The Department of Internal Medicine remains the largest and most research intense clinical department at the Max Rady College of Medicine/Rady Faculty of Health Sciences, University of Manitoba. I am humbled and proud at the same time of being able to serve as its Head.

In 2018, the previously announced major overhaul of our health care system really started to affect most of us individually in some form or another, but also as an academic department. While this comes with many changes and has created challenges, the changes are necessary to improve and sustain how we deliver care to our patients. Change creates uncertainty and is disruptive at times, but also creates opportunities. In order to advance our mission, we need to continue to stay alert, identify, and take advantage of opportunities that present whenever they align with our strategic goals.

The planning for our new ambulatory care center, scheduled to open in 2020, progressed throughout the year. The required approval process is expected to be completed in early spring, and work on the ground to start shortly thereafter. The center has a modern layout that takes new research on clinic work flow into account, will unite all our outpatient clinics in one building, aims at interdisciplinary collaboration, and strengthening the department’s academic mission (education, research).

Sustaining a respectful learning environment was and remains a number one goal which all department members work on hard and continuously together. This includes diversity, inclusion, and civility in dealing with each other. Undergraduate Medical Education (UGME) accreditation and preparing for the introduction of Competency Based Education (CBE) were at the forefront of our attention in medical education.

Highlights of the department’s research activities include translational research by various clinician-scientists collaborating with the department’s own Manitoba Center of Proteomics and Systems Biology. This has allowed our transplant medicine and rheumatology research groups to gain international reputation. Other internationally recognized research teams utilize large, linked clinical and administrative databases to advance our knowledge of various aspects of inflammatory bowel disease, multiple sclerosis, chronic kidney disease, infectious diseases, cardiology, critical care and hematology/oncology to name just a few. There would be more to highlight, not the least the striving for excellence of any and all of our department members, regardless of their rank or professional background. Working together as a team makes us strong, and includes accepting that not everybody and every achievement can be mentioned in a report like this. I trust that those who do not read about themselves here will understand.

Dr. Eberhard Renner MD, FRCP, FAASLD Department Head, Internal Medicine

Q&A WITH DR. RENNER

Did you always have Medicine in mind as a career goal?
No, the decision to study Medicine came relatively late and only after some detours including philosophy and acting …

What motivated you to pursue a career in Gastroenterology and Hepatology?
I completed Med School just to find out that there were no residency positions available. I wrote dozens of applications before finally being accepted into clinical pharmacology. As it happens, my boss who became my mentor, a gastroenterologist by training, was interested in how the liver handles drugs and how this is affected by liver diseases. The liver and academic medicine fascinated me ever since.

What are the challenges in combining clinical and research work, and how do you balance the clinical and research sides of your career?
Finding the right balance is definitely a challenge. Patients always come first, but you have to find a way to set time aside for your research interests. This often means longer hours - and less pay. I strongly feel that the intellectual stimulation that inevitably comes with doing research makes more than up for that!
MISSION

WHO WE ARE, HOW WE WORK TOWARD OUR VISION, WHAT MAKES US UNIQUE

We deliver state-of-the-art (tertiary) medical care in a patient centered, effective and efficient manner
We train the next generation of academic internists and subspecialists who innovate and excel in life-long learning
We are leaders in key areas of biomedical research and innovation at a national and international level

VISION

LOOKING AHEAD

To be a national leader in (tertiary) patient care, medical education, and bio-medical research with international recognition in priority areas

CORE VALUES

GUIDING PRINCIPLES OF OUR WORK AND HOW WE OPERATE

Patients always come first
We treat each other with respect
We do what we say we do
We hold each other accountable for what we do
We innovate and commit to continuous learning
We embrace change as an opportunity
We welcome competition as a driver of quality and innovation

What aspects of research and clinical practice intrigue you the most?

Most fascinating for me is helping to define a clinical question by stringent clinical observation and to find answers by seeking and applying novel molecular insights. The hepatitis C story is a great example for this and I say “helping”, as no single researcher or clinician can do this alone.

What attracted you back to the University of Manitoba?

The chance to take on a position where I might be able to make a difference or at least try to …

What advice would you give to medical students and residents?

Think big, embrace change, embrace the hard work, and make it better!
We Are:

06 DISTINCT  Our people make us great
30 UNPARALLELED Our trajectory and numbers speak for themselves
32 PARAMOUNT Recognizing our acclaimed leaders, while ensuring an extraordinary future
36 COMMUNITY Uniquely positioned to create lasting impact
38 EDUCATORS Cultivating wisdom through our distinguished institution
42 WORLD CLASS Transcending research beyond borders
48 EVOLVING Limitations do not exist in our world
50 THE CENTRE OF IT ALL Why we choose Winnipeg to be our home

Esplanade Riel pedestrian bridge. This five-metre wide and 250-metre long “people path,” is located north of the junction of the historic Red and Assiniboine Rivers, and provides a link between The Forks and Winnipeg’s French Quarter. The bridge was named in honour of Louis Riel. (Tourism Winnipeg) Image courtesy of Mayelle E. Reyes
WE ARE: DISTINCT
Our people are the essence of the department. Every individual is an integral part of our current success and catalyst towards an unprecedented future. It is because of their passion, dedication and resiliency that our vision is becoming a reality. We would also like to take a moment to recognize those we were unable to share in this edition. Every individual that continues to dedicate themselves to the department, are truly what makes us the Centre of It All.
WE TEACH OUR MEDICAL STUDENTS that in physiology, nothing occurs in isolation. When the heart malfunctions, the kidneys suffer. When the liver fails, the brain is impaired. One dysfunctional component of a system can activate a chain reaction of compensatory mechanisms that affect virtually all cells in all systems. Most aspects of health are interdependent.

It isn’t a stretch to look at our own well-being and capacity to perform through the same lens. We work together to provide superb, patient-centered medical care to the population of Manitoba. Our ability to do this job together is interdependent on the skill, attitude, behavior and health of the colleagues we need and value.

Our teaching, learning and clinical environments are aggregates of our interactions as individuals, and the smallest interactions are impactful. Acts of civility, when repeated on a daily basis, lead to a more relational environment that is higher-functioning and welcoming to all.

Under the leadership of Dr. Renner, our department has made a commitment to examining and reimagining our culture. For 2019, this vision includes initiatives to understand the barriers women have sometimes faced within our sections, increasing and championing civility, diversity and inclusion, and building better mentorship opportunities from groups that are underrepresented in our sections. We are also seeking to better understand how physician burnout is affecting our members so that we can begin to address issues that are within our control in ways that are likely to have tangible and lasting impact.

Let this work be part of our legacy to the next generation of physicians at the University of Manitoba … a more relational existence, a more equitable and supportive environment, more humanity.

LEAVING A LEGACY THAT MAKES AN IMPACT

CONGRATULATIONS & THANK YOU

This year our department joins in celebrating the retirement of two valuable team members:

- **DR. DAVID MYMIN**
  - A pioneer in the section of cardiology at the University of Manitoba
  - Years of Service (1962-2018): 56

- **DR. BRENT SCHACTER**
  - Hematology/Oncology, Cancercare Manitoba and University of Manitoba
  - Years of Service (1972-2018): 46

57 ♀
FEMALE GFT MEMBERS

332
TOTAL FACULTY

17
SECTIONS

56
YEARS OF SERVICE
(1962-2018)

46
YEARS OF SERVICE
(1972-2018)
Department Overview

The Department of Internal Medicine at the University of Manitoba’s Rady Faculty of Health Sciences is the largest academic department of the Max Rady College of Medicine.

The department supports tertiary care and quaternary care medicine for the Province of Manitoba, and parts of Nunavut and Northwestern Ontario - a catchment area consisting of over 1.5 million people. The department is made up of 17 sections with national and world-renowned faculty members and staff dedicated to excellence in patient care, research and education.

The Department of Internal Medicine has six clinical teaching units and is affiliated with two academic health centres: Health Sciences Centre, St. Boniface Hospital, as well as the Grace Hospital. The CTU’s are the focal point of the in-patient training programs for medical residents and clerks rotating through Medicine.

The Rady College of Medicine is affiliated with the Winnipeg Regional Health Authority (WRHA). The WRHA oversees the health management of Winnipeg urban hospitals as well as the Churchill Health Centre; community health agencies, home care, public health mental health services and long term care facilities. Clinical programming is organized by a matrix management model. There are 16 clinical programs in the WRHA, each responsible for the provision of services to their population base within this system. A three person multidisciplinary team consisting of medical, nursing, and an administrator, leads each clinical team. The Department of Internal Medicine is affiliated with seven of these programs.
ADMINISTRATIVE STAFF

Our support staff represent the talent and expertise, that keep our department functioning to the highest standards. Each name listed below deserves utmost recognition, for their continued contribution and dedication to serving our department.

ADMINISTRATIVE SUPPORT
Allan, Nicole
Ang, Sheila
Ansell, Donna
Barthelette, Sylvia
Bernaldo, Sarah
Church, Cindy
Cirillo, Wendy
Coss, Bonnie
Cote, Amy
Desrosiers, Brenda
Devigne, Paulette
Dolor, Laura
Dolovich, Casandra
Dungca, Maria
Ellison, Karen
Greco, Rita
Gurney, Diane
Gushulak, Janice
Harper, Angela
Heggie, Beverly
Holubowich, Martha
Ilao, Jillian
Kearns, Kari
Kiel, Karen
Lejano, Michelle
Manipol, Elaine
Mann, Rita
Marcknow, Carole
Mcfarland, Judith
Mcauley, Colleen
Miller, Dorota
Muloj, Lisa
Nanowski, Annette
Nelson, Tiffiny

PHYSICIAN SERVICES MANAGER
Armitt, Kim
Burton, Tracey
Davidson, Liane
Watsko, Ashley

TRANSCRIPTION SERVICES MANAGER
Belanger, Cathy

FINANCE MANAGER
Cipriano, Tamara

PROGRAM ADMINISTRATOR MANAGER
Doyle, Suzanne

SERVICE REDESIGN MANAGER
Morris, Kym

MEDICAL TRANSCRIPTIONIST
Anderson, Kaeren
Angelkovski, Lisa
Balcaen, Maria
Blackman, Lisa
Charney, Dianne
Christianson, Susan
Chua, Nelinda
Corrigan, Sherri
De Guzman, Laurie
De Guzman, May
Donovan, Donna
Farr, Ceridwen
King, Barbara
Klyne, Heather
Krzyzstofik, Geraldine
Kyweriga, Barbara
Marte, Sheila
Mercredi, Darlene
Piercy, Marcella
Popowich, Margaret
Quilloy, Karen
Roberts, Leigh
Sangster, Colleen
Sehgal, Vikas
Sehgal, Vishal
Skinner, Stephanie
Vokey, Pamela

PROGRAM ADMINISTRATOR
Blonjeaux, Melissa
Field, Marie
Hodnett, Cidalia
Labarre, Janet
Loyola, Melanie
Posillipo, Tammy
Stratton, Deb
Thibert, Holly
Van Der Vis, Kathy
Vertz, Vanessa
Wirth, Lisa

SERVICE REDESIGN
Aubel, Herman
Eldridge, Karen
Esteves, Sandra
Knight, Julie
Mauro, Claudia
Sobetski, Rayeann
Styba, Terrence
Tenbergen, Tina
STANDING COMMITTEES

Our standing committees play an essential role in our strategic planning, fiscal management, policy development and implementation. The committees serve as an important communication channel within the department and ensure the bi-directional flow of accurate and timely information between leadership of the department and sections, and individual members.

SENIOR ADVISORY
CHAIR: Dr. Eberhard Renner
Senior advisory group to Department Head

EXECUTIVE
CHAIR: Dr. Eberhard Renner
Executive advisory group to Department Head

RESEARCH AND FACULTY DEVELOPMENT
CHAIR: Dr. Hani El-Gabalawy
Advise on career development for junior faculty and make recommendations regarding Faculty Development Fund
Review research performance for all faculty with a research commitment greater than 25%

PROMOTION AND TENURE
CHAIR: Dr. John Wilkins
To accept and review applications from faculty for promotion consideration, and make recommendations to Department Head on each applicant

POSTGRADUATE MEDICAL EDUCATION
CHAIR: Dr. Pamela Orr
To ensure achievement and maintenance of academic, clinical, professional and leadership excellence in postgraduate medical education

FINANCIAL OVERSIGHT & ADVISORY
CHAIR: Dr. Martin Karpinski
Provide a forum for discussion of any issue of importance to the GFT members, to ensure there is transparency, accountability and a feedback mechanisms for GFTs, particularly with regard to departmental finances and its planning, while always ensuring that the academic mission moves forward
1. What are some activities you like to spend some time doing in the Summer?
   • There is always time made for travel and going to the lake.
   • Never miss the annual Winnipeg Folk Festival.

2. What are some activities you like to spend some time doing in the Winter?
   • When time permits, I travel as much as possible.

3. What is your favorite landmark/site in Winnipeg or Manitoba?
   • Winnipeg Beach and its unique community, is a great place to check out!
Section of Cardiology

The mission for the Section of Cardiology encompasses the department’s three pillars of research, education, and patient care. Specifically:

1. To explore leading edge basic science, translational, clinical, and population research that will continue to redefine the field of cardiovascular medicine in Manitoba.
2. To train the next generation of leaders in academic cardiology.
3. To provide exceptional care for patients at risk of established cardiovascular disease in our province.

There are currently 29 full-time academic cardiologists within the Section of Cardiology with major academic and clinical responsibilities in interventional cardiology, electrophysiology, echocardiography, cardiac computed tomography, cardiac magnetic resonance imaging, critical care cardiology, nuclear cardiology, cardiac rehabilitation, heart failure and cardiac transplantation, adult congenital heart disease, and cardic palliative care.

For 2018, our 3 notable highlights include:

1. The retirement of Dr. David Mymin from his dedicated 56 years of service (1962-2018) as a pioneer in the Section of Cardiology, Department of Internal Medicine, at the University of Manitoba.
2. Congratulations to Dr. Shelley Zieroth, the President of the Canadian Heart Failure Society.
3. Congratulations to Dr. Davinder S. Jassal, the recipient of the Canadian Society for Clinical Investigation/Royal College of Physicians and Surgeons of Canada Henry Friesen Award and Lecture.

Research

The major research areas of the Section of Cardiology include:

1) Population health, outcomes research, and prevention policy;
2) Translational research and metabolic studies in heart failure; and
3) Cardiovascular bioinformatics with the primary investigator being our own Dr. Amir Ravandi.

Education

The section received over 40 nominations from the UGME department at the U of M for 2018. Dr. Soni was the recipient of the “Med 1 Award: Mentorship” and “Med 1 Award: Best Course: Cardiovascular 1.” Dr. Khoo was the recipient of the “Med 1 Award: Inspiration.” In 2018, there are a total of 10 trainees in the Adult Cardiology residency training program.

Patient Care

The cardiac catheterization lab at St. Boniface Hospital is one of the largest (top 2) in Canada by volume with excellent 30 day outcomes.

AFC Program Highlights

A 2 year training program in Adult Interventional Cardiology, based at St. Boniface Hospital. It was the first AFC program at University of Manitoba to receive accreditation from the Royal College.

Dr. Jassal was born and raised in Thompson, MB. After training at Dalhousie University and Harvard Medical School in Boston, MA, he relocated back to his home province in 2006 to be closer to his family. He has 2 children, 14 and 10, who are actively involved in dancing with the Royal Winnipeg Ballet and the Manitoba Fencing Association.

1. What are some activities you like to spend some time doing in the Summer?

• I enjoy Folklorama and Clear Lake; the views of the beaches and boats, but mostly the summer days in our backyard and pool with our Boston Terrier Finnegan.

2. What are some activities you like to spend some time doing in the Winter?

• I would highly recommend skating @the forks, Festival du Voyageur, and the Ice Castles @ The Forks.

3. What is your favorite landmark/site in Winnipeg or Manitoba?

• I would make a point of heading north to Thompson to see Paint Lake; it’s breathtaking.

Dr. Jassal

We Are: Distinct

Dr. D. Allen
Dr. I. Barac
Dr. J. Ducas
Dr. R. Ducas
Dr. B. Elbarouni
Dr. P. J. Garber
Dr. D. S. Jassal*
Dr. M. Kass
Dr. C. Khoo
Dr. A. Khadem
Dr. M. Love
Dr. A. Malik
Dr. K. Minhas
Dr. A. L. Morris
Dr. T. Nguyen
Dr. F. C. Perez
Dr. A. Ravandi
Dr. M. F. Saeed
Dr. A. Schaffer
Dr. C. Seifer
Dr. A. Shah
Dr. N. Shaikh
Dr. R. Singh
Dr. A. Soni
Dr. J. W. Tam
Dr. A. Tischenko
Dr. O. Toleva
Dr. K. Wolfe
Dr. S. Zieroth
Dr. W. Czarnecki
Dr. R. Feldman
Dr. D. R. Leyva
Dr. D. Mymin
Dr. M. F. Saeed
Dr. A. Schaffer
Dr. C. Seifer
Dr. A. Shah
Dr. N. Shaikh
Dr. R. Singh
Dr. A. Soni
SECTION OF CRITICAL CARE

Q&A WITH DR. A. GARLAND & DR. B. PAUNOVIC

1. What are some activities you like to spend some time doing in the Summer?

- Summer consists of being outside on the deck (Dr. A. Garland), Paddle boarding on the Red River and going to the Assiniboine Zoo (Dr. B. Paunovic).

2. What are some activities you like to spend some time doing in the Winter?

- We spend the majority of our spare time skating at The Forks (Dr. Garland), Cross country skiing/snow shoeing at Bird’s Hill Park (Dr. Paunovic).

3. What is your favorite landmark/site in Winnipeg or Manitoba?

- Winnipeg has many sites to check out. We would say the top three would be: The Forks Market, The Winnipeg Children’s Museum (Dr. Garland) and Victoria Beach (Dr. Paunovic).

The Section of Critical Care Medicine is a busy enterprise, both clinically and academically. The section originated as part of the Department of Internal Medicine, and remains so today, though the more than 40 intensivists on our faculty come from a variety of Departments including Anesthesia, Emergency Medicine, Internal Medicine, and Surgery.

We provide critical care services for adults in Manitoba, northwestern Ontario, and Nunavut. Because of the distances, critical care transport, including specially equipped aircraft, is integral to our clinical work. We have five Intensive Care Units in two academic/tertiary hospitals (Winnipeg Health Sciences Centre, St. Boniface Hospital) and three ICUs in four community hospitals (Concordia Hospital, Grace Hospital, Seven Oaks General Hospital). There are separate Medical and Surgical/Trauma ICUs at Health Sciences Centre; St. Boniface Hospital has a mixed Medical-Surgical ICU and a Cardiovascular Surgery ICU. Intensive Care Units within the city possess advanced support capability including invasive mechanical ventilation, continuous renal replacement therapy and Extra-Corporeal Membrane Oxygenation (ECMO). Approximately 5000 patients are admitted to our ICUs annually.

Our faculty also provides Critical Care education for medical students, residents, subspecialty residents and fellows. Formal UGME and PGME rotations are hosted at Health Sciences Centre, St. Boniface Hospital, and Grace Hospital Intensive Care Units. Critical Care faculty deliver a monthly series of lectures covering a curriculum of 12 core ICU topics. The lectures are presented in an interactive format across all of the teaching sites to allow for participation of all trainees across the region.

The major training focus of the PGME Critical Care Program is the group of Critical Care Subspecialty Residents ("ICU Fellows"). Critical Care trainees complete RCPSC training in a base specialty prior to commencing their subspecialty residency - with most trainees certifying in the following specialties prior to enrollment: Internal Medicine, Anesthesia, General Surgery, Cardiac Surgery, or Emergency Medicine. Currently, there are five trainees in the Critical Care Program. The Critical Care Subspecialty Residents complete two years of additional training specific to the ICU environment. During this time, they spend the bulk of their time working as team leaders within the ICUs, but also develop non-clinical areas of medical expertise, complete coursework and a project relevant to quality improvement, complete a scholarly project, provide service as physicians with the LifeFlight Air Ambulance Program and write thrice-annual in-training exams. Ultimately, all University of Manitoba Critical Care Medicine Subspecialty Residents are expected to write the RCPSC certification examination in Critical Care Medicine.

New applications for subspecialty training in Critical Care Medicine are accepted every year in the summer during the CaRMS Medicine Subspecialty Match. We welcome applications from physicians who desire to become experts in the delivery of medical care to critically ill patients.

Within the section we also have robust programs for improving the quality of ICU care, and research related to Critical Care.

RESEARCH

Over the past five years, members of the Section of Critical Care Medicine have authored 285 published manuscripts, including 58 in 2018. Of the 285, 71% were original scientific studies. During that same time, section members have been investigators on 31 extramural grants, being principal or co-principal investigators on 16 with total direct funding of 2.3 million dollars. Major areas of research effort in the section are: (a) the epidemiology of critical illness, (b) clinical trials in sepsis and septic shock, and (c) advance care planning and end-of-life care.

The Forks, Travel Manitoba
Victoria Beach, Travel Manitoba

GFT

Dr. M. Blouw
Dr. A. Garland*
Dr. T. Jacob
Dr. A. Kumar

Dr. O. Mooney
Dr. K. Olafson
Dr. B. Paunovic*
Dr. D. Roberts
Dr. B. Unger

ADDITIONAL FACULTY

Dr. D. Funk
Dr. L. Homik
Dr. E. Jacobsohn
Dr. S. Kowalski

Dr. A. Robertson
Dr. L.A. Shafer
Dr. F. Siddiqui
Dr. H. Smith

Dr. K. Olafson
Dr. B. Paunovic*
SECTION OF DERMATOLOGY
SECTION HEAD: Dr. M. Wiseman MD

The faculty of Dermatology consists of three lecturers, two associate professors, three assistant professors, and one professor.

Dr. Marni Wiseman’s current activities consist of a collaboration at Cancer Care with Dr. James Johnston. Dermatology has many clinic locations at the physicians’ private locations throughout Winnipeg, as well as St. Boniface Hospital and Health Sciences Centre, though there are no in-patient units. Dr. Wiseman currently holds a grant from the Canadian Dermatology Foundation and the section hold a monthly journal club, in addition to clinical meetings where patients are presented. Lastly, Dermatology holds a monthly journal club and clinical meeting where patients are presented. For the future (forecast), it looks like it’s sunny without a chance of sunburn!
The Section of Endocrinology has a strong commitment to the provision of clinical services, undergraduate and postgraduate teaching and basic and clinical research.

Our 15 full-time and part-time faculty members provide specialized in-patient and out-patient ambulatory care. Our patients present with conditions of the pituitary and reproductive systems, osteoporosis, benign conditions of the thyroid as well as thyroid cancer, and those living with Type I and Type II diabetes mellitus. Section members provide direct patient care via the Ambulatory Care clinics and through its' consultative services at the two tertiary care teaching hospitals. Many of the section’s physicians, along with two Ph.D scientist members, have active research programs. All section members actively participate in undergraduate and postgraduate education. Our postgraduate training program in Endocrinology and Metabolism is a two-year Royal College accredited program in adult endocrinology which is designed to provide the trainee with sufficient exposure to endocrine and metabolic disorders and the necessary clinical and basic science knowledge base to function capably in a consultative capacity in a community or academic setting.
1. What are some activities you like to spend some time doing in the Summer?
• Summer is spent: being outdoors with the family on roadtrips, spending Canada Day in the Whiteshell, Folklorama and hiking the Hunt Lake Trail (Whiteshell).

2. What are some activities you like to spend some time doing in the Winter?
• One of our four seasons that brings our favorite activity, cross country skiing; it is an excuse to stay fit in the winter and it is guaranteed that snow will come in Winnipeg.

3. What is your favorite landmark/site in Winnipeg or Manitoba?
• FortWhyte Alive – full of walking trails, short hike, entry level for kids; great brunch and you are even able to rent a canoe.
SECTION OF GENERAL INTERNAL MEDICINE

SECTION HEAD: Dr. M. A. Hajidiacos MD, FRCP

The Section of GIM includes a diverse group of over 50 full and part time faculty members who provide in-patient and out-patient clinical services, at the three teaching hospitals in Winnipeg.

Our physicians provide clinical attending services in 6 Clinical Teaching Units and in-patient consult services. Our ambulatory care clinics offer post admission follow ups for patients who were admitted to internal medicine wards, in addition to referrals received from primary care providers for GIM, and referrals and consults from the ER. Furthermore, we provide care to the addictions unit, quality assurance, health care delivery planning and Fetal Maternal Medicine. Our faculty members actively participate in both undergraduate and postgraduate education. The GIM residency program is designed to provide our residents with the broadest clinical experience that will afford them the best opportunity to attain the knowledge, skills and attitudes to become a strong clinical physicians and to practice internal medicine in the most exemplary manner.

Assiniboine Park Zoo © Ken Gillespie Photography / Alamy Stock Photo
**Q&A WITH DR. ST. JOHN**

1. What are some activities you like to spend some time doing in the Summer?
   - I enjoy walking our dog, working in the garden, hiking our many trails this Province has to offer and reading.

2. What are some activities you like to spend some time doing in the Winter?
   - You would normally find me with my dog going for a walk, or cross country skiing.

3. What is your favorite landmark/site in Winnipeg or Manitoba?
   - Our Assiniboine Park and The Forks would be my favourites. We also have many trails that are dog friendly.

---

**SECTION OF GERIATRIC MEDICINE**

**SECTION HEAD: Dr. P. St. John MD, MPH, CCFP, FRCP**

The Section of Geriatric Medicine has a significant presence within the Winnipeg Regional Health Authority and serves our aging population with a variety of programming.

There are 6 full time members, as well as cross appointed faculty. The section maintains a very large clinical service with the WRHA: it provides for more than 37 inpatient beds, inpatient consult services at all inpatient sites, day hospital coverage for 4 geriatric day hospitals, and supports 6 Geriatric Program Assessment Teams (GPATs). The faculty is active in teaching medical trainees at all levels, and actively participates in teaching a broad array of health and public health trainees. They contribute to general educational activities for the general public. Teaching evaluations have been consistently strong. The section is also actively engaged with the Centre on Aging, and section members regularly present at the Centre on Aging Spring Symposium, and the Alzheimer Society Annual Conference. These sessions reach a wide and varied audience, including the general public.

---

**GFT**

Dr. D. Mangat  
Dr. L. Peitsch  
Dr. P. St. John*  
Dr. D. Strang  
Dr. S. M. Thille  
Dr. K. van Ineveld

**ADDITIONAL FACULTY**

Dr. L. Blom  
Dr. M. Gawryluk  
Dr. G. Hasdan  
Dr. S. Henry  
Dr. N. Dixon  
Dr. E. S. Rhynold  
Dr. H. Zacharias
1. What are some activities you like to spend some time doing in the Summer?
- There are not many cities where you can run to and from work. I also attend various Winnipeg public libraries with my young children.

2. What are some activities you like to spend some time doing in the Winter?
- Running to and from work. I use exercise as a form of mindfulness and it’s a great way to stay warm during the winter months.

3. What is your favorite landmark/site in Winnipeg or Manitoba?
- The Winnipeg Airport, which has become the new “Forks for the 21st century” as it welcomes all the newcomers to the city. The bike rack outside the new airport building is my favourite spot since it is important; I suspect it cost $500 to install, while the airport parkade cost many millions of dollars.

The Section of Hematology/Oncology, in affiliation with CancerCare Manitoba (CCMB), is a research-oriented group that offers comprehensive care to adults in Manitoba with cancer and serious blood disorders. The section consists of 36 full and 6 part time faculty members, of whom 26 are Assistant Professors, 8 Associate, and 4 full Professors. Included in our team are 3 Physician Assistants, 8 Clinical Assistants, and 5 Nurse Practitioners.

Our ambulatory care clinical services are based at 3 CCMB sites in Winnipeg (MacCharles/HSC, St. Boniface and Victoria Hospital), while in-patient services are at St. Boniface Hospital and Health Sciences Centre, the latter including the province’s only unit dedicated to complex hematological malignancy and Blood and Marrow Transplantation (BMT).

We offer two distinct undergraduate courses at the Max Rady College of Medicine: Blood/Immunology and Medical Oncology. We also provide Royal College of Physicians and Surgeons of Canada accredited residency training programs in both Hematology and Medical Oncology, and we offer advanced post-residency training in sub-specialties such as BMT, lymphoma, and thoracic malignancies. In conjunction with CCMB’s Community Cancer Program, our section members lead annual continuing professional development (CPD) sessions for primary care practitioners and specialists such as the Community Cancer Program Annual Meeting, Blood Disorders Day and the Geriatric Oncology Day.

The section’s research portfolio is broad, with significant active research funding, some 65 peer-reviewed publications per year, and a total of 6 physician full-time equivalent (FTE) dedicated to research. We participate in clinical trials and lead translational research, cancer epidemiology and health outcomes programs through our partnerships with CCMB’s Research Institute in Hematology/Oncology and the internationally renowned provincial Cancer Registry. High profile research interests include: chronic lymphocytic leukemia (CLL), for which there is an active tumor bank and patient registry; acute care hematology, in which there is close collaboration with critical care partners; studies of the pathogenesis, treatment and prevention of infections in vulnerable cancer patient populations; BMT registry outcomes, based on the Canadian National BMT registry that is housed at CCMB.

Section members hold major leadership positions in National and International organizations; such as the Canadian Partnership Against Cancer (CPAC), Pan-Canadian Oncology Drug Review (pCODR), Canadian Blood and Marrow Transplant Group (CBMTG), the Royal College of Physicians and Surgeons of Canada (RCPSC), the Infectious Diseases Society of America (IDSA), and the American Society of Hematology (ASH).

The section would like to thank Dr. Brent Schacter for his dedicated 46 years of service (1972-2018) in the Section of Hematology/Oncology, CancerCare Manitoba and University of Manitoba.
The Section of Hepatology at the University of Manitoba was the first in Canada to be accredited independent from gastroenterology. The section’s faculty consists of hepatologists and a Ph.D researcher. Two clinical assistants and post-doctoral fellows complement the team. Several section members are actively involved in clinical research that is conducted through our Clinical Trials Unit (CTU) with several research nurses. The unit is conducting clinical research on viral hepatitis, non-alcoholic fatty liver disease, autoimmune liver disease and liver cancer. A particular research focus is non-alcoholic fatty liver disease in Canadian First Nations population, for which two section members attracted a multi-million dollar CIHR grant. One of our faculty is a CIHR funded clinician-scientist with an active lab-based research program on the role of cancer stem cells in the pathogenesis of hepatocellular and cholangiocarcinoma. The section offers a Royal College of Physicians and Surgeons Canada (RCPSC) Area Focused Competency (AFC) program in adult hepatology and, apart from hepatology fellows, trains rotating fellows and residents from general internal medicine, gastroenterology, infectious diseases, genetics, and other subspecialties in internal medicine. In addition all faculty members are involved in UGME teaching. The section provides clinical services for outpatients and a consult service for inpatients covering all aspects of hepatology including pre and post-transplantation care, and serves the tertiary hepatology referral center.

**AFC PROGRAM HIGHLIGHTS**

**Endeavouring to lead to the distinction and Diploma from the Royal College indicating DRCPC (Adult Hep)**

The Section of Hepatology in the Department of Internal Medicine at the University of Manitoba has always been a leader and pioneer in hepatology specialty training since the early 1990’s. At that time, our training program was the first and only university postgraduate medical education department approved and certified hepatology training program in Canada. We are, once again, proud to be an educational pioneer within our recent approval by the Royal College of Physicians and Surgeons of Canada as one of the first accredited university training programs that will train future hepatologists towards the acknowledgement of specialized training in the discipline of adult hepatology. This competency-based hepatology training program is a new Royal College Area of Focused Competency (AFC) program. It will lead to the distinction and a Diploma from the Royal College indicating “DRCPC (Adult Hep).” We already have hepatology trainees who will be the first to enroll in our pioneering training program, and we look forward to welcoming and training future hepatologists from Canada and potentially from beyond!
1. What are some activities you like to spend some time doing in the Summer?
• I would usually be outside surrounded by nature somewhere in Winnipeg, or out in the garden.

2. What are some activities you like to spend some time doing in the Winter?
• I spend time drawing, painting and creating other artistic pieces. I also find myself out at the farm during the cold months.

3. What is your favorite landmark/site in Winnipeg or Manitoba?
• The view of the Provencher bridge is stunning when viewed in the morning sun.

SECTION OF INFECTIOUS DISEASES
SECTION HEAD: Dr. K. MacDonald MD, FRCP

The Section of Infectious Diseases conducts patient care, education, basic and clinical research activities.

Currently, the section consists of 8 full time GFT members, but expands to 15 members when cross-appointees and non-GFT’s are included. Adult Infectious Diseases specialists provide inpatient and outpatient care consultation primarily at Health Sciences Centre and St. Boniface Hospital. ID Specialists also oversee the Community IV Antibiotic Clinics and provide consultation services. Research areas of active interest in the Section of Infectious Diseases include: HIV/AIDS vaccine design, epidemiology and pathogenesis, with a global health focus; infections in immune compromised hosts and antimicrobial resistance; urinary tract infections; tuberculosis and Indigenous health and community based HIV prevention.

The RCPSC accredited subspecialty training program in infectious diseases at the University of Manitoba offers a two year training program. The fellowship program usually admits 1 to 2 fellows per year who train closely with pediatric infectious diseases fellows and medical microbiology residents. Opportunities for joint training in infectious diseases and medical microbiology are available as a 3 year combined program.
The Section of Nephrology at the University of Manitoba comprises a team of 29 academic faculty members and over 700 interdisciplinary research, administrative and clinical personnel dedicated to providing outstanding patient-centered care, research, and education in the areas of kidney disease, dialysis and transplantation.

The section is fully aligned with the Manitoba Renal Program and Transplant Manitoba, and collectively manages over 2000 advanced stage Chronic Kidney Disease (CKD) patients, over 1600 kidney failure patients on dialysis (380 on home dialysis, and over 290 in satellite hemodialysis units dispersed across the province of Manitoba), and over 700 prevalent transplant patients across its three main sites of operation (Health Sciences Centre, St. Boniface Hospital, and Seven Oaks Hospital). The section also runs general nephrology clinics and provides on-site nephrology consultation to its 3 main hospital sites as well as remote telehealth support to other hospitals across the province. The section and its allied programs are leaders and innovators in areas of CKD and transplant risk assessment, risk stratification, exercise programming in CKD, multidisciplinary care models, remote care delivery, and interventional nephrology.

The section provides a productive and highly collaborative research environment, with internationally recognized expertise in the areas of translational, clinical, epidemiologic, health economic and implementation science in both native and transplant kidney disease. This activity is anchored by two research clusters in Renal Transplant and Systems Biology (Health Sciences Centre) and at the Chronic Disease Innovation Centre (Seven Oaks Hospital). The 10 core researchers in the section collectively hold a significant value in peer reviewed research support, and publish between 40-50 peer reviewed articles per year, many in premier journals. Current research is broadly (but not exclusively) structured along the following themes: optimal detection and prevention of CKD (CanSolve-CKD SPOR); optimizing outcomes and quality of life in CKD and in kidney failure; optimizing kidney transplant rates and outcomes and optimizing AKI diagnosis and treatment.

The Nephrology Fellowship Training Program is a two year RCPSC accredited training program. Clinical fellows accepted into the training program are exposed to a wide spectrum of clinical and academic nephrology. Education consists of instruction at all aspects of clinical care including clinics, inpatient services, CKD and ESRD care. The section hosts one of the world’s premier Interventional nephrology programs, and our faculty trains fellows the world over in PD catheter insertion and tunneled HD catheter insertion, with and without fluoroscopic support. Fellows are encouraged, supported and mentored in developing their academic interests, and are exposed to a wide range of research opportunities.

The Canadian Museum of Human Rights, downtown Winnipeg.
The Section of Neurology at the University of Manitoba is based at the Health Sciences Centre and St. Boniface Hospital. There are 28 neurologists in the Section of Neurology. Neurology outpatient clinics (some multidisciplinary) are held at Health Sciences Centre (HSC), St. Boniface Hospital (SBH), Victoria Hospital (Bairdmore Clinic), and Grace Hospital (GH).

HSC and SBH have neurology consultation services; HSC also has an inpatient neurology service. There is clinical and research expertise in multiple sclerosis, stroke, epilepsy, movement disorders, neuro-ophthalmology, neuromuscular diseases, basic neurophysiology, and neurological infectious diseases. Multiple sclerosis epidemiology is a particular research strength with an international reputation and considerable research funding and productivity. The highly successful Adult Neurology residency training program accommodates a total of 10-12 trainees.

- We hope to upgrade the epilepsy monitoring unit with a view to establishing an adult epilepsy surgery.
- The stroke program is being enhanced in 2019 to more efficiently triage and accommodate stroke patients eligible for urgent mechanical clot extraction (endovascular thrombectomy).
- Telestroke coverage of rural hospitals will increase by 40% in 2019.
- The MS clinic is continuously expanding treatment options as new therapeutics become available.

---

1. What are some activities you like to spend some time doing in the Summer?
   - Running would be at the top of my list.

2. What are some activities you like to spend some time doing in the Winter?
   - Winter, Summer, rain or snow, if not on call, or away I go (running).

3. What is your favorite landmark/site in Winnipeg or Manitoba?
   - The Pavilion in Assiniboine Park - it's stately, calm and enduring.
1. What are some activities you like to spend some time doing in the Summer?

• Whether it be summer or winter, the activities I enjoy outside of work involve my family
• We have a cabin in Lac du Bonnet and enjoy our time at the lake
• The kids are busy with baseball and soccer which run through part of the summer
• We go golfing as a family and play best ball. My ego has taken a hit as the kids are getting a lot better and it is less and less likely that I’ve played the best shot

2. What are some activities you like to spend some time doing in the Winter?

• My wife Sue and I are hockey parents through and through. I’ve love watching the practices and games and seeing their improvement over time. We’re busy with hockey 5-6 days per week between the two kids
• If we’re not at hockey, then my son (11) practices baseball indoors once a week as well and my daughter (9) plays piano, which will keep us running around

3. What is your favorite landmark/site in Winnipeg or Manitoba?

• The Bell MTS Place during the NHL playoff season

SECTION OF PHYSICAL MEDICINE AND REHABILITATION

SECTION HEAD: Dr. R. Skrabek MD, FRCP

The eight physiatrists in the Section of PM&R specialize in the area of rehabilitation medicine, dealing with muscles, bones, nerves, function and mobility. Our inpatient rehabilitation units are located at the Rehabilitation Hospital, Health Sciences Centre and the Riverview Health Centre. Outpatient clinics are located at the Rehabilitation Hospital, Health Sciences Centre, Riverview Health Centre and the Pan Am Clinic.

Our faculty members actively participate in undergraduate, postgraduate and continuing medical education. The PM&R residency program currently has ten residents.

Dr. Ryan Skrabek is the Section Head of PM&R. Dr. Jennifer Salter is the Residency Program Director. Dr. Karen Ethans is the section’s Research Director, and Dr. Davyd Hooper is the UGME Section Lead for PM&R.

RESEARCH
Dr. Ethans’ research on spinal cord injury, bladder spasticity, and the use of Botox in this area is known nationally and internationally. As the section’s research director, she supports our resident research. Under her supervision 6 of our residents have won national research awards through the Canadian Association of Physical Medicine and Rehabilitation since 2007.

EDUCATION
Our section has 10 residents in our Residency Program – Dr. Salter has taken over the Postgraduate Education Program Director role from Dr. Hooper after 10 years. Dr. Hooper, in exchange, is now our UGME Section Lead for PM&R. Our section provides support to the University of Manitoba Medical School during the Musculoskeletal Block including teaching clinical examination skills and running small group tutorials.

PATIENT CARE
Clinically our eight physicians cover five distinct areas of inpatient and consult service rehabilitation medicine, year round, including: acquired brain injury rehabilitation, stroke rehabilitation, spinal cord injury rehabilitation, amputee rehabilitation, and neuromuscular rehabilitation.

We provide outpatient consultation in these areas as well as neurodiagnostic services (EMG/NCS) in the Riverview Neurodiagnostic Clinic and participate in the Health Sciences Centre Pain Management Centre and the Pan Am Pain Clinic.

GFT

Dr. A. S. Arneja
Dr. A. Casey
Dr. K. Ethans

Dr. D. Hooper
Dr. D. Perry
Dr. S. Pooyania
Dr. J. Salter
Dr. R. Skrabek*

ADDITIONAL FACULTY

Dr. T. Lesiuk
Dr. H. Sommer
Dr. M. Stitz
SECTION OF PROTEOMICS AND SYSTEMS BIOLOGY

SECTION HEAD: Dr. J. Wilkins BSc., MSc., Ph.D

Although DNA carries the information necessary for the synthesis of proteins, the proteins themselves are the molecules responsible for the activities necessary for a life processes.

The incorporation of results from many high content “omics” approaches (i.e. genomics, transcriptomics, metabolomics) is essential to the goal of systems biology which is to develop dynamic models to describe living systems in health and disease. Proteomics is an approach that attempts to simultaneously characterise all of the proteins in a biological sample with the goal of developing an understanding of how proteins function in health and disease. This is no small feat as there are ~20,000 human genes coding for proteins and any given cell type may express >12,000 different types of proteins at a one time. The use of advanced mass spectrometry now permits us to identify >8,000 types of molecules in a single analysis and our colleagues are pushing hard to extend that capability. The presence of a protein does not always indicate whether it is active so approaches are now being advanced to detect active molecules such as enzymes. Collectively these approaches can provide critical information about the process and progress of disease as well as identify possible targets for new therapeutic interventions.

The Manitoba Centre for Proteomics and Systems Biology was established with the intent of developing the expertise and resources base for the application of proteomics to biological and clinical materials. This has been highly successful locally, nationally and internationally. Local collaborations are ongoing in diverse areas including but not limited to rheumatology, transplant nephrology, cardiology, and oncology. These projects have often involved small feasibility studies as proof of principle which have facilitated subsequent funding from local and national agencies. There are still many unexplored opportunities for the application of systems biology in medicine and the Centre welcomes the opportunity to discuss these with interested members of Internal Medicine and other clinical departments.

Q&A WITH DR. WILKINS

1. What are some activities you like to spend some time doing in the Summer?
   - I enjoy a lot of activities. If I had to name a few- biking, running, stand up paddle boarding and reading.

2. What are some activities you like to spend some time doing in the Winter?
   - Again, it’s difficult to choose, but I would say: skiing, running, reading and woodworking.

3. What is your favorite landmark/site in Winnipeg or Manitoba?
   - I never miss an opportunity to go to Tall Grass Prairie Bakery at the Forks Market in Winnipeg.
Respiratory medicine (respirology) is a subspecialty of internal medicine concerned with the diagnosis and treatment of diseases of the respiratory system such as advanced chronic obstructive pulmonary disease, interstitial lung diseases, pulmonary arterial hypertension, tuberculosis, cystic fibrosis, pleural disease and pulmonary fibrosis. The respiratory medicine physicians also provide on-going care for lung transplant patients and patients with chronic respiratory failure.

The physicians and their team provide medical care assessments and manage patients in within the province.

Adult respirology clinics are located at Winnipeg’s largest hospitals, the Health Sciences Centre, St. Boniface Hospital and Grace Hospital. Our respirologists are involved in the evaluation of patients with various sleep disorders including sleep-disordered breathing work at the Sleep Disorder Centre located at the Misericordia Health Centre. Dr. Els De Gussem leads the hereditary hemorrhagic telangiectasia (HHT) clinic at the Grace Hospital.

Respiratory medicine physicians also provide coverage on the chronic ventilator ward at Riverview Health Centre.

The section is currently active in research. Dr. Ramsey is a clinical epidemiologist who is studying airway diseases; Dr. Desautels is using epidemiological data to look at various aspects of sleep medicine. Dr. Andrew Halayko is a tier 1 Canada Research Chair in lung pathobiology and treatment, is an active participant in our section.

In 2019 we will be modifying our service delivery model at HSC to improve inpatient consultation and urgent outpatient assessment.

This section is a dynamic group with the additions of the 3 recruits: Dr. Kim Mulchey (area of special expertise is Sleep Medicine), Dr. Musawir Ahmed (area of special expertise is lung transplant medicine) and Dr. David Christiansen (area of expertise is pulmonary hypertension).

The Whiteshell, Travel Manitoba
The Section of Rheumatology is based at the Health Sciences Centre in Winnipeg with six full time faculty members who provide ambulatory care services as well as clinical consultation and inpatient care to patients with all types of musculoskeletal and autoimmune diseases.

We also have nine enthusiastic community rheumatologists, including our program director, who are active participants in our teaching program. We are committed to a mission of providing outstanding clinical care for both the most complex patients as well as vulnerable populations. We provide all levels of medical education and cutting edge research to improve the health, treatments, outcome, and quality of life for our patients.

The section is home to an endowed Rheumatology Research Chair. Our researchers are at the forefront of research ranging from basic science and translational research to epidemiology and clinical trials, and reflect the varied interests and activities of our faculty members: the pathogenesis of rheumatoid synovitis and the mechanisms involved in the initiation of synovial inflammation, systemic lupus erythematosus, rheumatic disease in Indigenous people, cohort studies to predict and optimize RA outcomes, biomarkers and disease pathogenesis, scleroderma; and disparities in rheumatology care.

A major strength of the section is the strong collaborations we have cultivated with other sections and departments at the University of Manitoba, and with other leading universities, institutions and organizations in Canada and abroad. We participate in and lead national and international collaborative studies of lupus and rheumatoid arthritis, as well as inflammatory myopathies, vasculitis and scleroderma.

Faculty members are actively engaged in undergraduate and post-graduate education. The rheumatology training program is a two-year program undertaken by candidates with training in internal medicine. Residents must have completed three or four years of general internal medicine training prior to entering the program. The section has 2-3 rheumatology fellows in the program, and rotating residents from internal medicine, neurology, physical medicine and ophthalmology, as well an increasing number of medical students choosing to complete rheumatology rotations. Many of these trainees are participating in research projects with faculty members, and we also frequently host Canadian Rheumatology Association summer research or clinical students. These trainees have the opportunity to attend national or international meetings to present their work.

Q&A WITH DR. PESCHKEN

1. What are some activities you like to spend some time doing in the Summer?
   - We enjoy heading out to the cottage as much possible and seeing all of our province’s beautiful lakes.

2. What are some activities you like to spend some time doing in the Winter?
   - Our cottage is where we love to be, especially in the winter time; with amazing views of snowscapes.

3. What is your favorite landmark/site in Winnipeg or Manitoba?
   - There is something very peaceful about being at Assiniboine Park.
Recognize and accept that none of us can change the entire world once and for all. We can just continue to try making things better bit by bit here and there on our limited scales. But be confident, small improvements add up – and their sum will eventually change the world!

- Dr. Eberhard Renner

It’s not just our department that loves all that our province has to offer. Manitoba was awarded Best in Travel 2019 by Lonely Planet!

An inuksuk (also spelled inuksuk, plural inuksuit) is a figure made of piled stones or boulders constructed to communicate with humans throughout the Arctic. - The Canadian Encyclopedia.

Manitoba is known for its spectacle of northern lights that draws travellers from around the world. Experience the breathtaking sight of the dancing aurora borealis and be left spellbound as nature puts on its very own light show. - Travel Manitoba
I think about the challenges of starting such an endeavour; the pioneer spirit, the faith, the drive needed. These individuals started something special and each day these past 135 years, everyone who has served the department has done their best to build on these pioneers’ work and their vision. What would each say if they could see us today?

The technology, the innovations, the research breakthroughs, the capabilities in care, the evolution of education and health care are all things I don’t believe they could have even imagined.

2018 was a year that continued building on each of these themes. We embarked on a massive change to how residents are evaluated and given feedback.

Competency based medical education made its introduction to our department in 2018 and we prepare for more sections transitioning in 2019.

The medical system in Manitoba is also undergoing major changes. Consolidation of services has meant movement of a number of faculty and services to new sites.

are all things I don’t believe they could have even imagined.

2018 was a year that continued building on each of these themes. We embarked on a massive change to how residents are evaluated and given feedback.

Competency based medical education made its introduction to our department in 2018 and we prepare for more sections transitioning in 2019.

The medical system in Manitoba is also undergoing major changes. Consolidation of services has meant movement of a number of faculty and services to new sites.

The original 1883 group numbered 13, in 2018 we were proud to welcome over 20 new faculty members. A healthy combination of residents trained here are staying here, welcoming back residents who have gone away for further training, and new physicians and researchers to Winnipeg and to Canada, has bolstered our abilities to share new ideas and knowledge, learning from each other, all working to build our department.

The 130 plus staff members on the support teams play such a vital role in our success and evolution as a department. In 2017, knowing our people were the best sources of knowledge, we started our own online wiki. In the fall of 2018, the wiki surpassed 1,000 pages. The site has been viewed by 17,000 visitors with 70,000 page views. The wiki symbolizes our faith and our reliance on the abilities of our people to know their job and to perform it well. It’s simply a tool for all to share their know-how and wisdom, and to make sure we can operate in as lean and efficient manner as possible.

My office continues to build on the legacy inherited by completing our transition to new accounting methods and tools. The details provided by our new software allow us to make even more informed decisions. Our Finance Oversight and Advisory committee was formed in 2018 and was part of our annual reporting and has begun making recommendations.

While full of challenges and changes, 2018 was a successful year on many fronts. I thank every staff member, each who cares about the enterprise with their hard work and dedication to our academic mission, and to the faculty who together make this a wonderful place to work.

I am ever conscious of those back in 1883 who started this journey and the responsibility entrusted to us; I thank all who have come since for building on their vision; I commit to being a worthy custodian while here, and to continue the evolution of the department for those who will eventually come after.

Dale Gustafson
Managing Director CPA, CMA, December 2018
### OUR DEPARTMENT BY THE NUMBERS

<table>
<thead>
<tr>
<th>Category</th>
<th>2017</th>
<th>2018</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Share of Available Grant Funding</td>
<td>$38.3M</td>
<td>$6.85M</td>
<td>$31.45M</td>
</tr>
<tr>
<td>Department Endowment Values</td>
<td>12685</td>
<td>12078</td>
<td>-607</td>
</tr>
<tr>
<td>Medicine Unit Admissions</td>
<td>12685</td>
<td>12078</td>
<td>-607</td>
</tr>
<tr>
<td>Mean LOS</td>
<td>12.5</td>
<td>13.7</td>
<td>+1.2</td>
</tr>
<tr>
<td>Teaching Hospitals</td>
<td>3</td>
<td>8</td>
<td>+5</td>
</tr>
<tr>
<td>International Residents</td>
<td>65</td>
<td>65</td>
<td>+0</td>
</tr>
<tr>
<td>Support Staff</td>
<td>126</td>
<td>123</td>
<td>-3</td>
</tr>
<tr>
<td>Male Faculty</td>
<td>141</td>
<td>198</td>
<td>+57</td>
</tr>
<tr>
<td>Female Faculty</td>
<td>10</td>
<td>5</td>
<td>-5</td>
</tr>
<tr>
<td>Faculty with Masters</td>
<td>43</td>
<td>65</td>
<td>+22</td>
</tr>
<tr>
<td>Faculty with Protected Research Time</td>
<td>18</td>
<td>10</td>
<td>-8</td>
</tr>
<tr>
<td>Male GFT Members</td>
<td>141</td>
<td>198</td>
<td>+57</td>
</tr>
<tr>
<td>Female GFT Hires</td>
<td>10</td>
<td>5</td>
<td>-5</td>
</tr>
<tr>
<td>Male GFT Hires</td>
<td>5</td>
<td>10</td>
<td>+5</td>
</tr>
<tr>
<td>Female Section Heads</td>
<td>126</td>
<td>123</td>
<td>-3</td>
</tr>
<tr>
<td>Male Section Heads</td>
<td>10</td>
<td>18</td>
<td>+8</td>
</tr>
<tr>
<td>AFC Programs</td>
<td>2</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>Clinical Teaching Units</td>
<td>6</td>
<td>6</td>
<td>0</td>
</tr>
<tr>
<td>Endowed Research Chairs</td>
<td>8</td>
<td>3</td>
<td>-5</td>
</tr>
<tr>
<td>Teasing Hospitals</td>
<td>3</td>
<td>6</td>
<td>+3</td>
</tr>
<tr>
<td>Male Residents</td>
<td>126</td>
<td>123</td>
<td>-3</td>
</tr>
<tr>
<td>Female Residents</td>
<td>123</td>
<td>126</td>
<td>+3</td>
</tr>
</tbody>
</table>

**Note:** Data represents the difference between the years 2017 and 2018.
ENDOWED RESEARCH CHAIRS

The Department of Internal Medicine at the University of Manitoba is home to eight endowed research chairs created through contributions from individuals, foundations, corporations and/or faculty members. A chair is established with a sizable gift to an academic area designated by the donor; the gift is invested in an interest-bearing fund for which the principal remains intact and the interest provides a perpetual source of annual income. This income provides valuable financial support to our chair holders.
QUALITY IMPROVEMENT AND HEALTH SERVICE DESIGN (2007)
Created to advance innovation in the function and design of medical services. Aimed at improving effectiveness and safety of patient care. Dedicated to skill development of physicians.
Vacant

BINGHAM CHAIR IN GASTROENTEROLOGY (2008)
Created to advance research in the field of Inflammatory Bowel Disease (IBD) and other gastrointestinal disorders. Dedicated to the goal of eliminating the burden of these diseases.

Dr. Charles Bernstein, MD, FRCP, Section of Gastroenterology
Dr. Charles Bernstein’s research focuses on IBD by exploring the biological and clinical intersection between different chronic immune mediated inflammatory diseases, optimizing management approaches, clinical outcomes, and disease etiology. Further, he has been involved in exploring the biological and clinical intersection between different chronic immune mediated inflammatory diseases. Dr. Bernstein has assisted to develop groundbreaking work in the epidemiology of Helicobacter pylori infection among Aboriginal populations in Canada, colorectal cancer screening and outcomes of gastrointestinal endoscopy and biopsy.

MORBERG FAMILY CHAIR IN HEPATOLOGY AT THE HEALTH SCIENCES CENTRE (2010)
Created to advance research in the field of liver diseases. Dedicated to improving health care for patients with hepatobiliary disorders.

Dr. Gerald Minuk, MD, Section of Hepatology
Dr. Gerald Minuk is a professor of Medicine and Pharmacology at the University of Manitoba. Dr. Minuk’s research has been able to shine the spotlight on developing a new approach to cancer treatment by reporting differences in electrical charges in liver cancer cells. He has teamed up with other leading researchers in search of improvements in the prevention and treatment of liver diseases.

EVELYN WYRZYKOWSKI RESEARCH CHAIR IN CARDIOLOGY (2011)
Created to advance research in the field of cardiac disease. Dedicated to improving health care for patients with cardiovascular disorders.
Vacant

FLYNN FAMILY CHAIR IN RENAL TRANSPLANT (2009)
Created to advance research in the field of renal transplantation. Dedicated to the goal of improving access and quality of outcomes associated with renal transplantation

Dr. Peter Nickerson, BSc. (Med), MD, FRCP, FCAHS, Section of Nephrology
Dr. Peter Nickerson is the Medical Director of Transplant Manitoba and the Medical Advisor, Organ Donation and Transplantation Division, Canadian Blood Services (CBS), and Medical Consultant, Transplant Immunology Laboratory, at Shared Health. Currently, his team’s research has been at the forefront of HLA molecular mismatch assessment, which is setting the stage for precision and personalized medicine in kidney transplantation. Further, his research interests include transplant immunology, non-invasive diagnostics, monitoring immune activation, and health policy and system design.

THE WAUGH FAMILY CHAIR IN MULTIPLE SCLEROSIS (2014)
Created to advance research in the field of Multiple Sclerosis. Dedicated to improving health care for patients with Multiple Sclerosis.

Dr. Ruth Ann Marrie, MD, PhD, FRCP, Section of Neurology
Dr. Ruth Ann Marrie is a Professor in the Departments of Internal Medicine and Community Health Sciences. Dr. Marrie focuses her research on the impact of comorbid conditions and outcomes in multiple sclerosis such as; other chronic diseases, health behaviors, and critical illness. Additionally, her interests include pediatric MS, etiologic factors for MS, and quality of life.
Academic Awards

MAX RADY COLLEGE OF MEDICINE TEACHER RECOGNITION

Dr. Clarence Khoo – Med 1 Innovation Award (Section of Cardiology)

Dr. Donald Houston – Med 2 Innovation Award (Section of Hematology/Oncology)
Dr. Pamela Katz – Med 2 Teaching In Small Group Award (Section of Endocrinology)
Dr. Keevin Bernstein – Best Med 2 Course Urinary Tract 2 (Section of Nephrology)
Dr. Jillian Horton – Med 3 Award for Attending Professionalism

Dr. Michael Semus – Med 3 Award For Attending Clinical Teaching
Dr. Aditya Sharma – Med 3 Award for Attending Mentorship
Dr. Joel Nkosi – Department of Internal Medicine’s Barry J. Kaufman CTU Clinician Educator Award
Dr. Colette Seifer – Department of Internal Medicine’s Morley Lertzman Subspecialty Clinician Educator Award

AWARDS

Dr. Nancy Porhownik – Astra Zeneca’s Nick Anthonisen Award of Excellence
Dr. Aditya Sharma – Department of Internal Medicine 2018 Med Residents’ Educator of the Year Award
Dr. Rachael Fainstein – Department of Internal Medicine 2018 Subspecialty Resident Teaching Award
The department is proud of the commitment and dedication that our faculty members bring to their diverse roles and celebrates their achievements at an annual faculty dinner. The event is dedicated to excellence in education and research respectively. We commend and congratulate all of our award recipients.

RESIDENT RESEARCH DAY AWARDS

Liane Arcinas (PGY3) – Internal Medicine, 1st Prize Clinical Investigation (Poster presentation)
Bryan Tordon (PGY3) – Internal Medicine, 1st Prize Clinical Investigation (Poster presentation)
Conrad Goerz (PGY2) – Neurology, 1st Prize Case Report (Poster presentation case report)
Evan Wiens (PGY2) – Internal Medicine, 1st Prize Case Report (Poster presentation case report)
Sarah Henni (PGY5) – Adult Infectious Diseases, 1st Prize Clinical Investigation
Evan Wiens (PGY2) – Internal Medicine, Emy Ozamoto Award
Evan Elias – 2018 Resident Research Award – Canadian Associate of Gastroenterology

Dr. Ruth Ann Marrie – Distinguished Scientist Award
Dr. Chris Wiebe – The Liam J. Murphy Young Investigator Research Award
  • Established in 2006, is given every two years to a young investigator who shows evidence of developing a strong research program with multiple peer reviewed publications, national or international recognition, and success in obtaining local and national funding.

Dr. Davinder Jassal – CSCI-RCPSC Henry Friesen Award
Dr. Janilyn Arsenio – Recipient of Tier 2 CRC Chair in Systems Biology of Chronic Inflammation and was honoured by CBC Manitoba as a member of “2018 Manitoba Future 40”
Dr. Linda Larcombe – CMHC President’s Medal for Housing Research Excellence

Dr. David Dawe – MMSF John Henson Clinical Research Professorship in Population Medicine Award
Dr. Peter Nickerson – Kidney Foundation of Canada’s National Medal for Research Excellence
Dr. Brett Houston – Hector Ma Award in Research
Dr. Amarjit Arneja – Distinguished Service Award – Doctors Manitoba
Dr. John Embil – Scholastic Award
Moms in Motion in First Nations Communities

Garry Shen MD, Ph.D, and Amy Hui RD, Ph.D, Diabetes Research Group, Section of Endocrinology & Metabolism

Previous studies from our and other groups demonstrated that First Nations mothers and their offspring in rural or remote communities have a high risk for diabetes. Pregnant women living in rural or remote First Nations communities have lower physical activity and unhealthy food intake compared to Caucasian pregnant women in urban areas. Our group has developed a strong partnership and engaged in the prenatal education promotion for pregnant women in 3 rural or remote communities supported by CIHR since 2006. The participation rate of pregnant women in prenatal classes organized by the Canadian Prenatal Nutrition Program and our group was very low at the initial stage. We invited Elders, pregnant women, and other community residents to identify barriers for pregnant women to participate in prenatal classes in community health centers. Common barriers include lack of transportation, unawareness of the study, and child care during class.

With collaboration from community partners, class advertisements were put on local radio; community-owned vehicles were arranged to facilitate transportation for pregnant women to attend the class. These actions substantially increased prenatal class attendance. However, the class participation rate compared to the total pregnancies in the communities was still less that 20%. Based on our observation, most women in childbearing age in the communities have a smartphone. They frequently use social media to communicate with peers. With the funding support from Lawson Foundation, we developed a prenatal/postnatal education website combined with secured breastfeeding support chat groups for pregnant women in the 3 communities. Pregnant women can use their smartphone or internet to access educational materials. The topics include gestational diabetes, healthy weight gain, balanced diet, exercise, and breastfeeding. Pregnant women can watch videos regarding home exercise and tips and techniques of breastfeeding through their smartphone at any time. The flexible and home-based prenatal educational program has increased access to prenatal education in the program by 3-fold and reduced rate of gestational diabetes in several communities.

More recently, we launched a breastfeeding promotion program in the communities. The program is strongly supported by the community health authorities, healthcare workers, Elders, and pregnant women.
of prevention and intervention. Currently participating communities include Winkler and the four Anishinew First Nations communities of Island Lake: Garden Hill, Red Sucker Lake, St. Theresa Point and Wasagamack. Every stage of the study (from the development of the proposal to the implementation of the clinics to KTE activities) is a collaborative effort of a partnership of equals, including Indigenous community members and leaders, elders, Four Arrows Regional Health Authority (FARHA), C.W. Wiebe Health Centre and university researchers. The Anishinew community named the study “the Ookwin Study” (‘liver’ in the Ojibway-Cree language).

Health information related to the liver and liver disease, the prevalence of NAFLD and its risk factors, and healthy nutrition are being disseminated in interactions with community members during clinics and via study team presentations, local community radio and TV appearances, and brochures. The clinics travel to and are set up in communities instead of community members having to travel to Winnipeg. Participating community members have the benefit of being tested for NAFLD, and those who are found to have this condition will be followed up by a Hepatologist for over 5 years. The study’s clinics increase access to health services, information on healthy lifestyle choices and diets, and prospective treatments in participating Indigenous and rural non-Indigenous communities. The messages of prevention, future orientation, and health investment are available for participating communities and their members. Information accessed is more likely to have an impact on personal behaviors as well as to be shared with family and community members, in a way making the gained information available to others.

The study is on NAFLD scientifically speaking. But it goes beyond research. It is a community-led effort that occurs in community settings, engaging both individual members of the community and a community as a whole. As such it is a project in community engagement and health development. It is conducted by a community of individuals with diverse knowledge, skills, and backgrounds, who are mutually committed and invested. This project will lead to gaining of NAFLD knowledge with possibly far-reaching implications. This is a two-way street, where we are learning from each other, enriching and broadening our perspectives, and taking this journey together towards the goal of enhancing community wellness.

**LIVER DISEASE STUDY FUNDED BY 2M CIHR**

Julia Uhanova, M.D., M.Sc., Ph.D., Assistant Professor Department of Internal Medicine

Our recent database studies demonstrated that breastfeeding initiation was associated with a lower rate of incidence of diabetes in First Nations and non-First Nations mothers and their offspring in Manitoba. The breastfeeding initiation rates in the communities were around 30-40% in comparison to 83% in the general population. Over 80% of mothers breastfeeding their infants weaned before 2 months of age. The identified barriers for breastfeeding include lack of education and family support. Recently, we launched a breastfeeding promotion program in the communities. The program is strongly supported by the community health authorities, healthcare workers, Elders, and pregnant women. We trained a number of community women as breastfeeding support counselors to provide personal support on breastfeeding for mothers. Pregnant women participating in the program were invited to join breastfeeding support chat groups. Within the chat group, mothers share experience, discuss breastfeeding issues with each other and with prenatal workers, breastfeeding support counselors. The peer support and social media supported breastfeeding promotion program has considerably increased the breastfeeding initiation in the communities. We hope this study will help the community capacity building, increase breastfeeding initiation rate as well as duration in the long run, and reduce obesity and diabetes in women and children in rural and remote First Nations communities.

**COMMUNITY ENGAGEMENT COMMITTEE**

The Community Engagement Subcommittee exists as the Department of Internal Medicine believes we must be invested, engaged and active in contributing back to our community. The committee consists of five members who meet and annually or just quarterly to seek and review suggestions on engagement opportunities, organize and provide feedback on established activities. The mission is to foster an atmosphere of engagement with our community, through active and passive involvement with charities and service organizations in our neighbourhood, city and province. The committee focuses on engagements within Manitoba involving education, clinical service or research.
IN JULY 2018, ONCOLOGY AND NEPHROLOGY IMPLEMENTED “COMPETENCY BY DESIGN” (CBD) IN THEIR POSTGRADUATE SPECIALTY TRAINING PROGRAMS. Initiated by the Royal College of Physicians and Surgeons of Canada, CBD is an educational system that evaluates outcomes that are achieved by the resident. Resident advancement is dependent on achieving set outcomes. Program Directors Debjani Grenier (Oncology) and Leroy Storsley (Nephrology) are to be congratulated for being the first in our department to implement this very significant change in how we evaluate our residents. They are sharing what they have learned through this process with the programs that will adopt CBD in the coming years: critical care, gastroenterology, general internal medicine, core internal medicine and rheumatology in 2019; cardiology, allergy and immunology, and respirology in 2020; hematology in 2021; and infectious diseases and endocrinology thereafter.

I would like to thank all the Program Administrators and Directors for their work in the PGY1 and PGY4 CARMS matches this past year. Since Paulette Tougas retired, Suzanne Doyle has provided excellent leadership in the subspecialty match. Among all our programs, core internal medicine is the largest and the most complicated in terms of scheduling and management. We are lucky to have Janet Labarre, Tammy Posillipo working with us now as administrators, in partnership with two very competent and skilled Program Directors: Drs. Carmen Hurd and Michael Semus.

Research is an activity in which every doctor engages: the process of asking questions and trying to answer them. Along with clinical service, teaching and administration, it forms a pillar of our academic mission. Drs. Moltzan, Houston, Kraut and Garland have taken over roles to promote resident research within the core and subspecialty internal medicine programs. We are very lucky to have them involved in supporting our residents. Resident Research Day, organized by Dr. Don Houston, was held twice this past year, on April 24 and November 20, 2018. The quality of presentations and the engagement of the residents are a testament to the academic excellence of our programs.
Core Program Overview

RESOURCES
The Department of Internal Medicine has six clinical teaching units affiliated at the two academic health centers as well as the Grace Hospital. The CTU’s are the focal point of the in-patient training programs for medical residents and clerks rotating through Medicine. Each CTU is headed by a Service Chief who is responsible, together with 8-12 attending physicians and a further 12-15 active and associate staff, for providing tertiary internal and subspecialty medical care. Each CTU is responsible for up to 25 teaching patients located on a single medical ward. Some of the subspecialties, notably Geriatric Medicine, Physical Medicine, Respirology, Neurology, and Cardiology also have designated units.

FACULTY
Program faculty consist of both full-time and part-time members in all Royal College recognized internal medicine subspecialties including general medicine, infectious diseases, respirology, cardiology, nephrology, endocrinology, rheumatology, hematology/oncology, immunology, gastroenterology, geriatrics, hepatology and critical care. Sub-specialty training programs are available in all of these areas.

ACADEMICS
CURRICULUM
The program consists of three core years. Each year is divided into 13 four week periods. The program is designed to provide residents with a broad clinical experience to attain the knowledge, skills, and attitudes to practise internal medicine in an exemplary manner. There is an emphasis on becoming a strong clinical physician. As residents progress through the program, they assume increasing responsibility under appropriate supervision with the flexibility to be self-directed in defining their own educational needs. Ambulatory care is emphasized in our program to expand the patient spectrum upon which to learn.

RESEARCH
Residents are required to present a clinical vignette or clinical investigation in each of their core years at the annual departmental Resident Research Day, open to residents and fellows. There are opportunities to become involved in research in every area of internal medicine. Many faculty members are actively engaged in research and interested in supervising and collaborating with residents. One to two subspecialty rotations can be devoted purely to research, allowing dedicated time to both clinical and basic science endeavours. Residents from Manitoba have presented and won competitions at large meetings, including national ACP conferences.

RESIDENTS
The residents in the program come from a diverse array of backgrounds. The largest proportion are University of Manitoba grads, with representation from most programs around the country and a few schools from abroad.
Experiences at the Centre

1. I am currently completing my inflammatory bowel diseases fellowship in British Columbia. My residency at the U of M gave me a strong academic foundation to succeed in my fellowship. At the U of M, I had fantastic teachers who created a supportive learning environment and gave me confidence to manage complex GI cases. I hope to come back to Manitoba to work when I am done my fellowship.

   Dr. Tawnya Hansen, 2016-2018

2. Nephrology subspecialty training in Winnipeg was quite busy, but the experiences I gained definitely helped prepare me for my current position in transplant nephrology. I am fortunate to be surrounded by supportive mentors and faculty that have helped me achieve success, both as a trainee and in my early career. My plan is for ongoing development of expertise and skills in transplant nephrology, right here in Winnipeg.

   Dr. Jamie Shaw, 2015-2017

3. I completed both my core Internal Medicine residency and my sub-specialty residency in Nephrology at the University of Manitoba. The nephrology sub-specialty curriculum provided exposure to a high volume of diverse pathology. The nephrology section members are committed to teaching and fostered my intellectual curiosity and independence. The clinical skills that I developed during my sub-specialty residency resulted in me feeling prepared when I started independent practice. I am now employed in Winnipeg as a nephrologist.

   Dr. Andrea Mazurat, 2014-2016

4. Internal Medicine residency at the University of Manitoba had been a period of significant personal growth for me. Through this journey, I have had the opportunities to work with many wonderful colleagues and preceptors that I have learned so much from. I feel that the skills and confidence that I have developed over the past three years is helping me to excel in my current residency in Medical Oncology. I am currently training at the Cross Cancer Institute in Edmonton, Alberta. My hope is to become an academic Medical Oncologist in which I will likely pursue an extra year of fellowship training after my two-year of residency is finished.

   Dr. Hanbo Zhang, 2016-2018
What would it be like to study at the University of Manitoba? 6 resident’s share how the department of Internal Medicine has enriched each of their paths. Next, follow along Dr. Zieroth’s journey, as she reveals how her extraordinary career started right here with us.
The Canadian Museum for Human Rights (CMHR) is the first museum solely dedicated to the evolution, celebration and future of human rights. The CMHR is a national and international destination - a centre of learning where Canadians and people from around the world can engage in discussion and commit to taking action against hate and oppression. The Museum opened on September 20, 2014.

Photo courtesy of Aaron Cohen, CMHR.
A WORD FROM OUR ASSOCIATE HEAD OF RESEARCH: DR. HANI EL-GABALAWY

ROADMAP TO INCREASING OUR FOOTPRINT

RESEARCH IS A KEY COMPONENT OF THE MISSION OF AN ACADEMIC DEPARTMENT OF INTERNAL MEDICINE (DIM). The national and international recognition and acclaim achieved by academic clinical departments is highly dependent on their research output and reputation. The top tier universities have focused on: 1) optimizing the competitiveness and output of their existing researchers and research programs; 2) recruiting top researchers from other institutions and, most importantly, 3) nourishing and maintaining a strong pipeline of research-oriented trainees. Academic appointments for clinician investigators are viewed as a pinnacle in career achievement and are highly sought after by trainees.

The Department of Internal Medicine at the University of Manitoba has had a long history of research accomplishments that are recognized globally. One only has to think back to ground breaking studies in respiratory medicine, HIV and other infectious diseases, inflammatory bowel disease, and renal transplantation to appreciate the scope of these accomplishments (sorry not to mention the multiple other areas of strength). These accomplishments are often centred around an inspirational leader who can harness the talents of those around them, collaborate widely and effectively, and mentor promising trainees to their full potential. If done well and with vision, the latter establishes a “lineage of mentorship” where mentees become new mentors who open doors for others and become the leaders of their own generation.

The Department of Internal Medicine has sought to attract and sustain such leaders by establishing a series of endowed research Chairs funded by tenacious efforts that have successfully garnered philanthropic donations and funding from other sources, both private and public. These, along with notable other programs that currently do not have a research chair associated with them, have become the research lifeblood of the department, serving as a magnet for the brightest trainees in our programs.

Having said this, the department has recognized a number of structural impediments to the training and sustaining of clinician investigators and scientists. These can be summarized as follows: 1) lack of a clear and well documented path towards becoming a successful clinician researcher; 2) insufficient and inadequate interface with basic researchers and departments both within, and outside of, the Rady Faculty of Health Sciences; 3) difficulty in transitioning from the “new investigator” stage to the “mid-career investigator” stage. Some of these impediments are generic and appreciated broadly, while others are specific to our own department/institution. All need to be tackled in order to lift the department’s research footprint to a higher level.

To address these challenges, the department is developing a clear, yet flexible, path for integrating research training with clinical training during the post-graduate years. The centerpiece of the research training will be the Royal College’s Clinician Investigator Program which provides funding and a roadmap for the training of clinician investigators. The department is also in active discussions with other clinical departments regarding a new initiative to establish a graduate degree program within the clinical departments themselves, based in part on an existing template in the Department of Surgery.

The potential for highly successful multidisciplinary research is readily evident when one considers the interface between infectious disease researchers with the National Microbiology Lab and the Department of Medical Microbiology, between researchers in nephrology and rheumatology with the Centre for Proteomics and Systems Biology and the Department of Immunology, and between public health researchers and the Department of Community Health Sciences. Although many of these interactions grow organically, catalyzed by the need to compete effectively for research funding, there are many things the department can do to facilitate these interactions. In particular, providing opportunities for unencumbered exchange of ideas is a high priority.

The transition from having new investigator status, with all of the local and national opportunities available for those at this stage, to the harsh reality of large open competitions that mid-career researchers rely on, is always a difficult one. Clinician researchers are particularly vulnerable during this transition, as they are often pulled in multiple directions. In recognition of this, the department focuses on assigning adequate levels of protected time for its cadre of clinician investigators/scientists that can be sustained without the need to rely on clinical activities to protect the time. The department’s Faculty and Research Development Committee regularly evaluates all of those who have such protected time to ensure that impediments and challenges are addressed in a timely manner before they result in the researcher’s program becoming non-viable.

Academic departments, as with individuals, need to continually adapt to an everchanging and at times unpredictable environment. To quote ancient Japanese Wabi Sabi wisdom “nothing is permanent, nothing is finished, and nothing is perfect”.

Let’s move ahead together…
What is your research on and why is it important? As genomic and proteomic techniques have revolutionized the understanding of human pathology, the human lipidome stands ready to make its contribution. Lipids are a key part of the metabolome and are involved in the formation of important biological elements such as membranes, lipid droplets, and lipoproteins. With our current lipidomics platform at St. Boniface Research Centre we will be able to identify close to 600 individual molecule species. This will allow us to determine the contribution and importance of individual lipid molecules in human pathology and specifically the relevance to cardiovascular disease. We have recently found that some of these lipids during a heart attack can lead to significant muscle damage. We are investigating new drugs that can prevent the action of these heart damaging lipids.

Are any other hospitals working on this type of research? We are one of the few laboratories across the globe that focuses on high throughput plasma lipidomic analysis.

Where do you see this research going in the future? My goal has always been, “how can we take better care of our patients and help them live longer with the knowledge that we gain in the research lab?” With our current research we have identified an antibody that can prevent heart damage during a heart attack and we are experimenting with ways in which we can deliver this antibody to the heart during a heart attack.

Why did you choose Internal Medicine? Most universities claim to support academic endeavors and to support research. That statement is taken seriously here at U of Manitoba. As a clinician my success has been greatly due to the support that I receive from the Department of Internal Medicine.

Why did you choose Winnipeg? Winnipeg is a wonderful city to raise a family in. Coming from the traffic jams of Toronto it is refreshing to get to work in 15 minutes.
Dr. Mookherjee’s research program is focused on advancing our fundamental understanding of the molecular processes involved in chronic inflammation. She has established a partnership with Dr. Christopher Carlsten, Director of The Air Pollution Exposure Laboratory (APEL) at UBC. APEL is a unique Canadian installation which makes it possible to expose human participants to precise, accurate and safe, yet realistic levels of environmental pollutants and provides a flexible system to study human adaptations to a wide variety of inhaled exposures. Drs. Mookherjee and Carlsten have ongoing studies aimed at understanding how exposure to air pollution, such as inhaling diesel exhaust, changes proteins in the lungs and blood. This partnership has benefited directly from the expertise and capabilities at the Manitoba Centre for Proteomics and Systems Biology, where Dr. Mookherjee’s lab is located. They receive samples from APEL, which are then processed and analysed at the proteomics centre to determine global protein changes (the proteome) in the lungs and blood. Together, this team is uniquely positioned in Canada to study the effects of air pollution across a range of diseases, and to provide us with a better understanding of pollution-induced immunopathology and its link to infections.

Dr. Mookherjee’s research team has recently defined protein changes in human lungs and in plasma following inhaled exposure to common allergens and air pollutants such as diesel exhaust. Their research findings showed that inflammatory proteins are increased, whereas those critical in clearing infections are decreased in human lungs following exposure to diesel exhaust. These studies represent the first molecular evidence to explain the association of increased infection risk to air pollution exposure that has been shown in prior epidemiological studies. This research has received considerable academic and public attention, and was entirely possible due to the expertise and capabilities at the proteomics centre. The continued partnership of Dr. Mookherjee’s lab at the proteomics center along with Dr. Carlsten’s APEL facility in Vancouver will allow detailed examinations of pulmonary and systemic human adaptation to different environmental exposures. The success of this collaboration has resulted in recent funding secured from the Workers Compensation Board of Manitoba, and together they aim to provide evidence to inform pollution-related policy for public health, both here and across Canada. ■

Dr. Zarychanski’s research focuses on advancing our fundamental understanding of the molecular processes involved in chronic inflammation. She has established a partnership with Dr. Christopher Carlsten, Director of the Air Pollution Exposure Laboratory (APEL) at UBC. APEL is a unique Canadian installation that makes it possible to expose human participants to precise, accurate and safe yet realistic levels of environmental pollutants and provides a flexible system to study human adaptations to a wide variety of inhaled exposures. Drs. Mookherjee and Carlsten have ongoing studies aimed at understanding how exposure to air pollution, such as inhaling diesel exhaust, changes proteins in the lungs and blood. This partnership has benefited directly from the expertise and capabilities at the Manitoba Centre for Proteomics and Systems Biology, where Dr. Mookherjee’s lab is located. They receive samples from APEL, which are then processed and analysed at the proteomics centre to determine global protein changes (the proteome) in the lungs and blood. Together, this team is uniquely positioned in Canada to study the effects of air pollution across a range of diseases, and to provide us with a better understanding of pollution-induced immunopathology and its link to infections.

Dr. Mookherjee’s research team has recently defined protein changes in human lungs and in plasma following inhaled exposure to common allergens and air pollutants such as diesel exhaust. Their research findings showed that inflammatory proteins are increased, whereas those critical in clearing infections are decreased in human lungs following exposure to diesel exhaust. These studies represent the first molecular evidence to explain the association of increased infection risk to air pollution exposure that has been shown in prior epidemiological studies. This research has received considerable academic and public attention, and was entirely possible due to the expertise and capabilities at the proteomics centre. The continued partnership of Dr. Mookherjee’s lab at the proteomics centre along with Dr. Carlsten’s APEL facility in Vancouver will allow detailed examinations of pulmonary and systemic human adaptation to different environmental exposures. The success of this collaboration has resulted in recent funding secured from the Workers Compensation Board of Manitoba, and together they aim to provide evidence to inform pollution-related policy for public health, both here and across Canada. ■
Dr. Charles Bernstein has been a Gastroenterologist with the Department of Internal Medicine at Health Sciences Centre since 1993. He is a Distinguished Professor of Medicine and Director of the University of Manitoba Inflammatory Bowel Disease Clinical and Research Centre (established in 1994). In 2008 he was named as the inaugural Bingham Chair in Gastroenterology.

You are the director of the IBD Clinical and Research Centre here at the University of Manitoba. Where is IBD research going?

There is a considerable focus on exploring the gut microbiome and whether changes in the microbiome can provide clues to disease causation and also targets for treatment. There continues to be further exploration of modulating immune targets and there are many ongoing multicenter clinical trials that will facilitate the emergence of an even greater array of oral, subcutaneous and intravenous drug options to treat IBD. I believe there will also be greater exploration of the brain-gut connection and understanding how stress, anxiety and depression impact on symptoms and disease course.

Does your brain ever shut off? What do you do to regenerate?

I like eating. Unfortunately, if you ask my wife she will tell you that goes on at all hours of the day. But we especially like eating good and interesting food everywhere we travel. I am also a diehard fan of my kids and the Winnipeg Jets.

What advice would you give to residents starting their careers in medicine?

Medicine provides an opportunity to have a multifaceted career. However, trainees need to determine what’s really included in program development. For me, I had decided during my gastroenterology fellowship that while I enjoyed clinical medicine I was not certain it would keep me fully engaged fifteen years later. Hence, I embarked on a research career to complement my clinical career. Trainees, however, should not become researchers solely to facilitate job placement or to fulfill expectations of others. That being said it is much more fun to attend scholarly meetings as a participant, presenting research studies rather than as an observer. Research questions present themselves nearly every day to clinicians so acquiring skills to address these questions is a worthwhile and career enriching endeavor.
What are some of the challenges and payoffs of being a clinician-scientist?

The obvious main challenge is finding funding to sustain research which becomes increasingly expensive. Another challenge is to keep going back to the well, to resubmit an already rejected research manuscript or grant application. The payoff is potentially huge. It includes being an active participant at national and international meetings and being able to contribute to the dialogue about how to move science and clinical practice forward. Perhaps my greatest reward has been meeting people all over the world and having friends worldwide.

You completed your undergraduate medical degree as well as your residency here in Winnipeg. After that you went to work at UCLA for a time. How did you end up back in Winnipeg?

I had a great job on faculty at UCLA and my wife and I were quite happy living in LA. Our son Matthew was born in LA. After the “Rodney King” riots of 1992 we did some soul searching and decided we really wanted to raise our family in Winnipeg. My parents, three older siblings and their respective families were all in Winnipeg and that was the major draw. Considering the resources and gastroenterology faculty at UCLA it was professionally risky to leave LA for Winnipeg, but undoubtedly good for my soul and my family’s well-being.

What has been your most important or surprising finding?

Perhaps the most important accomplishment has been the development of a method to mine administrative data (including that of Manitoba Health) to create a population-based database of a chronic immune disease. In 1995 together with colleague James Blanchard we created the University of Manitoba IBD Epidemiology Database. At the time it was the largest population based database of IBD in North America. It has served as a model for development of other IBD databases in nearly every province and other chronic immune disease databases. We have mined this database to describe issues around disease burden, disease outcomes, comorbidities, medication use, outcomes, and even to pursue questions of disease etiology.

In 2005 together with researchers at Stanford University we reported the first description of the human gut microbiome in the journal Science. This was a groundbreaking study.

In 2005 together with researchers at Stanford University we reported the first description of the human gut microbiome in the journal Science. This was a groundbreaking study.

What questions are you still hoping to answer through your research?

Together with Lesley Graff and John Walker in the Department of Clinical Health Psychology we have explored the impact of mental health on the course of IBD. More recently with Ruth Ann Marrie who is a multiple sclerosis expert and Carol Hitchon who is an arthritis expert and other colleagues from our faculty, we have been exploring the intersection clinically and biologically of different chronic immune diseases and especially the impact of mental health disorders on these diseases. We hope to better understand the biology of the relationship between mental health disorders and chronic immune diseases. The brain-gut connection plays a key role in symptom experience and possibly also in disease pathogenesis.

Why is the topic of the gut microbiome (nicknamed the second brain) so popular right now?

It is popular because we have the tools to study it at a level where all organisms resident in the gut and the metabolites the organisms make can be fully identified. It is popular because research to date has shown how it changes in disease conditions. And it is popular because it is a central focus of popular topics including how diet, stress and drug ingestion may be impactful on the gut microbiome.

For more information, visit the IBD Centre website: ibdmanitoba.org
WE ARE: EVOLVING

A WORD FROM OUR ASSOCIATE HEAD OF CLINICAL SERVICES: DR. NICK HAJIDIACOS

PROVIDING EXCEPTIONAL CLINICAL CARE IS A CORE VALUE

I STARTED IN THIS POSITION IN 2018. The position was created by our department head, Dr. Renner, in order for there to be a dedicated physician focused on the clinical services offered in the department. This position has become important as the clinical services in the Winnipeg Regional Health Authority and the province are going through a generational change.

I took on this role as my area of interest is service design and quality improvement. I became interested in this area early on in my career, working with the department’s service redesign team and being encouraged and mentored by our previous department head, Dr. Dan Roberts. I also felt this was important as providing exceptional clinical care was a core value that I learned in my residency training, from my program director at the time, Dr. Ken VanAmeyde, and my other teachers.

The department has come a long way over the years, with expansion of many services, providing care in multiple hospitals in the region. With acute care now being focused on three hospitals, we are seeing the development of core areas of excellence which will position the department well in the coming years, allowing it to remain sustainable and concentrate on improving the quality of the services we offer to a wider range of patients.

What I hope this position will evolve into is a way to ensure that the clinical mission of the department excels while at the same time creating an environment where education and research, the other two pillars of the department, can flourish and be highly regarded nationwide.

On a personal note, I grew up in Winnipeg and did all of my education here. My parents immigrated here and I have an unwavering commitment to the province which I have always called home. Outside of my career, I enjoy spending time with family, and watching my kids grow up here. I also believe in the need to give back to the community, and commit a lot of extra time working with a charity that means a lot to me, JDRF (Juvenile Diabetes Research Foundation). I am very proud that this year I was elected to the national board of this very important organization.

WHAT IS ‘THE WIKI’?
The department uses a collaboratively edited wiki to document its processes. The information is stored in a searchable, hyperlinked and categorized way to allow quick access from the desk or mobile devices.

WHAT THE WIKI CAN DO FOR YOU?
Any faculty or staff member can get an account to edit processes or ask questions. We know our people know their processes best, so we have replaced management-owned standard operating procedures with a documentation process that allows everyone to contribute to and understand the current best practices. As an additional benefit, the tagging of questions and concerns right in our documentation generates meta-data which effectively maps the gaps, tells us where improvement should focus, and tracks our progress over time.

HOW DOES THE WIKI RELATE TO THE PHILOSOPHY OF THE DEPARTMENT?
Our adoption of this philosophy is a reflection of our belief in continuous improvement and breaking down silos. We allow our processes and procedures to be public - if they are good there should be no reason not to be transparent about them, and if they are not good enough we would rather improve them than hide them.

OTHERS USING WIKIS IN A HEALTH CARE, RESEARCH OR OPERATIONAL ENVIRONMENT
- NASA’s Extra Vehicular Activity Wiki
- Emily Carr University
- Intellipedia, used by the US Central Intelligence Agency’s (CIA) Wikipedia
Service Redesign

The Service Redesign Team is comprised of professionals representing engineering, medicine, nursing, information technology and health care. The breadth and depth of experience is substantial, enabling the pursuit of a variety of process improvement projects within the department.

Sponsored and supported directly by the medical community, the team has, in a short period of time, achieved some notable successes, especially in the areas of electronic medical record integration and comprehensive redesign of a number of key service areas. Applying a scientific management approach to their work, the team is able to bring a fresh perspective to the delivery of health care services which recognizes the principle of cost containment and customer service without sacrificing patient safety, performance and the pursuit of innovative ideas. The team continues to mature in terms of its ability to deliver value-added services to the local health care community.

The primary customers are WRHA Medicine Program Managers and Medical Directors at various sites around the city. Upon direction from these managers, projects are initiated. Most projects result in analysis of outpatient and inpatient service provision. The team engages with key stakeholders including medical staff, researchers, finance and information technology staff. The team provides project management and facilitation services. Effective and appropriate communication techniques are the key to these responsibilities. Many of the projects extend to include implementation of recommendations in conjunction with local management. Information management has become a central focus of many of these efforts. Data analysis to support management decision-making is also a core function.

This past year, the team has focused on completion of the EMR roll-out to the remaining Medicine ambulatory care clinics and engaged in the logistical planning for the future consolidated ambulatory care clinic.

NEW INTERNAL MEDICINE CLINIC

by: Dr. David Robinson, MD, MSc, FRCP, Medical Director - Ambulatory Care Centre, Department of Internal Medicine

In the fall of 2017, the Department of Internal Medicine, in cooperation with Health Sciences Centre (HSC) and the Winnipeg Regional Health Authority (WRHA), agreed to a $8.9M project where 13 of our ambulatory care clinics which see over 75,000 patients a year, would be consolidated into a brand-new ambulatory care clinic (ACC) in what was once a school located next to HSC.

The new ACC will not only have a new physical layout but an updated approach to outpatient medicine. Patient centered care will be emphasized with better coordination between specialties and the opportunity for patients to see multiple specialists on the same trip and sometimes in the same clinic. Expanded hours will increase clinic capacity and allow appointments before or after work for some patients. Increased use of telemedicine will obviate the need for some patients to travel to appointments altogether. Most importantly, a new patient advisory group, representing the diversity of patients seen in the ACC will tell us when we are doing things right and where we need to improve.

The second focus of the ACC will be on tertiary and academic medicine. That means focusing on the patients who need our specialized care the most — patients with complex medical problems, as well as those from vulnerable groups within our province. As a teaching hospital, clinics will be organized to allow direct observation of trainees with patients, meeting the new standard in competency-based medical education in Canada. Teaching space for small groups will also be available. What about research? Flexible space for clinic-based research and processing of samples is built in. We hope the close association of multiple specialties will foster collaboration between subspecialists leading to improvements in care and research opportunities as we learn from each other.

The department expects to move into our new clinic space in late 2020.

GO ONLINE FOR ALL THE LATEST NEWS AND UPDATES:

WEBSITE: umanitoba.ca/medicine/units/intmed/
BLOG: n.umintmed.ca
WIKI: wiki.umintmed.ca

NEW INTERNAL MEDICINE CLINIC

by: Dr. David Robinson, MD, MSc, FRCP, Medical Director - Ambulatory Care Centre, Department of Internal Medicine

In the fall of 2017, the Department of Internal Medicine, in cooperation with Health Sciences Centre (HSC) and the Winnipeg Regional Health Authority (WRHA), agreed to a $8.9M project where 13 of our ambulatory care clinics which see over 75,000 patients a year, would be consolidated into a brand-new ambulatory care clinic (ACC) in what was once a school located next to HSC.

The new ACC will not only have a new physical layout but an updated approach to outpatient medicine. Patient centered care will be emphasized with better coordination between specialties and the opportunity for patients to see multiple specialists on the same trip and sometimes in the same clinic. Expanded hours will increase clinic capacity and allow appointments before or after work for some patients. Increased use of telemedicine will obviate the need for some patients to travel to appointments altogether. Most importantly, a new patient advisory group, representing the diversity of patients seen in the ACC will tell us when we are doing things right and where we need to improve.

The second focus of the ACC will be on tertiary and academic medicine. That means focusing on the patients who need our specialized care the most — patients with complex medical problems, as well as those from vulnerable groups within our province. As a teaching hospital, clinics will be organized to allow direct observation of trainees with patients, meeting the new standard in competency-based medical education in Canada. Teaching space for small groups will also be available. What about research? Flexible space for clinic-based research and processing of samples is built in. We hope the close association of multiple specialties will foster collaboration between subspecialists leading to improvements in care and research opportunities as we learn from each other.

The department expects to move into our new clinic space in late 2020.
The people who choose to live and work in Winnipeg see the bigger picture and know that any challenges experienced are matched and exceeded by the opportunities afforded to us.

We are a community of contrasts: hot and cold, laid-back and passionate, humble yet resilient, hard working people that know how to enjoy their free time.

As the “Culture Cradle of Canada” Winnipeg is overflowing with creativity in all forms, from visual arts to live music to the performing arts. Winnipeg is home to the Royal Winnipeg Ballet, the Winnipeg Symphony Orchestra, Manitoba Opera, and many theatre companies including Rainbow Stage and Manitoba Theatre Centre. Recently, the architecturally renowned Canadian Museum of Human Rights was opened in Winnipeg, the first national museum outside of Ottawa. Creativity also expands to our local food scene. Whether you are into breweries, wine bars, small plates, fancy food kiosks, or brick ovens, discovering a new local favourite could easily become a common occurrence.

Winnipeg enjoys world class cuisine and cultural events year round, but is also known for its fierce loyalty and addictive attitude towards their sports teams. Home to many professional and amateur sports teams including the Winnipeg Blue Bombers, Winnipeg Jets, Manitoba Moose, Winnipeg Gold eyes, and most recently, Valour FC, there’s a team for everyone to get behind.

Though it’s easy getting from one side of the city to the other in a short amount of time, should you want to, it’s even easier to escape to numerous lakes, parks and beaches just outside Winnipeg. Camping, fishing, biking, hiking and many other outdoor activities keep Winnipeggers energized in every season.

Because the cost of living in Winnipeg is affordable, there is ample ability to thrive both personally and professionally. Individually, or as a family, the opportunity for growth and success in Winnipeg is unmatched in other markets.
OF IT ALL

NO MATTER THE SEASON, THERE’S NOT ENOUGH TIME TO TAKE IN EVERYTHING WINNIPEG AND ITS SURROUNDING AREA HAS TO OFFER!

1. Out on the lake – Caddy Lake canoe route in Whiteshell Provincial Park. Travel Manitoba
2. Exchange District – Known for its intact early 20th century collection of warehouses, and is home to approximately 150 heritage buildings. Travel Manitoba
3. Manitoba Legislature Building – Also known as the “The Leg” (pronounced ledge). Travel Manitoba
4. Investors Group Field – Home to the Winnipeg Blue Bombers and University of Manitoba Bisons. Travel Manitoba
5. The Forks River Trail – Earned the Guinness World Record for its 8.54 kilometers of naturally frozen skating surface along the Assiniboine River. Melanie Loyola
6. Churchill Polar Bear Tours – Experience polar bears in their natural habitat. Travel Manitoba
7. Winnipeg Cycling Paths – One of Winnipeg’s many cycling paths. Travel Manitoba
8. Centre of Canada Sign – Located in Tache, Manitoba, under 40 minutes outside of Winnipeg. Kate Fenske
10. The Hudson Bay coastline – Retreating glaciers have smoothly sculpted rock formations in Churchill. Travel Manitoba
11. The Old Market Square – Home of The Cube, an outdoor concert venue. Travel Manitoba
“It is impossible to mention everyone whose commitment and hard work make the department a success. Moving forward, we will strive to highlight the achievements also of those not mentioned in this current brochure. Thanks for understanding!”

Eberhard Renner, MD, FRCPC, FAASLD
DEPARTMENT HEAD, INTERNAL MEDICINE
DEPARTMENT OF INTERNAL MEDICINE
ROOM GC430, HEALTH SCIENCES CENTRE
820 SHERBROOK STREET
WINNIPEG, MANITOBA, CANADA R3A 1R9
P: 204-787-7772
F: 204-787-4826
E: intmed@umanitoba.ca

Available online in PDF format at
umanitoba.ca/medicine/units/intmed/

DEVELOPMENT:
Ashley Watsko, BA, Manager, Physician Services
E: awatsko@exchange.hsc.mb.ca
Melanie Loyola, Program Assistant
Elaine Manipol, Administrative Assistant
Vanessa Vertz, Program Administrator
DESIGN: Well CREATIVE, wellcreative.ca