The experience of losing her grandfather to colorectal cancer helped motivate Caitlin C Chrystoja, an MD/PhD doctoral student, to find her calling as a clinician scientist. It’s a career path that led her to study clinical epidemiology at IHPME. She has been awarded Canada’s most prestigious doctoral award, the Vanier Canada Graduate Scholarship, in recognition of her research potential, academic excellence and demonstrated leadership abilities.

Chrystoja’s undergraduate research focused on early-stage cancer detection through non-invasive blood tests, which led to an international patent on which she is a co-inventor. Her line of research was inspired by the unanswerable question of whether her grandfather would still be alive if a non-invasive test was available that could have accurately detected his cancer sooner and prompted him to seek an early intervention.

“Like many people of his generation, he thought he would know when something went wrong with his body. He never sought out a colonoscopy. By the time he was diagnosed, treatment was primarily palliative instead of potentially curative,” says Chrystoja.

Leveraging the burgeoning availability of public gene and protein databases, she developed an innovative bioinformatics-based strategy that identified serum markers for the early detection of different types of cancer. Early tests identified a promising protein that could detect pancreatic cancer early. After a whirlwind of further experiments and collaborations with scientists and clinicians in Toronto and around the world, the discovery was not validated. It turned out the commercial kit they used to identify serum levels of their candidate protein did not identify it at all, but also reacted to something else.

Chrystoja says the experience was eye-opening, “We trusted in the fact that a company would have stringent quality assurance practices. Implicit trust can be dangerous.”

Clinical exposure in medical school led Chrystoja to become interested in how new technologies and procedures are introduced into medical use. Her Vanier-supported doctoral work focuses on developing a calculator to assess the accuracy and predict the benefits and risks of healthcare interventions.

“Unlike new drugs, there is often no rigorous methodological evaluation of treatment effectiveness for many medical devices and surgical procedures. There are many examples of high-profile medical device recalls and surgical techniques found to not significantly improve health or even cause harm,” says Chrystoja.

She points out that randomized controlled trials provide the best quality of evidence about treatment effectiveness but are rarely performed for non-drug health technologies, due to
a lack of legal requirements and funding. As a result, health agencies and other decision makers often rely on lower-quality evidence from nonrandomized studies. The use of many medical devices and surgical procedures is often grounded only in historical precedent.

To develop the evaluation tool, Chrystoja will be conducting a literature search on four diverse health interventions to understand how and why results differ between nonrandomized studies and randomized controlled trials. Using advanced Bayesian statistical methods, the study will examine the impact of bias in nonrandomized studies. She hopes to develop an interactive calculator that can incorporate a study’s characteristics and show a bias-adjusted estimate of what it may have shown with a more rigorous design. Her aim is to produce tools for both knowledge users and non-technical audiences.

“This work is important to me as it can be applied across clinical fields and will enable health technology agencies to interpret any study to evaluate the validity of their claims. When benefits of new technologies are overestimated, it can mean the misallocation of scarce health care dollars, not to mention the human cost in suffering. Patients could delay alternative treatments supported by high-quality evidence, implicitly trusting that promising new study results will translate into a positive outcome for them. When risks are underestimated, the consequences can range from mild complications to the catastrophic, and even death,” says Chrystoja. “It’s exciting to be doing work that could impact health policies and benefit patients around the world.”

**IHPME NEWS**

**IHPME Contributes to OHA Report**


**Dr. Chan Speaks about CIHI’s New Patient Safety Indicator**

IHPME’s Dr. Ben Chan recently participated in a panel about the national launch of Canadian Institute for Health Information’s new patient safety indicator. Chan contributed significantly to the design of this indicator, and has been noted in the acknowledgments in additional to being recognized with a formal academic citation for a section of the report.

**Harold Livergant Award**

IHPME is pleased to announce that Jordanne Holland has been awarded the Harold Livergant Award.

Recently, Brad Livergant (son of Harold Livergant) came to IHPME to present the award and speak about his father.

“My Dad was a visionary who saw things as they were and thought of ways to change them for the better. His philosophy in health care still stands today. The responsibility of the health care professional is to provide quality care to the patients without using too much of society’s money. If you don’t give back anything of value to society for the money you’re spending that is the biggest sin.

We feel that this year’s winner possesses the qualities that marked Harold Livergant life in the healthcare field. Jordanne is a leader among her peers and takes on leadership roles.”

- Brad Livergant

**Tobacco Endgame Summit**

Recently, IHPME Professor Rob Schwartz helped lead the Tobacco Endgame Summit at Queen’s University. The summit invited national & international experts to discuss the creation of an “Endgame” for tobacco usage in Canada - defined as a prevalence rate of less than 5% by 2035.

Read recent media releases and press coverage:

*Queen’s University hosts Summit on the Creation of a Tobacco Endgame for Canada*
*Queen’s University Gazette*

*Queen’s–led summit concludes with a call to bring tobacco prevalence rate to “less than 5 by ’35”*
*Queen’s University Gazette*

*Under 5 by ’35 - Canadian Cancer Society*

*Tobacco Endgame - Afternoons with Rob Breakenridge*

*Summit aims to butt out cigarette use*
*The Kingston Whig-Standard*
Summer Mentorship Program

Recently, IHPME and the Waakebiness-Bryce Institute for Indigenous Health (WBIIH) actively participated in the Summer Mentorship Program, hosting four sessions over two days.

The Summer Mentorship Program (SMP) is an innovative initiative in the Faculty of Medicine at the University of Toronto that exposes high school students of Indigenous (i.e., First Nations, Métis and/or Inuit) and African ancestry to the health sciences. Students go through a competitive process to have a taste of university life. The program allows students to obtain direct experiences, interact and gain exposure to health professions as well as receiving mentorship and long term support.

The sessions were led by Drs. Raglan Maddox, Anita Benoit and Ben Brisbois, as well as by Lori Chambers (PhD Candidate, McMaster) with support from Ms. Christina Gorman (undergraduate student, U of T) and Ms. Wajiha Rasul (Administrative Assistant, WBIIH).

These sessions were held in July to develop student identified research ideas around public health issues in their communities, in Canadian society more generally and around the world. In addition to developing research studies, the students developed research processes to explore a number of topics of interest and created tools to collect and analyze data as well as to share the information.

Facilitators of the SMP described the program as a positive and enriching experience. Dr. Raglan Maddox from the Well Living House at St. Michael’s Hospital explained that he was inspired by the students. “It was a great experience to be inspired and to learn from the students, as well as sharing some of the lessons I’ve learned, and the insight that I have gained at universities around the world. It’s exciting to think that these students will be the leaders and Elders of tomorrow, the next cohort of health professionals pushing the envelope and helping our communities to experience better health and well-being.”

“It was a positive experience. The students mentioned how they viewed health as a much broader concept than they had previously understood it to be,” said Ms Wajiha Rasul, the former acting WBIIH Administrative Assistant.

The program was a great way for high school students to meet professors, tutors and other students, talk to admissions staff, tour the university and ask questions.

Dr. Anita Benoit, Interim Associate Director of the WBIIH, was impressed at the student’s level of engagement in the sessions.

“I enjoyed interacting with the students. They were quite creative and very reflective. Many of the student’s research questions and developed projects promoted systemic changes to generate positive health and wellness at the community level. Some students questioned the status quo and how to be more inclusive of persons of different ethnic and cultural backgrounds given the impact of identity on health and wellness. I know that whatever path the students choose they all have the potential to accomplish great things,” said Benoit.

The program was extremely successful with over 60 students coming together, forming a community of bright minds exploring and learning everything about studying at the University of Toronto. Hopefully we’ll be seeing more of these bright minds on campus in the years to come, and we look forward to the 2017 Summer Mentorship Program!

For more information on the Summer Mentorship Program, please visit: [http://www.md.utoronto.ca/SMP](http://www.md.utoronto.ca/SMP)

WE’D LIKE TO HEAR FROM YOU

We’re pleased to receive submissions of 400 words or less for consideration in upcoming editions. If you’d like your event listed, please send full details.

Contact: rhonda.cockerill@utoronto.ca and ihpme@utoronto.ca
IHPME IN THE NEWS

A recent study, led by IHPME researchers Sara Allin and Audrey Laporte and others was featured in the National Post: ‘More is not always better’: More drugs mean seniors more likely to land in hospital, says study.

IHPME Professor Raisa Deber was recently interviewed by AM 640 about the dispute between the provincial and federal government over the Canada Health Transfer. Listen: Will more money make a better healthcare system?

PUBLICATIONS

Allin S, Rudoler D, Laporte A
Health Serv Res.
Does Increased Medication Use among Seniors Increase Risk of Hospitalization and Emergency Department Visits?

Klein DJ, Brown AD, Detsky AS
JAMA
Investing Wisely in Health Care Capital

FACULTY NEWS

IHPME Welcomes New Faculty Members

Dr. Lusine Abrahamyan has expertise in evidence synthesis, health economic modeling, clinical trials, and health services research. She received her medical degree from the Yerevan State Medical University, Armenia, a Master’s degree in Public Health from the American University of Armenia, and a doctoral degree from the University of Toronto. She held a Post-Doctoral Fellowship with the Canadian Cardiovascular Outcomes Research Team at the Institute of Clinical Evaluative Sciences before taking on the role of Clinical Epidemiologist at the Toronto Health Economics and Technology Assessment (THETA) Collaborative.

Nicholas Mitsakakis has expertise in statistical methods applied to health economics and health services research, as well as to all phases of clinical trials. His particular interest is on estimation of health care costs and on measuring health utilities and health related quality of life. He is also interested in data science applied to big public health data for policy making. He completed his bachelor’s degree and master’s degree in mathematics from the University of Athens, Greece. He also completed another master’s degree in Information Technology from the Department of Artificial Intelligence at the University of Edinburgh, UK. He received his doctoral degree in Biostatistics at the Dalla Lana School of Public Health, University of Toronto after which he was recruited as Senior Biostatistician for the Toronto Health Economics and Technology Assessment (THETA) Collaborative. He is currently a Senior Biostatistician at the Biostatistics Research Unit (BRU), University Health Network.

Dr. Valeria Rac has expertise in clinical research methods, grantsmanship, protocol development, and research ethics. She has experience with design, implementation and evaluation of large clinical trials, mixed-methods studies, complex interventions and registries involving prospective and retrospective pre-hospital and in-hospital data collection. She received her medical degree from the University of Sarajevo, Bosnia and Herzegovina and her doctoral degree at the Institute of Medical Science, University of Toronto. She held a Post-Doctoral Fellowship at IHPME and the Li Ka Shing Knowledge Institute, St. Michael’s Hospital then got recruited as Associate Program Director and Director of Clinical Research for the Toronto Health Economics and Technology Assessment (THETA) Collaborative.

Hold the Date
IHPME Faculty Retreat
Tuesday, January 31 | Noon - 5:00 pm

Save the Date!
IHPME Annual Holiday Party
Thursday, December 1
5:00 - 8:00 pm | Hart House: Music Room
FACULTY APPOINTMENTS

New Appointments
Lori Brady - Adjunct Lecturer
Donald Murray Ford - Adjunct Lecturer
Jason William Huehn - Adjunct Lecturer
Wing-Si Luk - Adjunct Lecturer
Michael Millar – Adjunct Lecturer
Paige Church – Assistant Professor, Status
Marko Simunovic – Associate Professor, Status

Renewed Appointments
Andrea Bezjak – Full Professor, Status
Catherine Birken – Associate Professor, Status
Andrea Bezjak – Full Professor, Status
Susan Bronskill – Associate Professor, Status
Ryan Brydges – Assistant Professor, Status
Glynnis Burt – Adjunct Lecturer
Alice Charach – Associate Professor, Status
Natalie Coburn – Associate Professor, Status
Maitreya Coffey – Associate Professor, Status
Edward Etchells – Associate Professor, Status
Darcy Fehlings – Full Professor, Status
Amir Ginzburg – Lecturer, Status
Wolfgang Klassen – Adjunct Lecturer
Dennis Ko – Associate Professor, Status
Danielle Martin – Assistant Professor, Status
Matthew Muller – Assistant Professor, Status
Martin Offringa – Full Professor, Status
Christopher Parshuram – Full Professor, Status
Eleanor Pullenayegum – Associate Professor, Status
Gustavo Sapoznik – Associate Professor, Status
Michelle Silver – Assistant Professor, Cross-Appointment
Karen Spalding – Associate Professor, Status
Joshua Tepper – Associate Professor, Status
W. Mark Toone – Adjunct Lecturer
Karen Tu – Full Professor, Status
Simone Vigod – Assistant Professor, Status
Brandon Zagorski – Adjunct Professor

THESIS DEFENSES

MSc
Delia Sinclair Frigault (supervisor: Raisa Deber)
Responsible Behaviours in Dementia: Developing and Implementing the Behavioural Supports Ontario Initiative

Albert Gheorghita (supervisor: Joanna Sale)
What is the Patient’s Experience of Pain After a Fragility Fracture?

Keira Grant (supervisor: Raisa Deber)
Design and Content of Personal Support Worker Training Programs

Reyhaneh Keshmiri (supervisor: Mona Loutfy)
Economic Evaluation of Infant Feeding Modalities for Mothers in Canada Living with HIV

Stacey E Morrison (supervisor: Dorcas Beaton)
Concordance Between Need and Receipt of Social Support, Independence and Associations with Well-being in Women with Systemic Lupus Erythematosus

Robert Smith (supervisor: Kerry Kulikski and Lianne Jeffs)
Patient-level Social Determinants of Unplanned Hospital Readmission Among General Internal Medicine Patients

Peggy Tso (supervisor: Mark Dobrow)
Development of a Decision Aid for Evidence-Informed Public Health Policy: A Mixed Methods Study

Daniel Wagner (supervisor: Noah Ivers)
Completing the Feedback Loop: An Assessment of the Implementation of an Early Stage Audit and Feedback Intervention in Primary Care

PhD
Heidi Amernic (supervisor: Heather Boon)
Exploring Patient-Centred Primary Care in Family Health Teams

Natasha Lane (supervisor: Walter Wodchis)
Determinants of Disability and Disablement in Ontario Long-Term Care Residents

Read the DLSPH Bulletin

IHPME ON Flickr
CALL FOR SUBMISSIONS

IHPME graduates are leaders in government, health care, academia and research – shaping our health care system through innovative and creative thinking and leadership.

The IHPME Society of Graduates supports and celebrates this excellence through its Leadership, Innovation and Literary Awards, recognizing the accomplishments and contributions of IHPME Alumni.

IHPME Website: Criteria & How to Submit
Deadline: January 15, 2017

AWARDS

Recently, IHPME Professor Ross Baker was presented with a Board Award by the Association of Family Health Teams of Ontario (AFHTO). Baker was recognized for his work in Primary Care Governance, particularly, his authorship of a groundbreaking study, which formed the basis for the toolkit and curriculum – Effective Governance for Quality in Primary Care – that AFHTO has used to train hundreds of primary care team board members over the past three years. Read more about the AFHTO Bright Lights Award on the AFHTO website. Congratulations, Professor Baker!

Congratulations to IHPME students Rohan D’Souza and Ryan O’Reilly who received the Lee B. Lusted Finalists Student Prize Award. This prize recognizes students’ outstanding research in medical decision making at the Annual Meeting of the Society for Medical Decision Making.

SUPPORT IHPME

The Institute of Health Policy, Management & Evaluation, as part of the Dalla Lana School of Public Health, is the first Canadian public health school to launch its own fundraising campaign. With the support of our generous donors, our Boundless Campaign will enable IHPME to continue shaping training and research in health systems, management and policy.

For more information on how you can get involved, give annually, create a named fund, or consider the School in your estate planning, please contact Ryan Lindsay, Senior Development Officer at ryan.lindsay@utoronto.ca or visit IHPME Donate or Support/Campaign. Thank you for your support!

EVENTS

POHR Seminar: Dr. Vikki Entwistle
November 9, 2016 | 12:00 pm - 1:30 pm | HS208

IHPME in collaboration with the McMaster Health Forum and the Ottawa Hospital Research Institute are pleased to host a Seminar as part of the Partnership for Health System Strengthening’s program on Patient-Oriented Health Research & Innovation.

CCHE Seminar Series
Fridays | 10:00 am - Noon | HS100

Please note the upcoming seminars:

Peter Coyte, Nov 11, 2016
Deborah Marshall, November 18
Wendy Ungar, November 25
Gilbert Sharpe, December 2

SPEED MENTORING with EHL Toronto and IHPME
November 17, 2016 | 5:30 pm - 8:15 pm | HS 7th floor

Emerging Health Leaders (EHL) Toronto and IHPME present this exciting speed mentoring session. Whether you’re a current student, recent graduate, or early career professional in the health sector, take this opportunity to learn from and network with health care experts and industry leaders.

Webinars for Prospective Applicants

MHSc - November 22, 2016 | 5:00 pm - 6:00 pm
MHI - November 29, 2016 | 4:00 pm - 5:00 pm

IHPME will host online information sessions for individuals interested in our MHSc Health Administration and Master of Health Informatics Programs.

Please consider forwarding this information to any colleagues who might be interested in and/or considering a return to school to advance their careers.

Town Hall meeting with Dr. Adalsteinn Brown
November 28, 2016 | 1:00 pm - 2:00 pm | HS208

Dr. Brown will be providing students an opportunity to give feedback and ask any questions regarding student life at IHPME. We can discuss issues related to courses, funding issues or the student study space and anything pertaining to your student experience.

If you can’t attend questions can be sent in advance to ihpmegsu@utoronto.ca.