This edition of the BHSc Community newsletter doesn’t have an obvious theme. I have had several opportunities over the past few months to engage in discussions about the purpose of education. There is a simple answer offered by some, which focuses on the issue of training and competencies. These are simple to understand; there are some things people should know and be able to do and in some disciplines this is the focus of education. It is also the challenge of education. Often, these are the things that can be measured and they fit well into accountability agendas. Some of the groups with whom I have been working see the additional and more difficult challenge. Education needs to be about the challenges of capability, not simply competencies. If students are to respond to new challenges in a rapidly changing global system they need to be able to do the things that education systems are challenged to implement. There needs to be more opportunities for students to struggle with uncertainty; more opportunities to understand their own strengths and limitations in ways that are actionable and more opportunities to take personal responsibility. This doesn’t mean abandoning our role. It is an opportunity for learning communities to strengthen what they do in intentional ways; not for immediate short term measurable gain but for an increased capacity and capability of the next generation to recognize and respond to new challenges. The education system also needs to be more comfortable with uncertainty. In the next few pages you will see elements of this thread imbedded in what students and faculty say. Enjoy!

Del Harnish
3M Fellow
Assistant Dean, BHSc (Honours) Program
BHSc (Honours) Scholarship 2012/13 Recipients
Compiled by Teresa Basilio, Program Manager, BHSc (Honours) Program

The Bachelor of Health Sciences (Honours) Program Scholarship was established in 2004 by students, alumni, faculty, staff, and friends. This particular scholarship is awarded to a BHSc (Honours) student who has made significant and meaningful volunteer contributions to the Hamilton and McMaster University communities.

In 2012 we were fortunate to award two scholarships. The scholarship recipients for 2012 were Patrick Thornley, and Dhruvin Hirpara, both from the class of 2013.

For his senior project course, Patrick along with a peer screened approximately 1,500 Hamilton inner-city elementary school students who do not have access to professional eye care. Children identified as requiring a professional examination will receive one from the project’s supervisor, a pediatric ophthalmologist at the McMaster University Children’s Hospital. Patrick and his peer have also written a series of grants to receive funding to provide free eyeglasses to children in need. Patrick’s interest in volunteering for inner-city youth had been forged throughout his four years in the BHSc (Honours) Program when he tutored children from foster care and protective care homes weekly with the Catholic Children’s Aid Society. Patrick is a four-year Marauder golfer who finished his OUA career as a Marauder in the Fall of 2012, as well as the President of the McMaster Athletes Care Program. The program seeks to motivate over 900 student athletes at McMaster to volunteer in the community with a focus on inner-city youth and education. This winter, Patrick helped coach a grade nine and ten inner-city girl’s youth basketball team in the same neighbourhood where his senior project and many of the McMaster Athletes Care initiatives took place. Patrick’s primary motivation comes from recognizing that he is in a privileged position in being able to obtain a high-quality post-secondary education. Consequently, he uses his position as a student athlete to be a mentor in his community to students who may receive negative reinforcement regarding their educational prospects. Patrick plans to continue giving back to the Hamilton community after finishing his undergraduate education at McMaster and intends to pursue a health care profession.

Dhruvin is deeply involved in the McMaster community. He currently serves as the President of CANFAR McMaster (Canadian Foundation for AIDS Research), a prominent health advocacy club that raises awareness about HIV and AIDS in the McMaster community. CANFAR also fundraises to support teams of scientists conducting AIDS research. As president, Dhruvin has come to realize his duty and ability to advance the health and well-being of fellow community members. This involves promoting disease prevention through educational campaigns as well as efforts to change specific practices amongst youth, one of the most vulnerable demographics in the HIV/AIDS epidemic. Dhruvin has also invested time in several other meaningful initiatives such as Students Squashing Sickness, a recreational squash club founded by him, to promote healthy living in the McMaster community. He also serves as the Senior Awareness Executive for the McMaster Cancer Society and a Course Coordinator for Students Offering Support, a national charity that raises money for sustainable education projects in Latin America. Dhruvin’s deep-rooted connection to the McMaster community stems from his commitment to having a meaningful impact in the lives of others around him. He hopes to use the BHSc Scholarship to make further contributions to the Hamilton and McMaster University communities.

HTH SCI 3E03 SPACE MEDICINE
By Sheila Whelan, Instructor, BHSc (Honours) Program, McMaster University

Developed in 2009, the Space Medicine Inquiry course was created to apply the knowledge gained from Anatomy and Physiology as it relates to medical issues relevant to microgravity. The course focuses on topics from crew selection, radiation effects, bone and muscle loss, and space walking Issues to the psychological support needed to manage “the right stuff.” Having worked at NASA for 17 years before returning to Canada, I am thrilled to offer my experiences working with the astronauts on each topic. I am also pleased to see the passion the students share for Space Medicine. This course offers a unique opportunity to see the Earth applications derived from NASA’s human spaceflight program.

“Through learning about crew selections, space walks, medical risks associated with spaceflights and much more, space medicine has opened my eyes to a whole new world of knowledge that I wouldn’t have the opportunity to have access to otherwise. The group work and the interesting stories shared in class further expanded my understanding of both the human body and the space environment. Most importantly, this course allowed me to realize and to appreciate our own desires for discovery and exploration. In this course, the space is the limit.” - Sunny Meng Xia, Class of 2014

“Most kids dream of being an astronaut when they grow up. Well, Space Medicine is the next best thing. This course is unique in its content and structure and is definitely one of, if not the most interesting course I’ve taken at McMaster. Each week, we spend the first half of class learning about different dangers and risks astronauts face while in space, and the second half researching the risks and presenting the findings to our peers. This course would not be as enjoyable if it were not for Sheila Whelan. Having worked at NASA for many years before she came to McMaster, she has managed to impress me each class with her knowledge of space flights and aeronautics, and is one of the coolest instructors I know. Even if you’ve never considered Space Medicine as an interest, I would still recommend this course for anyone.” - Bernard Ho, Class of 2014
THE LOUNGE “HOME-BASE”: BHSc IN A NUTSHELL

By Arnav Agarwal, BHSc (Honours), Class of 2014

A cheerful first-year student responded, “Gingerbread men at Christmas time and smiles year-round.” A tired second-year yawned back, “The perfect place for a nap to the sounds of BHSc hustle-and-bustle.” Sharing a few laughs with her friends, a third-year replied, “Where I go when I feel I haven’t seen everyone in far too long.” And finally, a wise fourth-year shared, “Home-base indeed – it is home away from home.”

Home: the unchanging element in a lounge that has been transformed, year after year. The BHSc lounge is a thread in the program’s culture, one that ties together students from different years, specializations, and interests. Stepping beyond the front doors, one is greeted by the aroma of baked goods for charity and slight chatter from an area of couches as a group of students talk about their weekend plans. The occasional reference to a Cell Biology paper or Inquiry group project from further across the lounge is accompanied by the electronic rings of the television in the backroom as a group of students frantically press the keys on their gaming controllers. The lounge encompasses everything the Health Sciences program is about: interaction, collaboration, and the concepts of a supportive community, and a human sense of equality. The Tree of Life resembles vitality and the spread of ideas, as well as the concepts of a supportive community, collaboration, and the transfer of ideas through the interaction of the two people. It provides a warm welcome into the lounge and captures the very elements that characterize the BHSc (Honours) program. This work of art has been accompanied by an upgrade in the space’s technology. The introduction of a gaming console allows students to take a break from their group projects and assignments to step into a virtual world with their peers and relieve themselves of their stress. The addition of a scanner and a microwave makes the lounge a fully-functional hub for its students.

But the recent additions don’t take away from the aspects of the lounge which have always made it special to students. “The home-base is essentially an on-campus shelter where students can hang out with friends, sit down and grab a bite to eat, or even buckle down and study,” said Abrar Hossain, Class of 2014. “What makes it special is the fact that everyone is so friendly. People just start up a conversation and there are always people willing to help you. It highlights how friendly, warm, and comforting a student community can be.”

As the lounge continues to grow and new students make it their home away from home, one thing remains the same: it is a microcosm of the student community at large. It may introduce new games, paintings, and other frills which make it more welcoming to the eye, but year after year, what makes it tick is what has made the BHSc (Honours) program tick since its inception: the dynamism and energy of its students.

THE CONTINUOUS EVOLUTION OF BHSc (HONOURS)

Why Your Feedback Matters

By Ronald Leung, BHSc (Honours), Class of 2016

The little red flag appears in your LearnLink inbox - not just in BHSc community, but all your other course folders. “Course evals” is the subject heading and you make a mental note to complete it without even opening the message, since you figure the content would just be the same.

But wait - how many of us actually complete the course feedback? Amidst the midterms, group projects, and extra-curricular activities it’s easy to forget about “just another” course evaluation but reflection, not only on the individual level but also program-wide, is a cornerstone of the Bachelor of Health Sciences (Honours) program.

Although giving course evaluations may seem like a routine today, the idea was certainly foreign only a little while ago. The high school system for the most part certainly lacks a standardized, board-wide feedback policy on teachers and staff so it would be simple to extrapolate this deficiency to universities. Del Harnish, Assistant Dean of the BHSc (Honours) program explains more about how feedback became so central to the program.

“It was actually back in 1995 when we just started using LearnLink for a science program,” Del explains. “We had a course folder where students could leave feedback and there were over 100 messages quite quickly, with some of them being ‘Lecture too fast,” he laughs. Development of an official, program-wide course evaluation soon started and has grown over the years into the system it is now.

Feedback has initially been slow to spread to other faculties and programs, but it’s slowly appearing now. Why has this been the case? “There’s actually in certain cases a fear for getting feedback,” Del says. “It’s certainly very helpful, but it can also be hurtful. We’ve even occasionally lost faculty due to some of the comments.” Student participation can also be a problem. “If only 20% or 25% of students respond, can any changes be made for the remaining 80% or 75%?” The good thing is, many students in BHSc certainly “pay attention”. Feedback for courses has generally been very healthy, with a good proportion of replies being returned. Processing all the course evaluations also holds a unique approach in BHSc, with focus groups of faculty, students and staff used to discuss possible changes. “For example, when the Global Health specialization was just created, we moulded a lot of the syllabus through student input and the same process is happening now with the new Child Health specialization.”

Voluntary feedback is often the most useful, because the provider of the evaluation willingly takes the time to give back to their community. Taking five minutes out of our day to develop our own education pales in comparison to the countless hours spent by the Health Science faculty and staff working to provide an enriching learning environment for students and instructors alike.

“We’re trying to create a culture where input is valued, change happens to get better, or where it’s good to just say thank-you.” Del concludes.

Sounds like a great place to learn.
Why was the Global Health Specialization in the B.H.Sc. Program developed?
The Global Health Specialization was created to provide a formal academic stream devoted to fostering an understanding of health within a global context. The vision was to facilitate knowledge acquisition and integration with concurrent skill development in a manner that allowed students to engage with the theoretical concepts and tangible experiences of global health that span beyond the traditional learning environment. It is the product of a pedagogy that embraces complexity and change.

Why do you feel it is important for students to have access to a curriculum in global health?
Three billion people live on less than $2 a day, yet bear 90% of preventable disease and have access to only 10% of the world’s health resources. Within different regions of the world starkly different patterns of morbidity and mortality prevail. Within highly unique environments, the state of human health and ill health is defined by innumerable variables, which produce a complex web of relationships that can define a health system and ultimately a sense of global health.

Approaching health from a global perspective is not a single lens, a particular skill set or series of information packets; it is a truly interdisciplinary academic and personal journey that is grounded in exploring and understanding the variables that define these complex relationships. Global health incorporates traditional academic fields as diverse as economics, religious studies, ethics, anthropology, epidemiology and quantitative/qualitative research methodologies. Ultimately, the outcome of interest is human health and ill health and thus is grounded to a certain degree in human physiology and pathology. It is within this context that the Bachelor of Health Sciences (Honours) Program created the Global Health Specialization. It is a unique undergraduate opportunity that challenges students to embrace the complexity of their learning through the development of a global consciousness and the understanding of health as a fundamental component of the human experience. We challenge that an understanding of health and its many facets is incomplete without an understanding of health within the global context.

Please describe one of the activities/opportunities that students completed on their ELE. This description of activities is from one of the NGO’s – Unqweru in Malawi.

**Natural Resource Management**
- Making clay stoves and briquettes as a firewood alternative, since deforestation is a huge issue in Mzuzu
- Maintaining a tree nursery in the Msiki communities of Luwinga, again combating deforestation (many trees are fruit trees, so this is also part of food sustainability)

**HIV/AIDS Management**
- Running AIDS support groups (ASGs) in five communities of Mzuzu (groups of people living with HIV discuss discrimination, nutrition, natural medicine, poor health associated with HIV, ARV compliance, etc.)
- Supporting income-generating activities (IGAs) in the ASGs, such as the Pig Pass-It-On program and encouraging garden harvests, to provide a sustainable source of income for the groups; many are widows
- HIV/AIDS education in Luwinga high schools, running activities and discussions/debates with the schools’ awareness clubs

**Education**
- Running seven Community-based childcare centres (CBCCs) in Luwinga, which are preschools for 2-5 year olds who haven’t started primary school yet. Caregivers at the CBCCs work for free
- Water & Sanitation
- Working with another Mzuzu NGO called Wells for Zoe, installing wells in different communities of Luwinga
- Building eco-toilets for Luwinga communities

**Food Security**
- Helping Luwinga communities grow gardens, similar to the Community-based childcare centres (CBCCs) and Aids Support Groups ASGs (they can use the food themselves or sell the harvest for income)

**CORE COMPETENCIES**
Students engage in an academic curriculum that is designed around SEVEN core areas of competency:
1. Social determinants of health
2. Biology and epidemiology of disease states across high, middle and low income countries
3. Financing, delivery and policy process of health care systems
4. Evaluation of health care programs and services
5. Global governance structures, institutions, conventions and legal frameworks
6. Qualitative and quantitative research methodology design, implementation and evaluation.
7. Ethical and reflective cultural exchange and practices
How does the specialization prepare GHS students to continue to study or work in global health?

- Understand the basic political economy that defines national and international health
- Have a deeper understanding of broad ethical issues as they relate to global health, with particular emphasis on the impact of volunteerism, international aid and the concept of participatory ethics
- Be able to approach the relationship between gender and health from a multi-cultural perspective
- Have a skill set that permits a culturally sensitive exchange of knowledge and understanding.
- Be a highly effective peer collaborator, possessing the skills to excel in both familiar and unknown group and individual endeavors.
- Understand how research for health promotes social and economic development, and why research is an essential resource for improving health systems and enacting equitable policies

GLOBAL HEALTH SPECIALIZATION

Interview with Graeme Hoit, BHSc (Honours), Global Health Specialization, Class of 2013

**Why did you apply to the Global Health Specialization in the BHSc (Honours) Program?**

“I saw the Global Health Specialization as a way to gain a foundation of knowledge and experience that would allow me to become an active, informed global citizen” says Graeme Hoit, BHSc (Honours), Global Health Specialization, Class of 2013.

Graeme spent his Embedded Learning Experience (ELE) in the fall of 2011 with the Public Health Foundation of India (PHFI) in New Delhi, India. PHFI is part of a public-private partnership with the Government of India conducting primary health research to affect policy change. Working in collaboration with a group of researchers they conducted infectious disease research on pathogens that transmit between vertebrate animals and humans (such as influenza and rabies). One primary goal of the project was to share the research findings across various disciplines, including veterinary practice, human medicine, infectious disease and wild life health which would enable teams to improve efficiency and utilize resources effectively. Graeme developed a methodology to map the institutional laboratory capacity of institutions that have contributed research for twenty priority zoonoses over the past decade. In addition, the team has quantified and analyzed the research output. They are now in the process of making policy and funding recommendations based on the data. Given the scope of this project and Graeme’s continued interest, he has extended his involvement with this project for his fourth year senior thesis.

“This was really my first experience in the field of systematic health research and health policy. I was incredibly intimidated at the start by the amount of free reign I was given on the project and the importance of it given my inexperience. I went into the experience without experience in designing research methodology, however what I did have was the research foundation that had been set by my first two years in BHScs. Mostly, I knew how to ask questions, I knew how to examine and analyze primary articles and I knew how to communicate findings. My work at PHFI really highlighted how important those skills are, because you may not know how to do something immediately, but you definitely know how to find the information you need to learn. Previous to my ELE, the plans I had for my career were focused around making individuals feel and function better. However, working at a public health agency really allowed me to see that I would not be satisfied unless I made some effort to affect health on a far broader scale. I have started to approach problems from a more systematic perspective”.

To capture his Global Health experience so far, Graeme refers to a quote by Dr. James Orbinski “What I’ve experienced is that I can’t know the future. I can’t know if anything that I do will change what happens tomorrow. I can’t know with certainty, but what I do know is if I do nothing, nothing will change.”

Acknowledgement; the BHSc (Honours) Program would like to thank the numerous faculty, staff and students who have participated in developing the Global Health Specialization with a special thank you to Sheila Barrett and Gregory Knapp for their dedication and expertise in this field which has led to its success.
A REFLECTION ON CAPABILITY
By Elyse Watkins, BHSc (Honours) Alumnus, McMaster University

As I reflect on my time in the Bachelor of Health Sciences (BHSc) Program, I know that I was where I was supposed to be. There are the obvious reasons why I enjoyed my time as a Health Sciences student—unique learning style and opportunities, personalized education, emphasis on lifelong learning, collaboration, wide course variety. The list goes on. However, it is when I think of the personal struggles and challenges I faced as an undergraduate student that I realize how privileged I was to be a ‘Health Sci.’

At first, Inquiry scared me. I was used to being the quiet kid in class. I thought that the best way for me to learn was to silently absorb everything in class and then go home and study the material alone. However, Inquiry (and BHSc) did not seem to lend itself to my old ‘learning style’. There was a lot of personal dissonance trying to break out of old habits and adjusting to the new learner I was becoming. Not to mention, it seemed like everyone else was doing fine, so why was I feeling so lost and confused? This is where BHSc made the difference.

I learned that it was okay to feel uncertain and confused—it’s all part of the process. I learned to accept that it was not a race and to focus more on what I was doing rather than on what I was not doing. I learned how to ask for help and to use the resources around me to deal with conflict and change. Candid discussions with my peers and facilitators helped me to realize that I was not the “only one” who did not know what to do or who felt outside of their comfort zone. Most importantly, I learned how to be me and stay true to myself throughout the process. The result of this combination of support, honesty, and community in BHSc is why I know that I was where I was supposed to be.

So, Inquiry does not scare me anymore. Yes, I still have moments of uncertainty, personal struggle and dissonance. And, that’s okay. My vision of education has been transformed from a narrow, linear path into an organic landscape that is always growing and changing. BHSc has taught me to be more than a competent student…I am now a capable learner. With this capability, I will take the skills, knowledge, and philosophies I gained as a ‘Health Sci’ and nurture them wherever I go next.

Thank you, BHSc.
DR. CHRISTIAAN BRINK
HOWARD BARROWS AWARD RECIPIENT (2012)
By: P.K. Rangachari, Professor (Emeritus), Medicine, BHSc (Honours) Program

The Howard Barrows Award was established in the Fall of 2010 to coincide with the 10 Year Anniversary of the Bachelor of Health Sciences (Honours) Program. This special award reflects the guiding principles of the program, to promote student engagement in their own learning by providing a stimulating teaching environment. The Barrows Award honours exceptional teachers who have taught students, primarily at the undergraduate level. The award pays tribute to an eminent teacher, Dr. Howard Barrows who is widely recognized as an architect of self-directed, problem-based learning and pioneered the concept of using simulated patients to train medical students.

The first two recipients were Dr. Jaclyn Duffin, a medical historian from Queens University, Kingston, ON and Dr. Harold White, a biochemist and educator from U. Delaware, USA. This year’s recipient was Dr. Christiaan Brink, an eminent pharmacologist and educator from North-West University in Potchefstroom, South Africa.

Dr. Brink spent a busy week at McMaster University meeting Drs Deane and Denburg at the launch of a book of essays (Student Matters: The Rewards of University Teaching, edited by Kevin Dorsey and P.K. Rangachari), to which he had contributed a chapter. He gave a talk on Teaching with Technology in an African Context to a packed audience. On that occasion, Mrs. Barrows presented him a framed wood engraving of the foxglove plant by Gerard Brender a Brandis, an outstanding artist who graduated from McMaster (http://www.gerardbab.ca/).

During his visit, Dr. Brink discussed issues related to technology and health care in South Africa with students in HTH SCI 4RR3 (Drugs, Devices and Desires) and met the first year students in HTH SCI 1106 (Cellular and Molecular Biology) where he heard from several groups of students about the benefits of active learning. He was amazed at the confidence and chutzpah of the students who stood up in front of the entire class and summarized what they had learned within a few short months at University. He mentioned several times that his colleagues back in South Africa would hardly believe their ears.

The visitor met with a technology group at the Centre for Leadership and Learning and had an opportunity to discuss a wide range of issues with several members of the Faculty who teach in the BHSc (Honours) Program (Szechtman, Trim, Singh, Wainman and Whelan) as well as Levinson, Huizinga, Holloway and Kim who teach in other programs. He appreciated the generosity of Dr. Del Harnish who hosted him and the efforts of Sheila Whelan who organized his travel.

Dr. Brink left with a vivid impression of a dynamic University campus that fully justified its reputation for innovative educational ventures.

FACULTY PROFILE: DR. HENRY SZECHTMAN
PROFESSOR, PSYCHIATRY AND BEHAVIOURAL NEUROSCIENCES
By: Julia Shen, Class of 2016; Carolyn Tan, Class of 2016; and Julia Woo, Class of 2016

Dr. Szechtman, instructor and course coordinator of HTH SCI 1G03 (Psychobiology), received his Doctorate of Psychobiology from the University of Pittsburgh. Since coming to McMaster, his research has involved behavioural neuroscience and human studies (e.g. schizophrenia and OCD). Additionally, he has examined the effect of psychostimulant drugs in animal models. Dr. Szechtman has been a part of the BHSc (Honours) Program since its inception. In the first year of the program (2000), three professors each taught one third of HTH SCI 1G03. Since then, Dr. Szechtman has been the primary instructor and course coordinator. Originally, exams and midterms were the chosen forms of evaluation for the HTH SCI 1G03 class. However, through feedback, it became evident that the exams were more detrimental than helpful, and were subsequently replaced with other forms of evaluation. He believes that in order to understand, students must be able to explain concepts in their own words. Many assignments involve written communication: journals, essays and discussion posts. The journal provides three methods of examining the content; the essays allow for research in a collaborative setting. This year, the discussion board weighting is greater as an outcome of positive feedback. Dr. Szechtman enjoys being part of the BHSc community—the faculty, staff and students. Notably, he believes that the HTH SCI 1G03 course provides a solid framework for first year students.
BHSc (Honours) Transfer Students’ Perspectives

Compiled by Arnav Agarwal, Class of 2014 and Sukhmani Sodhi, Class of 2013

With only a fraction of the BHSc community consisting of Level 2 BHSc (Honours) transfer students, the experiences of transfer students and their transition into the Program has been a point of interest. As such, we spoke with a few transfer students from levels 2-4 to gather their insights. Below are some of the comments and feedback that they provided about the program. This is what we found:

What made you apply to the BHSc (Honours) Program?

“The style of teaching and learning. It really promotes a stronger understanding and application of concepts. The PBL (problem based learning) style has been a lot of fun. The skill based and group approach really appealed to me.”
- Aatif Qureshi, Class of 2014

“I was astonished by the sense of community within the BHSc (Honours) Program and the support and help that every student receives from both faculty and peers.”
- Pourya Masoudian, Class of 2015

“The courses available in second year, specifically anatomy and the freedom available in 3rd/4th year.”
- Sukhpreet Klaire, Class of 2014

“I knew about this program from high school and I loved the freedom we have in choosing what we get to study. Health Science courses also had content which I was extremely interested in.”
- Mark Tenn, Class of 2015

How was your transition into BHSc?

“My transition into BHSc was a really great experience. I went from being in a program so large that every day you met an unfamiliar face, to a small, welcoming program that became a second family for me.”
- Leyla Eryuzlu, Class of 2014

“As transfers, we were welcomed and provided with every opportunity to integrate and become used to the different style of courses. The Health Sci community and faculty were incredible in their support.”
- Aatif Qureshi, Class of 2014

“It was great. Everyone is really nice and welcoming. In terms of academics, it may be a bit of a challenge in the beginning going from independent work to group work, but you get used to it pretty quickly.”
- Nikunj Patel, Class of 2015

“What is the best part of being a transfer?

“Knowing the people. We work together for EVERYTHING. It’s just nice to have a community that helps each other out.”
- Steven Shu Liang, Class of 2014

“Upper years welcoming us into the Transfam was great.”
- Anne Xia, Class of 2015

A DAY IN THE LIFE...
By Beatrice Preti, BHSc (Honours) Class of 2015


All students know the pain and panic of the early-morning rush. Indeed, forgotten homework, missed assignments, and the roller coaster of grades all seem synonymous with the essence of education itself. But, for first-year BHSc (Honours) student Maggie Jiang, Class of 2016 these common routines are only the “bread and meat” of McMaster’s Health Sciences experience.

“(It’s) like making a delicious sandwich,” Maggie recently explained. “On top of the typical undergrad routines, Health Sci’s have a healthy dose of inquiry, LearnLink, free food, group meetings and tonnes of personal growth.”

These aspects have led McMaster’s BHSc (Honours) Program to be considered the gold standard in undergraduate education by many across the province, nation, and globe.

But Health Sciences isn’t all fun and games. Even applicants are thrust into the whirl of open-ended supplementary applications...with “correct” answers no one ever seems to figure out. Sample questions have included “What four-letter word would you expunge from the dictionary, and why?”, “What defines you as you?”, and, more recently, “What do you consider to be an act of folly? Explain why.”

The stream of opportunities for creativity only continues with acceptance, and first-years are subject to a string of trial assessments, group problem-based learning, and integrative journal reflections. One sample assessment is the UNSIN project, in which groups of 8-10 students work together over several months to cure one of the seven deadly sins.

Noel also mentions a key Health Sci pillar. “Health sci is more than a program, it’s a philosophy and a community... Collaborating with other students is emphasized throughout, and I think that really leads to a sense of belonging, something I’m very grateful for.”

Maggie echoes Noel’s sentiments. “[This is] what so many of us first years have grown to love about BHSc. I would not have my day...any other way.”

“COMMUNITY! It’s not just because we have few people in the program -- we have AMAZING faculty in the BHSc Program who actually care about our learning, and facilitating a community atmosphere. You can see this from our community debriefs - can you think of any other program that sets up events where students and faculty members can sit together in an open space, and discuss issues that health sci students are facing? Nope, didn’t think so.”
- Allison Chan, Class of 2014

“The best part of being a transfer is getting to know Stash, and his puppy. And maybe the other transfers too.”
- Kathryn Cleverly, Class of 2014

“The best part of being in BHSc is that it is my family away from home. Due to the highly collaborative nature of the program, we are all with each other so often that we really progress from being peers, to friends, to family.”
- Leyla Eryuzlu, Class of 2014

“My transition into BHSc was a really great experience. I went from being in a program so large that every day you met an unfamiliar face, to a small, welcoming program that became a second family for me.”
- Leyla Eryuzlu, Class of 2014
MARKO POPOVIC: RESEARCH ARTICLES BY CURRENT BHSc STUDENTS
By Linda Zhou, BHSc (Honours) Program, Class of 2015

Marko Popovic, Class of 2016, is the lead author of a paper entitled “Needs Assessment of Medical Care for Rural Jamaicans that Require Assistance from Short-Term Medical Missions”. To set the foundation of his project, Marko volunteered on a short-term medical mission (STMM) with Crystal Mission International. Short-term medical missions are defined as a well-established means of providing much needed healthcare services to the developing world. Marko’s particular STMM had been to Jamaica, one of many nations that experience a lack of information on the medical needs of its rural population.

Marko says that he had initially embarked on the medical mission out of curiosity. He thought it would be a great experience to see the frontlines of medicine and to observe the effect of medical missions on individuals in need. Marko shares that, before embarking on the mission, the team had carried out a literature search to have a better idea of the types of medical conditions they would likely be facing; however, to their surprise, the team could not find any relevant research in the literature. Logically, Marko hypothesized that “it would be valuable to start a project… so that others looking to go on medical missions to Jamaica would have a better idea of the disease prevalence and appropriate treatments needed for this nation”.

In Jamaica, one of Marko’s main responsibilities was the collection of sociodemographic data from patients; this was done through an interview format in which Marko administered a simple questionnaire. Marko also was actively engaged in the organizational aspect of the STMM, which meant facilitating the smooth transition of patients from the interviews they had with the volunteers to the assessment of routine clinical data by nurses, and finally to a full medical check-up and appointment with the attending physicians.

When asked about what he has taken from his experiences abroad, Marko speaks about awareness and appreciation, “I feel that this experience gave me a great sense of awareness of the medical issues faced by the rural Jamaican people. Seeing the faces of so many underprivileged people made me appreciate the vast luxuries I have been given in life and has made me more cognizant of the power that medically-related volunteer organizations have.” Through his new outlook on life, Marko shares truly inspirational advice, “try to identify certain areas of society that may need improvement—either locally, regionally, or internationally— and consider what beneficial changes you can make to the local populations, given your expertise”.

Marko hopes his study will be able to provide a comprehensive set of medical issues faced by the rural Jamaican population that is regularly cared for by STMMs. In addition, he hopes that “this work will be of great use to those travelling to Jamaica to take part in STMMs, as well as in bolstering scholarly awareness for an otherwise heavily under reported issue in the literature.” When asked about any hardships faced, Marko says that, “In the week that we had our mission, we managed to see and take care of 248 patients. The long days on the medical mission with dozens of patients each day were quite tiring, but extremely fulfilling at the same time.”

Marko’s article along with collaborators Milos Prica, Milan Minic, Beatrice Steele, Edward Chow, and Jelena Popovic has since been published in a 2013 issue of International Public Health Journal.

ANDREW WEBSTER: RESEARCH ARTICLES BY CURRENT BHSc STUDENTS
By Linda Zhou, BHSc (Honours) Program, Class of 2015

Andrew Webster, Class of 2015 is the lead author of the review article “Epigenetics and Cardiovascular Disease” – published in the January 2013 issue of the Canadian Journal of Cardiology. Epigenetics is the study of gene expression by mechanisms external to the DNA sequence. In short, epigenetics helps to explain how external environmental as well as endogenous factors affect the phenotypic expression of genes. In his paper, Andrew explores the mechanistic relationships between epigenetics and cardiovascular disease pathways. The paper also considers the growing significance that epigenetics may play in the future, as it provides new mechanistic insights as well as a host of novel clinical diagnostic and therapeutic applications.

Andrew began his work on the article last June at the vascular epigenetics lab of Dr. Philip Marsden, at St Michael’s Hospital, Toronto. Of the experience, he reveals that the process was “quite literally a 24/7 time commitment with constant researching, writing, editing, re-writing, adding and chopping,” repeated several times over. When asked if there was anything in the publication process that he found surprising, Andrew replied that the process had been “undeniably long, tiring, and stressful” especially with tight deadlines and packed school days factored in. However, Andrew’s optimism doesn’t fail as he shares that at the same time, the process had been undoubtedly rewarding. “You get out of it in experience, understanding, and appreciation of the strict standards of research, dependent on what you put into it in terms of energy, enthusiasm, and creativity.”

Indeed so – not only does the experience sound deeply rewarding and enriching but it also highlights the importance of translational research to the scientific community. The process of finding patterns that relate our current understanding of epigenetics to cardiovascular disease helps bridge the gap between various fields of research. Translational, integrative reviews allow scientists of different backgrounds to share important findings in ways that are specifically meaningful to one another.

When asked what the greatest lesson from this experience had been, he says, “keeping an open mind, persevering, remaining determined, and maintaining a high standard are the only ways that you can truly write a well-informed paper”. Sounds like great advice for all areas of our lives, actually. Andrew elaborates that “it was truly an eye-opening experience, but a task that must be entered with the utmost determination and tenacity”. Finally, when asked if his BHSc experience had aided in this process, Andrew reveals that, “in peer-editing at any level, having the ability to effectively and efficiently work in groups is one of the elements in writing a successful paper.”
Community Research

AMANDA LEE, 2012 CIHR AWARD RECIPIENT
BHSc (HONOURS) ALUMNUS (CLASS OF 2010)

Amanda is a Masters student in Pathology and Molecular Medicine at McMaster University

In my early years in the BHSc (Honours) Program, we briefly touched upon the immune system and I was fascinated by the impact the immune system has on the human body. It has a hand in a variety of human processes and diseases. In my third and fourth year, I was able to pursue my interest in immunology and virology through the courses that the BHSc (Honours) Program offered. For my fourth year thesis project, I knew that I wanted to work in an immunology laboratory, which is how I came to work with Dr. Ali Ashkar.

In Dr. Ashkar’s lab, I investigate the innate immune response to HSV-2 infection. In particular, I am currently investigating how natural killer cells (key innate immune cells that combat infection) are activated and how they are able to limit HSV-2 infection and replication. In understanding natural killer cell activation, we hope to be able to utilize the information to develop and/or improve therapeutics for both HSV-2 and other viral infections.

“This is an incredible achievement,” says Dr. Ali Ashkar, member of the Michael G. DeGroote Institute for Infectious Disease Research, McMaster Immunology Research Centre (MIRC), and Associate Professor in the Department of Pathology and Molecular Medicine. “It demonstrates that we have exceptionally gifted students who have the ability to alter the future of science.

What is so impressive is that Amanda was ranked first in her category and received a nearly perfect score from the reviewers, which is highly unheard of. She has a real gift for science and this award is a true testament to her talents.”

The BHSc (Honours) Program was instrumental in leading me to my current path. The introductory courses in immunology and virology first exposed me to these areas of research. The material was interesting and the professors seemed genuinely excited! As well, the option to conduct a fourth year thesis project in any discipline gave me the opportunity to experience the process from lab bench to textbook. It was an extremely rewarding experience, where I was able to spearhead my own research project. This eventually led me to publish three papers throughout my thesis and masters projects.

In the future, I hope to be conducting some form of research within the immunology field. There is still so much to learn and explore. I don't think I’ll ever get bored of learning about the immune system!

Research is interesting and exciting in that you're constantly learning, whether it's through the literature you read or the experiments you conduct. There is also this level of flexibility within research. Though you may research one particular area or disease, you can always decide to explore other areas, depending on your interests or where your own research takes you.
Jon is a PhD student in Biochemistry at McMaster University.

The astronomer Phil Plait said, “You can experience the wonder of seeing them for the first time, the thrill of discovery, the incredible, visceral feeling of doing something no one has ever done before, seeing things no one has seen before, know something no one else has ever known. No crystal balls, no tarot cards, no horoscopes. Just you, your brain and your ability to think. Welcome to science. You’re gonna like it here.” He encapsulates the essence of why I conduct research. Not only is my work going to help improve people's health someday, but it allows me to peer into the depths of the unknown and reveal, for the first time in history, how something works. That’s a special feeling.

I study new ways of killing bacteria and given that antibiotic-resistance has now reached crisis proportions, this area of research is tremendously important. It has the potential to improve human health on a global scale. Specifically, my research is focused on discovering novel small molecules that inhibit a cellular process called ribosome biogenesis. Indeed, while many current antibiotics inhibit the function of the ribosome after it is assembled, as of yet no molecules exist that prevent the complex and poorly understood process of ribosome biogenesis. We hope that small molecule inhibitors of ribosome assembly will one day represent a new class of antibacterial drugs, thereby increasing our repertoire of clinically useful antibiotics. I would see this as a remarkable success. I can’t think of anything more rewarding than contributing to discoveries that save lives.

Ribosomes are weird things. They’re absolutely massive and complex beyond imagination, yet bacteria can assemble them in just a couple of minutes. The molecular events underlying ribosome biogenesis are stunning, and they perfectly highlight the complexity, elegance, and beauty of finely tuned biochemical systems. Understanding how to perturb this process using small molecules is an extremely challenging problem, but the significance of finding a solution is enormous. Indeed, the great biologist E.O. Wilson stated, “In the attempt to make scientific discoveries, every problem is an opportunity — and the more difficult the problem, the greater will be the importance of its solution.” It brings me a lot of hope to think that I can improve people’s health if I can help figure out how to prevent ribosome biogenesis in bacteria. A complex solution will be required to solve such a complex problem, yet in this era of widespread antibiotic resistance, new molecules with novel and potentially bizarre mechanisms of action will surely be our best chance of success against drug-resistant bacteria.

BSc allowed me to explore. It let me figure out what I liked, what I didn’t, what I was good at, and what I wasn’t. Really, it was this exploration that led me into Dr. Brown’s lab and into the twisted world of the ribosome. “Indeed, in all my time as a mentor of junior trainees, I’ve rarely seen a student take to their science with such a combination of enthusiasm, hard work and intellect. He’s very close now to publishing a very high impact story on the first-ever chemical inhibitor of ribosome assembly. Likewise he has shown that he has the stuff to continue to deliver. Indeed, it’s early days in Jon’s research career but he is on an impressive trajectory and has a very bright future.” – Eric Brown

But beyond this, and as equally important, being a BSc student has made me comfortable with uncertainty. Scientific research is a confusing road littered with dead ends and inconclusive results. It’s difficult to navigate at times. But my time in BSc has taught me that forging ahead and trying something new is absolutely necessary for progress. Nobody ever did anything new without screwing up a few times along the way. The big leap is to accept the fact that you’re going to make mistakes, to learn from them, and to teach those around you to ensure those same mistakes aren’t repeated. When the dust settles, I guess BSc taught me how progress happens. How things get improved. How new ideas arise. I’m extremely grateful I picked that up.

What will I be studying in the future? No idea! I’m a scientist. I go where the questions take me. As of now, I’m entirely consumed by bacterial ribosomes, but whether this fascination will persist for 10, 20, 50 years, I’m not sure. I do know that I’d like to be a professor someday, though. I can’t think of too many professions where you get paid to explore the world and teach bright young students along the way. It’s a special career that I’d like to experience.

When asked if there was anything else that Jon would like to share with the BSc Community, he added this, The Most Astounding Fact - Neil deGrasse Tyson http://www.youtube.com/watch?v=9D05ej8u-gU
NSERC 2012 SCHOLARSHIP RECIPIENTS
By Ronald Leung, BHSc (Honours), Class of 2016

The Natural Sciences and Engineering Research Council of Canada dedicates several undergraduate student research awards (USRA) each year to enable undergraduate students to perform summer research at McMaster University with an NSERC grant holder. Five BHSc (Honours) students received the 2012 NSERC/USRA Awards. Three are profiled below.

Yoni Weiss, BHSc (Honours)
Class of 2014
NSERC Supervisor: Dr. Murray Junop, Associate Professor, Biochemistry and Biomedical Sciences

Main research topic: The study of an ultraviolet light-resistant organism Deinococcus Radiodurans, and how its natural protection is generated through the action of proteins.

NSERC research experience: “Once you receive the scholarship, you’re free to carry out the experiments in a more flexible manner. You don’t have to follow exactly everything you wrote in the proposal.”

Initial interest in Scientific Research: “It was from the Biomedical Specialization in second year that helped demonstrate the research process because you do a research project in Biochem 2L06. In an easy-to-understand way, you see what a researcher has to do on a regular basis. In the future, I want to combine something in both research and potentially medicine. This experience helped me to realize research is something worth doing and enjoyable!”

Advice for students interested in research: “If you’re interested in conducted research in first year, you understandably wouldn’t have as many skills and as much knowledge as upper year undergrad students. That is why the Biomedical Specialization is good for getting your foot in the door. We went through how research projects work and how to solve problems and interpret results and that’s very important to have in your tool box so that when you’re applying for these positions, your previous experience will help.”

Jana Cmorejova, BHSc (Honours)
Class of 2013
NSERC Supervisor: Dr. Justin Nodwell, Associate Professor, Biochemistry and Biomedical Sciences

Main research topic: The function of a regulatory protein of the bacteria Streptomyces that plays a crucial role in antibody production and resistance.

NSERC research experience: “The project is your own and you take the steps you want as opposed to just following guidelines or repeating similar procedures in level I science labs.”

Initial interest in Scientific Research: “Finding something new that nobody has ever done – innovation and creativity. Scientific results that could potentially have an impact on the world really have a lot of potential. I also think I’m a pretty science-oriented individual.”

Advice for students interested in research: “For the Biomedical Specialization, you receive your own lab-based project. An independent lab setting is different from chemistry because you have your own protocol and this is based on your own interests and gives you the necessary lab skills. It really helps you to gain the experience and application skills for a lab.”

Tahrin Mahmood, BHSc (Honours)
Class of 2013
NSERC Supervisor: Dr. Ping-Chan Yang, Assistant Professor, Pathology and Molecular Medicine

Main research topic: Gastrointestinal inflammatory diseases such as inflammatory bowel, which is very prevalent in Canada.

NSERC research experience: “My supervisor initially guided me with the steps I had to take but I got more freedom later. My research was very new so there was a lot of chance to direct my research.”

Initial interest in Scientific Research: “I’ve wanted to conduct research since high school. When you’re learning from a textbook, someone had to conduct countless experiments to derive those conclusions! It’s cool that you’re part of the ‘front-line’. Sometimes you get frustrated because things don’t work out so you have to keep that in mind too.”

Advice for students interested in research: “I would suggest taking your time and starting early to look for professors that you’d be interested in working with and start e-mailing them! Some people are really hindered by the fact that you’re in first or second year and they think professors don’t like that, but you can potentially be trained for 3-4 years, so don’t be scared if you don’t have any experience. You just need to have the interest and the experience will come. If you’re considering research, just try it out! It’s really different when you actually do it.”
BHSc (HONOURS) SUMMER RESEARCH SCHOLARSHIP

By Chujun Wang, Class of 2015

Each year approximately ten Bachelor of Health Sciences Honours students in levels I to III are awarded the BHSc Summer Research Scholarship. With a value of $2,000, this scholarship offers students the opportunity to gain first hand research experience in a particular field of interest. Three of last year’s scholarship recipients are Daniel Waltho, Katelynn Tang, and Angela Park.

Daniel Waltho, Class of 2013, conducted research in Dr. James Mahoney’s lab in the Pathology and Molecular Medicine Department. He worked on the development and evaluation of human-viral fusion proteins for use in novel antiviral drugs. Daniel was involved in two research projects that focused on the Chlamydia bacteria and influenza virus. His work included the cloning and purification of virulence factor protein fragments secreted by the Chlamydia bacteria, for the purpose of elucidating its structure. He further developed a therapeutic peptide to target viral proteins essential for the transcription process of the influenza virus. This experience gave him the opportunity to learn about a variety of lab techniques, including cloning, PCR, protein purification, immunofluorescence, and fluorescence microscopy. In addition, it has piqued his interest in basic science, leading to his further involvement in these projects past the summer term.

Katelynn Tang, Class of 2014, worked with Dr. Elyanne Ratcliffe in the Pediatrics Department, investigating the mechanisms behind how microorganisms in the gastrointestinal tract can influence the development of the enteric nervous system. She worked with gnotobiotic mice (a germ-free mice strain) to study the development of the enteric nervous system in normal versus gnotobiotic mice. Her specific roles included helping with tissue culture and immunohistochemistry, as well as blinding analyzers of the experiment. Katelynn gained a lot of hands-on experience in conducting experiments and even learned about the process of grant writing. This opportunity taught her about the hard work and dedication that are involved in research. She found the experience to be both challenging and educational. Her exact words were, “you don’t always get what you expect!”

Angela Park, Class of 2013, was involved in a research project in Dr. Murray Junop’s lab in the Biochemistry and Biomedical Sciences Department. The team collaborated with a French pharmaceutical company, to develop an inhibitor for the HldE enzyme, which is needed for LPS synthesis in Gram-negative bacteria. Angela was responsible for elucidating the crystal structure of HldE. Her success in completing the task was partially due to having taken a critical approach to the problem. Additionally, she learned about X-ray crystallography, which was used to determine the crystallized enzyme’s structure. This opportunity solidified Angela’s passion for doing wet-lab and biochemistry research, and sparked her interest in pursuing research in the future. According to Angela, it was “one of the best summers I’ve ever had!”

The BHSc (Honours) Summer Research Scholarship has offered, and continues to offer, a great opportunity for BHSc (Honours) students to explore the intricacies involved in conducting scientific research. Please refer to the following link for more information: http://fhs.mcmaster.ca/bhsc/research_scholarships.html

10TH ANNUAL BHSc (HONOURS) POSTER DAY

On Wednesday March 27th, 4th year BHSc (Honours) Program students gathered to present their thesis and senior project research in the Student Centre for the 10th Annual BHSc Poster Day!
4X03 is designed to encourage the development of a learning community that is shaped by interaction, cooperation and collaboration. A dynamic learning environment is created that involves a group of individuals coming together to work towards a common goal, learning from one another and integrating ideas and understandings. This collaboration enables individuals, through working together to help one another and to initiate positive change within multiple communities. In addition to, the areas of individual growth fostered by 4X03 include positive interdependence, interpersonal skills, individual accountability and group process.

4X03 begins in Level I and is completed in Level IV, where students formally enroll in the course to receive three credits. The evaluation of the course is based on personal growth and development of community building and collaborative learning skills. Students are encouraged to experiment, look for quality, not quantity, ask questions, become involved, create their role and take initiative! Most importantly, 4X03 is about creating personal goals and opportunities of which individuals are passionate.

**4X03 Initiative – BHSc Outreach**

In early 2002, an idea developed that aimed to create an opportunity for group volunteering. It would also provide an opportunity to foster interactions between local students and teachers and develop camaraderie and collaboration between students from all years of BHSc. This initiative began as an after school tutoring program at nearby schools. In its first year, there were programs at Hess Elementary, Delta Secondary School and Westmount High School. The schools and programs offered began to change and increase as interest and various needs shifted and grew. Over the years, BHSc Outreach has worked with over 20 schools and community partners in the Hamilton area. This year, the programs included are:

**Hess Street Tutoring**

- Act as mentors for elementary school students (majority of whom are ESL students)
- Provide homework help, as well as reading, writing and conversation skills

**Math Enrichment Program**

- Teach advanced math to grade 7-8 students to prepare for the Gauss math contest
- Good Shepherd
- Volunteer with inner-city, at risk youth
- Prince Philip Homework Club
- Provide classroom support for JK-Grade 5 classes
- Help students with homework
- Hamilton Hebrew Academy
- Tutor students one-on-one from grades 1-8
- After school homework club
- Catholic Children’s Aid Society
- Work with foster children from Grades 1-8
- Provide homework help, moral and emotional support
- Strathcona School
- Work on reading and writing with students from K-Grade 5

**Language Enrichment Program**

- Design and teach a new program in collaboration with teachers and other volunteers
- Grade 7-8 students at Dalewood

**4X03 Initiative – COPE: A Student Mental Health Initiative**

Former student Anne Dang applied to have COPE ratified as a MSU club in 2008 as part of a 4X03 initiative with other fellow students who were deeply passionate about mental health issues. Its mission was to inform students on issues of depression and mental health disorders, which is a surprisingly common phenomenon amongst university students. The club was created in hopes of providing a unique experience and learning opportunity for all students to learn about mental illnesses, address the stigma, myths and access to services. When created, the following elements were utilized as a means to accomplish this mission: promote education, reduce isolation, making information accessible and promoting participation. Organizations that COPE has worked with include: St. Joseph’s Hospital, Homestead Christian Care: Hope and Homes, Kids Help Phone Hamilton, Good Shepherd, McMaster Students Accessibility Services, Open Circle, Mental Health Rights Coalition Hamilton and the Mood Disorders Society of Canada.

In addition to general promotion and discussion of the issues, current COPE initiatives and campaigns include:

- **Move for Mental Health**
  - Begins with a 5km run or 1km wheelchair through McMaster campus
  - Raise awareness and eliminate stigma associated with mental illness

- **The Elephant in the Room**
  - Working with the Mood Disorders Society of Canada (MDSC) on their national campaign

- **A plush blue elephant is sold that represents the stigma associated with mental illness (all proceeds are donated to MDSC)**

- **By placing a blue elephant in the workplace or home, it signifies that your space is a safe environment to discuss mental health issues (stigma free zone)**

**Annual Crazy for Art Festival and Coffeehouse**

- Held on Wednesday, March 6th, 2013

COPE has been widely recognized for its contribution to McMaster and the community through the following awards:

- Jordan James Pickell Mental Health Achievement Recognition Award (April 2013) by the Mood Disorder Society of Canada
- 2011-2012 MSU club of the year
- 2008-2009 MSU Club of the Year Nominee
- Featured on Macleans, CBC Hamilton and the Silhouette

With the hope to reduce stigma and raise awareness surrounding mental health, COPE has grown from a humble community of a few members to one of the most active clubs at McMaster. Over the past few years, COPE has held biweekly awareness and fundraising initiatives on campus and facilitated volunteer placements in the Hamilton community. With COPE, we are a step closer to creating a safe and supportive space for students to share their stories. We are there to help each other when we go through difficult times. We want to make a difference in changing the way mental illnesses are viewed amongst us, with the openness and acceptance.

—Amber Chen, BHSc Class of 2013, COPE President 2012-2013
HTH SCI 4X03 (COLLABORATION AND PEER TUTORING)
BRINGING ABOUT CHANGE IN THE COMMUNITY

By Sawyer Peloso, Class of 2015

There is no doubt that HTH SCI 4X03 (Peer Tutoring and Collaboration) is distinctive in nature. It is one of many unique courses in the Bachelor of Health Sciences (Honours) Program that fosters individual growth and builds upon the skills required to be successful in collaborative environments. In fourth year, students are placed in groups where they collaborate to propose and follow through with personal and/or group initiatives. This provides an opportunity for students to contribute towards the McMaster and Hamilton communities in a meaningful way.

For example, in an attempt to showcase the diversity of BHSc (Honours) students one group has proposed a multicultural food fair initiative. The benefits don't stop there, as all proceeds will be donated to a Hamilton charity. Another initiative will bring all BHSc students together to explore some of the hidden gems in Hamilton, such as the Hamilton Philharmonic Orchestra and McMaster Museum of Art. Through exploring various landmarks in Hamilton, inter-year mingling and collaboration will be encouraged to further consolidate the tight-knit community feeling that is characteristic of the BHSc (Honours) Program.

These initiatives are not limited to helping the BHSc community alone. Many groups of students are working together to try and bring about significant change within the Hamilton and McMaster communities. One group has proposed an initiative entitled Random Acts of Kindness. No real organizational paradigm exists in terms of what kind acts are performed; however, the idea is that students are making a conscious collaborative effort to partake in kind acts that may enhance or brighten the lives of others. Such acts have included the donation of copious amounts of candy and chocolate to BHSc students after having completed their anatomy bellringer, as well as the collection and donation of prom dresses, suits and accessories to grade 12 students who would otherwise be unable to afford such items. Yet another group is synthesizing a “Hamilton Hot Spots” guide for students not only within the program, but for students within the McMaster Community with the aim of getting students to explore their surroundings beyond what many term the “McMaster Bubble”.

BHSc (Honours) students are aware of the many opportunities that Hamilton, McMaster and the Health Sciences community have given to them, and through this course it is evident that they are keen to express their appreciation by contributing and giving back in unique and creative ways.

NEW CLUBS

By Sawyer Peloso, Class of 2015

HEALTH SCI POPS ORCHESTRA

The Health Sci Pops Orchestra is a club that began in 2012 which is growing immensely in popularity. It brings together students from Health Sciences who express passion and enthusiasm for orchestral and pop music. Anyone with a background in strings, brass, winds or percussion may become a member. Students gather regularly to bond over a mutual interest and love for music as well as perform musical pieces chosen by students. With regular practice and rehearsal, students involved in the orchestra plan to eventually display their talents in front of a BHSc audience in a charity concert.

HEALTH SCI ATHLETIC COMMITTEE

New this year is the creation of the Health Sci Athletics Committee. Several students within the program expressed frustration with the fact that few opportunities existed to get involved with various athletics and sports at McMaster. As a result, this committee was created to provide easy access to a wide variety of athletic and sport opportunities for students in the Bachelor of Health Sciences (Honours) Program. Currently, several students are competing regularly to remain atop of the newly created Billiards Ladder as well as the Squash Ladder. A Health Sciences Soccer League has been created, whereby students have gathered regularly on Fridays to participate in competitive soccer games with each other. Intramural basketball, and indoor soccer are also in the works. The wide array of opportunities has given all sports fanatics within the BHSc (Honours) Program the chance to remain competitive and actively involved in both team and individual sports.
Don’t be afraid to spend time in the lounge. Everyone is super nice, and it’s a great way to meet new people. [There] are a lot of upper years but they’re all super friendly and talking to them is a good way to get an idea of what your future in BHSc looks like. As important as forward planning is, constantly thinking about all the things you have to do is a good way to stress yourself out. Keep everything you have to do in mind, but just do it all day by day and you’ll get through it in no time. - John Sawires, Class of 2014

Time-management. Even if one subject seems more “important” or “heavier” than the others, it’s important to remember that all of them are equally important. Why else would you take them? Don’t be afraid to speak to people! Classmates, TAs, professors...they can sometimes be intimidating, especially if you’re shy, like me! But, once you take that first step, you’ll find it’s worth it! After a very stressful day, resist the urge to turn on the TV. Run. Dance. Play football. Anything to be active and let it out. Otherwise, it builds up inside of you... - Beatrice Preti, Class of 2015

If you make food in res, share with your floormates. Next time they make delicious goods, they’ll make sure to share with you too! As easy as it is to stick with Health Sci friends in first year, spend some quality time in res! You’re stuck with us Health Scis for 4 years but you can only meet your res friends in first year!

- James Bao, Class of 2013

Remember that it’s just first year. Enjoy it while you can! There’s not a lot of time for hanging out with friends, socializing or partying in second year, and your work load will only get heavier as you move forward in life. Take the time to enjoy it now while you can. People say that university is one of the best experiences you will have for a reason.

- Christine Li, Class of 2015

Get a good large agenda - it is worth spending the money on. It will change your life. Go to the information sessions about different master, PhD and professional programs and ask a lot of questions. You will find your true passion sooner or later! Try to become involved in the Health Sciences community, you will enjoy your years here a lot more if you realize how privileged you are.

- Mariam Besada, Class of 2014

Make use of the Student Wellness Centre. There are a lot of friendly doctors available that will see students. You can usually get an appointment for the same day or the following day and the wait times are not bad at all. The Student Wellness Centre has many other useful resources including ways to relieve stress and counselors for students who need someone to talk to.

- Marie Colantonio, Class of 2013

Keep an eye out for Valentine’s dinner specials at Bistro. Lobster is often involved. Sabrina Lue Tam, Class of 2015

- Sabrina Lue Tam, Class of 2015

BHSc COMMUNITY NEWSLETTER TEAM

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