ORTHER VOLUME 16 | ISSUE 2

EMEN

PUTTING COMMUNITIES IN THE DRIVER'S SEAT

BEHIND THE SCENES IN SAULT STE. MARIE

ACTIVELY TRANSLATING SOCIAL ACCOUNTABILITY

HONOURING A RESEARCH SCIENTIST'S INQUISITIVE SPIRIT

GUIDING GIRLS ON A PATH TO SUCCESS



ۈ≥∪دې ∖م∪∑⊳

۵۰مه ۱۹۹۰ ۵ ۱۹۹۰

PASSAGES

Newsletter of the Northern Ontario School of Medicine



Northern Ontario School of Medicine Laurentian University

935 Ramsey Lake Rd. Sudbury, ON P3E 2C6

Tel: +1-705-675-4883 Fax: +1-705-675-4858



Northern Ontario School of Medicine Lakehead University

955 Oliver Rd. Thunder Bay, ON P7B 5E1

Tel: +1-807-766-7300 Fax: +1-807-766-7370

Northern Passages is published bi-annually.

© Copyright 2016 Northern Ontario School of Medicine.

FEEDBACK

We welcome feedback and suggestions about Northern Passages. What stories would you like to read about your medical school? Send ideas to communications@nosm.ca.



facebook.com/thenosm



@thenosm



nosm.ca



@thenosm

Cover Photo: Crystal Falls is located in Hiawatha Highlands Park—also known as Kinsmen Park in Sault Ste Marie



The world of medical education and research will converge on June 20-25, 2016 for the International conference on Community Engaged Medical Education in the North (ICEMEN). The fifth in a series of biannual conferences, ICEMEN 2016 is a collaboration between the Northern Ontario School of Medicine (NOSM), Flinders University in Australia, and the Training for Health Equity Network (THEnet), a global learning community of schools committed to transforming health-professional education to improve health equity.

ICEMEN provides an opportunity to learn from and with an international audience about distributed, community-engaged medical and health professional education, research, and service. The conference will be held in Sault Ste. Marie, one of more than 90 communities across the region to host NOSM learners. It is very significant that the conference is being held in Sault Ste. Marie, as the city hosted a curriculum development workshop when NOSM was preparing to admit the inaugural MD class. While there have been modifications since, the unique curricular model developed at the Sault Ste. Marie meeting is still in use, and has been a key feature of NOSM's international reputation in medical education.

ICEMEN was first held in Sudbury and Thunder Bay in 2008 through a partnership between NOSM and Flinders. This international partnership continued with The Muster in the Barossa Valley, Australia in 2010; Rendez-Vous in Thunder Bay in 2012; and, The Muster at Uluru, Australia in 2014. Previous conference partners include: James Cook University, Australia; the Federation of Rural Australian Medical Education; the Consortium of Longitudinal Integrated Clerkship (CLIC); the WONCA Working Party on Rural Practice; and, The Network Towards Unity for Health.

ICEMEN 2016's partner events—the Indigenous Research Gathering and the Northern Health Research Conference—will provide networking opportunities for researchers (including researchers who themselves are Indigenous). The Indigenous Research Gathering will be held in Sault Ste. Marie on the traditional Ojibway territory of the Batchewana First Nation, neighboring the community of Garden River First Nation. NOSM's 11th annual Northern Health Research Conference will highlight a wide range of research from undergraduate and post-graduate students and community-based researchers. From biomedicine to health services and education to environmental medicine, research conducted in and for northern, rural, and remote communities will be presented.



A partner in ICEMEN 2016, the Training for Health Equity Network (THEnet) is a growing global movement of health workforce education institutions striving towards social accountability and committed to reducing health inequities through innovative approaches in education and research in partnership with communities. Partnering with and building on the experience and successful strategies of THEnet's founding institutions, including those of NOSM, the organization conducts global, cross institutional research on socially accountable health workforce education and shares findings on what works, how, and in what context.



Björg Pálsdóttir, Chief Executive Officer and Co-Founder of THEnet

A keynote presenter at ICEMEN 2016, Björg Pálsdóttir, Chief Executive Officer and Co-Founder of THEnet, says that through its Social Accountability Framework and tools developed by its founding members, THEnet helps develop the capacity of institutions and faculty to set strategies and transform educational programs to make their own schools more results oriented and relevant

to the needs of the communities they serve. "THEnet also partners with like-minded groups to advocate globally and nationally for equity-oriented health and education policies and to increase the accountability of health systems, education institutions, and health workers," says Pálsdóttir.

"It has been stimulating to work with both schools—NOSM and Flinders—and exciting to create these inspiring learning and networking opportunities," says Pálsdóttir. With each of the biannual conferences, the global momentum for community engagement and social accountability in medical education has grown. More and more, educators worldwide are interested in learning how to implement the principles of social accountability and translate them into operational strategies with local relevance.

"It has been fantastic to promote the highly innovative approaches used by NOSM," says Pálsdóttir. "It has also been particularly rewarding to demonstrate how much the rest of the world can learn from our colleagues in the Philippines, South Africa, Sudan, and Nepal who face enormous challenges yet have quietly worked towards creating truly transformative models of health professional education."

Pálsdóttir says it has been exciting to watch NOSM grow from an innovative school with great potential to one demonstrating through emerging evidence that its radical approaches to design and delivery of medical education are having the desired impact. "This is evidenced by comments at a recent workshop on accreditation at the Global Forum on Innovation in Health Professional Education of the National Academies Health and Medicine Division (formerly the Institute of Medicine), where one of the speakers named NOSM as a major factor in changing thinking on accreditation in North America," says Pálsdóttir.

SAULT STE. MARIE FACULTY MEMBER BRINGS MEDED HOME

When Dr. Ehsan Mohammadi worked as a locum in Sault Ste. Marie 15 years ago, he was impressed with the city and the collegiality amongst the health-care professionals. "I still think that is one the best attractions for anyone wanting to practise medicine in the Sault," says Mohammadi.

Now a NOSM faculty member, Mohammadi began working full time in the emergency department at the Sault Area Hospital nearly 14 years ago. Embracing the opportunity to teach whenever medical students and residents were undertaking elective work in the Emergency Department, Mohammadi became involved with NOSM learners from the outset. "I am amazed and impressed with quality of the learners we see from NOSM. I always compare them with myself when I was at that level of my training," says Mohammadi. "I am not ashamed to admit that most of the learners are much better than I was at that level. I think the teaching model that NOSM is using has been very successful."

When Mohammadi was a student doing clinical work, he says it was a 'trickle down' system of learning where he rarely saw the preceptor: "Most of our learning was distributed down the chain from senior residents to the learners at the bottom of the chain." Mohammadi now sees NOSM medical students spending hours of one-on-one time with their preceptors and getting feedback on their performance and education, to which he attributes their success.

In addition to his teaching role with NOSM, Mohammadi has been bringing continuing medical education to Sault Ste. Marie for more than five years. Recognizing that he and his colleagues had to travel to attend important conferences, Mohammadi says he started the Sault Conference to "provide the same level of quality medical education in the region with specific attention to challenges faced by small town and community physicians."

Initially focused on emergency care, last year the Sault Conference focus was broadened to include primary care and acute medical topics. This change was brought forward with feedback from attendees—mainly community family physicians—who require a wide range of skills to provide quality patient care. Scheduled for September 22-23, 2016, the sixth Sault Conference will feature a wide breadth of topics to appeal to health-care professional needs, and be will be accredited through the Office of Continuing Education and Professional Development at NOSM.

saultconference.com

Dr. Ehsan Mohammadi, NOSM Assistant Professor and Emergency Department physician.



EXPERIENTIAL LEARNING THROUGH STORYTELLING

Each spring, NOSM's first-year medical students complete a compulsory Integrated Community Experience (ICE) in one of more than 40 Indigenous communities across Northern Ontario. These placements provide opportunities to experience firsthand the delivery of health-care services for people living in rural and remote Indigenous communities. Through these experiences, it is hoped medical students will learn more about themselves, about culturally appropriate care, and that they will gain an understanding of the issues affecting Indigenous peoples.

Maxine Lesage, registered nurse and Health and Clinical Services Supervisor with Garden River Wellness Centre, is NOSM's Local Community Coordinator in Garden River First Nation near Sault Ste. Marie. She believes that medical students gain opportunities from these placements that they can't experience in the classroom. A faculty member with NOSM, Lesage takes pride in teaching medical students on placement in Garden River about the culture and the history of the area.

Residential Schools Centre at Algoma University in Sault Ste. Marie. "The students shouldn't leave our community until they visit and learn about residential schools. I truly believe that experience helps puts things in perspective," explains Lesage. Having worked on the first Shingwauk project back in 1990, and having distant family that attended the school, Lesage was honoured to interview students who attended the residential school before it closed in 1970.

"Some of the stories weren't favourable of course, but I have that connection and I am able to share these stories with the medical students." One of Lesage's first students back in 2006 said he was 'gobsmacked' when he spent the day at the Shingwauk Residential Schools Centre. "As much as it's hoped the students won't have preconceived notions of our community, some do. However, by the time they leave our community, most say there is an awakening, so to speak, which you can't get from a textbook," says Lesage.



For Lesage, the pinnacle of teaching the culturally based experience is taking medical students to the Shingwauk

with us," says Lesage.



VOLUME 16 | ISSUE 2 | NORTHERN PASSAGES

BEHIND THE SCENES SAULT STE. MARIE: NATURALLY GIFTED

In each issue of Northern Passages, individuals share a "behind the scenes" look into the Northern Ontario School of Medicine. This issue features the community of Sault Ste. Marie—a Naturally Gifted community where more than 100 NOSM faculty members are teaching NOSM medical students, postgraduate medical residents, dietetic interns, and other health sciences learners.

Carrie Jones (CJ): I am the NOSM Site Administrative Coordinator as well as the Physician Recruitment and Retention Coordinator in Sault Ste. Marie. For the past four years, I have had the pleasure of working with all medical learners that flow through Sault Ste. Marie for rotations, including providing orientation and scheduling.

Christine Pagnucco (CP): I was the NOSM Site Administrative Coordinator prior to Carrie. Preparing for 12 medical students from the Charter Class to join us in the fall of 2007 for their third-year Comprehensive Community Clerkship (CCC) was a very exciting time. Since 2011, I have been in the role of Manager of Physician Recruitment and Retention for the City of Sault Ste. Marie.

CJ: Both Christine and I have plenty of opportunity to interact with NOSM learners. Learners are keen and excited to be in our

community, and it is great to be able to assist them in meeting their learning objectives, curriculum needs, and facilitating the preceptor/learner relationship. The process of becoming a physician is long and demanding, and being a part of making that journey a little easier administratively is very rewarding.

CP: It's exciting to me that Sault Ste. Marie has been fortunate to recruit many NOSM graduates to the community for practise opportunities. Some joined us for electives and the Summer Studentship Program after having just completed their first year of medical school, and now they are practising and teaching in our community.

CJ: My combined position working for NOSM and physician recruitment is a natural fit. Over the last ten years, the number of medical learner training days has doubled in Sault Ste. Marie. I've recently noticed an increase in learners from other universities looking for placements with NOSM. The family medicine residency program is well known, and specialty residency training programs have also been developed. The word is out there—NOSM is a great place to learn and develop clinical skills.

CP: The word is also out there that the City of Sault Ste. Marie's

Christine Pagnucco (left) and Carrie lones (right) enjoy introducing NOSM learners to their community, which is a natural fit with their love for the outdoors.

NORTHERN PASS, GES I VOIUME TICK ISSUE 2

ACTIVELY TRANSLATING SOCIAL ACCOUNTABILITY

Preparing future physicians to address society's priority health concerns—particularly those of marginalized populations—is of particular importance to NOSM, a medical school that is internationally known for its unique model of socially accountable medical education. First- and second-year NOSM medical students recently had the opportunity during Academic Week to learn about the concept of the active offer with focus on issues related to access to linguistically appropriate health-care services in Northern Ontario, as well as strategies for improving the provision of services.

The active offer can be described as the "regular and permanent offer of services to the Francophone population." Statistics show Francophones are a minority in Ontario, making up about 5% of the population. Though a minority across the province, Francophones make up 25% to 30% of the population in Northeastern Ontario.² "If you plan on practising anywhere north of Parry Sound, there is a strong probability that you are going to have Francophone clients. It will be important for you to gain the skills necessary to work with that population," says Patrick Timony, a Research Associate with the Centre for Rural and Northern Health Research (CRaNHR).

Speaking on the subject of patient-centred communication, Timony and Dr. Alain Gauthier, CRaNHR Investigator and Associate Professor at NOSM, shared their research with the medical students. "Many Francophone patients in Ontario—and specifically in Northern Ontario—have lost hope that services will be available in French," explains Timony. "Francophones believe that when they see their doctor they will be served in English. They don't ask for service in French, because they don't think it is an option. And many physicians don't offer services in French, because there's a belief that everyone in Northern Ontario is bilingual and can understand English."

Dr. Tim Dubé, NOSM Assistant Professor and former Theme 1 Chair, Northern and Rural Health, believes there is also a broader application of the active offer in terms of linguistic barriers for other priority populations. "When we talk about the active offer, it's not only about delivering medical care in French. It comes back to recognizing that when somebody is ill, they naturally revert to their mother tongue—whatever that language may be," says Dubé. "Across Northern Ontario, there are families

whose first language is Portuguese, Italian, and Finnish, for example."

Advancing their understanding of the concepts of the active offer is the take home message Dubé hopes the medical students internalize. "Hello, bonjour,' is not enough. And that alone is not the active offer. It goes well beyond that," Dubé says. "It is how you structure your practice, the materials that are made available to patients, how signage is posted, and more."

During the session, Francophone physicians, Drs. Meghan Cusack, Paul Fredette, Claire Perrault, and Paul Rheault also shared lived experiences with NOSM's medical students. They each stressed that the idea of the active offer is to make the effort to communicate, regardless of your language, as it eases the anxiety of patients. Everyone involved in serving the public has a role to play in the active offer, even those who do not speak French.

Throughout their presentation, Chantal Bohémier and Anne Proulx-Séguin of the Réseau du mieux-être francophone du Nord de l'Ontario suggested strategies to better serve Francophones in Northern Ontario. "As you move through your education, always keep the active offer in mind. Though you may not be able to speak the language of your client, you should still be able to offer care that is sensitive to their linguistic needs," says Timony.

French Language Health Planning Entities and French Language Health Networks of Ontario, Joint
Position Statement on the Active Offer of French Language Health Services in Ontario, March 2015.
 Statistics Canada, 2011 Census of Population, Based on the Inclusive Definition of Francophone
from the Office of Francophone Affairs.



AWARDS SEASON NOT JUST FOR HOLLYWOOD

Each year, the Northern Ontario School of Medicine rolls out the proverbial red carpet, recognizing the outstanding achievements of staff, faculty, and learners. Those honoured through the School's peer-nominated awards programs recently enjoyed their moment in the spotlight. What unites NOSM's award recipients is that their colleagues recognize their commitment and contribution to the advancement of the School's vision, mission, and values, and nominate the recipients.

- Awards of Education and Scholarship recognize and celebrate faculty and learner education and teaching excellence.
- Awards of Excellence celebrate the achievements of NOSM employees and pay tribute to the important work that all NOSM staff do each and every day.
- Years of Service Awards recognize and express appreciation for the service of NOSM employees and full-time faculty at the five- and ten-year milestones in their careers.

AWARDS OF EDUCATION AND SCHOLARSHIP RECIPIENTS

Scholar

Dr. Kristen Jacklin

Clinical Scholar

Dr. Eli Orrantia

Clinical Teacher

Dr. David VanderBurgh

Academic Leader

Dr. Ric Almond

Medical Educator

Dr. Patrick Martel

Scholar Activity

Mr. Daniel Dalcin (Learner)

Physician Clinical Teachers' Association Leadership

Dr. Emmanuel Abara

AWARDS OF EXCELLENCE RECIPIENTS

Innovation

Judy Depatie

Inspiration

Judy Depatie

Leadership

Joey McColeman

Team Player

Lee Rysdale

Service Excellence

Alisha Depatie

Reliability

Cara Garbachewski

Positive Attitude

Bethany Beaudoin

Team Effort

Be Active with NOSM Implementation Team, consisting of:

- Katherine Biasiol
- Kathleen Beatty
- Kirsten Benson
- · Pascale Brown
- · Dr. Catherine Cervin
- · Kim Daynard
- Nova Donaldson
- Kate Kearney
- Lisa Kokanie
- Catherine Krause
- Kimberley Larkin
- Jason Lind
- · Chantal Marcotte
- Michael Martyn
- Dr. Penny Moody-Corbett
- Lyne Morvan
- Kathryn Needham
- Véronique Poirier
- · Alexandra Poling
- Cathy Powell
- Claudia Rocca
- Rachel Schaaf
- Dana Walsh

10 YEARS OF SERVICE

- ★ Denise Adams
- ★ Danielle Barbeau-Rodrigue
- ★ Tamara Boyd
- ★ Chris Caddel
- ★ Laura Csontos
- ★ Carol Delorme
- ★ Judy Depatie
- ★ Jennifer Dumond
- ★ Dr. Joe Eibl
- ★ Darren Foulds
- ★ Cara Garbachewski
- ★ Dr. Kristen Jacklin
- ★ Christeen Jones
- ★ Dr. Neelam Khaper
- ★ Dr. Marion Maar
- ★ Joey McColeman
- ★ Claudia Rocca
- ★ Sam Senecal
- ★ John Shea
- ★ Dr. Patricia Smith
- Dr. Marina Ulanova
- Aaron Wright

5 YEARS OF SERVICE

- ★ Jennifer Fawcett
- Dr. Simon Lees
- ★ Dr. David Marsh
- ★ Debra McKever
- Ghislaine Pilot-Attema
- ★ Cortney St. Jean
- Dr. Janice Willett

CONGRATULATIONS TO ALL AWARD NOMINEES AND RECIPIENTS!

NOSM's innovative model of distributed, community-engaged medical education and research would not be possible without the dedication of these individuals spread across the 800,000 square kilometres of NOSM's wider campus of Northern Ontario.

According to Dr. Eli Orrantia, Clinical Scholar award recipient and NOSM Associate Professor, located in Marathon: "NOSM has great potential to become recognized for the scholarly works contribution of its clinical faculty. Developing a distributed model of scholarly work will help engage the breadth of NOSM's faculty throughout its geography and produce novel research and innovation that matters to the North."

In keeping with this philosophy, when Orrantia's practise group created the Marathon Family Health Team in 2005, they hired a part-time epidemiologist to help the physicians understand their population and monitor the impact of their programs and interventions. "We were early to engage in quality improvement efforts through collecting and evaluating practise data," explains Orrantia.

Being immersed in medical education with NOSM learners has been a privilege and a lot of fun for Orrantia. "I find it a very special gift to be able to be involved in the formation of young clinicians and then to continue to evolve our relationship to that of valued colleagues."



HONOURING A RESEARCH SCIENTIST'S INQUISITIVE SPIRIT

Michael John Page was born to Sonja and Roger Page in 1975. Raised in Thunder Bay, Michael graduated from Port Arthur Collegiate Institute in 1994.

In September 1994, Michael moved to Ottawa to study biochemistry at Carleton University, where he graduated with his B.Sc. in 1998. He then moved to Vancouver, British Columbia and entered the University of British Columbia's (UBC) graduate program in biochemistry and molecular biology. Michael was supported by a competitive graduate studentship grant from Canadian Blood Services.



Settling in to his new life in Vancouver in the late 1990s, Michael was a huge Vancouver Canucks fan. As one of his graduate student colleagues recalls: "Mike had an endless excitement and drive for science, sports, and life in general, and he shared all of those interests with his friends."

In 2004, Michael successfully defended his Ph.D. thesis titled *Bioengineering coagulation factor Xa substrate specificity into Streptomyces griseus trypsin*. As another colleague described him, "Mike was the essential glue in keeping our group coherent during grad school and made those years so memorable for all of us." Now known as Dr. Michael Page, he headed to Washington University in St. Louis, Missouri to complete a postdoctoral fellowship studying the biological activity of thrombin—an enzyme in blood that causes clotting.

During his four-year stay in St. Louis, Michael co-authored ten papers and he was the first author for eight of them. As a testament to his work, Michael received a two-year fellowship from the American Heart Association. His fellowship, extended for a third year, was followed by the prestigious Career Development K Award. Dr. Charles Craik welcomed Michael to the University of California, San Francisco (UCSF) in 2010. At UCSF, Michael developed one of his greatest achievements—a peptide probe that was able to detect blood clots in real time. This discovery won Michael and his team an entrepreneurship competition that led to a patent for the discovery, and later the creation of a company called Biopaint Inc. Michael's patent—Restricted Interaction Peptide Technology—is in the control of UCSF.

In addition to his cardiovascular work, Michael was most excited about his research on early pancreatic cancer detection. Michael's last research paper, titled Non-Invasive Imaging and Cellular Tracking of Pulmonary Embolism by Near-Infrared Fluorescence and Positron Emission Tomography, was published posthumously in Nature Communication, on October 1, 2015.

Michael passed away unexpectedly in 2013. He was a researcher with a passion for medical research. As one of his supervisors reflected: "I will miss his ingenuity, his deep knowledge and enthusiasm for science, and I will miss his great sense of humour that made my lab such a great place to work."

To honour his memory, the Page family has created the Michael John Page, Ph.D. NOSM Summer Research Award. Funds are awarded to encourage and finance graduate students who wish to gain cardiovascular research experience during the summer term at the medical school in Thunder Bay.



Pictured (left to right): Ashley Nemec-Bakk, M.Sc. student in the department of Biology at Lakehead University; Mr. Roger Page, father of Dr. Michael Page; Dr. Neelam Khaper, NOSM Associate Professor, Physiology; and, Dr. Stephanie Puukila, Post-Doctoral Fellow at Laurentian University.

Honoured to receive the Michael John Page, Ph.D. NOSM Summer Research Award in 2015 were Ashley Nemec–Bakk and Dr. Stephanie Puukila. Nemec–Bakk is a secondyear M.Sc. Biology student at Lakehead University. Her project is focused on investigating the cardioprotective role of a lignan compound found in flaxseed in oxidative stress condition. This study will provide new knowledge of this compound in cell survival signaling and antioxidant status in cardiac iron overload.

Puukila completed her Ph.D. in Biotechnology at Lakehead University. Her project focused on investigating the role of antioxidants in the heart under conditions of oxidative stress induced by radiation as well as right heart dysfunction. During the course of her training, Puukila gained valuable exposure to experimental models of heart disease and various cell, molecular biology, and functional techniques to assess cardiac function.

If the story of Dr. Page has inspired you, contact NOSM's Advancement Office to speak with us about honouring your loved one's legacy.

Kathy Needham Katie Biasiol 705-662-7154 807-766-7424

If you wish to learn more about Michael's research, staff at NOSM's Health Sciences Library would be more than happy to assist with a literature search.

GUIDING GIRLS ON A PATH TO SUCCESS

When applying to NOSM's MD program, potential students outline academic, work, and life experiences that they feel have prepared them for studying medicine and working in Northern, rural, and/or remote communities. A significant piece of completing the medical school application is describing community involvement and volunteerism.

Charlotte Roy, first-year NOSM medical student, has been involved in Girl Guides for over 15 years, and has been volunteering as a leader in some capacity for nine of those years. "I became a leader here in Sudbury when I returned home to start at NOSM. Having been so influenced by Girl Guides, I believed it was important for me to give back to the organization, and where better than in my hometown?"

Roy recently organized a visit to the medical school for a group of Girl Guides (ages 9 to 11) and Pathfinders (ages 12 to 14). The girls toured NOSM's research lab, learned about health research careers, and heard from Allison Kennedy, a Laurentian University Ph.D. candidate, about the learning path to becoming a researcher. At the Health Sciences Library, Librarian Kaitlin Fuller organized a scavenger hunt to creatively convey information about online library resources related to healthy eating.

The highlight of the evening was presentations from NOSM Assistant Professors Drs. Claire Perreault and Min Yi Ngae. Perreault, a retired general surgeon, shared her inspirational story about how she became a general surgeon at a time when not many women entered medical school, and even fewer became surgeons. Ngae, a pathologist at Health Sciences North, spoke about perseverance and the value of education, and she encouraged the girls to consider a variety of careers choices in science and health care.

"I hoped that my girls would be inspired—by female role models, by the School's facilities, by everything the Northern Ontario School of Medicine is about" says Roy. "I wanted them to see all the possibilities that lie ahead of them. They are all such smart, diverse, and interesting young women who have so much potential, and I wanted them to know that we believe in them, and we believe in what they can do."



