

Learning from experience



Susan Elliott
Dean, Faculty of Applied Health Sciences

The University of Waterloo is synonymous with excellence in co-operative education. It was the foundation on which we were built and by which we are truly defined. Our activities in co-operative education allow our students to link their academic and career goals, leading to success in work and life. While 60 percent of Waterloo students are engaged in co-operative education, there are still 40 percent for whom we need to provide work-integrated learning opportunities outside of the co-op experience. We do this through experiential education — learning opportunities steeped with experience, both inside and outside the classroom. To be meaningful, these activities must connect to curriculum, be tied to explicit learning outcomes and involve supervision, assessment and evaluation.

In Applied Health Sciences (AHS), we are enhancing our existing experiential education opportunities and implementing some exciting new initiatives to facilitate the highest quality of enhanced learning amongst our students.

“tell me and I forget
teach me and I remember
involve me and I learn”

BENJAMIN FRANKLIN



We are developing a first-year inquiry course designed to promote essential skills, like problem solving and critical thinking, which will help students throughout their university career. Statistics have shown that students exposed to inquiry-guided learning are more likely to successfully complete their program and achieve the highest standings.

We are the first Faculty on campus, and the second in Canada, to implement a “Common Book” program. Incoming students are encouraged to read *The Immortal Life of Henrietta Lacks* by Rebecca Skloot — a compelling story about the woman whose cancer cells started the HeLa human cell line. Students are asked to consider the major issues reflected in the book, including research, ethics, poverty and social justice — all central to Applied Health Sciences curriculum — and are urged to discuss their thoughts through an online discussion board. Particularly meaningful is the fact that researchers use HeLa cells in our own labs and students potentially have the opportunity to work with them during their studies.

Kelly Anthony, highlighted in our cover story, uses community-service learning in her classroom — a vibrant example of experiential education in action. A Distinguished Teaching Award winner, Anthony is Applied Health Sciences’ first Teaching Fellow and in this role is mandated to raise the bar around awareness, innovation, and enhanced teaching practices, including various experiential education opportunities.

In AHS and at Waterloo, we are galvanizing and institutionalizing experiential education — creating a “Made in Waterloo” version that will build on our solid foundation as a pioneer in co-operative education and solidify our reputation as a leader in the field of work-integrated learning. ■

« Students, faculty, and staff will forge connections this fall reading *The Immortal Life of Henrietta Lacks*, our common book program for incoming AHS students.

BEYOND BOOKS

students engage in experiential learning

A pillar of experiential learning, co-op provides AHS students with applied opportunities in the workplace. This year, Health Studies student Nemica Thavarajah won the University’s **Co-op Student of the Year Award** for her work at Sunnybrook Health Sciences Centre.



As part of Recreation and Leisure Studies’ second-year program management course, students plan, organize, implement, and evaluate a program. In November, the class hosted **Waterloo West Neighbour Fest**, a day-long family event at the Stork Family YMCA and Harper Library.



Now in its second year, the **anatomy lab’s summer dissection club** gives kinesiology student volunteers the opportunity to prepare human cadavers for the fall term.



In June, three student teams from Waterloo’s School of Public Health and Health Systems beat out 26 other teams from across the country to claim the top spots at the **Canadian Evaluation Society’s student case competition**. Held annually, the competition helps students build skills in evaluating public policies and programs using real examples from the public sector.



In recognition of **Therapeutic Recreation Awareness Month** in February, a group of students, under the supervision of Leeann Ferries and Carrie Briscoe, organized a series of hands-on events on campus. At one of the events, a group of students faced off against three of Canada’s Paralympic athletes in a game of sitting volleyball.

From books to bikes, undergraduate students in the KIN 205 lab measure heart rate response to predict maximal aerobic power. **Waterloo’s kinesiology program** employs six full time lab coordinators to provide undergraduate students with small group, hands-on experiences.



AHS NEWS

The Faculty is pleased to announce the appointment of **Jim Rush** as Associate Dean as of July 1, 2013. Rush, a Canada Research Chair in Integrative Vascular Biology, leaves his position as Chair of the Department of Kinesiology to take on this new role.



The Faculty of Applied Health Sciences proudly honoured **Alyson Woloshyn (BA '00, RLS)** as the 2012 AHS Alumni Achievement Award recipient and **Adil Bhatti (BSc '05, KIN)** as the 2012 AHS Young Alumni Award recipient at spring convocation.



Kinesiology graduate **Ammar Bookwala (BSc '13, KIN)** was the recipient of the 2013 Alumni Gold medal for outstanding academic achievement and extracurricular involvement. Bookwala was also the first recipient of the Alyson Woloshyn Leadership Award, created in memory of Woloshyn. The award recognizes an individual who has made significant leadership contributions to the student experience.

Faculty releases first strategic plan

» VISION

To be a global leader in protecting and promoting individual and community health and well-being, preventing illness and injury, and optimizing abilities across the life course for all.

It was a year in the making, but on Friday May 31, Faculty Council approved the first-ever Applied Health Sciences strategic plan.

Built around a new vision and mission statement, the plan outlines the Faculty's priorities, goals and objectives through to 2018.

"This strategic plan will guide our actions, shape our plans, and act as a benchmark for our successes over the next five years. I would like to sincerely thank all those who participated in the creation of the plan by offering their expertise, feedback and ideas," said Susan Elliott, Dean of Applied Health Sciences.

The plan was created through a consultative process with key stakeholders — including more than 800 AHS alumni, 160 staff and retirees, 140 undergraduate and graduate students, and 14 leaders from the academic, private, healthcare, and not-for-profit sectors. ■

View the full strategic plan at uwaterloo.ca/ahs/strategic-plan.

Reasons to celebrate



Internationally-recognized leader in the field of maternal and child health, Dr. Jean Chamberlain Froese received an honorary Doctor of Laws at AHS' first convocation ceremony in June. She is pictured here with Dean of Applied Health Sciences, Susan Elliott.

On June 11, more than 300 graduating students filled the Physical Activities Complex to mark the first AHS-exclusive convocation ceremony. At the ceremony, the University awarded Dr. Jean Chamberlain Froese an honorary Doctor of Laws for her tireless advocacy for the rights of women and children. An associate professor in obstetrics and gynecology, Dr. Chamberlain Froese is director of the International Women's Health Program, and executive director of Save the Mothers, an international organization she helped found in 2005. ■



New app helps more people "butt out"

Trying to quit smoking? We have an app for that.

In April 2012, scientists at the Propel Centre for Population Health Impact launched Crush the Crave, a research-based smoking cessation app. Now, just over one year later, the popular app has been updated to help keep even more people from smoking.

Based on scientific findings related to tobacco use among Canadian youth, Crush the Crave offers a customized quit plan to help young people monitor habits, understand craving triggers, share results and gain support from friends online. It also offers social media tools, such as videos and opportunities to chat with friends until the craving subsides a few minutes later.

The app was developed in collaboration with Health Canada, the Canadian Cancer Society, and the student-oriented quit smoking program, Leave the Pack Behind.

"Young Canadians may, for the first time, have a shorter life expectancy than their parents," said Bruce Baskerville, a senior scientist at Propel. "This is the first evidence-based mobile app targeted to people between the ages of 19 and 29 — the demographic with the highest smoking rates in Canada, and the most users of smartphones."

With more than 1,200 installations, more than 17,000 Facebook fans, and 600 Twitter followers, the app's growing popularity suggests it is striking a chord with young people. A randomized controlled trial is underway to determine its impact and cost-effectiveness. ■

To learn more about the app, visit crushthecrave.ca.

UW WELL-FIT launches new program

In February, thanks to generous funding from the Zonta Club of Kitchener-Waterloo, UW WELL-FIT launched LIVING-FIT, a unique four-week group program for women undergoing adjuvant hormone therapy for breast cancer. The program educates women on how exercise can help them adhere to their treatment plans and manage treatment-related side effects. "Our investment in UW WELL-FIT is an opportunity for us to make a meaningful impact on the lives of people in our community," said Fran Fisher, Zonta Club president. ■



AHS NEWS



MAREP director steps down to focus on teaching and research

After nearly 12 years as Director of the Murray Alzheimer Research and Education Program (MAREP), Sherry Dupuis has stepped down from the role to focus on her teaching and research activities with the Department of Recreation and Leisure Studies and the Partnerships in Dementia Care Alliance. Dupuis' last day as director was May 31, 2013.

Under Dupuis' direction (pictured above with Kenneth Murray, MAREP founder), MAREP evolved into a renowned research unit known for innovative knowledge translation tools like the By Us For Us Guides and the Changing Melody Forum.

Dupuis' expertise and passion significantly raised the profile of dementia research across Canada and around the world. Her research will continue to enhance the lives of those experiencing Alzheimer's disease and related dementias.

MAREP will continue with their research, programs, and services while investigating new leadership.

Bringing lessons to life: AHS leads experiential learning at Waterloo



A kinesiology student gets hands-on experience treating a varsity athlete under the supervision of Head Athletic Therapist Rob Burns.

“Rule in and rule out things as you go,” Waterloo’s Head Athletic Therapist tells a group of fourth-year kinesiology students as they assess injured varsity hockey player Elora Brenneman one muggy afternoon in June at the Columbia Icefield clinic. This isn’t your typical university lecture, but Rob Burns’ fourth-year sports injuries assessment class is just one of a growing number of courses that use experiential learning to bring lessons to life.

“I try and make the course applicable to their future careers, safely develop their technique and tie together the other courses they take here at Waterloo,” says Burns, who follows his hour-long lecture each week with a two hour lab where students practise musculoskeletal evaluation and hands-on assessments on each other and on varsity athletes.

A leader in co-operative education, Waterloo has long been a proponent of experiential learning — a multi-dimensional approach to education that connects students to the real world by providing them with relevant, hands-on opportunities to apply their theoretical knowledge to practical experiences.

But now, with an increasingly competitive job market waiting for students after graduation and a renewed focus on teaching excellence with the launch of the university’s Teaching Fellows Program in February 2012, Waterloo is setting the bar even higher. Across campus professors and instructors are integrating experiential learning into their courses and Applied Health Sciences is leading the way.

Ahead of the learning curve

“There is a real hunger for learning in a real-world context among all our students, not only our co-op students,” says Kelly Anthony, a lecturer in the School of Public Health and Health Systems and the Faculty’s newly-appointed Teaching Fellow.

Winner of the 2013 Distinguished Teacher Award, Anthony’s unconventional teaching style has students lining up for a spot in her class every term.

“I want my students to experience another model of how we can convey information and ideas. I try to encourage deep learning,” says Anthony of her preferred hands-on teaching style.

Each year, as part of her social determinants of health class, Anthony takes students on a guided walking tour of downtown Kitchener led by a formerly homeless man. On the tour, students get a chance to speak with homeless people and see first-hand where they sleep, find food and access medical care.

“It’s intense and personal. But I want students to know that it’s reality, it’s their world,” says Anthony.

Also on Anthony’s syllabus are visits to local shelters, low income residential facilities, and a trip to Grand Valley Institute for Women, a federal prison.

“While textbook learning is fine, visiting a place like an actual prison and meeting some of the women was an entirely different story,” says Kinshuk Kumar, one of the students in Anthony’s class. “It brought a degree of humanity to what we had been talking about. It gave me a completely new level of understanding.”

For Anthony, that’s all that matters. “The goal is learning. If that means going outside of my teaching comfort zone, then I have to take the risk. What’s important is what the students walk away knowing, not what I walked in knowing.”

From classroom to community

Troy Glover would agree. Last year the Recreation and Leisure Studies professor ventured into uncharted territory when he restructured the popular program management course REC 220 and let students run the show.

Aimed at teaching students how to plan, organize, implement, and evaluate a program, Glover thought it only natural that REC 220 somehow involve the community.

What transpired was Waterloo West Neighbour Fest, a day long family event hosted by Glover’s students in collaboration with the Stork Family YMCA and the Harper Public Library.

“It was the first time we did programming in the community,” says Glover.

Prior to the event, students conducted needs assessments with YMCA patrons and determined gaps in current programming. Based on this information, they developed specific programs to offer at the Saturday event.

Sharon Mair, one of the students in the class, says designing and implementing Neighbour Fest gave her the real-world experience she was craving.

“Recreation and Leisure Studies is a hands-on field, so it’s important for us to get the practice, to push ourselves and learn our limitations. The class gave us a skill set we’ll need when we graduate, which is why the experience has so much value.”

Anatomy of an education

Tamara Maciel certainly understands the value of hands-on education. As the coordinator of one of only a few anatomy labs outside of medical schools in Ontario, Maciel ensures that every first-year kinesiology student has opportunity to learn from human cadavers.

“Having this type of opportunity is critical to our students’ learning. The lab gives them a chance to see beneath the skin and truly appreciate human form and function,” she says.

A formerly homeless man speaks to a student about life on the streets during a guided walking tour of downtown Kitchener. The tour is part of Kelly Anthony’s (pictured right) social determinants of health class.



It’s a kind of appreciation students just can’t get from a textbook.

“Diagrams aren’t in 3D. It helps to see and touch what you’re trying to understand. I’m a very hands-on learner, so this helps me immensely,” says Jonathan Best, a fourth-year kinesiology student, and one of over 200 upper-year students who volunteer in Maciel’s summer dissection club.

Maciel started the club two years ago in response to an overwhelming student interest in anatomy. While working to help prepare cadavers for the fall term, student volunteers get an unparalleled glimpse into the human body.

“They can see things like artificial heart valves, joint and hip replacements and gall stones first-hand,” says Maciel. “It’s a huge advantage to their learning.”

“A textbook can’t show you how it all connects. This is the best learning opportunity in kinesiology anyone could have. There is no comparison. Because of experiences like this, I will remember what I learn,” says Best.

Last fall, Rob Burns received an email from one of his former students proving that experiential learning can have lasting effects.

“I just wanted to let you know that your class prepared me so well for physio school,” writes Laura McGill. “Thank you for creating so many opportunities to build foundational knowledge. It’s clear that we are well prepared to succeed — in whatever field we choose.” ■

THE LATEST

NEWS



Congratulations to **John Hirdes** (pictured above left), recipient of the Queen Elizabeth II Diamond Jubilee Medal. The honour recognizes Hirdes' leadership in the development of standardized assessment tools enabling the delivery of high quality home care and community care services across Canada.



Paul Stolee was honoured with the Canadian Association on Gerontology Evelyn Shapiro Mentoring Award.

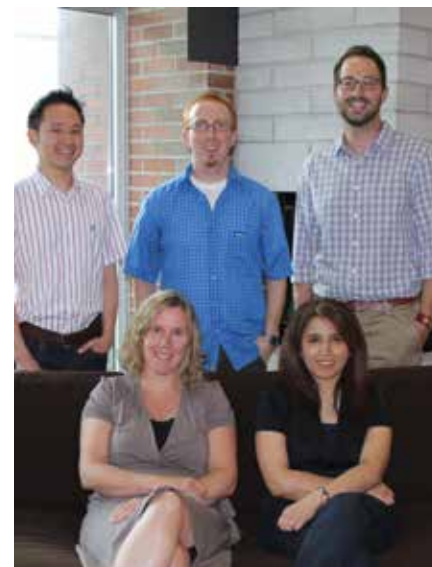


The department said good-bye to **Paul McDonald**, Director of the School of Public Health and Health Systems, and wished him luck in his new role as the

Pro Vice-Chancellor of the College of Health at Massey University in New Zealand. He laid the groundwork for continued growth and excellence in the SPHHS, including the development of new undergraduate and graduate programs and plans for a new physical home for the School.

New faces

The School welcomes the following new faculty members (pictured clockwise from top left):



Joon Lee | Assistant Professor
Interests: health informatics, decision making in health care

Brian Laird | Assistant Professor
Interests: risks from environmental contaminants

Chris Perlman | Assistant Professor
Interests: health evaluation, mental health services research and evaluation

Elham Satvat | Assistant Professor
Interests: role of adult neurogenesis on memory formation

Diane Williams | Lecturer
Interests: bio-medical determinants of health

Building capacity

To become Canada's best, the School of Public Health and Health Systems needs a home large enough to house its aspirations. Over the next five years, the School will add several new degree programs, double student enrollment, and increase interdisciplinary research directly impacting health care policy.

At a cost of \$25 million, the new 63,000 square-foot state-of-the-art facility represents the largest fundraising campaign ever undertaken in Applied Health Sciences. "The building will catalyze our ability to engage new partners from other faculties, universities, agencies and sectors. Such partnerships ensure that we will become a public health leader, in the community, across the country and around the world," Dean Susan Elliott emphasized.



Rendering created by Shamir Panchal

Steve McColl retires

After 36 years in the field of health studies at Waterloo, Professor Steve McColl retired July 1, 2013. As colleagues and students gathered to honour McColl, one of the founding faculty members who established the Department of Health Studies in 1978, they recognized his retirement was indeed a milestone in the history of the School of Public Health and Health Systems (SPHHS).

Originally joining the Faculty in the kinesiology department, McColl — a young "hot shot" cellular biologist from Purdue University — was part of the visionary concept to expand the Faculty beyond the biomedical side of health care. McColl's contributions to the department, often behind the scenes, have been vital to the growth and impact of the SPHHS. Serving as Associate Chair for Undergraduate Affairs in the early years, McColl helped establish a rigorous undergraduate curriculum, and high teaching standards. Beyond his stellar work in the classroom, McColl provided leadership at critical points in the development of the School, serving as Chair from 2002 to 2008 and after that as Associate Chair for Graduate Studies, when initial plans for the school were being implemented.



"Steve has done so much to initiate the School, and to nurture and its people along the way," says Roy Cameron, retired faculty member of SPHHS.

John Garcia replaces Steve McColl as interim Director for the School of Public Health and Health Systems.

New programs

Two new degree programs, an honours Bachelor of Health Promotion and a Master of Health Evaluation (MHE), will be offered in the SPHHS. The Health Promotion program, which will begin in September 2013, prepares graduates for health-focused careers in public health units, health centres, and with disease-fighting organizations. The MHE, set to launch in September 2014, is Canada's first professional online course-based graduate degree providing training in the evaluation of health programs and services.

Mary Carothers Bell BSc '06

There is no such thing as a typical day at work for **Mary Carothers Bell**, a graduate of the Health Studies program. Carothers Bell currently works in Thunder Bay, Ontario, developing health programs and community engagement strategies for remote First Nation communities in Northern Ontario. As a Community Development Worker with NorWest Community Health Centres, Carothers Bell is responsible for assessing health needs in communities and working with the local populations to develop health promotion programs that fulfill their needs.



Before moving to Thunder Bay, she worked in Fort Smith in the Northwest Territories. There, after conducting a youth health needs assessment in Fort Smith, gaps in necessary health care services became clear and, in response, she created a unique youth-inspired health facility called the Health Café at a local high school. On the surface the Health Café appears to just offer healthy snacks, but the main intent is to provide a wide range of health services to at-risk youth in the community.

Carothers Bell identified that many youth expressed concerns about the stigma associated with accessing health services, especially those related to sexual health. In response, one of the unique features of the facility is that it's youth-driven, to help reduce the stigma and increase the comfort level of those accessing the health services. Youth participating in the development and maintenance of the café not only ensures that youth needs are met, but increases the likelihood of them taking responsibility for their own well-being. This in turn creates a health café that is self-sustainable and run by the very community that benefits most.

Today Carothers Bell is still involved with the Health Café, but from a consultation perspective. One of her goals was that the facility would operate under the leadership of the local community, which has become a reality. Her model has even been adapted by other communities across the Northwest Territories and she is now exploring expanding the concept as part of youth healthy living strategies in urban settings.

Recreation and Leisure Studies

ALUMNI PROFILE

THE LATEST

NEWS

New faces

The department welcomes:



Lisbeth Berbarly

Assistant Professor

Interests: social change, subjectivist theories, and creative analytic practices



Luke Potwarka

Assistant Professor

Interests: inspiration, consumer behaviour, marketing, and sponsorship

Congratulations to **Bryan Smale**, **Sherry Dupuis**, and **Troy Glover** on being elected Fellows of the Academy of Leisure Sciences.

Laurie Porter, 4B Therapeutic Recreation, won Therapeutic Recreation Ontario's Student Essay Competition for her piece "Therapeutic Recreation...Living the Possibilities."



PHOTO: © 2013 Waterloo Region Record, Ontario Canada

Diana Parry was honoured as one of Waterloo Region Record's Top 40 Under 40. Professor Parry was also appointed Special Advisor to the university's President for Women's and Gender Issues.

Campus Athletics Research Network

"I've caught the research bug," says undergrad student Kelly Harris (pictured right). The affliction is the result of an innovative new collaboration between the Department of Recreation and Leisure Studies (RLS) and the University's Department of Athletics and Recreational Services.

The Campus Athletics Research Network (CARN) serves as a "research shop" where undergraduate and masters students select a challenge faced by the Athletics department and address it using theoretically grounded research approaches and techniques.

Harris's first project involved developing a diagnostic survey to help the Athletics department match campus recreation programs with new users' interests. She's now considering a second CARN project, which examines factors influencing alumni decisions to give to varsity athletics.

"The CARN provides important experiential learning opportunities for RLS students," says CARN director Luke Potwarka. "It allows our students to apply theory



and engage in a research process to address 'real world' challenges."

For many students, this is the first chance to experience the relevance and application of research first-hand. "Students have the opportunity make practical recommendations to the Athletics department based on their research findings," explains Potwarka. "For me, witnessing students' research being used to inform managerial decisions, policy, and strategy is the most rewarding element of the network." To learn more about CARN, visit uwaterloo.ca/rec/carn.

Research extols benefits of camp

Summer camp is about more than s'mores and sing-alongs. A camp counselor in his youth, professor Troy Glover suspected that camp changes kids for the better. Thanks to the Canadian Summer Camp Research Project led by Glover and RLS collaborators Steven Mock and Roger Mannell, he now has the data to prove it. "We found that summer camp allows for either improvement or reinforcement of positive attitudes and behaviours, and these changes are maintained long after camp has ended," said Glover.

The latest findings, wrapping up a three-phase project, were based on the perceptions of 1,405 parents of campers between the ages of 4 and 18. The study examined whether parents noticed changes in their children's social integration and citizenship, environmental awareness, attitudes towards physical activity, emotional intelligence, and self-confidence after returning from camp.

"Parents perceived positive development in all areas," says Glover. "Regardless of age, gender or camp experience, all campers experienced some degree of positive outcomes and growth." Older children experienced the greatest changes in attitudes and behaviours, while girl campers experienced greater levels of social integration and citizenship than boys. Children who stayed at camp longer exhibited greater changes, with returning campers experiencing greater positive changes than new campers.

"The camp experience transfers into everyday life," explains Glover. "Parents can leverage this and help children foster the skills and values to become successful adults."

Roger Mannell retires

As a prominent social psychologist in the field of leisure and the former Dean of Applied Health Sciences at the University of Waterloo, Roger Mannell should be well-prepared to walk the talk.



Mannell (pictured below with colleagues in the Department of Recreation and Leisure Studies) retires this September after nearly four decades of scholarly contributions and administrative leadership at Waterloo. "Much of what we know of the social psychology of leisure can be traced to Roger's work," says department chair Mark Havitz. "His impact on our professional field has been nothing less than profound."

A fellow and past president of the Academy of Leisure Sciences, Mannell pioneered research methodologies including path and structural modeling, and the experiential sampling method. He uncovered the social and personality factors that influence how people choose to use their leisure and how leisure choices affect the quality of their lives, and is a world-renowned expert on theories of play. In recent years, his research has examined the impact of time pressure and stress on family leisure and lifestyles, the relationships between work and health, and leisure, mental health, and well-being.

In addition to inspiring legions of undergraduate and graduate students, Mannell led and represented the Faculty as Associate Chair, Chair of both the dance and recreation and leisure studies departments, and the founding director of the RBC Retirement Research Centre. A dedicated father of five, Mannell looks forward to spending more time at the cottage with wife Marg and the next generation, where he can truly study leisure in its finest.



Chris Bourne MA '01

"I have a hard time relaxing. Life for me is go, go, go," says **Chris Bourne**.

One glance in his garage suggests this is an understatement: amongst the kids' toys hangs a plethora of skis, handcycles, and beat-up racing chairs that drives his wife crazy.

An accomplished wheelchair racing triathlete and avid water skier, Bourne has spent decades promoting a physically active lifestyle for people with all types of disability.

It was more than 20 years ago, enroute to a day of waterskiing, that a freight train collided with Bourne's car leaving him paralyzed from the waist down. Following extensive rehabilitation, he re-embarked on his athletic and scholarly pursuits.

Missing his days on the lake, he built a makeshift seat, bolted it to a kneeboard, and was back up on the water. The purchase of professional skis and dogged determination led to three world disabled water skiing championships and multiple Canadian records.

He finished his business degree and later completed his master's in recreation and leisure studies. Bourne now works as a rehabilitation counselor with Spinal Cord Injury Ontario and manages the Changing Minds, Changing Lives program with the Canadian Paralympic Committee.

Outside of work, he has chaired committees to make towed water sports more available to people with a disability, and helped develop SkiAbility: a nation-wide outreach program that provides adapted water ski clinics for instructors and skiers with a disability.

As an athlete role model, he regularly visits schools and rehabilitation centres delivering motivational and educational presentations to inspire young people to achieve their goals.

Bourne believes challenges are what make life interesting. Overcoming them is what makes life meaningful. "I love to push the boundaries" he asserts. "The way I define the limits of what's possible is by continually going beyond them to what is initially perceived as impossible."



NEWS



Professor **Bill McIlroy** has been appointed Chair of Kinesiology for a four-year term commencing July 1, 2013. He previously served as Associate

Dean, Graduate Studies and Research (2010 – 2012) and as Associate Dean, Research (2012 – 2013).

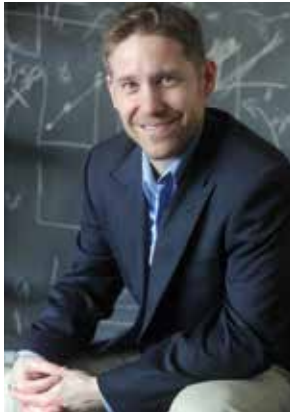


PHOTO: © 2013 Waterloo Region Record, Ontario Canada

Biomechanics professor **Andrew Laing** has been awarded The Record's 2013 Top 40 Under 40. An assistant professor in kinesiology, he has spent the last 10 years pioneering ways to minimize fall-related injuries among older adults.



Professor **Eric Roy** has been appointed Fellow of the Canadian Society for Psychomotor Learning and Sport Psychology (SCAPPS). The Society

promotes the study of motor control, motor learning, motor development, and sport psychology in Canada.

New faces...

The Department of Kinesiology welcomes the following new colleagues:



Ewa Niechwiej-Szwedo | Assistant Professor
Interests: Eye movements, visuomotor coordination during functional tasks, development of motor control, binocular vision, multisensory integration



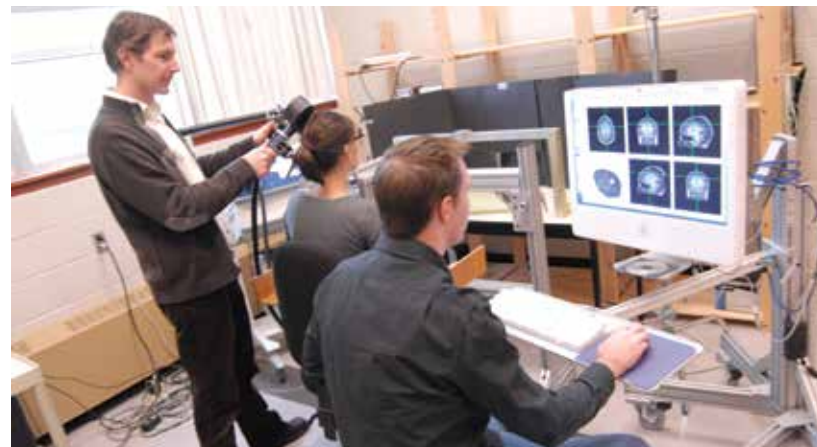
Michael Barnett-Cowan | Assistant Professor
Interests: Multisensory integration, perception and action, vestibular system, psychophysics, cognition, gravity perception, neurostimulation

...and new spaces

The Faculty of Applied Health Sciences is growing significantly with new programs, increased enrolment and the addition of new faculty and staff to support these activities. Space shortages have never been more challenging. Fortunately, relief is in sight.

Tech Town, a privately owned building in the University's David Johnston Research and Technology Park was donated to the University in 2012 and Applied Health Sciences is benefiting from this acquisition. The former Columbia Lake Health Club in Tech Town will be renovated for research staff and graduate students from all departments. Kinesiology is creating a multi-disciplinary clinical research and innovation centre that will include assessment facilities as well as areas for evaluating new interventions, therapies and training approaches.

In the spring of 2014, ground will break for a new kinesiology building on main campus that will provide much needed laboratory and teaching space for students and faculty. Wet lab space will accommodate highly specialized instrumentation for research. The three-story building will also include a new 300+ seat lecture theatre.



Professors receive grants for life-changing research

Leading-edge research with the potential to improve human health has earned national recognition for four Waterloo professors — kinesiology faculty members James Rush, Richard Staines, Jack Callaghan and Ken Stark, who hold the title of Canada Research Chair (CRC).

James Rush, Canada Research Chair in Integrative Vascular Biology since 2003, examines the cellular and molecular basis for poor blood vessel function in hypertension, and for the beneficial effects of exercise, dietary factors and antioxidants on blood vessel function. **Richard Staines**, Canada Research Chair in Sensorimotor Control since 2005, is developing new innovative strategies based on basic knowledge of neural mechanisms for motor control, to help patients recover movement after suffering a brain injury, such as a stroke.

In October 2012, **Jack Callaghan** advanced to a Tier 1 chair in Spine Biomechanics and Injury Prevention, while **Ken Stark** joined the roster as Canada Research Chair in Nutritional Lipidomics. Callaghan's research into lumbar spine function and spinal injury is influencing workplace standards, helping to prevent spinal injuries and improve treatment for people suffering from lower-back pain. Stark studies nutritional lipidomics to better understand the links between diet and disease. He likens his work to dietary forensics, with body lipids such as cell membranes telling the story of a person's eating habits and how their diet impacts their overall health.

There are 2,000 Canada Research Chairs at institutions across Canada, including 60 at the University of Waterloo.



ALUMNI PROFILE

» Pro Stergiou BSc '93



Gaining the trust and support of the best amateur athletes in Canada and their coaching team is just another day on the job for kinesiology graduate **Pro Stergiou**. As Director, Biomechanics and Performance Analysis at the Canadian Sport Centre Calgary (CSCC), Stergiou works directly with high performance athletes and coaches to analyze the biomechanics of their movements, at their venue, while they perform.

"The key to success is all about building a strong relationship with athletes right from day one," says Stergiou, who credits a co-op position with Dave Winter, a former faculty member in kinesiology, for inspiring him to pursue a career in biomechanics.

"Funny story, I didn't even know what kinesiology was when I applied to university," Stergiou shares. "A friend told me about the program in the myriad of physical education programs and I was like Kines-what? It was just my good fortune that I found my way to kinesiology and the field of biomechanics."

Now, as he reflects on his five years at Waterloo, three years playing varsity soccer, the co-op program and his studies in kinesiology, Stergiou still attributes the skills and knowledge he has today to a top-notch program that gave him hands-on learning in the lab that helped him hit the ground running upon graduation.

Beyond his director role, Stergiou is an instructor for the National Coaching Institute's biomechanics course through the CSCC where he teaches elite Canadian coaches about technology and biomechanics.

"I explain some of the various technical tools to help in the assessment of an athlete's movement and help coaches learn how to best support their athletes," he says.

Working with coaches to train the Canadian men's and women's luge team, Stergiou uses detailed, real-time video analysis to improve the lugers' starting times and techniques. The ultimate pay-off? The hope that the luge team will take home gold at the next Olympics in Sochi.

Stergiou has watched many amateur athletes achieve their goal and become Olympic medalists over the years. For this AHS alumnus, the sense of accomplishment he feels knowing he was part of that dream is all that matters at the end of the day.

"When an athlete attributes their success to your work — what could be a better reward than that?"



Turkey quiche

Osteoporosis is a condition that causes bones to become thin and porous, decreasing bone strength and leading to increased risk of breaking a bone. At least 1 in 3 women and 1 in 5 men will suffer from an osteoporotic fracture during their lifetime. Good calcium intake throughout your life can help to prevent osteoporosis. Keep this calcium-rich recipe handy for those Thanksgiving turkey leftovers!

Preheat oven to 375°F (190°C)

- 2 cups shredded Swiss cheese
- 1 cup chopped, cooked turkey
- 1 tbsp finely chopped green onion
- 1 tbsp finely chopped celery
- 1 tbsp finely chopped parsley
- 1 tbsp all-purpose flour
- 1/2 tsp salt
- 3 eggs
- 1 cup milk
- 1 frozen unbaked pie shell (9-inch/23 cm)
- 1 tbsp grated Canadian Parmesan cheese

In a medium bowl, combine Swiss cheese, turkey, onion, celery, parsley, flour and salt. In a large bowl, beat eggs lightly; gradually stir in milk. Add cheese and turkey mixture; stir to combine. Pour into pie shell and place shell on baking sheet. Sprinkle with Canadian Parmesan cheese.

Bake in preheated oven for 35-40 minutes, or until knife or toothpick inserted in centre comes out clean.

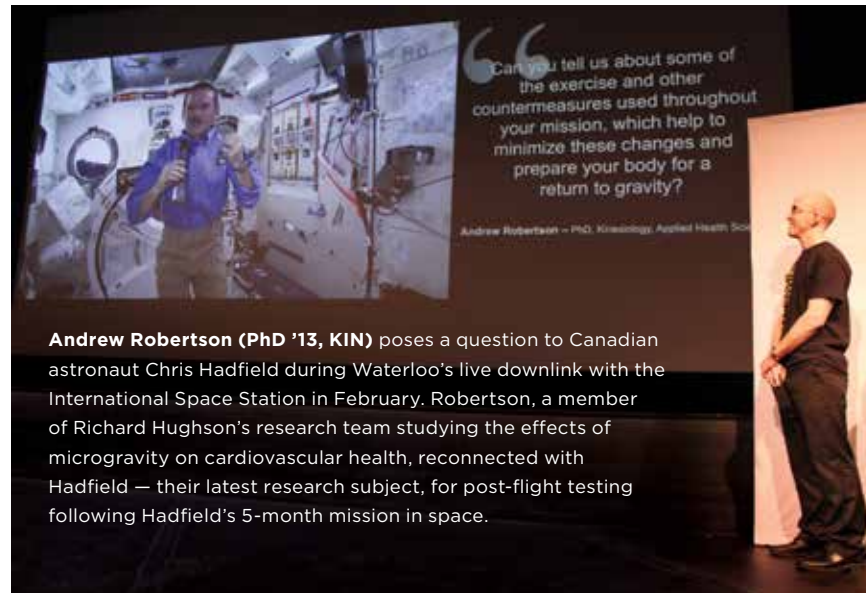
Serves 6.

Adapted from *The Everyday Calcium Cookbook* by Helen Bishop MacDonald ©2004, endorsed by the Osteoporosis Society of Canada.



SNAP!

CAPTURING THE AHS COMMUNITY IN ACTION



Andrew Robertson (PhD '13, KIN) poses a question to Canadian astronaut Chris Hadfield during Waterloo's live downlink with the International Space Station in February. Robertson, a member of Richard Hughson's research team studying the effects of microgravity on cardiovascular health, reconnected with Hadfield — their latest research subject, for post-flight testing following Hadfield's 5-month mission in space.



More than 350 alumni gathered at the Capitol Event Theatre in Toronto for the first Canadian screening of *The Cola Road*, a documentary following the work of alumnus Rohit Ramchandani (BSc '04, HEALTH). The documentary features the work of the independent non-profit organization ColaLife as they develop new methods to distribute life-saving oral rehydration medication in Africa using the Coca-Cola distribution system. Pictured above (left to right) are Steve McColl, former director of the School of Public Health and Health Systems, Rohit's parents, Rohit Ramchandani and the Dean of Applied Health Sciences, Susan Elliott.



Learn more about Lora Giangregorio's research on safe and effective exercise prescription for those with osteoporotic fractures: uwaterloo.ca/kinesiology/bones.



AHS alumni Olympian Heather Moyse (BSc '00, KIN) and entrepreneur Ami Richter (BA '01, RLS) creator of LUG (pictured with Mari-Beth Davis, left) returned to campus, along with AHS student Richard Holmes (not pictured) to speak at TEDxUW in November.



Waterloo alumnus and physician Dr. David Wilson (BSc '76, MSc '79) delivered the keynote address at Discovery Days in Health Sciences, an event where high school students explore a variety of career options in health sciences. The day concluded with a panel discussion featuring AHS alumni.



Cupcakes fittingly adorned with mice figures greeted guests at Dawn McCutcheon's retirement celebration in January. McCutcheon joined the Faculty as the Animal Care Technician in 1986, providing decades of leadership and best practices in animal care in AHS labs and across campus.

Alumni like Gaby Sabados (BSc '99, HEALTH), a midwife at the University of Waterloo Midwifery Clinic and St. Jacobs Midwives, inspires future generations of AHS grads at the annual Speed Networking event in January.



AHS welcomes our alumni — like the KIN class of '72 back for Reunion!

As I complete my first year as the Alumni Advancement Officer, I'm extremely excited and encouraged by all the wonderful AHS alumni I've had the chance to meet. From events like Reunion 2012, TedxUW, Speed Networking, Discovery Days, Grad Class Send Off and both Fall and Spring convocations, I am impressed by the spirit of volunteerism from all of our alumni and students. Engagement opportunities like the *Ask AHS Alumni* program, our alumni achievement awards and the outstanding profiles on the success of our alumni, makes me proud to showcase your successes to the AHS community and beyond.

One of the best ways for me to share all of the amazing things you've accomplished, is to stay connected with you. If you're in town, whether you're visiting family, travelling for work or proudly showing your son or daughter the Waterloo campus — we'd love to hear from you. Drop me an email at mbdavis@uwaterloo.ca or give me a call at 519-888-4567, ext. 32610. I'd love to connect with you while you're here. Or if you're attending a Waterloo alumni event closer to home, be sure to let me know.

And of course, one of the best ways to reconnect with your friends and classmates is REUNION 2013 on Saturday, September 28, 2013. Revisit the campus to reunite with your peers and favourite professors, and relive your fondest memories. AHS is celebrating the 28th year of the annual AHS Fun Run and celebrating the anniversaries of the graduating classes of '73, '78, '83, '88, '93 and '03 with a special banquet!

Remember, wherever the road leads — we're always here for you!

Mari Beth Davis

RECONNECT | APPLIED HEALTH SCIENCES | WATERLOO | RECONNECT | APPLIED HEALTH SCIENCES

Survey Says!

The results of our Alumni Events and Engagement survey are in. You gave us some great suggestions for new events and ways you can get involved in the AHS community!

CHECK OUT OUR INFOGRAPHIC ONLINE AT:

uwaterloo.ca/ahs/alumni-survey-says for some fun facts about AHS alumni!



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ON THE COVER

Kelly Anthony, Lecturer, School of Public Health and Health Systems, and her class
Photo: Colin Dewar

A big thank you to all our alumni who completed the survey!

REUNION
revisit. reunite. relive.

Don't let time run away...

Join alumni and friends and return to campus for **REUNION 2013**.
Saturday, September 28, 2013

REGISTER NOW: uwaterloo.ca/ahs/alumni-events

- » **AHS Fun Run 2013** — Celebrating 28 years!
- » **AHS Alumni Reunion Banquet** — Commemorating the classes of '73, '78, '83, '88, '93 and '03

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