Fast Forward

Boris family gift advances health research and care

McMaster Health Campus slated to open in 2014

Nursing school helps create healthy neighbourhoods
The winter/spring of 2012 has been a time of significant achievement for the Faculty of Health Sciences. In this report, I will highlight some of these achievements, but once again, we have to thank citizens who have been instrumental in providing support to help us achieve this success.

On Feb. 6, Marta Boris, Jackie Work and Les Boris presented McMaster University and the Faculty of Health Sciences with a remarkable $30M gift on behalf of their family and their husband and father, the late Owen Boris.

A McMaster graduate and the former president and CEO of Mountain Cablevision Ltd., Owen Boris had been enthusiastic about the opportunity to develop a new and forward thinking out-patient ambulatory health-care clinic to serve our local citizens, but more importantly, to serve as a model for the next step in health care. The family has given $6 million to support its creation.

The second major component of the remarkable gift was $24 million to support human stem cell research and in particular its direct application in the clinical areas of neurological disorders and disorders of the blood.

In upcoming issues of Network we will describe in greater detail how the Marta and Owen Boris Foundation’s gift will impact not just McMaster University in Hamilton, but the province, Canada and the world.

Other key milestones included a $20-million investment by the city of Hamilton toward the downtown McMaster Health Campus. These are but two of the many significant recent initiatives at McMaster.

The School of Nursing is making a significant difference in three of Hamilton’s north and east end neighbourhoods, as it helps to identify and prioritize their health issues as part of an initiative called Health in the Hubs. The intent is to build healthy, safe neighbourhoods for our families to live, work and play.

The School of Rehabilitation Science, associate professor Brenda Vrkljan is examining the challenges seniors face staying on the road. She has partnered with other researchers and the AAA Foundation for Traffic Safety to produce a website on current provincewide practices regarding medically at-risk and older drivers.

Meanwhile, Canada Research Chairs were received by professors Tim Whelan, Sonia Anand and Brian Coombes.

Within the partner hospitals, the Faculty’s Department of Oncology in partnership with Hamilton Health Sciences created the Escarpment Cancer Research Institute, with a particular focus on applied research.

Furthermore, our students continued to set the bar with remarkable achievements as Bachelor of Health Sciences student Sheiry Dhillon was selected as one of the two Rhodes scholars from Ontario.

The excellence of the Faculty is also noted externally with McMaster recently ranking second in Canada and 16th in the world in the international ranking of post-secondary institutions offering clinical, pre-clinical and health programs as compiled by the Times Higher Education World University Rankings of the UK.

I hope you enjoy reading about these accomplishments and the updates on our alumni in this issue.

John G. Kelton, MD
Dean and Vice-President
Faculty of Health Sciences
**New child blood disorders chair**

**Sheiry Dhillon** has been chosen as one of just two Rhodes scholars from Ontario.

“Social inequity has driven my pursuit of knowledge for my entire life,” said Dhillon, a fourth-year Bachelor of Health Sciences student specializing in global health.

The scholarships provide students from around the world the opportunity to study at the University of Oxford in England for two to three years.

“Sheiry is an outstanding scholar who combines a commitment to academic excellence with impressive leadership qualities and a passionate regard for the welfare of others,” said McMaster University President Patrick Deane, who acted as a mentor to all three of McMaster’s Rhodes finalists. “She does not view her education as an end in itself but rather is deeply committed to using her education to improve life for others.”

Holden Sheffield, an MD student of the Michael G. DeGroote School of Medicine and Joseph Veloce, an engineering student, were also among the 13 Ontario finalists.

Established in the will of Cecil Rhodes in 1902, the Rhodes is the oldest and perhaps the most prestigious international scholarship program in the world.

**An internationally recognized McMaster physician used to handling calls 24/7 about children with bleeding and clotting disorders is the first to step into a newly endowed chair position.**

Anthony Chan, a pediatric professor at the Michael G. DeGroote School of Medicine at McMaster, is now the McMaster Children’s Hospital/Hamilton Health Sciences Foundation Chair in Pediatric Thrombosis and Hemostasis.

“As a hematologist, I am particularly pleased to have this new research chair in child blood disorders,” said John Kelton, dean and vice-president of the Faculty of Health Sciences at McMaster. “Dr. Chan is one of Canada’s top pediatric clinician scientists who link the needs of their patients to their discoveries in the laboratory.”

Chan has a clinical focus on children with bleeding and clotting disorders, as well as stroke, and a leading research program of study including novel anticoagulants. He is a widely-sought consultant, contributing his expertise in thrombosis to physicians worldwide by providing a free consultation telephone service through an 800-number service.

The new chair is sponsored by the Hamilton Health Sciences Foundation, the McMaster Children’s Hospital and Bayer Inc.

“This is an honour,” Chan said. “This endowed chair will allow us to continue to improve the lives of children with bleeding and clotting problems.”

Chan is also the division chief of pediatric hematology/oncology and director (pediatrics) of the Hemophilia Treatment Centre at McMaster Children’s Hospital.

“Dr. Chan is a well-respected, internationally recognized investigator who has been at the forefront of amazing accomplishments in the area of thrombosis and hemostasis,” said Peter Fitzgerald, president of McMaster Children’s Hospital.

Chan trained at universities in Hong Kong and Saskatchewan before joining McMaster and Hamilton Health Sciences in 1997.

His research has attracted both a Heart and Stroke Foundation of Canada Career Investigator award, as well as a Canadian Paediatric Society Research Award.
Will lowering blood pressure with a new type of blood-pressure-lowering-drug reduce the risk of heart attacks, strokes or heart failure in elderly patients?

Professor Salim Yusuf is tackling that question as he leads an international study looking at high blood pressure (hypertension) amongst 11,000 elderly persons. The study, APOLLO (Aliskiren Prevention of Later Life Outcomes) is funded, in part, with a $40-million investment by Novartis Pharmaceuticals Canada Inc, along with $1-million from the provincial government. The total global budget for the study is $100 million. The APOLLO study follows patients in 20 countries over five years to determine the long-term benefits of aliskiren, the first of a new class of blood-pressure-lowering agents called renin inhibitors. Aliskiren is marketed by Novartis as Rasilez.

A new aspect to the study is an assessment of functional ability, looking at whether participants can continue to carry out different complex tasks associated with independent and productive living.

The study is being managed by the Population Health Research Institute of McMaster University and Hamilton Health Sciences, which is led by Yusuf. The study is expected to be completed by mid-2017.
Three Faculty of Health Sciences investigators continue successful research in cardiovascular disease, infectious diseases and breast cancer as the Canada Research Chairs program has renewed support. They are among eight McMaster University researchers to receive $6.7 million in new and renewed funding.

**Sonia Anand**, a professor of medicine, clinical epidemiology and biostatistics and Canada Research Chair in Ethnic Diversity and Cardiovascular Disease, is using her Tier 1 Chair to examine high-risk populations to provide greater insight into the causes and risk factors of cardiovascular disease. Her research could eventually lead to the development of prevention strategies to stem the leading cause of premature deaths in ethnic populations.

**Brian Coombes**, an associate professor of biochemistry and biomedical sciences, was awarded a Tier 2 Canada Research Chair in Infectious Disease Pathogenesis to investigate how major enteric pathogens — the organisms that enter the bodies and cause serious problems with gastrointestinal systems — infect humans, and how human and environmental activities influence the evolution of these infectious diseases.

**Tim Whelan**, a professor of oncology, received an advancement of his chair to Tier 1 status. His work has been changing cancer treatment practice across North America. He is forging new paths in the study of the biomarkers indicating the presence of a cancerous tumour to determine if the treatment of early breast cancer can be individualized. He continues to conduct clinical trials to optimize radiation therapy.

Tier 1 Chairs are for outstanding researchers acknowledged by their peers as world leaders in their fields. Tier 2 Chairs are for exceptional emerging researchers, acknowledged by their peers as having the potential to lead in their field.

---

### Nursing research program focuses on cancer survivors

**As more** Canadians live with cancer, given advances in treatment and support, McMaster researchers are leading a new research program aimed at improving the care and quality of life for cancer survivors.

The Canadian Centre of Excellence in Oncology Advanced Practice Nursing (OAPN) at the Juravinski Cancer Centre and the Canadian Centre for Advanced Practice Nursing Research (CCAPNR) at the School of Nursing (SON) hosted national and international researchers, decision-makers, patient advocates and health care providers for two days in January at the McMaster Health Forum to identify research priorities and solutions for improving survivorship care.

**Denise Bryant-Lukosius**, director of the OAPN and CCAPNR, and associate professor with the SON and Department of Oncology at McMaster, said research and change is needed because there are more patients with unmet needs in the post-treatment phase than at any other stage of the cancer continuum.

---

### Professors receive cancer study funds

**Two studies** led by Faculty of Health Sciences researchers have been awarded more than $1 million by the Canadian Cancer Society.

**Mick Bhatia's** lab received $423,000 to continue its ground-breaking research turning adult skin into human stem cells to generate different types of blood cells. Bhatia is a biochemistry and biomedical sciences professor and director of McMaster’s Stem Cell and Cancer Research Institute.

**Hsien Seow**, associate professor of oncology and the Cancer Care Ontario Research Chair in Health Services Research, received $672,000 to advance his research which showed end-of-life cancer patients in Ontario who received more homecare nursing hours were less likely to require hospital visits.

---

### $20,000 raised

For the past decade members of McMaster University’s Society of Off-Campus Students have been raising funds in memory of a member who died of cancer.

Recently, the student organization presented the McMaster University Bone Marrow/Leukemia Research Fund with a cheque for $20,000 during its 30th anniversary reunion.

The gift was a tribute to SOCS member James Kuss who died of non-Hodgkin’s lymphoblastic lymphoma, a cancer of the lymphatic system.
Modify genes

There’s a way to get around the genes passed on to you by your family. Sonia Anand, of the Population Health Research Institute and professor of medicine, clinical epidemiology and biostatistics, and an international team of researchers discovered the gene that is the strongest marker for heart disease can actually be modified by generous amounts of fruit and raw vegetables. The research involved analyzing five ethnicities and how their diet impacted the 9p21 gene. The results of their study are published in the recent issue of the journal *PLoS Medicine*.

Watch the salt

Too much or too little salt is bad for your heart. It can put people with heart disease or diabetes at an increased risk of stroke, heart attack and other cardiovascular complications, suggests a McMaster University study published in the *Journal of the American Medical Association*. The research, co-led by Martin O’Donnell, an associate clinical professor of medicine, and Salim Yusuf, a professor of medicine and executive director of the Population Health Research Institute, found moderate salt intake was associated with the lowest risk of cardiovascular events.

Risks of HRT

Using hormone replacement therapy (HRT) for hot flashes and other menopause symptoms? You might want to think again. HRT has been found to increase the incidence of breast cancer, heart attack and stroke, say McMaster researchers. Kevin Zbuk, assistant professor of oncology and the study’s lead author, says there is clear evidence that countries with the highest HRT rates had the largest decrease in breast cancer incidence when HRT use declined. The research was published in the *Journal of Epidemiology and Community Health*.

Black Death discovery

An international team, led by researchers at McMaster University and the University of Tübingen in Germany, sequenced the entire genome of the Black Death, which caused the most devastating epidemic in human history. Geneticists Hendrik Poinar and Kirsten Bos, along with Brian Coombes, Brian Golding and David Earn of McMaster University and other international researchers are the first to draft a reconstructed genome of any ancient pathogen. This will allow researchers to track changes in the pathogen’s evolution and virulence over time. This work, published online in the scientific journal *Nature*, could lead to a better understanding of modern infectious diseases.

Protect small intestine

Stomach acid-reducing drugs may be causing major problems in the small intestine, McMaster researchers found. “ Suppressing acid secretion is effective for protecting the stomach from damage caused by (these drugs), but they appear to be shifting the damage from the stomach to the small intestine, where the ulcers may be more dangerous and more difficult to treat,” said lead investigator John Wallace, professor of medicine and Farncombe Family Digestive Health Research Institute’s director. The study is published in the medical journal *Gastroenterology*.

If you can’t get off the couch to exercise, the key protein that allows you to exercise has likely been turned down. Gregory Steinberg, associate professor of medicine and Canada Research Chair in Metabolism and Obesity, said his study of specially-bred mice with two genes removed in their muscle saw the otherwise healthy mice struggling to run. These results may explain why it’s so hard to start an exercise training program. “The good news is, if you stick with it, your AMPK will get switched back on. The study’s results appeared in the *Proceedings of the National Academy of Sciences*.

Trouble getting off the couch?

If you can’t get off the couch to exercise, the key protein that allows you to exercise has likely been turned down. Gregory Steinberg, associate professor of medicine and Canada Research Chair in Metabolism and Obesity, said his study of specially-bred mice with two genes removed in their muscle saw the otherwise healthy mice struggling to run. These results may explain why it’s so hard to start an exercise training program. “The good news is, if you stick with it, your AMPK will get switched back on. The study’s results appeared in the *Proceedings of the National Academy of Sciences*.
Health in the Hubs

A neighbourhood planning team explores the issue of walkability in the Crown Point neighbourhood.

Working toward healthier neighbourhoods

What can make our neighbourhoods healthy and safe places to live, work, play and raise a family?

Faculty and students of the School of Nursing (SON) are working with three Hamilton neighbourhood planning teams to address priority health issues. The initiative is called Health in the Hubs.

“There’s more to the health of a community than blood pressure readings and immunizations,” said David Derbyshire, a community development worker at Wesley Urban Ministries and key project leader. “The role of today’s nurse is to look at that continuum of health.”

The concerns raised are sometimes not to do with what people usually associate with health care. In the first phase, residents of the South Sherman area said beautification and safety was a concern, mainly graffiti, gardens, litter and alleys. In the Crown Point area in the north end, residents are working to create a more walkable community by looking at traffic calming, safety and barrier-free walking. The McQuesten neighbourhood is concentrating on job creation through food security by developing a community kitchen and community garden.

With funding from the Hamilton Community Foundation, the second phase of the project, called Street Smarts Book Smarts, saw students in a new independent study course work alongside resident consultants hired by the SON to determine best practices for addressing the priority issues. The Partnering with Hamilton Neighbourhoods for Health course has brought together students from different disciplines, including nursing; biochemistry; humanities; neuropsychology; arts and science and health sciences.

“Community health nurses’ competencies include community development skills and these kinds of skills are being lost among community health nurses across Canada,” said Ruta Valaitis, associate professor of nursing who developed the course. “We want our students to learn these skills not in isolation in a classroom, but in partnership with the community and students from other disciplines.”

The consultants were “absolutely vital,” said Anne Marie Child, a third-year nursing student who took the course in the fall of 2011. “They were really invested in the community and interested in helping us help them.”

Faculty members emphasize that while community development takes time, real progress is being made and students from other nursing courses continue to move the resident-led agenda forward in each of the neighbourhood hubs. This involves action planning around improving the pipeline and road safety in Crown Point, and developing partnerships with local businesses to increase access to nutritious, affordable foods in McQuesten.

In South Sherman, meetings are planned for the fall to address beautification and safety.

“Health in the Hubs has evolved beyond the important work we’re currently doing in the three hubs,” said Catherine Tompkins, associate dean and director of the School of Nursing. “It’s an ongoing commitment and partnership with the community, and a model we’ve adopted for working with residents in a respectful, inclusive manner.”
Health Campus planned for downtown Hamilton

Preliminary conceptual rendering of the proposed McMaster Health Campus in downtown Hamilton.

McMaster University’s downtown health campus is expected to open in 2014 with a large family health centre and as a hub for training family doctors, nurse practitioners and other allied health professionals.

The university is purchasing the land at the corner of Main and Bay streets from the Hamilton-Wentworth District School Board for the McMaster Health Campus. The school board will temporarily relocate its offices to three nearby downtown locations while its new headquarters is under construction.

“This is a significant project for Hamilton and McMaster and we are very pleased with the city’s investment and partnership,” said McMaster President Patrick Deane. “For many years McMaster and the city have worked to expand the university’s presence in the core and with this campus, our beach-head in downtown is strengthened.”

Last summer, Hamilton city councillors approved a $20-million investment in McMaster’s plan for its $85-million downtown health campus. In addition, some of the city’s public health services and clinics are expected to be located at the site. In addition to the city’s funds, $19 million is coming from the province, $10 million from a private donor and the remainder from McMaster.

Hamilton Mayor Bob Bratina said the campus represents a significant milestone for the city.

“This is our finest hour,” the mayor said. “We will take pride years from now that we’ve made this happen.”

The McMaster Health Campus will be a nucleus for students, teaching, patient care and research. A large, new family health clinic will allow up to 15,000 Hamiltonians without a family physician to have one. It is expected to have up to 54,000 patient visits every year. The campus will also see 4,000 McMaster students come downtown to participate in classes, training and events. It is to be home to 450 McMaster employees and create 650 jobs during design and construction.

The Department of Family Medicine of the Michael G. DeGroote School of Medicine will be located at the campus. In addition, McMaster’s continuing health sciences education program and the nurse practitioner program will be based at the site. The Maternity Centre of Hamilton, Shelter Health Network and several major research programs will also be located there.

The location of some of the city’s public health services at the campus will provide efficiencies, while providing increased access to care and higher quality service.
Seniors don’t want to give up the freedom and mobility that comes with driving.

However, as baby boomers get older, it has become a health research challenge to help them stay on the road safely. A national study shows older drivers find licensing policies are different all across Canada.

Licence renewal requirements, reporting practices, appeals processes and options for restricted licences largely depend on where someone lives, says researcher Brenda Vrkljan of McMaster University who worked with colleagues at the University of Waterloo and University of Ottawa.

The study, funded by the Ontario Neurotrauma Foundation and Transport Canada, found little agreement between the provinces and territories on the best ways to identify and regulate older drivers who may present a risk to themselves and other road users.

Some provinces subject drivers to medical review at 70, 75 or 80. Mass screening is costly though and, apart from in-person renewal, shows minimal impact on fatalities.

Physicians in most provinces are required to report patients suspected to be medically unfit to drive. This puts pressure on doctors who have increasing numbers of older patients with chronic conditions and lack valid tools to determine fitness-to-drive.

Vrkljan, an associate professor in the School of Rehabilitation Science and an occupational therapist, saw the implications of an aging population first-hand when she worked at a Chatham hospital.

“Being able to drive was a key health issue for our patients, particularly our older patients who lived in rural areas where alternative transportation is nearly non-existent,” she said.

Surveys show that most would rather have restricted licences (such as no night or highway driving) rather than lose driving privileges altogether.

Transport Canada data shows in 2009 there were 3.25 million licensed drivers aged 65 and older, 14 per cent of the total driving population. The number of senior drivers is expected to more than double in the next decade.

The study also found provincial differences in access to driver assessment centres, wait times and costs to drivers.

The researchers partnered with the AAA Foundation for Traffic Safety to produce a comprehensive website on current practices and promising approaches regarding medically at-risk and older drivers at www.candrive.ca.
In February, the Boris family of Hamilton gave a $30-million gift to fast forward McMaster University’s developments in health research and care. Within a month, recruitment began for three world-class scientists, and the architect selection started for a new unique clinic for complex care.

Owen Boris’ children Les Boris and Jackie Work announced the gift to McMaster University to a standing ovation and video fireworks. The donation was given by the Marta and Owen Boris Foundation established by their parents. “McMaster University has proven its ability to fast-forward discoveries from the lab bench to the patients’ bedside,” Les Boris said. “It made perfect sense to make this investment in this world-class university.”

The gift has two major parts, inspired by Owen Boris’ desire to push stem cell science forward as well as his family’s frustrating experiences in obtaining coordinated health care.

Of the total, $24 million is designated to establish The Boris Family Centre in Human Stem Cell Therapies, which will speed the commercial development of discoveries at the McMaster Stem Cell and Cancer Research Institute. The six-year-old institute has had several major breakthroughs, including the ability to turn human skin into blood.

Those funds will establish two senior research chairs, one in blood stem cells and the other in neural stem cells; set up several fellowships and technician positions; build the facility and provide a fund for emerging opportunities.

An additional $6 million is for a unique clinic which will allow patients with complex health problems to see several specialists and have related tests during one visit. Established in partnership with Hamilton Health Sciences, this patient-oriented clinic will be built in the McMaster University Medical Centre in Hamilton and led by a senior research chair.
The foundation was established by Marta and Owen Boris who created the Hamilton cable company Mountain Cablevision Ltd. and developed it over 50 years before selling it to Shaw Communications in 2009. Owen Boris died in April 2011.

"McMaster University has proven its ability to fast-forward discoveries.”

– Les Boris

"McMaster has been renewing its commitment to our community, and to have community members make such a significant contribution to the university is truly outstanding," said Patrick Deane, president of McMaster. “Great research, great discoveries and better patient care. The Boris family gift will accelerate our ability to make great things happen.”

He added that McMaster will work tirelessly to deliver the legacy that the Boris family has enabled.

With the strength of the Boris family’s philanthropy, McMaster will become wonderfully disruptive and innovative, said John Kelton, dean and vice-president of the Faculty of Health Sciences. “This is an innovative and action-oriented family,” Kelton said. “They understand the great potential McMaster has to make medical breakthroughs and their willingness to place their bets on McMaster is a tremendous vote of confidence in us.”

Mick Bhatia, scientific director of the McMaster Stem Cell and Cancer Research Institute, said: “In a short time we’ve become world renowned for our human stem cell discoveries. Now is the time to move these discoveries to the patient. This is a huge leg-up.”

About the clinic for day patients, Akbar Panju, professor and deputy chair clinical programs of the Department of Medicine, said the new format is unique in Canada and will put patients first.

“Too often patients go from office to office to receive essential medical care from several specialists. This clinic will ensure they will get everything they need in one place,” he said, noting that the clinic will also be a centre of learning for health sciences students and residents from many disciplines.

The facility will revolutionize health care and prepare generations of physicians, nurses, therapists and other health care professionals to deliver the best patient care in the world, he said.
Owen Boris: A visionary

Owen Boris was a builder, always looking to adopt the next innovation.

An engineer with the Canadian Avro Arrow jet fighter program, a young Owen was among thousands of Avro workers who found themselves unemployed after the project was cancelled in the late ‘50s.

He returned to Hamilton where his disappointment with television reception at the time led him to build a television tower in the backyard of his home on Hamilton Mountain. The requests from his neighbours to tap into his service became the beginning of Mountain Cablevision Ltd.

Owen and his wife Marta developed the service for Mountain residents for more than 50 years, and their children Peter, Les and Jackie all became involved in the business.

The firm was known for punching above its weight and staying on the leading edge of new developments in the cable industry.

Owen’s technical wizardry and tolerance for risk turned the business into one of the country’s most successful independent cable companies.

“Owen was a strong-willed person, and if you were working around him you had two choices — either get out of his way because he was going somewhere and you’d better not impede his mission, or join him,” Pat Kiely, Mountain Cablevision’s former director of business operations has said.

In 2009, the family sold Mountain Cablevision to Shaw Communications. That very year, Owen was honoured with a lifetime achievement award by the Canadian Cable Systems Alliance.

Owen was 79 when he died last April. He had been making plans to give back to the community.

“The family knows what his wishes are, and we’ll be carrying on and making that come to fruition,” Les Boris said.

Owen’s interest in investing in improved health care has included last year’s announcement of a gift of $6 million to St. Joseph’s Healthcare Hamilton. Half of the gift went to establish an endowed chair in alcohol addiction research, in memory of his son Peter who died of the complications of alcoholism in 2009.

The family also donated $5 million to St. Joseph’s for a surgical robotics system, allowing for two surgeons to work in tandem during a surgical procedure.

Owen was also interested in developing the potential for stem cells in improving health care and he wanted to see the ‘one-stop-shop’ model for patient care in Canada.

Akbar Panju, McMaster professor of medicine, said Owen recognized Canada had a good health-care system, but he wanted to know how to make it better.

“Owen always pushed for the next innovation,” Panju said.
Professors focused on the individual

Two former faculty members, one an internationally renowned respirologist and the other a global leader in the development of medical ethics, have been honoured by the Faculty of Health Sciences.

Frederick Hargreave, professor emeritus of medicine, and John Thomas, professor emeritus of philosophy, brought distinction and recognition to McMaster University through their innovative scholarship and outstanding research and have been inducted into the Faculty’s Community of Distinction.

Family and friends of the professors, both deceased, joined university and department faculty and staff at a November reception at the Community of Distinction display in the Ewart Angus Centre lobby of the Health Sciences Centre. A citation and portrait of each of the inductees have been added to the exhibit.

The Community of Distinction honours those who have made distinguished contributions in scholarship, science, the delivery of health care and leadership in medical and health sciences education and research.

“Both of these men were completely absorbed in the situation for each patient,” said John Kelton, dean and vice-president of the Faculty of Health Sciences. “That keen focus on the ultimate importance of the individual has had a remarkable impact in how health-care professionals think about the issues in both areas of respirology and ethics, not just here in Canada but around the world.”

Frederick E. Hargreave, MD

Frederick E. Hargreave, known to everyone as Freddy, was a world-renowned respirologist who helped change the way asthma is diagnosed and treated through research driven by the clinical needs of his patients. For more than four decades after joining McMaster in 1969, the brilliant clinical scientist developed tests to measure airway responsiveness and inflammation that became the gold standard. A founder of the Firestone Institute for Respiratory Health, he was a superb mentor who trained many of the world’s current leaders in asthma research. He became professor emeritus in 2004, but remained active in research. He was also held in the highest regard by his patients.

John Thomas, PhD

John Thomas pioneered the development of health care ethics in the Faculty of Health Sciences and he was instrumental in establishing the discipline at both the national and international levels.

The philosophy professor was involved with the medical and nursing schools for more than three decades and he was officially an associate member of the Faculty from 1985 until his retirement in 1991. Thomas created undergraduate courses in health ethics, served on ethics committees and profoundly impacted clinicians, policy-makers and patients through his scholarship, consultations and teaching.

A quiet, wise, gentle leader, Thomas brought out the best in his colleagues and students.

Two FHS grads join McMaster’s Alumni Gallery

Two Faculty of Health Sciences graduates have been inducted into the McMaster University Alumni Gallery. Debra Katzman (B.Sc.(H) ’80, MD ’83) and David Levy (BA ’72, MD ’75) joined the gallery that has more than 400 alumni in its ranks.

Katzman is the professor of pediatrics at the University of Toronto and director of the division of adolescent medicine and of the eating disorders program at the Hospital for Sick Children.

She was instrumental in building the adolescent clinic at the Hospital for Sick Children into the largest comprehensive care, treatment and research centre in Canada and one of the largest in the world. She has trained specialists in adolescent medicine who now work around the world.

Levy has worked at McMaster as the clinical professor of the Department of Family Medicine and in the Department of Medicine. He began working with the Hamilton Tiger Cats as a team physician in training before becoming a regular team physician. He helped develop the McMaster Varsity Sports Injuries Clinic and served as both medical director and consultant to the clinic. He remains a team physician for the Hamilton Tiger Cats, the Hamilton Bull Dogs and the Toronto Rock, as well as a physician to many athletes and entertainers out of Copps Coliseum and Hamilton Place.
Prime Minister Stephen Harper visited the McMaster campus to announce the winners of the prestigious Vanier Canada Graduate Scholarships for 2011, a group that included two PhD candidates in the Faculty of Health Sciences.

“I am pleased to congratulate the 167 recipients of this year’s Vanier Canada Graduate Scholarships — researchers whose ideas will help produce tomorrow’s breakthroughs and keep Canada’s economy growing,” Harper said.

The announcement was made at McMaster’s Convocation Hall with many of the recipients from across Canada in attendance.

The federal government established the awards in 2009 to attract and retain world-class doctoral students from across Canada and abroad. Winners receive $50,000 a year for up to three years.

Carolina Alba, a cardiologist and PhD student in the Health Research Methodology program, and Jonathan Lai, a PhD student in neuroscience, were among the six McMaster recipients.

Alba is pursuing her PhD in clinical epidemiology under the supervision of Gordon Guyatt, a professor in the Department of Clinical Epidemiology & Biostatistics.

She is examining biochemical predictors of heart failure, using both clinical and laboratory research.

Lai is working toward his PhD through the McMaster Integrative Neuroscience Discovery & Study (MiNDS) program.

He is studying the association between autism and Fragile X syndrome, one of the most common inherited disorders. He is looking at how brain cells that have risk genes for autism communicate with each other.

The Vanier Canada Graduate Scholarships program is administered jointly by Canada’s three research granting agencies: the Canadian Institutes of Health Research (CIHR), the Natural Sciences and Engineering Research Council (NSERC) and the Social Sciences and Humanities Research Council (SSHRC).

McMaster PhD candidate receives Fulbright Student Award

A McMaster PhD candidate has received a prestigious Fulbright Student Award to conduct research in epidemiology at Harvard University.

Catherine Kreatsoulas is spending nine months in the United States researching the discrepancies in cardiovascular disease and health that exist among population groups. Her project seeks to show how the focus of cardiovascular disease prevention and research can create a better understanding of the “causes of the causes,” also known as the social determinants of health.

Kreatsoulas also holds a M.Sc. from McMaster and a B.Sc. in physical anthropology from the University of Toronto. Her work has been widely published in academic and peer-reviewed journals.

Operating in over 150 countries worldwide, the Fulbright program has long been regarded as the world’s premiere academic exchange.

Fulbright Canada aims to grow intellectual capacity, increase productivity and assist in the shaping of future leaders through its bilateral academic exchanges with the United States.
Major medical imaging project wins $1.4M grant

Capturing, storing and transmitting diagnostic images electronically are now possible given the innovations in medical imaging technology. What remains missing is a way to move the images efficiently from the large storage units to the radiologist’s workstation to the health-care professional’s desk.

David Koff, associate professor and chair of the Department of Radiology, has received $1.4 million from the province to lead a team to develop technologies to accelerate how large data sets — diagnostic and medical images such as x-rays, ultrasounds and MRIs — are shared among health-care providers.

“The research will ensure that the images associated with a patient’s medical history are shared seamlessly and securely within the electronic health record system.

“Our goal is to build the tools that will allow us to retrieve these images efficiently,” said Koff, who is also chief of diagnostic imaging at Hamilton Health Sciences (HHS). “This will improve the workflow for radiologists and enable faster and better service for our patients.”

The collaborative project, based at the Medical Imaging Informatics Research Centre at McMaster (MIIRC@M), brings together radiologists at McMaster and HHS, the Information System Group in the DeGroote School of Business and the School of Engineering Technology at Mohawk College. Private sector partners include Agfa Healthcare, NexJ Systems and AXON Medical Technologies Corporation.

CFI grants equip cutting-edge health sciences labs

Two labs in the Faculty of Health Sciences now have research equipment worth more than $1 million after an infrastructure funding announcement in September by the Canada Foundation for Innovation.

Michael Surette, a professor of medicine and biochemistry and biomedical sciences, received $727,400 for his laboratory for interdisciplimnary microbiome research in health and disease, which will be a high-capacity biosafety level two facility dedicated to culturing, characterization and rapid molecular profiling of microbial communities of the human microbiome. Surette, the Canada Research Chair in Interdisciplinary Microbiome Research, is collaborating with researchers from the Michael G. DeGroote Institute for Infectious Disease Research and the Farncombe Family Digestive Health Research Institute.

Brian Timmons, an assistant professor of pediatrics, received $351,000 for equipment to advance research and the broad agenda of child health. His pediatric exercise and environmental testing and flow cytometry suite is now furnished with equipment geared to studying the physical-activity-to-health connection in young children.

“My research program takes a lab bench to park bench approach with the goal to generate the necessary knowledge on which to build public health policies and standards of clinical care to promote active living during the growing years,” he said.

Timmons and Surette are two of five McMaster researchers to benefit from the CFI’s Leaders Opportunity Fund – a program that invests in state-of-the-art facilities and equipment to attract and retain today’s best research talent.

McMaster alumna and nursing professor wins national award

Jenn Salfi, an assistant professor with the School of Nursing, has received the 2012 Dr. John Gilbert Interprofessional Education Mentorship Award from the National Health Sciences Students’ Association. “I know I’ve made a difference in the Faculty of Health Sciences, especially in the School of Nursing, but to have students from across Canada vote for me was a huge honour.”

The honour recognizes a mentor in interprofessional education for the 2011-2012 year and acknowledges their encouragement, support, insight and enthusiasm that has been instrumental to students and their work.

Salfi completed her Bachelor of Science in Nursing in 1997, her master of science in 2001 and her PhD in 2004 at McMaster. She joined the nursing school in 1999. “Dr. Jenn Salfi is a champion of interprofessional education at McMaster University and an encouraging mentor of student leaders,” said Joshua Smalley, the McMaster medical student who nominated her. “She oversees numerous projects that break down silos and helps cultivate a generation of collaboration-ready health professionals.”
School founder, crisis manager remembered

J. Fraser Mustard, one of the founders of the Michael G. DeGroote School of Medicine at McMaster University and a tireless advocate for the importance of early childhood development, died last November. He was 84.

He joined the medical school in 1966, recruited by former colleague and the first dean John Evans. Mustard was the first chair of pathology and established medical research at the fledgling school. He was world-renowned for his work on blood platelets, vessel injury and the effect of aspirin.

He was also deeply involved in developing the innovative medical school education program with small group, problem-based learning — a model adopted around the world. From 1972 to 1982 he was dean and vice-president of the Faculty and his influence extended beyond McMaster with contributions to research and health-care policy.

In 1982, Mustard left McMaster to found the Canadian Institute for Advanced Research. Later he became known for his campaign to examine the crucial first six years of a child’s life, co-authoring the 1999 Early Years study for the province.

David McCann, a family and emergency doctor who excelled in handling crises, particularly large disasters such as the Haiti earthquake and 9/11, died last August at 50 after a brief illness.

The associate professor of family medicine in the Michael G. DeGroote School of Medicine moved to Hamilton from the United States in 2007. He was deputy incident manager for the City of Hamilton’s health sector emergency management services as well as its intermediate and long-term planning lead.

He worked with a disaster response team in Florida and co-ordinated medical disaster relief preparations during Haiti’s 2010 earthquake and Hurricane Katrina in Mississippi and New Orleans. McCann also responded to the 9/11 tragedy in New York City. He was a lead physician at the Stonechurch Family Health Centre and on staff at Hamilton Health Sciences.

FHS grads making waves

Roberta Bondar (MD ’77), the first Canadian female astronaut to travel to space, received a star on Canada’s Walk of Fame in October. She received a standing ovation at the induction ceremony in Toronto’s Elgin Theatre after the airing of an introductory video narrated by director James Cameron.

Samantha Nutt (B.A.Sc. ’91, MD ’94, LLD ’05), executive director of War Child North America, has written a new book called Damned Nations, Greed, Guns, Armies and Aid. She has been at the front line of many war zones and disaster areas. In her book, she talks about her experiences and provides background information about the players in the conflicts and catastrophes. She discussed her new book and shared some of her stories during a visit to McMaster in November.

Geordie Fallis (MD ’75), chief of family practice at Toronto East General Hospital, has released an audiobook titled From Testicles to Timbuktu: An Eclectic Look at Love, Life and Laughter from The Other Side of the Stethoscope. The book is a collection of anecdotes from a journal started while he was in medical school at McMaster. It offers readers an insight into the moments of great human drama doctors are in a unique position to observe.
FHS alumni: Where are they now?

1970s

Mark Magenheim, MD ’74

Mark Magenheim has had an illustrious career. He taught in McMaster’s Department of Clinical Epidemiology & Biostatistics from 1978 to 1983 while serving as director of McMaster’s International Health Program in West Africa. Magenheim became the health officer of Sarasota County, Florida from 1984 to 1995 and he has been an adjunct professor in epidemiology and clinical research methods at the University of South Florida since 1985. In 1989, he was awarded the U.S. Surgeon General’s Medallion for his leadership in dealing with the AIDS epidemic in the U.S. He was later appointed as the deputy state health officer of Florida to expand HIV care services.

Wendy Azzopardi, BScN ’88

After Wendy Azzopardi earned her nursing degree at McMaster in 1988, she completed her master’s in science at the University of Toronto. She also received her Canadian Psychiatric Mental Health Nursing Certification. Azzopardi worked at the Hamilton Psychiatric Hospital for about 12 years. She is now a faculty member at the Conestoga College of Applied Arts and Technology and level four co-ordinator of the collaborative McMaster Mohawk Conestoga BScN program at the Conestoga site. Azzopardi is thankful for the lifelong learning skills she acquired at McMaster.

1980s

Elaine Principi, B.H.Sc. (PT) ’83

Elaine Principi’s career has spanned nearly 29 years since she graduated from the combined McMaster University/Mohawk College physiotherapy program. In 2009, she completed her master of education at Brock University. She started her career at the former Henderson General Hospital and went on to a variety of positions in the community, private clinic and hospital setting. She left her post as the clinical leader at St. Peter’s Hospital to accept her current position as the chief of physiotherapy practice at Hamilton Health Sciences. Principi is an assistant clinical professor at McMaster’s School of Rehabilitation Science.

2000s

Steven Hoffman, B.H.Sc. ’07

After completing his B.H.Sc. in 2007, Steven Hoffman received his law degree and masters in political science at the University of Toronto in 2010. He went on to practice at a Toronto law firm specializing in intellectual property litigation. He is currently an assistant professor of Clinical Epidemiology & Biostatistics at McMaster University, an adjunct faculty member with the McMaster Health Forum and a Fulbright & Knox Fellow at Harvard University. Hoffman previously worked as a project manager for the World Health Organization and he continues to consult on their development of a global strategy for health systems research. This summer he will be working in the office of United Nations Secretary General Ban Ki-moon in New York City.

Kathi Wilson, B.H.Sc. (Midwifery) ’96

Kathi Wilson was in the first graduating class of the midwifery program at McMaster. She entered the program following her own childbirth experiences and teaching childbirth classes for 10 years in the London community. She had been an active group member lobbying for the legislation of midwifery. After graduation, she went on to work as a midwife in St. Jacob’s. In 1997, she set up her own practice in London. Wilson is also the chief of the midwifery department at the London Health Sciences Centre, a position she has held for 10 years. She continues to tutor for the McMaster midwifery program and also acts as a clinical preceptor.

Nancy Aza, B.H.Sc. (Physician Assistant) ’10

Nancy Aza enrolled into the first Physician Assistant Program (PA) at McMaster after studying life sciences at McMaster and working for six years as a paramedic. She continued paramedic duties part-time while in school. Upon graduation, Aza went to work in the emergency room at the Oakville-Trafalgar Memorial Hospital. She also returned to McMaster to teach courses in the PA program. Aza is thankful for the unique, exciting experience she had as part of the first civilian-trained PA program in Canada.
Andrew Padmos is a graduate of a small class in what was then the newest medical school in Canada. Four decades later, he is a champion of taking Canadian medical training and standards to the world.

His colleague, Louis Francescutti, president of the Royal College of Physicians and Surgeons of Canada, said Padmos, as chief executive officer of the college, is a charismatic leader and "definitely exciting to be around."

“People describe Andrew as being a step ahead of everybody else. He’s got a million ideas that come out of his mind every minute it seems . . . He has brought enthusiasm to a portfolio that in the past was quite content to be status quo.”

This spring, Padmos spoke to the latest group of McMaster University medical graduates. In the fall, he returns as a key organizer of the 40th anniversary reunion of the very first graduating class of 1972.

It was a small class: only 19 students with some classes held in what had been a laundry room at the Chedoke hospital. He remembered his training as “exciting, stimulating and liberating” as the small class size made for a unique learning situation, and he embedded problem-based learning into his approach to medical practice.

A hematologist by profession, Padmos has practised health care in cities and hospitals from Alberta to Nova Scotia as well as abroad. For 15 years, he was a doctor in Riyadh, Saudi Arabia – his youngest of three boys was born there – where he developed a clinical program in hematology and oncology. He also directed the launch of a bone marrow transplant program there in 1984, a leader in the world at the time.

Later, he held the office of commissioner of Cancer Care Nova Scotia for eight years. In September 2006, Padmos became the top full-time officer of the Royal College, based in Ottawa.

The college has more than 43,000 members, about 35,000 of whom are actively practising specialists such as cardiologists, oncologists, surgeons and microbiologists. It sets standards and conducts examinations to certify experts in 29 primary specialty fields and administrators exams to more than 2,300 resident candidates each year.

Today, Padmos still does rounds, only now it is mostly to medical seminars and conferences to talk about advances in medical care, to Parliament Hill to address politicians and to international gatherings to talk about global health issues. His health orbit is vast. In a year, he might spend up to 40 per cent of his time outside the Ottawa office, at stops across Canada or outside the country.

During an average year, for example, he might fly to Saudi Arabia four times. He speaks “quite a bit of Arabic, certainly around medical conditions.”

Padmos remains a practising physician.

continued on page 19
continued from page 18

For example, he attends an outpatient hematology clinic near Halifax once a month. “Like every other fellow of the Royal College,” he must maintain his certification standards, which includes credits in medical upgrading and currency requirements. Perhaps echoing the McMaster life-long learning theme, he engages in both self-directed and group-learning as part of that maintenance. “I don’t feel I work,” he said. “I enjoy every day I have.”

As college CEO, he is in a good position to see Canada’s health-care system is “good but not great,” based on a number of metrics and standards used globally. “At the level of health-care services, I think we have a very good system, although it’s not very customer-responsive . . . Health care is important and its importance is rising for individuals, with all the expenses associated with that.”

Padmos is not alone in suggesting the national medicare system is “showing lots of markers of stress and strain.” Up to 40 per cent of a provincial budget, some of it from federal transfers, goes into the health-care system. If funding is capped from whatever sources, that reduces the flexibility and efficiency of the system.

Some Canadians, for example, may not be able to find a family doctor. Some may spend hours at an emergency department, months seeking surgery, or waiting to get into some kind of respite or rehabilitation space. He said the latter situation, acute in an aging society, reflects an irony born of medical successes: some diseases, such as cancer, are no longer automatically fatal but become a chronic illness, requiring enduring treatment.

In this vast geographic sprawl of a country, some citizens may not have ready access to quality care. The system, he said, does not offer “very good incentives or programs for (doctors) to move around to areas that are not as well supplied.”

For all those stresses, there are some shining successes, he said. For example, cancer care in Canada consists of a well-integrated system of front-line clinics, hospitals and specialists. Many cancer-related research discoveries are being made here. In another area, provincial health systems are making headway in setting up innovations, such as electronic health records.

Padmos regularly plays a key role in medical education and innovation sessions at conferences across the country. He thinks Canada has a strong health story to sell internationally. Francescutti, who has accompanied Padmos abroad, notes that the college CEO is “very keen on bringing the standards and excellence that we enjoy in Canada . . . to other countries as well.”

But the sales job requires that Canada better promote its medical-education partnerships and its training and professional standards. For example, Canada could inspire by helping to set up models and templates, such as the governance role of a national accreditation college, he said. In that vein, Padmos often goes to countries such as Saudi Arabia, other Arabian Gulf nations, China and Chile to help build collaborative programs, such as residency-education conferences.

“I think that will always be a part of my life at the college . . . I think Canada’s health care and higher education systems are of considerable interest to people in countries abroad and I feel there are valuable programs that could be exported.”

Keep us up to date

Do you have news you would like to share in Network? Please e-mail us at network@mcmaster.ca to keep us up to date on your accomplishments.

New medical graduates create bursary

Bourne Auguste, originally from the island of St. Lucia, knows the barriers families face when there isn’t enough money.

The president of the MD Class of 2012 has personally seen how poverty and a lack of resources prevent people from moving forward in their lives, not only in his native country, but in Canada as well. It is why he wants to see future medical students who are struggling financially to receive assistance.

So, in honour of his upcoming class graduation, Auguste launched a fund-raising drive with his classmates to establish a bursary for students who follow them at the Michael G. DeGroote School of Medicine. The bursary has been started with $3,000 raised by the medical students before this spring. Auguste said the class goal is to raise up to $10,000 in the next few years.

He said the bursary will be for students who demonstrate financial need, and it will greatly assist many students since the rising cost of tuition poses difficulties. “There is a significant apprehension about increasing debt,” Auguste said.

His classmate Reed Siemieniuk agreed, adding that the class feels blessed to have had an amazing experience at McMaster and wants to provide others a similar opportunity. “We are hoping that this little bit will help somebody who may not otherwise be able to go to medical school,” Siemieniuk said.

Both Auguste and Siemieniuk have benefited from the generosity of others through student bursaries. “It is a way to give back,” Auguste said.
On Oct. 20, 2012, the Faculty of Health Sciences will be holding MD class reunions for the classes of ‘72, ‘77, ‘82, ‘87, ‘92, ‘97 and ’02.

The day will feature a continuing medical education (CME) lecture by professor Geoff Norman, entitled Beyond PBL: The Evolution of Problem-Based Learning at McMaster 1969-2012; tours of the Michael G. DeGroote School of Medicine and a dinner at the Hamilton Convention Centre. Individual classes may also be organizing other activities around this weekend.

Reunion registration packages will be sent out soon with further details.

To assist with class outreach or to get more information, please contact Josie Bufalino-Jasek at jasekj@mcmaster.ca and to connect with classmates, visit the “events” section of the MacHealthSci’s Facebook page.

MD Class of ’72 – 40th Reunion
Reunion Committee: Andrew Pudmos and Ralph Bloch

MD Class of ’77 – 35th Reunion
Reunion Committee: Jennifer Blake

MD Class of ’82 – 30th Reunion
Reunion Committee: Jean Mullens, Rose Giammarco, Jan Patterson, Patti Wilson-Cross

MD Class of ’87 – 25th Reunion
Reunion Committee: John Granton

MD Class of ’92 – 20th Reunion
Reunion Committee: Sonia Anand and Linda Redwood-Campbell

MD Class of ’97 – 15th Reunion
Reunion Committee: Rob Whyte

MD Class of ’02 – 10th Reunion
Reunion Committee: Leonard Grinblat and Jason Denys

MD class of ‘86 reunite after 25 years

Members of the MD Class of ’86 gathered Oct. 22, 2011 at the University Club of McMaster to celebrate their 25th reunion.