U of M honours Morrison

The Faculty of Agricultural and Food Sciences’ Carman research station was officially named the Ian N. Morrison Research Farm on July 26. Morrison was a professor and renowned weed scientist with the University of Manitoba for 20 years.

A sign noting the farm’s new title was unveiled by Morrison’s wife Joanne and children Stuart, Katie and Brett. Morrison, as head of the department of plant science in 1992, led the effort to secure the Carman property as a permanent research farm.

Today, the 406-acre farm located on the west side of Carman serves as an important site for research and collaboration with grower groups and Manitoba Agriculture, Food and Rural Initiatives personnel, and for extension activities such as the annual Crop Diagnostic School.

Each year approximately one thousand visitors from Manitoba and around the world tour the Carman farm.

The site also includes the University of Manitoba Carman & Region Facility, a teaching, research and extension centre that serves the community and surrounding area.

Morrison’s research contributions in weed science, especially his groundbreaking research into herbicide resistance, were internationally recognized.

In 1999, he was inducted as a Fellow of the Weed Science Society of America, an international society that he had served for many years.

Also a gifted teacher, he supervised more than 20 graduate students, many of whom now play major roles in the agricultural industry across Canada as researchers, educators and managers in private industry, universities and the public service.

Morrison left the University of Manitoba in 1996 to become dean of the Faculty of Agriculture, Forestry and Home Economics at the University of Alberta in Edmonton for eight years. He passed away unexpectedly in January 2006.

Joanne Keselman, vice-president (research), was on hand for the event and said the U of M couldn’t do its job as a research university without places like the research farm.

“The Carman Research Station plays a very important role as a centre of research and education throughout the region, and it’s fitting that we are dedicating this facility to an outstanding scientist who made a significant and lasting contribution to research and education across the prairies,” Keselman said.

Students decode the law

About a dozen University of Manitoba law students have developed an innovative project that provides legal information to Aboriginal people in Manitoba who were in the residential school system.

All summer students have been volunteering their time and expertise traveling to Manitoba reserves and giving free information workshops on the federal government’s Indian Residential Schools Settlement Agreement.

“We’re helping those people who don’t normally get access,” says Calla Coughlan, law student and program coordinator for Pro Bono Students of Canada - Manitoba (PBSC), a student volunteer organization interested in philanthropy and public interest law.

“The settlement will impact many survivors’ lives; it’s critical they understand it. We’re helping those people who don’t normally get access,”

The PBSC residential schools information workshops offer information on how to protect finances, including signing authority, shared bank accounts, and what constitutes fraud and theft.

“Since many survivors are elderly, we are also answering general questions regarding the creation of wills,” Coughlan adds.

“The settlement agreement opt-out day [of Aug. 20] is approaching and survivors are still wondering what the ramifications of opting out are,” says law student Meredith Mitchell, who took part with Coughlan in a workshop at Peguis First Nation last month.

“Since many survivors are elderly, we are also answering general questions regarding the creation of wills,” Coughlan adds.

“The settlement agreement opt-out day [of Aug. 20] is approaching and survivors are still wondering what the ramifications of opting out are,” says law student Meredith Mitchell, who took part with Coughlan in a workshop at Peguis First Nation last month.

“As students with a valuable skill set and understanding and decoding the law we have an opportunity to assist survivors.”

Funding has been provided by the Law Foundation of Manitoba to help cover travel costs.

Upcoming trips include the Peguis First Nation, Rouseau River First Nation, Norway House and Cross Lake,

“Since many survivors are elderly, we are also answering general questions regarding the creation of wills,” Coughlan adds.

“The settlement agreement opt-out day [of Aug. 20] is approaching and survivors are still wondering what the ramifications of opting out are,” says law student Meredith Mitchell, who took part with Coughlan in a workshop at Peguis First Nation last month.

“All summer students have been volunteering their time and expertise traveling to Manitoba reserves and giving free information workshops on the federal government’s Indian Residential Schools Settlement Agreement.

“As students with a valuable skill set of understanding and decoding the law we have an opportunity to assist survivors.”

Funding has been provided by the Law Foundation of Manitoba to help cover travel costs.

Upcoming trips include the Peguis First Nation, Rouseau River First Nation, Norway House and Cross Lake.

Requests for additional workshops have been received by the students, who are teamed up with the university’s Manitoba Aboriginal Law Students’ Association. The students are advised by law faculty in their research.

Creative works

A new grants program is recognizing the value of creative works.

Artic adventure

Our researchers will be busy over the next 15 months studying change in the Arctic Ocean.

DNA physics

Biology, chemistry and physics all have a role to play in the study of DNA.

One University.
Many Futures.
Meet tomorrow’s scientists

By Kimberly Cornellie

Fifteen Grade 5 and 6 students got hands-on experience as budding scientists in the recently launched Head Start Biomedical Youth Program.

The program ran for one week with the young scientists receiving their graduation diplomas on Friday, July 13 at the Faculty of Medicine, University of Manitoba.

The program targeted Winnipeg inner city schools, with a specific focus on Aboriginal schools Niji Mahkwa, Marion and Fort Rouge.

Francis Amara, associate professor and senior scientist, department of biochemistry and medical genetics, Faculty of Medicine, said this initiative is designed to give students of under-represented minorities and low socio-economic backgrounds an introduction to science and research.

The goal of the program is to encourage them to learn more about science and to eventually pursue careers in the health profession.

Jasmine Boulente, who proudly said she’s entering grade six at Niji Mahkwa School, had a great time.

“I really liked the tour and the science experiment,” she said.

When asked what she would like to accomplish as a scientist, she answered, “I want to learn how long mosquitoes live and I want to cure cancer.”

Boulente’s excitement was demonstrated by all 15 participants as they toured the lab facilities at both St. Boniface Hospital Research Centre and the Faculty of Medicine and later participated in hands-on experiments with grad students.

Next year the program will continue, and Amara would like to see more inner city students have the opportunity to participate.

“I am hoping that this program will create a sustainable interest in science, and have an impact on the career choices for these children,” said Amara.

The Head Start Biomedical Youth Program and the Science Buddies Program are both sponsored by the Faculty of Medicine, St. Boniface Hospital Research Centre, Sanofi-Aventis Biotech, MINDSET Manitoba, and the Centre for Aboriginal Health Education.

Like meeting people? Come volunteer!

The University of Manitoba is hosting an Open House to coincide with this year’s Homecoming celebrations in September and we need your help to make it a success.

On Saturday, Sept. 15, from 10 a.m. to 2 p.m., the general public will be invited to campus to take part in tours, activities and displays hosted by various faculties and departments.

We’d love to have faculty, staff and students join us as volunteers. We envision our student volunteers as ambassadors for the university. Along with playing host and acting as support staff for the event, we’re hoping they’ll have a chance to talk with prospective students, alumni and members of the general public to share their views and experiences of university life.

Volunteers are needed in a number of areas and capacities such as hosts, tour guides and support staff. If you are interested in volunteering and/or can help us find some students and staff members who are, please contact Dale Barbour at 474 8111 or barbourd@ms.umanitoba.ca or Erin Carter at 272 1564 or cartere@cc.umanitoba.ca.

Volunteer orientation will be provided.

The Bulletin

University of Manitoba

The Bulletin is the newspaper of record for the University of Manitoba. It is published by the Public Affairs department every second Thursday from September to June and monthly in December, July and August.

The Bulletin welcomes submissions from members of the university community. Submissions can include letters to the editor, columns, news briefs and story and photo suggestions.

Material in The Bulletin may be reprinted or broadcast, excepting materials for which The Bulletin does not hold exclusive copyright.

John Wilkins and the Head Start Biomedical Youth Program students complete their tour of the Centre for Proteomics and Systems Biology Lab, which opened in June 2006.
A window between tundra and ice
Circumpolar Flaw Lead project will shed light on Arctic's future

The University of Manitoba is on the move in the Arctic Ocean and Canada Research Chair in Arctic System Science David Barber couldn’t be happier.

Barber, who is also director of the Centre for Earth Observation Science at the University of Manitoba, leads the Circumpolar Flaw Lead System (CFL) study, a 15-month adventure aimed at understanding the effects of climate change in the Arctic. The project kicked off this summer.

The CFL study, which involves more than 16 countries, was officially launched at the University of Manitoba on July 11. Based aboard the Canadian Coast Guard research icebreaker, CCGS Amundsen, the CFL study is the largest project in Canada’s International Polar Year (IPY) research program, and one of the largest IPY projects in the world.

For the official launch, Barber was joined by First Nations minister, Joanne Kesselman, and Treasury Board president, Kerri Irvin-Ross.

“The CFL study will provide us with vital scientific knowledge regarding the interactions between climate change and the ocean ecosystem,” said Kesselman.

“On behalf of Loyola Hebrew Minister of Fisheries and Oceans, "Our new geographic circumpolar lead System project will provide us with scientific knowledge regarding the interactions between climate change and the ocean ecosystem," said Kesselman. "We are extremely proud of Dr. Barber and his team, and we congratulate every one of the more than 200 researchers who will play a part in this unprecedented collaboration."

Along with Barber, the project is co-led by Gary Stern, DFO/University of Manitoba and Jody Deming from the University of Washington.

CFL researchers will be studying "flaw leads," areas of open water created when the central Arctic ice pack moves away from coastal ice. Scientists consider flaw leads to be early indicators of what the Arctic will look like in the coming decades. Barber said they have never before been studied in such a detailed way.

"Our project is looking at the flaw lead system from virtually every angle," Barber said at a media presentation following the official announcement.

"When you consider that we are now losing Arctic sea ice at a rate of about 70,000 square kilometres each year, we really need to understand how this will effect the entire circumpolar region," Barber said.

For details call 474 8111
For more information about the project visit: umanitoba.ca/ipyp

New Faculty Orientation Animal Care and Use Workshop
This workshop will be beneficial to recently hired, senior animal research personnel such as faculty members, post docs, research associates and senior technical personnel who will be applying for funding, holding or writing animal care protocols and/or managing research projects utilizing animals.

Topics addressed will include: policies as they relate to animal use, animal care protocol submission, education and training requirements, facility requirements and veterinary services.

This hour will also provide an opportunity to meet the University of Manitoba's animal care personnel. Coffee and donuts will be served.

Come out and meet us now and let us help you save valuable time in future research projects.

Tuesday, September 4, 2007 12:00 - 1:00 p.m. Room 210 Medical Services Building Bannatyne Campus For further details please contact Denise Borowski at 789-3960 or by email at borowski@cc.umanitoba.ca

From left, Canada Research Chair in Arctic System Science David Barber, speaks with Manitoba minister of healthy living Kerri Irvin-Ross, vice-president (research) Joanne Kesselman, and Treasury Board president Vic Toews at the CFL launch on July II.

A lesson about sarcasm
Melanie Glenwright’s research is really interesting. No, really.

Glenwright, department of psychology, is exploring sarcasm and kids, and children’s ability to grasp these important aspects of everyday communication.

"Sarcasm is something that we don’t get until a certain point in our childhood stage of development, late in our primary years," says Glenwright.

Glenwright, who has spent six years making sarcastic comments around kids, has found that children tend to be literal thinkers and their ability to perceive and process sarcasm is developed over time.

Of course, Glenwright doesn’t stop around the schoolyard trying to elicit laughs with her sarcastic wit. Her research is conducted using puppets who employ sarcasm in conversation with each other while children, aged 6 to 10, observe. Kids are then asked about the meaning and intent behind the puppet’s words.

"Kids detect sarcasm at about age 6, but don't begin to see the intended humour until around age 10," she explains.

But Glenwright’s work doesn’t stop at pinpointing which ages can identify sarcasm. Her research, much of which is done in collaboration with University of Calgary colleague Penny Pexman, sets out to answer specific questions, such as: Why do children have difficulty seeing the humour intended in sarcasm? And, what cognitive mechanisms and social experiences are necessary for children to understand sarcasm?

Although adults don’t think twice about why they are laughing at a sarcastic quip made by a character in a popular sitcom such as Friends, Glenwright says that the process by which we interpret and respond to sarcasm is actually quite complex.

It works something like this: when we encounter sarcasm we first process the literal meaning of the words being spoken, then we suppress an urge to respond to that literal meaning, then we look for the true intent of the words based on facial expressions, intonation and familiarity with the person speaking the words. At that point, we’ve recognized sarcasm and can respond accordingly, often with laughter or an icy stare.

Kids, on the other hand, are left wondering what the joke is.

"Younger kids think slapstick is funny, and playing with people is just fun," Glenwright says, adding that kids often perceive sarcasm to be mean-spirited.

Glenwright says her research could be a boon to educators, as it helps shed light on the origins of teasing, which can turn into bullying at later stages of child development.

"Healthy classroom discussions about sarcasm could be beneficial for kids," she says.

A healthy classroom discussions about sarcasm could be beneficial for kids.

Advertise in The Bulletin
For details call 474 8111

ONE UNIVERSITY. MANY FUTURES umanitoba.ca

Copyright © 2007 by The University of Manitoba
Finding physics in the study of DNA

BY DALE BARBOUR
The Bulletin

Charge Migration in DNA: Perspectives from Physics, Chemistry, and Biology, part of the Nanoscience and Technology series by Springer. The book is drawn from a series of talks given at the University of Manitoba last year. Chakraborty is editor and contributes to the chapter “Physics Aspects of Charge Migration Through DNA.”

As the title suggests, the concept behind the book is that DNA molecules can carry charges, not unlike a copper wire carrying an electrical charge. Although the process isn’t nearly as simple.

The ramifications, however, are significant and some of them are already well known to the general public. “People understand that anti-oxidants are healthy and that they should be eating fruit,” Chakraborty said. The science behind that health tip has everything to do with the ability of DNA to carry a charge. When DNA molecules become oxidized, it means an ion has been knocked off the base of the DNA, changing its charge.

As that charge transfers through the DNA, it has the ability to pass on the damage to other areas of DNA, changing its charge. The process has taken computers from the size of rooms to the palm of your hand in a generation. But the charge migration taking place at an incredible rate, Chakraborty said. “Nanotechnology is based on the idea that things can be created that are smaller through conventional means,” Chakraborty said. But DNA is the ultimate nano-circuit, due to its molecular recognition and self-assembling capabilities.

“DNA is an important element for nanotechnology. We need to understand its electronic properties. It has not even been clear until now that DNA can conduct charges,” Chakraborty said. How the processes works and under what conditions is still a matter of debate. Chakraborty’s own lab is working on theoretical models for how the processes might work. It’s the sort of approach that might one day lead to computers that are designed at the cellular level.

Charge Migration in DNA: Perspectives from Physics, Chemistry, and Biology is written with upper level graduate students and researchers in mind. Ultimately, Chakraborty said the goal is to draw together the research strength from all the disciplines.

Exhibit looks at book design

Elizabeth Dafoe Library is hosting a traveling exhibit of prize-winning books, selected for the 2006 Alcuin Society Book Design Awards. Since 1981 the Alcuin Society has sponsored the oldest national competition that recognizes and celebrates fine book design in Canada. Each year publishers submit books to a panel of expert judges who give the Alcuin Society Awards for Excellence in Book Design in Canada. Judging is based on the suitability of the design concept in relation to the intellectual nature of the content and the intended audiences. Judges also consider use of colour and type as well as illustrations and photography (when applicable). To view the exhibit, please visit the Elizabeth Dafoe Library.
The University of Manitoba will be the place to be in September and not just for students.

The university is holding an Open House at its Fort Garry Campus on Sept. 15, from 10 a.m. to 2 p.m. It will be a great chance for the general public, along with friends and family of students and staff to check out the university.

The Open House will include entertainment, displays and campus tours. Visitors will also have the opportunity to explore the campus where they’ll find everything from art shelves to dinosaurs.

Had enough of looking at the campus? Then break off from the Open House and catch the U of M Bison square off against the University of Calgary Dinos during the Homecoming football game. The game kicks off at 1 p.m. and is one of the highlights of Homecoming 2007, which runs from Sept. 12 through Sept. 16.

Each year, the University of Manitoba Alumni Association holds its week-long Homecoming event with the goal of recapturing the magic of student life for U of M grads from all over the world. But the week is not only for grads. It’s a chance for university faculty and staff to mix and mingle with former students as well as with the Homecoming Football game, events include:

• Class reunions. Plenty of alumni will be back to share memories.
• The Faculty of Engineering centennial. It will be a great party. More information is available at: umanitoba.ca/faculties/engineering.
• There will be tours of the Fort Garry Campus on Friday, Sept. 14. Sure to prompt a ‘Hey, that’s new’ moment.
• The faculty of music concert. A great mix of jazz, classical and more.
• Reunion dinner. A gala event and perennial highlight.

There’s something for everyone at Homecoming 2007. To learn more, head to umanitoba.ca/alumni. Pick the events you’d like to attend and then give Alumni House a call at 474-9946 to order your tickets.

Check out the Bison on Sept. 15!
A full listing of employment opportunities at the University of Manitoba can be found at www.umanitoba.ca.

The University of Manitoba encourages applications from qualified women and men, including members of visible minorities, Aboriginal peoples, and persons with disabilities. All qualified candidates are encouraged to apply; however, Canadians and permanent residents will be given priority. Please include the position number when applying for openings at the university.

FACULTY OF ARTS

Women’s Studies Program
Position: Post-Doctoral Fellowship (up to 5 years post Ph.D.)
Start date: Jan. 1, 2008
Salary: The fellowship award is $41,750 for per annum (non-negotiable). The postdoctoral fellow will be expected to engage in an active program of research and teaching.

For information: Dr. Linda M. Wilson, professor and acting coordinator, women’s studies program, 308 Fulcher Argeuil Building, University of Manitoba, Winnipeg, MB, R3T 2N2, phone 474-8403, fax 474-7590, e-mail lwilson@ms.umanitoba.ca.

UNIVERSITY OF MANIToba LIBRARIES

Elizabeth Dafoe Library
Position: Education librarian at the rank of assistant librarian
Salary: Commensurate with experience and qualifications
Application deadline: Sept. 16
For information: Ms. Carolynne Presser, director of libraries, The University of Manitoba Libraries, Winnipeg, MB, R3T 2N2.

FACULTY OF ENGINEERING

Department of Mechanical and Manufacturing Engineering
Position: Assistant professor in the area of solid mechanics
Start date: July, 2008
Salary: Commensurate with experience and qualifications
Application deadline: January, 2008 and will continue until the position is filled
Position number: 05352
For information: Professor D. Kuhn, chair of the search committee, department of mechanical and manufacturing engineering, University of Manitoba, Winnipeg, MB, R3T 5V6, e-mail nabe@umanitoba.ca to the attention of Prof. D. Kuhn.

FACULTY OF MEDICINE

Department of Internal Medicine
Winnipeg Regional Health Authority
Position: Transplant Hepatologist
Start date: Oct. 1
Salary: Commensurate with experience and qualifications
Application deadline: Position will remain open until filled
Position number: 06493
For information: Dr. Gerald Minuk, head, section of hepatology, John Buhler Research Centre, 8034-715 McDermot Ave., Winnipeg, MB, R3E 3P4.

Department of Internal Medicine
Winnipeg Regional Health Authority
Position: Four neurologist positions within the areas of stroke neurology and/or general neurology
Start date: Oct. 15
Salary: Commensurate with experience and qualifications
Application deadline: Sept. 30, however position will remain open until filled
Position number: 06446, 06447, 02222, AF08 529
For information: Dr. Alan Jackson, chair, search committee, section of neurology, Room GF545, Health Sciences Centre, 820 Sherbrook St., Winnipeg, MB, R3A 1R9.

Department of Pediatrics and Child Health
S e c t i o n  o f  P e d i a t r i c s
Position: Gastroenterologist
Start date: Jan. 1, 2008
Salary: Commensurate with experience and qualifications
Application deadline: Dec. 1
Position number: 05017
For information: Dr. C. Rockman-Greenberg, department head, department of pediatrics & child health, University of Manitoba, Children’s Hospital, 820-840 Sherbrook St., Winnipeg, MB, R3A 1S1, fax 787-4807, e-mail gregenberg@hsc.mb.ca.

FACULTY OF SCIENCE

Department of Physics and Astronomy
Position: tenure track position in experimental biological physics
Start date: July 1, 2008
Application deadline: Oct. 31
Position number: 05259
For Information: Dr. PG. Blunden, Head, Department of Physics and Astronomy, University of Manitoba, Winnipeg, MB, R3T 2N2, phone 474-9817, fax 474-7622, e-mail blunden@physics.umanitoba.ca.

FACULTY OF MEDICINE

Department of Internal Medicine
Winnipeg Regional Health Authority
Position: Transplant Hepatologist
Start date: Oct. 1
Salary: Commensurate with experience and qualifications
Application deadline: Position will remain open until filled
Position number: 06493
For information: Dr. Gerald Minuk, head, section of hepatology, John Buhler Research Centre, 8034-715 McDermot Ave., Winnipeg, MB, R3E 3P4.

Department of Internal Medicine
Winnipeg Regional Health Authority
Position: Four neurologist positions within the areas of stroke neurology and/or general neurology
Start date: Oct. 15
Salary: Commensurate with experience and qualifications
Application deadline: Sept. 30, however position will remain open until filled
Position number: 06446, 06447, 02222, AF08 529
For information: Dr. Alan Jackson, chair, search committee, section of neurology, Room GF545, Health Sciences Centre, 820 Sherbrook St., Winnipeg, MB, R3A 1R9.

Department of Pediatrics and Child Health
S e c t i o n  o f  P e d i a t r i c s
Position: Gastroenterologist
Start date: Jan. 1, 2008
Salary: Commensurate with experience and qualifications
Application deadline: Dec. 1
Position number: 05017
For information: Dr. C. Rockman-Greenberg, department head, department of pediatrics & child health, University of Manitoba, Children’s Hospital, 820-840 Sherbrook St., Winnipeg, MB, R3A 1S1, fax 787-4807, e-mail gregenberg@hsc.mb.ca.

FACULTY OF SCIENCE

Department of Physics and Astronomy
Position: tenure track position in experimental biological physics
Start date: July 1, 2008
Application deadline: Oct. 31
Position number: 05259
For Information: Dr. PG. Blunden, Head, Department of Physics and Astronomy, University of Manitoba, Winnipeg, MB, R3T 2N2, phone 474-9817, fax 474-7622, e-mail blunden@physics.umanitoba.ca.

The Bulletin welcomes Classified Ads. The rate for ads is $5 for the first 45 words.

CHARACTER DUXPLUS (1st floor) in Osborne Village, close to bus routes, shopping, Corydon, and downtown. 2 b/r, large liv r, new appliances, and w/d. Parking available. No pets. ns. $950 per month. Available late August or September. Call 284-5033.

CLASSIFIED ADS

The Bulletin welcomes Classified Ads. The rate for ads is $5 for the first 45 words.

CHARACTER DUXPLUS (1st floor) in Osborne Village, close to bus routes, shopping, Corydon, and downtown. 2 b/r, large liv r, new appliances, and w/d. Parking available. No pets. ns. $950 per month. Available late August or September. Call 284-5033.

Live on campus!

Rooms are available at St. John’s College Residence, 92 Dysart Road.

SJC has excellent services and (arguably) the best food on campus.

Residence rates include 19 buffet style meals/week, plus complimentary snack on Sunday nights and during exam periods.

Cost: Single Room - 8 months $6763.

Contact the Dean of Residence
474-8363,
plampman@ms.umanitoba.ca.

Remember, it’s YOUR Bulletin!

The Bulletin welcomes: news tips, opinion pieces, letters to the editor, photo ideas and event submissions.

For information call 474 8111.
Perfecting the tools to manage power

BY SEAN MOORE
Research Promotion

The hybrid car recently zipped to the forefront of environmentally-friendly vehicles, which is admirable, but where is the champion of clean commuting – the all-electric engine? In the race to reduce greenhouse gas emissions, why does the production of electric cars continue to crawl along at the speed of a wounded turtle?

In short, it has a power management problem. But things are about to change.

Shaahin Filizadeh, electrical and computer engineering, is designing new circuitry that will make power flow to where it is needed more smoothly and with remarkably increased efficiency.

“We have a powerful motor and we have batteries with limited energy storage. What’s needed is an interface to manage how much power flows from the batteries to the motor, and how it is done. That’s one of the things we’re working on,” Filizadeh said.

He is developing computer simulation models that can be used to create better power electronics, which are being installed into an electric all terrain vehicle (ATV) his lab is building. He chose an ATV because it epitomizes the problem: farmers, for example, use it for long trips involving many stops and starts and recreational users want it to go fast.

When power flows from its source to its destination, it travels through a combination of electronic switches called a power electronic converter. The topology of such converters and the way switches are turned on and off affects the way power flow happens. Simulation tools play an important role in the way such systems are designed to enhance their operation and make them more efficient by smart use of the energy available.

Researchers examine our views on zoos

BY SEAN MOORE
Research Promotion

Apparently, there’s something captivating about captive animals.

Every year, North American zoos have greater attendance numbers than all professional North American sports teams combined. They are prominent cultural institutions found in nearly every major city; you are brought to them when you are young and you are old. Indeed, Winnipeg’s 103-year-old zoo is the oldest zoo in Canada. The first Canadian zoo, however, was a privately owned one established in 1847 in Halifax, but it closed in the 1890s.

“What is it about these places that bring people out in droves?” Bonnie Hallman, environment and geography, asked.

Hallman and Mary Benbow, associate dean (academic) of the Clayton H. Biddell Faculty of Environment, Earth, and Resources, are studying zoos. Both examine zoos from different angles, but often their work overlaps and they have recently begun collaborating on new studies.

The rich repository of environmental, social and cultural information held in zoos, and disseminated by them – from maps and signs to souvenir stuffed animals and conversations at an animal’s cage – is being tapped and examined by Benbow who wants to know what impacts zoos have on people. Such information is valuable to conservationists.

“It’s been stated that, for many people in Western countries, their only contact with biodiversity is in zoos. I thought if that’s the case, then that contact means people get a fundamentally different view of nature,” Benbow said. “What are the implications of that?”

To learn more, she studies maps because they reveal how zoos portray themselves. Zoo maps from the late 19th century, like Philadelphia’s, were designed to be formal and convey an image of a scientific institution. By the 1930s, animals on zoo maps were portrayed using symbols and even cartoons. These images reveal how the animals were viewed; for example, gorillas were once depicted as brooding and monstrous but recently, and more appropriately, as sensitive and nurturing creatures.

Meanwhile, Hallman is looking at how people, with a particular interest in families, interact within the zoo. She has also received funding from a Centre on Aging Research Fellowship to examine the ways zoos can be more inviting to seniors – important future clientele.

Current zoo goers, Hallman said, are mostly mothers with their children.

“A zoo helps define who we are and it helps people grow into the role of being a good parent,” she said.

“It gets an unquestioned stamp of approval for a good family outing.”

In the race to reduce greenhouse gas emissions, why does the production of electric cars continue to crawl along at the speed of a wounded turtle? If you look around, you realize there are essentially so many projects that the big challenge is figuring out where we want to go next,” she said.

“Current zoo goers, Hallman said, are mostly mothers with their children.

“A zoo helps define who we are and it helps people grow into the role of being a good parent,” she said.

“It gets an unquestioned stamp of approval for a good family outing.”

Shaahin Filizadeh, left, and Erwin Dirks, electrical and computer engineering.

Mary Benbow, left, and Bonnie Hallman, environment and geography, are studying zoos.

Research News
umanitoba.ca/research

You can’t just waste energy. Everything counts,” he said.

A previous design his lab developed in early 2007 was used to create an electrical vehicle driven by some American parking authorities. The simulated energy savings were 95% accurate compared to subsequent real-world results.

“I think what distinguishes us from other researchers working on electric and hybrid vehicles is the real power of good simulation tools that we have and develop. It’s our niche area,” Filizadeh said.

His work is also applicable to larger scale projects, like power grids.

By adding better power electronic devices to a system you could, for example, select how much power you want to send down a particular corridor, thus making much better use of existing power transmission networks.

If information technology is the art of data processing, power electronics is the art of energy processing. You have different forms of energy available to you but if you want to use them responsibly you need to process them in a way that is efficient and gives you performance and reliability. That’s what these interfaces we design can do.”

Research News is Published by the Office of the Vice-President (Research)
Comments, submissions and event listings to:
stefaniu@ms.umanitoba.ca
Phone: (204) 474-9020 Fax (204) 261-3475
Grant program has creative focus
Sinclair plans to draw people into a fictional world

BY DAVE BOURBE
The Bulletin

Thanks to a $1,972 grant from the University of Manitoba’s own creative works grants program, English professor Struan Sinclair has a leg up on his new project titled If/Then: A Walkthrough Fiction.

“It’s a project I’ve had in mind for a while,” Sinclair said. As director of the English Media Lab he has experience in using multiple media to tell a story or move a story forward. His own research reaches across cognitive science, computing, literature and the possibilities of using artificial intelligence as a story creating engine.

If/Then: A Walkthrough Fiction will pull all of those various approaches together and put them together in a virtual world.

“When I went to London, I came across a walking tour by Canadian artist Janet Cardiff,” Sinclair said. People would be handed a tape or cd and head off on their own with some head phones. The tour started off with a straight forward narrative, but as the tour progressed the narrative voice became far more personal, talking about what the places had meant to her.

With If/Then: A Walkthrough Fiction Sinclair envisions putting together a collection of a virtual world where they’ll meet people and places capable of telling or showing their own stories. The first phase of the project will be a single building, but Sinclair sees the project evolving into an open construct where people can log in from around the world and help build the story – reshaping the virtual world through their own interaction with it.

It’s a project that raises intriguing questions about the ability of people from across the world to work together to develop a larger project.

But of course, building a world does take money. The creative works grants program funding will help Sinclair purchase the programs needed to run the virtual world and the technical expertise to help build it. However, as much as the grant will help him, Sinclair said as significant is the meaning behind it: It’s a sign that the university recognizes the value of creative works.

“It gives credence to creative works that are often shut out of the funding circle,” Sinclair said. But like other research projects undertaken at the university, Sinclair said creative works reach out to the broader community and industry through partnerships.

“You can’t make a project like this work on your own,” Sinclair said. “Winnipeg is the perfect place to do it because it’s so rich in resources, ranging from the strong artistic community to the expertise available on the technical side.”

Sinclair is one of ten faculty members to receive a grant through the creative works grants program. The program supports high quality creative works that meet peer standards of excellence and are suitable for publication, public performance or viewing. All full-time academic staff members with professorial or academic librarian rank at the University of Manitoba are eligible to apply to the program. Details about the program can be found at umanitoba.ca/research/orc/internal_funding_grantforms.html.

Apart from If/Then: A Walkthrough Fiction, Sinclair is still working in more conventional media. A book of short stories, Everything Breathed, is out with Graffiti and his first novel, Automatic World will be published in Canada by Doubleday in 2008.

**Creative works grants program recipients**

The following people received awards in the May 1, 2007 competition of the University Creative Works Grant Program:

<table>
<thead>
<tr>
<th>Applicant</th>
<th>Department</th>
<th>Project Title</th>
<th>Award</th>
</tr>
</thead>
<tbody>
<tr>
<td>B. Brown</td>
<td>Landscape Architecture</td>
<td>Landscapes and sound. Exhibited at event</td>
<td>2,500</td>
</tr>
<tr>
<td>N. Chard</td>
<td>Architecture</td>
<td>Active picture plane. Drawing instrument</td>
<td>2,500</td>
</tr>
<tr>
<td>G. Fitzaz</td>
<td>Theory &amp; Composition/Design &amp; Theory</td>
<td>Strange Places / Alien Spaces. Canada's Urban Rivers</td>
<td>2,440</td>
</tr>
<tr>
<td>P. Hassel</td>
<td>Architecture</td>
<td>&quot;Squirrels&quot; &amp; other delicious nuts. Short works</td>
<td></td>
</tr>
<tr>
<td>W. Kerr</td>
<td>English</td>
<td>&quot;Blow-up&quot; temporary inflatable installation</td>
<td></td>
</tr>
<tr>
<td>L. Lawen</td>
<td>Music</td>
<td>Urban Sculptures. Exhibition in Montreal</td>
<td>2,350</td>
</tr>
<tr>
<td>M. Matthews</td>
<td>Music</td>
<td>&quot;Squirrel's&quot; &amp; other delicious nuts. Short works</td>
<td></td>
</tr>
<tr>
<td>N. McArthur</td>
<td>Philosophy</td>
<td>CD recording. Harrington-Lawren duo</td>
<td>2,500</td>
</tr>
<tr>
<td>D. McMillan</td>
<td>School of Art</td>
<td>Compact disc recording of piano works</td>
<td>2,500</td>
</tr>
<tr>
<td>S. Sinclair</td>
<td>English</td>
<td>Byrantum (short film)</td>
<td>2,500</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Photographing Chemdyl Zone</td>
<td>2,500</td>
</tr>
<tr>
<td></td>
<td></td>
<td>If/Then: A Walkthrough Fiction</td>
<td>1,972</td>
</tr>
<tr>
<td>TOTAL</td>
<td></td>
<td></td>
<td>24,262</td>
</tr>
</tbody>
</table>

**U of M gives donated books a new home**

**A Day in the Life of a gifts and preservation librarian**

Books are very personal items. You can spend a lifetime gathering a collection and every one of them tells a story about where you were and what you were doing when you acquired it.

LIttle wonder when people give up their collection they want to ensure they go to a good home and that’s where U of M libraries gifts and preservation librarian Georgina Lewis comes in.

“I coordinate the large interdisciplinary gifts – the donations that are not limited to a certain subject area,” Lewis said. The gifts come from a variety of sources, from members of the general public, to alumni to retired faculty members or their families.

“All of our donations are local either, one of our recent major gifts came in from Toronto. That one ran to about 100 cartons of books.”

“Sometimes if it’s a local person we’ll go to collect the books ourselves,” Lewis added. “We’ll spend a day or two at the donors going through the collection and packing up the books.”

It’s hard physical labour, but at the same time they have a chance to chat with people connected to the collection.

“They want to know their books are going to a good place and sometimes they just want to see them treated well because they are books,” Lewis said.

Of course, the university can’t keep every book that is donated. While some books fill a hole in the university’s own collection, others are duplicates or just not what the university’s looking for. Lewis said.

Donors may receive a tax receipt for the appraised value of those books which are added to the Libraries collections.

The preservation-side of Lewis’ position involves ensuring that the university’s own collection of books is kept in good shape.

“What we’ve done here is focus on prevention,” Lewis said. “If we can control the environment we can keep the books safe.” Prevention includes keeping the books from getting wet and ensuring their bindings are maintained. Acidity in paper used to cause paper to become brittle as it aged, but Lewis said printers have long since cottoned on to that problem making books made since the 1970’s more durable.

Nowadays, a major threat to books in a library is mold, either from water damage or uncontrolled humidity. If a book gets doused with water, Lewis said they have about 48 hours to step in and freeze or properly dry the book otherwise mold can both destroy the book and create a health hazard.

As if being gifts and preservations officer wasn’t enough, Lewis is also head of the F. Harold Drake Library at St. Paul’s College. She’s been with the university since 1990, but added the St. Paul’s position in 2001.

“I liked the idea of returning to my academic roots,” said Lewis who is also an alumnus of St. Paul’s college from her own undergrad days at the University of Manitoba. A big part of Lewis’s job as library head is shaping the library to meet the study and research needs of the college, particularly its focus on University 1 and Catholic Studies.

“And with the new Arthur Mauro Centre for Peace and Justice having just been created at the college, it was a chance to develop a doctoral level collection from scratch,” Lewis said.

**English professor Struan Sinclair is looking to create a virtual world.**