

Lady Davis Institute Research Newsletter



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Laurence Kirmayer honoured with two prestigious awards

Dr. Laurence Kirmayer, Director of the Culture & Mental Health Research Unit at the Institute of Community and Family Psychiatry, has been awarded the 2020 Award for Distinguished Contributions to Family Systems Research from the American Family Therapy Academy (AFTA) and the 2021 Judd Marmor Award for advancing the biopsychosocial model by the American Psychiatric Association (APA).

Dr. Kirmayer conducts research on culturally responsive mental health services, the mental health of Indigenous peoples, the integration of culture in global mental health, and the anthropology and philosophy of psychiatry. He is a James McGill Professor of Psychiatry at McGill University and a Fellow of the Canadian Academy of Health Sciences and the Royal Society of Canada (Academy of Social Sciences).

"This recognition from AFTA is especially meaningful to me because family theory and therapy have been central to my thinking over the whole span of my career," said Dr. Kirmayer. "I have always held that family theory and therapy provide the most natural path to cultural psychiatry. My on-going work on mental health promotion for Indigenous youth brings family and cultural perspectives together to support communities in building local culturally adapted versions of a family-centered program."

The Judd Marmor Award was established to honor a distinguished member of the psychiatry field who has contributed to advancing the biopsychosocial model, which argues that biological, psychological, and social factors all play a critical role in the development and manifestation of disease. The Marmor Award includes an opportunity to give a lecture at the APA annual meeting, which Dr. Kirmayer will deliver next year. Previous Marmor lecturers include the Nobel laureate Eric Kandel, MD.

William Foulkes Awarded Quebec's highest honour in biomedicine

The Quebec government awarded **Dr. William Foulkes**, Head of the Cancer Genetics Laboratory at the Lady Davis Institute and Director of Cancer Genetics at the Segal Cancer Centre, the Wilder-Penfield Prize for Biomedicine due to his extensive research into the genetic roots of breast and ovarian cancer, particularly in Quebec, and on rare forms of cancer.

"Winning this award is extremely important, both professionally and personally," said Dr. Foulkes. "I chose to live in Quebec almost 25 years ago, and to be recognized in this way by my adoptive home is very gratifying."

During his career, Dr. Foulkes identified the specific genetic mechanisms involved in several inherited cancers. One of the elements of his research success has been the genetic environment that Quebec's population offers. Known as the "founder effect," it can reveal genetic components that are more pronounced than in other Canadian communities. Dr. Foulkes has also put Quebec on the map for other researchers – in 2005 he helped establish the International Symposium on Hereditary Breast and Ovarian Cancer, which has been running biennially and attracts hundreds of delegates to each edition.

Dr. Foulkes has published over 600 articles. One of his key papers, on the "basal-like" nature of BRCA1-related breast cancer has been cited 600 times. In addition to his research, Dr. Foulkes has maintained clinical practice.

"I am always motivated by my clinical work with patients," he explained. "It is often the source of new insights and discoveries that in turn become interventions that can help them, their families, and other persons. It's a highly rewarding cycle."

Québec Biobank for COVID-19 expands critical infrastructure

The Canada Foundation for Innovation and the Ministère de l'Economie et de l'Innovation du Québec have pledged \$690,000 to augment the collection and analysis of COVID-19 patient samples and data at the Jewish General Hospital to enhance research into the global pandemic.

The new funding to the <u>Biobanque Québec COVID19</u> (BQC19) provides for the following critical improvements:

- a biobanking infrastructure that is essential for processing the biological samples from thousands of COVID-19 patients and their controls in a Biosafety Containment Level 2+ facility and to prepare those samples for research;
- a high-performance computational cluster that provides the computation infrastructure capable of processing the hundreds of millions of data points that are generated per subject, to prepare it for research, undertake appropriate quality control measures, and to store the data and enable it to be shared with other researchers.

Québec, and the BQC19 in particular, have taken a leadership role in COVID-19 biobanking, resulting in fifty-one applications to date for access to data and samples from the Canadian Institutes for Health Research's (CIHR) COVID-19 Rapid Response Program.

"This award provides evidence of the importance of this resource to Canada's health research community," said **Dr. Brent Richards**, one of the principal investigators with BQC19.

Established in March, the BQC19 is the largest collection of data and biological samples of COVID-19 in Canada, and among the larger deeply assayed collections anywhere in the world. Its data is shared to foster a better understanding of the biological and social determinants of the disease and its associated severity and mortality.

"Biological samples from patients who have, or have recovered from, COVID-19 are critical to vaccine design and the development of therapeutics," said Dr. Richards. "We are trying to identify genetic biomarkers to explain why the illness is so severe in some patients and benign in others. We need to distinguish the antibodies produced by asymptomatic patients so that we can discern how to most effectively immunize against the virus."

He added, "The research resultant from this biobank will advance our understanding of the determinants of COVID-19 susceptibility and severity. We are extremely grateful for this infusion of financial support and the ability to invest in the infrastructure necessary for our work."

The 2019-2020 honourees for Best Trainee Talks for the MRM Speaker Series are:

Will Brothers (M.Sc. candidate - Marc Fabian lab)
Nabila Karam (M.Sc. candidate - Vahab Soleimani lab)

Jeesan Lee (Ph.D. candidate – Stephane Richard lab) Nick DiStasio (Ph.D. candidate – Stephanie Lehoux lab) Kiran Makhani (Ph.D. candidate – Koren Mann lab) Ting Cai (Ph.D. candidate – Stephane Richard lab)

They were selected based on audience feedback and evaluations. Please join us in congratulating all six trainees.

Ella Ivensky has joined the Lady Davis Institute as the new Associate Director of Finance. She has spent the past four years as Director of Finance at the JGH Foundation. For nine years prior to that, she was a Finance Officer with the Jewish General Hospital. Before moving to Montreal, she gained a wealth of experience in health care management during twelve years with the Shaarei Tzedek Medical Centre in Jerusalem. Ella brings to our institute a background in accounting, financial planning, budget development, and human resource management. She is also proficient in computer programing for accounting.

Kamala Harris, Vice President-elect of the United States, and her late mother, Shyamala Gopalan Harris, have connections to the Lady Davis Institute and Jewish General Hospital. Ms. Harris and her sister moved to Montreal because their mother took a job in the mid-'70s conducting research into breast cancer at the LDI. As a laboratory scientist, Dr. Harris developed a method of assessing cancerous breast tissue that became standard procedure at the JGH and other hospitals.

Read the article in 360

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Phyllis Zelkowitz retires

After more than thirty years of researching maternal and reproductive mental health and of leadership in the Jewish General Hospital (JGH) research community, **Dr. Phyllis Zelkowitz** is retiring. In announcing her retirement, Dr. Karl Looper, JGH Psychiatrist-in-chief, and Dr. Roderick McInnes, Director of the LDI, praised her for "exceptional leadership, ushering in a generation of researchers that has elevated the status of mental health research at the Jewish General Hospital to an international level."

"Working in fields that have changed dramatically over the years, I have had the opportunity to grow intellectually and to expand my research interests," said Dr. Zelkowitz, who began her career as a Research Associate at the JGH in 1989 and has served as the Department of Psychiatry's Director of Research and Head of the Psychosocial Axis at the LDI since 2004.

Dr. Zelkowitz has earned accolades for her work on perinatal mental health. Ground-breaking research by her team determined that oxytocin may act as a buffer against the deleterious effects of psychosocial stress, protecting high stress women from developing depressive symptoms and promoting more sensitive maternal behavior. Their video, *The Science of Motherhood* won a Canadian Institutes of Health Research (CIHR) Institute of Human Development, Child and Youth Health Talks Video Competition Award in 2015.

Dr. Zelkowitz spearheaded the establishment of the Quebec Reproductive Psychiatry Network (QRPN), comprised of six hospitals that provide perinatal mental health services. The QRPN has been instrumental in standardizing intake procedures to create an invaluable databank that captures demographics and psychiatric history, with an emphasis on adverse experiences, postpartum bonding, and adjustment to motherhood.

Recently, Dr. Zelkowitz has turned her attention to men's experience of infertility, a problem that causes much distress while being largely overlooked. Her *Infotility* team undertook a national study of men's fertility knowledge, uncovering gaps in knowledge of infertility risk factors. They have created and tested a mobile app that provides men with fertility issues access to information. A greater awareness of lifestyle factors associated with infertility may allow men to take action to safeguard their reproductive health and

Dr. Ashley Wazana has been appointed interim Research Director of the Department of Psychiatry and Head of the Psychosocial Axis. Co-director of the Early Childhood Disorder day hospital in the Centre for Child Development and Mental Health at the JGH, he founded the Developmental Research in Early Adversity Mental health Blological susceptibility and Gender (DREAM BIG) research project . He is examining the influences of the early postnatal environment, such as parental care, stress factors, and social support.

their overall well-being. Her efforts garnered widespread attention, including in *Time*.

Fourteen years ago, she launched the Annual JGH Department of Psychiatry Research Day to give researchers the opportunity to highlight their work for an audience of healthcare professionals from all over Montreal. It is a half-day retreat during which those who are primarily concerned with providing service on a daily basis get to pause and discover how psychiatric research can be relevant to their practice.

"I've always worked to put knowledge in the service of helping people," she emphasizes. "The potential clinical impact has informed all my thinking. This is why being associated with the JGH has been so critical to my scientific work. It helps you to focus on patients, the ultimate beneficiaries of health research."

Dr. Zelkowitz has had an international impact, for example, through collaborations in a clinical trial of an intervention for perinatal depression in Ibadan, Nigeria. The study revealed how a psychosocial intervention delivered by primary care providers can positively affect postpartum depression and improve breastfeeding. The report of this study in the *British Journal of Psychiatry* was recognized with a 2020 Editor's Choice Award.

Dr. Richard Margolese, a surgical oncologist with extensive experience leading clinical research studies, has been named Scientific Chair of the Research Ethics Board (REB) of the CIUSSS – West Central Montreal, replacing Dr. Zelkowitz, who had been Chair since the advent of the CIUSSS in 2008 and had served on the committee for more than two decades.

"We are very grateful to Dr. Zelkowitz for her enduring contribution to our consideration and application of research ethics and for helping to guide us through the transition from a single entity – the JGH – to a multi-centre institution – the CIUSSS," said Dr. Bessy Bitzas, Chair of the REB and Head Nurse in Palliative Care at the JGH.

The Karen Anthony Consortium for Lung Cancer Research

A generous \$1.7 million donation from Maxime Rémillard has created the innovative Karen Anthony Consortium for Lung Cancer Research at the Jewish General Hospital (JGH), where scientists will use artificial intelligence (AI) to generate sophisticated algorithms that will churn massive amounts of data to guide clinicians in selecting the best therapies to treat each patient's lung cancer. The result will be better outcomes and increased survival.

"As we bring more data to bear on identifying the active mutations in cancer, the more tools we have to identify the therapy that will disrupt the specific pathway that generates a person's cancer, and the more effective we will be in eradicating the malignancy," said **Dr. Alan Spatz**, Director of Pathology at the JGH, and Scientific Director of the Consortium.

The Karen Anthony Consortium is the first stage of the McGill Initiative for Shared Database Across Sites (MIDAS). MIDAS-Lung has two major components:

1) an enriched multidimensional database of non-small-cell lung cancer (NSCLC), which will consolidate tens of thousands of pieces of information from clinical, radiological, and laboratory studies. Consolidation will allow for the identification of new targets against which novel therapies can be developed, thereby improving lung cancer treatment.

2) Using this approach, researchers will identify who among the 35% of people with early stage disease who undergo potentially curative surgery, are the most at risk to have a recurrence after surgery and could actually be cured by the addition of more aggressive and/or novel treatments.

"Each of these objectives represents innovative ways to identify new domains of medical action and opportunities to interact with industrial partners for drug and test development," said Dr. Spatz.

"Our partnership with the JGH to create the Karen Anthony Consortium for Lung Cancer Research will catalyze innovative research leading to better treatments and outcomes, changing the lives of the millions of people worldwide who are affected by lung cancers," said Mr. Rémillard.

JAMA publishes first results of trial for E-cigarettes as smoking cessation tool

The E3 Trial (Evaluating the Efficacy of E-Cigarette Use for Smoking Cessation) - a large, multi-centre randomized clinical trial of adults motivated to quit smoking found that using nicotine e-cigarettes plus counseling was more than twice as effective as counseling alone at sustaining abstinence after 12 weeks of treatment. However, after 24 weeks, the difference between the two groups was no longer significant. In contrast, among those who used non-nicotine e-cigarettes plus counseling, the quit rate was significantly higher after 24 weeks when compared with counseling alone, but not at 12 weeks. The findings were published in JAMA.

Abstinence was significantly greater for nicotine ecigarettes plus counseling (21.9%) compared with counseling alone (9.1%) at 12 weeks; but not at 24 weeks (17.2% vs 9.9%, respectively). Abstinence for non-nicotine e-cigarettes plus counseling was not significantly different from counseling alone at 12 weeks (17.3% vs. 9.1%), but was significantly greater at 24 weeks (20.5% vs 9.9%).

Another notable finding was a significant reduction in self-reported daily cigarette consumption by participants randomized to nicotine e-cigarettes plus counseling compared to counseling alone at 12 weeks, as well as among participants randomized to non-nicotine e-cigarettes plus counseling compared to counseling alone at 12 weeks and 24 weeks.

"Although e-cigarettes may not lead to immediate cessation of smoking, they can be a part of a transition process that may require some time to take effect," explained **Dr. Mark Eisenberg**, the study leader. "We recognize that most smokers will make multiple attempts to quite before succeeding, which is testament to the power of this addiction."

E3 was designed to ascertain whether e-cigarettes might be a more effective aid to achieve lasting smoking cessation. "The study showed that some people, many of whom have tried other methods unsuccessfully, have positive results with e-cigarettes," said Dr. Eisenberg. "This is indicative that there is no one magic bullet. The efficacy of a therapeutic approach is dependent on what may best suit a particular individual.

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