



UNIVERSITY OF MANITOBA
Research **LIFE**

WINTER 2014 | VOLUME 1

The Museum as Muse

INSIDE:

- STUART MURRAY
- PUTTING ATHLETES' RIGHTS FIRST
- LIFE AND DEATH FOR MOMS & BABIES

MESSAGE

FROM THE VICE-PRESIDENT (RESEARCH AND INTERNATIONAL)

Human rights are essential for the creation of a just, egalitarian and peaceful society. This statement reflects the vision the University of Manitoba has for the future, a vision that will allow us to continue to meet the needs of an ever-changing world. Human rights education, research and outreach form the basis of all of our interactions with our students, our staff and our community.

In this issue you will read about research that focuses on specific aspects of human rights that have implications for citizens of our own country and many others around the globe.

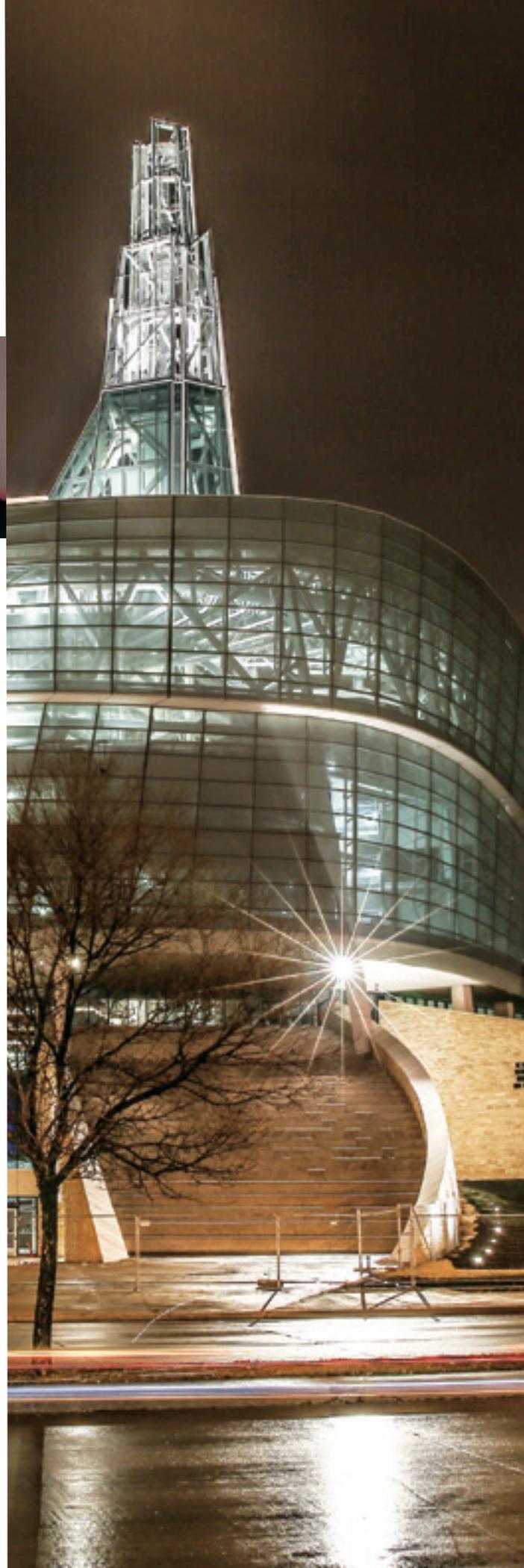
In 2013, the university was honoured to be chosen by the Truth and Reconciliation Commission of Canada to host the National Research Centre on Residential Schools. The centre will play a key role in the preservation of all statements, documents and other materials collected during the Commission's five-year mandate.

The opening of the Canadian Museum for Human Rights in Winnipeg in 2014 has many of our researchers and graduate students working alongside the curatorial staff at the Canadian Museum for Human Rights on exhibits. Our cover feature story *The Museum as Muse* will give you a sneak peak at some of the collaborative research projects they are readying for the opening.

Turn the pages of this issue and learn about research that impacts the communities we live in, from water and sanitation, to how age-friendly those communities are, to putting the rights of athletes first.

You will notice the magazine has what we are hoping you will find a refreshing new look, as well as a fresh perspective on some of the issues facing us today.

—Digvir S. Jayas, PhD, PEng, PAg, FRSC





INSIDE



10

THE MUSEUM AS MUSE

The Canadian Museum for Human Rights has turned out to be a perfect match for many University of Manitoba researchers. By HELEN FALLDING



17



23



29

15 INSIGHTS

Stuart Murray, president and CEO of the Canadian Museum for Human Rights

17 DIVING IN

Ethicist Sarah Teetzel challenges sport to put athletes' rights first. By KATIE CHALMERS-BROOKS

23 LIFE AND DEATH

Researchers (and moms) Maryanne Crockett and Lisa Avery talk about their fulfilling—and frustrating—journey to keep new mothers and their babies alive on the other side of the world. By KATIE CHALMERS-BROOKS

29 JUST DO IT

A plan to make our cities age-friendly is the just thing to do. By ANDREA DI UBALDO

Happenings	3	Viewpoint.....	9
Kudos	6	Spotlight on Students.....	27
Centres & Institutes	8	On the Horizon	33
Books of Note	21	Just the Facts.....	34
Ideas to Innovation.....	22		

ResearchLIFE

RETURN UNDELIVERABLE CANADIAN ADDRESSES TO:

UNIVERSITY OF MANITOBA
Office of the VP (Research and International)
207 Administration Building
Winnipeg, MB Canada R3T 2N2
Tel 204-474-7300
ResearchLIFE@umanitoba.ca

VICE-PRESIDENT (RESEARCH AND INTERNATIONAL)
Digvir S. Jayas

EDITOR
Janine Harasymchuk

DESIGN
Relish New Brand Experience Inc.

CONTRIBUTORS

Katie Chalmers-Brooks, Andrea Di Ubaldo, Helen Fallding, Janine Harasymchuk, Stewart Hill, Angela Jajetovic, Shawn Jordan, Bev Pike, Mariianne Mays Wiebe

PHOTOGRAPHY

Cover: Canadian Museum for Human Rights
Inside: Lisa Avery, Kendra Campeau, Pamela Campeau, Katie Chalmers-Brooks, Daniel Gwozdz, Mike Latschislaw, Sheila Spence, Special Collections Archives (University of Manitoba), Archives of the Truth & Reconciliation Commission of Canada.

Member of the University Research Magazine Association: www.urma.org

umanitoba.ca/research

ISSN# 1918-144



TRAVELING IN THE RIGHT DIRECTION

Christine Wu's work with Motor Coach Industries Ltd. (MCI) will shift into overdrive thanks to more than \$1 million in funding from the major manufacturer and NSERC.

Since 2007, the professor of mechanical and manufacturing engineering has been collaborating with MCI, the leading builder of intercity coaches in Canada and the United States.

Her work finds ways to reduce the laboratory testing period during production without sacrificing safety or the integrity of the data gathering. For example, MCI's current



Mike Latschlaw

system for vibration testing is time consuming; being able to develop an automated testing system would mean significant time and cost savings as well as more reliable results. The faster a new technology can leave the laboratory and enter production, the better it is for industry.

“Working closely with Motor Coach Industries, the work of Dr. Wu and her team will lead to safer rides for passengers on buses and similar large vehicles and will strengthen Canada's reputation as a technical innovator in this field,” said NSERC president Suzanne Fortier. ■

Researcher Christine Wu with collaborator Jim MacDonald (MCI)

A breakthrough in the fight against ALS



Katie Chalmers-Brooks

In a November submission to the journal PLOS Genetics, a team of researchers at the U of M revealed both the genetic mutation that appears to cause amyotrophic lateral sclerosis (ALS), also known as Lou Gehrig's disease, as well as results of experiments they performed that could yield a treatment that slows its progression.

Roughly 80 per cent of ALS sufferers die within two to five years after diagnosis.

At the heart of the discovery is a genetic mutation, which disrupts the auto-regulation function of what is known as TLS protein. In healthy cells, TLS protein production has a built-in mechanism whereby some of it travels back to the nucleus of the cell telling it to halt further production. But according to Prof. Geoff Hicks—who led the graduate students and fellows from the Manitoba Institute of Cell Biology and the university's Regenerative Medicine Program responsible for

the finding—in people with ALS, that process gets blocked, creating a “runaway train” effect and too much protein within the cell. That build up disrupts normal cell function and causes cell death of the motor neuron; the latter creating the gradual loss of function in the arms, legs and eventually the throat and diaphragm of people with ALS.

The experiments Hicks and his colleagues conducted in the lab have applicability beyond ALS treatment as similar TLS protein mutations that trigger its development also play a role in cancer. ■



Mike Latschislaw

TAKING ON WATER QUALITY ISSUES

Residents of 113 First Nations across Canada are unable to drink their tap water. Now, Indigenous science and engineering students will be at the forefront of tackling the problem.

Soil scientist Annemieke Farenhorst will lead the H₂O CREATE program with assistance from the university's Centre for Human Rights Research and in collaboration with Trent University, University College of the North, the Assembly of First Nations and industry partners.

"We are honoured to host a research training program that is so important to people living in our region," said Digvir Jayas, vice-president (research and international) at the University of Manitoba. "Three quarters of the First Nations homes without running water are in Manitoba and Ontario."

H₂O CREATE is part of the H₂O Program for Water and Sanitation Security. The program was recently awarded \$1.65 million from NSERC which—in addition to existing funding—brings total support close to \$3 million.

For more information, visit create-h2o.ca. ■



Pamela Campeau,
Sapotaweyak Cree Nation

Historic agreement signed on NATIONAL ABORIGINAL DAY

The Truth and Reconciliation Commission of Canada (TRC) has chosen the University of Manitoba to become the permanent host of a National Research Centre to house the statements, documents and other materials gathered by the Commission during its five-year mandate.

Speaking recently at a signing ceremony, TRC Chair Justice Murray Sinclair said the proposal of the University of Manitoba and its partners to host the research centre "demonstrated a strong commitment to Aboriginal peoples and governance, the highest standard of digital preservation, long-term public access and the protection of privacy."

The TRC's mandate is to inform all Canadians about what happened in the 150-year history of the Residential School System, and to guide and inspire a process of reconciliation and renewed relationships based on mutual understanding and respect. The National Research Centre will house thousands of video and audio statements that the Commission is gathering from survivors and others affected by the schools and their legacy; millions of archival documents and photographs it is collecting from the Government of Canada and Canadian church entities; works of art, artifacts and other "expressions of reconciliation" presented at TRC events; and all of the research collected and prepared by the Commission over the life of its mandate.

Reconciliation is important to the University of Manitoba and it has engaged with both Aboriginal and non-Aboriginal communities on the matter. The university hosted a series of dialogues and exhibits on residential schools, sponsored seminars and symposiums on TRC issues, and partnered with the lieutenant-governor and the TRC for the event "Revitalizing Reconciliation in Manitoba—A Cross Cultural Dialogue." The Centre for Human Rights Research continues to advance the commitment the U of M made towards encouraging debate and discussion around the understanding of human rights, peace and justice and respect for others.

In October 2011, history was made by University of Manitoba president and vice-chancellor David Barnard when he became the first university president to offer an apology to the TRC and Indigenous peoples. Though universities were not involved in operating or funding residential schools, Barnard said universities failed to recognize and challenge the forced assimilation of Aboriginal peoples. ■



Mike Latschislaw



Mike Latschislaw

Assembled dignitaries at the agreement signing.



Mike Latschislaw

DEVELOPING NEW SEEDS FOR FARMERS

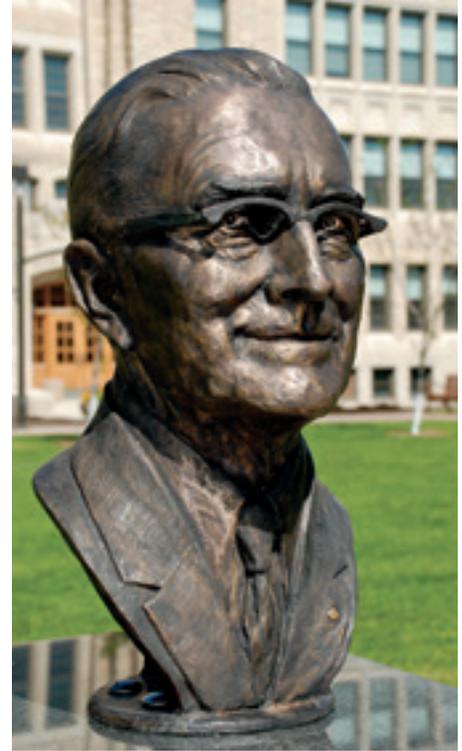
A \$3.9 million agricultural research project aims to create a new high quality rapeseed with a world-class resistance to herbicide.

With Robert Duncan in the Faculty of Agricultural and Food Sciences as the lead, work will begin to produce hybrid herbicide-tolerant, high-erucic-acid rapeseed cultivars.

This research is being funded over five years with a Collaborative Research and Development grant of \$1.92 million from the Natural Sciences and Engineering Research Council of Canada (NSERC) and another \$1.96 million from Bunge Canada and DL Seeds.

The project will incorporate expertise in: plant breeding, genomics and disease resistance at the University of Manitoba (Duncan, Dilantha Fernando and Genyi Li); hybrid development from DL Seeds; and oilseed processing from Bunge Canada. ■

Innovation Plaza opens, celebrates father of canola



Mike Latschislaw

A new public space in a park-like setting on the Fort Garry campus celebrates the achievements of noted University of Manitoba scholars and researchers.

Located on the south lawn of the Buller Building at Auld Place, Innovation Plaza features a series of commemorative busts that honour individuals who have greatly enriched society and contributed significantly to the well-being of Canada and the world.

The plaza's inaugural inductee is Baldur Stefansson, often described as the father of canola. His installation was sponsored by the Richardson Foundation.

Stefansson (1917-2002) began his career as an oilseed breeder in the U of M's department of plant science and recognized the potential of oilseed rape as an edible oilseed crop for temperate climates.

In 1974, Stefansson released Tower, the first 'double zero' rape cultivar with less than five percent erucic acid and low levels of glucosinolates, which cause bitterness in vegetables such as cauliflower and brussels sprouts. The significant improvements in both oil and meal quality, as well as taste, were recognized in a new commodity name canola. In 1987, Stefansson registered the world's first low linolenic canola cultivar, Stellar, and products made with canola have since been commonplace on grocery shelves.

umanitoba.ca/innovationplaza ■



Stefansson family

Mike Latschislaw

A ROYAL HONOUR

Three University of Manitoba professors have been elected to the Royal Society of Canada, considered the highest honour an academic can achieve in the arts, humanities and sciences.



PATRICIA MARTENS

(professor of community health sciences and director of the Manitoba Centre for Health Policy) is an internationally recognized expert on population health with particular interests in the health status and health care use of Manitoba's rural and northern residents, the use of health-care services by those with mental illness, and child health. She has received numerous awards, and in 2013 became a member of the Order of Canada (see related story on page 7).



AFTAB MUFTI

(Professor Emeritus Engineering and former president of ISIS Canada Research Network) is known for his many developments in the field of civil engineering and his pioneering work in the field of civionics engineering and structural health monitoring. Mufti became a member of the Order of Canada in 2010 for his contribution to and leadership in the field of civil engineering, notably for researching the use of advanced composite materials and fibre optic sensors in the construction and monitoring of bridges and other infrastructures.



GRANT PIERCE

(professor of physiology; executive director of Research, St-Boniface Hospital Research) has made major contributions toward the understanding of heart dysfunction in people diagnosed with diabetes, the role of oxidized cholesterol and sodium-hydrogen exchange in ischemic heart disease and the prevention of cardiovascular disease through nutraceuticals. He is considered one of the top cardiovascular scientists in the world.

Among the country's best

Professors Patricia Martens and Vaclav Smil are the latest U of M faculty to join the Order of Canada.

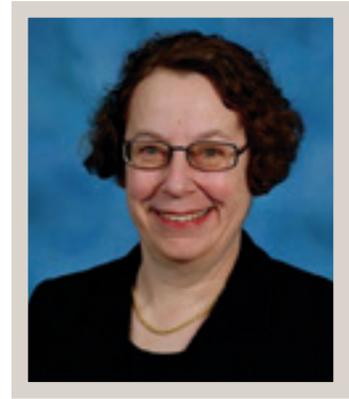
Martens (professor of community health sciences and director of the Manitoba Centre for Health Policy) is an internationally acclaimed university-based researcher focused on population-based health services, public health and population health research. Martens has held various research awards, including a Canadian Institutes of Health Research (CIHR) New Investigator Award (2003-2008) and presently a CIHR/PHAC Applied Public Health Chair (2008-2013). She was recently named the YM/YWCA Woman of Distinction for Health & Wellness.

Smil is a Distinguished Professor Emeritus in the department of environment and geography in the Clayton H. Riddell Faculty of Environment, Earth, and Resources, having retired from the university two years ago. He was recognized for his contributions as an author, educator and lecturer on the impact of human energy use on the Earth's ecosystem. He has written more than 30 books, including four in 2013. He has been vocal in criticizing world governments for paying more attention to politics than to human interests. In 2010, Smil was named by *Foreign Policy* magazine to its list of FP Top 100 Global Thinkers.

Established in 1967 by Her Majesty Queen Elizabeth II, the Order of Canada is the centerpiece of Canada's honours system and recognizes a lifetime of outstanding achievement, dedication to the community and service to the nation. ■



Vaclav Smil



Anaphylaxis expert recognized

Estelle Simons has been inducted into the Canadian Academy of Health Sciences. A professor of pediatrics and child health in the Faculty of Medicine and a research scientist at the Manitoba Institute of Child Health, Simons is an internationally renowned expert on allergic diseases.

For more than three decades she has worked tirelessly to improve the health of patients suffering from allergic diseases, including asthma and anaphylaxis. With her colleagues, she pioneered pharmacological approaches to the investigation of medications used to treat allergies.

Her world-leading research on anaphylaxis has made her the 'go to' authority on the subject. Her comprehensive studies of epinephrine resulted in changes to practice and made epinephrine autoinjectors the standard delivery method for those suffering from anaphylactic reactions brought on by allergies. ■



CENTRE FOR HUMAN RIGHTS RESEARCH

Human rights are the basic rights and freedoms to which all human beings are entitled, and include civil, political, economic, social and cultural.

The University of Manitoba is home to scholars from around the world who centre their work on human rights issues. This multi-faceted work is situated in a broad range of fields—including arts, law, education and the sciences—provoking rich interdisciplinary research and training opportunities.

The Centre for Human Rights Research (CHRR) was established in 2012 with law Prof. Karen Busby as its director. Busby is an expert in legal issues related to sexuality, sexual violence, assisted human reproduction and religious rights.

The CHRR brings researchers and community members together, igniting collaboration, energizing interdisciplinary connections and providing exciting education and training opportunities for students. More than 40 U of M professors from 11 faculties are affiliated with the CHRR.

“Professors from disciplines as diverse as psychology, English, community health and agriculture who might never have met each other are now working together on joint human rights research projects,” Busby said. “They’re also connecting through the research centre with community-based organizations that have research needs.”

Some of the projects underway include research related to reproduction and sexual rights, led by Busby, and support for research on missing women and sex workers. Busby is co-editing a series of books to be published by the University of Manitoba Press that explore the quest for social justice and basic rights and freedoms.

The CHRR and researchers from across the university are working with the Assembly of Manitoba Chiefs and other partners on water as a human right, with a focus on drinking water and sanitation in First Nations communities across Canada.

With the announcement of the U of M as home to the new National Research Centre on Residential Schools, the CHRR is fostering research in support of that initiative.

The CHRR hosts an annual seminar series that is open to the public and podcasted on its website at chrr.info, as well as providing a speakers bureau of university students who talk to Grade 7 to 12 students about human rights issues.

“Making sure that our research is accessible to the general public is a big priority for us,” Busby said. “Manitobans are passionate about human rights and we want the university to contribute to the dialogue about how we can all help make our world more just.”

Work is also underway to establish an interdisciplinary master’s degree program in human rights at the University of Manitoba. ■

BY STEWART HILL

GOD'S LAKE AND OXFORD LAKE: PRISTINE WATERSHED MANAGEMENT PLANNING

In the northeastern corner of Manitoba are two freshwater lakes that remain in their natural and pristine state. These lakes are “my home and native land” and are located within the boreal forest region of Canada, home to the three Cree communities of Bunibonibee Cree Nation (Oxford House), God's Lake First Nation and Manto Sipi Cree Nation (God's River). Like many other First Nations in the country, these three Cree communities face challenges with the quality of their drinking water, which is ironic given they live along the shores of large, very beautiful and pristine lakes. They also face chronic shortages when it comes to the development of water infrastructure in their communities such as running water and sewage services. Periodically these communities experience boil water advisories.

I am a member of the God's Lake First Nation. Recently when I was presented with an opportunity to pursue PhD studies under the H2O CREATE program, I proposed to look at the water issues facing my community and the sister communities of Bunibonibee and Manto Sipi. I wanted to develop proactive watershed management studies for God's Lake and Oxford Lake. A question that has been posed to me is: Why develop watershed management plans or source water protection plans for natural and pristine lakes? Water planning will contribute to the governance of the communities in terms of their water security and



Mike Latschislaw

Stewart Hill

accessibility to safe drinking water into the future; the foundation needs to be built today as opposed to tomorrow when it might be too late after development has already caused contamination.

My intent is to conduct participatory research with these communities in the development of source water protection plans. Water plans for these communities will address the need to protect the people from future development activities such as mineral exploration, possible mine development, proposed all-roads into the area and all the related development that accompanies the opening of a region to the outside world. Even though these communities are nearby and have family ties, they can have differing views on the vision of their future development and growth, despite facing the same socio-economic conditions and issues. For example, all three communities are isolated with only air access year-round and no all-weather road linking them to each other or the rest of the province. As a result, the cost of living is high due to the high prices for goods and services as compared to the South.

My ultimate goal is to contribute to the health and well-being of the people in the three communities by increasing their knowledge base about water security and providing practical solutions to meet their water needs as provided by the H2O CREATE program, but also to conserve the watershed. It is my hope this program will ultimately succeed in this goal by working closely and cooperatively with the people.

To learn more about the H2O CREATE program visit create-h2o.ca ■

“I wanted to develop proactive watershed management studies for God's Lake and Oxford Lake.”

A forbidding three-storey brick building looms before you, beckoning with a clanging bell. Move up the stairs and open the wooden doors if you dare to enter Canada's racist history.

THE MUSEUM AS MUSE



BY HELEN FALLDING

Inside the virtual building, you will hear the voices of former residential school students telling their own stories. Use a computer mouse to explore a classroom and dormitory, then type messages on a student's slate, scrawl graffiti on the school walls and gaze out the window towards a horizon that inspires dreams of escape.

When it's time to walk away from this virtual world, you might have greater respect for residential school survivors such as Elder Ted Fontaine and empathy for his daughter and grandkids, who grew up in the shadow of Fontaine's pain.

Is an experience such as this coming soon to a screen in a museum near you? That depends on what a team of University of Manitoba researchers discovers through the Embodying Empathy project.

Fontaine will help sociologist Andrew Woolford and English, film and theatre professors Struan Sinclair and Adam Muller complete the design of a virtual "storyworld" intended to immerse users in the lives of residential school children. See a prototype video at embodyingempathy.ca/projects.html#storyboard. Psychology professor Katherine Starzyk will evaluate whether the experience makes users more sensitive to Aboriginal issues.

"Museums are spending vast sums of money on generating technology like this, without any clear sense that it actually works in bridging the distance between witnesses and experiences of atrocity. Everything is all multimedia and interactive in museums now, but nobody really knows if it should be," Muller said.

(l-r) Professors Adam Muller and Katherine Starzyk with the virtual residential school rendering.



Mike Latschislaw



Mike Latschislaw

(above) The museum's Clint Curle with Prof. Andrew Woolford.

“Museums are spending vast sums of money on generating technology like this, without any clear sense that it actually works in bridging the distance between witnesses and experiences of atrocity.”

The project was inspired by Winnipeg's Canadian Museum for Human Rights, which plans to use advanced technology to facilitate dialogue. The Fragile Freedoms lecture series jointly sponsored by the university and museum has a high profile, but the fertile research connections between the two institutions are less widely known.

Clint Curle, the museum's head of stakeholder relations and a professional affiliate of U of M's Robson Hall law school, is keen to see the results of the Embodying Empathy project, which is still gathering funds for computer hardware and software.

“We're really interested in that project because it does parallel in many respects some of our ambitions with our exhibits,” he said. “Scholarly studies are hugely important to us and will be on an ongoing basis.”

Academic and museum researchers inspire each other

Curle visited the Fort Garry campus on Nov. 1 to introduce a seminar by Iranian-Canadian author Marina Nemat, whose story of surviving torture as a teenager will be featured in one of the museum's inaugural exhibits. Museum curator Armando Perla met Nemat in 2011 when she was in Winnipeg to give the keynote speech at the university's Strangers in New Homelands conference.

Curle is also on the advisory board for the Canadian Journal of Human Rights, launched by University of Manitoba law professor Donn Short in 2012.

The only journal of human rights scholarship in Canada has already issued two volumes covering a broad range of national and international issues, including the need for national monitoring to make sure Canada implements human rights treaties.

“I've come and spoken to the student editors a couple of times,” Curle said. “It's such an important journal.”

The research and support flow both ways. Native studies professor and artist Sherry Farrell Racette is curating the museum's Metis Rights exhibit.

“I'm happy to be doing it,” she said. “If Metis kids are going to visit the museum on school tours, we need to be here.”

“I want that child to walk out a little taller and Elders to feel their life struggles have been validated. That's my audience. If I can do that, it will work for everyone else.”

Farrell Racette hopes to create a welcoming kitchen table surrounded by original artwork and a timeline. Visitors would sit at the table to listen to and share stories of the ongoing struggle for Metis rights. One of her challenges in the unique museum building is designing an exhibit that will catch someone's eye even when viewed from two storeys above.

History professor Tina Chen is on a national advisory committee that gave the museum feedback on an exhibit about the Chinese head tax. Two other U of M history professors and a graduate student have prepared museum research packages on the partition of India, the antiapartheid movement and state terrorism in Argentina.

Jorge Nallim gathered stories of disappeared adults and stolen babies from the years of Argentina's military dictatorship, then stories of denial and of eventual mobilization by those willing to break the silence. The museum reserves the right to use his work however it sees fit, but Nallim felt that was worth the risk.

Meanwhile, a law student helped Perla with research on live-in caregivers as an assignment for a course organized by the Centre for Human Rights Research. That seminar series has now inspired the first book about the museum, to be co-edited by Muller, Woolford and research centre director Karen Busby. She is also co-editing a new University of Manitoba Press human rights book series with the museum's former research director Rhonda Hinthner.

Chapter authors for *The Idea of a Human Rights Museum* book are a mix of University of Manitoba professors and experts from across Canada, the U.S. and Europe. They braved Winnipeg in February 2013 to trade ideas and don hard hats for a coveted tour inside the museum under construction.



Sherry Farrell Racette is curating the museum's Metis Rights exhibit.

Woolford and Muller's bid to host the July 2014 International Association of Genocide Scholars conference was successful in part because scholars from around the world are eager to visit Winnipeg's new ideas museum.

Its construction inspired efforts to better co-ordinate the broad and deep expertise on human rights that has long existed at the University of Manitoba. Since the Centre for Human Rights Research was formally created in 2012, 43 professors from 11 faculties have signed on as research affiliates. The centre currently focuses on four themes: sexual and reproductive rights, drinking water as a human right, documenting human rights, and truth and reconciliation related to Indian residential schools. U of M will soon be home to a new National Research Centre on Residential Schools, which will house the archives of the Truth and Reconciliation Commission of Canada.

The Canadian Museum for Human Rights has turned out to be a perfect match for University of Manitoba researchers who were already experts in fields such as genocide or the psychology of responses to injustice, offering a local application for their work.

"Scholarship comes up against the pragmatics of museum design," Woolford said. "Attempting to represent something about residential schooling history in an

The Canadian Museum for Human Rights has turned out to be a perfect match for University of Manitoba researchers who were already experts in fields such as genocide or the psychology of responses to injustice, offering a local application for their work.

eight-by-eight space in language that reads at a Grade 9 level is an incredible challenge."

Attracting graduate students to a human rights city

The striking new development at The Forks is also inspiring graduate student thesis projects. Archaeology master's student April Chabot will use the Canadian Museum for Human Rights as a test case in her work developing a best-practices model for federal heritage policy and legislation that is inclusive of First Nations interests.

The museum's builders surpassed their limited legal requirements when investigating the artifacts beneath their foundation-free building, Chabot said. Somewhat to her surprise—given media coverage—she has heard positive feedback so far about the dig from First Nations and Metis people who were involved. They see the museum as an evolution of the meeting space The Forks has always been.

"The fact that they seem to have capped it so that there's no further destruction possible as long as that building is standing, they seem to be fairly happy with that."

The museum's research department already includes two University of Manitoba graduates and Julia Peristerakis, still completing her sociology master's thesis on child welfare policies known as the '60s scoop of Indigenous kids. Having already presented her work at an international conference organized by Woolford helped her secure the job.

Muller has encountered graduate students from other parts of Canada who now see Winnipeg as "the place to be" for human rights research.

"The potential for recruitment is altered because of the Canadian Museum for Human Rights. I have a case to make to students working in visual culture and representations of trauma that they have a real live work-in-progress to absorb themselves in."

The Centre for Human Rights Research is leading talks on potential development of an interdisciplinary master's degree program in human rights that would be unique in Canada.

In the meantime, there's plenty of opportunity for students enrolled in existing programs. U of M filmmaker Warren Cariou and philosopher Neil McArthur are working with students to finish a documentary that asks, "What are human rights?" Using the construction of the Canadian Museum for Human Rights as symbolic springboard, the documentary attempts to reach back to a time before the concept of human rights.

Education professors Jerome Cranston and Melanie Janzen are working with the museum's learning and programming department on a collaborative summer institute for July 2014 focused on teaching and leading human rights education. The summer institute will use the museum's extensive database of curricular resources.

Once museum researchers have a chance to catch their breath after the new building opens in September 2014, they will turn their attention to the museum's long-term research goals. A centerpiece will likely be the oral history project that included Nemat's interview, Curle said.

Muller said doing research that is helpful to the museum requires understanding the political context in which curators work, while maintaining a critical edge.

"I hope at the end of the day that the various communities, both nationally and in Winnipeg, can learn to understand the museum as not the last word... but an important place in which their concerns can be articulated, heard and engaged with." ■



Mike Latschislaw

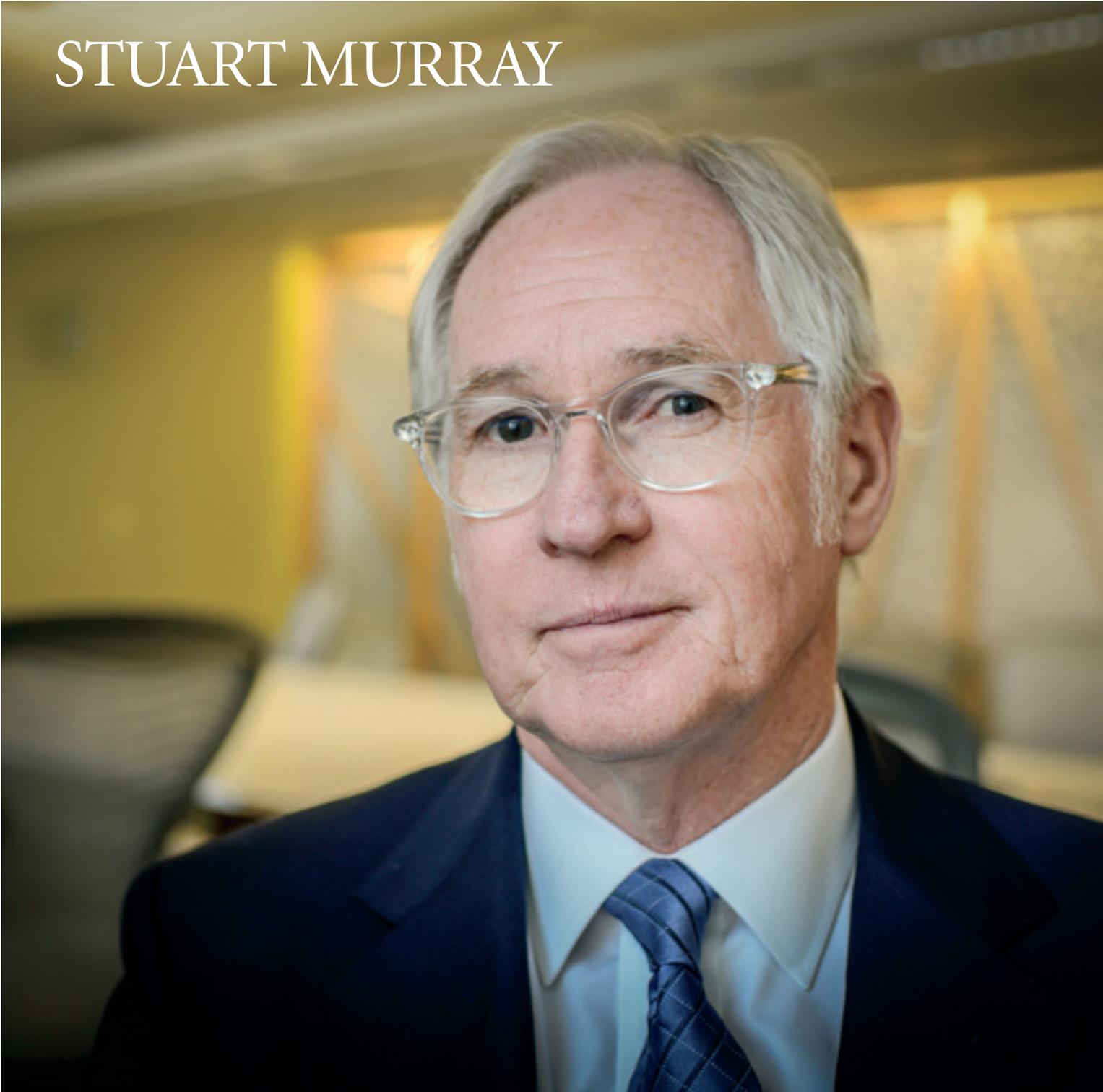
Museum curator Armando Perla met author Marina Nemat (left) through the research centre that Prof. Karen Busby (right) leads.

INSIGHTS

Stuart Murray was appointed chief executive officer (CEO) of the new Canadian Museum for Human Rights, Canada's fifth national museum and the first to be built outside the National Capital Region, in September 2009. He previously served as president and CEO of the St. Boniface Hospital and Research Foundation since 2006. He became Leader of the PC party of Manitoba in 2000 and resigned in 2006. Stuart also worked as president and CEO of DOMO Gasoline Corporation Ltd. from 1989 to 1999.

Stuart has also been very active in the community as a volunteer, most notable raising in excess of \$10 million for the Royal Winnipeg Ballet Sustaining Applause campaign.

STUART MURRAY



Mike Latschislaw

What follows is an excerpt from a conversation with Stuart Murray:

“ The challenges we face today can be informed by historical struggles for human rights.

Winnipeg is on track to become a city of human rights education with a critical mass of excellence in human rights scholarship, and the U of M is an important part of that effort. Winnipeg is a great place to share resources on important human rights issues, such as the National Research Centre on Residential Schools. Building a hub of human rights learning assists the CMHR in its research efforts, in its goal to inspire reflection and dialogue about human rights, and in attracting visitors such as national and international academics who are interested in human rights.

Ultimately research is all about asking questions and forming relationships. We are still learning what human rights mean, and this includes embracing new types of questions, exploring new relationships, and using new mediums as technology develops.

Partnering with the best organizations and institutions, the Canadian Museum for Human Rights ensures the integrity, accuracy, and credibility of its collected and disseminated research. The CMHR's goal is to build all their exhibits and programs on a foundation of strong scholarship.

In the field of human rights, so much great research is going on. One of the main tasks our Museum can accomplish is bringing this research to the popular level and watching people get really excited about this research—asking good questions about human rights and figuring out how they, individually and together, can advance human rights today.

The CMHR has already benefitted from U of M research through our partnership with the Centre for Human Rights Research (CHRR). CMHR staff members have participated at many CHRR seminars, which speak to issues currently at play in exhibit development at the museum. CMHR researchers have used U of M archives, library, scholars and experts in very direct ways which are driving the exhibit development processes.

The goal of the Museum is to inspire human rights reflection and dialogue, and to be a reliable human rights learning resource.

The CMHR's oral history collection, consisting of recorded first-person accounts of the lived experience of human rights defenders and survivors, is envisioned as a source of primary research that can significantly assist academics and researchers.

One senior scholar has described the CMHR as a megaphone to bring new human rights research to the popular level. We are a medium between the university and the broader population.

The CMHR exhibits and programming will be the mainstays of our dissemination strategy.

The CMHR is looking at publications post-inaugural, hosting visiting human rights scholars, internships, artistic productions, etc. We have already held several public events which have brought cutting-edge researchers in to raise public awareness of human rights issues—some of these have been done in partnership with the U of M.

The CMHR has a strong commitment to partnerships and collaborative projects, bringing in-house expertise into conversation with external experts and advocates.

Inclusive design and participatory research methods embody the Museum's human rights commitment.

The Museum uses a story-telling approach to highlight the relevance of human rights to everyday life.

Telling the stories of ordinary people, inclusive of all ages, backgrounds and abilities, helps visitors to recognize themselves in the stories and see the human rights connections to their own lives.

Research in human rights has been evolving toward a more inclusive model which opens to the experiences of those who have been under-represented in the past. Research in this context is a way of uncovering these stories and bringing them to the centre of our conversations.

I have learned so much during my time with the Museum. I want our visitors to critically engage with the Museum's content, construct their own points-of-view and share human rights stories with each other. I want them to know that they can and should contribute to this conversation! ■



BY KATIE CHALMERS-BROOKS

DIVING IN

Ethicist Sarah Teetzel challenges sport to put athletes' rights first



Sarah Teetzel never made it to the Olympics as an athlete. In fact the former competitive swimmer says she never even came close. But she is perfectly fine with that.

Sitting in her office within the Faculty of Kinesiology and Recreation Management, Teetzel acknowledges she wasn't competitive enough. This despite spending much of her teenage years in a pool in small-town Ontario and racing at the national level throughout university in her specialty: the 400 and 800-metre freestyle.

"I didn't care enough if I won or lost," says Teetzel, 33. "I loved training and the environment but was never set on winning. That element of wanting to be the best that most Olympians have, I didn't have that."

What the assistant professor does have is the fire required to win when championing human rights in sport. A sports ethicist who takes on controversial topics like doping and gender testing, she's quick to point out how many of the rules and policies that govern sport would never fly in most other settings.

Consider the drug testing of child athletes; Olympic officials do random tests on kids as young as 14 at the youth version of the world's most elite competition.

"We can contrast this with the public school system. If a principal required a student to go into a bathroom and provide a urine sample under his or her observation, that principal would likely be fired right away, with no other question asked," she says. "So why do we allow this in sport?"

With funding from the World Anti-Doping Agency (WADA) and the International Olympic Committee (IOC), Teetzel examines policies, rules and values in sport. Her research addresses athletes' right to privacy and autonomy. "I want to help ensure that our policies governing sport are fair and that they respect athletes' basic human rights."

Sarah Teetzel is a research affiliate with: the Health, Leisure and Human Performance Research Institute; and the Centre for Professional and Applied Ethics.

This requires she regularly immerse herself in contentious waters and explore issues that are growing more complex. While some ethicists are calling on sport to go ahead and allow doping to help level the playing field, Teetzel insists the better option is to improve education and find a way to do effective testing while still being respectful of athletes as individuals.

Over time the performance-enhancing drug of choice in sports has changed and continues to evolve. “It’s impossible for researchers to ascertain how far ahead of the drug testing agencies the athletes are because, unsurprisingly, athletes who dope are not inclined to divulge that information to researchers, even in anonymous surveys and questionnaires. It’s a constant catch-up battle for WADA,” says Teetzel.

In the 1990s, erythropoietin (or EPO) was popular among endurance athletes since there were no reliable tests then to detect this hormone that transports extra oxygen to the muscles, extending the time it takes to reach fatigue; it’s prescribed to people with anemia to increase red blood cell count.

Tests used today more effectively identify the use of EPO or steroids (which, when used legitimately for cancer treatment, combats muscle wasting) along with diuretics (a dehydration agent that can mask the presence of other drugs).

As tests became more specific and sensitive, athletes using performance-enhancing drugs figured out that by taking smaller amounts more frequently they could avoid a positive result. This tactic, known as micro-doping, was a contributing factor in WADA’s decision to implement the athlete biological passport, essentially a databank of blood and urine test results collected throughout the year. Researchers analyze the passport looking for changes that could correspond to the use of banned substances. This random and unannounced testing requires elite athletes to report where they’ll be for one hour every day in case they are asked to provide a sample. Three missed tests results in a violation and ban.

“It’s surveillance... This type of surveillance isn’t acceptable in many other areas,” says Teetzel. “We do a lot in sport that, if we don’t look at critically, we accept too easily I believe. There are many ethical and philosophical questions we can ask about sports and why we do what we do.”

Rights around drug testing have been further complicated by the new realm it’s about to enter: genetic modification. Already researchers in China have told media they can use gene transfer technology for athlete enhancement; instead of drugs they inject viral vectors to introduce or modify genes and alter a person’s genetic makeup. (Gene therapy

has brought hope to people living with genetic conditions like muscular dystrophy.) “Theoretically, athletes could modify their own DNA for performance enhancement purposes and if they did this it would be undetectable using standard doping detection tests. So what happens to sport then?” Teetzel asks.

Twice this year she has been invited to lecture at the International Olympic Academy, an institute in Olympia, Greece, just down the road from the ancient archeological site where it all began in 776 BC. In early writings the poet Homer describes Olympia as a majestic place. Teetzel agrees, noting people “are often reluctant to leave.”

She also felt something special when attending her first Olympics, in London in 2012. “There was an electric atmosphere that you don’t get from watching on TV,” she says. “You could feel the community spirit and the joy of the people in the streets.”

But the positive energy of the Olympics, as powerful and contagious as it is, can be undermined by the policies that govern international sport, Teetzel argues. Invasive drug-testing and athlete surveillance are just two examples of how competition is controlled at the expense of the athletes’ rights. Stringent rules that exclude gender equality is another.

Teetzel points out how the IOC goes to great lengths to position the Olympic Games as supportive of fair play, equality and bringing people together globally yet some of the rules surrounding its sports do the opposite.

Up until last year women’s beach volleyball rules stipulated players had to wear bikinis or specific one-piece bathing suits and in some competitions even went so far as to declare a maximum two-inch width for their bottoms. The rules also dictate the athletes can’t wear their tracksuits during post-match media interviews unless the temperature dips below 18 C. Regulations were revised to allow athletes to compete wearing shorts and a T-shirt or a more modest one-piece swimsuit but the change still excludes women from countries where more conservative dress is expected, Teetzel notes.

When women’s boxing became an Olympic sport last year women’s sport advocates successfully fought for athletes to wear regular boxing shorts when told to wear padded bras and skirts. The very nature of sport with its ingrained rules of the game isn’t an environment conducive to bending. “There is not a lot of space for athletes to be advocates because they need to play within a certain structure of rules to remain eligible to participate,” Teetzel says. “Sports rules are implemented by international federations and if you don’t agree with them, their response is often: don’t play.”

“Sports rules are implemented by international federations and if you don’t agree with them, their response is often: don’t play.”

The rise of transsexual athletes and those whose gender falls into the grey area of intersex, has created a new set of challenges to inclusiveness in sports and a new set of questions for ethicists like Teetzel to ponder.

She was in the 2012 Olympic crowd in London when South African runner Caster Semenya completed the 800-metre for a silver medal. Semenya made international headlines when her masculine appearance prompted officials at the 2009 World Championships to question her gender. At only 18 years old Semenya involuntarily became the poster girl for the return of gender testing—another research area of Teetzel's.

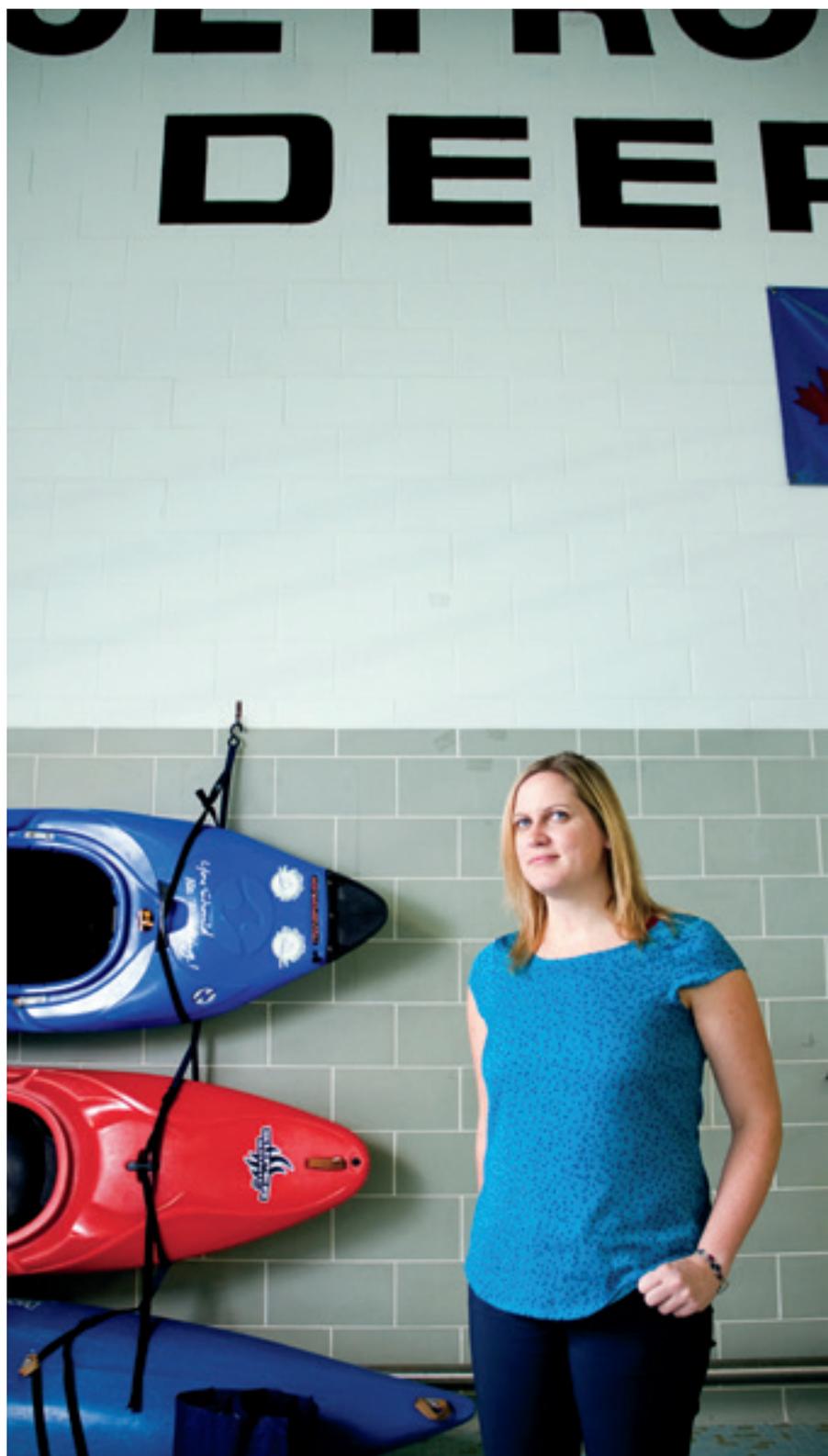
Like testing for performance-enhancing drugs, the ways of verifying biological sex has morphed over time; in 1966 female athletes at the Commonwealth Games in Jamaica, as well as at other competitions in the mid-1960s, were forced to parade nude in front of doctors to prove they were women. Until 1999 Olympic officials required all women athletes undergo a test to earn their “femininity certificate,” notes Teetzel. The testing included a swab of the cheek to ensure competitors had XX chromosomes.

Women's sports groups spoke out and the testing was dropped before the 2000 Olympics. Semenya's situation brought it back, but on a case by case basis. “Which in itself is problematic. How are female competitors targeted now for sex testing: because of your appearance, because you're too fast, because you're not in line with ideals of what women athletes should look like?” Teetzel says.

Athletes under suspicion undergo a battery of tests, including an assessment of their chromosome patterns and testosterone levels, but the results aren't always straightforward. Some women are considered intersex, which means they're born with ambiguous genitalia; and some are born with androgen insensitivity syndrome, which means they produce higher levels of testosterone. Researchers disagree on the extent to which this corresponds to a competitive advantage in sport.

It's speculated that Semenya—who was kept from competing for a year—must now take drugs to block her testosterone production to within a range specified by scientists consulting with the international governing body of track and field. “Thankfully her results were not released to the public,” says Teetzel. “There was enough of an invasion of privacy for her.”

The number of transsexual athletes competing at the elite level has risen in recent years, inviting sports ethicists to weigh in on the IOC policy put in place to allow them to compete in the category opposite their birth gender; they must have: undergone sex reassignment surgery, taken hormone therapy for two years to block or trigger testosterone, and provided legal recognition of their change from their native country. That third requirement



is problematic, Teetzel says, since it excludes athletes from less liberal countries whose governments refuse to recognize sex change. “It's progress. It's attempting to be inclusive but it's not perfect.”

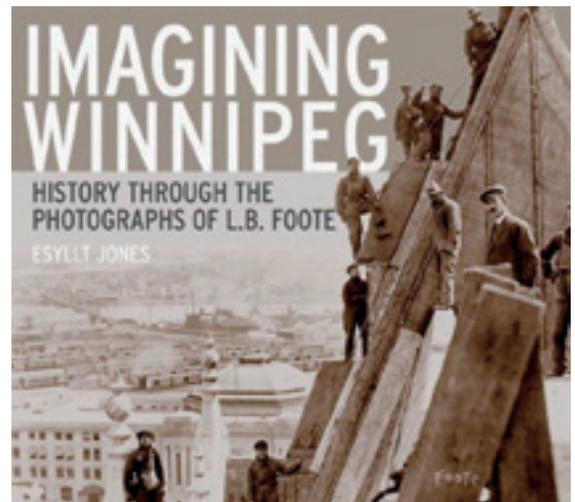
Within the field of sports ethics itself there are no perfect answers, she adds.

“But I find the questions fascinating.” ■



BOOKS OF NOTE

History professor Esyllt W. Jones' book *Imagining Winnipeg: History through the Photographs of L.B. Foote*, published by University of Manitoba Press, won top honours for Best Illustrated Book of the Year at the 2013 Manitoba Book Awards event. It was nominated for four Manitoba Book Awards: McNally Robinson Book of the Year, Best Illustrated Book, Carol Shields Winnipeg Book Award, and the Mary Scorer Award for Best Book by a Manitoba Publisher.



The book explores the photographs of Lewis Benjamin Foote (1873-1957). As Winnipeg's pre-eminent commercial photographer, Foote documented everything from royal visits to deep poverty, from the building of the landmark Fort Garry Hotel to the turmoil of the 1919 General Strike.

Incorporating 150 photographs from the more than 2,000 images in the Archives of Manitoba Foote Collection, the book challenges our understanding of visual history and the city we thought we knew. Jones is also the author of the award-winning *Influenza 1918: Death, Disease and Struggle in Winnipeg*.

U of M writers racked up a substantial proportion of this year's Manitoba Book Awards. Of the 13 awards handed out at the event,

eight went to writers associated with the U of M.

Graduate student Kristian Enright took two prizes, one for most promising Manitoba writer and the other for best first book. *Sonar* (Turnstone Press) wrestles with language, mental health and identity through the eyes of an artist boxed in by tradition. Besides his status as a PhD candidate in the department of English, film and theatre, Enright is also an alumnus (MA, English, film and theatre) of the U of M.

Jonathan Ball, an instructor in the department of English, film and theatre, won the Aqua Books Lansdowne Prize for Poetry for his book *The Politics of Knives* (Coach House Books). The collection uses mirrors and cutting imagery alongside takes on Hitchcock's films. Says

Ball on his work, "I am an oddity as a writer in that I often mimic avant-garde techniques (in this case, the "cut-up" technique) rather than actually executing them. I also tend to be densely allusive [in my work]."

Also in the design category, *Warehouse Journal Vol. 21*, edited and designed by students Nicole Hunt and Brandon Bergem, U of M Faculty of Architecture, took the Manuela Dias Book Design of the Year award.

The Manitoba Book Awards were established in 1988 and are annual awards that celebrate Manitoba writers, publishers and books.

For other books published by U of M faculty members visit researchlife.ca

Weaving the Dream

BY JANINE HARASYMCHUK

Heavy rainfall pours through the broken roof in a small hut that a family calls home in a Bangladesh community. They huddle together on the floor, their arms wrapped around each other for warmth and security—the deluge could easily make them wet and cold throughout the night and day.

This first-hand account from professor Emdad Haque at the Natural Resources Institute was an awakening for him and drives his passion for his research, which focuses on how people address environmental and resource problems.

Haque is originally from Bangladesh and since 2007 has worked with community partners in that country through funding from the Department of Foreign Affairs,

Trade and Development (formerly Canadian International Development Agency) to find ways to improve the lives of local women and their deteriorating environment.

“Canada is one of the richest countries in the world and we have some global responsibility in terms of supporting humanity and other development causes,” says Haque.

He and film director M.S. Rony found an innovative way to use the knowledge they acquired during the course of their research by presenting their results in a docu-drama-oriented film entitled *Dream Weavers*. The film depicts the lives of women in Bangladesh (portrayed by actors in the film) and the transformation that can take place through the use of micro-credit programs. The Association of Universities and College of Canada funded the project.

“The film shows how the invisible connection of minds follows a single



dream: to live better with sustainability,” says Rony.

“In essence, it captures the struggles and triumphs of women and men of Bangladesh,” says Ryan Klatt, who acted, edited and led cinematographic work of the film.

Haque adds: “By using micro-credit to reduce poverty these women can be successful, but not only in economic terms but also to conserve their vital natural resources and preserving the environment,” says Haque. “The film captures lessons that can be adopted by other developing countries and societies in Africa, Asia and other parts of the world.”

“They are courageous women who are innovative. They help themselves to weave dreams and help others to weave their own dreams,” says Haque. ■

Still images from the docu-drama *Dream Weavers*, filmed in Bangladesh.



BY KATIE CHALMERS-BROOKS

LIFE & DEATH

Researchers (and moms) Maryanne Crockett and Lisa Avery talk about their fulfilling—and frustrating—journey to keep new mothers and their babies alive on the other side of the world

The drug misoprostol is cheap, easy to administer and has a long shelf life. And it could have saved the young woman who died in a Kenya hospital after giving birth to a healthy baby boy.

With her husband at her side and only in her 20s, she bled to death from a post-partum hemorrhage.

The loss hit hard for her loved ones—and for Manitoba-born Lisa Avery, then an obstetrics resident in the East Africa hospital. She resented how the quality of care varied hugely depending on where you happened to live in the world. She knew the woman would have survived had she been in Canada, even though she was at a greater risk because of her anemia.

Still today policies supporting misoprostol for postpartum hemorrhage lack in the developing country due to concerns the drug will be misused for the termination of pregnancies. It's meant to be used to help prevent gastric ulcers. "It was never intended to be used for postpartum hemorrhage but we know it works," says Avery, who now practices in Winnipeg. "The hospital (staff) did everything they could to save this woman. They just had limited medication and limited ability to do more than they were doing."

For Avery, the woman's death was a turning point. While venting to a colleague about what she had witnessed Avery was told she sounded like a public health specialist, someone who wanted to go beyond clinical work and actually direct policy and practices from a higher level.

Today that's what she and fellow doctor Maryanne Crockett do with partners and researchers in Kenya and India, with projects whose combined funding tops \$10 million.

Sitting with Crockett in the lunchroom of the U of M's Centre for Global Public Health during a visit from her maternity leave, Avery admits she can still see the face of that heartbroken husband. "You never forget it," she says, her two-month-old son Samuel asleep in her arms.

Crockett, a pediatrician at Children's Hospital, also has a memory of a patient that won't leave her. The small Guyana hospital where she was a second-year medical student wasn't equipped to help a woman whose baby wouldn't come out despite hours and hours of pushing. The



woman's options? Stay there and probably die; go to a larger hospital but risk her life on the hour-long, treacherous bus ride required to get there; or opt for a shorter journey but aboard a bicycle. She chose the bus; but the medical staff couldn't alert the larger facility that the woman was en route or even make sure someone would be there to help. "I wonder what happened to that mom and that baby? There was no guarantee that either of them was going to survive," says Crockett, an associate professor in the departments of pediatrics and child health, and medical microbiology.

In many countries having a child remains a high-stakes game. In Kenya, 480 women die for every 100,000 births. In rural areas, that number can more than double to roughly 1,000 women. In Canada it's a different story with a maternal mortality rate of approximately eight women for every 100,000 births. "That's a huge difference," notes Avery, who's an assistant professor in the departments of community health sciences; obstetrics, gynecology and reproductive sciences; and medical microbiology.

Much of her and Crockett's work focuses on saving the lives of women and their babies in rural regions of Kenya and India where barriers to accessing care are significant and the quality of care, variable.

The obstacles that stand between women and the medical care they need for themselves or their unborn (or newborn) child—like the distance to health facilities, transportation, knowing when to seek care and the cost—can be overwhelming so they might choose to stay home and wait it out. Getting help may even require walking at night through terrain inhabited with elephants and lions. And when they do reach care, it isn't always adequate. The quality of training for nurses and doctors can differ greatly, even within a country, and limited resources affect the supply of health-care providers, drugs and equipment.

The result of all of these compounding factors? Children in these parts of the world are dying of diarrhea, pneumonia and malaria; and their moms are dying of post-partum hemorrhage



Lisa Avery



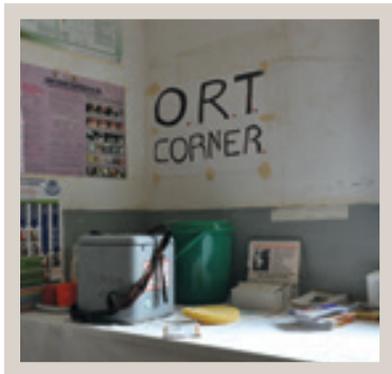
Lisa Avery

and seizures from high blood pressure. "Perhaps the most disturbing thing about maternal, neonatal and child health is that the causes of death for both women and babies are very well known, easily treatable, easily preventable (conditions)," says Avery. "Globally, post-partum care remains this huge gap even though it's a crucial time to actually be able to save lives."

She explains that in the regions of Kenya and India where they have projects, data from their initial assessments found less than 15 per cent of

women stay in a hospital or clinic—or receive care from a midwife or community health worker—during the 48 hours after delivery, yet this is when you see the most maternal deaths. More than 40 per cent of deaths among children under five happen within the first month with three quarters occurring in the first week of life and more than half of those in the first day.

"It's a big contrast with here where people are building nurseries and having showers before the baby is even born. In most low-resource settings you wouldn't



see that. And it's not because children aren't loved or celebrated or wanted, it's just because there is still a very strong chance of dying," says Avery.

In India, when a child turns one it's a big celebration, Crockett says, "because to get to that first birthday is a huge success."

But now fewer infants are dying within their first crucial seconds. Avery and Crockett discovered a heart-wrenching oversight while investigating gaps in care in India: the hospital staff responsible for delivering babies were not consistently making attempts to resuscitate those babies born not breathing. They were declaring the infant stillborn, not realizing the child was not in fact dead but rather in need of stimulation to trigger its first breath. Crockett explains there is that golden minute when a baby is born when the simple contact that comes with cleaning and drying the baby will prompt the infant to breathe. If that doesn't work, nurses can use a small bag to breathe a bit of air for them. These key steps work most of the time, she says.

"We were seeing that even though people were graduating with the appropriate titles they didn't always have the skills required to deliver maternal, newborn and child health services as well as they could have," says Crockett.

These life-saving solutions seem simple but making them reality and routine for an entire region—and one day every region—is complex.

Take a commonplace ailment like diarrhea. To effectively help a child with this illness (which is often from drinking bad water) some vital steps have to happen: the parent needs to know enough to recognize the problem and bring the child for help (and in the meantime keep the child hydrated); the doctor needs to make the right diagnosis and then provide the right fix (hydration and zinc lozenges, which decrease the risk of complications); and that treatment needs to be accessible. "Most of the things that kill women and children don't require the degree of technology that we have here," says Crockett, who specializes in infectious diseases and treats some of Manitoba's sickest kids: those with meningitis, lung infections and sepsis. "That's what's frustrating, that it's simple. It's simple if you break it down to: 'You just need this.' But it's how you get that zinc lozenge in the mouth of the child that has diarrhea."

She and Avery tackle this mountain with their on-location teams by solving problems on two levels—in the facility (at hospitals, clinics and pharmacies) and in the community.

The projects they work on promote packages of 'interventions' that health care providers should use when caring for their patients along the continuum of care from pre-natal to pre-schooler. They outline can't-be-missed services that need to be offered to women and children and detail at what stage to do so. In India, their team helped develop a mentoring program that uses trained nurses—called maternal mentors—to tour health facilities and teach and support local nurses and doctors. They focus on key skills like how to properly use a partograph (a tool that monitors the progress of labour) and how to resuscitate a newborn baby who is not breathing. In Kenya they have worked within the government system to train community health workers who travel by bike around remote areas, to identify and follow local women and their families, and chat with them about health

issues—like the danger signs to watch for during pregnancy.

They've also developed a kitchen garden program where these women are taught to grow the vitamin A and iron-rich foods their diets lack. Eating well is especially important for HIV-positive families; the research team discovered

some parents won't take their kids to Kenya's specialized HIV/AIDS nutrition programs for fear of discrimination.

Avery and Crockett emphasize how important it is to recognize that each region has its own problems and requires a customized, evidence-based plan. They say they've watched other projects, well-funded but

with little academic rigour, come and go with no lasting impact or success since the work didn't fit the context of what was happening or what was needed. They insist a successful strategy also aligns with a given government's platform. In India, their team provides technical support to the National Rural Health Mission launched in 2005 by the Indian government to reduce death and disease in women and children in remote areas. This government took several innovative approaches including providing an incentive to women—money—to get them to deliver their babies in hospitals instead of at home.

In Kenya, President Uhuru Kenyatta's forward-thinking policies give Avery hope; this summer, he declared all maternity services should be free.

Both women say being a mom has made them better doctors and researchers.

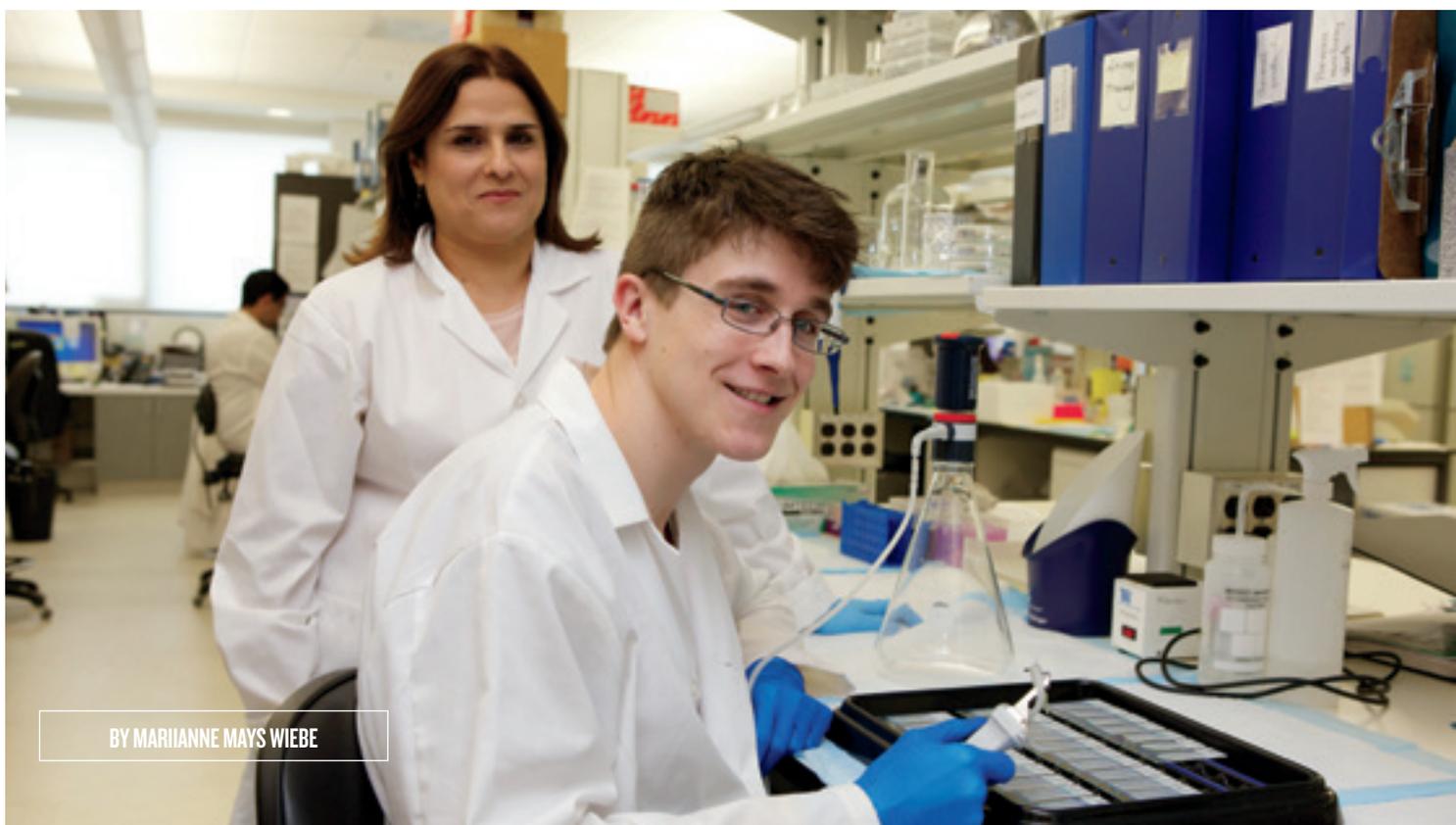
"When you go through pregnancy and go through labour and you have this little being put onto your belly, you really do feel that intense love and I can't imagine how devastating it would be to then lose that little being," says Avery.

"Yet it's the reality for many women around the world," adds Crockett. "It's almost an expectation that they'll lose at least one or more children because that's what happens."

But with the right solutions in place, Avery insists, it will happen less.

"And for the mother and family, that means all the difference in the world." ■

In India, when a child turns one it's a big celebration, Crockett says, "because to get to that first birthday is a huge success."



Daniel Gwozdz

BY MARIANNE MAYS WIEBE

THE PURE PASSION OF RESEARCH

Undergraduate research poster competition

Chemistry student Alexandra Ciapala rapidly explains the use of a breakthrough sub-cellular Infrared imaging that works with chemicals. The finer points of Fourier infrared transform spectroscopy (FTIR) spectrochemical 3D imaging (and they are almost all finer points) are complex.

She most certainly knows her stuff. Ciapala is young, a bit nervous—and incredibly passionate about the pure beauty she sees in her topic. When she learns that the story will appear on the U of M news site, she lights up. “Oh good!” she says. “Because I’d like to advertise this a little, too. I really want other people to know about it. It’s a methodology that can be used for a lot of different research.”

Her poster went on to win third prize in the Natural Sciences category.

This is the annual Undergraduate Research Poster Competition, an event that gives the undergraduate students the opportunity to present research posters. Many of them are awardees of Undergraduate Research Awards, and the posters they are presenting are the result of research they’ve conducted with their advisors at the U of M over the past summer. For most of the 120 undergraduate participants, this is their first foray into major research, and the Oct. 30 event was their first chance to present a research poster with the findings of their research projects.



Mike Latschislaw

(top) Undergraduate Research Award recipient Daniel Proulx with researcher Sahila Karimi, at work in summer 2013. (above) Alexandra Ciapala answers questions at the competition.

In addition to the high calibre of posters on display, one of the striking things about the event is the breadth and variety of research. There are posters entered in five categories: applied sciences; health sciences; natural sciences; social sciences/humanities; and creative works. The research uses quantitative analysis, qualitative analysis or experimental research methodologies.

For instance, John Bryans, a third-year undergrad in the Faculty of Kinesiology and Recreation Management, whose poster “Body Royale: Aesthetic Ideals and Men’s Bodies in the Performing Arts” took top prize in the Qualitative Research Group category and second in the Social Sciences/Humanities category. He worked with

Moss Norman, an assistant professor in the faculty who researches body image of men and boys; Bryans was one of the recipients of an Undergraduate Research Award for the project.

His research was initially motivated by his own experience. Bryans has a background in the arts; he worked as an actor for eight years in Toronto. In his profession, he felt the pressure to conform to a certain male ideal, he says. He wanted to look further into how physical ideals had evolved over the past 30 years, and the impact of that physical ideal on real men. He interviewed 12 men in the performing arts, whose professions included acting, performing and dancing.

He explained how his qualitative research fit into kinesiology. “In kinesiology we’re often looking at health in terms of exercise and nutrition for sport,” he says, “but for those in the performing arts, there is a performance aspect that transfers over to some of the kinesiology issues.”

“Men in the performing arts are nicely positioned to speak to body image because the body is central in their work. Their work is often contingent on how they look and their appearance.”

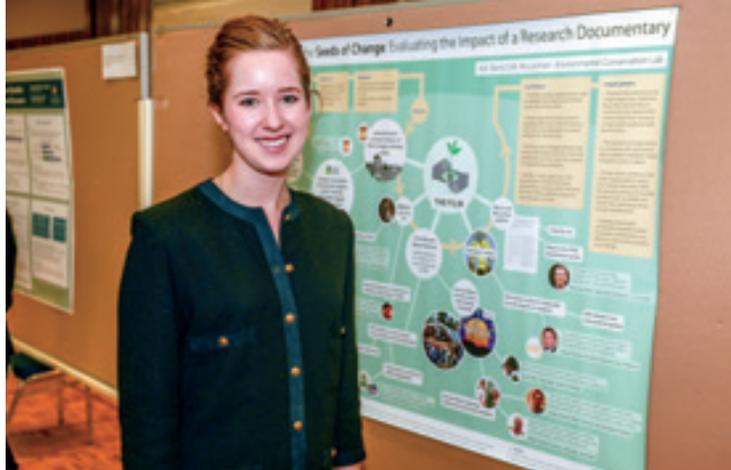
Bryans’ poster compares the male body ideal in James Bond from 30 years ago (Sean Connery) to the James Bond of today (Daniel Craig). “Today, the ideal for men is muscular, zero per cent body fat—and there’s not a lot of variation in body type,” he notes, “even for men who aren’t playing an action role like James Bond. You have to be a certain body type; this perfect archetype.”

The ideal results in pressures for these men in terms of their health practices and nutrition, as well as their mental health, he adds. The pressure of having to live up to these ideals, he says, “adds anxiety to a profession that’s already filled with pressure and anxiety, as I can attest. It has an effect on general health, including the impacts of guilt and shame.”

He plans to expand his study across the performing arts. The research he’s conducted will be submitted to an undergraduate journal and presented at a conference. He says that the poster competition, his first, increased his confidence in synthesizing and presenting his research. “I definitely wanted [the research] to have a life beyond this summer, which is why I did the poster competition. It was a great experience.”

Down another row, Colin Desmarais stands in front of his mathematics poster, “Negacyclic Weighing Matrices.” He handily explains the details of combinatorial matrix theory in his project. Another recipient of an Undergraduate Research Award, Desmarais worked with Robert Craigen, an associate professor in the department of mathematics, Faculty of Science. Desmarais says that he “fell in love” with the topic he had been assigned by Craigen, and spent the rest of the summer researching.

Natalie Baird, whose poster “Planting the Seeds of Change: Evaluating the Impact of a Research Documentary” took first place in the Social Sciences/Humanities category, was interested in the role of film and creative media in communicating or educating about environmental topics. She worked with Stephane McLachlan, a professor in the department of environ-



Mike Latschislaw



Mike Latschislaw

ment and geography, Clayton H. Riddell Faculty of Earth, Environment, and Resources.

Chemistry student Daniel Robinson presented his poster, “Syntheseis of Modified Proline Building Blocks.” It was his first summer of research, after three years of undergraduate work. He enjoyed the hands-on experience of research. “You get to do something. It was fun to go out and make these molecules,” he says. He worked with Frank Schweizer, an associate professor of chemistry and assistant professor of medical microbiology.

“Who Are You? Kin Recognition and the ‘Dear Enemy Phenomenon’ in Cape Ground Squirrels” was a poster presented by biology student Alyssa Archibald. She went to South Africa last summer with biological sciences associate professor Jane Waterman, whose research has focused on this species and on the selective factors that influence the evolution of sociality and mating systems. Archibald notes that the species is extremely social; her research was an experiment set up to further investigate the phenomenon—of paying more attention to a stranger rather than a kin, because the stranger is more of a threat—in this species.

The summer she spent in South Africa sparked Archibald’s interest in research. It was her first experience with research, and field research in particular. “From this project and from others we worked on this summer, I gained so many valuable field techniques. It was a steep learning curve, but I took a lot away from it.”

Digvir Jayas, U of M VP (research and international), notes that, “This competition is an opportunity for undergraduate students to sharpen their skills and showcase research findings to their peers and to the public.” ■

(top) Natalie Baird and (below) John Ryans with their winning posters.





BY ANDREA DI UBALDO

JUST DO IT

A plan to make our cities age-friendly is the *just* thing to do

Architecture professor Richard Milgrom's office is dominated by a large, rectangular oak table around which are six chairs. It evokes "dining room table" and the necessary mundane act of meal planning and preparation. Often the most important place in your daily life is at that dining room table, where all of your paths cross, where people talk and relate and solve problems.

Envisioning age-friendly societies, Milgrom takes his research from the table and into the community to focus on planning.

His reason for following this path was personal. His parents were aging.

"As they aged, I saw how difficult the environment can be to navigate," Milgrom recalls. "Older adults are seen as burdens. So, how do we maintain the life we have as long as possible? We should have thought about this long ago because we ALL get old."

Milgrom is currently associate dean (research) and head in the Department of City Planning.

In 2008, he began participating in the Age-Friendly Communities—Active Aging Alliance as a researcher and project steering committee member. This five-year, \$1 million, Social Sciences and Humanities Research Council (SSHRC) funded Community University Research Alliance (CURA) project is based out of the U of M's Centre on Aging. The project's goal was to make cities and towns better places in which to grow old.

Looking at cities' sprawl patterns, it became apparent to Milgrom that the elderly were not factored in when planning new suburbs.

“If a senior living in the suburbs loses their drivers licence, becomes disabled or maybe the kids move away, they are housebound,” Milgrom explains. “Often, there aren’t any grocery stores or health centres within a reasonable walking or bussing distance.”

Milgrom, who either rides his bike or takes the bus to work, has been examining the relationship between city planning and human rights by analyzing how the design of a city impacts the health and well-being of its inhabitants.

Milgrom’s work also addresses some of the obstacles hampering the creation of age-friendly environments in Winnipeg. This comprises those that are rooted in current planning practices, including who is consulted in the preparation of plans.

“We largely know what would make a good community,” he says. “The challenge is how to implement it politically, physically and economically. People don’t want to think about getting older.”

Milgrom works with researchers at the Centre on Aging from a variety of different fields; including health, sociology, kinesiology and policy. He says aging is interdisciplinary by nature, but we don’t usually think about in the built environment.

“Now, we inform each other and help each other find the language to talk to different disciplines and groups about age-friendly environments.”

As part of this research, Milgrom has organized Graduate Planning Studios where graduate students explore questions around why organizations that serve older adults are not consulted in planning processes. They look at towns in Manitoba and look at their age-friendly benefits, challenges and how they can be improved.

Milgrom says Gladstone, Manitoba is using age-friendly as a way of attracting people back to the town because it had been shrinking and aging at the same time.

“Seniors are returning there because they have good, affordable

housing, lots of services and it’s just a positive community for older adults.”

Other towns, he says, have good main streets, but their centres have been gutted as big box and highway related stores are built on the edge of town creating a co-dependence on accommodations and transportation.

Some of the students’ work has revealed that seniors’ organizations are not usually recognized by municipal planners, but also that the organizations need to improve their understanding of the importance of planning and the built environment in ensuring independent living as long as possible.

“My short-term goal is to get politicians and planners to talk more about this,” Milgrom says. “We have an affluent, well-educated aging population that wants to stay independent for as long as possible. By talking, we’ll figure out how we can engage older adults to make cities better for everyone.”

“We need to look at what would make a good city: a walkable community, with choices in housing, transportation, amenities, places to socialize and shop.”

Milgrom says it has been challenging to get attention from the City of Winnipeg on the subject of age-friendly communities.

“They (city council) are only interested in short-term things like snow-shovelling. You can have Band-Aid solutions like a seniors’ centre, sending shuttles to stores, but why can’t we have incentives for building grocery stores within walkable distance, like the City has proposed subsidies for the building of parking structures downtown?”

His long-term goal, simply put, is to make age-friendly cities. Milgrom explains that to make a city viable is to have walkable populations with people at both ends of the age spectrum.

“We need to look at what would make a good city: a walkable community, with choices in housing, transportation, amenities, places to socialize and shop. Ultimately, we need to layout and plan differently, and the key to this is choice.”

According to the World Health Organization’s *Global Age-Friendly Cities: A Guide* published in 2007, an age-friendly community is one that provides support and opportunities in eight areas: outdoor spaces and buildings; transportation; housing; respect and inclusion; social participation; civic participation and employment; communication and information; and community supports and health services.

While Osborne Village is not his ideal community, according to Milgrom it is one of Winnipeg’s most age-friendly communities.

Spandex leggings and sushi might not be your grandma’s cup of tea, but Osborne Village was named Canada’s greatest neighbourhood by the Canadian Institute of Planners as part of the 2012 Great Places in Canada contest to “recognize the special places that Canadians love most.”

“The retail isn’t all ideal for older adults, but everything is within walkable distance. There’s a mix of population type, transportation and land uses,” Milgrom explains. “It gets rid of car-dependence.”

Changing cities takes time, but in his spare time Milgrom speaks to groups on age-friendly topics. He rode his bike to one presentation he was giving and there was nowhere for him to lock it up.

“It’s funny because I was there to give a talk about active aging,” he laughs. “It was interesting because they said they have a group of seniors from the Chinese community that ride (bikes) there every week but the organization had never thought about installing locks. When we think about older adults, we don’t



Mike Latschislaw

think about cultural differences. We think of them all as just old.”

He hopes to explore the cultural dimensions further by travelling to different countries to research how they accommodate their aging populations.

In addition to his research on age-friendly communities, he is also interested in the redevelopment of public housing, neighbourhood planning and community participation, and social and environmental impacts of mega-events.

Milgrom is a member of the Canadian Institute of Planners and Manitoba Professional Planners Institute, the Manitoba Association of Architects, the Planners Network and Planners Network Manitoba,

and the International Network of Urban Research and Action. He served as a technical expert for the University of Manitoba’s Visionary (re)Generation Open International Design Competition, opening the door to the creation of a new Fort Garry campus plan.

Milgrom’s department is developing a graduate specialization in Indigenous planning and design.

“It’s impossible to talk about social justice planning without looking at Indigenous communities and how they have been treated,” Milgrom says. “My hope is that it’s something people in other areas [of study] will take as well.”

Milgrom’s work in the near future is moving towards visualizing how

already-built environments might be modified to better accommodate active aging. The current graduate studio that he is leading is examining existing situations in three rural communities and, in consultation with local organizations, will develop and illustrate active aging planning and design ideas to make appropriate improvements. The results will be presented at the Manitoba Planning Conference in February and will eventually be available on a website providing examples that can be used by groups in other places.

“Social justice has always driven my research,” Milgrom states. “We’re abandoned at the end of life. This is a just thing to do.” ■



Twilight Navigation (detail) by Bev Pike, 1992, 8'x20', gouache on paper. Photographed by Sheila Spence

Critical Conversations on Sexual and Reproductive Rights

This seminar series organized by the Centre for Human Rights Research for 2013-14 features U of M researchers and others from a range of disciplines who work on issues related to the ability of individuals to exercise control over their sexual, gendered and reproductive integrity. Seminars are usually on Mondays from 2:30 to 4 p.m. in Room 206, Robson Hall (Faculty of Law) on the Fort Garry campus. All are open to the public.

Visit chrr.info for a detailed listing of speakers. ■

Fragile Freedoms

LECTURE SERIES

THE GLOBAL STRUGGLE FOR HUMAN RIGHTS

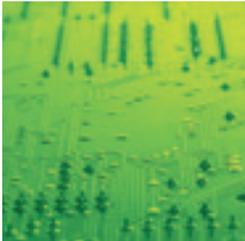
Presented by the U of M Centre for Professional and Applied Ethics, Canadian Museum for Human Rights and Canadian Broadcasting Corporation

Date	Speaker	Topic
Sep. 16, 2013	SOLD OUT A.C. Grayling	Human Rights: past and future
Oct. 25, 2013	SOLD OUT Martha Nussbaum	The capabilities approach to human rights
Nov. 13, 2013	SOLD OUT Kwame Anthony Appiah	Culture, identity and human rights
Jan. 20, 2014	John Borrows	First Nations and human rights
Feb. 25, 2014	Baroness Helena Kennedy	New human rights challenges for the 21st century
Mar. 28, 2014	SOLD OUT Vandana Shiva	Earth rights are human rights
Apr. 10, 2014	Steven Pinker	A history of violence and humanity
May 14, 2014	SOLD OUT Germaine Greer	Women and the struggle for human rights

Ticket and event details: fragilefreedoms.com



We would like to thank our generous sponsors:
 The Asper Foundation; Canad Inns; Government of Manitoba;
 Friends of the Canadian Museum for Human Rights;
 Inn at the Forks; Mauro Family Foundation; Winnipeg Free Press



BY THE NUMBERS:

- 73** endowed & sponsored research chairs – including 46 Canada Research Chairs and the highly competitive Canada Excellence Research Chair

- 51** research centres, institutes and shared research facilities

- 45** Royal Society of Canada Fellows

- 8** National Synergy Awards for Innovation

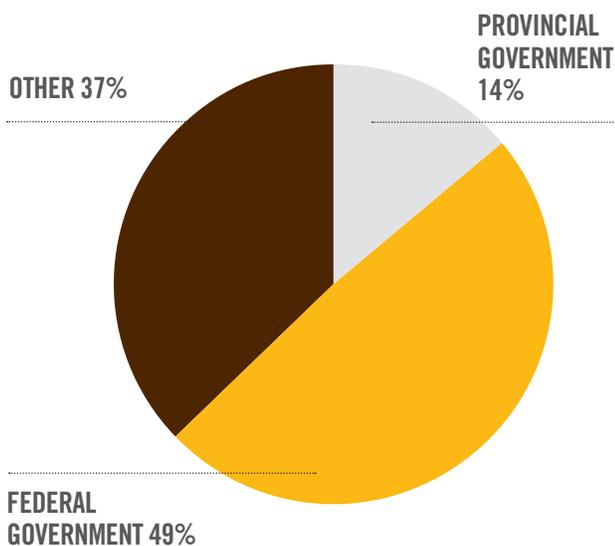
- 8,716** staff (2012/13) – 4,754 academic staff; 3,962 support staff

- 29,759** students – 25,363 undergraduate; 3,748 graduate

- 13%** of students are international, representing 104 countries

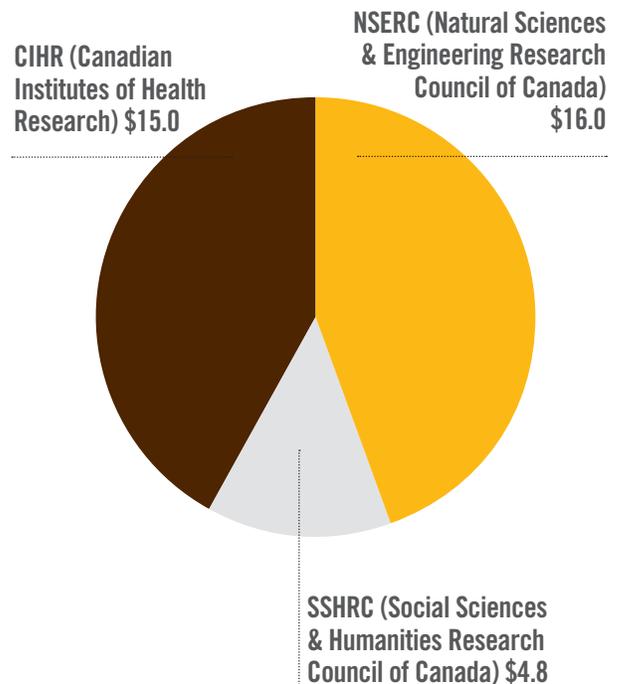
- \$604.0** million annual operating budget (2013/14)

SPONSORED RESEARCH INCOME BY SOURCE 2012/13



TOTAL: \$136.8 MILLION

TRI-COUNCIL FUNDING 2012/13 (\$ MILLION)





The General Synod Archives, Anglican Church of Canada: P1538 (136)

An archival photo from the Truth and Reconciliation Commission of Canada. See related stories on pages 4 and 14.