

FALL 2013

ON MANITOBA

CONNECTING ALUMNI AND FRIENDS OF THE UNIVERSITY OF MANITOBA

OVIDE MERCREDI

2013 Distinguished
Alumni Award Recipient

OPENING PATHS TO HEALING CONVERSATIONS

U of M to house National Research
Centre on Residential Schools

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UPCOMING EVENTS

CAFÉ SCIENTIFIQUE EVENTS – MCNALLY ROBINSON BOOKSELLERS

THE BATTLE AGAINST THE FLU VIRUS

Oct. 24, 7 p.m.

Every year many Canadians are afflicted with the seasonal influenza resulting in economic loss, a substantial number of hospitalizations and deaths. Join our research experts for the latest on the fight against the flu, from diagnosis to prevention and the development of a better flu vaccine.

PRACTICAL SOLUTIONS FOR DEVELOPMENTAL DISABILITIES

Nov. 19, 7 p.m.

Moving research knowledge from the researcher to the hands of those who need that information can make a difference in the lives of those who have developmental disabilities. Join our expert panelists to learn about their research partnership and findings.

HEART FAILURE: PREVENTION, TREATMENT & TRANSPLANTATION

Jan. 13, 2014, 7 p.m.

Come meet five U of M physiology graduate students exploring important research areas related to heart health. Canada's next generation of medical researchers will share information on functional foods that help lower blood pressure, recent advances that can improve heart attack survival rates, and better ways to preserve donor hearts.

BISONS SPORT HOME OPENERS

BISONS MEN'S HOCKEY

vs. Alberta Golden Bears
Oct. 4, 7 p.m., Max Bell Arena

BISONS WOMEN'S HOCKEY

vs. Mount Royal Cougars
Oct. 18, 7 p.m., Max Bell Arena

BISONS MEN'S VOLLEYBALL

vs. University of Winnipeg
Oct. 25, 8:15 p.m.
Investors Group Athletic Centre

BISONS WOMEN'S VOLLEYBALL

vs. University of Winnipeg
Oct. 26, 8:15 p.m.
Investors Group Athletic Centre

BISONS WOMEN'S AND MEN'S BASKETBALL

vs. University of Northern B.C.
Nov. 1, 6 p.m. and 8 p.m.
Investors Group Athletic Centre

ARTS AND CULTURE

CONCERT I - Featuring soloist

Bronwen Garand-Sheridan and the
University of Manitoba Symphony Orchestra
Oct. 7, 7:30 p.m.

Westworth United Church

1750 Grosvenor Ave.

Admission: general \$15, students \$5

WIND ENSEMBLE AND CONCERT BAND PERFORMANCE

Oct. 18, 7:30 p.m., 9 p.m.

Mennonite Brethren Collegiate Institute

160 Riverton Ave.

RINALDO

Presented by OPERA THEATRE and the
University of Manitoba Symphony Orchestra
Nov. 20 and 21

St. Andrew's River Heights United Church

255 Oak St.

CHAMBER ENSEMBLES

Nov. 28, 7 p.m.

University of Manitoba - Fort Garry

Marcel A. Desautels Music Building

65 Dafoe Rd., Room: Eva Clare Hall

LION IN THE STREETS

Presented by the Black Hole Theatre Company

Nov. 19 – 23, 26 – 30

By Judith Thompson Directed by Ivan Henwood

University College

210 Dysart Rd.

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Reserve by Email: tickets@bhct.ca

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Alumni



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How are U of M researchers tackling the issues plaguing Lake Winnipeg?

Writer **Sarah Richards** explores the problems and solutions from high above the earth, on the water's surface and in the depths below



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As the Bisons and Bombers kick-off their first seasons at Investors Group Field, we profile some of the alumni, students and staff who will help write the next chapter of football in Manitoba



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With five decades of experience in medicine, Dr. Arnold Naimark [BSc(Med)/57, MD/57, MSc/60] shows no signs of slowing down; after 25 years of helping the U of M meet the evolving needs of its students, Lynn Smith [BPE/71, CertEd/72, BEd/74, MPE/86, PhD/91] says farewell

“YEAH UNIVERSITY OF MANITOBA!”

Dear Shamona,

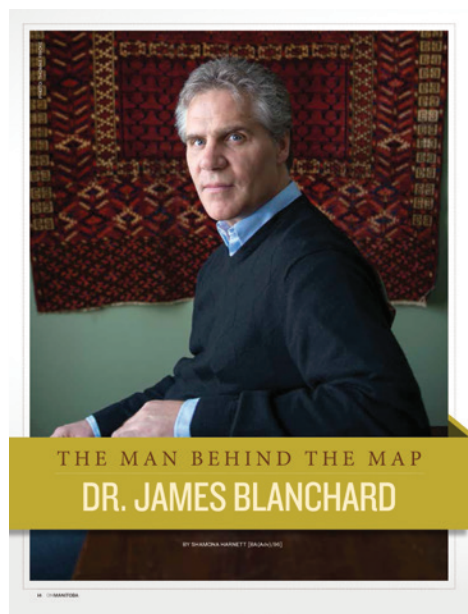
I read with considerable interest your well-written article on my wonderful classmate Dr. James Blanchard. It is a delight to see how he is putting his extraordinary talents to use in the relief of suffering and to the betterment of mankind—worldwide! Yeah University of Manitoba!

Similar to Jamie, I also obtained a superior education as a physician (in Jamie’s class) in the Faculty of Medicine at the University of Manitoba.

Sincere best wishes,

Kenneth R. Kunz MD [MD/86]

WEB EXTRA! *On Manitoba* caught up with Dr. Kunz and you can learn more about him on our website at umanitoba.ca/onmanitoba.



“I DESIGN ENGINEERS AND IT’S LIKE ANY DESIGN, WHEN IT WORKS, YOU’RE PROUD OF IT,”

This notable quote is courtesy of Engineering Prof. Emeritus Ron Britton, who recently received the Meritorious Service Award from Engineers Canada. Britton is considered one of the principal leaders in the re-birth of engineering design instruction in Canadian engineering schools.



From left: Alan [BComm(Hons)/82], Alexis [BA/13], Tasha and Wanda Prychitko [BA/87, BRS/89]

ALL IN THE (U OF M) FAMILY

I graduated from the University of Manitoba with my BA and my bachelor of recreation studies. I joined a campus sorority—Zeta Tau Alpha—in 1981, where I met several lifelong friends; one of whom introduced me to her cousin, a graduate of the U of M commerce program. We dated, married (it’s almost 25 years now), and have three wonderful children. Our eldest daughter graduated from U of M with her BA in spring, with hopes of entering the Faculty of Education. Our middle daughter has already been accepted to the Faculty of Science straight from her high school I.B. program. Our youngest son assumes he will attend the U of M as well—it’s all he’s ever heard about. His three uncles and four older cousins have also attended the U of M. I think it’s safe to say that the University of Manitoba has been an important part of our lives for a very long time, and will continue to be a positive aspect of our childrens’ education; many thanks.

Prychitko, Wanda [BA/87, BRS/89]

SHARE YOUR GOOD IDEA WITH US

Entrepreneurs around the globe drive innovation in everything from the financial services industry to the media, education to electronics, and cars to clothing. And since 1984, the Associates of the Asper School of Business have celebrated such individuals with their annual **International Distinguished Entrepreneur Award (IDEA)**. Today, the Associates are reaching out to alumni, asking you for your best IDEA candidates. Who would you recommend to join an esteemed list of past winners that includes Izzy Asper, Heather Reisman, Sir Richard Branson, Li Ka-shing and 2013 recipient Chip Wilson, Founder and CEO of Lululemon Athletica? Share your recommendations with Taralee Turner at tturner@associatesmb.ca.

SYNCOPTION

BY JEREMY BROOKS [BA/98]

JAZZ STUDIES ALUMNUS HEADS TO NEW YORK TO PURSUE MASTER'S

A salvo of snare-fire launches from Curtis Nowosad's drum kit, shattering the silence of Eva Clare Hall in July. Elements of Dave Brubeck's *Take Five* bubble up from the boil of his drumsticks, the mayhem of a John Bonham-like solo comes next. You can't help but bob your head in time with his riffs, all the while thinking to yourself, man this guy is good.

A lot of people feel that way when they hear 25-year-old Nowosad [BJazz/11] play.

Earlier this year, his auditions for the master's programs from two of the 'heavies' in the performing arts teaching world—New York's Manhattan School of Music (MSM) and The Julliard School—resulted in offers from both.

Julliard was ready to pay two-thirds tuition (as high as they go according to Nowosad). MSM won out with a full-ride scholarship (about \$36,000 per year for two years) that included naming Nowosad one of the 15 Fellows of their Jazz Institute, which means he'll perform on behalf of the school in some of the city's finest venues, at festivals and on air.

"It's cool to be singled out that way," says Nowosad, sitting behind the same vintage drum kit that he's been wailing on since he was a 12 year old growing up in Charleswood.

Determination, and what he describes as lucky timing, led Nowosad to the U of M and the mentorship of Steve Kirby, who is director of jazz studies.

Kirby came to the U of M from New York around the time Nowosad was in high school and set to task on efforts to shed more light on Winnipeg's jazz scene. One of his traditions became the Monday Night Hang. The event let green horn jazz lovers like Nowosad share the stage with local jazz pros in front of a live audience. Nowosad says he only played half a song at the inaugural 'hang' before getting the boot, but it was enough to get him hooked.

"I had no idea what I was doing, but evidently Steve saw something in me, and would let me play every week, yelling stuff at me to do, or just to stop playing altogether," he says, adding that Kirby's high expectations for drummers comes from having played with some of the best in the world.

"Within a couple of years, I ended up [studying] here and being in the house band for the Monday Night Hang."

As for the impact Kirby has had on him and on the Winnipeg jazz scene?

"Oh man, I'm hesitant to say it's been everything," says Nowosad. "But it's been close."

"I had no idea what I was doing, but evidently Steve [Kirby] saw something in me ..."

PHOTO: JASON HALSTEAD [BPE/92]



I REMEMBER WHEN

H O M E C O M I N G 2 0 1 3

SEPTEMBER 23-29

JOIN ME AT THE UNIVERSITY OF MANITOBA'S HOMECOMING 2013

*Lee Anderson [BSchEc/63, Cert Ed/64, BEd/80]
is organizing her Home Economics reunion.
She's looking forward to renewing old
friendships and making new memories
when she comes back to campus.*

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Pushing the boundaries of **OUR COMMUNITIES AND OUR WORLD**

At the University of Manitoba, we are at our best when we challenge the status quo with the goal of bringing about positive change that benefits us all.

This edition of *On Manitoba* touches on the many ways our alumni and university community are taking on the most important issues facing our society.

At Homecoming 2013, we have the privilege of honouring Ovide Mercredi with the Distinguished Alumni Award. He is being recognized for his unrelenting pursuit of social justice for Indigenous peoples in Manitoba, Canada and throughout the world stretching back to his days at the University of Manitoba as president of Canada's first Native Students' Association.

At the University of Manitoba, we are committed to making Winnipeg a centre of excellence for Indigenous education and research, with Indigenous students, faculty and staff leading the way.

On National Aboriginal Day we signed an historic agreement with the Truth and Reconciliation Commission of Canada, making the University of Manitoba home to the National Research Centre (NRC) on Residential Schools.

This centre will help Canadians move forward on a path of reconciliation and healing as we recognize the brokenness of our shared history. We are proud that we will play a critical role in that reconciliation through hosting the NRC.

We are also grateful that we can count on the leadership and wisdom of alumni such as Mr. Mercredi as we move forward with the National Research Centre, our Pathways to Indigenous Achievement plan and issues that are critical to the success of our university, province and country.

While Mr. Mercredi continues to pursue the advancement of human rights and social justice, a group of scientists is focused on one of the most pressing environmental issues facing our province.

Earlier this year, the Global Nature Fund named Lake Winnipeg as its 'Threatened Lake of the Year 2013.' Even though the issues facing Canada's sixth largest freshwater lake are well known, this report from a respected global environmental organization serves as another reminder of the dire consequences resulting from the human abuse of this beautiful and valuable resource.

Researchers at the U of M including Don Flaten, Gordon Goldsborough and Margaret Docker are focusing their investigations on, among other things, practical ways to reduce

nutrient levels that promote the growth of blue-green algae that threatens the lake's health.

While it will take the collective effort of all of us to address this threat to the environment, I am proud our scientists are leading the way and providing us with tools to tackle this important issue.

These are exciting times at the University of Manitoba for our Bison men's football team as it begins its first season at Investors Group Field. Our student athletes will be playing in one of the most modern stadiums in North America. And thanks to alumni like David and Ruth Asper, they will play, train and learn in the best facility for intercollegiate football in Canada.

Others within our alumni community played a significant leadership role in ensuring the completion of Investors Group Field. This edition features individuals who championed this project that enhances the quality of life in our university, city and province.

A university education touches us in unexpected ways. This month, we profile Second World War veteran and alumnus Lou Howard as he reflects on the harrowing battlefield experiences of his youth, and how his university education helped him build a successful life after the War. We also connect with Monty Hall, the beloved game show host, as he recalls the act of kindness that allowed him to study at the U of M, and how it motivated him to help others.

I am inspired daily by the dedication of our outstanding faculty and staff. After more than five decades in medicine, president emeritus Dr. Arnold Naimark continues his leadership role at the U of M as director of the Centre for the Advancement of Medicine. His outstanding contributions were most recently recognized when he was named a 2013 inductee into the Canadian Medical Hall of Fame. He shares his reflections on his life and career in this issue of *On Manitoba*. Dr. Lynn Smith, the former executive director of student affairs, retired recently after an outstanding 25-year career. Dr. Smith explores her time at the University of Manitoba and how the student experience has changed in the past quarter century.

We are proud that you, our 130,000-member alumni community, continue to push the boundaries of our communities and our world. It is our privilege to tell your stories and to celebrate alumni like Ovide Mercredi, this year's Distinguished Alumni Award recipient.

DAVID T. BARNARD PRESIDENT AND VICE-CHANCELLOR

THE PATH FORWARD

FROM THE HEARTBREAK OF THE RESIDENTIAL SCHOOL SYSTEM COMES NEW HOPE FOR RECONCILIATION AND HEALING

Stories shared by thousands of former Residential School students will find a home at the University of Manitoba. The Truth and Reconciliation Commission of Canada (TRC) has chosen the U of M to permanently host a National Research Centre on Residential Schools, housing the statements, documents and other materials gathered by the Commission during its five-year mandate.

“(The centre) will serve as a constant reminder to all future Canadians. Rather than forgetting or denying this occurred, it will stand as a testament,” TRC Chair Justice Murray Sinclair said during the signing of the documents on campus this summer.

The Centre will preserve thousands of video- and audio-recorded statements from Survivors and others affected by the schools and their legacy; millions of archival documents and photographs from the Government of Canada and Canadian church entities; works of art, artifacts and other expressions of reconciliation presented at TRC events; and research collected and prepared by the Commission.

Scholars from around the world will come to the Centre to explore new pathways towards healing between Indigenous and non-Indigenous peoples.

Special guests and president David Barnard spoke about this historic step forward during ceremonies held June 21, National Aboriginal Day.



“This has been a pretty happy day. I want to acknowledge the strength and the incredible resilience of the survivors and following generations. I am so glad to be a small part of that journey; we still have a long distance to travel.”

– PHIL FONTAINE [BA/81, LLD/10]
FORMER NATIONAL CHIEF
OF THE ASSEMBLY OF FIRST NATIONS



“When we would leave for school on Sundays, Mother was not able to face us. I didn’t know it as a child, but she was a Survivor herself...It means a lot to us who are on this journey; we want to thank you for your tears for us, because we weren’t allowed to cry then.”

– ELDER FLORENCE PAYNTER [Med/91]
ELDER-IN-RESIDENCE AT THE U OF M



“We believe the National Research Centre will advance the critically important conversation about the relationship between Indigenous and non-Indigenous people that will help us move forward on a path of reconciliation and healing.”

– DAVID T. BARNARD
PRESIDENT AND VICE-CHANCELLOR

PHOTOS: DAN GWODZ



STUDENT RESEARCHER PUTS EAR TO THE GROUND TO FIND OUT HOW TO BETTER CONNECT ZOO, VISITORS

With pen and paper in hand, student researcher Allison Birch [BA(Geog) Hons/13] watches closely the hub of activity around the Assiniboine Park Zoo's frog exhibit. The species she's observing? Humans. "Most (visitors) think I'm observing the animals—not them—which I think is pretty funny," says Birch, a recent natural resources management grad and avid people watcher. She spent the summer eavesdropping on conversations at the frog, flamingo and ocelot exhibits in Toucan Ridge to find out how engaged zoo visitors are. Her goal is to provide insight on how to improve signage and create a more interactive experience, one that will get people talking about conservation.

The poison dart frog is an endangered species. In fact, there is "a global frog crisis," says Birch's supervisor, Prof. Mary Benbow.

Since 1980, 168 amphibian species have gone extinct after losing their habitat to factors like pollution and climate change. To get this message across you need to know how best to share it with the audience. "By being able to listen in, we may be able to capture the reactions that people have and provide the information to the zoo so they can create interpretative signage that will speak to the people's interests," says Benbow, an associate professor of environment and geography who is also acting dean of the Clayton H. Riddell Faculty of Environment, Earth, and Resources. She knows of a number of other studies in different fields that have used the unconventional technique: researchers have recorded museum guests as they navigated exhibits, a hospital tracked what clinical staff said about patients while riding the elevator. Benbow did a similar study at

the Toronto Zoo, gauging the interaction at the polar bear exhibit; she is on the interpretative team for the new Journey to Churchill exhibit scheduled to open in 2014 at the Assiniboine Park Zoo. Benbow was first inspired when she was touring a zoo in Wichita, Kan.; she was in the Midwest to help the American zoo redraw their map. Spending time at an unfamiliar zoo, she realized that as well as observing visitors and their habits, their conversations might reveal more complex ideas. Adopting this model, Birch only makes note of the conversations (about 50 daily) that relate to the exhibit. If visitors are chatting about something else—most often, mundane things like grocery shopping—she'll tune it out or wander to another area, as directed in the project's ethics guidelines. Signs are posted to let visitors know that by being in the exhibit area, they may be participants in the study.

The need to better understand the environmental challenges our planet faces has put zoos front and centre in recent years, says Benbow, who's been studying the social, cultural and environmental implications of zoos since the early 1990s. Increasingly, zoos aim to get people thinking about the big issues in the world. "I think a lot of people are still bewildered about the issue of climate change," she says.

Simple signage with interesting facts about the frogs ramped up interaction considerably, Birch says, moving comments from 'it's slimy' and 'oh, it's so gross' to observations about their South American home and how poisonous they are—and hopefully, how important it is to save the species.

STORY AND PHOTO BY
KATIE CHALMERS-BROOKS

SMARTPHONE 'SWIPES' JOIN SWATTS IN WAR ON MOSQUITOES

In between mosquito-mashing slaps to the neck this summer, Winnipeggers were swiping their smart phones to access a U of M-born app that tracks the irritating insects.

The free 'M Tracker' app for iPhone and Android-based mobile devices, designed by U of M computer engineering students

Chen Liu and Rory Jacob, invites users to note how bad mosquitoes are in a specific neighbourhood and generates a map of Winnipeg showing the results. Their professor, Bob McLeod, who teaches computer system modeling in the Faculty of Engineering, says the idea came from earlier work that monitored another kind

of bug. "We originally had been using software to generate contact patterns to model the spread of flu and flu-like symptoms in hospitals several years ago, and realized the same technology could be used to track mosquitoes," McLeod says.



THE GREAT EQUALIZER

Ovide Mercredi [LLB/77] sees himself as a defender of his people. A former National Chief for the Assembly of First Nations, he continues to transform Canada and himself (most recently as a poet and artist)

BY KATIE CHALMERS-BROOKS

A smile surfaces on Ovide Mercredi's face when he recalls the name of the U of M employee he encountered on his first, intimidating day on campus in 1970. Back then, Mercredi was one of only a few dozen Indigenous students among the thousands enrolled at the university. "I went to the registrar's office and met with a lady called Miss *White*," he says. "Can you believe that?"

The long-time Aboriginal rights advocate is quick to crack a joke. Sitting on the sofa in his West-End bungalow in Winnipeg, he explains how alien university felt. In those days, it didn't reflect his traditions or culture. "It was a strange place and an exciting place at the same time," he says.

Mercredi grew up on the trap line in Grand Rapids, Man., an isolated community accessible only by boat or plane. Early on he knew he was destined to be more than a shelf stocker at a downtown Winnipeg department store, the first job he got after moving to the big city. Miss White, the registrar's assistant, knew it too. She asked young Mercredi—whose first language was Cree—what classes did he want to take? He told her he liked "learning about different people" and she helped him secure tuition costs to enroll in sociology and anthropology. "She cared," says Mercredi. "That was important."

At the U of M, Mercredi would earn his law degree, and he would go on to become a national political leader. But his education in social injustice began much earlier: when Manitoba Hydro came to Grand Rapids to build a massive generating station. At 14, Mercredi witnessed his family lose their land, their log home, and the community lose their traditional territory for hunting, trapping and fishing. Until then, Mercredi didn't know what it felt like not to be the majority. It was an eye-opening introduction to power. "Prior to Manitoba Hydro, I didn't know what injustice was," he says. "I guess if people want to thank someone for the politicization of Ovide Mercredi, people should thank Manitoba Hydro for what they did to my community and to my people."

Even as a young child, Mercredi was a deep thinker. Flipping through magazines in the Catholic priests' residence where he'd go to eat Italian olives—an exotic treat in northern Manitoba—eight-year-old Mercredi zeroed in on an issue of *LIFE* magazine documenting Mahatma Gandhi's death and cremation. "I remember thinking, 'Who was this man and why were millions and millions of people mourning his death?'" A book about the famous Indian activist, known for employing non-violent civil disobedience, sits on the side table next to Mercredi, along with sweet grass and an animal skin rattle that he later picks up and shakes while singing a Cree prayer.

Raised in a devoutly religious family, Mercredi left the Catholic Church in 1965. He never attended a residential school but stayed in a Catholic student residence while going to high school in The Pas, Man.

PHOTO: THOMAS FRICKE





“How would you describe yourself?” I ask.

“Hopeless,” Mercredi says with a laugh, before admitting he’s too self-critical.

But he’s also an optimist, someone who calls major hurdles in his life ‘gifts.’

One such gift arrived when he was a Grade 10 student on a movie date with a Caucasian girl from his class. The usher demanded Mercredi move to the theatre’s ‘Indian section.’ He didn’t budge and his white friends came to his defense. It was then Mercredi knew he wasn’t alone in his fight for equality.

A second gift arrived while he was a student at the U of M. A newspaper compiled by engineering students published derogatory comments paired with photos of Aboriginal people they’d taken at Main Street watering holes. “It shook up the school because this was racism,” Mercredi says. “Here we are at the place of higher learning, being confronted with racism.” Mercredi and a tight-knit group of Indigenous students could have responded with only anger, demanding the engineering students’ expulsion. On Mercredi’s urging, they instead chose to educate. They asked for apologies published in Winnipeg’s two newspapers, organized a forum where administrators could learn the truth about Aboriginal people, and directed the students to do research and re-write their articles. “It awakened the university to the presence of a new student, called the Aboriginal student,” says Mercredi, who as a young man was intrigued by how African Americans were speaking up south of the border. He remembers vividly a Winnipeg friend urging him to go to the local library to check out an amazing speech by ‘this guy called Martin Luther King Jr.’

When Mercredi came to the U of M there were 13,377 full-time students and it’s estimated that maybe 30 were Aboriginal. From within this small population about a dozen came together, including Mercredi, to make history. Enrolled as a mature student, he led efforts to establish the university’s first Indigenous student association, which was also the first of its kind in the country. “We have this bond that we developed by being the first students at university. It’s somewhat of a legacy that we all carry,” he says. Mercredi became inaugural president of the Indian Métis Eskimo Student Association, who successfully advocated for: their own student lounge and advisor, the first Powwow on campus, and a Natives Studies department that has been expanding ever since.

In subsequent decades, Mercredi has continued his quest to change the country to recognize Indigenous people. The Faculty of Law alumnus was elected Regional Chief of the Assembly of First Nations for Manitoba in 1989, and in 1991 (and again in 1994) National Chief for the Assembly of First Nations, representing more than 600 First Nations across Canada. More recently he was chief of the Misiwistik Cree Nation in Grand Rapids and remains a councillor in his home community.

An expert in constitutional law reform issues and Aboriginal and treaty rights negotiations, Mercredi played a major role in the visionary Charlottetown Accord in 1992, which, had it been successful, would have amended the Canadian constitution to recognize Aboriginal people as a founding nation. Two years earlier, along with Manitoba MLA (the late) Elijah Harper, Mercredi helped defeat the Meech Lake Accord because it didn’t address the rights of Indigenous people. “This country saw itself as two founding nations, meaning the French and the English and we don’t see it that way... We see it as our original home. We see it as our homeland and if there’s any founding nation, we’re the founding nation. And at minimum we should be considered one of the founding nations,” he says.

Mercredi has received the Order of Manitoba, the province’s highest honour, and was nominated by the Government of India for the Ghandi Peace Prize. But it’s the handmade ‘thank you’ from his own people that mean the most to him. Often, they come in the form of traditional blankets. (He has a vast collection in his home.) Mercredi’s most cherished example comes from a women’s

“I want to make
sure Canada
is transformed
fundamentally.”

group in honour of his efforts to resolve conflict without violence. His headdress is another item of pride. Mercredi received his after an intense sweat lodge ceremony with four elders; the youngest no less than 80 years old. “It reminds me, when I put it on, where I come from, where my roots are. So when you wear the headdress you are in fact representing your nation, not Canada’s nation state, but your own nation, your own people. It’s more than a symbol of leadership; it’s also a constant reminder of your

obligation to represent your people in an honourable way.”

To Mercredi, leadership must have a spiritual dimension. “You have to seek not only guidance of elders around you but guidance of the Creator, like the spirit world. You have to be open to this idea of receiving messages, like the idea of instinct or intuition.” He sits with his eyes closed, trying to recount the elders’ message word for word; he was given the headdress when he became national chief. The elders explained he had been chosen, not elected and “chosen not to change anything but to teach them who we are.”

“And I didn’t really particularly like that message because I wanted to change the world. I’m not happy with status quo. I want to make sure Canada is transformed fundamentally.”

Mercredi seeks inspiration everywhere. Most recently he found it in a dragonfly while barbecuing steaks at his friends’ cottage. Again, Mercredi was singing in Cree, tapping the bench to keep the beat. “And it would go like this as if it was dancing with me,” he says, doing a slight bob back and forth. “I said to myself, ‘Wow, it may be coincidence but nonetheless I’m going to take a lesson from this and there is a connection between me and this



Mercredi's influence is local and global, from left: addressing the General Assembly of the United Nations at the special meeting to inaugurate the International Year of the World's Indigenous People (1992); welcoming first-year students at the Faculty of Medicine's recent White Coat Ceremony; in Grand Rapids, speaking on behalf of the Grand Rapids First Nation (Aug. 9 2007/ reproduced with permission)

dragonfly.” Just like that he shifts from steak to the Earth and climate change.

He points out some other coincidences in conversation: Ghandi died the day he was born; and his mom named him Ovide after a bishop born in Oka, Que. (where Mercredi would one day advocate non-violence to resolve the Crisis over land between the town and the Mohawk First Nations).

The eldest boy of 10 children to parents Louise (a stay-at-home mom) and George (a trapper, fisherman, carpenter and labourer), Mercredi was an imaginative kid who built wooden toy boats to float on the Saskatchewan River and come winter, toy sleighs and tractor trailers. He also recalls carving Michaelangelo's David out of a bar of laundry soap as a gift for his teacher. In recent years he's taken up painting and poetry (with 500 poems and counting). “See there you are, sitting in yellow, pondering the meaning of this man,” he rhythmically says to me. “And there you are asking these questions, hoping to find the answer to this man.”

“We all have a creative imagination,” he offers. “Everyone has the same capacity but we can develop it.”

He sees potential in people where others may not. In the mid-'90s, he reached out to rival gang leaders of the Indian Posse and the Manitoba Warriors, who refused to meet with him together but agreed to come individually. He told them: “Look, we need you. We need you more than you think. You have such great leadership abilities. You need to use your leadership for the positive good of our people.”

What saddens Mercredi most in the Indigenous community are the young girls who've become moms too soon. Drug abuse among his people also pains him. “Some of these people who are selling drugs are the so-called upstanding people in the community, that's heartbreaking to me,” he says. Mercredi views poverty as the worst—and most common—issue First Nations are grappling with. When you live in a rich country, it's particularly destructive. “The psychological impact is this: we are devalued, we are not appreciated, and we are considered a burden.”

Mercredi thinks on the collective level, about the big picture, about how inequality damages the whole. “His whole idea is that you can't perfect Canada unless you include Aboriginal people,”

says friend Gerry Daly, a retired school teacher who describes Mercredi as a person who is as happy to shake the hand of a gas station attendant as he is the hand of a dignitary. “His greatest accomplishment is just being himself.”

Mercredi admits he's never really had the desire to turn his brain off. As a kid, he lived in his mind as a means of survival. He had a debilitating fear of public speaking that carried through to university and kept him from uttering one word in class. (His phobia in part kept him from graduating from high school, one of his life's regrets.) As a boy on the muskeg, he'd recite speeches to his dog Skipper and imagine himself as “one of the greatest speakers to ever be born in this universe.”

“I prayed a lot. I promised Jesus that if I overcame that problem I would always come back and help my people,” he says. Mercredi now spends most of his time travelling the globe doing speaking engagements to an eclectic mix of groups—from health-care workers to business people—and often without a stitch of notes.

A father of four and grandfather of five, Mercredi today is happy and hopeful. He predicts a First Nations or Métis premier of Manitoba within the decade (but not him). His role as national leader was one of grievance, forever petitioning the people with the power, wealth and resources. Movements like Idle No More are evidence that today's young Aboriginal people are solution-based, he says. Education plays a big role; more than 2,000 Aboriginal students now attend the U of M. “That's a tremendous development and progress we've made,” he says, noting today's young Indigenous people are in a position to go further. “They're just going to do it. Where they see oppression, they're going to fight it. Where they see poverty, they're going to change it. Where they see poor housing, they're going to improve it. Where they see bad education, they're going to make it better,” Mercredi recites.

At 67, he too is a work still in progress. He holds himself to a dual responsibility: to make society better for Aboriginal people and to improve on his own self. “I'm going to learn from these young people to be the leader that I'm capable of, to be the man that I can be, to be what I was meant to be.”

FIELD OF

The results of an eight-year journey to bring to life Investors Group Field on campus have been in plain view since June: a footprint of nearly half a million square feet hugging the corner of Chancellor Matheson Road and University Crescent, seating for more than 33,000, a roofline that shapes the south Winnipeg skyline and is visible from kilometres away.

But on a Friday night in late August, as 10,000 fans gathered under the stadium lights to watch the Bison's historic first game in their new house—a massive, 65-43 win over the University of Alberta Golden Bears—the real significance of the stadium to the university community was revealed.

To president and vice-chancellor David Barnard, whose involvement with the stadium traces back to his very first week on the job in 2008, it is an example of what is possible when a strong vision is in place.

"It's wonderful to see the efforts of so many partners come to fruition," says Barnard. "Seeing thousands of students in the stadium seats for our Orientation Pep Rally, and thousands more in attendance for the Bison Football home-opener, is incredibly exciting and a strong testament to the stadium's ability to build community on campus."

DREAMS

BY JEREMY BROOKS [BA/98]

Alumnus and University of Manitoba friend David Asper is gratified his vision for a stadium at the Fort Garry Campus has become reality.

"When it's empty, it's just a building," says Asper. "When the Bisons or the Bombers are on the field and people are in the stands, that makes it a home.

No space within Investors Group Field better captures this sentiment for the Bisons than the locker room/training room known as the David Asper University of Manitoba Bisons Football Centre. This state-of-the-art-facility has been described by Bisons coaches as a "culture changer" for student athletes now and for generations to come for its ability to elevate their game to the next level.

With both teams' first seasons at Investors Group Field underway, the new story of football in Manitoba begins. So too does a new chapter for the U of M community.

Meet some of the U of M alumni, students, and staff behind the scenes and on the field.

Bisons football is a family affair for team manager **DENISE GILL**. Her late father Pat managed the team for more than four decades (today the equipment room bears his name); and anchoring the Bisons defensive line is Gill's son, **EVAN**. Denise's locker room demeanor is that of a tough love mom: "It's not a bakery, I'm not going to sugarcoat anything," she says. But it comes from wanting the best for a team she's spent her life around. "No one loves this program more than I do," she adds. "No one wants to see them succeed more than me."

The timing of the team's new facility, which includes a full-time strength and conditioning coach for the players, couldn't be better for son Evan, who is eligible for the CFL draft this year. "You have a different mindset when you walk into the place," he says. "When you walk into our locker room, with the big 10-foot logo on the floor, you have a sense of focus, no matter what."

For eight years, architect **RAY WAN** [BA/82, MArch/87] "lived and breathed" every aspect of what became Investors Group Field in order to achieve the original mandate David Asper proposed to him in the spring of 2005: to create the best possible fan experience.

During the Bombers pre-season opener in June, the Blue and Gold faithful put all of Wan's thoughts and ideas to the ultimate test. As he toured the facility watching the crowd respond to the seats, sightlines, concessions and more, one spectator's comment grabbed Wan's attention above the rest. "He said, 'Boy, when you come into this place it feels like a contemporary coliseum,'" recalls Wan, smiling. "And you know what? I never thought of that."

The life of a Bombers fan came full circle for the club's vice-president and COO, **JIM BELL** [BComm(Hons)/81], as he watched living legends Ken Ploen and Milt Stegall share a handoff of the football before the June 27 season opener at Investors Group Field. "It was absolutely bone-chilling in a positive way," says Bell, who as a kid watched the team play from the fifty-cent seats in the Salisbury House end zone at the old stadium. "It gave me goose bumps."

Creating that game day experience for the next generation of fans, on the grounds of his alma mater, is something Bell hopes to build on for fans of both the Bombers and the Bisons. "We want that excitement to filter through," he says. "We look forward to further engaging the student body."



DENISE

EVAN

JIM

RAY

DAVID ASPER [BA/80]'s love for the gridiron game began in childhood when he played six-man football at River Heights Community Club and cheered on the Blue Bombers alongside his father, Izzy, whom he says was a huge Bombers fan. The Bisons became an extension of that love when he attended the U of M.

Both teams had long played in woeful facilities and that didn't sit right with Asper.

"If communities want to progress and evolve, you have to be prepared to say what ain't working anymore and do something about it," he says. "You can't just stand there and shake your head about it."

Today, thanks to his vision, Winnipeg has Investors Group Field and the Bisons football team also has two potent recruitment tools: a significant scholarship fund Asper and wife, Ruth, established, and the best training facility and locker room in the country: the David Asper University of Manitoba Bison Football Centre.

The one-two punch of athletics and academics that Schulich Leader Scholarship winner **JAYDEN MCKOY** brings to the U of M makes him 'one to watch' both on and off the field. Tackling first-year engineering as well as being a rookie defensive back on the Bisons is a tall order. But fortunately for 18-year-old McKoy, playing football helps him rise to such challenges. "[Football has] definitely helped me make my way through life," he says.

This trio from the Bisons coaching staff all played for the Brown and Gold and in 2007 helped orchestrate a perfect season and a Vanier championship (the team's third). They describe their new field and facility as a culture changer. Gone are the days of team meetings under the old stands, explains **STAN PIERRE** [BA/94, BComm(Hons)/97]. And in is a new game day experience, notes **JOHN MAKIE** [BA/11], who was starting quarterback for the 2007 championship squad: "I can't wait to see someone try to jump into those stands [after scoring]."

For **BRIAN DOBIE** [BPE/74, CertEd/75], who saw his first Bisons game with his dad in 1969 and who says being head coach has "always been my dream job", replacing the ramshackle Butler Hut with a complete training and locker room environment has, for the first time, given his players a place they can all take pride in. "You can already see the sense of 'this is our house.'"



DAVID

STAN

BRIAN

JOHN

JAYDEN

A LAKE AT STAKE

With another cottage season at Lake Winnipeg drawing to a close, the future of one of the Earth's largest bodies of freshwater, the one dubbed 'Most Threatened Lake of 2013' by the Global Nature Fund, remains a question; one that teams of researchers at the U of M are hard at work trying to answer.

BY SARAH RICHARDS



Generational.

It's not a word commonly used to describe something as raw and organic as a lake. Lake Winnipeg isn't an average lake, though.

For the vast majority of us, it's an experience, one that weaves in and out of our lives and that we share with those closest to us.

"Lake Winnipeg to me is a time for family, a time that re-energizes us from busy schedules," says Lila Goodspeed [BScHEc/64, CertEd/68, BEd/79].

Goodspeed, winner of the 2010 U of M Distinguished Alumni Award, spends summers with her family at her century-old lakefront cottage in Gimli, Man.

"It's a place that you go in your mind when it's the dead of winter," says Goodspeed. "And a place where you just feel meditative. The sky—the big, deep sky with the fabulous clouds. Or the rain, thunder and lightning. All of that over the lake is just so beautiful."

Goodspeed recalls the feelings of disappointment her two children had when, growing up, they got their first summer jobs—jobs that would keep them away from spending time at the cottage.

"They said, 'We can't be at the lake and it's our birthright to be at the lake,'" recalls Goodspeed. "When you think of it, you see it that way."

Still, as a member of the board of directors of the Lake Winnipeg Foundation, Goodspeed is more than aware of the serious challenges faced by Lake Winnipeg.

Then again, who hasn't seen the goober-green algae blooms that have made vast stretches of it look like a floating golf course instead of one of the largest bodies of freshwater in the world? We've grown accustomed to the signs warning us against touching the water that are periodically posted on different beaches.

"It's very disconcerting, but I feel hopeful," says Goodspeed. "It's a bit of a contradiction. There's a whole side of the endangered part, and then the other side where you're just living life and enjoying it. We're still using the lake and swimming in it. It's fabulous for fish. It's not to the point of not having some life-giving force."

Goodspeed isn't the only one describing the lake like this. Professor Don Flaten, a soil scientist and former Lake Winnipeg Stewardship Board member, bristles at the mere mention of the words 'dead lake.'

For a body of water that supports the largest portion of Manitoba's fishing industry, wanting to know whether Lake Winnipeg is anything close to dead is probably the wrong question to ask. But with an overabundance of nutrients in the lake causing periodic algae blooms—some of which are toxic—it's hard not to wonder.

"Whoa, whoa, whoa," clarifies Flaten [PhD/89]. "The question is wrong. It is a very, very alive lake."

It's more a question of the lake being very different from what it used to be.

"The balance of different organisms within that lake has shifted," he says. "There is concern that the lake—people sometimes talk about a tipping point—is getting more and more distant from its natural condition."

We've talked about fixing Lake Winnipeg for decades. Over that time, governments have come and gone. City folks have blamed farmers for the nutrient problem... and vice-versa. All the while, water quality in Lake Winnipeg and its vast watershed has continued to deteriorate.

Flaten and a team of University of Manitoba researchers are working hard to buck that trend. There's just one thing he wants people to know.

"It's going to be tough, holy smokes," says Flaten. "Way tougher than most people realize. And it's not the type of problem you solve within an electoral cycle—a four-year period."

Lake Winnipeg's water quality challenge is the result of a big number of small contributors. A variety of cities and towns all contribute a bit of the nuisance nutrients that fuel algae growth, as do a large number of farms. What that means is there's no single, easy solution to the problem.

Still, managing when, where and what water moves in Lake Winnipeg's massive watershed has become a critical aspect in its turnaround.

"One of the reason we've got this big push on the water management side is we're seeing probably a better chance of making real progress with the water management practices than with the nutrient management practices," says Flaten. "To be honest, our nutrient management practices our farmers are using are pretty good."

Numerous rivers systems drain in to the lake, including the nutrient-rich Red River, which contributes more than 4,000 tons of phosphorus to the lake per year. Some of that would be there regardless of whether we humans were running around. The

lake's prairie-dominated watershed is naturally blessed with more nutrients than watersheds in places like the Rocky Mountains.

But we humans are here, and a lot of the things we do create bad mojo for the lake. For starters, Manitobans have traditionally done everything possible to quickly drain agricultural land of water during the spring thaw.

"We have this abundance of water in the spring time and we have all the snow melt," says U of M aquatic ecologist Gordon Goldsborough [BSc(Hons)/81, PhD/86]. "Farmers are always desperate to get on their fields to start planting their crops, so they look at that water on the fields and look at it as a net liability."

Weeks or months later, however, they sometimes face drought conditions. That's in part why U of M researchers are proposing a different approach to managing the spring runoff, one that will help save that water and reduce the amount of nutrients in it from hitting the lake.

"The biggest problem is that in the spring when the snow melts, it takes with it nutrients that have come out of all the plant material on the surface," says watershed system research program coordinator Selenia Randall.

Landscape ecologist David Lobb and hydrologist Genevieve Ali are beginning a four-year study that will look at farmers storing water in places like modified ditches and irrigation ponds. They want concrete data for farmers on the drawbacks and benefits of such systems, including cost and how often and how long the retention areas will be holding water.

"You need to be improving drainage in some areas so that farmers can get on their land earlier and get better yield, but you also need to retain that water so that you're not creating flooding

EXPERIMENTAL LAKES AREA

With so many types of pollutants detected in varying degrees in Lake Winnipeg, why do we focus so much on phosphorus?

It's in part due to the pioneering research done at one of the most unique test grounds in the world: Canada's Experimental Lakes Area, or ELA.

Located near Kenora, Ont., the ELA consists of 58 small, deep lakes set aside expressly for experimental manipulations. By reserving entire lakes, freshwater research can be conducted in real life settings instead of laboratories, thereby providing more complete data.

When the ELA was first created in 1968, debate surrounded which nutrients were most important in causing eutrophication in Lake Erie. At the time, detergent companies argued that carbon was behind algal blooms because that's what studies in laboratories often indicate. Research in actual freshwater lakes, however, proved otherwise.

"The work at the ELA showed that phosphorus was most important to stimulating eutrophication," says Mike Paterson, the former senior scientist at the ELA and an adjunct professor at the U of M's department of

entomology. "You need to do whole ecosystem studies at the appropriate time-and-space scales to have a full understanding of which nutrients are causing the problems that we see."

Paterson [BSc(Hons)/82] says one ELA lake that has been eutrophied by scientists for 45 years has had no nitrogen added since 1990; it still, however, receives phosphorus.

"Despite the fact that we now add no nitrogen whatsoever, the amount of algae in that lake has not decreased at all," explains Paterson. "It's 20 times higher than other unmanipulated lakes at the ELA. There's just no other place where you can do these kinds of manipulations, which is why the work is so important."

ELA researchers have also contributed to a better understanding of numerous other issues including acid rain, the effects of mercury on fish

and climate change on lake health.

Paterson is now a senior fellow at the International Institute for Sustainable Development (IISD), a public policy research institute. At press time, the IISD was negotiating a take over of the ELA from the federal government after the latter announced it was shutting down the program.



ALGAE: AS SEEN FROM ABOVE

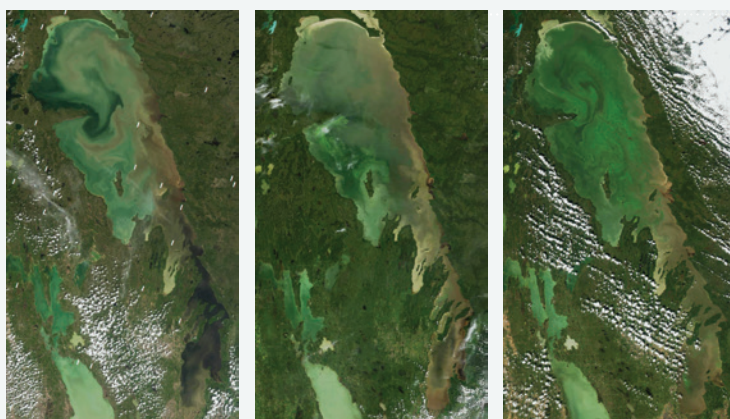
Beaches bathed in green sludge might deter would-be swimmers from dipping their toes into Lake Winnipeg, but to illustrate to the public the real magnitude of the problem, U of M geographer Greg McCullough took an out-of-this-world approach: satellite imagery. The following sequence of images calibrated by McCullough show the lake in May, July and September of 2005. From left, May 2005: The green indicates the presence of algae. Different species of algae grow at different times of the

year in Lake Winnipeg. “The satellite doesn’t see the early spring algae as well, but they are still there,” says McCullough. “The lake can be rich in them, but they’re always mixed up through the water column because they don’t have any tendency to float.” At the time of this picture, the Red River was flooding. The tan colour is sediment being brought in by the Red River. The dark-green swirl along the Long Point peninsula is a

different algae carried in by the Saskatchewan River. Most years, the first algae blooms form in the southwest part of the lake’s north basin, where the water is both more shallow and clear than elsewhere.

Two months later in July. Whereas in the first image, the south basin was quite dark—its water was relatively clear—it’s now muddy. This was due to a second large flood that peaked in mid-July. “It carried a lot more sediment in to the lake,” says McCullough, who last year received the 2012

Alexander Bajkov Award from the Lake Winnipeg Foundation for his research and efforts to protect and restore the lake. Big algae blooms often form where the water is clearest because they need light to grow. Still, by the end of the summer, satellite images sometimes show green overtaking brown areas. “Even that mud isn’t enough to stop the algae because the algae have had more time to grow and reproduce,” says McCullough [BSc/71, MA/99, PhD/06].



September 2005. Blue-green algae, some of which are toxic, are especially visible to the satellite because they frequently float near the lake’s surface. Here, the brightest green covers a bit less than half of the 25,000-square-kilometre lake with a continuous mat of algae. Blue-greens grow in the summer after the spring algae die off—often because the latter have used up the nitrate or silica in the water. “The reason

they die out and blue-greens come in is because blue-greens can get nitrogen from the atmosphere,” says McCullough. “None of the other algae can.” Algae maps based on the latest satellite imagery of the lake will soon be available to the public on the U of M’s Lake Winnipeg Basin Information Portal. McCullough hopes that combining such maps with weather forecast information could help predict when algal blooms will likely wash up on the lake’s beaches.

problems,” says Lobb. “Once people realize that they can do things a lot better in terms of water management to everyone’s benefit—but particularly the farmers’—you’ll see transformational change.”

Those crop farmers aren’t the only players in the future of Lake Winnipeg. We’ve long known about the challenges that come with having a hog industry in Manitoba. What to do with pig manure has befuddled farmers, agronomists and environmentalists since large-scale hog farms became popular in the 1990s.

Hog manure contains high levels of phosphorus, a key element behind Lake Winnipeg’s algae growth. Traditionally, farmers have spread hog manure on crop land as one way to get rid of the stinky mess. Concern over the amount of phosphorus from manure runoff in Lake Winnipeg lead the province to adopt new legislation that kicks in this year. Farmers who do not have phosphorus-deficient soil must now base the quantity of manure they apply to a field on the amount of phosphorus that particular crop uses up.

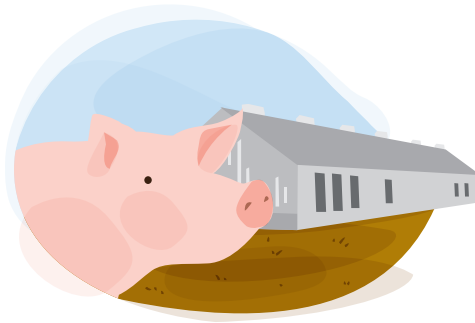
U of M agricultural economist Derek Brewin believes the new rules are a good start. Still, it’s important for legislators and farmers to realize that aside from Winnipeg and some areas

in northeast Manitoba, most of the province’s soil is actually phosphorus deficient.

Brewin, who specializes in agricultural markets, has mapped out where these nutrient deficiencies are. Some years, farmers end up paying \$1,000 or more for a ton of phosphorus to fertilize their land, he says.

“It’s a management problem in terms of we’re treating it like a waste in a few places where there’s too much,” says Brewin. “We’ve got to get the local farmer that needs the manure in a more balanced discussion with the guy that’s got it, rather than the guy who’s got it being treated as a pariah and told that he has to get rid of it. If he’s forced to get rid of it, he does it to the least cost possible.”

Transporting that manure from Manitoba’s hog farms to areas where there is phosphorus-hungry land is expensive, however. The University’s National Centre for Livestock and the Environment is hoping to reduce that cost with help from a sophisticated manure separation system. Along with the Prairie Agricultural Machinery Institute, the centre has been testing the system, which is designed



to separate the phosphorus-rich sludge from the nitrogen-rich liquid so that farmers can more easily export the former.

“What we want to do is make sure we know how they work and that we get the desired results out of those systems before farmers invest large quantities of money,” says Flaten.

There is, of course, another category of waste that even fewer people like to talk about: our own.

Winnipeg sewage plants are responsible for roughly five percent of the phosphorus load and four percent of the nitrogen load in Lake Winnipeg.

U of M environmental engineer Jan Oleszkiewicz has been working with civil engineering professor Qiuyan Yuan [PhD/12] and microbiologist Richard Sparling on technology that will allow conventional wastewater plants to strip and recover the phosphorus from sludge, a by-product of sewage treatment. Funded in part by the Natural Sciences and Engineering Research Council of Canada, the City of Winnipeg and consulting company AECOM, the process involves fermenting the sewage sludge and eventually harvesting the phosphorus in the form of struvite. Struvite can then be used as a slow-release crop fertilizer.

“This development means that phosphorus recovery can now be practiced anywhere and at any plants in the province and beyond,” says Oleszkiewicz.

Brandon, Portage and Winnipeg’s West End treatment plant already remove most phosphorus from their waste water. Plans to upgrade Winnipeg’s two other treatment plants to do the same are being undertaken at a cost of more than \$600 million.

“We’re getting there,” says Oleszkiewicz, who has worked as a consultant to the city on numerous waste water projects. “The province is the only province, and as far as I know, the only jurisdiction in the world that mandates recovery of phosphorus. Everybody else says ‘Just remove it.’ These guys are saying recovery, and that is a very bold move.”

A bold move—and a big headache for the many Manitoban communities that rely on far less sophisticated septic fields, holding tanks and lagoons to deal with their sewage.

“It’s more difficult for small communities to remove phosphorus from wastewater,” says Oleszkiewicz. “It’s easier to do it at a large plant because it has the technology and the people. A lagoon is designed by a bulldozer and operated by God.”

Some lagoons are still too small and end up dumping their contents into our streams and rivers during heavy rains.

Ecotoxicologist Mark Hanson is one of several researchers to have received a \$173,800 collaborative grant from Environment Canada’s Lake Winnipeg Basin Stewardship Fund to study what contaminants are in lagoon wastewater, and how constructed

LAKE MANITOBA

Like its big sister Lake Winnipeg, Lake Manitoba is also struggling with excess nutrients. The cause of the problem, however, is different.

A majority of Lake Manitoba’s nutrient loading comes from the Portage Diversion, which is controlled by the province. That diversion protects Winnipeg and certain communities along the Assiniboine from flooding; it’s also partly responsible for Lake Manitoba’s excessively high water levels in recent years.

Few can forget the catastrophic 2011 flood, which sadly shut down the U of M’s much-loved Delta Marsh Field Station. Despite this critical loss, U of M researchers like Gordon Goldsborough are still actively involved in improving Lake Manitoba’s ecosystem.

Just like Netley-Libau Marsh, Lake Manitoba’s Delta Marsh is also suffering because it hasn’t experienced deep lows in water that would allow seeds currently underwater to germinate and grow vegetation.

The marsh vegetation is being further stressed by an invasive species present in both bodies of water: the common carp.

“They’re ecological bulldozers,” says Goldsborough. “They churn up mud and that clear water becomes murky water. Plants die because there’s no light to grow. Without the plants and roots, there’s nothing to hold the soil, so erosion happens.”

While the lakes share the same pesky invaders, the approach to dealing with them somewhat differs.

Last spring, if you happen to have visited any of the four connecting waterways that join Lake Manitoba to the Delta Marsh, you’d have seen an incredible sight: thousands of carp chaotically bumping and pushing against a series of gates. Each metal barrier has bars perfectly spaced to allow native fish to travel to and from the marsh while keeping the lion’s share of the destructive species out. The \$3-million carp gate project involved the construction of seven gates in strategic locations. The gates prevent adult carp more than seven centimetres wide from accessing the marsh. The first big test came this spring, when most adult carp were blocked from entering the marsh—the first time in decades.



wetlands could help mitigate their release and effects. The project focused on the sewage lagoons of Morden and Winkler. The cities release their wastewater in to Dead Horse Creek, a tributary of the Red River that eventually dumps in to the lake.

“Both input their municipal waste water in to this small creek essentially at the same time each year: mid-June and potentially again later in the fall,” says Hanson.

What Hanson and the team discovered surprised him: there was no big difference upstream from downstream in the amount or type of insects living at the bottom of Dead Horse Creek. Nutrients in the creek during the releases exceeded provincial guidelines that will take effect in a few years... but once the releases were done, those levels returned to pre-release levels in a few days.

“We tend to think that a pipe always has something coming out of it, but it doesn’t,” says Hanson. “Maybe for a couple of weeks in the summer, the lagoon is drained—and then it’s done. So there’s a whole window there where you may be seeing changes, but if there are changes occurring, there is also plenty of time for the ecosystem to recover.”

The team has found antibiotic-resistant bacteria in wastewater from other Manitoba lagoons, which is cause for concern. Little

is known about the implications of this for both human and ecological health. In this study, however, micro pollutants were not detected in amounts that would indicate the potential to harm organisms in the creek aside from the antibiotic erythromycin and the insecticide diazinon.

“In that sense, these waters are not as bad as we may think they are,” says Hanson.

Well-managed and monitored sewage lagoons can be an effective way for communities with limited means to deal with wastewater, he says. The lagoons’ biggest problem right now is—you guessed it—their release of nutrients like phosphorus. Incorporating constructed wetlands with nutrient-absorbent plants like cattails could help staunch some of this, and perhaps remove antibiotic-resistant bacteria as well.

Lake Winnipeg does, of course, have its own massive wetland. Netley-Libau Marsh is the largest coastal wetland in North America and is located on the southern side of the lake. But its ability to help filter the water before it enters Lake Winnipeg has been limited in recent decades.

CONTINUED ON PAGE 36

“This is one of the most exciting moments in my career,” says Goldsborough. However, the system won’t work at Netley-Libau Marsh.

“It just cannot physically be done,” Goldsborough explains. “There are so many places where the Netley-Libau Marsh is connected to Lake Winnipeg that to try to isolate the marsh in any real way to keep the carp out probably isn’t feasible.”

That’s where the work of Margaret Docker comes in.

A fish biologist in the department of biological sciences, Docker is using the DNA sampling approach made popular on TV shows like *CSI* to better manage invasive aquatic species.

Animals naturally shed cells, mucus and feces—and with them their DNA—into the environment.

“By taking water samples, there’s the possibility of detecting the presence of an organism in the water just based on this shed DNA,” says Docker, whose molecular genetics facility was funded with \$255,972 from the Canada Foundation for Innovation and the Manitoba Research and Innovation Fund.

Docker’s lab is developing genetic detection technologies that will allow earlier discovery and species-specific control of invasive animals. Although Docker is using the technology to investigate invasive lampreys in the Great Lakes, it might be possible to use it in the next year to conduct routine screenings in Lake Winnipeg for newcomers that aren’t supposed to be there.

“This has a huge application for detection of invasive species, particularly for secretive organisms,” says Docker.

Lake Winnipeg already has six invasive species, including minuscule zooplankton known as spiny water fleas.

It’s nifty science, she says—even if the concept can be unsettling.

“It’s very cool, but it’s also kind of gross if you think about going swimming in a lake,” she adds. “You’re being bathed in the DNA of all these animals in there.” As for carp, the next step in that war will be to establish an industry that involves catching, removing and processing the invaders. “The solution for carp is exploitation,” says Goldsborough. “We need to turn them into a valuable commodity.” Carp caviar, anyone?



PHOTOS: DAVID KAWAI

THE LUCKIEST GUY IN THE WORLD

Alumnus and donor Lou Howard reflects on how his U of M education helped shape his post-War life

From left: the basement of Howard's Ottawa home holds memories from his experiences in the Second World War; Howard still wears his engineering ring with pride

For those of us who didn't witness the Second World War, it's easy to assume that Lou Howard's life would be defined by his wartime experience.

From 1943 through 1945, Howard helped to defend Canada's eastern coast against German U-boats. He was 21 years old and an officer on a minesweeper. At least twice, he cheated death under harrowing circumstances.

Like many others from his generation, however, Howard went on to build a remarkable post-War career thanks to courage and hard work—and in Howard's case, a little bit of help from the University of Manitoba.

"The iron ring—I wear it with pride," says Howard, who completed a degree in civil engineering once the War was over.

Last winter, Howard showed his appreciation for the university when he contacted the administration about setting aside a donation in his will. It's a generous decision by Howard, who grew up in Selkirk, Man.

Howard's mother taught music, while his father was the postmaster. The plan was for Howard to work at the Toronto Dominion Bank after Grade 11, as the family couldn't afford to send four children to university.

Howard, however, had other ideas in mind. He'd met a civil engineer from the U of M through Boy Scouts and was impressed with his lessons on how engines worked. Howard decided he wanted to work in the same field and ended up winning a scholarship to the U of M.

As the Second World War progressed, however, there was increasing pressure on men who had yet to volunteer to join the cause.

"Most of the people my age who had gone through school with me in Selkirk were now flying bombers," recalls Howard. "Some of them were dead."

By 1943, that pressure had turned to guilt. Lining up to take the Beaver Bus line from Selkirk to the U of M, Howard felt the stares of women around him, whose sons were already fighting in the War. The cure was simple: he joined the University Naval Training Division. He started out with the rank of an ordinary seaman but was selected for officer training. He graduated in 1944 as a sub lieutenant and joined HMCS Sarnia—an escort and patrol ship on the east coast—as a navigating and sonar officer. He quickly jumped ranks because unlike many of his colleagues, Howard had completed a year of engineering studies at the U of M. "I guess

I had a little bit more education and potential,” says Howard.

One of Sarnia’s responsibilities was stopping German submarines from getting at Allied supply ships traveling from Canada, England and the United States.

It didn’t take long before Howard’s first brush with fate: his ship had a mechanical problem, which meant another minesweeper filled in for her on a search for a U-boat off the coast of Halifax, N.S. That ship—HMCS Clayoquot—ended up being sunk by a German sub on Dec. 24, 1943. Eight sailors died.

“It could have been me,” reflects Howard. “The Clayoquot sailed instead of the Sarnia because we had a broken cylinder head.”

Just weeks from the end of the War, Howard had another close call when his ship and HMCS Esquimalt were hunting for a U-boat along that same coastline. The two Canadian vessels were scheduled to meet at sea, but when the time came, the Esquimalt was nowhere to be found. She’d already been sunk in under four stunning minutes by the Germans.

Howard says a miscommunication among naval command members back in Halifax ended up delaying any sort of rescue attempt for hours.

“There had been a party the night before and the shift that went off at 7:30 a.m.—the Esquimalt had been sunk at 6:30 a.m.—did not pass that information on to the groups that took over from them in dockyard,” says Howard.

“I suspect, although it was never said, that there were too many people with too many hangovers and they didn’t come in till later in the morning.”

By the time the Sarnia reached the survivors, many men who had survived the initial sinking had died from hypothermia in the freezing water. Howard helped bring the remaining sailors up on to the ship, giving some of them artificial respiration.

“A lot of the survivors that we thought were alive—as soon as they got on deck, they gave up,” says Howard. “I tried to bring a couple around.”

Meanwhile, Sarnia sat motionless in the ocean, an easy target for any lingering enemy sub.

“We knew a torpedo was out there,” says Howard. “I’ve never been so scared all my life. I went in blond, I came out grey-haired. I think it happened on that day when I was 21 years old.”

A total of 44 men lost their lives in the sinking of the Esquimalt; 27 survived. The Canadian government eventually bestowed Howard with an oak leaf emblem—a ‘Mention in Dispatches’ award—for his efforts that day.

“There were no grief counsellors,” says Howard. “We just went back to work again. We took three days in port to re-provision—restock our food, blankets, everything else, and out we go again.”

Howard was a different man when he returned to the U of M after the War to complete his degree in engineering. He was relieved to be alive, happy to be married and back in school.

“You know, they talk about engineers and panty raids—I never got involved in that at all,” says Howard. “The kids were so young when I re-joined the second year engineering class. I saw some of them weren’t even shaving yet, for God’s sakes, and I’d been out there doing all these things.”

Upon graduating, he was snapped up by the provincial public works department, where he became a highway engineer. Once again, however, Howard had bigger plans.

By the time Howard retired—at 77 years old—he’d worked as a private consultant to post-Communist governments developing market economies, been a mortgage manager for the Prudential Insurance Company, written a guide to real estate appraisal for the Appraisal Institute of Canada and served as a property management consultant for the federal government.

“The engineering ring that I wear with pride opened so many doors for me that I want to pay back,” says Howard, 89, who now resides in Ottawa.

For a better idea of the impact donations like Howard’s have, the U of M gives out nearly \$14 million in privately donated student award funds every year. Howard’s donation will play an

important role in maintaining educational excellence at the university.

Howard has placed no restrictions on his donation, asking only that it be gifted to civil engineering in the Faculty of Engineering.

“It’s quite rare for someone to say ‘I want the university to decide,’” says Beth Proven, who manages planned giving at the U of M. “That’s actually something that gives us a lot more flexibility in an institution to be able to address the areas of need that we have.”

Today, Howard is as busy as ever despite being retired. He still works out at the gym,

where he met his second wife, Mary Hyacinthe Wade. Howard’s first wife, Marjorie, died in 2007.

The Howards’ 2012 honeymoon was a cruise in South America, and they recently spent two weeks in Iceland.

“She’s eight years younger than I am,” says Howard. “She has her own teeth, her own driver’s license and her own car... I made my move.”

When asked the secret behind such a productive and long life, Howard is clear: genetics, for starters, he says. His mother lived until the age of 102. But there’s another obvious element behind it: attitude.

“I certainly believe I’m the luckiest guy in the world,” he says.

“The engineering ring that I wear with pride opened so many doors for me that I want to pay back,”

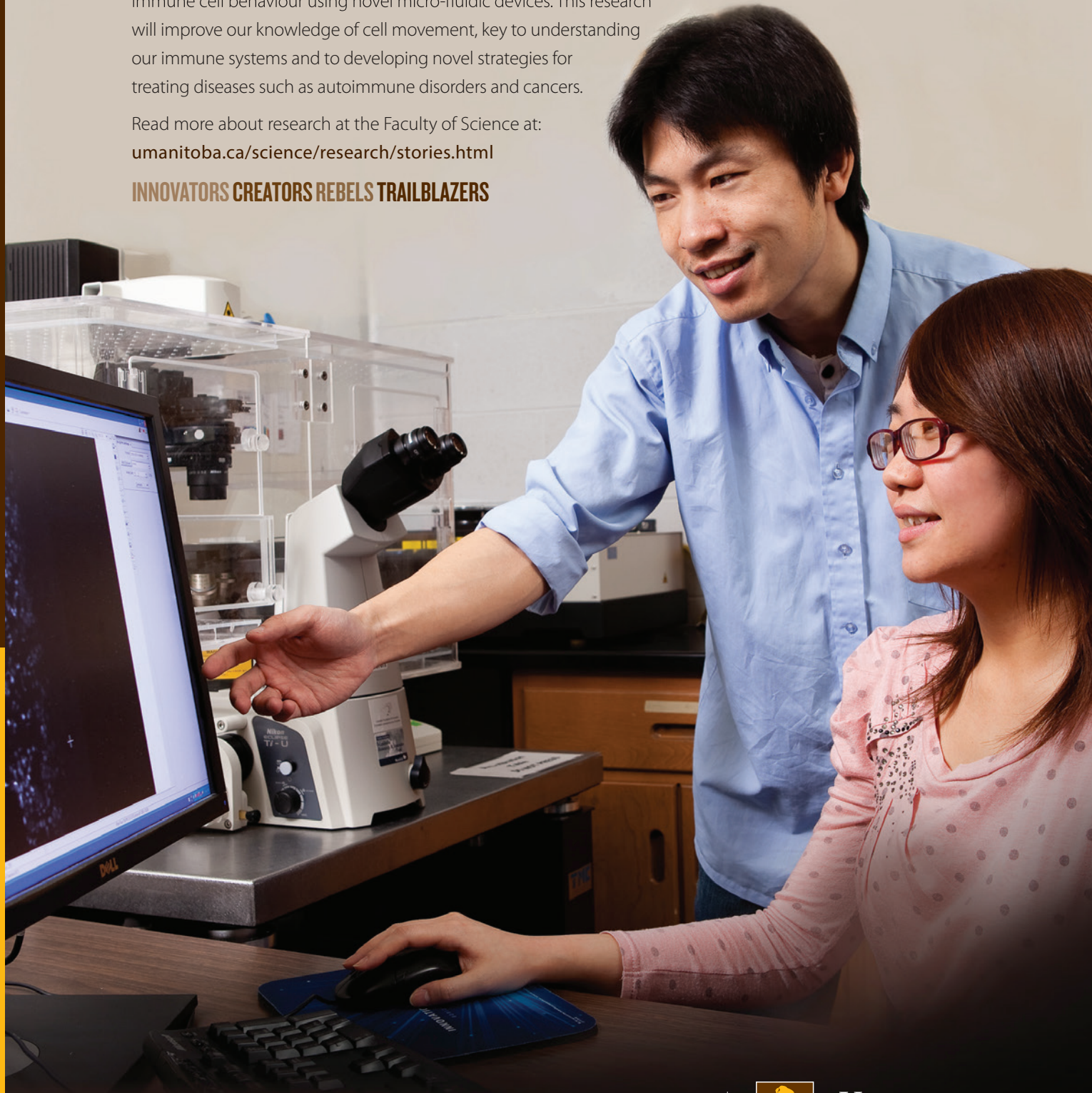
BY SARAH RICHARDS

OUTSTANDING RESEARCHERS

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INNOVATORS CREATORS REBELS TRAILBLAZERS



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PHOTO: MONTY HALL

THE \$990 LOAN THAT CHANGED THE WORLD OF CHARITY

A recent Lifetime Achievement Emmy Award confirmed his status as a TV legend, but **Monty Hall** has always focused on the fortune of others.

In 1943, Monty Hall was washing floors. He had completed his first year at the University of Manitoba, but didn't have the funds to return. Local businessman Max Freed spotted Hall and, upon learning about his situation, offered a loan to finish his education. Freed insisted the loan remain a secret (which it was for decades, Hall says) and asked Hall to do the same for someone when he was able.

"It was a defining moment in my life. I was astounded by this stranger's generosity, compassion and empathy," says Hall, who received \$990 for three years of tuition, books, food and haircuts. "That investment changed the course of my life. It shows you how one man can make such a huge difference."

Indeed.

Hall is recognized to this day as the affable host of the TV game show *Let's Make a Deal*, where he cheered on contestants in wacky costumes for almost 30 years. But what brings Hall the most pleasure is his life as a fundraiser. As per Freed's stipulation on the loan, he began giving back once he gained his footing in California in the '60s.

And he hasn't stopped. Hall has raised a staggering \$1 billion for charity and has received more than 200 honorary awards, including the Variety Clubs International Humanitarian Award and the Order of Canada. He has streets named after him in Winnipeg and Cathedral City, Calif., and four children's hospital wings at UCLA Medical Center, Hahnemann Hospital in Philadelphia, Mt. Sinai in Toronto, and Johns Hopkins in Baltimore.

"He's one of the greatest fundraisers in the world, without question," says Wayne Rogers, executive director of Variety, the Children's Charity of Manitoba. "He's a consummate gentleman, he's very friendly and transparent, and he's an incredible storyteller. He just wants to make a difference. Fundraising is in his blood. It overflows in him."

While Freed changed the course of Hall's life trajectory, it was his mother Rose who sowed the seeds of altruism. Hall says money was tight in their family, but she continually raised funds for community causes.

"She always said it was the right thing to do, and I love that," says Hall. "There were none of the adages like 'paying it forward' at the time. It was just the right thing to do, and it's been my creed since."

Charity often begins at home, and Hall has established and contributes to five awards at the University of Manitoba. The Monty Hall Scholarship rewards an exceptional student from his high school alma mater, St. John's. The other awards are bursaries that pay tribute to various family members, including his brother, Robert R. Hall in the Faculty of Law; cousin Jack Rusen and uncle Samuel David Rusen in the Faculty of Medicine; and uncle Charles Rusen in the Faculty of Dentistry.

At a sprightly 92 years old, Hall still serves as the Variety International chairman and hosts multiple events every year for the benefit of children, the aged, and medicine, though he's stopped travelling out of California.

"When the phone rings, I answer. I look in my book and if I'm available on that date, I'll do it," he laughs. "The reason I've done so many is because I've never charged a fee, so I'm popular! The more they called, the more I said 'yes', and it became an endless circle."

He describes the schedule he kept for many years: fly into a city on Friday night, attend a banquet, host a telethon on Saturday and Sunday, and fly out to return to the studio on Monday morning. He shrugs off his astounding contributions and says philanthropy takes a village, from donors writing cheques, to the medical teams putting those dollars to work, to the grandmas knitting socks and hats. As to maintaining his drive, Hall says the deep satisfaction he derives can't be beat.

"If you've visited a ward and you see a child with a debilitating disease and parents at the bedside, you don't need more motivation than that," he says. "I was exhilarated and exhausted for years. The TV career gave me fame and fortune but the charity continues to give me deep pleasure."

As for the benefactor who started it all, Hall stayed in touch with Freed, who took great delight in Hall's accomplishments (including his stint as UMSU president) until he passed away in 2010. He's grateful for Freed's generosity, but more appreciative of the challenge he issued to give back.

"By following his example, I've enjoyed living my life and the vicarious thrill of seeing people gain advantage," says Hall. "My mother always said there are two kinds of people: the givers and the takers. The takers eat well, but the givers sleep well. And I really do."

BY KRISTA SIMONSON

ALUMNI STORIES

IN MY LIFE

BY SHAMONA HARNETT [BA(ADV)/96]

PHOTO: JASON HALSTEAD [BPE/92]

MILESTONES FROM DR. NAIMARK'S FIVE DECADES IN MEDICINE

- Became professor in Faculty of Medicine in 1963 and in 1971 became the faculty's dean
- Helped put community medicine on the university's curriculum
- Helped found the Northern Medical Unit, which was the first of its kind in the world. (Before the NMU, Aboriginal people living in remote northern regions of the province didn't have easy access to doctors).
- In the 1960s, co-founded the world's first integrated laboratory and ward dedicated to respiratory intensive care

Dr. Arnold Naimark, 80, isn't one to lay back in his so-called Golden Years. The self-proclaimed “busy body” and Order of Canada recipient—who earlier this year was inducted into the Canadian Medical Hall of Fame—is still doing his part to change the world.

Whether he's rallying the federal government to keep genome research on its agenda or heading the University of Manitoba's Centre for the Advancement of Medicine, Naimark is a rare type of physician with a knack for getting behind the scenes and gently forcing the establishment to wake up.

Here, the U of M professor, former dean and president emeritus (Naimark was president and vice-chancellor from 1981 to 1996), reflects on growing up in Winnipeg's North End; his early days as a doctor; the mesmerizing woman behind the surgical mask who caught his eye; and how his 2,000-plus students became his fountain of youth.

I had the usual first-generation immigrant upbringing in the North End. It was kind of a melting pot in those days ... We essentially found our amusements in the streets.

(My parents) escaped the turmoil of post-revolutionary Russia in the 1920s ... They met in Winnipeg ... They worked hard and deprived themselves ... in order to give my sister and myself a world of opportunity.

In our ethnic community ... being a doctor was a highly regarded profession, not just because it is a healing profession and all the rest of it. It was seen as one of the professions with which people from my ethnic background could have an independent life.

You could be your own boss so to speak ... With a Jewish background you couldn't, in those days, become part of Eaton's Junior Executive Program, for example.

One of my classmates in first and second-year university was a fellow by the name of Leonard Peikoff ... We were interested in philosophy. Occasionally we would turn up at his place to study together. His father was a well-regarded general surgeon in town.

He'd ask us what we were doing and why we were doing it. He kept saying, 'Well, you could always be a philosopher. But you really should think about getting a profession to earn a decent living and raise a family.'

We applied for entry into medical school in the spring of the second year of university ... Then I went off to Germany as part of a select group of cadets in the Canadian Officers Training Corps.

I saw two pictures of Germany—the destruction caused by the War was still evident but there was also amongst young people a sense of new beginnings. It was a very interesting experience.

While I was there, I went to the concentration camp at Bergen-Belsen. It was very close to where we were stationed. I was deeply

affected by my visit there and the evidence of the horror of the Holocaust—and the suffering of millions of people that ended up in concentration camps and were exterminated.

(In 1956), I was a senior medical student on call at the Women's Pavilion. I was in the delivery room, on a case. There was a student nurse there—fully gowned, capped and masked.

She had sparkling hazel eyes and a wisp of red hair poking out from under her cap. I sent her a note telling her who I was and asking her what her name was. That's how we met. (Naimark and his wife Barbara, who later became a professor at the U of M in the Faculty of Nursing, have now been married 53 years.)

[Working as a professor] was a time where I got a lot of satisfaction from seeing that one could really positively influence young people at ... the start of their professional careers. It was a time when I felt I was, to some extent, repaying the rewards I got from teachers who inspired me.

Students come to a subject or a problem without any preconceived notion ... It sort of keeps you in touch with your younger self.

There was a sequence of classes with a significant proportion of [students] that came into medicine with a commitment to social activism. A group of them came to see me with concerns that the curriculum wasn't sufficiently responsive to social issues. I guess they came in expecting resistance to them challenging the system.

I said to them, 'Well, what would you do?' They came up with some ideas and in the end, we did include them in redesigning parts of the curriculum.

They said to me afterwards ... they were left a bit dumbfounded. They weren't expecting the kind of reaction that I gave them. They were a really interesting group. [The group included Joel Kettner, who eventually became a physician and Manitoba's chief public health officer].

I'm fairly even-tempered. I don't rant and rave.

The last book that I read ... was a book by David Sedaris: *Let's Explore Diabetes with Owls*.

I'm a busy body.

If I'm interested in an area and I serve on a board or committee and I see things that ought to be done, I just feel the compulsion to try and make something happen. Because otherwise...you're just taking up space.

ALUMNI STORIES



THE STUDENTS' ADVOCATE

BY KATIE CHALMERS-BROOKS



PHOTOS: JASON HALSTEAD [BPE/92]

Every day, Lynn Smith wears two dozen silver bangles around her wrist, each representing a special memory in her life.

“My staff tell me they can hear me coming. It’s kind of like putting the bell around the cat,” she jokes. Smith’s next bracelet acquisitions will reflect a new chapter: retirement. During her 37 years with the U of M—the last eight as executive director of student services—Smith has witnessed the evolution of the student. And she’s helped shape how the university responds.

When she began work here in July 1976 as a teaching assistant she couldn’t have predicted she’d one day be tackling complex questions like: How do you prevent plagiarism in an online world of cutting and pasting? How do you identify learning disabilities that can go undetected until students are on their second degree? And—most troubling—how do you minimize the risk of a campus shooting at the hands of an unstable student? “A lot of universities have learned from Virginia Tech and other tragedies,” says Smith. “We started to think about it about a decade ago.” She meets with a team dubbed STATIS regularly to case conference on any reports of threatening behaviour. Six tragic student deaths in less than two years at Queen’s University—some from suicide—have provided additional insight to Canadian universities on how to identify mental health issues, she says.

Approaching her final day at the helm, Smith explains how her role in student affairs has expanded over time to supporting students not only academically but personally and emotionally. The U of M now has a health and wellness educator and a mental health consultant. (During exam week, students can de-stress by visiting with dogs for pet therapy.)

Smith hears first-hand how technology is changing the classroom, and in some cases creating new challenges: the cyber bullying of students on Facebook, the anonymous online rating of professors, the distraction of mobile devices, the

copying of online essays (to address the latter, the U of M runs anti-plagiarism workshops during student orientation). But technology has also opened doors for people like Megan Jack, the first deaf student in the U of M’s Faculty of Medicine and only the second deaf medical student in the country. Smith and her colleagues in student accessibility services helped coordinate the funding, equipment (including a special stethoscope) and a sign language interpretative team who is now supporting Jack during her residency in family medicine. “It’s a phenomenal story. I’m very proud to be a part of it,” Smith says. But she is most proud of what she calls “a renewed attention to the student experience.”

University students across Canada have made it clear they want a less clinical, more personal post-secondary experience. But the U of M has gone even further, Smith explains, expanding learning beyond the classroom to exchange programs overseas, community service work and internships. “Sometimes it’s not just what students tell us they want or need, it’s also about us stepping back and considering, much like a parent does, what will be helpful in the long run?” says the mother of two grown daughters, both U of M alumni. “A student may say, ‘No, no, I want a quick path, give me a three-year degree and I’m out of here.’ And I think it warrants our attention to make sure students know how they can enhance their own experiences.” In short, Smith wants today’s student to be as fulfilled as she was when she studied at the U of M. “I enjoyed school so much,” she says. Smith earned degrees in physical education and education, a master’s in exercise science and a PhD in physiology—all at the U of M. (She also met her husband here.) Over the years she’s been everything from a lab demonstrator to an anatomy instructor. “When people say, ‘How long have you been here?’ I’ll say, ‘I actually



feel like I’ve never left.” But she has taken a few breaks—to fulfill her duties as an international gymnastics judge, including at the 2008 Beijing Olympics; her lanyards—proof of her accreditation as a judge—hang behind her office door.

Whether she’s scoring the floor routines of gymnasts during high-stress televised events or working with faculty to assist a U of M student, she says she follows some advice given to her by a professor years ago: “Just do good work. Good work will tell in the end.”

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E-mail jeremy_brooks@umanitoba.ca. Deadline for our Winter 2013 issue is Oct. 3, 2013



Froebe, Charlie [DipAg/64] was named a 2013 inductee into the Manitoba Agricultural Hall of Fame for his "significant and lasting contributions to agriculture in Manitoba." Froebe's major contribution to agriculture in Manitoba and Canada was his innovative and steadfast work on behalf of canola growers and on cash advance programs.



Gutkin, Dr. Calvin [BSc(Med)/69, MD/69] was awarded the Queen Elizabeth II Diamond Jubilee Medal for his outstanding contribution throughout his career to family medicine in Canada, and for his leadership with CFPC during the past 17 years.



Laffin – Thorburn, Paula R. [BA/75] has self-published her first book, a collection of illustrated children's stories, entitled *The Bush Babies*. The stories are based on the true adventures of her own children growing up and living full-time (home schooled until Grade 8 and 9) on Tee Pee Island, Lake of the Woods, Ont. Books are available in Winnipeg at McNally-Robinson Booksellers.



Nelson, Colleen [BEEd/96, PBCertEd/02] has published her second novel for young adults, *The Fall*. Taking a realistic look at how young people deal with grief, the book focuses on the lives of three boys after they witness a tragic accident. Her previous novel, *Tori by Design*, won the McNally Robinson Book for Young People Award in 2012. Great Plains Teen Fiction is the publisher for both books.



Penko, Maureen [BA/75] received the 2013 Eve Kassirer Award for Outstanding Professional Achievement from the Canadian Association of Speech-Language Pathologists and Audiologists.



Werier, Art [BA/60, LLB/65] was named an inductee to the Manitoba Sports Hall of Fame for 2013. Werier played table tennis at four world championships and three Commonwealth Games. He was a perennial contender at the national level in the 1970s and 1980s. He was the International Table Tennis Federation vice-president (1973-77) and he played a key role in creating Sport Manitoba, serving as its chairman (1973-75).



Donaldson (Garbald) Ramona [BSc(Agribus)/09] and **Donaldson, Chris** [LLB/09] welcomed their daughter Nina Brigitte Donaldson on Feb. 1, 2013.



Willumsen (Murenko), Tania [BA/68] attended the Killam Trust prize ceremony hosted by Governor General David Johnston. Killam Prizes recognize eminent scholars in engineering, health sciences and natural sciences; Willumsen has chaired the investment committee for the past 15 years. After a successful career specializing in the management of pension and trust funds, she retired as a partner in a national investment-counseling firm and applied her experience to serving as a corporate director.

Adams, Karen [BA/66, BA(Hons)/67] was presented the Canadian Library Association's 2013 CLA Outstanding Service to Librarianship Award. Adams, who has been university librarian at the U of M since 2008, has made outstanding contributions to Canadian librarianship in a distinguished career that spans public, government, and academic libraries; involves leadership in provincial, regional, national, and international library organizations; includes teaching, research, mentoring, consulting, and publication; and demonstrates leadership on pivotal library issues, such as copyright.

Bajus, Beverly [BScHEc/59] recently presented an aerial photography show of "farMScapes" in the Restaurant Gallery of the Minnesota Landscape Arboretum. Dubbed *Five Miles High*, the show featured 36 images that Bajus shot from commercial jetliners cruising at altitudes of 27,000 to 34,000 feet.

English (Tate), Ann [BSc(ME)/80] became CEO and registrar of APEGBC (Association of Professional Engineers British Columbia) in November 2012. English joined APEGBC after nearly a decade with BC Hydro where she was director of interconnections and shared assets; director of Olympic Initiatives (during the 2010 Games); project delivery director; and director of distribution engineering.

Finlay, Barry [CA/72] has written a book about climbing Mount Kilimanjaro in 2009 with his son Chris. *Kilimanjaro and Beyond – A Life-Changing Journey* describes Finlay's post-retirement journey from a sedentary life behind the desk to the summit of Africa's highest peak at age 60 and his family's commitment to helping the children of Tanzania. The Finlays used their mountain trek as a platform to raise

money—\$75,000—towards a classroom for primary school students and a preschool. More information at keeponclimbing.com.

Finlayson, (Ptosnick) Marcia [BMROT/87, MSc/95, PhD/99] received the 2013 Muriel Driver Memorial Lectureship Award by the Canadian Occupational Therapy Association, which is their highest honour. Since 2012, Finlayson has been vice-dean (health sciences) and director of the School of Medical Therapy at Queen's University.

Fleming, Dan [BA/06] a 35-year military veteran and retired major, Fleming was awarded the Queen Elizabeth II Diamond Jubilee Medal for his work with injured military service members and veterans organizing Adaptive Ski/Snowboarding events the past number of years. He was nominated by the Department of National Defence.

Lindsay, John [BA(Hons)/89, MCP/93] has been promoted to associate professor at Brandon University, where he teaches in the applied disaster and emergency studies department.

Morrow, Morna-June Cecile [MEd/77, BEd/69, BMus/67, AMM/65] received an Honorary Life Membership from the Handbell Musicians of America in May 2013. She was part of the very first BMus graduating class in 1967.

Pankiw, (Hrenchuk), Mary [BA/65, BEd/69, MEd/72] has released *Ruffles Rabbit*. Pankiw's second children's book—and her first, *Misilla Mouse*—were illustrated by her 15-year-old granddaughter, Nadya.

Peters (Kastner), Joan Y. [BPed/73] was awarded the Queen Elizabeth II Diamond Jubilee Medal for many years of community

service, including an outstanding contribution to the R.M. of Cartier family history book: *Treasures of Time* 1985.

Simon, Libby [BA/66, MSW/71] has morphed into a freelance writer, after a long career in social work. She recently published her first book, *Life is Like a Pot of Soup*, which is a collection of new and previously published anecdotes and essays.

Shay, Jennifer [MSc/59, PhD/66] has written an account of the early years (1966 to 1986) of the University of Manitoba's Delta Marsh Field Station, titled: *Reflections on a Marsh*. Shay is one of its founding directors. Copies of the book are available from the department of biological sciences at the University of Manitoba at a price of \$22. Cheques should be made payable to the University of Manitoba. To order, please contact Jaime.Stringer@ad.umanitoba.ca.

Stamatakis. Eleftherios [BSc(Maj)/96, BSc(EE)/99] completed his master of science in engineering (applied mathematics major, computer and electrical engineering minors) in 2011 at Santa Clara University in California.

Zefferys (Little) Marlene [BSc/63] published her second novel, *Tears in the Rainforest*, an international thriller set in Malaysia. The fast paced novel highlights criminal activity in South East Asia involving exotic animal smuggling to China. The book is available for presale at a special price on Amazon.com with a launch date of Oct 1, 2013. This is Zefferys second novel on Malaysia. She has also written seven mini-books on current health problems: diabetes, high cholesterol, stroke, high blood pressure, memory, probiotics, and celiac disease also available on Amazon.com.



IN MEMORIAM

The Alumni Association Inc. of the University of Manitoba extends their condolences to the family and friends of the following alumni:

1930-39

Brown (Hiebert), Catherine E. [BScHEc/38]
April 19, 2013

Carr (Bingeman), Elizabeth (Betsy) [BA/36]
Feb. 20, 2013

Cooke, Dr. Robert Leighton [MD/39]
Feb. 8, 2013

Hechter, Annette [BHEc/38] April 14, 2013

Litch, Kathleen H. [BScHEc/34]
March 21, 2013

Longstaffe, Edwin G. [DipDairy/39]
May 29, 2013

Lorimer (Pilkey), Mary [BA/38]
March 14, 2013

Lough, Catherine G. [BScHEc/39]
May 5, 2013

May (Fosness), Margaret Laura
[BA/38, Cert Ed/67] March 16, 2013

Stoffman, Dr. Isaac W. [MD/39] April 4, 2013

Thomson (Mathieson), Genevieve E.
[BA/37] May 27, 2013

1940-49

Bauer (MacLean), Murina [BA(Hons)/43,
MA/45, BEd/49] March 26, 2013

Brill, Yvonne Claeys [BSc/45] March 27, 2013

Butler (Warren), Helen E. [BScHEc/41]
Feb. 18, 2013

Comrie (Schweitzer), Alison T.
[BScHEc/45, DipSW/46] March 8, 2013

Fanthorpe, Norman V. [CA/49] April 2, 2013

Feniak, Dr. Elizabeth M. [BScHEc/41]
April 7, 2013

Galt, Thomas M. [BComm(Hons)/48]
May 17, 2013

Green, Dr. Howard Chapman [MD/48]
Feb. 22, 2013

Guild, James D. [DipAgric/49] March 14, 2013

Hurst, Dr. Harold G. [MD/41] Feb. 2, 2013

Kesselman, Laila [BSc/47] May 21, 2013

McCarrel, Wilma F. [BScHEc/44] April 2013

McKenzie, Dr. John G. [MD/45] Jan. 11, 2013

McVicar, Barry M. [BSc(EE)/49] March 8, 2013

Mehmel, Dr. Philip Vincent [BA/48, MA/50]
May 25, 2013

Pauch, John E. [BSc(EE)/41] May 28, 2013

Poersch (Cuddy), Elaine M. [BScHEc/46]
April 22, 2013

Stevenson, Catherine [BScHEc/43]
Feb. 5, 2013

Tinline, Dorothy C. [BA/42] Feb. 2, 2013

Trachtenberg, Dr. Samuel [BA(Hons)/42]
Feb. 19, 2013

Howard (Phimister), Prof. Dorothy
[BA/49, LMM/61, Cert Ed/65] March 1, 2013

1950-59

Blackman (Andrew), Merle [BScHEc/53]
March 27, 2013

Bracken, Alvin M. [DipAgric/56] March 6, 2013

Crawford, David C. [BComm/55]
May 17, 2013

Hamilton, J. M. [DipAgric/50] April 15, 2013

Hill, Dr. Kenneth C. [MD/56] April 29, 2013

Hudson, William J. [BComm(Hons)/50]
June 3, 2013

Jessen, C. Lloyd [BSA/54] Feb. 9, 2013

MacLachlan, Dr. Gordon A. [PhD/56]
March 8, 2013

Maher, Arthur W. [CA/53] May 6, 2013

Mercury, Michael N. [BA/52] April 10, 2013

Oman, Norman Sidney [BSc(Pharm)/52,
Cert Ed/67, BEd/71] Feb. 21, 2013

Perreault, Elaine [BScHEc/59] Feb. 8, 2013

Shearer, David A. [BSc(ME)/56]
March 21, 2013

Smith, Margaret J. [BA/53, BPed/54]
Feb. 1, 2013

Sobkowich, Victor [BArch/50] March 30, 2013

Standing, John M. [BA/52, Cert Ed/66,
BEd/71, MEd/81] April 18, 2013

Tergesen, Terence P. J. [BArch/58]
Feb. 13, 2013

Wilson (Guild), Helen J. [BScHEc/51]
March 2013

1960-69

Bennett, Winnifred Mary
[BA/61, BSW/65, MSW/66] March 21, 2013

Borgfjord, Marvin R. [BArch/63, DipCP/67,
MCP/73] April 21, 2013

Buchel, Edward A. [BSc/60, BEd/64]
April 1, 2013

Capel, Michael J. [MSc/68] May 27, 2013

Christie, Douglas H. [BA/67] March 11, 2013

Connors, Ronald L. [BSc(Pharm)/62]
Feb. 21, 2013

Davis, Arthur H. [BSc(Pharm)/61] June 3, 2013

Demare, Paul J. [CA/65] April 2, 2013

Demers, Donald Joseph [BA/68]
March 13, 2013

Enns, Jacob [BA/64, BEd/68] April 21, 2013

Enns, John [MEd/64] March 12, 2013

Fast, Sheldon Donald [BSc(EE)/66]
Feb. 7, 2013

Finlay, Ronald B. [BSc(ME)/61] April 13, 2013

Ford, Douglas O. [BSA/65, MSc/72]
April 15, 2013

Glass, Marvin B. [BA/63, MA/66]
May 17, 2013

Kozak, Walter C. [BSc/66] Feb. 1, 2013

Kroeker, Gordon [BSc/67, BSW/72]
May 1, 2013

Kutcher, Peter F. [BA/61, BEd/61, MEd/69]
May 2, 2013

Ledingham, Dr. Robert M. [BID/64, LLD/06]
May 2, 2013

Lirenman, Warren [BSc/64, LLB/67]
March 21, 2013

Loewen, Gerhard Hardy [BA/67, BEd/69]
April 12, 2013

McLeod (Woods), Joan L. [AMM/67]
May 6, 2013

McLeod, Dr. Neil S. [BSc/61, MD/65]
April 9, 2013

Miles, Richard T. [BComm(Hons)/68]
Feb. 14, 2013

Peachell, John Lawrence [BA/67, BEd/71,
MEd/85] March 23, 2013

Rutledge, Robert F. [BA/64, LLB/67]
Feb. 18, 2013

Shinoff, Ruth [MSW/60] Feb. 7, 2013

Tretiak, Theodore J. (Ted) [BSc/65]
March 22, 2013

Vanderstoel, Dr. John [BA/63, BEd/66,
MEd/76, PhD/83] April 19, 2013

Wall, Harry B. [BSc(EE)/63, MSc/65,
Cert Ed/70, PB CertEd/92] April 29, 2013

Watson, John Walker [BSc/66] May 27, 2013

White, Ronald A. [CA/60] March 4, 2013

1970-79

Arpin, Helene M. [BPed/70] March 28, 2013

Blondal, A. Ted [BA/70, BEd/84] June 2, 2013

Bueckert, John Frederick (Rick) [BSA/78] April 15, 2013

Chernecki, Wayne Glenn [BComm(Hons)/71] Feb. 11, 2013

Craig (Iwaszkiw), Alice N. [BA/77] Feb. 22, 2013

Curto (Rempel), Judith H [BA(Hons)/74] April 30, 2013

Fehr, Robert John (Bob) [BFA(Hons)/77] May 21, 2013

Fleming, Wayne [BPE/73, Cert Ed/75] March 25, 2013

Friesen, Jacob [Cert Ed/70, CA/79] Feb. 21, 2013

Giesbrecht, Judge Linda Marie [LLB/76] May 17, 2013

Gosselin, Louis R. [Bes A/72] April 27, 2013

Holder, Harold S. [BSc/74] Feb. 28, 2013

Homik, John Christopher David [BSc/77, BComm(Hons)/81] April 23, 2013

Kowbel, Glen J [BSc/75] Feb. 9, 2013

Lafond, J. Guy P. [Bes A/74, BSc(Hons)/78, MSc/80] April 26, 2013

Lauren (Wilson), Sylvia L [BA/76, BEd/77] Feb. 5, 2013

Lewicki, Olga Elsie [BPed/72] April 18, 2013

Moncek, Sharon G. [BSc(Pharm)/76] Feb. 6, 2013

Owens, Thompson W. [Cert Ed/70] March 24, 2013

Percival, Kenneth Wayne [BA/71] March 15, 2013

Pollick, Robert S. [BA(Hons)/73, LLB/77] April 26, 2013

Reimer, John G. [BA/72, BEd/73] Feb. 2, 2013

Richardson, Royden Rooper [BA/76] May 4, 2013

Russell, Catherine Mildred [DipPT/73, BPT/76] Feb. 12, 2013

Seward, Robert D. [DipAgric/73, BSA/78] Feb. 25, 2013

Shtykalo, Daniel [BA/72, BEd/75] May 28, 2013

Sigurdson, Dr. Elaine Margaret [MD/79] May 3, 2013

Smith, David Aman [BSc/77] April 26, 2013

Smoke, Frederick M. [BComm(Hons)/74] Feb. 24, 2013

Solar, Elsie [BEd/77, MEd/81] Feb. 1, 2013

White, Edward A. [BSc/72] March 17, 2013

1980-89

Bartley, Larry Wayne [BEd/85] May 20, 2013

Berg, Dr. Karen Marguerite [MD/82] May 20, 2013

McConnell, Wendel Ross [DipAgric/80] March 5, 2013

Neamtan, Alexander David [BSc(Maj)/86] May 30, 2013

Perschel, Marion Joanna [BA/86] April 27, 2013

Quintero, Antonio Viado [BEd/88] March 3, 2013

Ryckman, Gail Elaine [BFA/80] Feb. 12, 2013

Shewfelt, Douglas D. [BCSc(Hons)/83, MSc/89, MBA/94] Feb. 10, 2013

Watson, Mary Elizabeth [BA/87] Feb. 24, 2013

Willows, Robert John [BA/86] May 30, 2013

Zacharias (Kroeker), Nancy Eleanor [BComm(Hons)/84] March 16, 2013

1990-99

Alexiuk, Dr. Nancy Anna Marie [MSc/91, PhD/96] Feb. 1, 2013

Alvarez (Bruinooge), Nadja Xiomara [BSW/93] May 11, 2013

McLeod, James Dennis [BComm(Hons)/96] Feb. 12, 2013

Price, F. Lindsay [BA/91] March 18, 2013

Ross, Christopher Winston [BComm(Hons)/91, CA/94] April 22, 2013

Smirl, Lisa Marie [BA(Hons)/97] Feb. 21, 2013

2000-09

Abgrall, Sharon Edna [BSW/08] March 3, 2013

Finkbeiner, Michael Douglas [BA/07] Feb. 28, 2013

Gerus (Brown), Jennifer Rae [PB DipEd/07] March 23, 2013

Harvard, Sasha Michael [LLB/09] March 2, 2013

Mathieson, Karen Anne [BA(Adv)/06] May 15, 2013

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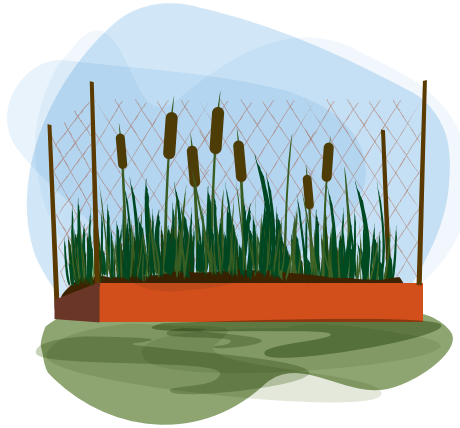
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A LAKE AT STAKE

CONTINUED FROM 23



Factors including man-made physical alterations to the marsh and the sheer volume of nutrient-laden water brought to it by the Red River have all helped change the marsh's appearance and functionality.

"It's not really a marsh anymore," laments Goldsborough. "In effect, we've turned this once-vast marsh into an extension of the lake."

Goldsborough adds to that the main effect of Manitoba Hydro's water regulation, which is a reduction in the frequency of low water events. That, in turn, has meant the marsh no longer experiences natural low-water periods. Those periods would allow dormant seeds in the mud to sprout and re-establish marshland.

Tinkering with Hydro's water levels is tricky, however. Instead of waiting for changes in the provincial Crown Corporation's operational practices, Goldsborough has been working on prototypes of a small, floating marsh called a bioplatform.

The idea is to instantly 'restore' the marsh's vegetation and provide habitats for animals by growing cattails on platforms and anchoring them on floats in the marsh. The cattails will help absorb phosphorus in the water, and could even be harvested and transformed into fuel pellets for stoves—thereby recycling the phosphorus.

"Even if you don't burn them, you can compost them and it becomes a source of organic matter," says Goldsborough, whose research is funded by the province, the Department of Conservation and Water Stewardship as well as Ducks Unlimited Canada.

Small floating wetlands are already being used in the harbour of Baltimore City.

"The sky is endless," says Goldsborough. "You could put these platforms into sewage retention ponds. Right now, sewage retention ponds are often just ponds; they're not doing anything that actually reduces nutrients. It seems to be that this is the tip of the iceberg."

It's going to take a lot of new ideas—and twists on old ideas—to fix Lake Winnipeg. Funding will be critical. Moving beyond the blame game will be, too. But not to be forgotten is the importance of encouraging scientists and researchers to be both creative and practical.

U of M civil engineering Professor Trish Stadnyk is doing her part in bringing up the next batch of researchers who may one day play a role in helping Lake Winnipeg.

Stadnyk recently taught a senior design class in civil engineering. As part of the course, she asked her students to design computer-generated models that would test strategies to improve Lake Winnipeg's water quality—a practical way of teaching her students not just about academic theory, but also the complexities surrounding a precious resource in need of help.

"I hope that what they took away from it is that despite Lake Winnipeg facing a massive problem, it's solvable with good engineering judgement, some thought and putting a lot of science behind it," says Stadnyk.

Words to remember for the big job ahead of us.



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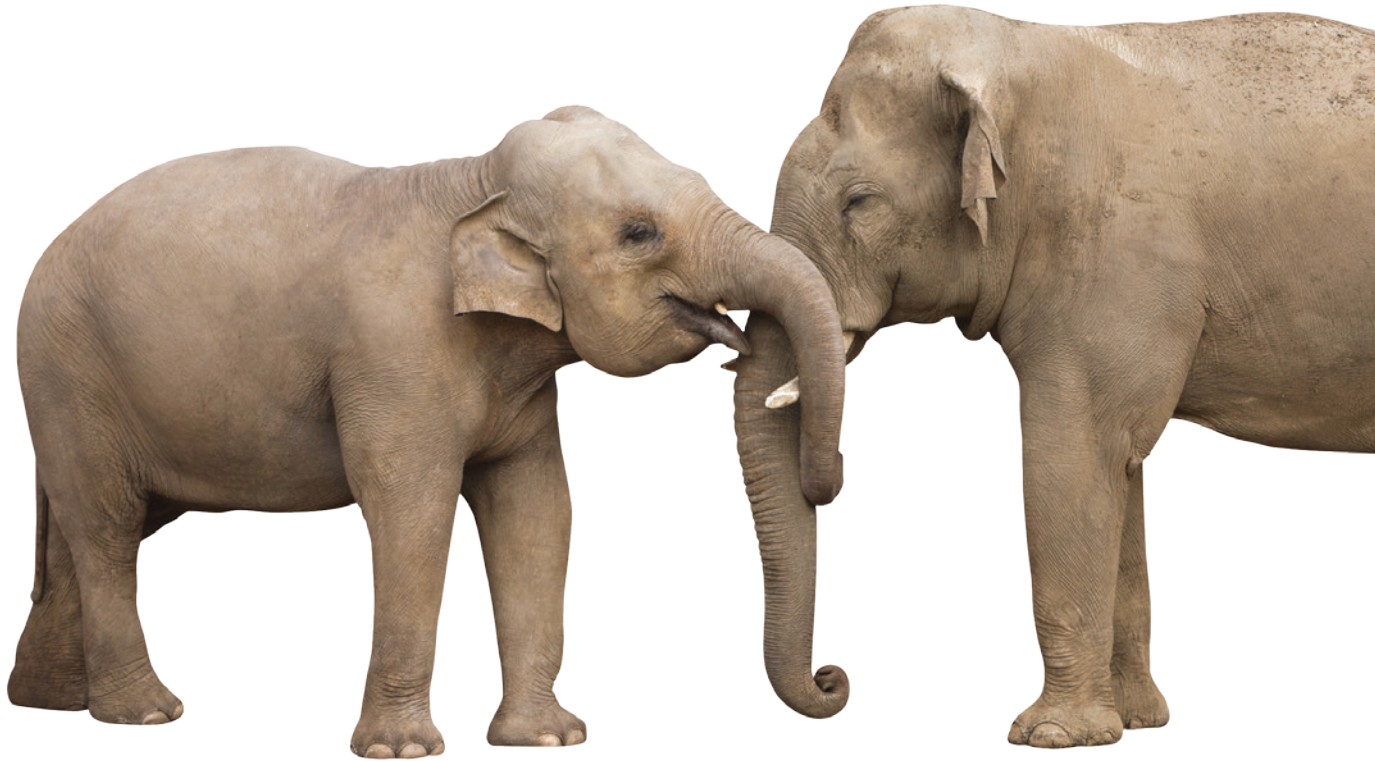
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