DOM 100

A CENTURY OF **INSPIRATION**

UNIVERSITY OF ALBERTA

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A CENTURY OF INSPIRATION

DEPARTMENT OF MEDICINE
FACULTY OF MEDICINE & DENTISTRY
COLLEGE OF HEALTH SCIENCES

Territorial Acknowledgement

The University of Alberta respectfully acknowledges that we are located on Treaty 6 territory, a traditional gathering place for diverse Indigenous peoples including the Cree, Blackfoot, Métis, Nakota Sioux, Iroquois, Dene, Ojibway/ Saulteaux/Anishinaabe, Inuit, and many others whose histories, languages, and cultures continue to influence our vibrant community.

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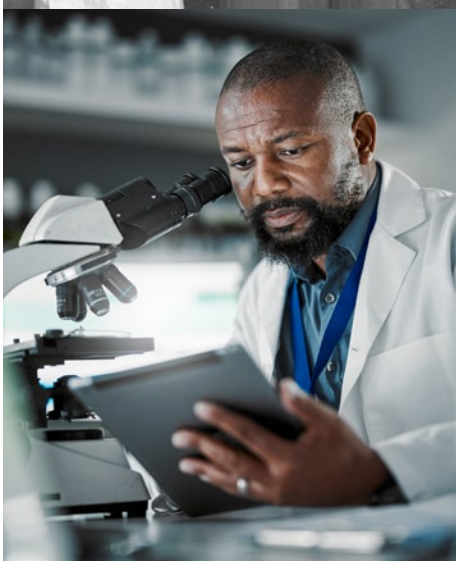


Chair's Message

Just over a century ago, a transformative endowment of $500,000 from the **Rockefeller Foundation**, directed to medical education at the University of Alberta, led to the creation of a full, five-year medical degree program in the Medical School and the founding of the Department of Medicine. The establishment of clinical professorships enabled the recruitment of McGill-trained neurologist **Dr. Egerton Pope** as the first clinical professor of medicine.

Dr. Pope became the inaugural head of the new Department of Medicine, one of only two departments created in 1924 within the Medical School.

In those early years, Pediatrics, Psychiatry, and Preventive Medicine were all under the Department of Medicine, before becoming separate departments in later decades. Critical Care, Medical Oncology, Radiology, Ophthalmology and Otolaryngology, and Anesthesiology also had their start in our department. Preventive Medicine and Physical Medicine & Rehabilitation experienced moves in and out of our department before finding a home back with us in this century.

All this to say that even though our department has looked different at various times, the central essence, vision, and values have remained the same. For me, this is most clearly expressed in the vision statement created by the Department in the early 1990s, then under one of my personal mentors, former Chair **Dr. Paul Armstrong**: "To achieve international standards of excellence in our education and research programs in order to provide exemplary contributions to the health of the current and future generations we serve." This is the continuing legacy that I'm most proud of and is the bedrock for our latest strategic plan which, in broad strokes, builds out from that foundation to cultivate broad collaborations, expert communities, and co-creation using new technologies in the pursuit of academic medical excellence.

There are similarities between our present time and the 1920s. One war had ended and the seeds of the next had been planted. Epidemics had raged and more were on the horizon. Social and economic fluctuations meant attitudes and resources waxed and waned. Clinical care was under pressure but poised for transformation, resources were strained yet deployed in ingenious ways, and the need for more people, research, and education was essential for meeting medical need with the best medical care. Yet it was a new era in medicine signalled by such advances as insulin and the electrocardiogram. Through the decades, the commitment to discover and learn and apply findings to care has been unwavering.

Every great success story starts with first steps. The Department of Medicine's first steps a century ago are something I reflect on with pride and awe. From the beginning, the Department of Medicine was an integral part of the School of Medicine. Today our 14 divisions of adult medicine have more than 700 academic and clinical members and constitute the largest department in the university. Our department exemplifies the best in academic medicine, with continual, outstanding, globally acclaimed achievements from clinical innovation, research prowess, and education leadership.

The impact of the Department is felt profoundly at the individual level by our faculty, our trainees at all levels, and the patients we serve in the Edmonton area, Northern Alberta, and much farther afield. Equally resonant is our impact at the municipal, provincial, national, and international levels.

Leaders in the Department of Medicine throughout the past century have often gone on to take leadership positions within our own Faculty of Medicine & Dentistry and in our university, at other universities, the Alberta Medical Association, the Canadian Medical Association, the Royal College of Physicians and Surgeons of Canada, the Medical Research Council, and the corporate sector.

Many of our members have been honoured with provincial, national, and international recognition for their contributions and achievements, starting with **Dr. James Collip's** formulation that contributed to the Nobel Prize winning discovery of insulin.

Our legacy of research started then, and in the decades since, we've led the University of Alberta in both research dollars garnered and research output. The links from the past endured with many research successes translated into medical and health advances such as the Edmonton Protocol, the discovery of the Hepatitis B vaccine, and world-firsts in transplant medicine.

Our medical education programs are among the best in the country, evolving from a few graduate students in the 1930s, to the first specialist trainees in the 1940s and 50s, to the residency programs in the 60s and 70s, to today, where we have the largest graduate program at the University of Alberta. Our medical education leadership has resulted in honours both within the University of Alberta and at the national and international levels from our peers.

Clinical innovation is a driving force in our department. We have always been very early adopters to clinical technologies, from renal care with the first use of dialysis in Canada, to cardiac care with the first heart transplant performed in Western Canada, and now, with one of the largest cardiac transplant programs in the country. Our Endocrinology division members were leaders in the initial development of biomarkers and hormone testing. Transplant medicine in Edmonton dominates in the country with the integration of research, clinical care, and education across divisions and other departments in the faculty and university.

At this important milestone, we celebrate the legacy of the past: the ideas, perseverance, and achievements of thousands of people before us who have made this department a powerhouse of outstanding academic medical activity and accomplishment. As we turn our eyes to the future, we know it will be our contributions and achievements that will continue the legacy in the years ahead.

While none of us today has the living experience of what academic medicine was like in Alberta in the early years of the last century, we have accounts that paint a fascinating picture, from the types of disease that were common then, such as Tularemia, to the ingenious tools rigged up to alleviate patient suffering during the polio epidemic.

These accounts are found in the histories of the Faculty of Medicine & Dentistry and of the Department of Medicine, painstakingly researched and written by **Dr. Dawna Gilchrist**, alumnus of the Division of General Internal Medicine within the Department of Medicine. It is Dr. Gilchrist's outstanding work that we relied on heavily to prepare this document, and we are most grateful for her scholarship.

> ***Dr. Pope came as professor of medicine and really inspired us all.*** *I thought he was the most fascinating and cultivated man I had ever seen and I more or less worshipped him as well as his subject. I read Osler's medicine from cover to cover in order to be able to answer his questions. No other professor in my six years of medicine made such an impression on me. His lectures were masterpieces, his clinic was well run.*
>
> ***Leone McGregor Hellstedt,*** *student in the first graduating class of Medicine. "Background and Experiences of a Girl Born in Carnduff, Saskatchewan in January 1900. The Choice and Course of her Career in Medicine."*

Past Chairs

Department of Medicine, University of Alberta

Dr. Egerton L. Pope
1924–1944

Dr. John W. Scott
1944–1954

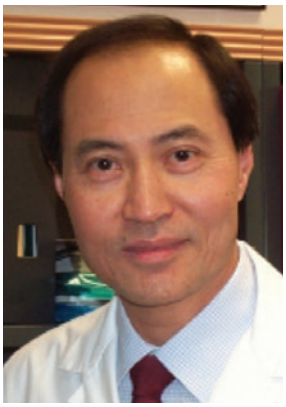
Dr. Donald R. Wilson
1954–1969

Dr. Robert S. Fraser
1969–1974

Dr. Brian Sproule
(Acting)
July 1974–June 1975

Dr. George D. Molnar
1975–1986

Dr. E. Garner King
1986–1992



Dr. S. F. Paul Man
(Acting)
April 1992–January 1993

Dr. Paul W. Armstrong
1993–1999

Dr. Thomas J. Marrie
1999–2004

Dr. Jody Ginsberg
(Acting)
July–October 2004

Dr. Jonathan B. Meddings
2004–2009

Dr. Dennis Kunimoto
(Acting)
September 2009–April 2010

Dr. Barbara Ballermann
2010–2020

Cardiology

Before its founding as a division seventy years ago, the practice of cardiology in Edmonton had a limited scope of procedures. The return from the war of two interns, Drs. G. I. Bell and J. Dvorkin, both with training in cardiology, led to its emergence as a subspecialty.

Dr. Michelle Graham

Director, Division of Cardiology
Department of Medicine
Faculty of Medicine & Dentistry
College of Health Sciences
University of Alberta

The introduction of cardiac catheterization in 1953, which enables visualization and more reliable diagnoses of the heart, and then the pump oxygenator, which provided oxygen to the blood during surgery, resulted in fewer risks for heart surgery and significant improvement of patient outcomes.

Recruitment and research in the early days were made possible by a trust fund created with pooled funding from ECG interpretation. Another pool of income from the cardiac catheterization laboratory gave cardiologists more time to work in their area of interest, whether research, clinical care, or teaching. The first coronary care unit, founded on cardiopulmonary resuscitation and new training for nurses and technicians, was established in 1965 by **Dr. Russ Taylor** and reduced in-hospital deaths by more than half within a year.

In the 1970s, the Government of Alberta gave millions to upgrade cardiology labs and units and to enable hiring of cardiologists with expertise in the new technologies. The creation of the Alberta Heritage Foundation for Medical Research in 1979 provided massive funding for the recruitment of cardiology researchers and the establishment of laboratories.

In the 1990s, the interdisciplinary Cardiac Transplantation Program was formed; it is now one of the largest in Canada. Heart surgeons and cardiologists collaborate with clinical and laboratory researchers to develop innovative approaches to patient care.

In 2005 the Mazankowski Alberta Heart Institute opened as the new home for cardiology excellence in Edmonton. Nearly two decades later, the Cardiology Division is one of the best in Canada because of its pursuit of excellence in clinical care, education, research, and mentorship.

"We're always focused on the future," says Divisional **Director Michelle Graham**. "If we identify someone in their first year of Cardiology residency who is really impressing us, we start talking to them about eventually joining us on faculty."

In the two years Dr. Graham has been division director, she has recruited seven people, more than had been recruited in the previous decade. "Our retirements or departures have outpaced our recruitment," she says. "So now we're building for succession planning and eventually expansion of the system."

Cardiology is now the largest division in the Department of Medicine, with about 90 people total throughout the city, 36 of those in the Mazankowski Alberta Heart Institute. It's one of the highest-ranked adult cardiology divisions in the country, with strengths in cardiac intensive care, electrophysiology, including complex devices and ablations, interventional and structural cardiology, adult congenital heart disease, 3D echo and imaging, and transplantation.

The division has impressive research strengths, with clinical and basic researchers garnering millions in funding and producing publications in top-ranked journals. "We've just had one of our clinical faculty, Dr. Soori Sivakumaran, someone with no protected research time, publish a first-author paper in the *New England Journal of Medicine*," says Dr. Graham. "I think that's one of the best things that's ever happened."

In the area of training, the Adult Cardiology residency program is one of the most sought-after in the country. "One of our strengths is all the simulation training that we do with all levels of residents," says Dr. Graham.

One recent simulation centred on a high-fidelity simulation of a destabilized patient and involved a full team, from the cardiac ward to the CICU to the catheterization lab. "Simulation has the stress level of managing an acutely ill patient, with everyone engaged, but with no risk," says Dr. Graham.

One of the features of the division's training is the appointment of a mentor for every resident. "Mentorship is a pillar of academic medicine that in my view is separate from education," says Dr. Graham. "Our residents have mentors dedicated to getting them to the finish line in terms of successfully navigating training, completion of scholarly activity, and knowing who will make connections if the resident wants to do a fellowship somewhere else."

"It reflects that the division as a whole, separate from teaching, invests in our residents," says Dr. Graham. "They are the future generation of cardiovascular practitioners."

As cardiology evolves, Dr. Graham's vision is to stay ahead of future needs through recruitment planning in specific areas. "Women's heart health is sadly underrepresented, and that's on my radar," she says. "Another area with a huge shortage of specialists worldwide is adult congenital heart disease." Other areas Dr. Graham pinpoints are cardio-oncology, transplant, inherited arrythmias, and cardio-obstetrics.

To get that top talent, Alberta is often competing with other, bigger centres. Dr. Graham knows that her strategy of recruitment from within works because it is a pathway that she herself benefited from.

"I had incredible mentors all across Canada, including Dr. Tom Marrie, whom I first met when I was training in cardiology at Dalhousie," says Dr. Graham. "When he became Chair here, I was thrilled because he was so invested in making sure his people were a success."

Dr. Graham is also proud that the Department of Medicine has had two female leaders during her tenure, Dr. Barbara Ballermann and Dr. Narmin Kassam. "I look up to both of them for their ability to steer the department to achieve our mission and vision," she says.

"I want us to be the number one place for cardiology, period," Dr. Graham says. "I want people to say the Mazankowski Heart Institute before they think of any other centre. I want us to be the absolute best."

Dr. Soori Sivakumaran

Dr. Soori Sivakumaran trained as an electrical engineer before turning to medicine, specializing in cardiac electrophysiology. These days, Dr. Sivakumaran performs complex cardiac resynchronization therapy (CRT) device implantation and extraction on patients with heart failure and on those with device infection or needing upgrades to more advanced devices.

Some heart failure patients have electrical conduction abnormalities that throw off the heart's electrical timing. "That timing can make a difference in how the heart works as a pump," says Dr. Sivakumaran. "And for some people, if we fix that timing, they can have a marked improvement."

In 2003, Dr. Sivakumaran was the principal investigator in the Edmonton portion of the RAFT clinical study that showed the five-year outcome advantages for patients who received a CRT device compared to those who received an implantable cardioverter-defibrillator (ICD). In 2024, Dr. Sivakumaran was first co-author on a *New England Journal of Medicine* publication of a study that showed the sustained benefit for many of the original RAFT patients with CRT devices over 14 years. It was the first study conducted of the long-term use of CRT devices.

Dr. Sivakumaran's patients are so sick that CRT implantation is often their last resort. "Many people get better after CRT, but some people don't," he says. "Figuring out why is important to me because I know the patients involved, and I want to do what I can to help them."

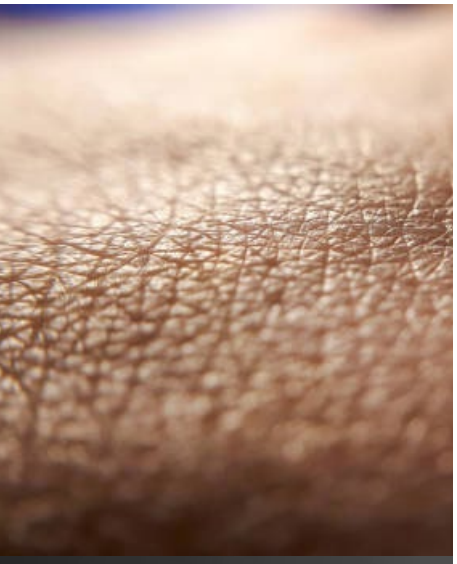
149

Four graduate programs with a total of 149 trainees

> ***… from the early '30s when I was a medical student, to about 1954, the Department and its facilities remained relatively static, reflecting that money was not available during the Depression and the 'dirty '30s'…*** *during the War, the major effort was turning out physicians….with the return of physicians from the War, and postwar training programs, and with prosperity just beginning to make its appearance, especially with the discovery of oil at Leduc, the period from 1954 to 1969 could be called the period of rapid expansion.*
>
> ***Dr. Donald R. Wilson*** *"The History of the Department of Medicine at the University of Alberta." Chair: 1944–1954*

Dermatology

Although dermatologists had been practising in Edmonton since 1919 with the arrival of Dr. Harold Orr, later to become the president of the Canadian Medical Association, it wasn't until 1987 that an academic training program in dermatology began.



Dr. Kowichi Jimbow, a Sapporo, Japan-based dermatologist, arrived in Edmonton on July 31, 1987, the same day that a devastating tornado hit Edmonton, to lead the development of the program. Within a year, the first residents were admitted to the program. Among them was **Dr. Thomas Salopek**, who later established the multidisciplinary melanoma group at the Kaye Edmonton Clinic.

In 1999, under Division Director **Dr. A. Krol**, the basic research component of the residency training program was eliminated, and clinical dermatology training was increased by a year. Around the same time, a dermatology outpatient clinic was opened in the Clinical Sciences Building so that staff dermatologists could see their patients more efficiently and residents could have easy access to clinical learning.

Dr. Robert Gniadecki

Director, Division of Dermatology
Department of Medicine
Faculty of Medicine & Dentistry
College of Health Sciences
University of Alberta

Between 1999 and 2004, Edmonton saw the establishment of several dermatologists' practices throughout the city. In 2015, a year after the recruitment of Dr. Robert Gniadecki from Denmark as division director, the division re-established a laboratory in the Heritage Medical Research Centre for research and training. One of the research initiatives undertaken was a focus on the genomics of cutaneous lymphoma, which led to the development of a method for genome sequencing of cancer cells in 2018.

On the clinical side, several specialized clinics were created over the years, including a patch testing clinic in the Kaye Clinic founded by Dr. John Elliott in 2008 to diagnose contact dermatitis; a skin lymphoma clinic established in 2017 by Dr. Thomas Salopek and headed by Dr. Marlene Dytoc; a mole-screening clinic and hair diseases clinic in 2018; and, in a collaboration with Rheumatology in 2019, a clinic for complex cases of autoimmune diseases with skin manifestations.

Although the pandemic stopped most in-patient medical appointments, Dermatology kept their nine clinics opened, safely providing about 16,000 consultations in 2020. In 2021, **Dr. Marlene Dytoc** opened a Psychiatry-Dermatology Skin Health Clinic. The division's focus in research resulted in several papers in 2022 and 2023 on the subjects of T-cell lymphomas and, with Rheumatology Division members, early systemic sclerosis.

For Division Director **Robert Gniadecki**, the essential functions of the Division of Dermatology are providing education and research and focusing on the unmet needs of complex patients not covered by practising physicians in community offices.

"It's not that community doctors can't solve these problems, but they have time constraints and aren't working in academic medicine with access to the latest research information and treatments," he says.

Dr. Gniadecki himself started out in internal medicine and cardiology more than two decades ago and says he wouldn't be able to function as a physician in those divisions now. "You lose skills, and one of the strengths of being in the Department of Medicine, which is different from dermatology in Europe, is that you are part of a bigger unit that is focused on problem-solving together," he says. "One of the reasons I came to Canada was to work in this kind of model."

When Dr. Gniadecki first arrived at the Department of Medicine in 2015, the person most helpful to him on a daily basis was his first executive assistant **Phyllis Ewasiw**. "Phil had been here for a long time and knew everybody," he says. "Having a very good divisional assistant who provides continuity and institutional memory is extremely important, and this is often overlooked."

Collaboration is something Dr. Gniadecki prizes. "We are a small research group and know each other very well," he says. "There's a willingness to collaborate which is very different than my experience in Europe."

"In academic medicine, collaborative research can translate into new treatment, especially for difficult conditions," he says. "In a complex dermatological disease, for example, there may be information that will help our colleagues in other specialities and vice-versa."

Skin and joints are commonly affected in patients with autoimmune disease. Dr. Gniadecki and his division colleagues work closely with clinical immunologists and rheumatologists because of the overlap with autoimmune disease. "Patients who have unsolved diagnostic problems and skin manifestations are sent to us," he says. "Sometimes we can even help with internal medicine diagnoses just because we read this in a different way."

Because the skin is a big organ with a tissue weight of approximately two kilos, the amount of autoimmunity that happens in the skin has systemic consequences. Dr. Gniadecki describes how his division is one of the few centres that is looking into mortality connected to skin disease. "When we look at psoriasis patients and compare them to other ambulatory patients with the same levels of illness, we find that our patients' survival rate is about three years shorter," he says. "There isn't a drug on the market that can increase their ability to survive inflammation by three years."

Answers for these and other complex dermatological problems arise from the division's teamwork. Despite the division's size, it's well-integrated. "Everyone has a different sub-specialty or different area of interest," says Dr. Gniadecki. "But the common denominator is that we see skin disease as part of the bigger picture, as an internal medicine, because there are so many interactions between the skin and internal organs."

One of Dr. Gniadecki's future plans is to better integrate clinical immunology with dermatology. "Autoimmunity and inflammation play such a huge role in skin disease, so much so that approximately 90 per cent of everything we see is autoimmune inflammation," he says. "My goal is to hire a clinical immunologist as a bridge between our two disciplines."

The addition of immunology expertise in the division would foster unique fellowship training and broaden research activity. It would also offer substantial benefits to patients, given that the prevalence of inflammatory and autoimmune skin diseases is increasing.

Dr. Gniadecki sees artificial intelligence as having a role in shaping dermatology practice of the future. "Dermatology is very visual and easy to plug into AI," says Dr. Gniadecki. "Diagnosis and satellite treatment for skin diseases may be greatly enhanced by it, but ultimately patient contact cannot be replaced by algorithms."

Cases of anatomy specimens in Medical Building, 1929.

A laboratory at the University of Alberta Hospital.

300*

*Almost 300 Academic Faculty

Dr. Thomas Salopek

Dr. Thomas Salopek was set on becoming a surgeon when he entered medical school, but as luck would have it, he stumbled across a dermatology atlas in the Cameron Library at the U of A that changed his life course. He became one of the first three residents in the Division of Dermatology, newly established by Dr. Kowichi Jimbow, who had been recruited from Japan.

"It was so new that no one knew about it," says Dr. Salopek. "If you simply walked through the door, you got the job." After his residency, Dr. Salopek completed a melanoma fellowship at New York University, returning to Edmonton in 1994, initially as a research associate, and then worked his way through the ranks to full Professor in 2013.

"In the beginning, it was just **Dr. Jimbow** and I, until **Dr. Andrew Lin** was recruited from Rockefeller University in New York," says Dr. Salopek. "There was then, as there is now a heavy involvement by community dermatologists, which has enabled the program to survive all these decades."

Today, most of the academic members run highly specialized clinics or participate in multidisciplinary clinics at the Kaye Edmonton Clinic.

In his career, Dr. Salopek has seen huge strides in the outlook for patients with melanoma. "Thanks to immunotherapy, we are achieving melanoma-specific survival rates of over 50 per cent and are cautiously using the word "curable" when we discuss treatments with patients."

Endocrinology and Metabolism

Dr. Terra Arnason

Director, Division of Endocrinology and Metabolism
Department of Medicine
Faculty of Medicine & Dentistry
College of Health Sciences
University of Alberta

Former endocrinology resident Dr. Terra Arnason was recruited back to the University of Alberta as the Endocrinology and Metabolism Division Director in 2023. For her, one of the strengths of the division is the islet transplantation program for management of brittle Type 1 diabetics, developed in Edmonton nearly 25 years ago and now used throughout the world. The program is now housed in the Alberta Diabetes Institute, a hub for translating research into clinical care.

The division's success in diabetes research and care, and in many other areas of endocrinology and metabolism, is due to decades of research leadership and recruitment focus. Several key figures in the early days of the division were instrumental in creating a hub of knowledge that has expanded and flourished over the division's almost 70-year-history.

From Dr. Lionel McLeod, the division's first director in the 1950s, who introduced chronic dialysis in Canada; to Dr. George Molnar, the founder of the Muttart Diabetes Research and Training Centre on campus in the 1970s; to biomedical engineer Dr. Ray Rajotte, leader of the Edmonton Protocol group in 1980s and early '90s; the focus on diabetes has resulted in global attention and first-class care.

The robust clinical and research atmosphere has led to important advances in many other endocrinological and metabolic disease treatments. Division members had many firsts, from the use of a new growth hormone at the University Hospital in 1969 on a child with deficient growth hormone, to the introduction of fine needle aspiration for thyroid nodule assessments and some of the earliest work in Canada on bone densitometry.

Divisional research and clinical expertise throughout the decades include infertility, diabetes care, gestational diabetes, placental hormone studies, testicular tumours, breast cancer patient care, fetal hyperthyroidism, lipid research, neuroendocrinology, calcium disorders, hypertension, and transgender care.

Twenty-five years after the Edmonton Protocol's success, diabetes has increased exponentially in the population. "For example, the number of cases of gestational diabetes is astronomical," says **Dr. Arnason**. "Some hospital sites have closed clinics for other types of diabetes because they can do nothing but manage it."

The division is focusing on quality improvement (QI) research and recruitment as some of the necessary steps to manage care demands. "Every new recruit will be providing specialty diabetes care," she says. "And many of our QI projects revolve around the care journey of patients with diabetes."

Dr. Arnason sees promoting the academic side of endocrinology and metabolism within the division as vital to continued excellence in care. "My mandate is to bring research back as a priority," she says. "We want to involve everyone, whether as a lead researcher, or to bring ideas to the table, or to collaborate with the specialties we overlap with."

The goal for the division is that the strengths they are building on will translate into patients receiving the best care possible with the best treatments available. "We want to have this spectacular centre of excellence in place," says Dr. Arnason. "And maybe, in a few decades, we will be the place where the cure is found for diabetes."

Dr. Constance Chik

Professor Emerita and neuroendocrinologist **Dr. Constance Chik** has, in her words, "done almost everything that an academic endocrinologist would want to do in a career."

After obtaining her MD and PhD, followed by additional training at the National Institutes of Health, Dr. Chik joined the Division of Endocrinology and Metabolism in 1988. She was the program director, and later, the first female director of the division. Her national administrative leadership roles included that of chair of the Endocrinology and Metabolism Examination Board of the Royal College of Physicians and Surgeons of Canada and president of the Canadian Society of Endocrinology and Metabolism. In addition to caring for patients with neuroendocrine disorders, she was the co-director of the Western Canada Pituitary Clinic, co-founded the Alberta Pituitary Patient Society support group, and was instrumental in securing coverage of several medications essential for the treatment of pituitary disorders in Alberta.

Dr. Chik garnered several national funding awards for her neuroendocrine research, which primarily focused on the pineal and the pituitary gland, with **Dr. Anthony Ho**, Department of Physiology, being her main collaborator. Her research interests included the cellular mechanism of the pineal gland, melatonin, acromegaly, and diabetes. She participated in many multicentre clinical trials and published extensively in many top-ranked journals.

Dr. Chik retired from academia in 2018, but continues to treat patients, some of whom have been with her for 35 years.

Gastroenterology

Dr. Clarence Wong

Director, Division of Gastroenterology
Department of Medicine
Faculty of Medicine & Dentistry
College of Health Sciences
University of Alberta

Dr. Clarence Wong, the Division of Gastroenterology's (GI) director, clearly sees the strong links between the division's current strengths and the vision of its founders more than half a century ago. "We had one of the first GI training programs in the country, certainly the first in Western Canada," says Dr. Wong, "thanks to the vision and drive of divisional founders Dr. Richard Sherbaniuk and Dr. Ron Wensel in the 1960s."

The division's dedication to advancing education encompasses all levels of training and administration. The GI block for undergraduates was one of the first in the Faculty of Medicine & Dentistry to do video podcasting, long before the pandemic necessitated it. Division members are involved at all levels of administration to promote education, from roles in the Faculty of Medicine & Dentistry to national service in developing the competency-by-design framework for GI training.

Research has historically been a priority in the division. The first residency program director, **Dr. Wilfred Weinstein**, was recruited on the guarantee that his research time be protected. "Dr. Weinstein set a pathway for research, education, and translational research in the division," says Dr. Wong.

Many years later, Dr. Richard Fedorak was hired because of his vision of translational research. Dr. Fedorak, who later became divisional director, then dean of Medicine & Dentistry, led a large gastrointestinal disease clinical research group. While divisional director, he oversaw the planning of the Zeidler Family Gastrointestinal Health and Research Institute, where business and academic gastroenterology come together.

To ensure that GI training in the division was a step ahead of other places, **Dr. Fedorak** and **Dr. Robert Bailey** created the Bright Lights program (now called the Scholars program). "They took students and residents to national meetings to show them what it was like to be a clinical or academic gastroenterologist," says Dr. Wong. "We were the first among the specialties to do it, and that attracted GI societies from the US to come to us to learn about it."

Dr. Wong describes the current translational research of the division as incredibly strong, spanning basic biomedical to clinical research, with well-known international affiliations. The diversity of gastroenterology research includes the microbiome, Helicobacter pylori in Northern Indigenous communities, irritable bowel syndrome; the human betaretrovirus in liver disease, portal hypertension, nutrition research, motility, therapeutic endoscopy, and GI hypertension control.

Clinical innovation evolves from dedicated research and education focus. "We have core clinical strengths in inflammatory bowel disease, hepatology and cirrhosis care, liver transplantation, nutrition, gastrointestinal motility disorders, small bowel endoscopy, and therapeutic endoscopy," says Dr. Wong. "We're doing things that are unique in Canada, such as endoscopic surgery for cryoablation of cancers."

"On the liver transplantation side, we are regarded as probably one of the strongest in the world," says Dr. Wong. **Drs. Vincent Bain** and **Norm Kneteman** (Surgery) started the liver transplantation program in the 1980s. Currently, the program is among the top three in Canada for volume of transplantations.

A multidisciplinary approach underlies GI's successes in many clinical areas. "One of the strengths of our division is that we work very closely with other specialities such as surgery, which is why we're so far ahead in our transplant program," says Dr. Wong.

"Another example is our collaboration with colorectal surgery for inflammatory bowel disease and colon cancers."

While the division is fully dedicated to the three academic pillars of education, clinical innovation, and research, Dr. Wong sees a continuum for growth. "Our residents and fellows are the anchor; they are the farm team that we grow and train to eventually join the division fully," says Dr. Wong. "Our community practitioners are the foundation of clinical care and see the majority of patients in the zone."

Gastroenterology has one of the highest wait times across Canada. The division has a couple of initiatives in play to tackle the problem in Edmonton. "One is to develop a really effective central GI triage so that the right patient is seen at the right time, and we can use our limited beds properly," says Dr. Wong. "The second is implementing a team-based approach so that if I'm away, the nurse practitioner can call another hepatologist to see my liver patient."

Multidisciplinary teamwork is the only way that the division is going to be able to manage the growing volume in GI care, says Dr. Wong. "We were really hit during the pandemic because we lost all our elective spots, and we are just barely catching up in our wait times," he says.

The culture from the early days of the GI division was to work together cohesively. Over the years, the roles of division director and section chief were separated. "I now do both roles," says Dr. Wong. "I see my job as bringing the division members all over the city together as a unit and keeping the group engaged in our academic mission."

For Dr. Wong, that means ensuring that the clinical models are right so that the group can deliver care efficiently and support academic priorities. Given that GI has one of the fastest technological advances of any field, one priority is conducting research on and testing new equipment. "We are leaders in applying new endoscopic technologies such as endoscopic ultrasound and small bowel balloon endoscopy," he says.

Dr. Wong wants to ensure that the division is regarded as a place of clinical and academic excellence no matter how far in the future. "We have the same testing and expertise here as any centre in North America," he says. "We can do everything GI in Edmonton."

Research dollars garnered for 2023–24: $35,104,621

$35,104,621

Dr. Vince Bain

Gastroenterologist **Dr. Vince Bain** co-pioneered liver transplantation in Edmonton in 1989. Dr. Bain's interest in liver disease developed when he was a gastroenterology resident at the University of Alberta in the early 1980s. The only option for people with acute liver failure or end-stage liver disease is liver transplantation, but the procedure didn't exist then in Alberta. Dr. Bain wanted to change that, so he pursued hepatology training in England. Within three days of his return to Edmonton, he and surgeon Dr. Norm Kneteman performed their first liver transplant, part of a pilot study involving four patients.

That study's success led to the establishment of the liver transplant program, the first in Western Canada. As new therapies for Hepatitis B and C, cancer, and immunosuppression came into use, the parameters for liver transplant eligibility expanded. Over the past 35 years, around 2,500 transplants have been performed, with livers coming from living and cadaveric donors. Dr. Bain says it's been an honour and extremely satisfying to be part of a lifesaving program that can add years, even decades of good quality life to patients' lives.

In 2024, after more than 30 years, Dr. Bain stepped down as the liver transplant program's medical director, confident that the program is in good hands. "You should always recruit people smarter than you," he says. "Then you will have enduring programs and success, and you can leave with a clear conscience."

> ***"So this new funding model [AFP] allowed us… to recruit people… we in some ways pillaged Nova Scotia for some of its best and brightest physicians… we brought them Edmonton… because there was a real Alberta advantage at that time…*** *there really truly was… it was such a good model to recruit that I was asked by the Nova Scotia government to come out to a meeting in Nova Scotia to explain how and why we were taking so many of their best physicians. And I agreed after they promised that they would allow me to return unscathed!*
>
> ***Dr. Jonathan B. Meddings,*** *video recording May 2024. Chair: 2004–2009*

General Internal Medicine (GIM)

Until the 1950s, all staff in the Department of Medicine were general internists, although many had a special interest and training in particular areas. Edmonton hospitals affiliated with the Department of Medicine also had their own departments of medicine, comprising general internists.

By 1969, individual general internists with special interests had been assigned to the ten specialty divisions created in the Department of Medicine. In the same year, a Division of General Internal Medicine was established by Department of Medicine Chair **Dr. Robert Fraser**, as a necessary foundation for core teaching programs.

Dr. Gerry Richards became the division's first director in 1969 but was in the position for only a short time before moving to Vancouver. The position was vacant until 1972, when **Dr. Lee Anholt** became division director and the division's first geographic fulltime (GFT) appointment. The second GFT member was **Dr. Charles Harley**, appointed in the same year, who became chief of medicine and head of clinical teaching at the Charles Camsell Hospital.

Dr. Jennifer Ringrose

Director, Division of
General Internal Medicine (GIM)
Department of Medicine
Faculty of Medicine & Dentistry
College of Health Sciences
University of Alberta

For Dr. Anholt, developing the division's presence in patient care and clinical teaching was paramount. In the early '70s, part-time division members delivered clinical service and all Royal College-mandated clinical teaching, as subspecialists were not initially involved in teaching. Research, however, was largely non-existent. "Training manuals, CME, clinical reviews, and invited lectures were part of our life; laboratories were not," remarked Dr. Anholt in a historical publication[1].

Recruitment was a priority, but it was a constant challenge. For more than a decade, no new GFT appointments were made to the division, but then **Dr. A.M. Edwards**, an existing clinical member, became part-time and then a GFT in 1977, and eventually division director.

It wasn't until the early 1990s that the division, with Dr. Anholt as director for the second time, was able to appoint three new GFT physicians: **Drs. Peter Hamilton**, **Dawna Gilchrist**, and **Bruce Fisher**. Ten more joined over the next decade, including current Department Chair **Dr. Narmin Kassam**. The GIM Division was a different creature from 30 years before: acuity levels in hospitals were much greater, the clinical reach of GIM had broadened, and research was now an important part of the division. Yet, consistent with its founding principles, all these endeavours were responding to the needs of patients.

In 2024, the division has 132 members engaged in clinical innovation and care, education, administration, and research.

"What's clear to me is that the strength of our division is attributable to the people within it," says **Dr. Jennifer Ringrose**, appointed division director in 2022. "They have the curiosity to pursue interests that contribute to our academic quality and to deliver excellent clinical care."

Recent accomplishments by division members include education administrative leadership roles in the Department and Faculty: implementation of competency-based education; a program for resident wellness; refinement of the obstetrical medicine program; and an initiative to implement equity, diversity, and inclusion principles into all areas of trainee and faculty education.

"Our research areas include hypertension, evaluation of educational programs, quality improvement, evaluation of care delivery, heart failure, diabetes, obstetrical medicine, harm reduction, magnetic resonance spectroscopy, and artificial intelligence," says Dr. Ringrose. "That speaks to the diversity of our interests."

One of the division's most distinguished researchers is **Dr. Finlay McAlister**, scientific director of the Alberta government-funded SPOR (Support for Patient Oriented Research) Unit. Dr. McAlister is involved in numerous projects that focus on outcomes research, clinical epidemiology, systematic reviews, and clinical trial methodology. One of his recent publications concluded that the COVID-19 pandemic did not have an impact on follow-up frequency or continuity of outpatient care in Alberta.

Other divisional researchers study the effectiveness of therapies and outcomes of care in diabetes, AI in medicine, the role of troponin in cardiac muscle contraction, and approaches to harm reduction in vulnerable populations.

Improving clinical care is foundational in GIM, given the specialty's broad remit. One clinical innovation has reinvigorated an approach used in the past. "Our point of care ultrasound or POCUS team is a group of physicians that absolutely expedites care," says Dr. Ringrose.

With POCUS, the team brings the ultrasound equipment and procedures to the bedside and provides clinical teaching to trainees. Dr. Ringrose's goal is to see the Department of Medicine-supported POCUS team replicated at other hospital teaching sites in the Edmonton Zone.

In the early days of the division, most undesignated patients coming in through hospital emergency departments with alcohol, drug, socioeconomic, chronic, and terminal conditions were the responsibility of general internists. To this day, GIM physicians serve those most in need and manage the medical consequences of societal shortfalls.

"Family medicine is in crisis, and there aren't the community supports to help the increasing number of people struggling with substance use disorders," says Dr. Ringrose. "Very chronic diseases like liver cirrhosis are appearing in younger and younger people, and it's imperative that we prevent things from progressing."

[1] *Dr. Dawna Gilchrist, The History of the Department of Medicine at the University of Alberta (Department of Medicine, 2003), 83.*

"All of our activities have evolved out of clinical need," says Dr. Ringrose. The division runs specialty clinics in hypertension, venous thromboembolism, dyslipidemia, obstetrical medicine, urgent access, and pre-operative care. Another important clinic provides a medical home for pediatric patients who have complex medical needs but are transitioning into adulthood.

For Dr. Ringrose, GIM in the future is about wellness in all directions. "I think wellness is, in 2024 and onwards, the foundation that all of our teaching, clinical care, research and administration pillars stand on," she says. Several division members are involved in developing strengths in physician and learner wellness, mid-career physician wellness, and community building.

"Certainly, in the future there'll be artificial intelligence learning and tools that haven't even been invented as part of clinical care," says Dr. Ringrose. "But I hope it still involves humans who are assisted by AI to make care delivery better and more efficient. I hope that the humanity is still there."

765

Number of DoM members *(Faculty and Clinical Faculty)*: 765

Dr. Saifal Anwar

Associate Clinical Professor **Dr. Saifal Anwar** was appointed GIM site lead at the University of Alberta Hospital (UAH) in 2020 and currently oversees 46 internists. In addition to his obesity medicine clinical practice and hospital service, Dr. Anwar is leading quality improvement initiatives in the hospital.

One of his recent initiatives is the Nocturnist model, designed to help support medical residents and improve patient flow. Nocturnists are staff physicians who stay overnight at the hospital to support their teams and provide quality care in a timely manner. Continuous access to an in-house staff physician speeds discharge of patients, frees up hospital beds, and reduces consulting time, while improving residents' workload. The model was launched at the University of Alberta Hospital in January 2024, and the results were presented at the annual department research day, with plans to present them nationally.

Dr. Anwar is also the consulting internist for the liver transplant team, the Connect Care provincial medicine knowledge lead, and author of six order sets, which detail the care pathways for hospital admission of patients. He provides one-on-one mentorship to trainees in his clinic and in the hospital, an important step in meeting the increasing demand for internal medicine expertise. "Continuous ongoing mentorship is my focus," says Dr. Anwar. "I try and guide our trainees and help them transition into real practice."

Geriatric Medicine

The Division of Geriatric Medicine's roots were planted with the opening in the late 1970s of the 200-bed Youville Geriatric Centre in the Edmonton General Hospital. The first head of the Centre, Dr. David Skelton, came from Winnipeg in 1980 with the mandate to recruit physicians and health professionals and to develop a training program that would have strong links to the University of Alberta.

Most of Dr. Skelton's physician recruits were from Family Medicine, and when a residency program was started in that specialty in 1983, residents rotated through geriatric medicine. One of the first trainees was **Dr. Jean Triscott**, the current director of the Division of Care of the Elderly, who founded the Care of the Elderly training program, an intensive geriatric training program housed in the Department of Family Medicine.

Dr. Adrian Wagg

Director, Division of Geriatric Medicine
Department of Medicine
Faculty of Medicine & Dentistry
College of Health Sciences
University of Alberta

Geriatric care flourished in Edmonton through the establishment of The Center for Gerontology at the University of Alberta and, in Northern Alberta, through in-person geriatrician consults at heavily used local clinics and care homes. The ties formed by the division with primary care in those communities continue to the present day.

Despite the promising beginnings, the overwhelming workload that resulted from the establishment of the Youville facility meant that retention of medical staff was difficult. In 1986, a review of the faltering program by an external committee led to the establishment of the Division of Geriatric Medicine two years later, headed by **Dr. Peter McCracken**. His mandate was to recruit faculty and to have a residency program in place within a year.

He succeeded. New recruits helped develop a teaching program. By the early 1990s, the first Alberta-trained internist geriatricians were working in hospitals in Edmonton and throughout the province. In 1993, the division's nine members constituted the second largest Geriatric Medicine Division in Canada, a high point.

Resident and undergraduate medical student training was always a priority for the division. It was the first division to have its own training manual and to establish an academic half-day. In the mid-90s, the division was a leader in using technology to provide telehealth consultations and web-based access to curriculum materials to learners from all disciplines.

Retaining division members became difficult when the health care system was regionalized in the 1990s. Over the next decade, although recruitment and divisional development continued, retention was a concern. Partnerships with The Care of the Elderly Program geriatricians and geriatric psychiatrists helped considerably with workload.

Dr. Anne Sclater, recruited as division director from UCLA Davis, instigated an Acute Geriatrics Services Review that resulted in a comprehensive plan to see the division into the twenty-first century. Dr. Sclater also recruited **Dr. Darryl Rolfson**, instrumental in fostering the division's research activity and orienting current Division Director, **Dr. Adrian Wagg**, recruited from the U.K. When Dr. Sclater left in 2003, **Dr. Katherine Lechelt** stepped in as acting director, committed to the perennial challenge of recruiting faculty while guiding the division forward.

Since his appointment as divisional director in 2010, **Dr. Adrian Wagg** has focused on building the geriatric medicine team to its current high of 14 members. Despite his success, one of his chief concerns echoes that of his predecessors since the creation of the division: attracting trainees into the specialty, especially as the older population is reaching record high numbers.

"Half of the adults admitted to acute care wards in hospitals are over the age of 65, and they are often frail with complex needs," says Dr. Wagg. "There aren't enough geriatricians in acute care to take over the care of those older adults."

Consequently, fostering geriatric medicine knowledge and expertise through education and training is an ongoing divisional priority. The University of Alberta is one of a few schools in Canada that has a mandatory undergraduate medical school rotation in geriatric medicine. "While we are inculcating those skills into our medical trainees," says Dr. Wagg, "We're also raising awareness that geriatric medicine is a great general speciality with lots of opportunity to sub-specialize and focus on particular areas."

Division members provide clinical services across the continuum of care, working with people in their own homes, acute care outpatients, and rural outreach service of satellite clinics delivered through telehealth and in-person consultations in regional hospitals. Given their low numbers and the growing demand for care, geriatricians consult in internal medicine and family medicine in the care of older patients.

Providing quality care to older patients does not adhere to the health system's standard reimbursement of clinical services, which is based on efficiency of time. Dr. Wagg and his team have managed that issue through the brokering of a clinical alternative relationship plan with Alberta Health that recognizes the unique requirements of specialized geriatric service provision in the Edmonton Zone. "This allows physicians to work in different settings, from care at home, to home care, and including the rural outreach program," says Dr. Wagg. "That amount of flexibility is a core strength of our division."

Dr. Wagg wants to see the development of systems of care that are evidence-informed from research in frail older adults and the medically complex. "Often we're extrapolating," he says. "Focused research in the right populations is really important."

Current divisional research areas include osteoporosis, continence, and quality of care, and these directly inform clinical care. "We have ongoing research in perioperative care of older adults and healthy aging in community-dwelling older adults," says Dr. Wagg.

Facing the future, Dr. Wagg and his colleagues keenly feel the pressures of growing clinical demand and lack of specialized infrastructure. "We want to see a greater integration of positions with specialist training in the care of older adults throughout the health system," he says. "We need specialized interprofessional teams working in elder-friendly hospitals, who are championed by decision-makers, to ensure that our frail older adult population gets the care it deserves."

> ***The change in the curriculum; the subspecialization of the Department, the entry of the Hospital into the provisions of professional services in special care units; the reorganization and more structured nature of graduate training with the transfer of responsibility from the Hospital to the Dean's office to the Department; the recognition that the Department must recruit a nucleus of physician-scientists.***
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> ***Dr. Robert S. Fraser**, "The History of the Department of Medicine at the University of Alberta." Chair: 1969–1974*

Dr. Kanna Alagiakrishnan

"I chose geriatric medicine because it is a whole-body approach to medicine," says **Dr. Kanna Alagiakrishnan**.

Dr. Alagiakrishnan has researched and published extensively on delirium, dementia, and orthostatic hypotension, three of the most common illnesses experienced by elderly patients.

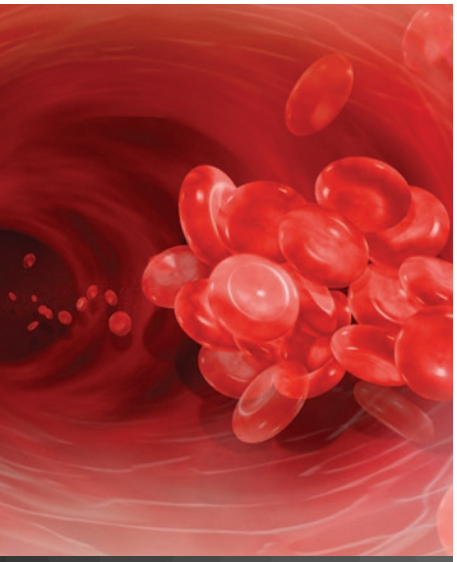
His work on prevention of delirium, a temporary state of confusion, showed that it can be prevented by simple measures such as adequate fluids, correcting the environment so patients can move more easily, and recalibrating drug dosages.

Dr. Alagiakrishnan's research in dementia reveals the extent to which it is a multifactorial condition involving genetics and epigenetic factors such as microbes. His investigations into orthostatic hypotension, a sudden lowering of blood pressure and a primary cause of falls in the elderly, reinforces the need for correct diagnosis to preserve quality of life.

Dr. Alagiakrishnan also holds master's degrees in epidemiology and health administration. He is an advocate for changes in the health system to properly and comprehensively manage the health needs of the elderly, a generation that, as he says, has made their contribution to society and needs our support.

Hematology

The Division of Hematology has a circuitous history, reflecting the evolution of blood disorder therapies, technologies, and expertise throughout the decades.



Dr. Marlene Hamilton

Director, Division of Hematology
Department of Medicine
Faculty of Medicine & Dentistry
College of Health Sciences
University of Alberta

In 1972, the Department of Medicine simultaneously established a Division of Clinical Hematology within the university and a Division of Medical Oncology at the Cross Cancer Institute, with **Dr. Alex McPherson** as the head of both. The creation of the two divisions supported the interconnectedness of cancer treatment and academic medicine.

That approach was also reflected in the Division of Clinical Hematology's collaborations over the years with agencies and institutions such as Canadian Blood Services, the Department of Laboratory Medicine and Pathology, The Department of Pediatrics, and the Comprehensive Hemophilia Centre of Northern Alberta (now the Doctor John Akabutu Centre for Bleeding Disorders).

In 1993, the Faculty of Medicine created a Department of Oncology to foster the academic development of oncology, particularly in research and graduate training. Subsequently, the Department of Medicine dissolved its Cross Cancer-based division, incorporating its faculty into the renamed Division of Clinical Hematology and Medical Oncology in 1994. The Division's name changed yet again to the Division of Hematology to reflect the breadth of clinical expertise, effective therapies and technologies, and research endeavours in all aspects of blood disorders.

The Division of Hematology's Director, Dr. Marlene Hamilton, joined the division in 2002. A year later she took over as the training program director. "I knew that the development of the division depended on training and retaining people, which we have done," she says.

Division members, including clinical lecturers and research scientists, have broad expertise in all aspects of hematology, including sickle cell anemia, hemoglobinopathies, bleeding disorders, and rare autoimmune diseases such as Paroxysmal Nocturnal Hemoglobinuria (PNH). The division's clinical and research strengths in malignant hematology, particularly acute leukemia, has made the University of Alberta Hospital the centre for acute leukemia treatment in Northern Alberta.

Because of the broad catchment area for hematology, residents receive a comprehensive training experience. "Residents work closer with us than they would in some centres, they have easy access to us, and they get to see all the breadth of hematology," Dr. Hamilton says.

The catchment size means that not everyone with hematological problems needs to come to the University of Alberta Hospital. Many consultations with out-of-town physicians are by video or telephone. "Managing someone from afar is a unique skill," says Dr. Hamilton. "We incorporate the trainees into that process so that they get a very broad exposure to managing all sorts of hematologic problems, both in Edmonton and out of the city."

Although each divisional member has their own niche area of expertise, Dr. Hamilton is proud of the fact that everyone has a broad knowledge of hematology. "That's our core ability," says Dr. Hamilton. "I want that to continue so that we don't become so subspecialized that no one can cover for anyone and we jeopardize service."

As hematology care changes with new therapies and therapeutic protocols, so do patient survival rates. "In the past we were able to treat acute leukemia only in people younger than 70, but with the advent of gentler drug regimes, we've been able to vastly increase the number of people we treat," says Dr. Hamilton.

"An increasing number of our in-house acute leukemia patients are older patients," says Dr. Hamilton. "And our acute leukemia patients in total make up roughly 80 to 90 per cent of patients on our ward." One of her priorities is to broker a broader partnership with Cancer Care Alberta, so that the supports for cancer care are more readily available to patients with blood cancers at the University of Alberta Hospital.

Dr. Hamilton highlights the collegiality in the division as one of its enduring strengths. "We all get along, and we really work together more as a group," she says. "We all have our area of interest, but in our divisional meetings, we try and solve problems that apply to any aspect of hematology."

She's determined to see the divisional commitment to collegiality continue in the future, along with growth in personnel and research to advance new therapies. "Our big push is to try and expand our division further to serve the increased needs of the population," she says.

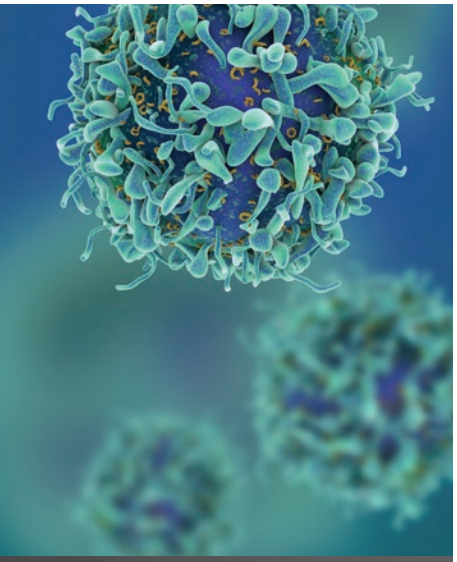
Dr. Monika Oliver

One of hematologist **Dr. Monika Oliver's** specialties is apheresis, the separation of blood components used in treating rare blood disorders and several other diseases. She also specializes in complement disorders, specifically paroxysmal nocturnal hemoglobinuria (PNH). A rare hematologic disease, PNH is caused by an overactivation of the body's complement system, part of the immune system. PNH destroys red blood cells, leading to devastating thrombosis. Until recently, there was only one approved and funded treatment for PNH patients in Alberta, which required them to have IV therapy every two weeks indefinitely. Dr. Oliver is working to change that.

Dr. Oliver has a passion for advocating for her PNH patients. She participates in industry advisory boards and health technology assessment submissions and works with Health Canada and drug partners to advocate for more therapeutic options for patients with PNH. In March of this year, two additional treatments became publicly funded in Alberta: one allows patients to have treatments less frequently, and the other offers an option to patients who didn't respond well to previous treatment.

"It's an exciting time to be a hematologist because we have new therapeutics that can cure or manage previously devastating diseases," says Dr. Oliver. "I will forever feel privileged to be able to treat and advocate for my patients."

Infectious Diseases



In 1967, there were three people in Canada trained in the new subspecialty of infectious diseases (ID). Dr. George Goldsand was one of them, hired as an ID subspecialist within Internal Medicine in the University of Alberta's Department of Medicine.

At that time, infectious diseases as a subspecialty was viewed with scepticism, because, as one colleague said to Dr. Goldsand, "Now that smallpox is eradicated, what is there left for you to do?"

One of Dr. Goldsand's first challenges was getting access to the University Hospital's microbiology laboratory and convincing laboratory staff that they had a role to play in supporting bedside clinical decision-making. Once that was achieved, Dr. Goldsand was able to show the value of ID not only in patient management but in education. Consequently, the number of consultations increased across the city.

In 1972, the Division of Infectious Diseases was created with **Dr. Goldsand** as director. A number of key recruits in the 1970s included **Dr. Harvey Rabin**, an internist with training in clinical pharmacology and an interest in antibiotics, and **Dr. Anne Fanning**, a tuberculosis specialist who joined the division when the transfer of TB patients to the University Hospital led to an allocation of a new position in the division.

Dr. Stephanie Smith

Director, Division of Infectious Diseases
Department of Medicine
Faculty of Medicine & Dentistry
College of Health Sciences
University of Alberta

As advances in chemotherapy, transplantation, and antibiotics occurred in the '70s and '80s, along with the rise in antibiotic resistance and emergence of HIV/AIDS, the Infectious Diseases division's workload increased steadily.

The nature of ID work changed, as the service expanded from the University Hospital to include HIV/AIDS outpatient service and consultations at the Cross Cancer Institute and other city hospitals. The excellence of training both in the medical school undergraduate ID block and in the ID rotation within internal medicine was a divisional hallmark.

The Canadian Infectious Diseases Society was established in 1977, heralding the recognition of Infectious Diseases as a subspecialty by the Royal College in 1983 and the launch of the Infectious Diseases subspecialty residency training program at the University of Alberta.

Among the early trainees were individuals who joined the division and became national and international leaders in the field. Recruitment of specialists trained elsewhere also added to the division's academic strengths. **Dr. Tom Marrie**, a distinguished infectious diseases specialist, was recruited from Dalhousie as Chair of the Department of Medicine in 1999 and became Dean of the Faculty of Medicine and Dentistry in 2004.

The early doubts about the need for infectious diseases expertise seems ironic now, given the rise and consequences of H1N1, COVID-19, mpox and many other diseases. And, as immunosuppressive and immunomodulatory therapies have grown in number and indication, ID expertise has become critical for patient management.

More than five decades after its founding, the division's clinical innovation and clinical education remain its greatest strengths. "The areas of transplant infectious diseases, antimicrobial stewardship, global health and bloodborne pathogens/sexually transmitted infections are particular strengths of the division," says Division Director **Dr. Karen Doucette**, who was recently succeeded as division director by **Dr. Stephanie Smith**.

Many infectious diseases disproportionately affect marginalized populations. "The division has a long history of advocacy and partnering with community-based organizations to support our patients," says Dr. Doucette.

Several current projects reflect the division's emphasis on strengthening its research core with a goal of improving patient care and health outcomes.

Dr. Ameeta Singh's recently concluded CIHR-funded clinical research study on the use of a point-of-care, dual syphilis and HIV test resulted in the test being licensed by Health Canada. Dr. Singh's work is now focusing on implementation of this test to increase diagnosis and early treatment and to study ways to optimize its impact on clinical care.

The Optimus SAB project in *Staphylococcus aureus bacteremia*, led by **Drs. Holly Hoang** and **Justin Chen** and featured in the accompanying profile, will improve patient outcomes and equity in access to care across the province and will bolster the division's research leadership in high-quality sustainable care.

Both projects involve extensive collaboration, which is foundational to work on infectious diseases. Dr. Doucette says, "Collegiality and collaboration within the division and with our external partners is one of our major strengths and something I am very proud of."

Dr. Doucette, a specialist in transplant infectious diseases, was recruited to Edmonton two decades ago to support and grow the internationally recognized multiorgan transplant program at the University of Alberta Hospital. She is part of the transplant infectious diseases group that manages patients who are immunocompromised and at risk for complex infections after organ transplantation and cellular therapies/bone marrow transplant. One of her goals is to recruit more members to the group, as this population continues to grow due to expanding indications and improved long-term survival.

Dr. Doucette has seen transformational advances in infectious diseases over her career. For example, "When I started in practice, hepatitis C therapy cured at best half of patients, so many died or needed liver transplant," she says. "Now we have a simple oral curative therapy, and hepatitis C has vanished as an indication for liver transplant." HIV has been transformed into a chronic disease with life expectancy approaching that of the general population, and there have been major advances in vaccines, including the human papillomavirus vaccine that has resulted in a dramatic decrease in cervical cancer and other HPV-associated conditions and cancers.

Despite the many amazing advances in the prevention, diagnosis and treatment of infectious diseases, there remain many challenges. These include not only the growing immunocompromised population, but also new, emerging, and re-emerging diseases, many driven by climate change, global travel, and increasing populations encroaching on wildlife habitat, and the global rise in antimicrobial resistance.

The global rise in vaccine hesitancy has led to the resurgence of many vaccine-preventable diseases, including measles, while the COVID-19 pandemic and war have disrupted many aspects of health care, including vaccination and infectious diseases elimination programs. "So, as was the case over 50 years ago when Dr. Goldsand was asked," says Dr. Doucette, "I believe there is an exciting and rewarding career with many opportunities ahead for those entering the field of Infectious Diseases."

> ***When I began teaching in the thirties, typhoid fever was common, as was tertiary syphilis...*** *Patients with tabes, general paresis, meningo-vascular syphilis, aortic aneurysm, syphilitic aortitis and aortic incompetence were common. Before compulsory pasteurization of milk, brucellosis was always with us. Tularemia occurred in the days of skinning and feeding rabbits to domestically raised fur-bearing animals. Before the days of Salk and Sabin vaccine, poliomyelitis was a common and dreaded disease in the hospital wards.*
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> ***Dr. John W. Scott**, "The History of the Department of Medicine at the University of Alberta." Chair: 1944–1954*

Drs. Holly Hoang & Justin Cheng

Staphylococcus aureus is a bacterium that lives on our skin surface, where it is usually harmless. If it opportunistically invades the bloodstream though, it can cause a bloodstream infection, called *Staphylococcus aureus bacteraemia* (SAB), which can lead to multisystem disease or even death. It is one of the most lethal infections, yet only 29 per cent of Albertans with SAB are being managed in our hospitals according to best practice recommendations.

Drs. Holly Hoang and **Justin Chen** both serve as medical directors of antimicrobial stewardship programs (Alberta Health Services and the University of Alberta Hospital, respectively), where they saw the need for a different approach to care for patients with SAB. "When we implemented a pilot study that addressed gaps in care, we saw an improvement in patient outcomes," says Dr. Hoang, referring to her former work as medical director for the Covenant Health antimicrobial stewardship program.

Drs. Hoang and Chen, in collaboration with **Dr. Dan Gregson** from Calgary, then designed a quality improvement initiative, called OPTIMUS-SAB, supported by the Medicine Strategic Clinical Network, AHS' virtual health platforms, and many other provincial partners. The centralized OPTIMUS-SAB team makes preliminary evidence-based recommendations and links to infectious disease experts. The PRIHS-funded initiative offers a new way of delivering standardized, optimal care to every patient with SAB in Alberta regardless of where they are hospitalized. "I think that this novel way of delivering patient care could be applied to many other conditions in the future," says Dr. Chen.

Nephrology

The Division of Nephrology has seen many medical milestones. Hemodialysis for acute kidney failure was first used at the University of Alberta Hospital in the mid-1950s.

The development of the first hemodialysis program in Canada for patients with chronic kidney failure followed, with **Drs. William Lakey**, **Lionel McLeod** and **Ray Ulan** carrying out the first procedure at the University of Alberta Hospital and in Canada in 1962. Their work resulted in international medical and media acclaim.

Dr. Lakey went on to perform the first cadaveric kidney—and first solid organ—transplant in Alberta in 1967. The following year saw the first live donor kidney transplant. These cumulative accomplishments led to the establishment of the Division of Nephrology and Immunology in 1969.

Dr. John Dosseter was the first director of the Division of Nephrology and Immunology, recruited from Montreal's Royal Victoria Hospital, where he had headed the kidney transplant program. Under Dr. Dosseter, the division created the MRC Transplant Group in 1970, which housed biomedical and clinical research, and the Kidney Foundation of Canada Edmonton Chapter, which provided significant funding to division members.

Dr. Jacques Romney

Interim Director, Division of Nephrology
Department of Medicine
Faculty of Medicine & Dentistry
College of Health Sciences
University of Alberta

The transplant and related programs grew over the following decades as did the patient population. The Royal College of Physicians and Surgeons Specialty Program in Nephrology was introduced into the Division in 1981.

In 1987, internationally recognized transplant researcher Dr. Philip Halloran became division director and led a pioneering research program focusing on transplant rejection, acute kidney injury, and immunosuppressive drugs, as well as creating a clinical trials unit. Edmonton was one of the first centres to offer patients with chronic renal failure in the north of the province continuous renal replacement therapy through the Northern Alberta Renal Program (now Alberta Kidney Care–North).

Today, Nephrology, like most areas of adult medicine, is challenged by the growing need for care among older, complex patients as well as a need for greater resources to meet their needs.

While transplantation remains a core element of research and clinical care, there is a growing focus on and increasing funding for clinical research and implementation science that can bring change and improvement to patient care and efficiencies to strained resources.

Recent initiatives such as the living kidney donor program have reduced kidney donation waiting times from 18 to four months. Another project helped patients waiting for kidney transplantation to use social media to expand their living donor pool. A third is studying the disparity in kidney care in remote and Indigenous communities and developing innovative care pathways to tackle it.

Drs. Sara Davison and **Neesh Pannu**, both featured in accompanying profiles, lead clinical research endeavours to give kidney failure patients a better quality of life. Other division members are studying various ways of administering dialysis; research on exercise and physiology for dialysis patients; kidney disease symptom management, including clinical trials of pharmacokinetics; the establishment of the first Glomerulonephritis Clinic in Edmonton, where people with a life-threatening inflammation of the kidneys receive care; the effects of chronic kidney disease on pregnant women; social media and nephrology education; and health economics, health quality improvement, and health outcomes research.

In 2024, as the division is in the midst of recruiting a new director, the current strengths and expertise in clinical care, clinical research innovation and implementation, and education and training in critical care nephrology are recognized across Canada.

> ***My most important insights into how to be a leader came from working with the people around me, including my patients.*** *I realized that being a good leader meant to make sure that the members of the faculty understood their triple mission of research, education, and clinical work. That was really important to undertake for our patients, because patients were always looking for new ideas, new treatments. I felt that I could shape the department in such a way that, that it would impact how we deliver clinical care to our patients.*
>
> ***Dr. Barbara Ballermann,*** *video interview May 2024. Chair: 2010–2020.*

Drs. Sara Davison

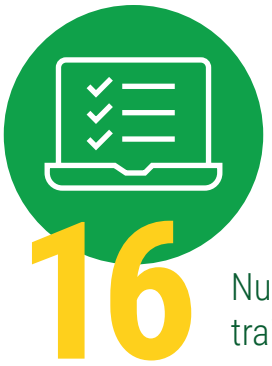
Starting out in her nephrology career, **Dr. Sara Davison** recognized the need for a different care approach for complex patients with advanced kidney failure and for those for whom dialysis wasn't appropriate.

Her passion for better, patient-led care and her self-described stubbornness, helped her build a pioneering program at a time when palliative and supportive care for patients with chronic kidney disease didn't exist. Today, the Conservative (non-dialysis) Kidney Management (CKM) program is recognized internationally. Recently, Dr. Davison was awarded a $4.8 million CIHR grant to develop supportive care approaches, based on the CKM model, for people with other advanced, chronic diseases.

The CKM program started with the use of a supportive care assessment on complex kidney patients who were being screened for symptoms. Advanced care planning processes were developed, and staff were trained in the basics of advanced care planning, including having conversations about end-of-life issues.

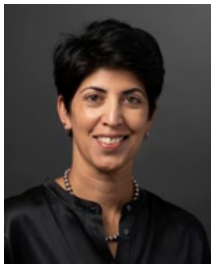
"We talk to each patient about their suffering, their trajectory, and their treatment options, and listen to them about what they most need in their day-to-day life to actually enjoy it, to feel good," she says. "Then we work on achieving their priorities, and we reassure them that we are with them every step of the way."

"We now have a complete pathway for conservative kidney management that has been integrated throughout our nephrology program, in training, and in clinical practice," says Dr. Davison. "We can always care for someone. Even just acknowledging their suffering has tremendous therapeutic benefit."



Number of specialty training programs: 16

Neesh Pannu



When **Dr. Neesh Pannu** began her career as a clinical nephrologist, she had questions that she knew could be answered only through research. She went on to complete a master's degree in biostatistics and epidemiology while working full time as a clinician and assistant professor.

The degree fuelled her interest in clinical research and quality improvement, especially in acute kidney injury (AKI), a complication experienced by about 20 per cent of hospitalized patients. Of the many studies she's led or co-led, she's particularly proud of a recent Alberta Health-funded Incremental Dialysis project.

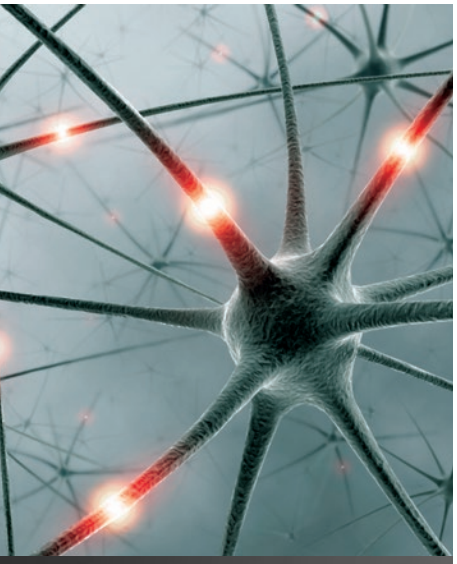
Because dialysis for kidney failure requires four hours of in-hospital treatment three times a week, it disrupts patients' lives. Dr. Pannu's study looked at treating patients who had some remaining residual kidney function, with less frequent dialysis treatments to start with.

"Patients told us this was a much easier transition and less traumatic," says Dr. Pannu. "Recovery time was better, their quality of life improved, and we were creating more capacity within our dialysis units." The study recently won a Health Quality Council of Alberta Patient Experience Award.

As Vice-Dean, Research (Clinical), Dr. Pannu has created an AI Health Hub to bring together researchers from all over campus to tackle the big challenges in health. She's also focussed on helping the next generation of researchers. "I want to make sure they have the tools they need to not only be successful in their own careers, but to inspire others to take a similar path," she says.

Neurology

In the first half of the twentieth century, neurological care was generally provided by general internists and neurosurgeons.



The first neurologist in the city was **Dr. George Monckton**, who brought the new diagnostic technique of electroencephalography (EEG) to the city. Dr. Monckton joined the Faculty of Medicine in 1957 and became the Division of Neurology's first director in 1962. He and **Dr. Harold Jacobs**, who joined the division in 1965, implemented the Royal College residency program in the division.

Recruitment over the next two-and-a-half decades brought expertise from around the world. Specialists such as **Drs. Donald McLean**, **Kenneth Warren**, **Jack Jhamandas**, **George Elleker**, **Michael Brooke**, and **Ashfaq Shuaib** joined the division during that time. They and others expanded the division's expertise in neuroanatomy and neuropharmacology, electrophysiology, basic neuroscience research, multiple sclerosis, and stroke.

Research in neuroscience accelerated in the 1970s with the establishment of a neuromuscular disease laboratory, advances in clinical treatment for brain bleeding, and the use of laser phototherapy to treat neurological conditions. The creation of the Alberta Heritage Foundation for Medical Research (AHFMR) in 1979 fuelled basic and clinical research in the province in every medical field, including an interdisciplinary rehabilitation neuroscience research group housed in the new Heritage Medical Research Centre.

Dr. Penny Smyth

Director, Division of Neurology
Department of Medicine
Faculty of Medicine & Dentistry
College of Health Sciences
University of Alberta

In 2024, the Neurology Division is one of the largest in the Department of Medicine, with close partnerships with the Neuroscience and Mental Health Institute (NMHI) on campus, and with the Divisions of Neurosurgery and Physical Medicine & Rehabilitation. The division's robust training programs, internationally recognized researchers, and large clinical reach with several subspecialty clinics reflect an attitude of enthusiasm and collegiality.

"We're all very energetic and passionate people, and we work strongly in advocacy for our patient population who often don't have the power to speak for themselves," says Division Director **Dr. Penny Smyth**. "We deliver high-quality care, and even though we're stretched in various ways, we try and apply a scholastic lens to that."

Dr. Smyth is particularly proud of the expansion of the residency training program from one resident a year in the early 2000s to the current five. The diversity of residents is another point of pride. "We have engaged in the international medical graduate match over the years," she says. "We really believe in developing neurologists from around the world to meet the needs of Canada's diverse population."

Neurological needs are increasing in Edmonton, in the rest of Canada, and around the world. "We are seeing increases in neurological conditions such as multiple sclerosis, stroke, dementia, and Parkinson's disease," says Dr. Smyth.

While Neurology faces the same shortages of personnel that many other medical specialties do, there is an additional barrier. Many non-neurologist medical professionals are uncomfortable treating neurological conditions. This well-documented phenomenon is called neurophobia and can lead to an inability to provide needed neurological care.

"Management of many chronic neurological diseases is practical, but people need to be able to treat the complications and subtleties," says former Divisional Director **Dr. George Elleker**. "It's difficult for neurologists to deliver complex care needs and also help our primary care colleagues in dealing with the simple straightforward stuff."

One way to counter neurophobia is through research into training approaches, such as the recent education scholarship conducted by a Division of Neurology resident involving a needs assessment of internal medicine residents when teaching them neurology.

Other approaches to helping with the growing pressure for more neurological expertise require innovative thinking in care delivery. For Dr. Smyth, it comes down to determining what neurologists need to see in person and what they don't. "Telehealth is especially useful in programs like epilepsy and stroke," she says.

Current research in the division is led by highly productive, well-recognized scholars who are focused on translational research. "Our research activity ranges from stroke to movement disorders, and from Alzheimer's to neuropalliative care," says Dr. Smyth. "We also have really great expertise in autoimmune neurology, which is a new field of neurology that promises new treatments for neuromuscular diseases."

For Dr. Smyth, the visibility of division members and recognition of what members provide locally, provincially, nationally, and internationally are at the forefront of her goals for the future. "I want to see us excel in all areas of academic medicine from research to clinical to education," she says.

"If I had to predict, I would say the future of neurology lies in molecular diagnostics and genetic testing, where we head into precision medicine," she says. "You can actually see that now in ALS where we look at a particular genetic profile of a patient to determine how responsive they will be to a particular treatment. It's very exciting and we're living it now."

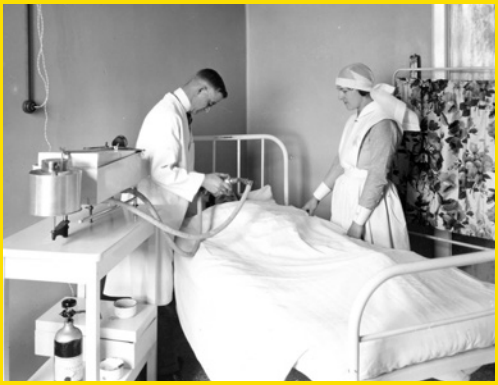
Dr. Fang Ba

Neurologist **Dr. Fang Ba** became fascinated by Deep Brain Stimulation (DBS) when she was doing an elective as a medical student. After completing her PhD, neurology training, and two postdoctoral fellowships at the University of Alberta, she took DBS training at the University of Florida and returned to Edmonton to join the Neurology division. Today she is director of the Parkinson & Movement Disorders Program, director of the Parkinson Foundation Center of Excellence, and the neurology lead of the multidisciplinary DBS program.

Deep Brain Stimulation, where an electrode is inserted into specific nuclei in the brain to control abnormal movements, is an effective, safe, and well-established treatment for multiple movement disorders. "There's a need to raise community awareness," says Dr. Ba. "If patients are referred to us before they develop lots of disabilities, particularly cognitive issues, we potentially can help them maintain their functional status for many more years."

Dr. Ba is excited about recent new developments in the Parkinson's field, such as biochemical and imaging biomarkers for various neurodegenerative diseases, and machine learning to analyze patients' locomotion, which will help with early diagnosis and treatment. She sees these new approaches as tools that will complement clinical diagnosis, management, and prognosis. "Our team is growing and is expanding on different skills and expertise in clinical practice and research," she says. "But we need to do a lot more to help manage the burden of disease."

> ***A great Department of Medicine…. invests in people, recruits excellent leaders and new junior faculty, creates new programs, and listens and responds to… its stakeholders.***
> *All the while it keeps one's eye on the future remembering that the long range vision is what separates the truly successful from the rest. What success we were able to achieve during that time was also a function of motivated, dedicated, and competent administrative staff…*
>
> ***Dr. Paul W. Armstrong,** "The History of the Department of Medicine at the University of Alberta." Chair: 1990–1993*



Courtesy of University of Alberta Archives

Physical Medicine & Rehabilitation

Dr. Jacqueline Hebert

Interim Director, Division of Physical Medicine & Rehabilitation
Department of Medicine
Faculty of Medicine & Dentistry
College of Health Sciences
University of Alberta

Physician Medicine and Rehabilitation's (PM&R) evolution as a medical speciality accelerated in the turmoil of the early twentieth century.

The two World Wars resulted in spinal cord-injured soldiers and soldiers with limb amputation who required rehabilitation, as did people in the civilian population who had survived stroke and polio, and those living with cerebral palsy and the consequences of thalidomide. The complexity of injuries and disabilities meant that a comprehensive, multidisciplinary approach was needed to improve care, patient function, and quality of life for the patient's lifespan.

While a smattering of appointments of physiatrists to medical faculties occurred in Eastern Canada in the post-war years, rehabilitation in Edmonton was run by neurologists, pediatricians, and other specialists who needed support for their patient populations. In the early 1970s, **Dr. Joe-Man Watt** was recruited to Edmonton, and he undertook the creation of a world-recognized pediatric rehabilitation centre at the Glenrose Rehabilitation Hospital.

The physiatry residency training program was started at the University of Alberta in the late 1970s and was expanded by former division director **Dr. Anne Bellamy**, with the first physiatrists graduated in the early 1980s. Nearly fifty years later, the residency program continues to be nationally competitive.

"Our residents have a comprehensive exposure to all PM&R subspecialty areas including pediatrics, stroke, brain injury, spinal cord injury, and amputation rehabilitation, as well as interventional MSK (ultrasound and fluoroscopic guided injections) and spasticity," says Division Director* Dr. Jacqueline Hebert*. "The quality of the program is demonstrated by a 100% pass rate in the Royal College examinations over many years."

The program is complemented by the biannual PM&R Review course, developed by **Dr. Lalith Satkunam** in 2000, and now hosted by the Canadian Association of Physical Medicine & Rehabilitation.

In 2014, the Division moved from being a free-standing division, established in 1980 under the Faculty of Medicine, into the Department of Medicine. "This has been a wonderful environment for us," says Dr. Hebert. "We are very much supported to pursue clinical innovation, conduct world-class research, and enhance our advancements and impact."

Many PM&R patients are treated in acute care for injury or stroke, released from hospital and sent home. But their medical needs don't end at the hospital doors.

"This is a vulnerable, high-need population that cannot access community services and healthcare as easily as other people," says Dr. Hebert. "Our goal is to be involved as early as possible, to maximize their function and quality of care over their lifespan." In collaboration with other specialties, PM&R physicians provide comprehensive medical care, including pre-surgery assessments, interventions for spasticity or pain, and management of chronic disability and functional impairments.

Accessing comprehensive care is a challenge for about half of all provincial PM&R patients who live outside Edmonton. "A large part of integrating new technologies into care is improving rehabilitation for remote and rural communities," says Dr. Hebert. "We're developing better outreach across the province through telehealth and tele-rehabilitation and specialist-staffed community hubs."

Transition to adult care for adolescents is another critical need that PM&R has addressed. "When someone who has spina bifida or cerebral palsy turns 18 and goes into community care, it's a challenge for family doctors to manage," says Dr. Hebert. "We've developed clinics that provide and expand that critical lifelong care."

"All divisional research, whether it is on early interventions, new technologies, basic science, community integration, or assessments of the health system, is conducted to improve patient outcomes and reduce the overall burden and costs to the health system," says Dr. Hebert.

Divisional research is expansive, and includes neuroprostheses development and use, targeted peripheral nerve reinnervation, robotics, spinal cord injury, interventional pain management, artificial intelligence, neuroplasticity, sensorimotor physiology, and community-based rehabilitation.

PM&R's local patient base is concentrated at the Glenrose. That, in Dr. Hebert's view, makes expanding the division's research cadre from the university to the Glenrose site ideal for integrating research and clinical innovation. "When you're at the Glenrose and the clinicians observe and are involved in implementing research, they provide valuable ideas and crucial input into how things can be improved."

Dr. Hebert wants PM&R to continue to be in a leadership position in the future. "Through PM&R, we have a unique view and perspective on a patient's journey through the healthcare system, and this allows us to be leaders within a broader healthcare team," she says. "Our viewpoint exists beyond the world of rehabilitation with our allied health discipline colleagues, across the spectrum of medicine from prevention to restored function."

Dr. Lalith Satkunam

When he was a resident, one of physiatrist **Dr. Lalith Satkunam's** patients was in the late stages of amyotrophic lateral sclerosis (Lou Gehrig's disease). The patient was treated with an intrathecal baclofen pump that relaxed his stiffened muscles. The resulting improvement in the patient's quality of life made Dr. Satkunam determined to learn more about spasticity and potential treatments when he joined the Department of Medicine.

Twenty-five years later, Dr. Satkunam's focus and determined advocacy efforts have resulted in the establishment of the first Canadian interdisciplinary spasticity program at the Glenrose Rehabilitation Hospital. The program's 16-member team offers a range of therapy interventions, including foot and ankle surgery for spasticity and other walking problems.

Dr. Satkunam is also a much-honoured teacher, a skill that he considers essential for clinicians. "Teaching is all about communication," he says. "And good communication is so important in medicine." He co-developed the first-ever Canadian Comprehensive Review Course in Physical Medicine & Rehabilitation for senior residents 24 years ago, now in virtual format.

Dr. Satkunam's future plans include employing new technologies to enable remote access to care. He is planning to use robots and technology, developed in the Rehabilitation Robotics Laboratory at the Faculty of Rehabilitation Medicine and delivered to locations throughout Alberta, to assess virtually stroke patients with spasticity. "I'm hoping that if we are successful, we can move up to delivering care, such as injections and other treatments, remotely," he says.

> ***When I came on, the chair made all the decisions with the help of their divisional directors.*** *The department became so large that the chair really had to be more of a quarterback, with specialists in the areas of education, research, and clinical care to focus and administrate those areas. Having leaders who support the chair has become very important and an essential part of the department.*
>
> ***Dr. Dennis Kunimoto**, video recording May 2024.*
> *Acting Chair: September 2009 – April 2010*

Medical Library, Medical Building, 1929.

Preventive Medicine

Dr. Sebastian Straube

Director, Division of Preventive Medicine
Department of Medicine
Faculty of Medicine & Dentistry
College of Health Sciences
University of Alberta

The roots of the Division of Preventive Medicine go back nearly a century, beginning with the establishment of the Community Medicine Department in the Faculty of Medicine in 1927.

It wasn't until the late 1970s, though, that occupational health became a stand-alone program at the University of Alberta. In those years, under the Lougheed government, there was an increased focus on workplace health and safety and environmental quality due to the resource extraction and related industries that were the economic engine of the province. A government-appointed commission struck to review workplace health and safety recommended the establishment of the Occupational Health Program (OHP), an academic program and technical resource centre housed at the University of Alberta, to be funded by a partnership involving the university, government, industry, and labour unions.

Dr. Tee Guidotti, a specialist in the field, was recruited to Alberta in 1984 to establish the OHP with funding from industry matched by the Alberta Government, a faculty position assigned by the University, and strong support from labour unions.

By the late eighties, changes in the provincial landscape challenged both OHP funding and its academic focus. The OHP adapted, adding services to its academic research mandate to meet the needs of the province. Despite the quick pivot to meet the new requirements, the fiscal uncertainty of those years necessitated cuts to the program.

"We were rescued by the Workmen's Compensation Board," says Dr. Guidotti. "It allowed us to continue shaping the program, as our anticipation was that it would at some point become a division of preventive medicine." Under his leadership, the OHP continued developing into a nationally and internationally recognized centre of excellence for occupational and environmental health. Dr. Guidotti left in 1999 to take up a position at George Washington University.

Dr. John Markham, who was with OHP until 1992, established a distance learning program in Occupational Medicine based on a distance learning program at the University of Manchester in the UK.

In 2012, The OHP was established as the Division of Preventive Medicine in the Department of Medicine, with **Dr. Nicola Cherry** as its first director.

Under **Dr. Sebastian Straube's** decade as division director, Preventive Medicine has seen growth in personnel and programs. "Our division is small, and going from one to three faculty members in Public Health has established some critical mass in that discipline," Dr. Straube says.

The Division of Preventive Medicine has also expanded its distance learning efforts in occupational medicine, delivering specialized knowledge across Canada, with plans for international expansion. The Foundation Course in Occupational Medicine offers a program in three sequential parts targeted to family and other community-based physicians with an interest in occupational medicine. Successful completion of the program enables participants to apply for membership by examination to the Canadian Board of Occupational Medicine (CBOM).

"The Foundation Course allows us to effectively teach occupational medicine, as in Canada, compared with other similarly industrialized nations, we have a relative shortage of specialists," says Dr. Straube. "It can be an addition to their community-based practice or lead to entirely new roles with industry. Graduates from our Foundation Course have gone on to lead occupational physician positions with well-known Canadian companies."

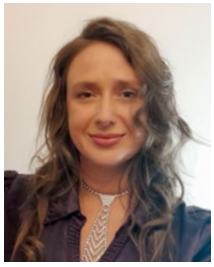
Looking ahead, Dr. Straube is working to expand the course internationally, with several physicians from the Middle East expressing interest.

Dr. Straube sees the future of the division being shaped by the emergence of occupational mental health issues. "We've had long practice with addressing the physical and chemical exposure side of things," Dr. Straube says. "Now a trend is certainly towards recognizing and understanding, researching, and managing the mental health aspects of occupational health."

"The nature of work may also be rather different within a few decades, with the emergence of artificial intelligence and further automation," he says. "My hope is that our provision of occupational health education, service, and research will keep pace with the rapid changes in the work environments."

In the non-communicable disease side of Public Health, Dr. Straube anticipates that optimizing life and health spans will be the dominant themes, and the division's recent recruits have added strength in that area.

Dr. Ellina Lytvyak



In 2023 **Dr. Ellina Lytvyak**, an obesity medicine specialist with a PhD in gastroenterology, founded the only bariatric medicine clinic affiliated with an academic institution in Canada. The clinic's approach is grounded in the fact that obesity is a chronic disease, resulting from myriad influences–gene expression, physiology, and individual and social psychology, coupled with food, physical activity, and social environments.

Dr. Lytvyak's patients suffer not only from obesity, but from complex liver and gastrointestinal diseases, making it difficult for them to access and maintain appropriate care. She provides evidence-based interventions to help them change their lifestyles and achieve their goals, whether that is improved physical and mental health and quality of life, optimal recovery from liver transplantation, eligibility for bariatric surgery, or reduction of medication side effects.

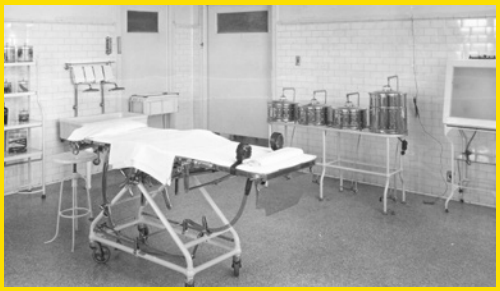
The clinic's affiliation with the Department of Medicine marks an innovative initiative that Dr. Lytvyak credits Division Directors **Dr. Sebastian Straube** and **Dr. Clarence Wong** and Department of Medicine Chair **Dr. Narmin Kassam** for supporting. The affiliation underscores the importance of research and its translation into clinical care and education. In the future, she wants to see more clinical support for this complex category of patients, with multidisciplinary teams comprising obesity medicine physicians, psychologists, dietitians, and psychiatrists.

"We see the medical consequences of obesity in the general population," says Dr. Lytvyak. "But people with obesity who are struggling with complex medical diseases are at a much higher risk of developing even greater complications."

500*

* Almost 500 Clinical Faculty

> ***There are lots of sacrifices to be made in academic medicine, in terms of additional training, and the outputs in the academic world that are a little more delayed.*** *It's really the mentors that bring you along. Mentorship to ensure that our impact as academics continues to grow through recruitment is absolutely essential. I am so proud of the department in terms of the mentorship that's provided by each and every academic faculty member. That is one thing that has always stuck with me, because I know that's why I'm here.*
>
> ***Dr. Narmin Kassam**, interview of September 17, 2024.*
> *Chair: 2020 – Present.*



Operating room at University of Alberta Hospital, 1923.

Pulmonary Medicine

The Pulmonary Medicine Division was established in 1960 in response to the polio epidemic in the early to mid-twentieth century. Dr. Brian Sproule, appointed to the University of Alberta Hospital to look after patients with respiratory complications from polio (often needing an iron lung), became the first division director. Dr. Sproule also established the Pulmonary Function Laboratory and pulmonary research programs.

While the Salk vaccine had been available since the mid-1950s, incidence of acute polio continued into the early 1960s, so much so that Dr. Sproule and his colleagues were working 100-hour weeks regularly to manage patients.

The division developed needed expertise and capacity in those early decades thanks to the recruitment of talented technicians and physicians. Technical management of pulmonary function equipment, breathing machines, and oxygen cylinders contributed to what would become the respiratory therapy discipline, later one of the first accredited NAIT courses and the first of its kind in Canada.

Dr. Giovanni Ferrara

Director, Division of Pulmonary Medicine
Department of Medicine
Faculty of Medicine & Dentistry
College of Health Sciences
University of Alberta

The other early twentieth-century epidemic in Canada was tuberculosis. The Aberhart Hospital, constructed in 1952 to care for TB patients, was, in the words of Dr. Sproule, "a keystone to the development of the Pulmonary Division."

The Aberhart's full complement of equipment and the clinical care provided by division members along with the availability of effective TB medication in the 1950s resulted in fewer patients requiring hospitalization. In 1968, the Aberhart was repurposed to provide care for those suffering the long-term effects of polio.

In the mid-1960s, pulmonologist **Dr. E. Garner King** established at the University Hospital one of Canada's first multisystem Intensive Care Units, initially with six beds. The construction of the Walter Mackenzie Health Sciences Centre two decades later considerably enlarged the ICU.

The 1970s saw the expansion of pulmonary research and its application to treatments. Sleep disorder research was led by **Dr. Eliot Phillipson**, and sleep disorder laboratories were established by **Dr. Godfrey Man**. An asthma centre at the Aberhart was headed by immunologist **Dr. Dean Befus**, who also ran the pulmonary research group. Others contributing to research and understanding of pulmonary function and physiology included **Drs. Irvin Mayer**, **Redwan Moqbel**, **Malcom King**, and **Dick Jones**.

Clinician researcher **Dr. Paul Man** developed greater research capacity in the division and took on administrative responsibilities, including as acting departmental chair. The lung transplant program was established in the late 1980s, with **Dr. Dale Lien** providing care for patients**. Dr. Garner King** became Department Chair in 1986 but died prematurely of bronchiolitis obliterans. The ICU that he founded is now known as the E. Garner King General Systems Intensive Care Unit.

"We are resuming our academic lives after the pandemic," says Division Director **Giovanni Ferrara**. "Climate change, however, is definitely a field that increasingly impacts our work and in which we will need to invest a lot more research."

As a significant percentage of the Canadian population ages, the risk of respiratory diseases increases. "The lungs are the largest surface of interface between our body and the environment," says Dr. Ferrara." In vulnerable populations with preexisting respiratory diseases, environmental hazards can cause flare-ups and can lead to hospitalization." The major forest fires of the past few years, as well as our increasingly hot summers, have taken their toll on the vulnerable, especially those who cannot access technologies such as HEPA filters, air cleaners, and air conditioners.

One of Dr. Ferrara's objectives is to create awareness in the community about the respiratory dangers associated with climate change. "Evidence helps us develop ways to alleviate suffering and increase resilience," he says. His own research is on the use of wearable devices such as smart watches to gather data from the environment and from patients. "The intent is to enable better follow-up of patients with respiratory disease and better characterization of their health even during extreme events like wildfires."

At the start of Dr. Ferrara's first five-year appointment in 2019, he worked with his colleagues to identify clear quality improvement goals for the division's clinics, with results that are benefiting not only patient care but academic areas. "We have seen a significant increase in high-quality clinical and translational research with a resulting increase in publications," he says. "And we're fostering career development at an international level for our trainees."

Successful recruitment has grown the division's academic group, an achievement Dr. Ferrara is particularly happy about. "There is a new generation of respirologists and researchers who are very motivated and are doing great things in research," he says. That new talent, alongside the strides made in ensuring equity, has put the division on a path of success. "More than half of division members are women, many of whom are in leadership positions and running multidisciplinary and research programs," he says. "Our group is solid, and we have a level of activity and productivity that will see us continuing to build strengths over the next decade."

Dr. Ferrara is entering his second five-year appointment as division director. One of his goals is to ensure the division's culture reflects its responsiveness to the needs of the community. That means not only delivering clinical excellence but also pushing the edges of knowledge.

"Challenges, whether they be pandemics, ageing, or climate change, will continue, and responding to the needs of the community has been the foundation of this division from the beginning," he says. "Our mission now, as it was then, is to increase knowledge, to look for solutions, and to instill a proactive academic culture."

For Dr. Ferrara, the supportive atmosphere within the division is one of the greatest features of the division. "The only way we succeed is by nurturing people, whether through teamwork or mentoring young faculty and trainees or looking out for each other," he says. "We can't control the economy or a pandemic, but we can help people achieve their goals."

Dr. Grace Lam

Pulmonologist **Dr. Grace Lam** co-led the establishment of Alberta's first dedicated long COVID clinic in 2020, soon after the pandemic started. Long COVID affects approximately 15 per cent of Canadians. Dr. Lam is involved in federal initiatives to accelerate and advance research relevant to therapeutics, to develop clinical practice guidelines, and to launch a national randomized control trial platform for long COVID.

Dr. Lam is also a cystic fibrosis (CF) specialist with a focus on screening and diagnosing CF-related diabetes. People with CF are at high risk for developing diabetes, but the standard annual screening test has low adherence rates because it requires a considerable amount of time. Dr. Lam is looking at alternate tools that could be used as a rapid, first-step glucose screening test to separate those people who need further testing from those who don't.

Recent therapeutic advances in the CF field means that patients in the next two decades will have their lives extended by about 30 years, making their life expectancy about the same as in the non-CF population. The new therapies mean that many formerly malnourished CF patients are now gaining too much weight, possibly because their high calorie diets are no longer necessary. "They are living longer, and without regular diabetes screening, uncontrolled blood sugar will have a greater ramification for heart disease and stroke," says Dr. Lam.

> ***The foundational piece for the modern day Department of Medicine was the creation of a practice plan.*** *That was the thing that Garner King was appointed to do. I was happy to be part of the team getting the practice plan up and running. That was probably the most memorable thing that we have done. It was huge because without that, the department could never have been built. The Department's practice plan has gone through several evolution and it's now much more robust. But the first step, don't forget, was taken at that time.*
>
> ***Dr. Paul Man**, Acting Chair, April 1992 – December 1992*

Physiology lab, 1940

Rheumatology

The establishment of the Rheumatology Division in 1968 was helped in part by the advocacy of the Canadian Arthritis and Rheumatism Society (now the Canadian Arthritis Society) for the embedding of clinical care of arthritis and rheumatic diseases within medical departments nationally.

Dr. Steven Katz

Director, Division of Rheumatology
Department of Medicine
Faculty of Medicine & Dentistry
College of Health Sciences
University of Alberta

This was also a priority for the first Divisional Director **Dr. John Percy**, recruited to develop an academic division, even though the academic policy of the Department of Medicine at the time excluded clinical practice.

As one of his first actions, he set up clinics at the University of Alberta Hospital and, over the next few years, in smaller cities throughout the province. The subsequent establishment of a residency training program attracted trainees from around the world. The recruitment in the early 1970s of **Dr. Anthony Russell** and **Dr. Paul Davis**, both from the UK, added needed clinical and research strengths. Drs. Russell and Davis respectively succeeded Dr. Percy as directors in the1980s and ‘90s.

Subsequent recruitments included Dr. Stephen Aaron, heavily involved in developing rheumatology education; Dr. Walter Maksymowych, whose research has earned him and our centre world renown, and Dr. Joanne Homik, past Divisional Director and a specialist in evidence-based medicine.

In the division's early years, research was aided by collaborations with nuclear medicine, immunology, and pharmacy. Despite the small size of the division, the number and impact of publications produced was impressive, a feature that continues to this day.

"We have a dozen members in the division, but the equivalent of only three fulltime faculty involved in research across the group," says Division Director **Steven Katz**, who was appointed in 2023. "Despite that small size, we've had over 300 publications over the past five years in high-impact journals.

"We have exciting research going on in areas of osteoporosis, scleroderma, vasculitis, medical education, check point inhibitors related to oncology, and artificial intelligence," says Dr. Katz. "Our longest standing program is **Dr. Maksymowych's** work with ankylosing spondylitis, which is recognized internationally."

"Clinically, I believe we see the most out-patients per physician of any group in the department," says Dr. Katz. "We're the busiest we've ever been over the last 15 years." The increasing clinical pressure is due to the increasing complexity of patient illness and the increasing complexity of therapeutic regimes to manage them.

Projections by such agencies as the Arthritis Society of Canada indicate that those pressures will only increase. That's because arthritis is Canada's most common, symptomatic, incurable chronic disease and affects about six million Canadians, a number estimated to increase to nine million by 2040. With Alberta's growing population, rheumatologists are seeing more patients, without a significant increase in specialists replacing those who retire. "We're getting better at raising awareness that there are more treatments we can use to treat these conditions," says Dr. Katz.

Academic education within the university is strong within the division. A number of staff have roles outside the division as educational leaders in the faculty or in the undergraduate medical education program.

National data generated by rheumatology training centres concludes that the best chance of having a future rheumatologist in place is to train them through local programs. Crucial to that goal is ensuring that local core medical (CIM) residents become interested in rheumatology.

"From a medical education point of view, we've historically been a very successful centre in terms of training future rheumatologists," says Dr. Katz. "Our internal medicine program has been the number one producer of future rheumatologist in the country."

"One of the reasons for our success is that if new faculty have a research interest or passion, that's where we want to drive," says Dr. Katz. "We're seeing fellows in our program who've become inspired by research and want to join it."

As he puts it, the goals of the division aren't his—they're everyone's. A recent division-wide strategic planning exercise has resulted in big picture goals, including a new multidisciplinary centre with a data-driven model of care.

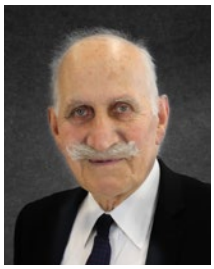
"Whether that's a figurative or literal place, that's to be determined, but it will provide patient-focused, world-class quality, multidisciplinary care and access to care for those from Red Deer to the North Pole," says Dr. Katz. "We want it structured so that we have an opportunity to teach trainees, learn from our patients, use that to inform scholarly work, and provide better support to those areas of research."

Funding is critical to make this plan a reality, as is getting the model right. "Traditionally, the patient relationship is with the rheumatologist alone," says Dr. Katz. "But there is significant value to having a team-based approach where patients benefit from having nurses, pharmacists, physiotherapists, and occupational therapists consistently involved in their care, where we can be creative, innovative, redistribute resources, and provide better quality and access to care for our patients."

Thinking about the decades ahead, Dr. Katz wants to see world-class quality and access to care at the heart of rheumatology's clinical care. He also wants to see the current building out of research programs as self-sustaining and to ensure that division members maintain their leadership in education and creating rheumatologists.

"We've had a triage program for the last 11 to 12 years due to capacity issues to try to ensure the right patient receives care at the right time at the right place," Dr. Katz says. "And I always say, the most successful thing that we can do for that program, every time we talk about a review of it, is if we don't need it anymore because we are able to provide rapid world-class access to every patient from the start, regardless of their disease or condition."

Dr. Anthony Russell



Dr. Anthony Russell was recruited by **Dr. John Percy** in 1971 from the Kennedy Institute of Rheumatology in London to the Department of Medicine.

When Dr. Russell trained as an immunologist, there wasn't a board exam for rheumatology. "I actually have never taken the exam," he says. "But I have been an examiner in it."

Dr. Russell's career has been focused on clinical research, including the ground-breaking first clinical trial of methotrexate, an anti-inflammatory agent and immune system suppressant, that is now a standard drug in the treatment of rheumatoid arthritis. Dr. Russell developed a clinical immunology laboratory that performed all the tests for rheumatism patients in Northern Alberta and helped establish peripheral clinics in Fort McMurray, Red Deer, Grande Prairie, Mannville, and High Prairie. Dr. Russell has more than 400 publications to his name. He continues to see patients at the Kaye Edmonton Clinic.

Looking back on his career, Dr. Russell notes two major milestones. "The first was the use of methotrexate, which transformed the care of rheumatoid patients," he says. "The second was the advent of biologic therapies, which further transformed rheumatic care and have had a broad application to other rheumatoid diseases." He is looking forward to the next transformation, which he thinks will be better access to care enabled by new technologies.

> ***"We are now into the third year of our first three-year agreement and are about to renegotiate a new agreement for the [Alternative Practice Plan] AFP …from my biased viewpoint, it has been an unqualified success.***
> *Over the past five years from 1999–2004, we have recruited over 75 academic staff with a net gain of 65 faculty. The number of grants submitted by Department members after the institution of the AFP has increased markedly, as has the number of teaching hours."*
>
> ***Dr. Thomas J. Marrie,** , "The History of the Department of Medicine at the University of Alberta." Chair: 1999–2004*

1917–1918 class in Medicine, in the lecture room in the power house

A History of Divisional Directorships

Department of Medicine, University of Alberta

Cardiology

1954 – 1969	Dr. Robert S. Fraser
1969 – 1988	Dr. Richard E. Rossall
1988 – 1996	Dr. Terrence J. Montague
1996 – 1998	Dr. Dennis Humen (Acting)
1998 – 2007	Dr. Stephen L. Archer
2007 – 2008	Dr. Wayne Tymchak (Acting)
2008 – 2011	Dr. Blair O'Neill
2012 – 2013	Dr. Wayne Tymchak (Acting)
2013 – 2021	Dr. Wayne Tymchak
2021 – 2021	Dr. Paolo Raggi (Acting)
2021 – Present	Dr. Michelle Graham

Dermatology

1930 – 1952	Dr. Harold Orr
1952 – 1975	Dr. Paul Rentiers
1974 – 1985	Dr. Jack Brown
1985 – 1987	Dr. Eric H. Schloss
1987 – 1997	Dr. Kowichi Jimbow
1997 – 2001	Dr. Alfons L. Krol
2001 – 2007	Dr. Gilles J. Lauzon
2007 – 2013	Dr. Thomas Salopek
2013 – 2015	Dr. William Dafoe (Acting)
2015 – Present	Dr. Robert Gniadecki

Endocrinology and Metabolism

1957 – 1969	Dr. Lionel E. McLeod
1969 –1974	Dr. Mo Watanabe
1974 – 1988	Dr. Peter M. Crockford
1988 – 1998	Dr. Jody Ginsberg
1998 – 2006	Dr. Richard Z. Lewanczuk
2006 – 2014	Dr. Connie Chik
2014 – 2020	Dr. Peter Senior
2020 – 2023	Dr. Jacques Romney (Acting)
2023 – Present	Dr. Terra Arnason

Gastroenterology

1968 – 1980	Dr. Ronald H. Wensel
1980 – 1986	Dr. Richard W. Sherbaniuk
1986 – 1995	Dr. Alan B. R. Thomson
1995 – 2006	Dr. Richard N. Fedorak
2006 – 2017	Dr. Sander van Zanten
2017 – 2022	Dr. Daniel Baumgart
2020 – 2021	Dr. Clarence Wong – Section Chief (Acting)
2022 – Present	Dr. Clarence Wong

General Internal Medicine

1969 – 1970	Dr. Gerald Richards
1970 – 1972	Position Open
1972 – 1977	Dr. Leroy M. Anholt
1977 – 1989	Dr. Allan M. Edwards
1989 – 1993	Dr. Leroy M. Anholt
1993 – 2002	Dr. Neil E. Brown
2002 – 2007	Dr. William J. Coke
2007	Dr. Narmin Kassam (Acting Aug – Nov)
2007	Dr. Peter Hamilton (Acting Dec – Aug 08)
2008 – 2012	Dr. Ann Colbourne
2012 – 2013	Dr. Narmin Kassam (Acting)
2013 –2019	Dr. Narmin Kassam
2019 – 2021	Dr. Peter Hamilton
2021 – 2022	Dr. Raj Padwal (Acting)
2021 – 2022	Dr. Brian Wirzba – Section Chief (Acting)
2022 – 2024	Dr. Brian Wirzba – Section Chief
2022 – Present	Dr. Jennifer Ringrose

Geriatric Medicine

1988 – 1998	Dr. Peter N. McCracken
1998 – 2003	Dr. Anne L. Sclater
2003 – 2004	Dr. Katherine E. Lechelt (Acting)
2004 – 2010	Dr. Katherine E. Lechelt
2010 – Present	Dr. Adrian Wagg

Hematology

1972 – 1975	Dr. T. Alex McPherson
1975 – 1977	Dr. Michael J. Mant (Acting)
1977 – 1982	Dr. James Hill
1982 – 1984	Dr. R. Neil MacDonald (Acting)
1984 – 2003	Dr. Robert A. Turner
2003 – 2013	Dr. Loree M. Larratt
2013 – 2023	Dr. Joseph Brandwein
2024 – Present	Dr. Marlene Hamilton

Infectious Diseases

1972 – 1984	Dr. George Goldsand
1984 – 1986	Dr. D. Lorne J. Tyrrell
1986 – 1987	Dr. Anne E. Fanning (Acting)
1987 – 1988	Dr. Lilly J. Miedzinski (Acting)
1988 – 1998	Dr. Lilly J. Miedzinski
1998 – 2009	Dr. Stephen D. Shafran
2009 – 2013	Dr. Geoffrey Taylor
2014 – 2015	Dr. Stephen D. Shafran (Acting)
2015 – 2024	Dr. Karen Doucette
2024 – Present	Dr. Stephanie Smith

Medical Oncology

1972 – 1985	Dr. T. Alex McPherson
1985 – 1989	Dr. Anthony L. A. Fields

Nephrology

1969 – 1985	Dr. John B. Dossetor
1985 – 1987	Dr. Raymond A. Ulan (Acting)
1987 – 2003	Dr. Philip F. Halloran
2003 – 2009	Dr. Barbara J. Ballermann
2009 – 2011	Dr. Kailash Jindal (Acting until Sept 2011)
2011 – 2016	Dr. Kailash Jindal
2016 – 2017	Dr. Branko Braam (Acting)
2017 – 2024	Dr. Branko Braam
2024 – Present	Dr. Jacques Romney (Acting)

Neurology

1962 – 1972	Dr. George Monckton
1972 – 1988	Dr. Donald R. McLean
1988	Dr. M. George Elleker (Acting)
1988 – 1997	Dr. Michael H. Brooke
1997	Dr. M. George Elleker (Acting)
1997 – 2007	Dr. Ashfaq Shuaib
2007 – 2014	Dr. Theodore E. Roberts
2014 – 2021	Dr. Douglas Zochodne
2021 – 2023	Dr. Janis Miyasaki
2023 – 2024	Dr. George Elleker (Acting)
2023	Dr. Penny Smyth

Physical Medicine & Rehabilitation

2014 – 2017	Dr. Shaun Gray
2017 – 2022	Dr. Chester Ho
2022 – 2023	Dr. Vivian Mushahwar (Acting)
2022	Dr. Heather Lindstrom – Section Chief (Acting)
2023 – Present	Dr. Jacqueline Hebert (Acting)

Preventive Medicine

2011 – 2015	Dr. Nicola Cherry
2015 – Present	Dr. Sebastian Straube

Pulmonary Medicine

1960 – 1986	Dr. Brian J. Sproule
1986 – 2001	Dr. S.F. Paul Man
2001 – 2011	Dr. Irvin Mayers
2011 – 2017	Dr. Harissios Vliagoftis
2017 – 2019	Dr. Ron Damant
2019 – Present	Dr. Giovanni Ferarra

Rheumatology

1968 – 1986	Dr. John S. Percy
1986 – 1991	Dr. Anthony S. Russell
1991 – 1998	Dr. Paul Davis
1998 – 2003	Dr. Anthony S. Russell
2003 – 2013	Dr. Joanne E. Homik
2013 – 2016	Dr. Stephen Aaron (Acting)
2016 – 2017	Dr. Steven Katz (Acting)
2017 – 2022	Dr. Jan Willem Cohen Tervaert
2022 – Present	Dr. Steven Katz

Administrative Services

1987 – 2007	J. Charles Morrison, MA (Director)
2007	Richard K. Mah (Acting; June – Dec)
2007 – 2012	Barbara Sonnenberg (Assistant Chair)
2012	Leonard Wong (Acting Assist. Chair July – August)
2012 – 2018	Barbara Hiscock (Assistant Chair)
2018 – Present	François Bouman (Academic Department Manager)

Department of Medicine History Milestones

1906

U of A founded by Alberta Legislation

1913

U of A's School of Medicine established, and first class enrolled

1914

First female medical students enrolled

1922

First successful clinical use of insulin at the University of Toronto; the insulin was prepared by Dr. J. Collip, U of A biochemistry professor. Strathcona Hospital becomes the University Hospital

1923

Nobel Prize for Physiology or Medicine awarded to Drs. McLeod and Banting for discovery of insulin. Dr. Collip's purification technique is an essential contribution to the discovery

1924

Department of Medicine founded with neurologist Dr. E.L. Pope as first Head

1926

James Collip receives his MD from the University of Alberta

1927

Department of Community Medicine established

1929

Founding of Royal College of Physicians and Surgeons of Canada (RCPSC) by Act of Parliament

1930

Division of Dermatology created

1936

Tuberculosis Act passed that ensured the provincial Department of Health provides free treatment to patients with TB

1938

Royal Alexandra Hospital becomes a teaching hospital

1939

Second World War breaks out

1944

Dr. John W. Scott succeeds Dr. Pope as Department of Medicine Head

1946

Charles Camsell Hospital opens for TB patients. RCPSC approves program in medicine and ophthalmology

1947

DIscovery of oil at Leduc Field. First drugs for TB available

1953

Polio epidemic hits Edmonton

1954

Dr. Donald R. Wilson succeeds Dr. Scott as Department Chair. Division of Cardiology created. Psychiatry becomes a separate department. Ophthalmology and Otolaryngology move to Department of Surgery. Radiology becomes a separate department

1955

Anesthesiology becomes a separate department. Department of Community Medicine becomes Department of Preventive Medicine and Public Health

1956

Last year individual hospitals were approved for graduate training. Training moved to university programs

1957

Division of Endocrinology & Metabolism created. Pediatrics becomes a separate department

1958

First residency training program in internal medicine in Canada set up by Dr. Richard Rossall, first director of Graduate Training in the Department

1960

Medical Research Council of Canada established. Division of Pulmonary Medicine created

1962

Division of Neurology created. Drs. William Lakey, Lionel McLeod and Ray Ulan perform the first hemodialysis procedure at the UAH and in Canada

1967

First cadaver kidney transplant. Division of Gastroenterology created. Administrative Services Division created in Department of Medicine with Chuck Morrison as Director

1968

National health care established. Division of Rheumatology created, RCPSC sets up McLaughlin Examination and Research Centre at the U of A for evaluating specialist physicians

1969

Dr. Robert Fraser succeeds Dr. Wilson as Department Chair. Divisions of General Internal Medicine and of Nephrology/Immunology created

1968–69

RCPSC adopts more formal procedures for graduate training program accreditation. Two core years of training followed by two less structured years in a supervised university program. Training programs sponsored by hospitals were no longer accredited

1969

The Department moves into the new Clinical Sciences Building. First international medical education conference organized by Dr. J. A.L. Gilbert. Alberta enters federal health medicare plan. New revamped, three-phase undergraduate curriculum introduced

1970

Professional Association of Interns and Residents of Alberta formed. RCPSC approval of Cardiology training program

1972

RCPSC approval of first trainee in Gastroenterology. Divisions of Clinical Hematology, Infectious Diseases, and Medical Oncology created

1974–75

Dr. Brian Sproule is Acting Department Chair

1975

Dr. George Molnar succeeds Dr. Sproule as Department Chair. Division of Physical Education and Rehabilitation moved into Department. Formal clinical teaching introduced at UAH and RAH

1976

RCPSC requires two years of post-graduate training for licensure

1977

First Chief Medical Resident appointed after a decade-long gap. The Department committed to a ten-year plan for a new Health Sciences Centre

1978

The Department develops explicit plan for management of residents and teaching programs at affiliated hospitals

1979

Alberta Heritage Foundation for Medical Research created. Division of Physical Medicine & Rehabilitation (PM&R) separated from the Department and became a free-standing division under the faculty

1980

Formal five-year review procedures implemented for division directors

1981

Department secured $1.2 million endowment from the Muttart Diabetes Research and Training Centre. Long-range Planning Committee implemented "pod" concept with University of Alberta Hospital and affiliated teaching hospitals. Long-range planning becomes essential addition to existing standing committees of Education, Clinical Practice, Research, and Clinical Chiefs of Affiliated Teaching Hospitals

1980–81

First two AHFMR scholars Dr. W.C. Leung and Dr. M. Dasgupta joined Department

1982

Department of Preventive Medicine and Public Health becomes Department of Family Medicine

1981-86

Department of Medicine divisions move their beds to Walter Mackenzie Health Sciences Centre

1984

Canada Health Act enacted

1985

RCPSC approval of Medical Oncology program

1985

First heart transplant in western Canada

1986

RCPSC approval of training programs in Clinical Hematology and Endocrinology and Metabolism

1986

Dr. E. Garner King succeeds Dr. Molnar as Department Chair. Residency training program given provisional status in Royal College accreditation review leading to complete restructuring of the program with Dr. Lee Anholt as Resident Training Director

1987

McLaughlin Centre moved to Ottawa by the RCPSC

1988

Division of Geriatric Medicine created; new program established in Dermatology and Cutaneous Services. Residency program awarded full accreditation by RCPSC

1990

14 divisions in Department

1992

Dr. King passes away. Dr. Paul Man became Acting Chair until December 1992

1993

Dr. Lee Anholt became Acting Chair from January-August 1993. Dr. Paul Armstrong succeeds Dr. Anholt as Department Chair

1994

Division of Clinical Hematology renamed Division of Clinical Hematology and Medical Oncology

1996

Faculty of Medicine merges with Dentistry & Dental Hygiene to become Faculty of Medicine and Dentistry

1999

Dr. Thomas Marrie succeeds Dr. Armstrong as Department Chair. First living donor liver transplant in western Canada. Alternative relationship funding plan implemented (now Academic Medicine and Health Services Program)

2000

Edmonton Protocol in islet transplantation

2001

Founding of the American Journal of Transplantation with head office in Edmonton

2004

Dr. Jody Ginsberg succeeds Dr. Marrie as Acting Department Chair

2004

Dr. Jon Meddings succeeds Dr. Ginsberg as Department Chair

2005

Zeidler-Ledcor Building opens

2007

Opening of Alberta Diabetes Research Institute and the Mazankowski Alberta Heart Institute. Administrative Services Director Charles (Chuck) Morrison passes away

2009

Dr. Dennis Kunimoto succeeds Dr. Meddings as Acting Department Chair

2010

Dr. Barbara Ballermann succeeds Dr. Kunimoto as Department Chair

2014

PM&R becomes Division in Department

2017

Competence by Design launched by RCPSC

2020

Dr. Narmin Kassam succeeds Dr. Ballermann as Department Chair. COVID-19 pandemic breaks out

2024

100th anniversary of the Department of Medicine

100 DOM

Academic & Clinical Faculty

Department of Medicine, University of Alberta

Aakash Shetty	Neurology	Assistant Clinical Professor
Aashif Esmail	Preventive Medicine	Adjunct Associate Professor
Aatif Hussain	Geriatric Medicine	Assistant Clinical Professor
Abdelrahman Aly	Physical Medicine & Rehab	Associate Clinical Professor
Abraam Isaac	Infectious Diseases	Associate Clinical Professor
Ada Lam	General Internal Medicine	Associate Clinical Professor
Adalberto Loyola-Sanchez	Physical Medicine & Rehab	Assistant Professor
Adam Romanovsky	Nephrology	
Adam Sinclair	Endocrinology	Clinical Lecturer
Adil Adatia	Pulmonary Medicine	Assistant Professor
Adrian Wagg	Geriatric Medicine	Professor
Adriana Lazarescu	Gastroenterology	Professor
Affan Tahir	General Internal Medicine	Clinical Lecturer
Ahmed Elmezughi	Preventive Medicine	Clinical Lecturer
Ainslie Eberhart (Hildebrand)	Nephrology	Associate Professor
Alan McMahon	Nephrology	Professor Emeritus
Albert Vu	Endocrinology	Clinical Lecturer
Albert Yeung	General Internal Medicine, Pharmacology	Adjunct Professor
Aldo Montano-Loza	Gastroenterology	Professor
Alexander Doroshenko	Preventive Medicine	Associate Professor
Alexandra McFarlane	Infectious Diseases	Assistant Clinical Professor
Ali Hajar	General Internal Medicine	
Alia Daoud	Pulmonary Medicine	Clinical Lecturer
Alicia Strand	General Internal Medicine	Assistant Clinical Professor
Alim Hirji	Pulmonary Medicine	Associate Professor
Alison Clifford	Rheumatology	Associate Professor
Allan Murray	Nephrology	Professor
Allen Lim	Gastroenterology	Assistant Clinical Professor
Alto Lo	Physical Medicine & Rehab	Assistant Clinical Professor
Amanda Brisebois	General Internal Medicine	Clinical Professor
Amanda Brost	General Internal Medicine	Clinical Lecturer
Amany Saad	Geriatric Medicine	Clinical Lecturer
Ameeta Singh	Infectious Diseases	Clinical Professor
Aminu Bello	Nephrology	Professor
Amirali Toossi	Physical Medicine & Rehab	Adjunct Assistant Professor
Amit Dhillon	Gastroenterology	
Amy Morse	Gastroenterology	Associate Clinical Professor
Amy Wagner	Neurology	Clinical Lecturer
Ana-Maria Bosonea	Pulmonary Medicine	Clinical Lecturer
Anan Hanna	Gastroenterology	Clinical Lecturer
Anand Bala	Gastroenterology	Associate Clinical Professor
Anca Tapardel	General Internal Medicine	Associate Clinical Professor
Andrea Johnson	Rheumatology	Clinical Lecturer
Andrea Kulyk	Gastroenterology	
Andrea Opgenorth	Endocrinology	Associate Clinical Professor
Andrei Fagarasanu	Hematology	Associate Clinical Professor
Andrew Ferrier	Dermatology	Assistant Clinical Professor
Andrew Mason	Gastroenterology	Professor
Andrew Wassef	General Internal Medicine	Assistant Clinical Professor
Angela Currie	Physical Medicine & Rehab	Assistant Clinical Professor (Secondary)
Angela Fu	Cardiology	Clinical Lecturer
Angela Juby	Geriatric Medicine	Professor
Angela Lau	Pulmonary Medicine	Assistant Professor
Anita Au	General Internal Medicine	Associate Clinical Professor
Anita Chan	Cardiology	Clinical Lecturer
Anita Daniel	Preventive Medicine	Clinical Lecturer
Anna Janowska-Wieczorek	Hematology	Professor Emeritus
Anna Lam	Endocrinology	Assistant Professor
Anna Oswald	Rheumatology	Professor
Anna Rogers	Endocrinology	Clinical Lecturer
Anne Fanning	Infectious Diseases	Professor Emeritus
Anoop Mathew	Cardiology	Assistant Clinical Professor
Anthea Peters	Hematology	Assistant Adjunct Professor
Anthony Russell	Rheumatology	Professor Emeritus
Antonia Barnes	Endocrinology	Clinical Lecturer
Anu Parhar	Pulmonary Medicine	Associate Clinical Professor
Arabesque Parker	Hematology	Clinical Lecturer (Secondary)
Arjun Gupta	Cardiology	Clinical Lecturer
Arya Sharma	Endocrinology	Professor Emeritus
Aseel Othman	General Internal Medicine	Clinical Lecturer
Ashfan Ghani	General Internal Medicine	Assistant Clinical Professor
Ashfaq Shuaib	Neurology	Professor
Ashlesha Sonpar	Infectious Diseases	Assistant Clinical Professor
Ashley Gillson	Pulmonary Medicine	Associate Clinical Professor
Ashley Whidden	Pulmonary Medicine	Assistant Clinical Professor
Asif Butt	Neurology	Clinical Lecturer
Asif Jamil	Neurology	
Azin Rouhi	Rheumatology	Clinical Lecturer
Barbara Ballermann	Nephrology	Professor Emeritus
Barbara Romanowski	Infectious Diseases	Clinical Professor Emeritus
Basdeo Nankissoor	General Internal Medicine	Assistant Clinical Professor
Bashir Brebesh	Neurology	
Beatrice Deschene St. Pierre	Physical Medicine & Rehab	Clinical Lecturer
Ben Chiam	Pulmonary Medicine	Assistant Clinical Professor
Benjamin Tyrrell	Cardiology	Associate Clinical Professor
Bernadette Quemerais	Preventive Medicine	Associate Professor
Bibiana Cujec	Cardiology	Professor Emeritus
Blair O'Neill	Cardiology	Professor Emeritus
Bodh Jugdutt	Cardiology	Professor Emeritus
Bohdan Savaryn	Infectious Diseases	Assistant Clinical Professor
Boray Nguyen	General Internal Medicine	Clinical Lecturer
Bradley Brochu	Cardiology	Clinical Lecturer
Branko Braam	Nephrology	Professor
Brenda Hemmelgarn	Nephrology	Professor
Brendan Halloran	Gastroenterology	Associate Professor
Brennan Walters	Gastroenterology	Assistant Clinical Professor
Brett Wegenast	Physical Medicine & Rehab	Clinical Lecturer
Brian Buck	Neurology	Associate Professor
Brian McNab	Pulmonary Medicine	FSO II - Assistant Teaching Professor
Brian Rambaransingh	Physical Medicine & Rehab	Clinical Professor
Brian Rowe	Pulmonary Medicine	Adjunct Professor
Brian Sonnenberg	Cardiology	Associate Professor
Brian Wirzba	General Internal Medicine	Clinical Professor
Bruce Fisher	General Internal Medicine	Professor Emeritus
Bruce Ritchie	Hematology	Professor
Caitlyn Collins	General Internal Medicine	Assistant Clinical Professor
Carlos Cervera	Infectious Diseases	Associate Professor
Carlos Moctezuma Velazquez	Gastroenterology	Assistant Professor
Carmen Tuchak	Physical Medicine & Rehab	Associate Clinical Professor
Carol Chung	Pulmonary Medicine	Associate Clinical Professor
Carrie Ye	Rheumatology	Assistant Professor
Cecile Phan	Neurology	Associate Clinical Professor
Chaitanya Gandhi	Endocrinology	Clinical Lecturer
Charles Harley	General Internal Medicine	Professor Emeritus
Charles Lortie	Dermatology	Associate Clinical Professor
Cheryl Goldstein	General Internal Medicine	Associate Professor
Cheryl Laratta	Pulmonary Medicine	Assistant Clinical Professor
Chester Ho	Physical Medicine & Rehab	Professor
Chris Venner	Hematology	Adjunct Professor
Christine Simpson	General Internal Medicine	Clinical Lecturer
Christopher Lyddell	Rheumatology	Assistant Clinical Professor
Christopher Power	Neurology, Medical Microbiology & Immunoloty	Professor
Christopher Sarin	Preventive Medicine	Assistant Clinical Professor
Christopher Sikora	Preventive Medicine, Public Health	Associate Clinical Professor
Christopher Wynick	Hematology	Clinical Lecturer
Chrystal Chan	Pulmonary Medicine	Assistant Clinical Professor
Clarence Wong	Gastroenterology	Professor
Clarissa Agusto	General Internal Medicine	Assistant Clinical Professor
Colin MacDonald	General Internal Medicine	Associate Clinical Professor
Colleen Norris	Cardiology, Nursing	Adjunct Professor
Conar O'Neil	Infectious Diseases	Associate Clinical Professor
Connie Switzer	Gastroenterology	Clinical Professor
Constance Chik	Endocrinology	Professor Emeritus
Craig Butler	Cardiology	Associate Professor
Curtis Hlushak	Physical Medicine & Rehab	Clinical Lecturer
Curtiss Boyington	Infectious Diseases	Clinical Professor
Cynthia Wu	Hematology	Associate Professor
Dale Lien	Pulmonary Medicine	Professor
Dalton Sholter	Rheumatology	Clinical Professor
Dan Sadowski	Gastroenterology	Professor
Dan Slabu	General Internal Medicine	Assistant Clinical Professor
Daniel Baumgart	Gastroenterology	Adjunct Professor
Daniel Fok	Neurology	Assistant Clinical Professor
Daniel Kim	Cardiology	Professor
Daniel Sawler	Hematology	Assistant Clinical Professor
Daniel Stollery	Pulmonary Medicine	Clinical Professor
Darren Gray	Physical Medicine & Rehab	Assistant Clinical Professor
Darren Hallett	General Internal Medicine	
Darren Lau	General Internal Medicine	Assistant Professor
Darryl Rolfson	Geriatric Medicine	Professor
David Collister	Nephrology	Assistant Professor
David Kleinman	General Internal Medicine	
David Page	Hematology	Clinical Lecturer
David Pincock	Gastroenterology	Adjunct Professor
David Waldner	Infectious Diseases	Assistant Clinical Professor
David Westaway	Neurology, Biochem	Professor Emeritus
David Yang	Gastroenterology	
Dayna Smordin	Physical Medicine & Rehab	Clinical Lecturer
Dean Befus	Pulmonary Medicine Med Micro & ID	Professor Emeritus
Dean Karvellas	Gastroenterology	Adjunct Professor
Debra Hammer	Cardiology	Assistant Clinical Professor
Debraj Das	Cardiology	Clinical Lecturer
Deena Hamza	Rheumatology	Adjunct Assistant Professor
Deena Hinshaw	Preventive Medicine	Clinical Professor
Deirdre O'Neill	Cardiology	Assistant Professor
Dennis Kunimoto	Infectious Diseases, MMID	Professor
Dennis Marion	Infectious Diseases	Assistant Clinical Professor
Dennis Todoruk	Gastroenterology	Assistant Clinical Professor
Dhiren Naidu	Physical Medicine & Rehab	Professor
Diana Rucker	Geriatric Medicine	Associate Clinical Professor
Dilini Vethanayagam	Pulmonary Medicine	Professor
Dima Kabbani	Infectious Diseases	Assistant Professor
Dina Kao	Gastroenterology	Professor
Dominic Carney	Pulmonary Medicine	Assistant Clinical Professor (Secondary)
Dominic Mudiayi	General Internal Medicine	Assistant Clinical Professor
Donald Gross	Neurology	Professor
Donald Morrish	Endocrinology	Professor Emeritus
Doris Sturtevant	Preventive Medicine	Assistant Clinical Professor (Secondary)
Douglas Zochodne	Neurology	Professor
Dylan Johnson	Rheumatology	Clinical Lecturer
Edmond Ryan	Endocrinology	Professor Emeritus
Ekua Amponsah Agyemang	Preventive Medicine	Clinical Lecturer
Elaine Yacyshyn	Rheumatology	Professor
Elena Liew	Hematology	Assistant Clinical Professor
Ellen Rafferty	Preventive Medicine	Assistant Professor
Ellen Toth	Endocrinology	Professor Emeritus

Ellina Lytvyak	Preventive Medicine	Assistant Professor
Elliott Sprague	General Internal Medicine	Associate Clinical Professor
Emad Saad	Pulmonary Medicine	Associate Clinical Professor
Emily Christie	Nephrology	Clinical Lecturer
Epsita Shome Vasanthan	Nephrology	Clinical Lecturer
Eric Wong	Pulmonary Medicine	Associate Professor
Erika MacIntyre	Pulmonary Medicine	Assistant Clinical Professor (Secondary)
Erika Wall	Hematology	Clinical Lecturer
Erin Miller	Endocrinology	Assistant Clinical Professor
Erinjit Toor	General Internal Medicine	Assistant Clinical Professor
Ermin Nath	Cardiology	Clinical Lecturer
Errol Raff	General Internal Medicine	Associate Clinical Professor
Eugene Waclawski	Preventive Medicine	Adjunct Associate Professor
Eunice Chow	Dermatology	Clinical Professor
Evan Lockwood	Cardiology	Clinical Professor
Evan Martow	Cardiology	Clinical Lecturer
Evan Sampson	Physical Medicine & Rehab	Assistant Clinical Professor
Evan Wiens	Cardiology	Clinical Lecturer
Evangelos Michelakis	Cardiology	Professor
Fabrizio Giuliani	Neurology	Associate Professor
Fadi Khadour	Cardiology	Associate Clinical Professor
Fang Ba	Neurology	Associate Professor
Farhad Peerani	Gastroenterology	Associate Professor
Finlay McAlister	General Internal Medicine	Professor
Fiona McAlister-Lawson	Geriatric Medicine	Clinical Professor
Frances Carr	Geriatric Medicine	Assistant Professor
Frank Hoentjen	Gastroenterology	Professor
Fraulein Morales	General Internal Medicine	Clinical Professor
Gabor Gyenes	Cardiology	Professor
Gabriel Suen	General Internal Medicine	Adjunct Assistant Professor
Gananjit Randhawa	General Internal Medicine	Clinical Lecturer
Gary Eitzen	Pulmonary Medicine	Adjunct Professor
Gavin Oudit	Cardiology	Professor
George Elleker	Neurology	Professor
Gerhard Benade	Preventive Medicine	Assistant Clinical Professor
Gillian Ramsay	General Internal Medicine	Associate Clinical Professor
Giovanni Ferrara	Pulmonary Medicine	Professor
Glen Jickling	Neurology	Associate Professor
Glen Pearson	Cardiology	Professor
Godfrey Man	Pulmonary Medicine	Professor Emeritus
Gopinath Sutendra	Cardiology	Associate Professor
Gordon Brown	Neurology	Clinical Lecturer
Gordon Searles	Dermatology	Clinical Professor
Grace Lam	Pulmonary Medicine	Assistant Professor
Grayson Beecher	Neurology	Assistant Professor
Greg Gilmour	General Internal Medicine	Assistant Clinical Professor
Greg Hrynchyshyn	General Internal Medicine	Clinical Professor
Greg Lutzak	Gastroenterology	
	General Internal Medicine	Clinical Lecturer
Gregg Blevins	Neurology	Associate Professor
Gukirat Gill	Geriatric Medicine	Clinical Lecturer
Gurbir Brar	General Internal Medicine	Clinical Lecturer
Gurpal Sandha	Gastroenterology	Professor
Hakique Virani	Preventive Medicine	Associate Clinical Professor
Hamam Abuoun	General Internal Medicine	Clinical Lecturer
Hamid Abdihalim	General Internal Medicine	
Hanna Slabu	Endocrinology	Clinical Lecturer
Harald Becher	Cardiology	Professor Emeritus
Haran Yogasundaram	Cardiology	Clinical Lecturer
Hardeep Kainth	Physical Medicine & Rehab	Assistant Clinical Professor
Harissios Vliagoftis	Pulmonary Medicine	Professor
Harris Chou	Neurology	
Hatem LinJawi	Cardiology	Clinical Lecturer
Heather Lindstrom	Physical Medicine & Rehab	Associate Clinical Professor
Heidi Choi	General Internal Medicine	Assistant Clinical Professor
Helene Lemieux	Cardiology	Adjunct Associate Professor
Hernando Leon	General Internal Medicine	Associate Clinical Professor
Hernish Acharya	Physical Medicine & Rehab	Associate Clinical Professor
Hesham Tarhoni	General Internal Medicine	Assistant Clinical Professor
Holly Hoang	Infectious Diseases	Associate Clinical Professor
Humaira Iqbal	Pulmonary Medicine	
	General Internal Medicine	Assistant Clinical Professor
Ian (David) Paterson	Cardiology	Adjunct Professor
Ibrahim Bader	Cardiology	Associate Clinical Professor
Ifeoma Achebe	Preventive Medicine	Clinical Lecturer
Imhokhai Ogah	General Internal Medicine	Clinical Lecturer
Inka Toman	General Internal Medicine	Assistant Clinical Professor
Irvin Mayers	Pulmonary Medicine	
	Caritical Care Medicine	Professor
Irwindeep Sandhu	Hematology	Adjunct Associate Professor
Isabelle Chiu	Infectious Diseases	Associate Professor
Isabelle Vonder Muhll	Cardiology	Associate Professor
Ishrat Gill	Pulmonary Medicine	Clinical Lecturer
Jack Jhamandas	Neurology	Professor
Jacqueline Hebert	Physical Medicine & Rehab	Professor
Jacqueline Tay	Pulmonary Medicine	Clinical Lecturer
Jacques Romney	Endocrinology	Clinical Professor
Jaggi Rao	Dermatology	Clinical Professor
Jaime Yu	Physical Medicine & Rehab	Associate Professor
Jalal Moolji	Pulmonary Medicine	Clinical Lecturer
Jaled Yehya	Pulmonary Medicine	Associate Clinical Professor
Jaleh Fatehi	Neurology	Clinical Lecturer
James Ferguson	Gastroenterology	Assistant Clinical Professor
James Talbot	Preventive Medicine	Associate Clinical Professor
Jamie Irvine	Physical Medicine & Rehab	Assistant Clinical Professor
Jamil Kanji	Infectious Diseases	Associate Clinical Professor
Jan Dirk Van Der Berg	General Internal Medicine	Assistant Clinical Professor
Jan Willem Cohen Tervaert	Rheumatology	Professor
Jan-Erick Nilsson	Gastroenterology	Clinical Lecturer
Janek Senaratne	Cardiology	Associate Clinical Professor
Janice Richman-Eisenstat	Pulmonary Medicine	Associate Clinical Professor
Janis Miyasaki	Neurology	Professor
Jason Dyck	Cardiology	Adjunct Professor
Jason Plemel	Neurology	Associate Professor
Jason Soo	Rheumatology	Assistant Clinical Professor
Jason Weatherald	Pulmonary Medicine	Associate Professor
Jay Varghese	General Internal Medicine	Associate Clinical Professor
Jaye Platnich	Nephrology	Clinical Lecturer
Jean Vance	Endocrinology	Professor Emeritus

Jeff Burton	Cardiology	Professor Emeritus
Jeff Patterson	Hematology	Assistant Clinical Professor
Jeffrey Bakal	General Internal Medicine	Clinical Lecturer
Jeffrey Johnson	Endocrinology	Adjunct Associate Professor
Jennifer Assh	Physical Medicine & Rehab	Clinical Lecturer
Jennifer Jacquier	Endocrinology	Associate Clinical Professor
Jennifer Jin	Gastroenterology	Associate Clinical Professor
Jennifer McCombe	Neurology	Associate Professor
Jennifer Ngo	General Internal Medicine	Associate Clinical Professor
Jennifer Ringrose	General Internal Medicine	Professor
Jenny Lu Song	Pulmonary Medicine	Clinical Lecturer
Jeremy Beach	Preventive Medicine	Professor Emeritus
Jeremy Theal	Gastroenterology	Associate Clinical Professor
Jesse Basnak	General Internal Medicine	Clinical Lecturer
Jesse Siffledeen	Gastroenterology	Associate Clinical Professor
Jessica D'Amico	Physical Medicine & Rehab	Adjunct Assistant Professor
Jessica Leong	General Internal Medicine	Clinical Lecturer
Jill McDermid	Gastroenterology	Clinical Lecturer
Joanne (Jody) Nicholson	General Internal Medicine	
	Cardiology	Assistant Clinical Professor
Joanne Homik	Rheumatology	Professor Emeritus
Jocelyn Gray	Physical Medicine & Rehab	Clinical Lecturer
Joel Allen	General Internal Medicine	Assistant Clinical Professor
Joel Dacks	Infectious Diseases	Professor
John Andersen	Physical Medicine & Rehab	Adjunct Associate Professor
John Bradley	Nephrology	Clinical Professor
John Cesarz	General Internal Medicine	Assistant Clinical Professor
John Dimitry	Cardiology	Clinical Lecturer
John Elliott	Dermatology, Medical Microbiology & Immunology	Professor Emeritus
John Kachope	General Internal Medicine	Associate Clinical Professor
John Keegan	General Internal Medicine	Clinical Lecturer
Jonah Mizzau	General Internal Medicine	Clinical Lecturer
Jonathan Cena	General Internal Medicine	Clinical Lecturer
Jonathan Chia	Physical Medicine & Rehab	Assistant Clinical Professor
Jonathan Choy	Cardiology	
	Gastroenterology	Clinical Professor
Jonathan Windram	Cardiology	Associate Professor
Jonathan Wong	General Internal Medicine	Assistant Clinical Professor
Jordan Marit	General Internal Medicine	Assistant Clinical Professor
Joseph Brandwein	Hematology	Professor
Joseph Senez	General Internal Medicine	Assistant Clinical Professor
Joshua Kutcher	Physical Medicine & Rehab	Clinical Lecturer
Juan Gonzalez Abraldes	Gastroenterology	Professor
Julia Rouget	General Internal Medicine	Assistant Clinical Professor
Julia Sun	General Internal Medicine	
Justin Chen	Infectious Diseases	Associate Clinical Professor
Justin Ezekowitz	Cardiology	Professor
Justin Lanteigne	General Internal Medicine	
Justin Okeke	General Internal Medicine	Assistant Clinical Professor
Justin Sebastian	Pulmonary Medicine	Associate Clinical Professor
Justin Weinkauf	Pulmonary Medicine	Professor
Jutta Preiksaitis	Infectious Diseases Med Micro & Inf Dis	Professor Emeritus
Kailash Jindal	Nephrology	Professor
Kam (Ming) Chan	Physical Medicine & Rehab	Professor
Kam Birdi	General Internal Medicine	Clinical Lecturer
Kanna Alagiakrishnan	Geriatric Medicine	Professor
Karen Doucette	Infectious Diseases	Professor
Karen Goodman	Gastroenterology Public Health Sciences-20%	Professor
Karen Kroeker	Gastroenterology	Professor
Karen Lee	Preventive Medicine	Associate Professor
Karen Madsen	Gastroenterology	Professor
Karen Wong	Gastroenterology	Associate Professor
Kata Matic	Gastroenterology	Assistant Clinical Professor
Katherine Ross	General Internal Medicine	Assistant Clinical Professor
Kathleen Hunter	Geriatric Medicine	Adjunct Professor
Kathryn Koliaska	Preventive Medicine	Associate Clinical Professor
Keith Bowering	Endocrinology & Metabolism	Clinical Professor Emeritus
Kelly Craig	General Internal Medicine	Assistant Clinical Professor
Kelvin Tran	General Internal Medicine	Clinical Lecturer
Ken Quadros	Cardiology	Assistant Clinical Professor
Ken Skeith	Rheumatology	Associate Clinical Professor
Kenneth Makus	Neurology	Associate Clinical Professor
Kenneth Warren	Neurology	Professor Emeritus
Keshavan Rajiv Nair	Endocrinology	Associate Clinical Professor
Kevin Bainey	Cardiology	Associate Professor
Kevin Wilson	General Internal Medicine	
Kevin Yen	Neurology	Clinical Lecturer
Keysun Ranjbar	Cardiology	Associate Clinical Professor
Khurshid Khan	Neurology	Professor
Kieran Halloran	Pulmonary Medicine	Associate Professor
Kim Moore	General Internal Medicine	
Kirles Bishay	Gastroenterology	Assistant Clinical Professor
Kris Chan	Cardiology	Clinical Lecturer
Kristin Klein	Preventive Medicine	Assistant Clinical Professor
Kristyn Campbell	Physical Medicine & Rehab	Clinical Lecturer
Kyle Murray	Cardiology	Clinical Lecturer
Kyle Parrington	General Internal Medicine	
Kyriaki Sideri	Pulmonary Medicine	Assistant Clinical Professor
Lalith Satkunam	Physical Medicine & Rehab	Professor
Lana Bistritz	Gastroenterology	Associate Professor
Laura Soong	Dermatology	Clinical Lecturer
Laura van den Bosch	Pulmonary Medicine	Clinical Lecturer
Lauren Bolster	Hematology	Associate Clinical Professor
Laurie Mereu	Endocrinology	Professor
Lavanya Bathini	Nephrology	Clinical Lecturer
Lawrence Cheung	Pulmonary Medicine	Professor
Lawrence Yang	Physical Medicine & Rehab	Clinical Lecturer
Leah Gramlich	Gastroenterology Department of Agricultural, Food, and Nutritional Science	Professor
Leah Remington	Infectious Diseases	Associate Clinical Professor
Leena Amin	General Internal Medicine	Associate Clinical Professor
Leon Byker	General Internal Medicine	
Lesia Boychuk	Infectious Diseases	Associate Clinical Professor
Lesley Merkel	General Internal Medicine	Clinical Lecturer
Lesley Soril	General Internal Medicine	Adjunct Assistant Professor

Leslie Kasza	Cardiology	Associate Clinical Professor
Levinus (Leo) Dieleman	Gastroenterology	Professor Emeritus
Leyla Asadi	Infectious Diseases	Clinical Lecturer
Lilia Olaru	Rheumatology	Associate Clinical Professor
Lillian Chan	General Internal Medicine	Assistant Clinical Professor
Lillian Du	Gastroenterology	Clinical Lecturer
Lilly Miedzinski	Infectious Diseases	
	Med Micro & Inf Dis	Professor Emeritus
Linda Miller	Preventive Medicine	Adjunct Assistant Professor
Linda Sun	Hematology	Associate Professor
Lindsay Bridgland	General Internal Medicine	Associate Clinical Professor
Lindsey Carter	Cardiology	Clinical Lecturer
Ling Ling	Pulmonary Medicine	Assistant Clinical Professor
Lisa Cameron	Pulmonary Medicine	Adjunct Associate Professor
Lisa Wang	Hematology	
Loan Nguyen	General Internal Medicine	
Loree Larratt	Hematology	
Loretta Fiorillo	Dermatology	Adjunct Professor
Lori Stead	Gastroenterology	Assistant Clinical Professor
Lorie Kwong	General Internal Medicine	Assistant Clinical Professor
Lorne (David) Tyrrell	Infectious Diseases	Adjunct Professor
Lucas Churchill	General Internal Medicine	
Lynora Saxinger	Infectious Diseases	
	Med Micro & Inf Dis	Professor
Maeve Smith	Pulmonary Medicine	Associate Professor
Magdalena Michalska	Nephrology	Associate Clinical Professor
Maher Saqqur	Neurology	Clinical Professor
Mahesh Kate	Neurology	Associate Professor (without tenure)
Mahmod Mohamed	Gastroenterology	Associate Clinical Professor
Mahua Ghosh	Endocrinology	Associate Professor
Maisoon Osman	General Internal Medicine	Clinical Lecturer
Majid Sikosana	Nephrology	Clinical Lecturer
Malcolm Wells	Gastroenterology	Associate Clinical Professor
Mamdouh Yousef	General Internal Medicine	Clinical Lecturer
Man-Joe Watt	Physical Medicine & Rehab	Adjunct Professor
Mandeep Sandhu	Gastroenterology	Assistant Clinical Professor
Mang Ma	Gastroenterology	Professor
Maninder Longowal	Dermatology	
Manohara Senaratne	Cardiology	Clinical Professor
Manpreet (Mona) Gill	General Internal Medicine	Associate Clinical Professor
Mant Haraphongse	Cardiology	Professor Emeritus
Mar Irida Lloret I Villas	Neurology	Assistant Clinical Professor
Marc Benoit	Cardiology	Clinical Lecturer
Marcello Tonelli	Nephrology	Adjunct Professor
Marcelo Marcet-Palacios	Pulmonary Medicine	Adjunct Assistant Professor
Marcelo Shibata	Cardiology	Clinical Professor
Mariam Shahidi	Endocrinology	Assistant Clinical Professor
Marilyn Zeman	Gastroenterology	Assistant Clinical Professor
Mario DiPersio	Physical Medicine & Rehab	Associate Clinical Professor
Mario DiPersio	Physical Medicine & Rehab	Associate Clinical Professor
Mariusz Sapijaszko	Dermatology	Clinical Professor
Mark Courtney	Nephrology	Associate Professor
Mark Heule	Pulmonary Medicine	Associate Clinical Professor (Secondary)
Mark Hnatiuk	Hematology	Assistant Clinical Professor
Mark Joffe	Infectious Diseases	Professor
Mark McIsaac	Nephrology	Clinical Lecturer
Mark Ng	Physical Medicine & Rehab	Clinical Lecturer
Marlene Dytoc	Dermatology	Clinical Professor
Marlene Hamilton	Hematology	FSO II - Assistant Teaching Professor
Martha Decker	Rheumatology	Clinical Lecturer
Martin Baur	General Internal Medicine	Assistant Clinical Professor
Maryam Rezaeeaval	General Internal Medicine	Clinical Lecturer
Mathew Nicholas	Dermatology	Clinical Lecturer
Matthew Church	Cardiology	Clinical Lecturer
Matthew Prowse	Physical Medicine & Rehab	Assistant Clinical Professor (Secondary)
Matthew Smith	Gastroenterology	
Meagan Lyszczyk	General Internal Medicine	Clinical Lecturer
Meena Kalluri	Pulmonary Medicine	Professor
Melaku Game	Hematology	Associate Clinical Professor
Melanie Pinchbeck	Gastroenterology	Clinical Lecturer
Melissa Johnson	Gastroenterology	Assistant Clinical Professor
Mena Bishay	Rheumatology	Clinical Lecturer
Micha Dorsch	Cardiology	Assistant Clinical Professor
Michael Amatto	Physical Medicine & Rehab	Clinical Lecturer
Michael Chan	Cardiology	Associate Clinical Professor
Michael Chu	Hematology	Adjunct Assistant Professor
Michael Kantoch	Cardiology	Adjunct Professor
Michael Karolak	General Internal Medicine	Assistant Clinical Professor
Michael Kindrachuk	Neurology	
Michael Knash	Neurology	Clinical Professor
Michael Mant	Hematology	Professor Emeritus
Michael Nutting	General Internal Medicine	Associate Clinical Professor
Michael Pappachan	Physical Medicine & Rehab	Clinical Lecturer
Michael Peplowski	Gastroenterology	
Michael Russell	General Internal Medicine	Clinical Lecturer
Michael Stickland	Pulmonary Medicine	Professor
Michael Zakhary	Preventive Medicine	Assistant Clinical Professor
Michal Gozdzik	Gastroenterology	Assistant Professor
Michel Sauve	General Internal Medicine	Assistant Clinical Professor
Michelle Graham	Cardiology	Professor
Miguel Bussiere	Neurology	Assistant Clinical Professor
Mikael Hanninen	Cardiology	Associate Clinical Professor
Mikael Muratoglu	Neurology	Associate Clinical Professor
Mila Luchak	Preventive Medicine	Assistant Clinical Professor (Secondary)
Minakshi Taparia	Hematology	Clinical Professor
Mitchell Rohatensky	General Internal Medicine	Clinical Lecturer
Mohamed Abdalla	General Internal Medicine	Assistant Professor
Mohammad Ashif Rahman	Geriatric Medicine	Assistant Clinical Professor
Mohammed Ahmed	General Internal Medicine	
Mohammed Osman	Rheumatology	Associate Professor
Mohit Bhutani	Pulmonary Medicine	Professor
Molly Lin	Infectious Diseases	Assistant Clinical Professor
Monica Gorassini	Physical Medicine & Rehab	Professor
Monika Oliver	Hematology	Assistant Clinical Professor
Mowad Benguzzi	General Internal Medicine	Clinical Lecturer
Mrinal Dasgupta	Nephrology	Professor Emeritus
Muba Taher	Dermatology	Clinical Professor
Muzaffar Siddiqui	Neurology	Associate Clinical Professor
Myat Tun Lin Nyo	Rheumatology	Assistant Clinical Professor
Nabeel Siraj	Neurology	
Nabeela Nathoo	Neurology	
Nabil Mitha	General Internal Medicine	
Nader Abbasi	Preventive Medicine	Assistant Clinical Professor
Nadia Jahroudi	Hematology	Associate Professor
Naeem Dean	General Internal Medicine	Clinical Professor
Naheed Rajabali	Geriatric Medicine	Assistant Clinical Professor
Naji Alhulaimi	Cardiology	Clinical Professor
Namratha Sudharshan	Neurology	Assistant Clinical Professor
Nancy Zhu	Hematology	Associate Clinical Professor
Narmin Kassam	General Internal Medicine	Professor
Naseem Hoque	Gastroenterology	Associate Clinical Professor
Nasir Rizvi	Neurology	Assistant Clinical Professor
Nathan Puhl	Rheumatology	Assistant Clinical Professor
Nawaf Almajed	Cardiology	Associate Clinical Professor
Nazia Shams	General Internal Medicine	
Neeja Bakshi	General Internal Medicine	Associate Clinical Professor
Neesh Pannu	Nephrology	Professor
Neesha Patel	Preventive Medicine	Clinical Lecturer
Neil Brass	Cardiology	Associate Clinical Professor
Neil Brown	Pulmonary Medicine	Professor Emeritus
Neil Gibson	General Internal Medicine	Clinical Professor
Neil Roberts	Neurology	Assistant Clinical Professor
Niall Jones	Rheumatology	Assistant Clinical Professor
Nicola Cherry	Preventive Medicine	Professor Emeritus
Nicole Kain	Physical Medicine & Rehab	Clinical Lecturer
Nigel Ashworth	Physical Medicine & Rehab	Professor
Nikhil Shah	Nephrology	Associate Clinical Professor
Noreen Rajwani	Pulmonary Medicine	Assistant Clinical Professor
Noreen Singh	Gastroenterology	
Oksana Suchowersky	Neurology	Professor
Omid Niaki	Rheumatology	Clinical Lecturer
Oscar Alejandro Fernandez Garcia	Infectious Diseases	Assistant Professor
Padma Kaul	Cardiology	Professor
Paige Lacy	Pulmonary Medicine	Professor
Pamela Mathura	General Internal Medicine	Assistant Clinical Professor
Paolo Raggi	Cardiology	Professor
Paramita Chaudhuri Basu	Physical Medicine & Rehab	Adjunct Assistant Professor
Patricia Araneta	General Internal Medicine	Assistant Clinical Professor
Patricia Campbell	Nephrology	Adjunct Professor
Patrick Pilarski	Physical Medicine & Rehab	Professor
Paul Armstrong	Cardiology	Professor
Paul Davis	Rheumatology	Professor Emeritus
Paul Forsythe	Pulmonary Medicine	Associate Professor (without tenure)
Paul Kuzel	Dermatology	Assistant Clinical Professor
Paul Man	Pulmonary Medicine	Professor Emeritus
Paula Horsley	Geriatric Medicine	Assistant Professor
Pen Li	Pulmonary Medicine	Associate Clinical Professor
Penelope Smyth	Neurology	Professor
Peng Wang	Hematology	Adjunct Assistant Professor
Perry Grewal	Dermatology	Clinical Professor
Peter Ao	General Internal Medicine	Associate Clinical Professor
Peter Crockford	Endocrinology	Professor Emeritus
Peter Dobrowolski	Neurology	Assistant Clinical Professor
Peter Guo	General Internal Medicine	Assistant Clinical Professor
Peter Hamilton	General Internal Medicine	Professor Emeritus
Peter Hwang	General Internal Medicine	Associate Professor
Peter Senior	Endocrinology	
	General Internal Medicine	Professor
Peter Wei	Pulmonary Medicine	Assistant Clinical Professor
Petra Smyczek	Preventive Medicine	
	Infectious Diseases	Associate Clinical Professor
Philip Halloran	Nephrology	
	Med Micro & Inf Dis	Professor
Philip Jacobs	Gastroenterology	Professor Emeritus
Phillip Gregoire	General Internal Medicine	Clinical Lecturer
Pierre-Marc Villeneuve	Neurology	Assistant Clinical Professor
Po kee Cheung	Cardiology	Clinical Professor
Prabhpreet Dhaliwal	Geriatric Medicine	
Puneeta Tandon	Gastroenterology	Professor
Quentin Durand-Moreau	Preventive Medicine	Assistant Professor
Quinn Daviduck	General Internal Medicine	Clinical Lecturer
Rabia Ahmed	Infectious Diseases	Associate Professor
Rabia Kashur	Cardiology	Clinical Lecturer
Rahima Bhanji	Gastroenterology	Assistant Professor
Rahul Mehta	General Internal Medicine	Assistant Clinical Professor
Rajive Jassal	Neurology	Clinical Professor
Rajpal Thiara	Physical Medicine & Rehab	Assistant Clinical Professor
Ramona Hrimiuc	General Internal Medicine	Assistant Clinical Professor
Randall Williams	Cardiology	Clinical Professor
Randolph Goebel	Gastroenterology	Adjunct Professor
Rania Bedaba	General Internal Medicine	Clinical Lecturer
Rany Al-Agha	Endocrinology	Associate Clinical Professor
Ray Ulan	Nephrology	Professor Emeritus
Rebecca Lee	Geriatric Medicine	Assistant Professor
Rebecca Mitchell	Endocrinology	Associate Clinical Professor
Reidar Hagtvedt	Preventive Medicine	Adjunct Professor
Rhea Varughese	Pulmonary Medicine	Assistant Professor
Richard Camicioli	Neurology	Professor
Richard Coulden	Cardiology	Adjunct Professor
Richard Lewanczuk	Endocrinology	
	General Internal Medicine	Professor Emeritus
Richard Long	Pulmonary Medicine	Professor
Richard Sultanian	Gastroenterology	Associate Clinical Professor
Rith Chea	General Internal Medicine	Assistant Clinical Professor
Ritu Rani	Preventive Medicine	
Robert Andrew Turner	Hematology	Professor Emeritus
Robert Bailey	Gastroenterology	Clinical Professor
Robert Burnham	Physical Medicine & Rehab	Associate Clinical Professor
Robert Coppock	Preventive Medicine	Adjunct Professor
Robert Gniadecki	Dermatology	Professor
Robert Hayward	General Internal Medicine	Professor
Robert Pauly	Nephrology	Professor
Robert Welsh	Cardiology	Professor
Robyn Harrison	Infectious Diseases	Clinical Professor
Ronald Damant	Pulmonary Medicine	Professor
Roopinder Sandhu	Cardiology	Adjunct Associate Professor
Roseanne Yeung	Endocrinology	Associate Professor
Rosmin Esmail	Gastroenterology	Adjunct Assistant Professor

Ross Mitchell	General Internal Medicine	Professor
Ross Tsuyuki	Cardiology	Professor
Rshmi Khurana	General Internal Medicine	Professor
Ruimeng (Raymond) Xing	Nephrology	Clinical Lecturer
Rukia Swaleh	Endocrinology	Assistant Clinical Professor
Ryan Choudhury	General Internal Medicine	Assistant Clinical Professor
Ryan Cooper	Infectious Diseases	FSO III - Associate Teaching Professor
Sabin Shurraw	Nephrology	Associate Clinical Professor
Sachin Mishra	Neurology	Clinical Lecturer
Sadik Salman	General Internal Medicine	Associate Clinical Professor
Saifal Anwar	General Internal Medicine	Associate Clinical Professor
Sajad Gulamhusein	Cardiology	Clinical Professor
Sakhamila Gavrilyeva	General Internal Medicine	
Sam Marcushamer	Pulmonary Medicine	Assistant Clinical Professor (Secondary)
Samantha Cheuk	Preventive Medicine	Clinical Lecturer
Sami Zaki	Physical Medicine & Rehab	Assistant Clinical Professor
Sana Vahidy	Pulmonary Medicine	Assistant Clinical Professor
Sanam Verma	Cardiology	Clinical Lecturer
Sander Van Zanten	Gastroenterology	Professor Emeritus
Sandra (Ann) Colbourne	General Internal Medicine	Clinical Professor Emeritus
Sandra Cockfield	Nephrology	Professor Emeritus
Sangita Sharma	Endocrinology	Professor
Sanjay Kalra	Neurology	Professor
Sanjay Sharma	Cardiology	Associate Clinical Professor
Sara Davison	Nephrology	Professor
Sarah Cawsey	Endocrinology	Associate Clinical Professor
Sarah Chapelsky	General Internal Medicine	Assistant Clinical Professor
Sarah Dobrowolski	Physical Medicine & Rehab	Assistant Professor
Sarah Kwong	Endocrinology	Associate Clinical Professor
Sarah Lapner	Hematology	Assistant Clinical Professor
Sarah Troster	Rheumatology	Assistant Clinical Professor
Satyabrata Kar	Neurology	Professor
Saumya Jayakumar	Gastroenterology	Associate Professor (without tenure)
Saurash Reddy	Rheumatology	Clinical Lecturer
Savitri Senaratne	Rheumatology	Assistant Clinical Professor
Sayra Khandekar	Cardiology	Associate Clinical Professor
Scott Klarenbach	Nephrology	Professor
Sean Bagshaw	Cardiology	
Sean McMurtry	Cardiology	Associate Professor
Sebastian Straube	Preventive Medicine	Professor
Selina Dobing	General Internal Medicine	Assistant Clinical Professor
Sergio Zepeda-Gomez	Gastroenterology	Associate Professor
Shafiq Akbar	Rheumatology	Associate Clinical Professor
Shahzad Zia	General Internal Medicine	Associate Clinical Professor
Shane Hoeber	Physical Medicine & Rehab	Assistant Clinical Professor
Shane Kimber	Cardiology	Associate Professor
Shannon Fong	General Internal Medicine	Assistant Clinical Professor
Shannon Ip	General Internal Medicine	Associate Clinical Professor
Shannon Turvey	Infectious Diseases	
Shaun Goodman	Cardiology	
	Public Health Sciences	Adjunct Professor
Shawn Wasilenko	Gastroenterology	Assistant Clinical Professor
Shawnik Bhargava	General Internal Medicine	Clinical Lecturer
Shea Pertman	Endocrinology	Assistant Clinical Professor
Sheela Vijay	General Internal Medicine	Associate Clinical Professor
Sheri Koshman	Cardiology	Associate Professor
Sherif ElMaadawy	Physical Medicine & Rehab	Assistant Clinical Professor
Shiva Nandiwada	General Internal Medicine	Clinical Lecturer
Shivani Upadhyaya	Rheumatology	Clinical Lecturer
Shwan Mohydeen	General Internal Medicine	Clinical Lecturer
Sibi Thirunavukarrasu	Neurology	Clinical Lecturer
Simran Jassar	Rheumatology	Clinical Lecturer
Simran Shergill	Physical Medicine & Rehab	Clinical Lecturer
Sita Gourishankar	Nephrology	Professor
Sofia Ahmed	Nephrology	Professor
Sola Mansour	Endocrinology	Clinical Lecturer
Soori Sivakumaran	Cardiology	Associate Clinical Professor
Soroush Shojai	Nephrology	Associate Professor
Stanley Houston	Infectious Diseases	
	General Internal Medicine	Professor Emeritus
Stephanie Keeling	Rheumatology	Professor
Stephanie Li	Endocrinology	Associate Clinical Professor
Stephanie Smith	Infectious Diseases	Professor
Stephanie Thompson	Nephrology, SCH	Associate Professor
Stephen Aaron	Rheumatology	Professor Emeritus
Stephen Chihrin	General Internal Medicine	Clinical Lecturer
Stephen Hung	Physical Medicine & Rehab	Assistant Clinical Professor
Stephen Ip	Gastroenterology	Assistant Clinical Professor
Stephen Joza	Neurology	
Stephen Lee	Neurology	
Stephen Shafran	Infectious Diseases	Professor
Stephen Tilley	Cardiology	Assistant Clinical Professor
Stephen Tsekrekos	Preventive Medicine	Adjunct Associate Professor
Steven Caldwell	Nephrology	Clinical Professor
Steven Katz	Rheumatology	Professor
Stuart Rosser	Infectious Diseases	Associate Clinical Professor
Subagini Parameswaranathan	Endocrinology	Assistant Clinical Professor
Sudheer Sharma	Cardiology	Assistant Clinical Professor
Sumantra Monty Ghosh	General Internal Medicine	Assistant Professor
Suresh Reddy	Nephrology	Associate Clinical Professor
Surinder Khinda	General Internal Medicine	Assistant Clinical Professor
Syed Habib	Nephrology	Associate Clinical Professor
Syed Nizam Ahmed	Neurology	Professor
Taha Taher	Cardiology	Assistant Clinical Professor
Tal Zucker	General Internal Medicine	Clinical Lecturer
Tammy Bungard	Cardiology	Professor
Tammy McNab	Endocrinology	Clinical Professor
Tammy Paulgaard McKnight	Preventive Medicine	Associate Clinical Professor
Tarun Sehgal	Cardiology	Clinical Lecturer
Ted Fenske	Cardiology	Clinical Professor
Ted Kovithavongs	Nephrology	Professor Emeritus
Ted Roberts	Neurology	Clinical Professor
Terra Arnason	Endocrinology	Professor
Tharindri Dissanayake	Rheumatology	Assistant Clinical Professor
Thiara Parminder	Preventive Medicine	Assistant Clinical Professor
Thirza Carpenter	General Internal Medicine	Associate Clinical Professor
Thomas Lawley	Preventive Medicine	
	General Internal Medicine	Adjunct Assistant Professor
Thomas Nakatsui	Dermatology	Clinical Lecturer
ThucNhi Dang	Gastroenterology	Clinical Lecturer
Tiffany Kwok	Dermatology	Assistant Clinical Professor
Tim Muzyka	Cardiology	Assistant Clinical Professor
Timothy Chan	General Internal Medicine	Associate Clinical Professor
Tolu Olateju	Endocrinology	Assistant Clinical Professor
Tom Jeerakathil	Neurology	Professor
Tom Salopek	Dermatology	Professor
Tomasz Hruczkowski	Cardiology	Associate Clinical Professor
Tomasz Nowacki	Neurology	Assistant Clinical Professor
Toru Tateno	Endocrinology	Assistant Professor
Tracey Bryan	General Internal Medicine	
	Pulmonary Medicine	Assistant Clinical Professor
Trevor Steve	Neurology	Assistant Clinical Professor
Troy Harkness	Geriatric Medicine	Professor
Tyler Berry	Physical Medicine & Rehab	Clinical Lecturer
Tyler Lamb	Cardiology	Assistant Clinical Professor
Tzu-Kuang Lee	General Internal Medicine	Clinical Professor Emeritus
Uwais Qarni	Nephrology	Clinical Professor
Vadoud Ahrari Roudi	General Internal Medicine	Clinical Lecturer
Valerie Sim	Neurology	Associate Professor
Vanessa Meier-Stephenson	Infectious Diseases	Assistant Professor
Vasile Captan	General Internal Medicine	Associate Clinical Professor
Vernon Lappi	Preventive Medicine	Adjunct Associate Professor
Victoria Cho	Preventive Medicine	Assistant Clinical Professor
Vijay Daniels	General Internal Medicine	Professor
Vijay Selvarajah	Gastroenterology	Assistant Clinical Professor
Vinay Deved	Nephrology	Associate Clinical Professor
Vincent Bain	Gastroenterology	Professor
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	Cross/Med Micro Immun	Professor
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Wasim Khan	Neurology	Clinical Lecturer
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Wayne Tymchak	Cardiology	Professor
Wei-Ching Chang	Cardiology	Adjunct Professor
Wendy Johnston	Neurology	Professor
Wendy Sligl	Infectious Diseases	Adjunct Associate Professor
William Gibson	Geriatric Medicine	Associate Professor
William Keeble	Cardiology	Associate Clinical Professor
William Stokes	Infectious Diseases	Assistant Clinical Professor (Secondary)
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Winnie Sia	General Internal Medicine	
	OBGYN	Professor
Winnie Wong	Endocrinology	Assistant Clinical Professor
Winnie Wong	Gastroenterology	Professor Emeritus
Xiangning Fan	Preventive Medicine	Associate Clinical Professor
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Yolande Westra	General Internal Medicine	Assistant Clinical Professor
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Zaheerali Lakhani	Cardiology	Clinical Professor
Zain Rajabali	Physical Medicine & Rehab	Assistant Clinical Professor
Zaki Taher	Dermatology	Associate Clinical Professor

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Medical building 1922

Athabasca Hall 1928

Strathcona Hospital 1912 (University Hospital as of 1922)

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