New program trains students in business and science

MD gives back to McMaster

Halton McMaster Family Health Centre opens
McMaster’s Faculty of Health Sciences is a world leader in developing collaborative and interdisciplinary approaches to teaching and learning. This focus stems from our unique combination of schools of medicine, nursing and rehabilitation science, as well as programs for midwifery, physician assistant, a Bachelor of Health Sciences (Honours) degree, and many graduate programs in health sciences.

However, our teaching and research increasingly extend beyond our Faculty as students in the health sciences seek to acquire knowledge and skills from multiple areas of study, and researchers require multiple perspectives in order to effectively address complex health questions.

In this issue of *Network* we highlight the rise of interdisciplinary graduate programs, both within our Faculty as well as those partnered with other Faculties and schools across campus. We explore why more and more students are looking to McMaster for a collaborative educational experience.

One innovative new program that offers such an experience is the Biomedical Discovery and Commercialization Bachelor/Master program. Offered by the Department of Biochemistry and Biomedical Sciences of the Michael G. DeGroote School of Medicine, in partnership with the DeGroote School of Business, students are training in biomedical science and business at the same time.

Over the past decade, our Faculty has established firm collaborations with the DeGroote School of Business with joint programs including the M.Sc. in eHealth, Master in Health Management and PhD in Health Policy. I am quite enthusiastic about a joint institute we are now developing between the Faculty of Health Sciences, including our Michael G. DeGroote School of Medicine, and the DeGroote School of Business, that will train those developing health care and business careers to be the health care leaders of the future.

Also in this edition, you will read about the illustrious career of Dr. John Evans, the founding dean of the Michael G. DeGroote School of Medicine, who we lost in February.

John had a towering intellect reflected in his career of varied accomplishments in a wide variety of fields. I was fortunate enough to know him personally, and I always admired how he mixed that leadership with great personal warmth for all he met.

Through his work at McMaster he revolutionized modern medical education with his innovative creation of the radical ‘McMaster Approach’ to develop humanist physicians who work as part of interdisciplinary health-care teams. He has an everlasting legacy in his profound impact on how physicians everywhere are trained, and on the care for many people worldwide. He will be missed.

On these pages we also touch on a number of reasons we have had to celebrate over the past few months.

We welcomed three professors of note into our Community of Distinction: John Bienenstock, Jonathan Lomas and Raelene Rathbone.

James MacKillop was recruited as the inaugural holder of McMaster’s Peter Boris Chair in Addictions Research, thanks to the Boris family. A partnership with the Schlegel family of Kitchener created the Schlegel Chair in Clinical Epidemiology and Aging, which has Andrew Costa as its first chair holder.

We opened the new Halton McMaster Family Health Centre with Joseph Brant Hospital in Burlington. And, we officially launched the McMaster Optimal Aging Portal.

I know you will enjoy reading about these and other recent achievements of the Faculty of Health Sciences, as well as updates from some of our accomplished alumni who continue to expand McMaster’s impact on health around the globe.

To stay up to date on all the latest news from our Faculty, visit us on the web at fhs.mcmaster.ca
With a flurry of excitement, officials opened the new Halton McMaster Family Health Centre in Burlington in November.

The primary care clinic and education centre for future physicians and other allied health professionals, run by the Department of Family Medicine of the Michael G. DeGroote School of Medicine, is sited on Lakeshore Road, on the southwest corner of Joseph Brant Hospital.

“The new centre is bright, open and welcoming, just as we’ve found the community in Burlington and Halton and with our academic partner Joseph Brant Hospital,” said John Kelton, dean and vice-president of the Faculty of Health Sciences. “This will be a fine centre of excellence for learning and health care.”

The centre will have six full-time family physicians and eight family medicine residents. As the teaching headquarters for family medicine across Halton, there will be eight additional residents placed in community practices throughout the region who will use the centre for education sessions. McMaster students from other programs, including nursing, nurse practitioner, physician assistant, medicine and social work, will also use the centre.

The Burlington Family Health Team currently has almost 9,000 patients. Besides physicians, the team includes a pharmacist, nurse practitioner, occupational therapist, nurses, social workers and a dietitian.

The 40,000 square-foot facility features many large windows facing spectacular views of Lake Ontario. The large family health clinic occupies the first floor, with 20 exam rooms, a team room for physicians and students with 23 workstations, prep areas and a large procedure room, along with a staff room and administrative space. The second floor has two teaching rooms and a walk-out patio for McMaster faculty members and students. The building, a joint project of the University and Joseph Brant Hospital, also has administrative space for the hospital.

The $7 million family health centre was funded by the City of Burlington and Region of Halton as part of a grant to the University; the Ontario Ministry of Health and Long-Term Care and McMaster’s Department of Family Medicine.

Joseph Brant Hospital is a clinical education campus of the University, providing clinical experience for students in emergency medicine, surgery and obstetrics, as well as family medicine.
World-renowned addictions researcher
James MacKillop was named the inaugural holder of McMaster University’s Peter Boris Chair in Addictions Research at an event in October that also officially opened the Peter Boris Centre for Addictions Research.

The Boris family of Hamilton committed $7.6 million to St. Joseph’s Healthcare Foundation to establish both the research chair and research centre. The youngest child of Owen and Marta Boris, Peter Boris lived with alcohol dependence for many years before passing away at age 44.

The title of the chair reflects the human aspect of addiction, a fact that is not lost on MacKillop.

“As the holder of this chair, I am reminded daily of one person whose life was lost to addiction and the myriad others who have similarly died prematurely or who currently suffer,” he said. “This chair gives a name to these often stigmatized conditions. It is a monument to the memory of Peter and to the personal tolls of addiction.”

Les Boris attended the event with his sister, Jackie Work, and mother Marta Boris.

“My goal is for the Boris Centre to be internationally known for cutting edge investigations that leverage innovations in basic behavioral science, brain imaging, and behavioral genetics into significant advances in diagnosis and treatment.”

– James MacKillop

“We are excited by the enthusiasm, expertise and dedication that MacKillop brings to his new role,” he said. “We only wish that these resources had been available to help our brother Peter during his struggle with alcohol addiction. But through this centre, Peter’s name will live on, and his legacy, paired with Dr. MacKillop’s research, will help tens of thousands of others who struggle with a similar affliction.”

In addition to his role as chair holder, MacKillop is now the director of the new centre at the West 5th campus of St. Joseph’s Healthcare Hamilton and a professor in the Department of Psychiatry and Behavioural Neurosciences of the Michael G. DeGroote School of Medicine.

“My goal is for the Boris Centre to be internationally known for cutting edge investigations that leverage innovations in basic behavioral science, brain imaging, and behavioral genetics into significant advances in diagnosis and treatment,” said MacKillop, who came to Hamilton from the University of Georgia.

John Kelton, dean and vice-president of the Faculty of Health Sciences, added that an advantage of the hospital and university partnership is that the Chair’s academic research will be quickly ready for use and evaluation in the clinical setting.
Diets

There is little difference in the effectiveness between popular branded diets like Weight Watchers and Jenny Craig, and the key to success is sticking to it, say McMaster researchers. The study, published in the Journal of the American Medical Association and led by Bradley Johnston, assistant professor in clinical epidemiology and biostatistics, also found that diets with behavioural support and exercise enhance the weight loss. Researchers compared 48 randomized clinical trials of branded diets, including more than 7,200 overweight and obese adults.

Hand-washing

Hospitalized patients don’t wash their hands enough, says research by Jocelyn Srigley, assistant professor of medicine. Using new electronic hand hygiene monitoring technology on 279 adult patients, her team found they washed only about 30 per cent of the time while in the washroom, 40 per cent during meal times, and only three per cent of the time when using the kitchens on their units. The study was published in Infection Control and Hospital Epidemiology.

Preemies and disorders

People born as extremely low birth weight babies are less likely than others to have alcohol or substance use disorders as adults, but they may have a higher risk of other types of psychiatric problems, says research by Ryan Van Lieshout, assistant professor of psychiatry and behavioural neurosciences. The study was published in Pediatrics.

Asthma treatment

A new antibody-based drug named mepolizumab can replace traditional steroid-based treatments for certain patients with severe asthma, resulting in improved outcomes and reduced side effects, says a global study led in Canada by respirology professor Parameswaran Nair. He said the new drug is the only therapy proven effective in well-established clinical trials to help reduce doses of steroid-based treatments for those with severe asthma. The research was published in the New England Journal of Medicine.

Disc surgery

Current evidence does not support the routine use of minimally invasive surgery to remove herniated disc material pressing on the nerve root or spinal cord in the neck or lower back. In comparing it with open surgery, McMaster researchers found minimally invasive surgery may speed up recovery and reduce post-operative pain, but does not improve long-term function or reduce long-term extremity pain. Nathan Evaniew, a research fellow in orthopedics, was lead author of the study published in CMAJ Open.

Exercise

Only 40 per cent of Canadians exercise to cope with stress, says a study published in the Journal of Physical Activity and Health. McMaster researchers led by John Cairney, professor of family medicine, and psychiatry and behavioural neurosciences, analyzed data from an existing survey of nearly 40,000 Canadians 15 and older. Exercise was ranked eighth among 13 coping behaviours for stress, behind other strategies like looking on the bright side, talking to others, ignoring stress and praying.

Weight shift hard

People of all ages find it difficult to prevent weight gain; extremely difficult to get rid of it later and to keep it off once lost. However, even small weight losses can mean better health. That confirmation came from the McMaster Evidence Review and Synthesis Centre in studies published in CMAJ Open and led by Leslea Peirson, review coordinator with the School of Nursing. The reports reviewed hundreds of studies published in the past decade about the prevention and treatment of overweight and obesity among children; the prevention and treatment of overweight and obesity among adults, and about keeping lost weight off.

A case of home sweet home

McMaster researchers have discovered that human stem cells made from adult donor cells “remember” what cell types they came from and that when reprogrammed in the lab, they preferentially revert to their original cell type. With this researchers now have a more efficient way of making higher quality and quantity of cells. The study was published in the journal Nature Communications and led by Mick Bhatia, professor of biochemistry and biomedical sciences. The findings will be used to further drug development at McMaster, and potentially improve transplants using human stem cell sources. The breakthrough made the Canadian Cancer Society’s list of the top 10 discoveries of 2014.

Human blood cells in a dish. Cells reprogrammed to stem cells from blood were 10 times more effective in making blood than using skin as a starting tissue.
McMaster Optimal Aging Portal launches

With its official launch in October, the new McMaster Optimal Aging Portal has become the go-to place for Canadians, caregivers, health professionals and health system decision-makers to find quality health and medical information on senior life and healthy aging.

"...what sets the Optimal Aging Portal apart from the crowd is its emphasis on providing only the best evidence, and telling you why it’s considered the best."
— Anthony Levinson

The portal can be found at www.mcmasteroptimalaging.org.

The site is already the premier health resource found on the home page of the Government of Canada’s online source for seniors. The portal brings together research evidence about clinical, public health and health systems questions, and presents it in various ways to discuss the key messages from the research, how trustworthy it is, and how it can be acted upon.

The website features evidence summaries that present the main points from complex research documents in an easy-to-understand form; blog posts of commentaries about what the scientific research on a topic actually means; and web resource ratings, which help to sort through the masses of other online free resources available on the Internet.

The Optimal Aging Portal was created by a team of McMaster researchers to reinforce the University’s role as a leading authority in Canada on the study of aging.

“There are many other online resources that deal with health and aging available, but what sets the Optimal Aging Portal apart from the crowd is its emphasis on providing only the best evidence, and telling you why it’s considered the best,” said Anthony Levinson, an associate professor of psychiatry who led the design and development of the website.

“The portal filters out the noise and makes it easy to understand how scientific evidence and other types of information can help you.”

Labarge Optimal Aging Initiative funds new projects

The Labarge Optimal Aging Initiative, funded through Chancellor Suzanne Labarge’s $10 million donation, has awarded funding to six new projects. The initiative has backed 13 research projects and created the McMaster Optimal Aging Portal.

The six new projects are:

• An examination of a unique adult day service model for older adults
• Resistance and longevity for older workers with arthritis through exercise
• Establishing age-related chronic inflammation as a modifiable risk factor for poor immune function in the elderly
• Preventative approaches to preclinical mobility limitation for community-dwelling older adults
• An exploratory study of the effects of automobile innovations on the experience of older drivers, their mobility, and social policy
• Providing recommendations from guidelines for healthy aging through the McMaster Optimal Aging Portal
New research chair to improve seniors’ health care

McMaster’s new Schlegel Chair in Clinical Epidemiology and Aging has been created through a partnership of Ron Schlegel and his family with the University. The chair is an essential part of McMaster's growing research focus on aging, said McMaster President Patrick Deane.

“This chair fits well into our expanding multidisciplinary work on optimal aging. This is a critically important area of research for Canadians, particularly since by 2036 it is anticipated that more than a quarter of the population will be seniors.”

– Patrick Deane

The Schlegel family is giving $1 million for the chair, to be matched by McMaster and used over 10 years. The first holder of the new chair is Andrew Costa, an assistant professor of clinical epidemiology and biostatistics and an associate member of the Department of Medicine with the Michael G. DeGroote School of Medicine. He is also the research lead at the school’s Waterloo Regional Campus.

Costa’s research is centred on helping seniors avoid unnecessary trips to hospital and on “trying to keep older adults happy, healthy and living in the environment of their choice, and typically that’s at home and living in the community,” he said.

Costa has already developed several ways to assess older adults with complicated health issues who may seek care at hospital emergency departments. One is a free app for use by emergency room nurses which asks six simple questions to assess how critical it is that the senior be seen quickly.

In another project, Costa created a tool that predicts emergency department use in home-care clients in order to help patients avoid emergency department admission in the first place.

Costa’s focus will now shift to the long-term care environment, particularly in preventing or managing transitions of frail seniors between their homes and the often hectic hospital environment.

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Poop’s glow may shed light on diagnosing cancer

Two McMaster researchers are developing fluorescent DNAzymes that will detect cancer markers in stool samples. If cancer is present, the molecules will glow, leading to early treatment and better outcomes for patients.

This could become an inexpensive, simple, accurate and non-invasive test for colorectal and other cancers.

Over a game of golf, biochemist Yingfu Li and gastroenterologist Bruno Salena discovered they share an interest in early detection of disease. Li has been studying fluorescent DNAzymes for years, while Salena has been treating patients with colorectal cancer and other bowel diseases.

“We got talking about the fluorescent enzymes and the possibilities for early detection of cancer and I got quite excited,” said Salena, an associate professor of medicine of the Michael G. DeGroote School of Medicine. “I looked at Dr. Li’s data and I loved it. I thought this is something new we can try.”

The pair was awarded a Canadian Cancer Society (CCS) Innovation Grant last summer.

“I looked over the data that Dr. Salena had and I thought it was really interesting,” said Li, a professor in the departments of chemistry and biochemistry and biomedical sciences. “There are no other grant programs in Canada that support unconventional approaches like this.”
Making vaccines more accessible worldwide

A research project using equipment of McMaster’s Biointerfaces Institute could potentially make vaccines for deadly illnesses much more affordable and available worldwide.

The research is led by Ali Ashkar, professor of pathology and molecular medicine and a researcher at the McMaster Immunology Research Centre and the Michael G. DeGroote Institute for Infectious Disease Research, along with Carlos Filipe, professor of chemical engineering.

Funding of $100,000 came from Grand Challenges Canada, the federal program that aims to improve maternal and child health in developing countries around the world.

Using an idea from chemical engineering PhD student Sana Jahanshahi-Anbuhi, the group first developed a way to store fragile biologics at room temperature by embedding them in the same kind of dissolvable gel used in Listerine breath strips. This provides a protective barrier and enabled them to store fragile enzymes and other agents in tiny pills for easy, cheap and immediate water testing in the field, a process that replaces cumbersome, slow and expensive lab tests.

The team that developed the water-testing pill realized the technology could be used in many more applications, including vaccines. McMaster researchers will now test the same idea with vaccines for diseases such as influenza, measles, diphtheria and tetanus.

“It’s the same recipe,” said Filipe. “I think it’s within our grasp, at least for some vaccines.”

Currently such vaccines require refrigeration, making them expensive to store and transport, and often putting them out of reach of people in developing countries. If the research is successful, vaccines could be transported and stored virtually anywhere, at low cost, and reconstituted on site using sterile water.

New nurses’ confidence built by supportive collaborations

Researchers from McMaster’s School of Nursing have found that new nursing graduates are not confident in their ability to engage in collaborative practice with other health professionals.

Since this may create problems in delivering safe and effective health care, interventions that provide support for interprofessional collaboration are needed.

The study was recently published in the International Journal of Nursing Studies.

Pamela Baxter, senior author of the study and an associate professor of nursing, said the confidence of new nurses will be improved by immersion into a respectful, supportive health care team; access to supportive leadership, unit/team educators and nurse managers; and a preceptorship or mentorship experience.

For the study, 514 new nursing graduates in Ontario completed a survey measuring perceived confidence in interprofessional collaboration. Findings suggested that several factors have a positive relationship on their confidence in interprofessional collaboration, including: availability and accessibility of the manager; availability and accessibility of the educator; the number of different disciplines worked with daily; the number of team strategies; and satisfaction with the team.

“This research will promote the engagement of new nurses in collaborative practice,” said Baxter. “If the new graduate feels supported, respected and engaged with the interprofessional team, it may result in greater nurse retention and improved patient outcomes.”

Ali Ashkar, professor of pathology and molecular medicine, is co-leading research that could make vaccines for deadly illnesses more accessible worldwide.
As the health workforce has evolved over the past decade, McMaster's Faculty of Health Sciences (FHS) has grown its offering of interdisciplinary graduate programs, including those joined with other faculties across campus, to meet the changing needs of students.

Moyez Ladhani is on track to be one of the first graduates of the M.Sc. in Health Science Education program this June. For him, the interdisciplinary nature of the program was a bit of a surprise, but a good one. “Going into the program, I’d assumed it would be more physician-based, but our first cohort class was a good mix of various specialties,” said the pediatrician. The associate professor is the program director of McMaster’s pediatric postgraduate program. He is also deputy chief of general pediatrics at McMaster Children’s Hospital.

“Going into the program, I’d assumed it would be more physician-based, but our first cohort class was a good mix of various specialties,” said the pediatrician. The associate professor is the program director of McMaster’s pediatric postgraduate program. He is also deputy chief of general pediatrics at McMaster Children’s Hospital.

“Going into the program, I’d assumed it would be more physician-based, but our first cohort class was a good mix of various specialties,” said the pediatrician. The associate professor is the program director of McMaster’s pediatric postgraduate program. He is also deputy chief of general pediatrics at McMaster Children’s Hospital.

On the other hand, for student Jessica Yu, it was the interdisciplinary approach that drew her to the M.Sc. in Global Health program. While completing her McMaster kinesiology degree, she did a volunteering placement at a hospital in Thailand where she observed the need to increase health access and improve health infrastructures in developing countries – an experience that furthered her interest in health issues abroad. When she returned, “I knew I wanted to apply to a program that was interdisciplinary and encompassed my many interests,” said Yu.

“It gives you a lot of different perspectives, especially to have small group discussions with students from multiple disciplines, as well as professional clinicians. It enriches the discussions in class, having students from business, health sciences and social sciences coming together.”

For joint programs like global health, students “will get a perspective and training that they wouldn’t have been able to get if only one Faculty was delivering that program,” said Catherine Hayward, associate dean of FHS Graduate Studies.

“A lot of the interdisciplinary programs at the University involve our faculty or are health-related in some way, and I think there is a very strong interest among graduate students to enter programs that are health-related. That’s a real strength at our university.”

Susan Denburg, associate vice-president academic for the FHS, added: “Our interdisciplinary programs stem from increased recognition that the health questions and dilemmas that people face today are very, very complex and can’t be addressed from one disciplinary perspective.”

In the M.Sc. in eHealth program, for example, students coming with
engineering and computer expertise focus on the technology, students with a health background focus on the needs in the health environment, and business people focus on the business aspects. So, it’s about everyone working together to figure out “what’s best practice in organizing newer technology to address questions around health,” said Denburg.

She said these joint programs are popular as students address complex problems in their coursework and learn different perspectives. “In many cases, it feels more real-world because you’re already seeing evidence from all specialists involved with addressing a question.”

The newer interdisciplinary programs complement some of the popular and traditional health professional programs within the FHS, which include nursing, occupational therapy (OT) and physiotherapy (PT), and other health-related graduate programs like medical sciences, rehabilitation science, biochemistry and health research methodology (HRM). As an example, Hayward said, graduates of the OT, PT and nursing programs may be attracted to an additional program such as the master in health management.

“They’re recognizing that to pursue a really great and fulfilling career, sometimes you need to immerse deeper into some of the things that you’re doing, to have an educational, management or research focus.”

A popular interdisciplinary program for the past 40 years has been the master in HRM offered by the Department of Clinical Epidemiology and Biostatistics (CE&B) of the Michael G. DeGroote School of Medicine. The program “attracts a lot of clinicians including physicians, nurses, OTs, and PTs – people of a diverse background who realize that in the current day and age, you need to be weighting evidence as an important part of a clinical career,” said Hayward.

Holger Schünemann, chair of CE&B, said the HRM program is successful and unique in the world because it is pragmatic since it “helps upcoming researchers and educators solve real-world health care problems and it is rigorous in that it emphasizes that the best methods should be used to do that.”

It is also successful because of the “collegial and collaborative approach that allows students to interact with faculty and other students,” he said.

Graduate studies in the FHS continue to grow.

The Biomedical Discovery and Commercialization (BDC) Bachelor/Master’s program, which gives students the opportunity to train in biomedical science and business at the same time, started in January.

The new M.Sc. in Public Health program, based out of CE&B, is expected to start this September. It will allow students to focus on population-based health problems from the local to international level.

“This program will build on our particular strengths including research methods in public health, health policy and environmental health,” said Schünemann. “McMaster’s strength in health economics, unique in Canada, and other strengths will allow additional areas of concentration and cross-pollination with students in other programs.”

As well, a new Master of Child Life Studies program is under development and a joint institute of the DeGroote School of Business and the FHS, including the Michael G. DeGroote School of Medicine, may soon offer leadership programs.

“This is the right place for advanced health sciences education because we have a long-standing track record of collaboration between departments, schools and Faculties,” said Denburg. “It’s part of the McMaster culture.”

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### FHS interdisciplinary graduate programs include:

**Master and PhD in Neuroscience**
- Collaborative program among the faculties of science, health sciences, engineering and humanities covering a broad spectrum of neuroscience

**Master and PhD in Biomedical Engineering**
- Faculties of health sciences and engineering program links current and emerging areas of molecular, medical and bioengineering research

**M.Sc. in eHealth**
- Faculties of health sciences, engineering and the DeGroote School of Business program provides training in health informatics, with emphasis on industry-relevant academic research and development

**M.Sc. in Global Health**
- With Maastricht University, the Netherlands, this interdisciplinary, cross-cultural and interprofessional program prepares the next generation of professionals for the global workforce

**Master in Health Management**
- School of Rehabilitation Science and DeGroote School of Business program provides regulated health professionals with the knowledge, skills and abilities to excel as a manager within the public and private Canadian health care sector

**M.Sc. in Health Science Education**
- Interprofessional program targeted to health care practitioners and clinical educators who teach or plan to conduct research in the education of health professionals

**M.Sc. and PhD in Chemical Biology**
- Graduates are researchers with a diverse skill set, who operate within multidisciplinary teams and speak both ‘languages’ of chemistry and biology

**Biomedical Discovery and Commercialization**
- Bachelor-M.Sc. Program
- Multidisciplinary training program offered by the Michael G. DeGroote School of Medicine, with the DeGroote School of Business, that equips graduates with discovery research skills and business acumen

**PhD in Health Policy**
- Unique collaboration of the faculties of health sciences, humanities, business, social sciences and science, where graduates develop solutions to policy problems
To become a medical science liaison for a pharmaceutical company, Rachel Fong thought she had to complete a chemical biology degree at McMaster University and then pursue graduate studies in business.

Instead, she is one of the first students of McMaster’s new Biomedical Discovery and Commercialization (BDC) Bachelor/Master’s program. The unique program offers students the opportunity to train in biomedical science and business at the same time.

“This multidisciplinary experience will equip me with my academic arsenal that will set me up for my career,” said Fong. She is one of 12 students enrolled in an accelerated start for the program that began in January. They will enter the fourth year of the program in September.

The program, offered by the Department of Biochemistry and Biomedical Sciences of the Michael G. DeGroote School of Medicine, along with the DeGroote School of Business, is open to students who have completed two years in science or health science. It takes two years to finish an honours Bachelor of Health Sciences degree, followed by 12 months for a course-based master’s degree. The master’s program includes a four-month internship working in the health sciences sector.

Courses in the program range from drug discovery and development and laboratory research skills, through to accounting for decision-making, applied marketing, and human resources management. McMaster’s innovative educational methods of experiential, inquiry and team-based learning approaches are a hallmark of the program.

“In terms of the basic science and the discovery research, we’ve done a bang-up job for decades now in educating biochemists in the biomedical sciences,” said Eric Brown, director of the program and a professor of biochemistry and biomedical sciences.

But one career development piece that has been missing from current programs, he said, is the connection with the community. So, the BDC program has reached out to the commercial health sciences sector for involvement as guest lecturers and community mentors.

“The program is teaching you to think more dynamically about the multiple factors involved in the drug discovery process. It gives us the unique opportunity as scientists to further develop the teamwork, communication and problem-solving skills that are going to be necessary after graduation.”

– Christian Pretto

BDC student Christian Pretto made the switch from biochemistry.

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“The program is teaching you to think more dynamically about the multiple factors involved in the drug discovery process,” Pretto said. “It gives us the unique opportunity as scientists to further develop the teamwork, communication and problem-solving skills that are going to be necessary after graduation.”

John Kelton, dean and vice-president of the Faculty of Health Sciences, said: “The growing impact of the pharmaceutical and biotechnology sectors on the Canadian economy creates a need for business-oriented scientists.

“McMaster has created yet another innovative venture, combining expertise from its renowned Michael G. DeGroote School of Medicine, DeGroote School of Business, and Faculty of Health Sciences, to produce leaders in the health sciences, drug discovery and development sectors who will commercialize Canadian discoveries for the benefit of our economy.”

Benson Honig, a professor with the DeGroote School of Business who teaches in the new program, said the best jobs are in knowledge intensive industries.

“Firms require a complement of talented people who span a number of different areas of expertise, who know how to work and collaborate with individuals across disciplines, who know how to get things done, how to market and sell their ideas, and how to convince others of their merit.”

He added: “This program is designed to develop interdisciplinary skills, such that young scientists will be familiar with the language and practice of contemporary business, both from a theoretical perspective, as well as an experiential one. Graduates of this program will be tomorrow’s highly
capable leaders, having mastered essential tools of both science and business management.”

Felicia Vulcu, an assistant professor in the Department of Biochemistry and Biomedical Sciences, teaches a laboratory course in the program. She described a classroom scene in mid-January as students discussed Huntington’s disease and drug discovery with a guest speaker. “There are no PowerPoint lecture slides in this class, no one is talked at…there are no blank stares. The students, just two weeks into the BDC program, are involved and truly learning. It is a wonderful sight and an amazing beginning to a truly unique program.”

Enthusiasm for the program has seen student support established even before the program began. The Deborah M. Brown Scholarship in Biomedical Discovery and Commercialization was established by Canada’s Research-Based Pharmaceutical Companies (Rx&D) and EMD Serono Inc., Canada, in honour of Deborah M. Brown, past chair of the Rx&D board of directors and president and managing director of EMD Serono Inc., Canada. Three entrance scholarships, worth $5,000 each, will be available for each of the next four years.

“In my experience, scholarships are very important,” said Brown. “They help students with the financial burden, of course, but they also provide phenomenal encouragement to students that they are on the right track with their training.”

The first full-year offering of the Biomedical Discovery and Commercialization Bachelor/Master’s program will begin in September 2015 with an anticipated enrolment of 50 students. More information may be found at http://bdcprogram-mcmaster.ca/.
Three researchers have been awarded new Canada Research Chairs. As a Tier 1 chair holder, Mohit Bhandari will receive $1.4 million over seven years. As Tier 2 Chairs, Dawn Bowdish and Sarah McDonald will each receive $500,000 over a five-year term for their research.

Guillaume Paré’s Canada Research Chair in Genetic and Molecular Epidemiology, worth $500,000 over the next five years, was also renewed. Mohit Bhandari, a professor of orthopedic surgery, was promoted to a Tier 1 Canada Research Chair in Evidence-Based Orthopedic Surgery. Bhandari will build on a research program that began with his Tier 2 CRC in Musculoskeletal Trauma and Surgical Outcomes, and continue to improve the lives of persons with musculoskeletal trauma.

Dawn Bowdish, an associate professor in the Department of Pathology and Molecular Medicine, was named a Tier 2 Canada Research Chair in Aging and Immunity. She will use her Chair to...
Three leaders join Community of Distinction

Three professors whose careers raised the profile and reputation of the Michael G. DeGroote School of Medicine were honoured with induction into the Faculty of Health Sciences’ Community of Distinction in November. This is the Faculty’s most prestigious honour.

Citations for each have been added to the wall in the Ewart Angus Centre of the Health Sciences Centre.

Inductees:

John Bienenstock, MD, is a renaissance man as a scientist, artist, administrator and visionary — and his ability to think outside the box has inspired a generation of scientists and clinicians. The Distinguished University Professor is recognized as a global authority on lung and gut and their interaction with the brain. From 1968 until after becoming professor emeritus of medicine and pathology in 1998, he forged the infrastructure for the Faculty’s robust research enterprise. He was vice-president and dean of the Faculty (1989-1997). The inductee of the Canadian Medical Hall of Fame is also a Member of the Order of Canada and a Fellow of the Royal Society of Canada.

Jonathan Lomas, MA, is known as the ‘father of knowledge translation’ for his groundbreaking research and his championing of the use of evidence to guide clinical practice and health system decision-making. His tireless advocacy broadened and enhanced the impact of McMaster-spawned evidence-based medicine. A professor of health policy for the Department of Clinical Epidemiology and Biostatistics from 1982 to 1997, he was co-founder and a leader of the influential Centre for Health Economics and Policy Analysis. Lomas has consulted for international organizations and governments at all levels around the world. Among other honours, he is an Officer of the Order of Canada.

Raelene Rathbone, MD, PhD, is an exemplary role model as a physician, researcher and academic administrator. At McMaster from 1971 until becoming a professor emeritus of pathology in 2002, she was recognized internationally as a scientist for her contributions to research on platelet physiology. She was renowned too as an administrator for her sensitivity, mentorship, pragmatism and enthusiasm in her many roles. These included associate vice-president of the Faculty (1992-2000) and acting as associate dean for education, for research and as the Faculty’s dean and vice-president. She also played a key role in establishing the unified city-wide Research Ethics Board.

The 2014 Community of Distinction inductees are, from left, Jonathan Lomas, Raelene Rathbone and John Bienenstock.

Health Sciences investigators

Dawn Bowdish explore age-associated deterioration of the immune response, investigating the mechanisms that cause pneumonia in the elderly and exploring why acquiring bacterial pneumonia in mid- or late life often exacerbates or accelerates other chronic inflammatory conditions. Sarah McDonald, an associate professor in the Department of Obstetrics and Gynecology, was awarded the Tier 2 Canada Research Chair in Maternal and Child Obesity Prevention and Intervention. She will further her research program which examines two prevalent and serious interrelated health conditions that are adversely impacting women and their children: excess maternal pre-pregnancy weight as well as excess weight gain during pregnancy.

Sarah McDonald
Gregory Steinberg, professor of medicine, was among three McMaster scientists named to the Royal Society of Canada’s College of New Scholars, a national group that recognizes the country’s emerging academic leaders.

The co-director of MAC-Obesity (Metabolism and Childhood Obesity Research Program) will join the College of New Scholars, Artists and Scientists, which is Canada’s first national system of multidisciplinary recognition for the next generation of intellectuals.

Gregory Steinberg to enter College of New Scholars

The Royal College of Physicians and Surgeons of Canada created the Royal College Dr. Thomas Dignan Indigenous Health Award in honour of the McMaster alumnus. He was the first First Nations graduate of McMaster’s medical program.

The award is available to Canadian physicians, residents and medical students who display a commitment to Canadian Indigenous rights and the pursuit of justice for Canada’s Indigenous people.

Dignan is a Mohawk from Six Nations of the Grand River Territory who is known as an advocate for eradicating disparities in health outcomes and inequities in the quality of health care facing Indigenous people. He is chair of the Royal College’s Indigenous Health Advisory Committee; co-founder of the Native Physicians Association of Canada; a founding member and first president of the Native Nurses Association of Canada; and a member of the Order of Ontario.

Award named in honour of McMaster alumnus

Sid Stacey, director of administration for the Department of Psychiatry and Behavioural Neurosciences, received the 2014 Innovation Award from the University of Toronto’s Society of Graduates, Institute of Health Policy, Management and Evaluation. Stacey was honoured for his leadership in launching the Ontario Cancer Research Ethics Board (OCREB).

Senior administrator wins innovation award

Laurie Doering, professor of pathology and molecular medicine, received a Passion in Science Award from New England Biolabs. He was the only Canadian winner recognized in the inaugural competition.

Doering was selected in the Inspiration in Science category for his research on astrocyte-based factors that may be able to treat neurons of people with Fragile X syndrome and autism. He said: “Passion in science is a desire, a want to do well in science and do something that will benefit society, benefit health in the long term. Passion is being happy and enjoying your work and doing a good job.”

Laurie Doering receives Passion in Science Award

Deborah Cook, professor of medicine and clinical epidemiology and biostatistics, received the 2015 Elizabeth J. Latimer Prize in Palliative Care.

The Hamilton critical care physician, researcher and educator is widely recognized for her compassion, dedication to humane, holistic care, and groundbreaking research on end-of-life care. She is known to many as a role model and champion for providing good palliative and spiritual care to dying patients and their family members.

The Elizabeth J. Latimer prize recognizes excellence and innovation in palliative care, and is named in memory of McMaster’s internationally renowned palliative care physician and educator.

Deborah Cook earns Latimer Prize

Members of the Department of Family Medicine picked up nine awards from the Ontario College of Family Physicians this winter. They included Dale Guenter as the Regional Family Physician of the Year (Region 3) and the McMaster Family Health Team as the Regional Family Practice of the Year. Awards of Excellence were given to faculty members Judy Baird, Anne Duvall, Sanjeev Goel, Robert Kerr, Frank Martino, James Milligan and Doug Oliver.

Family physicians honoured by College

Irene Turpie, professor emerita of geriatric medicine, received the Lifelong Achievement Award from the Department of Medicine’s Division of Geriatric Medicine and the Regional Geriatric Program central.

The award honours inspirational leaders in the field who have shown forward-thinking, integrity, a commitment to lifelong learning and a selfless contribution to the building of caring communities.

Turpie given lifetime award
McMaster to play key role in new provincial institute

McMaster scientist
Mick Bhatia will lead one of three teams in tackling the province’s highest-priority diseases, with funding from the new Ontario Institute for Regenerative Medicine (OIRM).

The provincial government gave $3.1 million to the Ontario Stem Cell Initiative (OSCI) and the Centre for Commercialization of Regenerative Medicine (CCRM) to form the OIRM, a research, development and commercialization institute dedicated to the translation of stem cell research into curative therapies for major degenerative diseases.

The OIRM announced funding of three Disease Challenge Teams to focus on:
- Developing novel stem cell strategies for immunotherapy
- Fixing damaged hearts with heart muscle derived from stem cells
- Restoring vision in macular degeneration through stem cell therapies

In addressing the first item, Bhatia is working to grow replacement tissue from stem cells. His team already discovered how to turn stem cells into dendritic cells, a special kind of immune cell that can instruct the patient’s immune system to kill tumours. Since it will take billions of cells to treat a patient, Bhatia is working with the CCRM to increase cell production. The director of the McMaster Stem Cell and Cancer Research Institute said the $250,000 awarded to his team will help move the project closer to the clinic.

With the University also being named one of the OIRM’s key partners, Bhatia said the provincial government is saying “Regenerative medicine and stem cells is our next big program, and McMaster has a big role to play.”

Hormone reduces calorie burning, contributes to obesity

McMaster researchers have identified an important hormone that is elevated in obese people and contributes to obesity and diabetes by inhibiting brown fat activity.

Brown fat sits around the collarbone and acts as the body’s furnace to burn calories. It also keeps the body warm. Obese people have less of it, and its activity is decreased with age. Until now, researchers haven’t understood why.

Most people are familiar with serotonin in the brain or central nervous system which affects mood and appetite, but this makes up only five per cent of the body’s serotonin.

The lesser-known peripheral serotonin circulates in the blood and makes up the other 95 per cent. The researchers discovered that this kind of serotonin reduces brown fat activity or “dials down” the body’s metabolic furnace.

The study, published in Nature Medicine, was the first to show that blocking the production of peripheral serotonin increases brown fat activity.

“Our results are quite striking and indicate that inhibiting the production of this hormone may be very effective for reversing obesity and related metabolic diseases including diabetes,” said Gregory Steinberg, the paper’s co-author and a professor of medicine.

He is also co-director of MAC-Obesity, the Metabolism and Childhood Obesity Research Program.

The findings also show that the high-fat western diet may be responsible for elevated levels of peripheral serotonin.

The research team is now working on a pharmacological “enzyme blocker” to reduce the production of this hormone by inhibiting tryptophan hydroxylase, which produces the majority of serotonin in the body.
Feline cancer treatment may help humans

Most breast cancer patients don’t undergo treatment at the veterinarian’s office. Unless they’re furry and four-legged. Researchers are treating their first feline patient as part of a study they hope will lead to a less invasive way to treat cancer in humans. The team is led by Brian Lichty, an associate professor of pathology and molecular medicine and a member of the McMaster Immunology Research Centre, with members of the Ontario Veterinary College in Guelph.

Maci – a twelve-year-old white house cat – has received oncolytic virus therapy to combat her breast cancer. The treatment involves two injections: one to boost the immune system, the other a virus that kills the tumour from the inside. The treatment is less invasive, has fewer side effects, and is more precise than traditional chemotherapy because it only targets cancer cells.

The team chose to treat cats because cancers found in felines are similar to those that affect humans.

The team hopes to start clinical trials in humans if the study is successful.

The project is funded by the Canadian Breast Cancer Foundation.

What to discuss near life’s end

In the study published in the Canadian Medical Association Journal (CMAJ), seriously ill hospitalized patients and their families say the most important aspects to discuss are:

- Preferences for care in the event of life-threatening illness
- Patient values
- Prognosis of illness
- Fears or concerns
- Additional questions regarding care

“However, we found that these elements are infrequently discussed and that concordance between preferred and prescribed goals of care is low,” the authors said.

The researchers asked older patients and their families for their top priorities and discovered that gaps exist between what patients would like and the care that they actually receive.

“Our findings could be used to identify important opportunities to improve end-of-life communication and decision-making in the hospital setting,” said You, the study’s lead author and an associate professor of medicine and clinical epidemiology and biostatistics with the Michael G. DeGroote School of Medicine.

Current guidelines list 11 key elements for health care providers to discuss regarding end-of-life care. However, these are based mainly on expert opinion and not on patient and family feedback.

The team of researchers with backgrounds in general internal medicine, critical care medicine and palliative care surveyed 233 hospitalized older adults with serious illnesses and 205 family members about the importance of the 11 guideline-recommended elements of end-of-life care. The patients had been admitted to nine hospitals in British Columbia, Alberta, Ontario and Quebec.

Patients reported that of the 11 key elements, an average of only 1.4 had been discussed with the health care team within the first few days of admission to hospital. The more elements of care that physicians discussed with patients, the higher the satisfaction that they and their families reported regarding care received, and the higher the concordance between preferred and prescribed goals of care.

They hope that their findings will help improve end-of-life care for patients in hospital.

The authors previously published a related guide in CMAJ called “Just ask: discussing goals of care with patients in hospital with serious illness” to help physicians initiate end-of-life discussions with patients and their families.

This study was supported by the Canadian Institutes of Health Research, the Michael Smith Health Services Research Foundation, Alberta Innovates and the Ontario Academic Health Sciences Centre Alternate Funding Plan Innovation Fund.
Ellen Amster has been appointed as the Hannah Chair in the History of Medicine. The historian of Middle East medicine joins McMaster from the University of Wisconsin-Milwaukee. She is an expert on transnational health issues and the social history of biomedicine in global context. Amster focuses on public health, maternal and infant health, and the encounters between western and Islamic medicines. Her work draws upon the western history of medicine, from the Ancient Greeks to the twentieth century, and anthropological methodologies from the study of health and healing in Africa.

“Dr. Amster brings a new perspective of approaching health research with the lens of a historian. Her international work in Northern Africa with midwives and her work on beliefs in health care are of great interest to the Department with our new efforts in public health and the related master’s program,” said Holger Schünemann, chair of the Department of Clinical Epidemiology and Biostatistics, where Amster will be based.

Pamela Swett, chair of the Department of History, where Amster is jointly appointed said: “Dr. Amster brings to McMaster a truly interdisciplinary outlook on education and plans to engage students across campus by demonstrating how the historical analysis of contemporary medical questions can lead to better health care.”

The endowed chair was funded in part by a $2 million donation from Associated Medical Services.

A recent study has found that McMaster University’s School of Rehabilitation Science consistently ranks highest in Canada for faculty productivity and research impact. The research was published in Physiotherapy Canada and led by Joy MacDermid, professor of rehabilitation science at McMaster. It examined the productivity of physical and occupational therapy faculty at universities across Canada using measurements related to research publications and citations as well as federal funding as indicators of academic impact.

The findings rank McMaster at the top in all four categories: total number of citations by other scholars; amount of funding to principal investigators by the Canadian Institutes of Health Research; the h-index, which is a measure of productivity and citation impact of a scientist’s published body of work; and g-index, which quantifies scientific productivity based on publication record.

“Our occupational therapy and physiotherapy faculty are recognized nationally and internationally for their leadership and innovation in rehabilitation science research,” said Patty Solomon, associate dean and director of the School of Rehabilitation Science.

“This study provides objective evidence of our research excellence and our impact within the scientific community.”

John Kelton, dean and vice-president of the Faculty of Health Sciences, added: “We have always known that our School of Rehabilitation Science is one of the top schools in North America, but the metrics have been absent. This kind of validation is rewarding.”

School of Rehabilitation Science ranked highest in Canada

Historian brings global perspective to Hannah Chair

A.O. Occupational therapy students take a class on splinting.
Jack Diamond founded neuroscience at McMaster

Dr. Jack Diamond, who helped establish neuroscience at the Michael G. DeGroote School of Medicine, died in August 2014 at age 86.

Diamond was well known for his infectious enthusiasm as an instructor, but renowned for his research in developmental neurobiology and the neurobiology of aging.

He joined McMaster in 1970 becoming a professor and the first chair of the Department of Neuroscience, now part of the Department of Psychiatry and Behavioural Neurosciences. He was instrumental in attracting an international team of researchers to the new medical school. Diamond continued his research beyond his retirement as professor emeritus in 1993.

Founding dean of medical school revolutionized medical education

Dr. John Evans, founding dean of the Michael G. DeGroote School of Medicine, died in February 2015 after a long struggle with Parkinson’s disease.

“Dr. John Evans’ inquisitive brilliance sparked a revolution in medical education. His founding of the Michael G. DeGroote School of Medicine, with the ‘McMaster Approach’ for developing humanist physicians willing to work as part of interdisciplinary health-care teams, has been copied around the world,” said Dr. John Kelton, dean and vice-president of the Faculty of Health Sciences.

“John went on to create many innovations, but his change of medical education is one that will improve the lives of millions of people for many generations.”

A Rhodes Scholar who received his medical training in cardiology at the University of Toronto (U of T), Evans was 35 years old in 1965 when then McMaster President Harry Thode chose him to establish the University’s medical school.

Evans drew together a team that included Hamilton physician Dr. William Walsh and three colleagues from U of T: Dr. Fraser Mustard, Dr. William Spaulding and Dr. James Anderson. The team developed a radically different medical school with a focus on small group, problem-based learning and early exposure to patients. Initial concepts included recognition of the importance of primary care, integration between the school and its community, and an emphasis on a full range of research. Students did not require a science background for admission and the program was three years rather than the traditional four.

The success of the program, dubbed the ‘McMaster Approach’, is illustrated in its use in hundreds of medical and other health professional schools worldwide.

Evans left McMaster to become president of U of T in 1972. His career spanned many innovations and disciplines. He was the first director of the World Bank’s Population, Health and Nutrition Division; CEO of Allelix; chair of TorStar; first chair of the Canadian Foundation for Innovation; chair of the Rockefeller Foundation; and the founding chair of MaRS.

The John R. Evans Chair in Health Sciences Educational Research and Instructional Development at McMaster was endowed by manufacturer Alcan Inc. in honour of Evans’ time as its chair.

Vasu Chanchlani remembered as pillar of Indo-Canadian community

A well-respected businessman whose gift established the Chanchlani Research Centre at McMaster died in September 2014 at age 62.

Born in India, Vasu Chanchlani came to Canada in 1979 and led a series of highly successful business endeavours in the technology sector as co-founder of the Sigma Group of Companies.

Described by many as a “great Canadian” and “pillar of the community,” the Mississauga resident was admired for his contributions to strengthening the relationship between Canada and India, and his philanthropy.

He and his wife, Dr. Jaya Chanchlani, founded the Chanchlani Foundation, a charity dedicated to promoting research. Their donations included $1 million to establish the Chanchlani Research Centre at McMaster in 2012.

The couple also endowed $500,000 at McMaster for the annual Chanchlani Global Health Research Award which funds an annual prize for research.
FHS alumni: Where are they now?

1970s

Stan Kutcher, MD ’79
Stan Kutcher is an internationally-renowned expert in adolescent mental health and a national and international leader in mental health research, advocacy, training, policy, and services innovation. He is currently the Sun Life Financial Chair in Adolescent Mental Health and director of the World Health Organization Collaborating Care in Mental Health Policy and Training at Dalhousie University and the IWK Health Centre. He previously served as department head of psychiatry and associate dean for international health at Dalhousie. He had followed his medical degree from McMaster with a residency in psychiatry at Sunnybrook Health Sciences Centre and postdoctoral research in brain metabolism in Edinburgh. He has received many awards during his career, including the Order of Nova Scotia in 2014.

1990s

Carie Gall (née Fines), BA (Psychology) ’93, B.H.Sc. (OT) ’96
Carie Gall began her career as an occupational therapist at Bellwoods Centres for Community Living, supporting adults with physical disabilities living in the community. She worked for 12 years at Holland Bloorview Kids Rehabilitation Hospital supporting youth with physical disabilities to prepare for adult life. Gall co-led the development of the Growing Up Ready framework to support transitions from the pediatric to adult world for children with physical disabilities. This included the creation of the Timetable for Growing Up, which has been adapted for use in over nine countries. Currently, Gall is the executive lead for primary care at the Mississauga Halton Local Health Integration Network.

Sarah Wojkowski, B.Sc. (Kinesiology) ’00, M.Sc. (PT) ’04
After graduating with her kinesiology degree, Sarah Wojkowski worked for McMaster’s Department of Athletics and Recreation for two years. Following her master’s, she worked in Fergus at Grand River Physiotherapy, and as a research assistant at McMaster’s School of Rehabilitation Science. She was one of the first physiotherapists to work as part of a family health team in Ontario. Wojkowski also worked with a team of faculty to establish the MAC H2OPE clinic at the Hamilton Downtown Family YMCA, which offers physiotherapy and occupational therapy services to adults in financial need. She is currently working on her PhD in rehabilitation science at McMaster and is director of clinical education (physiotherapy) for the School of Rehabilitation Science.

2000s

Siobhan Eastman, BScN ’06
Siobhan Eastman lives in Guatemala and works with Primeros Pasos, which is a non-governmental organization that maintains a small primary care health clinic aimed at improving the quality of life of the rural communities of the Palajunoj Valley of Quetzaltenango, Guatemala. The clinic provides integrated health education programs and access to medical services. Eastman occasionally returns to Canada to work as an outpost nurse in Northern Ontario. After graduating from the nursing program, she worked at Hamilton Health Sciences for two years in gastrointestinal surgery and the emergency room. She has also worked as a clinical instructor and problem-based learning tutor for the McMaster School of Nursing.

2010s

Ali Martin, B.Sc. (Molecular Biology and Genetics) ’11, B.H.Sc. (Physician Assistant) ’13
Right after her certification exam as a physician assistant (PA) in October 2013, Ali Martin took a position at Norfolk General Hospital in Simcoe, where she currently works in the emergency room (ER). Working as a PA in a rural ER is Martin’s “dream job.” She is from a small town and enjoys working in a small community hospital where she can have an interactive relationship with specialists, and advocate easier for her patients. Since many citizens don’t have a family doctor, she likes the fact that the ER is an easily accessible means of health care for the community, and she says the PAs in the ER play a big role in that.

To make a submission to “Where Are They Now?” email: network@mcmaster.ca
Alumna passionate about keeping kids healthy and active

Rosanna Morales (B.H.Sc ’04) has a passion for keeping kids healthy and active that grew out of her experience as part of the inaugural class of the Bachelor of Health Sciences Honours program at McMaster, and she applies it to both her career and personal life.

Morales is the City of Hamilton’s project manager of the Healthy Kids Strategy for Public Health Services, a role she has held since September 2013. Her position came about after the Province of Ontario set a target to reduce the childhood obesity rate by 20 per cent over the next five years, and the City identified childhood obesity as a priority issue.

“I have children and I know the opportunities that I provide for them, and when you see the lack of opportunities that some children in Hamilton have… we talk about poverty, we talk about third-world countries, but you don’t have to go far, unfortunately,” said Morales. “It’s in our city, and there are pockets of it throughout.”

Her first focus was having three Hamilton wards selected as among those Ontario communities participating in the Ministry of Health and Long-Term Care’s Healthy Kids Community Challenge. That involved securing support from many partners throughout Hamilton, but success was reached this past fall.

The Healthy Kids Community Challenge will provide up to $1.5 million over the next four years to develop and implement community programs and activities focused on one of three major areas that impact childhood obesity: healthy eating, physical activity and adequate sleep in children and youth.

Every nine months the Ministry will announce a theme relating to these areas and the community, with its partners, will develop a community-based action plan.

“As one theme is being implemented, the next theme is announced, so the idea is to build upon each other so that at the end of the four years, you have some sustainability in the activities that are currently in place,” said Morales. “We’re really excited and we’re hoping that at the end, there might be an opportunity to expand the things we’ve done to the entire city.”

What she likes most about her work is collaborating with partners. Morales said no single intervention will have an impact on an issue like childhood obesity.

“I didn’t know when I started (the B.H.Sc. program) where I was going to end up, but I think that the program laid an excellent foundation for lifelong learning.”

– Rosanna Morales

Her interest in healthy kids stems from her time in the B.H.Sc. program and one project in particular about autism spectrum disorder where she was able to attend clinics and see how children are diagnosed.

Then interest in chronic disease prevention grew through her time at the University of Waterloo while working on her M.Sc. That’s when she began working for Leave The Pack Behind, a comprehensive tobacco control initiative for young adults at all 44 publicly-funded post-secondary institutions in Ontario.

“That’s when I really got to see what impact prevention can have,” said Morales. “So then when this opportunity with the City came up, to me it was the perfect fit because it was looking at children and the impact that healthy choices and environments can make in shaping the course of their lives.”

Morales still has connections to McMaster through her job. Brian Timmons, research director of the Child Health and Exercise Medicine Program at McMaster and an associate professor of pediatrics of the Michael G. DeGroote School of Medicine, is involved with the Healthy Kids Community Challenge. Another partner is the McMaster Athletes Care program.
“We’re hoping that once we start developing these activities, that McMaster athletes will be able to act as role models and support the things we’re doing up here on Hamilton Mountain,” said Morales.

What she remembers most fondly about the B.H.Sc. program is the staff.

Her first year was challenging. She was part of the program’s inaugural class, problem-based learning was new to her, and she wasn’t sure what she was going to be able to do with a B.H.Sc. degree. So, she made an appointment to speak with assistant dean Del Harnish, something unheard of amongst friends in other programs.

“I had probably one of the most influential conversations,” she said, explaining that he shared his career path and how it wasn’t something carefully planned out, but a series of opportunities that arose because of the situations he had been involved in.

“When I look back at my experience and what I’ve done in the last 10 years, it’s been exactly the same,” said Morales. “I didn’t know when I started where I was going to end up, but I think that the program laid an excellent foundation for lifelong learning, and so the opportunities that I look to now, I know I have the skills to be able to pursue them fully.”

Morales lives in Burlington with her husband and two children, where she actively participates in her kids’ sporting activities. She coaches with the Burlington Youth Soccer Club, the Burlington Girls Hockey Club, and volunteers with Burlington Basketball as an assistant coach.

Doctor thankful for international experiences, McMaster’s unique approach

Mark Magenheim (MD ’74) is grateful for the international opportunities provided to him as a medical student at McMaster. His desire to help today’s students get global experience, and to honour McMaster’s unique approach to teaching and learning, is what led him to make several financial gifts to the University, now totalling just under $52,000.

“I give to all of the universities I attended, but I give mostly to McMaster,” said Magenheim. “It has to do with the experience I had there as a student, but also the values and the culture of the place that I think are just really superb.”

What stood out for him were aspects like McMaster’s flexibility in how the medical curriculum was designed and delivered; its faculty support and resources for students; the focus on interdisciplinary learning and cultivating interview skills; and the spirit of risk-taking and experimentation around curriculum development and recruitment in the early 1970’s.

He established the Magenheim Family Medical Education Travel Bursary in 2006, partly in honour of his parents because they exposed him as a child to different places and cultures with family vacations throughout North America.

The chance to pursue international electives further reinforced his interest in global health. He completed two electives in England, one in Africa, and another in northern British Columbia.

“It was those experiences as an elective medical student that shaped a lot of my career and interests in global health, primary health care, developing world solutions, apart from high-tech medicine, and looking at population health issues,” said Magenheim.

“So, the bursary we created has allowed a number of students to be able to have the kind of experience that I had and do international health electives in primary care in developing countries.”

Kinshuk Kumar, a second-year medical student, is one of six students who has received the bursary since its inception. It helped him complete a three-week international health elective in Dehradun, India.

“I am so grateful for this bursary as I have a strong interest in working in international health and with vulnerable populations in underserved areas,” said Kumar. “The funds will considerably help relieve the financial burden that is inevitably incurred with international electives.”

Magenheim has had an illustrious career. He taught in McMaster’s Department of Clinical Epidemiology and 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.

He is now semi-retired, teaching part-time and serving as the Institutional Review Board chair for the Sarasota Memorial Health Care System, a position he has held since 1989.

Magenheim is considering making a planned gift to the University as “a way for my support to McMaster to continue,” he said.

“I think McMaster’s approach laid a really strong foundation and I feel pleased to be able to give back, in some small way, for what was a great experience that led to a wonderful career for me.”

Magenheim lives in Sarasota, Florida with his wife Adriana. He has three grown sons – Bryan, Seann and Kevin – and granddaughter Jasmin, 5, who he’s hoping will be “our next McMaster grad.”

For more information on setting up student awards, please contact Josie Bufalino-Jasek at jasekJ@mcmaster.ca or 905-525-9140 ext. 21874.
Reunions

Nursing Class of ’79: On May 24, 2014 members of the Nursing Class of ’79 held a reunion lunch at the Alumni House. Thanks to Barb Hartford and Sylvia Phelps for planning the reunion.

Nursing Class of ’89: On Oct. 18-19, 2014 the Nursing Class of ’89 celebrated their 25th Anniversary Reunion in Niagara-on-the-Lake. Thanks to Lori Healey for planning the reunion.

Nursing Class of ’75 – 40th Reunion: May 23-24, 2015
Celebrate your 40th class reunion and spend the weekend with old friends and classmates in a new venue: ‘glamping’, luxury accommodations unique to the Long Point area and inspired by experiences of the owners in climbing Mount Kilimanjaro in Africa. (Long Point EcoAdventures: http://www.lpfun.ca/)
For more information email Trish Shouldice at trishshoulddice@sympatico.ca or Susan Wolnik at swolnik@sympatico.ca.

MD Program
MD Classes of ’74, ’79, ’84, ’89, ’94 and ’04 returned to celebrate reunions on Oct. 25, 2014. Special thanks to the class volunteers who helped ‘rally the troops’: Jacque Lewis, Richard Denton, Liz Lamere, Noah Forman, Mary Bell, Alfred Cividino, Maureen Cividino, Randy Cross, Eddie Wasser, and Doug Hemphill. To see more photos, visit: http://fhs.mcmaster.ca/main/alumni.html

MD Class of ’79 at the University Club.

MD Class of ’89 has fun with their group photo.

MD Reunion Day:
Oct. 24, 2015
MD Classes of ’75, ’80, ’85, ’95 and 2005 are invited to a reunion celebration. The day will feature a CME lecture, tours of the Michael G. DeGroote School of Medicine and the Health Sciences Library, lunch in the University Club, and an art tour at the McMaster Museum of Art. There will also be a gala dinner at the Hamilton Convention Centre.
To assist with outreach for your class or to get more information please contact Josie Bufalino-Jasek at jasekj@mcmaster.ca.

MD Class of ’79 at the University Club.

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