

McMaster Review

McMASTER UNIVERSITY'S MONTHLY NEWSMAGAZINE

VOLUME 2, NUMBER 6



9 June 2003

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Summer on McMaster's Campus



In the 2002-03 academic year, McMaster hosted 20,370 full-time and part-time students. In the summer session, numbers dropped to 4,075. With such a dramatic drop in population, people may expect that the usual active pace of the University slows down to a more leisurely stroll. However, take a walk across the McMaster campus in the middle of July and you will discover that the activity level is as high as ever.

Each summer, the profusion of activities and exciting attractions taking place on the University

campus keep McMaster a lively, busy and fun place to be. Throughout the summer months, the University continues to be the hub for a variety of activities – granted the population of campus does look a little different from the customary undergraduate crowd. From deer to geese, engineers-in-training to future pro-athletes, musicians to artists, many different groups will find themselves part of the McMaster community in the coming months.

For the full story, see pages 4-5.

POLICE CHIEF HONOURS McMASTER SECURITY STAFF WITH SPECIAL COMMENDATION

QUICK RESPONSE TIME PREVENTED SEXUAL ASSAULT ON CAMPUS



McMaster Security Services staff and officers were honoured at recent commendation ceremony during Police Week. Above, the staff posed for a picture with Lincoln Alexander. Left to right are: Inspector Bob Buck, Hamilton Police Service, Shelley Mayhew, Tonya Hansford, Chris Clement, Lincoln Alexander, Bryan Drury, David Noble, David Jenkins, Mike Ashley, and Ron Thorn.

Daily News Express

MORE ON THE DOUBLE COHORT

McMaster University will do its share to accommodate double cohort students who want to attend an Ontario university this fall. The University expects to enrol about 5,100 first-year students in September.

McMaster has committed to the Ontario government that 4,330 of the first-year class will be from the Ontario high school system.

"McMaster has always been committed to doing our part to ensure the double cohort class is accommodated this fall," said President Peter George. "Our decision on how many students McMaster can accommodate has always been guided by the importance of maintaining a quality education experience."

McMaster will be ready to accommodate the additional students with an additional temporary classroom building that will be in place until September 2004 when the new Centre for Learning & Discovery opens. The University recently received \$11.3 million in SuperBuild funding from the government for the construction of the building.

McMASTER RESEARCHER LEADS AGING STUDY

McMaster's Parminder Raina will lead one of the country's most comprehensive longitudinal studies on aging to improve the health and quality of life of older Canadians.

The Canadian Longitudinal Study on Aging (CLSA) received a \$400,000 boost from the Canadian Institute of Health Research. The study will provide knowledge about the aging process that will be used to develop improved treatments and prevention methods for illnesses associated with aging.

"The CLSA is going to be a unique multidisciplinary study of aging because of its magnitude and breadth," says the associate professor of clinical epidemiology & biostatistics, adding about 50,000 individuals will be recruited for the study. The study plans to understand the contribution of a large number of factors related to the evolution and progression of disease and illness, and healthy and successful aging among men and women over the age of 45, Raina explains.

Some of the factors to be examined include genetics, lifestyle, cultural issues, retirement and leading diseases. "The study will follow individuals for a 20-year period and will provide valuable information for the research."

These stories are excerpted from the McMaster Daily News Web site.

For additional details or to read other McMaster news, visit <http://dailynews.mcmaster.ca>

Less than three minutes.

That's all it took for McMaster security officers to rescue a female student from an attempted sexual assault on McMaster's campus last fall. The quick response time prevented serious injury to the victim. Within the community, a crime was prevented and a dangerous offender was apprehended.

The quick work of the McMaster security officers and dispatchers in the early hours of a mid-November morning last year was praised and commended last week at a special ceremony to honour Hamilton police officers.

On Nov. 17, 2002 McMaster dispatchers Tony Hansford and Shelly Mayhew were monitoring the security surveillance cameras when they observed a male suspect assaulting a female.

Security units were immediately dispatched and McMaster Officers Mike Ashley, Chris Clement, Bryan Drury and David Noble responded, under the direction of Sgt. Dave Jenkins. The suspect fled and was pursued by officers for some distance before being apprehended, through co-ordinated efforts.

"The diligent efforts of Tonya Hansford and Shelly Mayhew in recognizing an assault and taking action can be credited to preventing severe injury to this victim. With less than 3 minutes response time, the commitment and professionalism of Sgt. Jenkins, Officers Drury, Ashley, Clement and Nobel helped not only stop a crime, but also helped apprehend this offender," says the commendation from the Hamilton Police Service.

Chief of Police Kenneth Robertson also commended security staff for their excellence in public safety in a letter to McMaster security director Ron Thorn. "This team has shown excellence in their commitment in making the campus at McMaster a safe environment. The professionalism and dedication is a credit that all the staff and residents of McMaster should be very proud."

Thorn is proud of his staff for both the fine work they did in preventing a crime and for being recognized with the commendation. "This recognition is well-deserved. Our officers and staff are committed and dedicated to the security of all who are on campus."

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A dedicated bunch: Our 2002 staff award winners

Six individuals and two teams are the recipients of the 2002 President's Working At McMaster Awards for Outstanding Service. The awards recognize staff who have gone above and beyond the call of duty in their service to McMaster.

Janet Delsey, FACULTY OF ENGINEERING

Janet Delsey's motivation and strength in innovation have contributed to the prosperity and success of the Engineering DocuCentre, which she supervises. A 26-year employee of the University, she received "The Best Boss" title in 1999 when her staff nominated her as part of the Hamilton and District Chamber of Commerce/Hamilton Spectator Reader's Poll. Delsey's contributions have contributed to the betterment of the University community as a whole. She is described as a "woman of high ideals and sound integrity...her originality of ideas and capacity for hard work have been among her outstanding characteristics."



Doug Keller, FACULTY OF ENGINEERING

Doug Keller throws his heart and soul into making the Faculty of Engineering's annual open house one of its most important tools for attracting undergraduate students. Beyond this, Keller is efficient, professional and singularly effective in overseeing his areas of safety and purchasing and his duties as a lab manager. His technical and organizational skills, knowledge and exceptional managerial skills have been a part of the success of many Faculty projects. Keller does his work with great pride, putting forward extraordinary efforts during his more than 23 years at McMaster.



Wendy Mattingly, FACULTY OF HEALTH SCIENCES

She is affectionately described as the "glue that holds the department together." Wendy Mattingly has been with McMaster University for more than 30 years and has been the administrative co-ordinator in the Department of Psychiatry & Behavioural Sciences since its inception. Senior members of the department rely heavily on her wisdom, encouragement and advice and institutional memory. Her nominators say she represents the ideals of service excellence, professionalism and commitment.



Sandy Miller, PHYSICAL PLANT

Her customer service skills are unparalleled and she is gifted in her ability to deal with people. Her customers come first no matter how busy she may be and she always goes that extra mile. In her more than 25 years with physical plant, customer service clerk Sandy Miller has performed her job with professionalism, grace, friendliness, courtesy, knowledge and efficiency. Whether she is answering the telephone or directing a co-worker, her personality radiates sunshine. In the words of one manager, "Sandy is a wonderful person, more dedicated and conscientious than anyone I have ever met ..."



Rocco Piro, FACULTY OF HUMANITIES

Rocco Piro has provided superior leadership and management during a period of change within the Faculty of Humanities. His careful planning and collegial style has eased the transition of the Faculty's instructional audio-visual collection into the Lyons Communication Centre. Piro also supervised expanded computer use in teaching with the addition of the McArthur Multimedia Wing for the Multimedia Program. His hard work and professionalism have made the unit an exciting place to work and have contributed to McMaster's reputation as a centre of innovation.



Wendy Selbie, FACULTY OF SCIENCE

Her infectious, cheerful disposition and exceptional service to staff, faculty, students and visitors have made 26-year employee Wendy Selbie an invaluable member of the Department of Psychology. Selby performs and co-ordinates essential office duties with accuracy, efficiency and ease. She is also the department's information technology expert, and has taken up duties as psychology's official webmaster. "Wendy is an employee who embodies what we believe to be the true spirit of an outstanding employee," say her nominators.



McMaster Security Services TEAM MEMBERS: BILL ARMSTRONG, LYNN ARMSTRONG, MIKE ASHLEY, KATHY BAUGHAN, TAMA BEARDWOOD, ARLENE BREMER, JASON BROWNING, CHERYL BUTTON, FRED BUTTON, CHRIS CLEMENT, BRYAN DRURY, DIANE ERNJAKOVIC, TONYA HANSFORD, LINDSAY HOLLAND, DAVE JENKINS, ED KENNEDY, KELLY MCKEE, SHELLEY MAYHEW, ANNA MYERS, DAVE NOBLE, DAVE NORTH, BOB NUNN, CATHY O'DONNELL, DIANA PARKER, LORI RICHMOND, SHARON RUMPEL, WALTER SCOTT, CAM SMITH, HAROLD STEWART, BILL WATTS.

This team is responsible for the personal safety and protection of the campus community. Staff work around the clock, every day of the year performing such activities as monitoring everything from emergency phones to alarms and video cameras to preventing and solving thefts and other criminal offences.

The professionalism, diligence, and commitment of these individuals enhances the academic, working and living environment at McMaster.



Office of Student Liaison TEAM MEMBERS WITH PRESIDENT PETER GEORGE: BONNIE CROCKER, SARAH DONOVAN, TRISH SULLIVAN, PATRICIA HARRIS, PAULA JOHNSON.

The liaison team is McMaster's front line recruitment group responsible for producing program materials, visiting hundreds of high schools, hosting thousands of visitors to campus and communicating with prospective students and parents during the early recruitment stages. This team plays a huge role in convincing students to choose McMaster. Their work is considerable in normal times, but it took on a new dimension with the challenges of the double cohort.

Described as terrific ambassadors for McMaster this team is professional, knowledgeable and extremely pleasant to work with.

SUMMER on McMaster's CAMPUS

Although visitors come from all over the world, the first sign of summer is often the return of more local residents – most notably, the University's diverse wildlife population.

University planner Linda Axford notes that the first hints of wildlife are found across campus in the spring when grounds keepers begin noticing nibbled tulip and daffodil bulbs. The culprits soon reveal themselves when deer appear wandering about in the wooded areas of campus close to Cootes Paradise. One particular family of deer considers themselves new University mascots. They have adopted the area near the President's Residence as their summer grazing yards.

Summer is also the season when the local bird population swells with woodpeckers, blue jays, and cardinals making their presence known throughout the campus and redtail hawks circling over the woods on west campus.

Campus grounds also provide home turf to a variety of other animals. Rabbits seem to prefer the pastures around Burke Sciences Building. Gluttonous raccoons have a raucous time late at night rambling around the ravine areas and climbing in campus dumpsters. And Canada geese can be found reconnoitering the lawn outside of the John Hodgins Engineering building.

Axford oversees the year-round maintenance of the 300 acres of University grounds. In the summer, this job includes seven full-time grounds staff and twenty summer students who work diligently to keep the campus looking its best. Cutting the grass once a week, weeding, trimming, planting flower beds and planters, paying special attention to the athletic fields, and many other duties keep grounds crews going full steam all summer.



From May to September, the McMaster campus is busy hosting a wide variety of conference groups including many international delegations – everything from the academic and medical forums, to religious retreats, to training sessions. Dozens of organizations will enjoy the University's facilities and services during the summer months. And the variety of groups visiting campus is as diverse as our course calendar:

The Trefoil Guild is made up of Girl Guide leaders from England and Switzerland who are currently members of Guiding. These women travel all over the globe sharing their expertise and leadership skills with other Guide leaders.

In June, the North American Native Orchid Alliance is slated to have a two-day event at McMaster. This group is dedicated to the conservation and promotion of these decorative and delicate plants. David McAdoo, conference chairman, thinks that the McMaster community may learn something about orchids, just by hosting this conference. There are about 240 species of orchids that grow wild in North America, with about 50 or 60 types that flourish right here in Ontario. In Canada, most of the orchids are terrestrial, growing on the ground, rather than in trees as in other parts of the world. The flowers are not nearly as elusive as one might imagine. In fact, if you're lucky, you may find some unique orchid varieties of Ontario orchids lining the escarpment around McMaster University.

Another association coming to McMaster that may 'spark some interest', is the Ontario Artist Blacksmith Association (OABA) of North America, a group dedicated to promoting the traditional art of blacksmithing. Blacksmiths are metalsmiths who handcraft unique objects such as toys, tools, garden gates, and table cutlery. The Ontario Artist Blacksmith Association of North America was established in 1982 to promote blacksmithing as a high quality, creative craft and affordable art form. The OABA is made up of professional and part-time blacksmiths, as well as others who are simply interested in the field. They hold practical workshops throughout the year and they publish a bi-monthly newsletter, the Iron Trillium, which keeps members up-to-date on technical developments in the field.





In addition to the conference groups that visit McMaster during the summer, there are many groups of youngsters running across campus as they take part in a multitude of exciting summer camp programs. With instruction and encouragement from energetic students – many of whom attend McMaster during the academic year – the campers receive quality programming and have a lot of fun.

Mini-University is a two-week camp program for children ages 8-14 with a Junior Leadership Program for 15-17 year olds. 'Mini U' is designed to show that learning can be fun through hands-on and self-directed activities. Campers also experience an overnight stay in residence. Some of the learning activities include The Mind and More (Psychology), The Bones that Talk (Archaeology and Anthropology), Technology at Your Fingertips (Multimedia) and All the World's a Stage (Drama). Every afternoon provides the chance to cool off with a dip in McMaster's Olympic-sized swimming pool. Each two-week session concludes with an official graduation ceremony and presentations of Mini-University diplomas.

The Venture Summer Camp, sponsored by the faculties of Science and Engineering, is another popular program that provides an opportunity for children to experience the world of engineering, science, and computers. Children can take part in age-appropriate chemistry experiments, do dissections, and enjoy a trip to the University's planetarium. There are also opportunities to learn web design, explore computer programming and robotics, or dabble in digital video and movie production.

Krista Adlington, a fourth year biochemistry student, was a Venture Camp instructor last year. She says, "It was the best summer of my life. I just loved the kids and the rest of the staff was amazing. I got to develop my own projects and the kids made it so much fun."

"One of the most fun projects we did was to set up a mystery about stolen campus supplies, and then through the week we followed clues to solve the crime with our own forensics lab. We planted evidence, did profiles of the possible thief, and dusted for fingerprints. We even did a laboratory analysis of blood (provided from the lab, not the campers!). Then, on Friday morning, we put all of the evidence together and solved the mystery!"

And for those who prefer sports to science, Sports Fitness School is a multi-sport program that provides children ages 6-16 with an incredible range of sport and fitness related activities. The campers choose three activities from a choice of 22 offerings that include ball hockey, baseball, cycling, dance, diving, football, golf, instructional swim and aquatic games, in-line skating, karate, orienteering, outdoor adventures, senior sport, soccer, squash, synchronized swimming, tennis, track and field, volleyball, waterpolo – both for beginners and for those who are at a higher skill level.

The sporting events are balanced with fitness programs that allow each camper to participate at their own level and strive to improve their fitness level by a notch or two by the end of camp. Program instructors are kinesiology students, department of Athletics and Recreation staff, and prominent Marauder varsity athletes, all of whom make this camp experience a fun adventure.



Another key attraction on campus in the summer is the unique variety of arts programs and activities. An annual favourite for many people, is the provincial finals of the Kiwanis Music Festival, which offers a wide variety of musical activities. The event is an adjudicated competition for talented musicians of all ages. It's also a wonderful opportunity to attend and enjoy the musical talents of the participants, many of whom are young high school students.

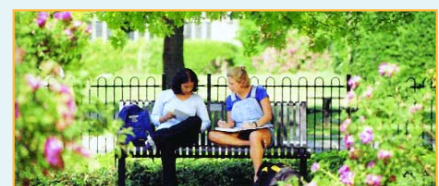
If the visual arts are your passion, the McMaster Museum of Art will be presenting two shows this summer, both featuring works from the Museum's extraordinary permanent collection.

An examination of pop art is the focus for Counter Culture, an exhibition that includes artworks by 20th Century American, Canadian and British artists such as Jim Dine, Kenneth Noland, Robert Motherwell, Joyce Weiland and R.B. Kitaj. This multi-faceted exhibition will investigate the reaction to high art by the pop artists and explore the relation of the artworks to popular culture and to the process of painting itself. A children's summer workshop will feature an afternoon of activities which include story telling, refreshments and an opportunity for participants to make their own pop art.

In addition, there will be water, water everywhere this summer, with a province-wide WATER Project organized by the Ontario Society of Artists. More than seventy arts organizations across Ontario, will be mounting exhibitions around the theme of water. The McMaster Museum of Art also is taking the plunge with a show called ART=H2O.

The wet and wild exhibition will include masterpieces such as Japanese artist Utagawa Hiroshige's brilliant colour woodcut, Ohashi Bridge, from The 100 Famous Views of Edo; J. M.W. Turner's luminous watercolour, Boston in Lincolnshire; and Aert van der Neer's charming 17th century oil paintings. Both exhibitions will continue at the Museum until August 17th.

So, if you're looking for a little solitude and quiet time on campus during the lazy days of summer, settle on a bench under a big, leafy tree, and watch the squirrels and birds folic in the grass and flowers. McMaster offers many beautiful areas where you can retreat to find a few moments of tranquility. And when you are looking for a bit of stimulation or activity, stay on campus and take part in some of the many summer events happening every day.



McMaster Welcomes the Commonwealth



BY SHELLY EASTON

McMaster and its partners are rolling out the red carpet beginning this month for international delegates who will determine where the 2010 Commonwealth Games will be held.

Hamilton and New Delhi, India are bidding for the games.

The Hamilton 2010 Bid Corporation is a partnership led by the City of Hamilton, McMaster University and the Hamilton Spectator and includes the Government of Canada, the Province of Ontario and other Canadian sporting organizations.

Hamilton and New Delhi officially lodged their bids with the Commonwealth Games Federation in London, England on May 30 in a presentation of their respective bid books to HRH Prince Edward.

University representatives along with a small contingent of alumni living in London also attended the ceremony held at Marlborough House, headquarters for the Commonwealth Games Federation. Prior to the official ceremony, the Canadian delegation traveled along some of London's West End streets in a double decker bus decorated with banners and flags carrying the Hamilton 2010 Commonwealth Games logo.

The 150-page book contains all the details and specifics of the Hamilton bid including everything from the menu of sports to be offered, to the look and feel of the athletes' village, which would be on McMaster's campus.

The bid book also contains details on how the games and new facilities that will be built to accommodate the games will be funded. The federal and provincial governments have agreed to contribute \$250 million each. The City of Hamilton has committed \$80 million to the initiative and the University's support equals \$50 million.

"McMaster is one of Canada's premier universities and, like the Commonwealth Games, has a proud legacy of building strong relationships within our local community, across Canada, and around the world," said President George. "We are dedicated to continuing this tradition through our support of the Hamilton bid for the 2010 Commonwealth Games and we look forward to



Students Felicity Humblestone, Kipp Kaufmann, and Scott Johnston are part of McMaster's team working on the 2010 Commonwealth Games Bid.

coming together with all of our partners to promote to the world the excitement and values of the Games."

McMaster would be a major venue for many of the events and would be home to a secure Games Village for participating athletes. In April, McMaster students voted in favour of contributing \$20 million through a levy to support the construction of a new multi-sport wellness complex. The complex is a component of the Commonwealth Games bid and will be expanded and enhanced if the games bid is successful. For McMaster, the bid also includes plans for an aquatics centre and a 7,000-seat stadium.

Roger Trull, vice-president University Advancement, is leading McMaster's involvement in the Games bid and assisting with the international lobby effort.

"The City of Hamilton, the Hamilton

Spectator and McMaster are strong partners in this bid and we are confident that the bid package we have submitted will be successful," Trull said. "The Games will bring tremendous benefits to both Hamilton and McMaster."

This month, representatives from countries in the Americas, the Caribbean, Africa and Europe travel to Hamilton and McMaster to see and evaluate local venues selected for the games.

The first of the site visits is set for June 5-8, with four delegates from the Americas scheduled to tour the McMaster campus on Saturday, June 7.

Subsequent delegate visits to Hamilton will also be four days long and follow a similar schedule with tours of the city and designated sports venues, visits to McMaster and planned working sessions and a variety of community activities.

The other regional groups represent the Americas, Europe, Africa, Asia and Oceania. In all, there will be nine visits to campus between June and September, including visits from the Commonwealth Games Federation executive and its evaluation team.

Delegates from 72 nations will cast votes; Hamilton needs 37 votes to win the bid. Votes will be cast at the Commonwealth Games Federation general assembly in Montego Bay, Jamaica on Nov. 13.

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Stargazing led Alison Sills to a career in physics and astronomy

She will use new supercomputer to study why stars collide

BY ANDREW VOWLES

Even for a theoretical astrophysicist, it began with that simple but universal human impulse to look up, way up.

"Almost everyone likes to look at stars and think, 'Wow, what are they? Where did they come from?' We like the idea that the vast universe out there is somehow important to us," says Alison Sills, professor of physics & astronomy. Her leisure-time pursuits while growing up in Toronto included reading science fiction novels and astronomy books and gazing at the stars.

Today she spends less time looking at the night sky from her backyard and more time observing simulations of colliding stars on her desktop PC, using data fed from the Hubble Space Telescope and from fellow stargazers working at Earth-bound observatories in Chile and Hawaii.

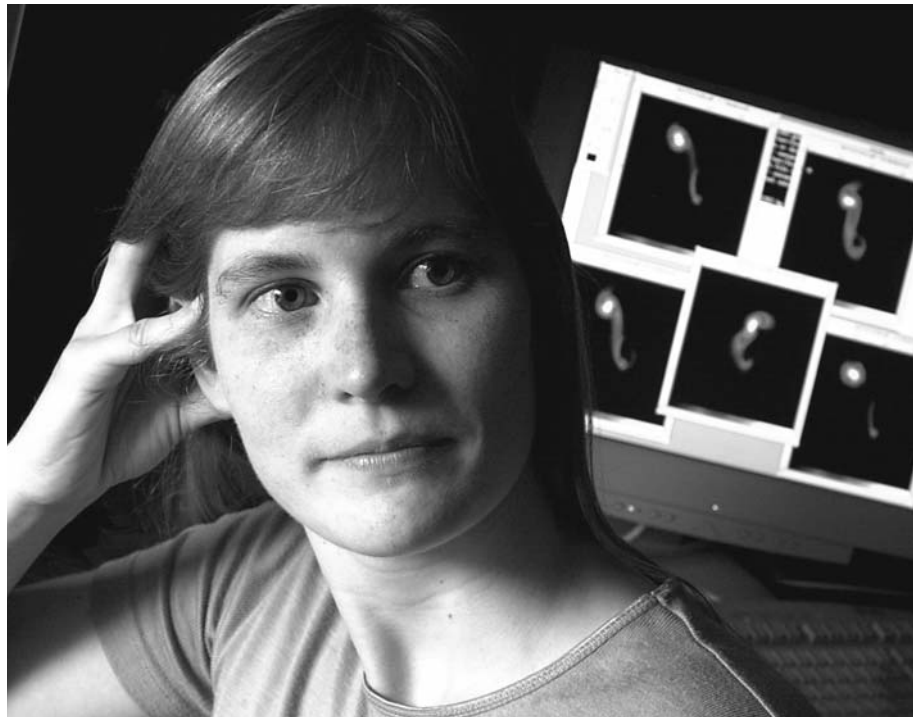
Last fall the Arthur Bourns Building became home to one of fastest supercomputers in the world dedicated solely to calculating gravitational forces between stars, particularly stars in the oldest parts of our galaxy. She's purchased the new desktop device through a New Opportunities grant worth almost \$175,000 announced this past summer by the Canada Foundation for Innovation.

That was only the first piece of good news this year for Sills, who joined McMaster in 2001. In October 2002, she was named as the year's recipient of the Polanyi Prize for physics. (Four out of the year's five winners of the prestigious prize were McMaster researchers. Besides Sills, McMaster's complement of Polanyi Prize winners included Alex Adronov, chemistry; Thomas Crossley, economics; and Jeremy Yethon biochemistry.)

"I look at what happens when stars collide," Sills says. To do that, she studies stars not nearby in our Milky Way but packed in globular clusters out on the fringes of the galaxy. In these regions, groups of perhaps 100,000 stars carom around closely enough that they run into each other – a kind of stellar "demolition derby," according to the cover article of the November 2002 *Scientific American*, which mentioned work by Sills.

She says learning about what happens during and after these smash-ups can tell us more about the formation of the galaxy itself. Although the composition of stars varies from one cluster to the next, the stars within a cluster are similar in age and material. Equally important, they give us a glimpse back in time. "Globular clusters are the oldest pieces of the galaxy."

Trying to peg the age not just of the Milky Way but of the universe itself has led to collisions of opinion among professional stargazers, including arguments over the age of globular clusters themselves. About five years ago, some scientists calculated that these clusters were about 15 billion years old. That



ONLY A RELATIVE HANDFUL OF SCIENTISTS WORLDWIDE STUDY THE DYNAMICS OF GLOBULAR CLUSTERS AND STAR COLLISIONS, AND MCMASTER'S ALISON SILLS IS THE ONLY ONE IN CANADA.

number was decidedly at odds with other astronomers' best guesses about the age of the entire universe at around 10 billion years old (for now, they've worked out a compromise of about 12-13 billion years).

Sills' role in that debate involved looking at the workings of one particular cluster, where the frequency of collisions appeared to have slowed abruptly some two to three billion years ago.

She explains that dense star clusters are more likely to contain binary stars, or pairs of stars revolving around each other. Her simulations suggested that earlier collisions eventually used up the binary

stars, lowering the odds of further smash-ups. Her work has been supported by that of other scientists studying formation of pulsars and the distribution of various kinds of stars in globular clusters.

"What fascinates me about astronomy is that we can learn a lot from almost nothing," says Sills. "You could understand these distant objects by knowing a bit of math and a bit of physics and looking at light." "The truly amazing thing is that we get it right."

Only a relative handful of scientists worldwide study the dynamics of globular clusters and star collisions, and Sills is the only one in Canada. At McMaster, she's part of a cluster of seven astronomers studying aspects of the universe's formation and workings. "The astronomy and astrophysics group here is small but strong. Every single person is extremely creative and engaged in the national and international astronomy community."

Years ago, she had intended to pursue stellar evolution. Sills did her undergraduate degree at the University of Western Ontario, then went abroad – first to Yale University for her PhD. She did her post-doctoral research at Ohio State University and the University of Leicester. Along the way, she encountered a professor who awakened her interest in globular clusters. "He kept coming up with these bizarre stars and said someone's got to explain them. He was just so excited."

Mac Grads - making a difference around the world

McMaster alumni are located in more than 125 countries and are making a difference no matter what their area of expertise. Here are some brief snapshots of the unique talents, interests and contributions being made by a few of our wonderful Mac grads.

Computer engineering grad **Al-Riaz Adatia '93** built his career in California's Silicon Valley, working at Octel, ST Microelectronics (SGS Thompson), and Microsoft. He developed some engineering courses that he taught at the University of California, Berkeley, UC Santa Cruz. At the age of 24, he was UC Santa Cruz's youngest instructor. In 1998 he co-founded IMDI and created Sonique, the second most popular MP3 player on the internet. The company's small team became the most revered in the field, out-pacing Microsoft and Real Networks. The product was sold in 1999 for more than \$70 million (U.S.).

Adatia moved on to become founder of Ustad, a teaching and consulting practice where he developed and presented private courses for leading computer companies.

He is now back in Canada applying his technological skill and success to foster entrepreneurial talent and help new and innovative companies in Canada reach their full potential. His sights are also set on his next challenge, which includes helping rebuild the technology systems in Afghanistan and Tajikistan following the war in Iraq.

Mechanical engineering & society grad **Craig Seeley '96** went back to basics in Guatemala.

After working for a couple of years following graduation, Seeley decided to pack in his Toronto job and explore the world. His travels took him to Mexico, Central America and South America. By 1998 he was in Guatemala studying Spanish and volunteering with a developmental organization called Common Hope. Seeley maintained the project's network of 25 computers. His other job was called the 'stove program' and it provided him with a unique opportunity to improve the design and technology used in elementary stoves.

Most families involved with Common Hope live in small huts made of cornstalks, with dirt floors and corrugated tin roofs. Women cook for hours each day over open fires that generate strong smoke. Related respiratory complications are the number-one killer of women and children in Guatemala. Through the stove program, Seeley and his team designed and built simple, wood-burning stoves with chimneys to remove the smoke from the kitchen.

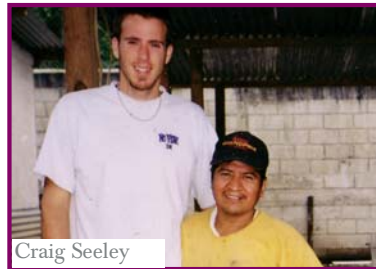
Seeley's definition of "engineering" is "the use of scientific knowledge for the betterment of society." That is his contribution that has improved the quality of life for many Guatemalan families.

Nursing grad **Christine Fransen '86** divides her time between nursing in Nunavut and visits home to London, Ont.

Fransen has spent many years in Nunavut and is very passionate about it. Home is a place called Igloolik, accessible only by air and a two-and-a-half



Al-Riaz Adatia



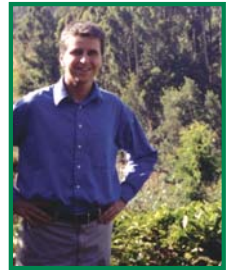
Craig Seeley



Christine Fransen



Michael Neff



hour flight north of Iqaluit. There are no shopping malls, no movie theatres, no paved roads, and not many vehicles. People use mostly snowmobiles or walk. Although her nursing work can be quite stressful, Fransen finds life there very peaceful, quiet, and simple.

The conditions are very much "Third World": there is extreme poverty, prices are high, and the quality of housing is low. Nutrition is poor partly because of the high cost of food, and generally the people have poorer health than the rest of Canadians.

Despite the -45° C winter temperatures and lack of lifestyle luxuries, Fransen thoroughly enjoys the beauty of the north and makes a substantial contribution to the people of Igloolik by providing much needed medical care.

Last year, computer engineering & society grad **Michael Neff '96** travelled to Kiriari, Kenya with Canadian Crossroads International.

To say that living in Africa presents some cultural differences from Canada is an understatement according to Neff who ventured to Kenya to teach high school math and computer programs. Neff thrives on the beauty and adventure of living in Africa, and has learned to appreciate what most Canadians take for granted.

One of the highlights for Neff in his job was to talk to his students during weekly guidance sessions to learn about their lives and answer questions they have about Canada. Common questions are about what Canadians eat, if we have famines, if child labour exists and details about what games children play. He's also had fun introducing some of his teaching colleagues to Canadian culture, including a pizza dinner party.

Neff has since returned from Africa and is working on a PhD in computer science. He continues to work for CCI helping place volunteers internationally.