

## ■ IMPACTING POLICY

# Clinical Epidemiology & Health Care Research

Patients walk into the clinical practice with specific goals for their own health. However, collectively, the vast number of interactions between clinicians and patients is a rich vein of health-related data that can be tapped to improve health care and the health system for everyone.

IHPME's highly regarded Clinical Epidemiology and Health Care Research program is developing the talent to reap those gains. Sharon Dell, who combines clinical epidemiology training with classical population-based observational epidemiology to study childhood lung diseases, serves as director of the program.

"We use innovative cutting-edge methods to design clinical trials and studies that go beyond the traditional experimental design," says Sharon. "We have dedicated, active clinician scientists from collaborating hospitals and research institutes from around Toronto teaching and supervising students."

New clinical research findings often rely on high-quality observational studies, making inferences from everyday clinical practice while carefully considering sources of potential bias and confounding. Researchers manipulate large data sets—so success relies heavily on the art, science and intuition of asking the right questions. Joe Kim teaches in the program, and stresses the importance of clinical epidemiology in making continued gains within populations where overall health has steadily improved in recent decades.

He points to the example of aspirin therapy, pioneered in the 1970s, which accounted for a dramatic reduction in rates of heart disease. Today, with this and other gains realized, heart disease is less prevalent. That means measuring the impact of new agents on further reducing heart disease has diminishing returns.

"It's still, of course, very worthwhile, but running a large, multi-year clinical trial becomes less viable," says Joe. "It's the nature of the health care system today to look for ideas you can implement quickly and at reduced cost. IHPME is well-positioned to be a leader in clinical epidemiology training: There's a diversity of expertise and it's always been a collaborative group."

International student Romina Brignardello Petersen was attracted to the balance between course requirements and research work, as well as the ability to focus on her area of expertise – dentistry. "U of T has an excellent international reputation, and the program overview described exactly what I was looking for: training in research methods, never losing the clinical focus. There was nothing like it in Latin America."

Some students with a deeper interest in clinical epidemiology pursue doctoral studies. Saswata Deb, a resident in cardiac surgery and a Vanier Canada Graduate Scholar from the Canadian Institute of Health Research, is among them. "My goal is to pursue research as a clinical trialist in cardiac surgery. The program has taught me how to turn an important clinical problem into an appropriate research question and obtain the most accurate and precise answer," says Saswata.

It's a skill set that is in greater demand throughout the health system—a gap that IHPME is helping to fill by producing a steady stream of highly skilled graduates. "What makes our program stand out in North America, is that it is designed to develop clinician scientists in the areas of clinical and health services research," says Sharon. "Our last external review showed that 80 per cent of our graduates go on to full-time academic positions."



Sharon Dell

## ■ CONTINUING EDUCATION

# Clinical Epidemiology Institute: Supporting Evidence-Based Health Innovation

They come from different organizations, occupations and backgrounds. Each year, 25–30 accomplished professionals involved in health care spend five days on campus at IHPME's Clinical Epidemiology Institute, learning from top U of T experts—and just as importantly, learning from each other.

"It's a diverse group—policy makers, administrators, physi-

cians, pharmacists, pharmaceutical industry personnel, nurses, researchers, fellows, medical residents, information technology specialists and others—learning about research design, interpreting evidence and how to get research across to end users," says Dr. Prakesh Shah, Director of the Institute. Dr. Shah is also CIHR Applied Research Chair in Reproductive and Child

Health Services and Policy Research and an Associate Professor at IHPME.

Policy makers and administrators come to improve their understanding of the research process and their critical appraisal of research findings. “They become much better at reviewing evidence and understanding the implications,” says Prakesh.

Other participants are researchers themselves, who want to strengthen their ability to conduct significant research and to learn tools to communicate research findings. “They learn to do more than simply make research available, hoping people will find it and use it. We discuss effective tools for reaching different audiences, such as creating a small-scale version of their research that is easily translatable.” Private-sector participants include people from pharmaceutical and biotechnology industries who need clinical appraisal skills to evaluate studies, including post-marketing surveillance.

“We use lectures, interactive sessions and small-group learning. The training is intensive and hands on,” says Prakesh. “Some participants go on to do a masters course in a field they are interested in. Most continue their learning by staying in contact with each other. They appreciate each others’ perspectives on a similar issue.”

Dr. Shah points out that the health care system, as a whole, is made stronger by improving the ability of health professionals to innovate. “One of the motivations for creating the Clinical Epidemiology Institute six years ago was to promote the implementation of research—supporting the creators of knowledge in making their findings known and encouraging health care professionals to implement and make best use of that evidence.”

For more information, please contact Jennifer James, Institute of Health Policy, Management and Evaluation  
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## STUDENT SUCCESS

# Michael Decter Scholarship

IHPME PhD student Natalie Warrick is the 2014 recipient of the Michael Decter Scholarship for Health Leadership and Policy Studies. With the direction of supervisor, Paul Williams, Natalie seeks to distinguish between strategies that build longer term capacity for caregivers and those that offer shorter term fixes.

The focal point of her research is in examining the development of caregiver and dementia policy. The scholarship is awarded annually by Saint Elizabeth to a high-performing student entering a graduate health leadership or policy program who is proposing creative solutions to issues facing the health care system.



## IHPME Connection: We'd like to hear from you

Our monthly newsletter profiles members of the IHPME community and lists upcoming events. 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](mailto:rhonda.cockerill@utoronto.ca) and [ihpme@utoronto.ca](mailto:ihpme@utoronto.ca)

## IHPME Events

### Health Services Research Seminars 2013-14

**CADTH + HTA: Past, Present, Future**  
February 5, 2014

Chander Sehgal is Director, Common Drug Review at the Canadian Agency for Drugs and Technologies in Health (CADTH).

**Calibration and Collaboration in HTA**  
March 26, 2014

Lauren Cipriano, PhD  
Assistant Professor, Ivey Business School,  
Western University, London, ON

All seminars run from 4:00 - 5:30 pm

**LOCATION:** Health Sciences Building,  
Room 208, 155 College St.

Free admission, no registration required

### Canadian College of Health Leaders-SOG Joint Event

**From Research to Reality - High Needs Patients Across the Health Care Continuum**

February 13, 2014

8:00 am - 8:30 am **Breakfast, registration and networking**

8:30 am - 10:30 am **Panel Presentation**

**LOCATION:** Hart House - East Common Room, University of Toronto, 7 Hart House Circle

**REGISTER ONLINE:** [http://cchl.in1touch.org/site/chapter\\_gta\\_events#sthash.tkuSYnRI.dpbs](http://cchl.in1touch.org/site/chapter_gta_events#sthash.tkuSYnRI.dpbs)

**COST:** CCHL/SOG Member: \$60; Non-Member: \$75; Student: \$40; (taxes included)

### Toronto Health Economics and Technology Assessment (THETA) Collaborative

**The perilous promise of privacy: Health disclosures in a brave new world**

January 17, 2014

Ester Moher, PhD

**Prevention of cardiovascular disease - should we inform patients about reduced risk or increased longevity?**

January 31, 2014

Ivar Kristiansen, PhD

All seminars run from 4:00 - 5:30 pm

**LOCATION:** Leslie Dan Pharmacy Building

144 College St., Room 850