**Plotting medical needs**

**BY JACK RACH**

*For The Bulletin*

If this is 2020 we must need more surgeons …

In fact, Manitoba’s needs for medical practitioners in different fields is expected to change dramatically over the next few decades according to a study put together by the University of Manitoba’s Manitoba Centre for Health Policy (MCHP).

The MCHP was asked by Manitoba Health & Healthy Living to come up with a roadmap for the future of health care in Manitoba. The result shows clearly that Manitoba’s needs are changing.

“This report provides Manitoba Health & Healthy Living and the University of Manitoba with some tools to assist in long-term planning for different specialties of physician training,” says Alan Katz, lead researcher and associate director, research at MCHP. “However, it’s important to differentiate between the number of services and the number of people required to supply those services,” says Katz.


The report found a significant increase in service provision over the past 10 years. In addition, patients under the age of 40 receive fewer services from family physicians than they did previously – while those between the ages of 41 and 80 visited the doctor considerably more. In total, a potential 20 per cent increase in services from family doctors is projected for 2020.

See REPORT/P 2

---

**Maddin on movies**

Filmmaker Guy Maddin wowed the crowd at St. John’s College for the 26th annual Marjorie Ward Lecture on Feb. 23.

Maddin credits a U of M professor with hooking him on film making.

“(Professor) George Toles gave me a first glimpse into the film industry,” said Maddin. “I was in my early twenties, I quit a job I didn’t like and my marriage just ended – kind of a scary thing to be going through at that age.”

Maddin quickly became immersed in the world of movies, theatre and literature, saying it was something he hadn’t had a feeling for in the first half of his life.

“In the second half of my life, I feel like I’ve switched hemispheres. George is really an important person in my life with the guidance he’s provided me with throughout the years. He has truly inspired me.”

After spending time on some movies sets, Maddin decided to start playing with his own thoughts and dreams.

“I’ll never be a strong, glossy, technically smooth filmmaker. I knew that from the first time I picked up a camera,” said Maddin. “But the one thing I knew I had was self-knowledge. I knew my movies would work. And I knew they would be bizarre.”

Maddin’s *My Winnipeg* (2007) has picked up a few awards including Best Canadian Feature Film at the Toronto International Film Festival.

“Winnipeg doesn’t seem to get much outside approval or recognition because of the centralized location. There are many stories that haven’t been boasted about too much, or mythologized. I wanted to be a bit aggressive and chose interesting stories from Winnipeg’s past for the film, which I think I’ve done.”

Maddin, the U of M’s distinguished filmmaker-in-residence within the Faculty of Arts, says a broader understanding of film has made his work possible.

“I’ve created a tiny space for myself because the borders have widened – and I’ll keep going because it’s something that will always interest me.”
In The News

University of Manitoba members are always making news – demonstrating the university’s impact on the community. Here’s a look at the stories and headlines that show how U of M faculty and staff impact the world around them.

Dave Barber on thin ice
February 24, 2009
CBC, Winnipeg Free Press, Grand Forks Herald

Growth in Arctic ice in 2008 may have seemed like a reprise from the devastating Arctic ice melt of 2007, but U of M Research Chair David Barber told the media recently that the growth was mostly thin, first-year ice, which is more likely to melt during the summer. Barber, who led last year’s Arctic-based Circumpolar Flaw Lead study as part of International Polar Year, says the Arctic continues to be ravaged by accelerated climate change.

Keeping cool at the Olympics
February 25, 2009
CBC

Rae Bridgman, city planning professor, was the subject of a CBC piece on the pressure athletes face at high profile events such as the Olympics. When not teaching psychology courses at the U of M, Bridgman is part of the Canadian Olympic team and it will be his job to help Canadian athletes deal with stress and maintain their focus during the 2010 Olympics.

Growth during a recession
February 20, 2009
Business Edge Magazine

Rob Warren, executive director of the Stu Clark Centre for Entrepreneurship, suggested in a recent business magazine that an economic downturn can actually be a great opportunity for businesses that are willing to be creative and experimental in their recession-survival solutions.

Bridgman gives away books
February 15, 2009
Winnipeg Free Press, CBC Radio

Rae Bridgman, city planning professor, and author of books for young adults, made news recently by giving away 100 books. The books, "Phosphorous in the Soil," by University of Manitoba microbiology professor Rick Holley. February 16, 2009, cites U of M

Renewed Research Chairs

Have you ever wondered what it would be like to attend Medical or Dental School? The University of Manitoba invites you to find out by attending the second annual Mini Medical School. Join us for a series of introductory Medical and Dental School lectures by dynamic faculty who will demystify important health issues:

- Type 2 diabetes
- Demonstrations of complex medical procedures performed in the new, state-of-the-art Clinical Learning & Simulation facility
- Cosmetic dentistry
- Oral health
- Colorectal cancer
- Common lab tests and their meaning
- Forensic medicine & dentistry
- 12 p.m. to 9:15 p.m., Wednesday evenings from March 11 to April 8 (April 1) in Theatre A, Basic Medical Sciences Building.

While prior scientific or medical background is not required, participants should be aware that these are no ordinary public information lectures. The level of presentation is similar to that for first-year medical students. Some of the slides are not for the squeamish!

Report shows need for surgeons

From Page 1

The report also found an estimated 27 per cent increase in general surgery for the same time period. "We are amidst a massive growth in demand for orthopedic services," says Katz, who outlines in the report that an estimated 88 per cent increase in orthopedic surgery services will be required by 2020. "This projected increase in services is likely to place significant pressure on the need for surgeons and other staff to meet this demand, however, recent developments in surgical techniques suggests that we should be cautious in translating the increased need in services to a corresponding need for actual surgeons."

This is in contrast to a predicted 13 per cent reduction in pediatric service. Katz says this finding requires further research to understand the consequences for the health of Manitoba children.

Med school without the stress

University of Manitoba

As has been noted, the University of Manitoba has a number of Canadian and international students that have been successful in their studies. However, these success stories are not the only stories that are told at the University of Manitoba. The University of Manitoba is also developing new conducting polymer systems that can form the basis of cheaper electronic devices that could be integrated into fabrics and packaging materials.

Charles Perry and G. Perry, chemistry, have been leaders in their fields and are prime examples of the calibre of the researchers at the University of Manitoba. We congratulate them on having their Chairs renewed today, Dr. Perry and Freund are leaders in their fields and are prime examples of the calibre of the researchers at the University of Manitoba. We congratulate them on having their Chairs renewed. The Canada Research Chair in Western Canadian Social History: Adele Perry, history, is examining Canada’s western region from the perspective of international social history. In the second term of her Chair, Perry will pursue several interrelated research projects.

The first is a study of kinship, migration and intimacy in the British Empire rooted in a history of the families of James Douglas, a fur trader and colonial governor of British Columbia and his elite Métis wife, Amelia Connelly. This work will make a significant contribution to the social history of British colonialism, race and western Canada in the nineteenth-century.

Perry will also begin a new project examining liberal humanitarians’ critiques of British administration of the fur-trading territories of the North American West in the middle-years of the nineteenth-century.

- Charles Perry will also reject any amendments to the University of Manitoba’s Code of Conduct with colleagues in electrical engineering, Freund is also developing new conducting polymer systems that could form the basis of cheaper electronic devices that could be integrated into fabrics and packaging materials.

- Dr. Perry and Freund are leaders in their fields and are prime examples of the calibre of the researchers at the University of Manitoba. We congratulate them on having their Chairs renewed.

- The Canada Research Chair in Western Canadian Social History: Adele Perry, history, is examining Canada’s western region from the perspective of international social history. In the second term of her Chair, Perry will pursue several interrelated research projects.

- The first is a study of kinship, migration and intimacy in the British Empire rooted in a history of the families of James Douglas, a fur trader and colonial governor of British Columbia and his elite Métis wife, Amelia Connelly. This work will make a significant contribution to the social history of British colonialism, race and western Canada in the nineteenth-century.

- Perry will also begin a new project examining liberal humanitarians’ critiques of British administration of the fur-trading territories of the North American West in the middle-years of the nineteenth-century.

- Charles Perry will also reject any amendments to the University of Manitoba’s Code of Conduct.

- Freund is also developing new conducting polymer systems that could form the basis of cheaper electronic devices that could be integrated into fabrics and packaging materials.

- Dr. Perry and Freund are leaders in their fields and are prime examples of the calibre of the researchers at the University of Manitoba. We congratulate them on having their Chairs renewed.

- The Canada Research Chair in Western Canadian Social History: Adele Perry, history, is examining Canada’s western region from the perspective of international social history. In the second term of her Chair, Perry will pursue several interrelated research projects.

- The first is a study of kinship, migration and intimacy in the British Empire rooted in a history of the families of James Douglas, a fur trader and colonial governor of British Columbia and his elite Métis wife, Amelia Connelly. This work will make a significant contribution to the social history of British colonialism, race and western Canada in the nineteenth-century.

- Perry will also begin a new project examining liberal humanitarians’ critiques of British administration of the fur-trading territories of the North American West in the middle-years of the nineteenth-century.

- Charles Perry will also reject any amendments to the University of Manitoba’s Code of Conduct.
How do we live with evolution?

New book gives both sides a voice in the debate over creation

Books
by University Staff

BY DALE BARBOUR

The Bulletin

When Joseph Seckbach, Hebrew University of Jerusalem, and Richard Gordon, University of Manitoba, were putting together Divine Action and Natural Selection: Science, Faith and Evolution they had one rule for the 56 contributors.

"Everybody had to be civil," Gordon said. "If people wanted to say stupid things that was fine, we figured they'd hang themselves, but they had to be civil."

With only a few exceptions, people were.

"We had to throw out one creationist and one anti-creationist because they refused to be civil," Gordon said. "They absolutely refused to be civil."

Divine Action and Natural Selection draws creationists and anti-creationists from 17 countries to discuss, argue, and debate the differences between the two camps.

Gordon was originally asked by Seckbach to contribute to the book, but as the project evolved, Gordon saw the opportunity for it to become a true discussion between creationists and anti-creationists.

While he is an anti-creationist, Gordon takes scientists to task for behaving as if they were above the discussion.

I dismiss creationists, but I'm annoyed by scientists who spout dogma to counteract the dogma of creationists," Gordon said. "The religious argument for creationism is most often that religion can fill in the gaps creationists," Gordon said. "The religious argument for the gap is a weakness for scientists to task for behaving as if they were above the discussion.

Gordon's own interest in evolution has deep roots.

I read Darwin's Origin of Species when I was a kid. I read it cover to cover when I was 15. I was a weird kid," Gordon said.

Throughout his career as an academic Gordon’s primary research interest has been in radiology and trying to improve medical imaging, primarily in the area of trying to detect breast cancer.

But he also has a research interest in diatoms, single-celled organisms that are considered potential building blocks for nanotechnology, and in embryology studying how the embryo reproduces itself.

"I came to look at evolution because of embryology. Looking at how embryos develop had obvious evolution implications, so I took three years to master the evolution literature," Gordon said.

However, mastering the conceptual ramifications of believing in evolution is an ongoing process.

"It's weird. I can look at you as a colony of bacteria, because you are a symbiotic colony of bacteria from an evolutionary point of view and I sit here marvelling at what bacteria can do," Gordon said. "So yes, it's weird."

Too weird for a lot of people to wrap their heads around.

Divine Action and Natural Selection has 45 chapters with writers – both creationists and anti-creationists – from around the world, showing how the creationist/anti-creationist debate plays out in Jewish, Muslim, Protestant and Roman Catholic religious communities.

What the book does is show that creationism is a worldwide phenomenon, it is not confined to the Bible belt in the United States, which is what a lot of people like to say. This morning there was a survey released asking how many people believe in evolution, as if evolution were a religion to be believed in, and the answer was 50 per cent in the United States and Great Britain.

But Gordon said those numbers aren’t surprising.

"If you scratch anybody, fundamentally I think you’ll find a creationist: you, me, anybody," Gordon said. "To actually believe and act as if evolution is true might be different from acting and believing other things, but maybe I’m wrong. You could say I probably am wrong from an evolutionary point of view because the justification for how we live and act can be a veneer over the evolutionary causes.

"There are simple examples of that: we’re monogamous because we’re told to be, but the truth might be that we’re monogamous because otherwise sexually transmitted diseases destroy us."

As one might expect, scientists and researchers are carrying out most of the debates in Divine Action and Natural Selection. What might surprise people is that many of the scientists are taking the creationist stance.

"This befuddles the atheist crowd who feel that being a scientist is equivalent to being an atheist," Gordon said. Historically, the truth has often been quite the opposite.

"Even Albert Einstein said he was interested in science as a way to understand the mind of God," Gordon said. "And if you go back to the 16th and 17th centuries they were all studying science to understand God. This was heavily their motivation: science grew out of religion.

But I don’t believe the current hoopla that there is any harmony between science and religion but I think ultimately there will be one understanding of creation.

I don’t think we’re anywhere near it and it could end up being science or religion. My preference is science but I think we’ve got a long way to go."

Hall wins gold at winter Olympics

The University of Manitoba’s Brita Hall won gold at the Special Olympics World Winter Games.

Hall, an office assistant in Extended Education, was part of Canada’s 4 km cross-country relay team at the event in Boise, Idaho.

She has been a Special Olympics athlete for 28 years and trains three to five times a week for both x-country skiing and track and field. The track training is at Max Bell and the Pan Am Stadium and the x-country skiing out training is at Max Bell and the Pan Am Stadium.

Hall competed in the Special Olympics World Winter Games Feb. 7 to 13 in Sun Valley, Idaho. She came home with two silver medals in the 7.5km and 10km X-Country skiing and a Gold medal for Team Canada in the 4x1km Relay race where she was the "anchor."

In x-country skiing alone, there were over 400 athletes competing from 36 countries. In all the sports, 3,000 athletes competed from 100 countries.

In the fall of 2007 Hall participated in the Special Olympics World Summer Games in Shanghai/China and won a gold medal in the 800m race. In the 2007 Special Olympics World Winter Games in Nagano/Japan she won one gold and two silver medals. She has also competed internationally in 1993, 1995 and 1997.

Hall has represented Canada at the Paralympic Games in Lillehammer, Norway (1994) and Nagano, Japan (1998).

In 2005 she was named Special Olympics Female Athlete of the Year both in Manitoba and Canada. She was the first female inductee into the Special Olympics Manitoba ‘Heroes Hall of Fame."

Every four years, thousands of Special Olympics athletes from around the world come together to showcase their athletic skills and celebrate the true spirit of competition through the Special Olympics World Winter Games.

The underbelly of panic attacks

A recent study led by psychiatry and psychology researchers at the University of Manitoba has found that panic attacks (PAs) may indicate the presence of other and more serious mental health issues.

"Compared to people without PAs, those with PAs had poorer overall functioning for disability, mental disorders, suicidal ideation, psychopathological distress, restriction of activity, chronic physical conditions, psychosis, depression, and physical and mental health," says Jo- lene Kinley, lead author of the study.

Hall of Fame
Elders gather at U of M
The University of Manitoba will host the 8th Annual Elders and Traditional Peoples Gathering March 15 and 16 in Aboriginal House. The theme for this year is 13 Grandmothers.

The goal of the program is to promote, validate, and pass on traditional knowledge and traditional teacher’s knowledge, as well as to make the University of Manitoba more relevant and accessible to First Nations communities.

The program is open to the public and students and staff from the University of Manitoba. The event will kick off on Friday, March 13 with an opening ceremony at 10 a.m. and then continue throughout the day with teaching circles. A traditional feast and a round dance will be held Friday evening. Events continue on Saturday with the closing ceremonies set to take place at 5 p.m.

Confirmed elders include Josephine Mandamin, an Ojibwa from Sault Ste. Marie, language speaker and leader of the Mother Earth Water Walk; Edna Manitowabi, an Odawa/Ojibway from Wilemekingk, Manitoulin Island, head wakamaa for the Eastern Doorway of the Three Fires Midewinun Lodge and Professor Emeritus Trent University; and Kataisee Atanagaskiak, an Inuit traditional teacher from Winnipeg. The event is free of charge. For more information please go to umanitoba.ca/student/asc.

Economics meets world history

The World History and Historical Materialism conference is set for March 12-14. The conference will examine the relationship between the historical roots and contemporary social, political, and economic dimensions of world history. The conference will pay particular interest to the shaping of the world economy, a very contemporary subject given the concerns about the economic downturn.

Bruce Cuningham, the Gustavus F. Swift and Ann M. Swift Distinguished Service Professor for the University of Chicago, will kick off the three-day conference on Thursday, March 12 when he delivers the Knight Distinguished Visiting Lecture entitled Facing West: Atlanticist Mystification and Pacific Realities in American Hegemony. Cuningham will speak at 8 p.m., Schultz Lecture Theatre, St. John's College.

Cuningham will also participate in a symposium entitled East Asia, Global Capitalism, and Authoritarian States with Rebecca Karl, East Asian studies and history, New York University, Hyun Ok Park, sociology, York University. The symposium will be held at 5 p.m., Thursday, March 12 in 300 Tier Building.

Panel discussions will run Friday and Saturday on topics ranging from a consideration of the fundamentals of the U.S. economy to discussions on race and racism in the modern world.

Entry to the Knight Distinguished Visiting Lecture events is free. Registration is required for the rest of the conference. For more information head to umanitoba.ca/faculties/arts/history/worldhistoryconf.

Campus as a Community

Meet Dr. Patrick Choy, Associate Dean (Research) in the Faculty of Medicine. Active in the Faculty of Medicine for 30 years, he's still as passionate about the U of M as he was when he started. Not only does he give his time as an administrator, he is also an active supporter of medical education both as a donor and as a campaign co-chair to raise funds for the Faculty’s priorities.

Q: What's the most rewarding thing about working at the U of M?
A: We do excellent medical research, we publish excellent papers, and we have excellent quality students. I'm proud of the University of Manitoba and its contribution to the community.

Q: Why do you give to the University of Manitoba?
A: Everybody has to do their own part – people give because it's a matter of their priorities. One of my priorities is to support medical education at the University of Manitoba. I feel it is important to support our students and the health of our wider community.

Q: After 30 years you've given a lot to the U of M through your work. Why do you also give financially?
A: I have been fortunate throughout my career to get external support for my research. I am also thankful to the university because it gave me the opportunity to develop my career. Serving in an administrative position has enlightened me to our needs. This is why I give.

Join your colleagues in supporting your university.

Bannatyne Campus
– ST. BONIFACE GENERAL HOSPITAL AND RESEARCH CENTRE

Medical rounds are typically targeted at university staff and professionals directly involved in the medical field.

THURSDAY, FEBRUARY 26
Annual Graduate Student Research Presentations with Liang Zhang, Immunology Library 604-065 Basic Medical Sciences Building, 12 p.m., Thursday, Feb. 26.

MARCH, MONDAY 2
Medical Microbiology, Preparation of “Spicy” (Biodical) Textiles: One Way to Help Fight Nosocomial Infections by Song Liu, 540 Basic Medical Sciences Building, 9 a.m., Monday, March 2.

Medical Microbiology Graduate Student Research Seminar, The role of NOS1 protein in Riff Valley Fever Virus Infections by Alan McGreevy and Investigation of Nipah Virus Mutation of the Porcine Host Immune Response by Beat Stachowiak Theatre A Basic Medical Sciences Building, 10:15 a.m., Monday, March 2.

WEDNESDAY, MARCH 4
Café Scientifique, Could keeping kids too clean make them sick? Asthma, allergies and chronic diseases, McNally Robinson Booksellers, Polo Park, 7 p.m., Wednesday, March 4.

THURSDAY, MARCH 5
Immunology, Annual Graduate Student Research Presentations, Topic TBA by Carolyn Weiss, Immunology Library 604-065 Basic Medical Sciences Building, 12 p.m., Thursday, March 5.

Hospice & Palliative Care Manitoba presents The Northern Lights Gala: Celebrating 25 Years of Community Service, Manitoba Hydro Place – 360 Portage Avenue, 5:30 p.m. to 8:30 p.m., Thursday, March 5. Tickets are $125 (Tax receipt for $75). For information call Joann at 889-8525 extension 232 or visit www.manitobahospice.mb.ca.

FRIDAY, MARCH 6
Pharmacology, Gasing for air: How plants survive anoxia – A story of photosynthetic oxygenase by Robert Hill, professor, department of plant science, University of Manitoba. Pharmacology Library A229 Chown Building, with video link to R014S St. Boniface Research Centre, 9 a.m., Friday, March 6.

THURSDAY, MARCH 12
Immunology, Peanut allergy. Why you? Then again, why not by Kent HartGil, department of biology, University of Manitoba. Canada Research Chair in Immunology, Regulation, Immunology Library 604-065 Basic Medical Sciences Building, 12 p.m., Thursday, March 12.

Canadian Centre for Agri-Food Research in Health and Medicine: Food for Thought, The role of early diet on the development and function of the immune system by Catherine J. Field, professor of agriculture, food and nutritional science, University of Alberta, Samuel N. Cohen Auditorium, St. Boniface Research Centre, with videoconference link to 2008 Human Ecology Building, 4 p.m., Thursday, March 12.
**Fort Garry Campus**

**THURSDAY, FEBRUARY 26**

**Kinesiology and Recreation Management**


**Centre on Aging Research**

**Why Don’t Older Adults Seek Professional Help for Mental Health Problems?** by Corey Mackenzie, department of psychology, 312 Fletcher Arge, 2 p.m., Thursday, Feb. 26.

**Central and East European Study Group**

**Joseph Boyden’s ‘Three Day Life’ and China by Tina Chen**, history; **Bodies, Land, Socialist Futures and the Politics of Hygiene** by Janis Kramarko, Nanotechnology in Tomorrow’s World, 7:30 p.m., Thursday, Feb. 26.

**Chemistry**

**The 2009 Arms Lectures** by Fraser Stoddart, board of trustees professor of chemistry Northwestern University, 197 Buller Building, 2:30 p.m., Thursday, Feb. 26.

**Institute for the Humanities: Power and Resistance in Latin America Research Cluster**

**Blackness and Whiteness in the Montevideo Carnival, 1920-2000** by George Reid Andrews, Distinguished Professor and UCIS (University Center of International Studies), University of Pittsburgh, 89 West 6th St., 3:30 p.m., Thursday, Feb. 26.

**Agricultural and Food Sciences**

**An Examination of Issues and Policies to Increase Producer Adoption of Best Management Practices for Reduced Phosphorus in Watersheds** by Wouter van der Leij, 10 a.m., Tuesday, March 3.

**Chemistry: The 2009 Arms Lectures** by Fraser Stoddart, board of trustees professor of chemistry Northwestern University, 197 Buller Building, 2:30 p.m., Thursday, Feb. 26.

**Arts & Entertainment**

**GALLERY ONE ONE**

**Revolver Downtown TWO**

**Bruce, assistant professor, community kinesiology and Recreation Sciences**

**Case Study by Peter Boxall**, professor of geography, University of British Columbia, 7:30 p.m., Thursday, Feb. 26.

**Stewart-Hay Museum, Z201 Duff Roblin Building**

**The Mind of Richardson’s Ground Squirrels** by Jim Hare, biological sciences, 220 Plant Science Building, 1 p.m., Tuesday, March 3. Tickets at the door.

**February 27, 2009**

**Human Nutritional Sciences Thesis Defense**

**The Effect of Relocation on the Nutritional Status, Eating Habits, and Nutrition Attitudes of Older Adults by Melissa Sitter**, 2008 Human Ecology Building, 9:30 a.m., Friday, Feb. 27.

**The Inside Grain Seminar Series**

**Methods of Identifying Fusarium Species by Tom Gravenstein**, Eastern Cereals & Oilseeds Research Centre, Canadian Grain Commission Building, Sixth Floor Boardroom, 503 Main St., 2 p.m., Friday, Feb. 27.

**Elizabeth Dafou Library Graduate Student Lectures**

**Violence and the North West Mounted Police by Fadi Ennab**, department of sociology, 412 Roblin Building, 2:30 p.m., Friday, Feb. 27.

**Philosophical Friday, The Content of Wisdom in Plato and Stoicism by Dimitrios Dentosoras**, University of Manitoba, 307 Tier Building, 2:30 p.m., Friday, Feb. 27.

**Economics, Seven Severity of Work Disability and Work by Umut Oguzoglu**, University of Manitoba, 307 Tier Building, 2:30 p.m., Friday, Feb. 27.

**Psychology**

**What works in bullying prevention: New methods and new approaches by Wendy Craig**, department of psychology, Queen’s University, 612 Roblin Building, 5 p.m., Friday, Feb. 27.

**Physics & Astronomy**

**Coping with frustration in nanomagnetism: A self-help guide by Johan van Lierop**, department of physics & astronomy, 300 Allen Building, 3:30 p.m., Friday, Feb. 27.

**Biological Sciences: Darwin Days Celebration**

**First Singer, third-year jazz drum set recital, Franco Manitoban Cultural Centre**

**Wednesday, March 11**

**TUESDAY, MARCH 3**

**Entomology Seminar Series**

**Alarm Stirs the Lust of All the Unattached Women, especially a fetching maiden and an aggressive, lonely widow. The Playboy of the Western World is directed by senior theatre-student Marleigh Chapman. Apart from acting in numerous Black Hole shows over the years, Marleigh has also directed Sure Thing and English Made Simple by David Ives for the Black Hole Theatre Company’s 2007/2008 Lunch B.H.A.G.G season.**

**ARCHIVES AND SPECIAL COLLECTIONS**

**350 Elizabeth Dafoe Library**

**Arts & Entertainment**

**GALLERY ONE ONE**

**Revolver Downtown TWO**

**Bruce, assistant professor, community kinesiology and Recreation Sciences**

**Case Study by Peter Boxall**, professor of geography, University of British Columbia, 7:30 p.m., Thursday, Feb. 26.

**University, 207 Buller Building, 2:30 p.m., Thursday, Feb. 26.**

**Bruce, assistant professor, community kinesiology and Recreation Sciences**

**Case Study by Peter Boxall**, professor of geography, University of British Columbia, 7:30 p.m., Thursday, Feb. 26.

**Institute for the Humanities: Power and Resistance in Latin America Research Cluster**

**Blackness and Whiteness in the Montevideo Carnival, 1920-2000** by George Reid Andrews, Distinguished Professor and UCIS (University Center of International Studies), University of Pittsburgh, 89 West 6th St., 3:30 p.m., Thursday, Feb. 26.

**Agricultural and Food Sciences**

**An Examination of Issues and Policies to Increase Producer Adoption of Best Management Practices for Reduced Phosphorus in Watersheds** by Wouter van der Leij, 10 a.m., Tuesday, March 3.

**Chemistry: The 2009 Arms Lectures** by Fraser Stoddart, board of trustees professor of chemistry Northwestern University, 197 Buller Building, 2:30 p.m., Thursday, Feb. 26.

**Arts & Entertainment**

**GALLERY ONE ONE**

**Revolver Downtown TWO**

**Bruce, assistant professor, community kinesiology and Recreation Sciences**

**Case Study by Peter Boxall**, professor of geography, University of British Columbia, 7:30 p.m., Thursday, Feb. 26.
TUESDAY, MARCH 10
Entomology, Honey bee brood pheromones, biology and potential applications by Tanya Pankiw, entomology, Texas A & M, 220 Animal Science/Entomology Building, 10 a.m., Tuesday, March 10.

WEDNESDAY, MARCH 11
Chaplains Association, Peanut Butter & Jam Day. Do you have 5 minutes to spare? Please come and help us make 2,100 peanut butter & jam sandwiches for Winnipeg’s Boys & Girls’ Clubs, Main Floor University Centre, 9 a.m. to 2 p.m., Wednesday, March 11. Contact bev at 474-8721 for more information.

Chemistry, New Drugs in fighting Neurological and Metabolic Diseases by Janis Huntington, School of Public Health, University of Alberta, 539 Parker Building, 2:30 p.m., Wednesday, March 11.

THURSDAY, MARCH 12
Law Distinguished Visiting Lecture. Abortion Law in Canada and the United States: Equality Arguments for Access by Daphne Gilbert, University of Ottawa, 5th Court, Biology and Robson Hall, 12 p.m., Thursday, March 12.

Knight Distinguished Visitor Symposium, East Asia, Global Capitalism, and Authoritarian States with Bruce Cumings, Gustavus F. Swift and Ann M. Swift Distinguished Service Professor, University of Chicago; Rebecca Karl, East Asian studies and history, New York University; Hyun Ok Park, sociology, York University; 506 Tier Building, 3 p.m., Thursday, March 12.

Knight Distinguished Visitor Lecture, Facing West: Atlanticist Myntification and Pacific Realities in American Hegemony by Bruce Cumings, Gustavus F. Swift and Ann M. Swift Distinguished Service Professor, University of Chicago, Schultz Lecture Hall, St. John’s College, 8 p.m., Thursday, March 12.

FRIDAY, MARCH 13
The Arthur V. Mauro Centre for Peace and Justice Brown Bag Lectures, Conflict Resolution and International Law by Michelle Gallant, associate dean of research and graduate studies and associate professor, Faculty of Law, 252 St. Paul’s College, 12 p.m., Friday, March 13.

The Centre for Professional and Applied Ethics, The ethics of ethics: Reflections on the public role of ethicists by PROFESSOR DANIEL WEINSTOCK

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

The Centre for Professional and Applied Ethics at THE UNIVERSITY OF MANITOBA

Winter Lecture Series: poverty, politics, ethics, animals, and death “The ethics of ethics: Reflections on the public role of ethicists” BY PROFESSOR DANIEL WEINSTOCK

Daniel Weinstock is a member of the Department of Philosophy, University of Montreal, and director of The Centre for Research Ethics. He is the author of The Challenge of Pluralism.

The Centre for Professional and Applied Ethics, The dog by the cradle, the serpent beneath: some paradoxes of human-animal relationships” BY ERIKA RITTER

Erika Ritter is a novelist, playwright, essyist and radio broadcaster. Her latest book The Dog by the Cradle, The Serpent Beneath has just been published.

DOCTORS JOEL ZIVOT AND ADRIAN FINE

Joel Zivot is a specialist in intensive care medicine and anaesthesiology. He cared for Mr. Golobchuk during his final days in the ICU at the Grace Hospital. Adrian Fine specializes in kidney resilience and was critical of the role of the court in the Golobchuk case.

LOAT: 474-7532, fax 474-7534, e-mail j_house@umanitoba.ca

JOEL ZIVOT AND ADRIAN FINE

The dog by the cradle, the serpent beneath: some paradoxes of human-animal relationships” BY ERIKA RITTER

Erika Ritter is a novelist, playwright, essayist and radio broadcaster. Her latest book The Dog by the Cradle, The Serpent Beneath has just been published.

The Centre for Professional and Applied Ethics, The Centre for Professional and Applied Ethics at THE UNIVERSITY OF MANITOBA

Winter Lecture Series: poverty, politics, ethics, animals, and death “The ethics of ethics: Reflections on the public role of ethicists” BY PROFESSOR DANIEL WEINSTOCK

Daniel Weinstock is a member of the Department of Philosophy, University of Montreal, and director of The Centre for Research Ethics. He is the author of The Challenge of Pluralism.

The Centre for Professional and Applied Ethics, The dog by the cradle, the serpent beneath: some paradoxes of human-animal relationships” BY ERIKA RITTER

Erika Ritter is a novelist, playwright, essayist and radio broadcaster. Her latest book The Dog by the Cradle, The Serpent Beneath has just been published.

DOCTORS JOEL ZIVOT AND ADRIAN FINE

Joel Zivot is a specialist in intensive care medicine and anaesthesiology. He cared for Mr. Golobchuk during his final days in the ICU at the Grace Hospital. Adrian Fine specializes in kidney resilience and was critical of the role of the court in the Golobchuk case.

The Centre for Professional and Applied Ethics, The dog by the cradle, the serpent beneath: some paradoxes of human-animal relationships” BY ERIKA RITTER

Erika Ritter is a novelist, playwright, essayist and radio broadcaster. Her latest book The Dog by the Cradle, The Serpent Beneath has just been published.
In Brief

Brockhouse Canada Prize

Two University of Manitoba researchers have won the fourth-annual Brockhouse Canada Prize for Interdisciplinary Research in Science and Engineering. The recipients are agricultural engineer Digvir S. Jayas, and Noel White, an entomologist with Agriculture and Agri-Food Canada. Dr. Jayas and Dr. White have spent more than two decades studying the causes of grain spoilage, from excess heat and moisture in storage bins, to damage caused by insects, fungi and bacteria.

The Brockhouse award has been given out only four times, and this is the second time University of Manitoba faculty have won it, the previous time being in 2006 when the award was last conferred.

Established by the Natural Science and Engineering Research Council of Canada (NSERC), and named after Nobel laureate Bertram Brockhouse, the prize honours teams of researchers that combine expertise in different disciplines to produce achievements of international scientific or engineering significance, and it includes $250,000 in funding for future research activities. The winning team was announced by NSERC President Dr. Suzanne Fortier on Feb. 25.

Upcoming

Café Scientifique

Could keeping your kids too clean make them sick?

Wednesday, March 4, 2009

McNally Robinson, Polo Park

1485 Portage Avenue

For more information:

Phone: (204) 474-9020

Speaker Series

Teen Health Talk

By Roberta Woodgate

Wednesday, March 18, 2009

7:00 PM

Robert B. Schultz Lecture Theatre, St. John’s College

For more information:

Phone: (204) 474-9020

Studying mouthy molecules

BY SEAN MOORE

The way to a person’s heart may be through the stomach, but if you want to see how a heart and other systems work at the molecular level, you only have to go as far as the mouth.

February is heart month and oral biologist/biochemist Rajinder Bhullar is investigating the fundamentals of a specific group of proteins that, when they blunder, upset the molecular mechanism that regulate the ability of the heart to pump. In other cases they can lead to the development of cancer.

“I am an oral biologist, but if you look at a human body, most of the cells are the same no matter where they are located. Unless they are specialized, cells in the mouth do not differ from cells in the toe,” he said.

“Our work is trying to understand the fundamental mechanisms in normal and disease conditions. Is a protein missing, or has a protein changed in a way that causes it to activate new pathways that were previously not a part of this protein’s job?”

Bhullar is looking at GTP-binding proteins. They are involved in signal transduction, which means when a cell gives or gets an order to do something, they pass along the instructions to other molecules. Some of these G proteins are found on the cell surface, and others are working within the cell.

This second group is the main subject of study in Bhullar’s lab, and of the 200 or so different proteins in this group, Ras p21 receives the most microscope time. This protein regulates cell growth, and when it goes haywire it can cause unmitigated cell growth (cancer). Indeed, about 30 per cent of human cancers are known to be based on mutations in this protein, Bhullar said.

“We have a broad interest in trying to look at the function of these proteins and how they interact with other proteins of the cell, and what impact that interaction has. You can’t just say it comes after A; You have to know what the intermediate steps are and what is the physiological impact of these relationships, and what functions they regulate. That’s the most important part, but that is also the most difficult part to establish.”

“The goal is to develop some small molecules that can potentially be delivered to a specific area within the tissue and – or – cell where they will be able to inhibit or enhance the physiological effect of these protein interactions.”

Imagination meets intelligence

BY SEAN MOORE

On February 20, the University hosted its third-annual SET Day, assembling over 250 high school students and teachers from across the province and beyond to learn about the future of research.

SET Day – Science, Engineering and Technology Day – is the only event of its kind in Canada. Last year, 100 students from 30 schools came.

This year, 47 Manitoba schools as well as one from Sioux Lookout, Ont., and one from Bellegarde, Sask. participated. The students and teachers heard presentations by leading researchers in five fields: health, climate change, psychology, robotics and biofuels.

“The lectures were more engaging than I was expecting,” said Jeff Shaddock, a science teacher at Miles Macdonell Collegiate.

“From speaking with my students and looking at their faces throughout the day, I can honestly say the profs spoke at the appropriate level!”

As Shaddock’s Grade 12 student Derek Schmidle said: “It was a lot funnier than I thought it would be. Our science classes aren’t as humorous.”

Indeed, SET Day is meant to show students how appealing science can be.

“The event’s goal is to get students excited about present day research and fascinate them with what research we, or I should say they, might be doing twenty-five years from now,” said Digvir Jayas, Acting Vice-President (Research) at the University of Manitoba.

The day began with a presentation by Patricia Martens, community health sciences, to talk to 250 high school students at SET Day, held Feb. 20. Cicek, biosystems engineering, who described the past, present, and future of biofuels in his presentation titled, Biofuels of Today and Tomorrow.

SET Day was sponsored by the Province of Manitoba (Science, Technology, Energy and Mines), Manitoba Hydro, the Prairies Office of the Natural Sciences and Engineering Research Council of Canada (NSERC), the Association of Professional Engineers and Geoscientists of Manitoba (APEGM), and the Office of the Vice-President (Research) at the University of Manitoba.

The Research Communications & Marketing Unit in the Office of the Vice-President (Research) is currently developing a SET Day website, which will include audio recordings of the day’s presentations. Check back soon at: www.umanitoba.ca/research/set

Published by the Research Communications and Marketing Unit, Office of the Vice-President (Research)

Comments, submissions and event listings to: lindsay_fagundes@umanitoba.ca

Phone: (204) 474-9020  Fax (204) 261-0325

umanitoba.ca/research

Café Scientifique

Could keeping your kids too clean make them sick?

Wednesday, March 4, 2009

McNally Robinson, Polo Park

1485 Portage Avenue

For more information:

Phone: (204) 474-9020

Submitted Photo

Patricia Martens, community health sciences, talks to 250 high school students at SET Day, held Feb. 20.

Patricia Martens, community health sciences, talks to 250 high school students at SET Day, held Feb. 20.
Safety is the watchword at clinic

A Day in the Life of a dental assistant

BY DALE BARBOUR
The Bulletin

The Faculty of Dentistry is a busy place. It has three different clinics that can serve a combined total of over 150 clients in a day. On Fridays that includes kids from 15 inner-city schools who receive their dental care for free.

There are 120 dentistry students and 60 dental hygiene students in the faculty that will all spend time working in the clinics.

In the sterilization unit, a suite of rooms next to the main dental clinic, it is clinical support services dental assistant Heather Reid’s job to ensure the students can stay busy while maintaining a safe hygienic environment.

“Our main job is sterilizing all of the students’ instruments,” Reid said. That task is probably more complicated than it sounds. Batches of equipment have to be sterilized twice each day, once at lunch time to ensure the equipment is ready for the afternoon and again at the end of the day to ensure the equipment is ready for the next morning.

But it gets more complicated because dental students each have their own set of equipment and a standard kit is worth nearly $15,000. The equipment is engraved with their names and it is all tagged with a name and code when they present it to the sterilization unit. Students also have their own security box for storing equipment. Ideally, the equipment is either in that security box, in the clinic or in the process of being sterilized.

“We scan the equipment in and out, so we don’t lose hand pieces,” Reid said. The equipment is then run through the sterilization chamber – a process that brings the temperature of the equipment up to over 133 degrees Celsius and then draws out all the air in the chamber to create a complete vacuum for three minutes. The entire process takes about 50 minutes from start to finish and the equipment is monitored the entire time.

“This is a secure room,” Reid noted. “There is whoever in here all the time or the door is locked.”

After the sterilization process is complete, the equipment is placed in the security boxes for pick up by the students. For the students, the high security approach to sterilizing the equipment ensures that their equipment is not lost or stolen.

But the process is even more critical for the patients in the clinic because it ensures that while they might be in a busy clinic they can be assured that all of the equipment has been sterilized properly.

While most of the equipment is run through a large sterilization bulk, there are other options for more delicate dental hygiene equipment.

“If a student drops an instrument while they’re working, we have a mini-sterilizer that can treat one or two instruments at a time,” Reid said. “It takes about 10 minutes. It’s also handy if the students are seeing a number of patients in one afternoon.”

The sterilization equipment is also routinely checked to make sure it’s working properly.

“We’ll test with live cultures to ensure that sterilization process is working properly,” Reid said.

As part of her job, Reid also checks over the faculty’s pre-clinical laboratories – including the rooms where students work with life-like mannequins which simulate patients right down to being able to produce saliva.

Reid kicked off her own career as dental assistant in a private clinic. Working in the Faculty of Dentistry she’s carrying out many of the same tasks she did in the private clinic, but at a vastly greater scale.

“There’s never a dull moment,” Reid said. “You’re always on the go and I enjoy interacting with the students.”

The sterilization unit will be undergoing a shake-up this summer when the faculty renovates to install a set of automatic washers.

“Currently, our students wash all their own equipment. Under the new system they’ll bring their equipment to us and we’ll run it through the automatic washers,” Reid said. They will also hand wash the trickier equipment. The change will help ensure that all the equipment is cleaned and sterilized in a consistent manner.

Reid is helping guide the transition and when she starts at their equipment now she’s envisioning what the future set up will look like.

“We want to ensure we take everything into account when we do the renovations,” Reid said. “We want everything to be able to run as smoothly as possible.”

Concrete toboggan team slides to victory

The 2009 University of Manitoba Concrete Toboggan team won top prize at the Great Northern Canadian Toboggan Race in Red Deer, Alberta, earlier this month.

Students began building the toboggan in December, making a compact toboggan that had curved aluminum sides and a concrete base made out of a specialized mix. The team, called Loggin-Boggan, won awards out of a specialized mix. The team, called Loggin-Boggan, won awards.

The 2009 University of Manitoba Concrete Toboggan team won top prize at the Great Northern Canadian Toboggan Race in Red Deer, Alberta, earlier this month. Students began building the toboggan in December, making a compact toboggan that had curved aluminum sides and a concrete base made out of a specialized mix. The team, called Loggin-Boggan, won awards out of a specialized mix. The team, called Loggin-Boggan, won awards.

The U of M’s toboggan was four months in the making. It had to meet specific criteria: all parts of the toboggan in contact with snow must be concrete at all times. There also must be a roll cage and breaking system. All other design aspects are up for interpretation and imagination of the teams. Part of team’s evaluation is use of recycled content in their concrete mix design. With the construction industry leaning more towards “green building,” incentive is given for teams to test different admixtures and Supplementary Cementitious Materials (SCM’s).

Teams had to descend down the course with five people in the toboggan, and are permitted three runs in total. Final scores are determined by maximum speed reached, braking distance and elapsed time per run.