively						h
								D

Students intested in graduate school, once in medicine need to start the application process within their second year of medicine and contact the Program Director early on. Students interested in the MD/PhD option should be aware that typically students take between 3.5-5 years to complete the PhD component.

Option 2: Pursue medicine school after lab work is completed in graduate program (PhD) M							
YEAR 1	YEAR 2	YEAR 3 YEAR 4	YEAR 5	YEAR 6	YEAR 7	YEAR 8	D
PhD	PhD	MD MD	PhD	PhD	MD	MD	1
Full time Graduate	*Defer	Dual registered students, considered	Take time away from medical school to		Clerkship	Clerkship	P
student	acceptance	full time medical students while	complete thesis, considered full time				h
	into medicine	enrolled full time	graduate students				D
	till lab work is						
	completed						

Option 1: Pursue Graduate Training (MSc) once in medical school					м	
YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5	YEAR 6	D
MD	MD	Start MSc	MSc	MD	MD	1
Pre- Clerkship	Pre- Clerkship	Dual registered stude	nts, considered	Clerkship	Clerkship	
Training	Training	full time graduate stu	dents while			м
		pursuing MSc actively	/			s

Students intested in graduate school, once in medicine need to start the application process within their second year of medicine and contact the Program Director early on. Students interested in the MD/MSc option should be aware that students typically complete and MSc in 1.5-3 years.

Option 1: Pursue Graduate Training (MSc) once in medical school						
YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5	YEAR 6	м
MSc	MD	Start MSc	MSc	MD	MD	D
Full time graduate	Pre- Clerkship	Dual registered students, considered	Complete MSc Thesis and defend	Clerkship (Clerkship	
student	Training	full time graduate students while				м
		pursuing MSc actively				s
						с

QUESTIONS OF THE MONTH

Evidence-based Medicine: As a clinician and as a researcher, what training or experience should I have in evidence synthesis?

Clinicians and clinician-investigators make important decisions about patient care through direct treatment and/or through clinical research. In both roles, knowledge (evidence) synthesis (KS) is a cornerstone of best-practice.

For clinicians, understanding the principles of KS can support evidence-based decision-making when it comes to patient care. Basic skills in various forms of KS, including systematic reviews, network meta-analyses, scoping reviews, rapid reviews, and others can promote your confidence, critical thinking ability, and understanding when it comes to rapidly evolving medical evidence.

For clinician-investigators, KS is fundamental. From understanding how to ask the right research question, which patient-oriented outcomes should be reviewed, and the biases associated with different study designs, investing in KS training can improve the quality and efficacy of your research. Needless to say, granting agencies are also interested in investing in areas where a real gap in the evidence is presented through properly conducted evidence syntheses.

The Knowledge Synthesis platform at the George & Fay Yee Centre for Healthcare Innovation provides training and support to students, clinicians, investigators, and policy-makers to improve service delivery and optimize the health of Manitobans. Services range from complete management of KS projects for academic publication to consultation on particular aspects of the KS pathway. Other services include informing funding applications, and guiding health policy decision-making. Of particular interest to residents and fellows, is that they can be involved in our ongoing research, getting 'hands-on training' as 'learning through collaboration'. Further they may want to work with us during their research block on topics of interest to their specialties. We also offer a number of training opportunities for clinicians and investigators to improve their knowledge and practice of KS.

The KS platform is home to an expert team of methodologists, systematic reviewers, academicians, biostatisticians and librarians who can collaborate with you to produce:

Systematic reviews (e.g. interventional reviews, observational reviews, diagnostic accuracy reviews and health technology assessments)

Traditional meta-analysis and advanced analyses (e.g. network meta-analysis)

Rapid reviews and evidence summaries for government & decision makers

Novel knowledge synthesis and meta-analytic methods research

For additional information about our services, please contact us at <u>knowledge.synthesis@umanitoba.ca</u> or visit <u>https://chimb.ca/knowledge-synthesis</u>



GEORGE & FAY YEE Centre for Healthcare Innovation

Rady Faculty of Health Sciences



University <u>of</u> Manitoba

COURSE ANNOUNCEMENT SYSTEMATIC REVIEWS AND META-ANALYSIS UNIVERSITY OF MANITOBA, RADY FACULTY OF HEALTH SCIENCES, DEPARTMENT OF COMMUNITY HEALTH SCIENCES

This course will guide participants through the process of completing their own publication-quality systematic review and meta-analysis. Whether you are preparing a funding application or synthesizing knowledge to inform policy or a clinical decision, this course will provide participants with the knowledge and skill-set necessary to plan, conduct, analyze, and report high quality systematic reviews and meta-analysis.

Thursdays • January 10 - April 4, 2019 • 1 - 4 pm

Bannatyne Campus, University of Manitoba, Winnipeg, MB

Who should take this course:

- » Physicians (trainees and faculty)
- » Graduate Students

- » Investigators
- » Research Personnel

Registration Information

- » Course No. CHSC 7362
- » Permission from the course director is required
- » If you are not currently registered as a graduate/post-graduate student, then you must apply to become an "occasional student" before October 1st, 2018.

Application details can be found on the CHS website: http://umanitoba.ca/faculties/graduate_studies/admissions/programs/visiting.html

Course Directors

Dr. Ryan Zarychanski (rzarychanski@cancercare.mb.ca) and Dr. Ahmed Abou-Setta (ahmed.abou-Setta@umanitoba.ca).

REGISTRATION IS LIMITED!







Course: Science and Practice of Knowledge Translation in Health Research

Knowledge Translation

Centre for Healthcare Innovation

Description \downarrow

Course Overview

This course will provide students with an overview of the fundamental aspects and current state of knowledge translation (KT) science and practice in health research and care. The topics covered in the course will equip the student with the basic principles required to integrate knowledge translation science into health research and apply best KT evidence and methodologies to their dissemination and implementation activities.

Registration Information

Tuesdays, January 8th- April 9th, 2019, 9:30 am - 12:00 pm

Course code: CHSC 7250

Instructor: Dr. Kathryn Sibley

Registration is limited and permission from the course instructor is required

If you are not currently registered as a graduate/ post-graduate student, then you must apply to become an "occasional student". Application details can be found at http://umanitoba.ca/faculties/graduate_studies/admissions/programs/visiting.html



January 08, 09:30 - April 08, 12:30, 2019 Team: Events, Training & News Posted on October 29, 2018 Add to your calendar as an .ics file



February 20, 2019 | 9 AM – 3 PM Bannatyne Campus

Learn about Master's & Ph.D. degree options within the Rady Faculty of Health Sciences.

Join us for our free Graduate Studies Open House at the Rady Faculty of Health Sciences! Features of this recruitment event include presentations on select graduate programs, Bannatyne campus tours, networking opportunities with professors and current students, a pizza lunch, and an information village.

New this year

Drop off copies of your resumé at the information village for summer job opportunities!

For more information and to register, visit umanitoba.ca/graduate_studies

Rady Faculty of Health Sciences



University •• Manitoba

POST GRADUATE MEDICAL EDUCATION

The Biostatistical Consulting Unit Presents: Biostatistical Consulting for Residents and Fellows

Biostats Open House



"The best time to meet with a statistician is before you start your project" -Dr. Shayne Taback

Event Description:

Would you like to "speed date" a biostatistician? While this is your chance! This is a perfect opportunity to get a wide range of feedback and suggestions from a team of skilled and diverse statisticians. Whether you are in the planning stages of your project, in the middle of your research, or putting the final touches on your project this is the perfect event for you.

The format of this event is much like speed dating. There will be multiple statisticians set up around the room and ready to learn about your project and provide feedback and suggestions. This is your opportunity to see which statistician you connect with and who will be able to guide you through the statistics in your project. Each statistician will bring their own unique background and approach to your project and you will leave with numerous insights and suggestions to use moving forward. Following this evening, you can continue to receive free 5 hours of statistical consultation from the biostatistician of your choice.

Don't miss out on this event as it is FREE, spaces fill up quickly and there are only limited spots available. Email pgmerra@umanitoba.ca as early as you can to reserve your seat. Trainees who register but do not attend may not be eligible to register for future sessions.

Event Details:	Date: January 30, 2019
	Time: 4:00 - 5:30 PM
	Location: Room 204, Brodie Centre
To Register:	Please email PGMERRA@umanitoba.ca

If you have specific questions about event content, please contact:

Dr. Depeng Jiang Email: Depeng.Jiang@umanitoba.

Rady Faculty of Health Sciences



POST GRADUATE MEDICAL EDUCATION

Upcoming Research Award Deadlines

CPGME Awards

CPGME Adniminstered Awards, 2018/2019 Academic Year	Application	Deadline
Dr. Diane Biehl Research Award in Postgraduate Med. Ed.	Download	Dec. 15, 2018
R. Samuel McLaughlin/MMSF Research & Education Fellowship	<u>Download</u>	Feb. 15, 2019
Dean of Medicine's Education & Research Fellowship Fund	<u>Download</u>	Feb. 15 <i>,</i> 2019
Dr. T.J. Lamont Memorial Prize in Maternal & Neonatal Welfare	Download	Apr. 15, 2019
Prowse Prize for Clinical Research	<u>Download</u>	Apr. 15, 2019
Pawas and Mradula Verma Fellowship for Transplant Research	Download	May 15, 2019
CSCI-CIHR Resident Research Award	Download	May 15, 2019

HSC Medical Staff Fellowship Fund Awards

HSC Medical Staff Fellowship Fund Awards (click for more information)	Application	Deadline
HSC Medical Staff Fellowship Fund Research Grant	<u>Download</u>	January 31, 2019
HSC Medical Staff Fellowship Fund Travel Grant	<u>Download</u>	January 31, 2019
HSC Medical Staff/Rady Faculty of Health Sciences Travel Fund	<u>Download</u>	January 31, 2019



VPRIO Workshop Series on Best Practices in Research Management

The Vice President (Research and International) Office is pleased to offer the Workshop Series on Best Practices in Research Management, a workshop series with a goal of providing a broad understanding of the requirements and institutional obligations in carrying out research and development as a faculty member at the University of Manitoba.

The core requirements for the workshop series are completion of 4 core courses and 1 from the listed options over a two-year period. Individuals who complete the requirements will receive a letter of acknowledgement from the Vice President (Research and International) Office for their Tenure and Promotion file.

Core 1 - Research Integrity Online Course-Self Register through UMLearn

This session can be completed at any time by registering through UMLearn. <u>https://universityofmanitoba.desire2learn.com/d2l/login</u>

In this course participants will have an opportunity to learn the principles and professional responsibilities of what doing good research implies. Participants will be exposed within a highly interactive environment to practical advice on how to deal with the challenging situations in which they may find themselves doing research within their own area of expertise, along with the latest standards, odes and policies in the responsible conduct of research both locally and on a global basis.

Any of the following five disciplinary areas can be picked to obtain a *Certificate of Successful Completion:* (A minimum of 2 hours spent working through the module of your choice is expected in order to receive a certificate)

- 1) Arts and humanities
- 2) Biomedical sciences
- Engineering and technology
- 4) Natural and physical sciences
- 5) Social and behavioural sciences

Each module is made up of 4-5 hours of online content plus an optional 25-32 hours of associated activities which will cover, among other topics, real cases of Serious Research Misconduct such as Fabrication, Falsification, Plagiarism and Questionable Research Practices such as Failure to keep records, mismanagement of data, ghost or guest authorship, improper acknowledgements, improper practice in presenting data, imagery, raising false expectations, etc.

Core 3 - Understanding Legal Terms of Research Contracts and Ensuring Compliance

January 18, 2019, 1:00-3:00 pm, 210 Helen Glass, Fort Garry Campus

Presenter: Lynne Hiebert (Legal Counsel, Office of Fair Practices and Legal Affairs)

This session will include a brief overview of the Research Agreement Policy and Procedure and will review and explain the most commonly occurring provisions in research agreements including reporting, confidentiality, publication, intellectual property ownership and indemnification.



University of Manitoba

VPRIO Workshop Series on Best Practices in Research Management

Optional Sessions

Option I - The International Centre: Comprehensive Support & Services for International Activities

February 8, 2019, 1:00-3:00 pm, 210 Helen Glass Centre, Fort Garry Campus

Presenter: Gitan Armour (Advising and Transitions Team Lead, International Centre) Tara Cleve (Partnerships and Mobility Lead, International Centre)

The University of Manitoba International Centre will provide an overview of their services for faculty, staff and students supporting teaching, research and service. Session topics include partnership development, the international agreement process and how the Centre supports registered students from pre-arrival to graduation.

Option 2 - Understanding Research Ethics and Privacy Legislation March 8, 2019, 1:00-3:00 pm, 210 Helen Glass Centre, Fort Garry Campus

Presenters: Pinar Eskicioglu (Human Ethics Coordinator, Office or Research Ethics and Compliance) Karen Meelker (Access and Privacy Officer, Privacy and Access Office)

This session will include a brief overview of research ethics and privacy legislation, including helpful tips and best practices to ensure compliance with provincial privacy laws (PHIA and FIPPA) and federal (TCPS) guidelines. Participants will learn more about the REB timelines and how to create a well prepared ethics submission.

Option 3 - Navigating Clinical Trial and Data Sharing Agreements with Affiliate Health Institutions

April 12, 2019, 1:00-3:00 pm, A106 Chown, Bannatyne Campus

Presenters: Kerrie Hayes (Director, Research Contracts, Office of Research Services) Lynne Hiebert (Legal Counsel, Office of Fair Practices and Legal Affairs)

This session will help to prepare you for the potential issues that arise when your project requires collaboration with affiliated hospitals and health authorities. Advance preparation is key! Participants will learn about the considerations and best practices for successfully administering the project.

To register or for more information visit: http://umanitoba.ca/researchintegrity/best_practice.html