Championing youth health and chronic disease prevention

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Building on excellence

It is hard to believe that more than a year has passed since I was first appointed interim dean of Applied Health Sciences (AHS). Much has happened over the last year, including my more permanent appointment as dean for a five-year term. I am honoured to have the opportunity to continue to lead the Faculty over what promises to be a time of great momentum, progress and success.

In November, we broke ground for our new expansion building. Since then, construction has continued at a steady pace and we are on track to open in the fall of 2016. On north campus, faculty and staff from Kinesiology and Propel have moved into our renovated space at Tech Town. The rapid growth of the School of Public Health and Health Systems prompted a reorganization within our existing space in the Lyle Hallman Institute for Health Promotion and B.C. Matthews Hall. The strategic moves are allowing consolidation as well as creating new capacity for growth.

Applied Health Sciences continues to rank among the highest levels of research funding per faculty member at the University. In an era of intense competition for research funding, our researchers are proudly funded by a broad range of sources including: large National Centres of Excellence programs such as the AGE-WELL program; tri-council agencies through individual and group operating grants; research contracts with numerous community, not-for-profit, government and industry partners; multiple research chair and investigator salary awards; and, federal and provincial infrastructure, equipment, and highly qualified personnel training and mentorship programs. This breadth and depth of AHS research funding is testimony to the excellence of our faculty, staff, and student researchers and to the impact and importance of their work.

Training the next generation of health leaders remains a top priority for the Faculty. It is a pillar of our strategic plan, and shapes both our day-to-day activities and our vision for the future. The excellence of our academic programs and of our research environment, coupled with a vibrant campus life, continues to attract top undergraduate and graduate students. Balancing our dual commitments to high quality teaching and research is very important, and I am pleased to report that this year, in spite of a highly competitive environment for student recruitment, we maintained our high admission standards while also meeting Faculty student recruitment targets, and added a number of new faculty and staff members, including five full-time lecturer positions.

I hope that you find the content of this edition of News to You gives you a good sense of the types of transformative research and outstanding academic programming being advanced by the Faculty. You may have noticed that this issue looks a bit different than past years. We are in the process of re-envisioning the publication — from the length and frequency to the type of content. As a key stakeholder in the future of the Faculty, I invite you to complete a readership survey at uwaterloo.ca/ahs/readership-survey. Our goal is to deliver information and updates that are important and meaningful to you, so please share your thoughts.

The next year promises to be a time of exciting progress and growth in Applied Health Sciences. We will continue to refine and formalize action plans for the Faculty’s strategic priority areas, allowing us to clearly define our path and benchmark our success. As we approach our 50th anniversary, we are poised to not only take on the challenges of our time, but continue to build our legacy as a pioneer in protecting health and well-being across the lifespan.
Moving evidence to action: An update from Propel

Each year, the Propel Centre for Population Health Impact brings Canadians one step closer to living in a country free from cancer and chronic disease. And this year was no exception.

In June, Propel’s evaluation of Break It Off, a social media campaign and smartphone app that encourages users to “break-up” with cigarettes, found that 32 per cent of smokers who used the platform quit smoking, compared to 14 per cent of their peers who used traditional telephone-based cessation support services. The study — which made headlines around the world — is helping to change the way public health leaders reach youth demographics and measure program success.

Recently, the Government of Ontario cited findings from Propel’s 2012/13 Youth Smoking Survey as evidence for banning all flavours of cigarettes, including menthol, in its new Making Healthier Choices Act. The Act seeks to enhance public health by regulating e-cigarette sales and updating existing legislature to better protect Ontarians from second-hand smoke.

As more provinces pass comprehensive policies that halt the sale of flavoured products, Propel’s mandate of engaged scholarship has never felt as timely or more urgent. Working closely with organizations and policy-makers, Propel scientists will continue to leverage research and move evidence into action — bringing a brighter, healthier future to all Canadians.

Barb Riley, Executive Director
Propel Centre for Population Health Impact

From the ground, up

The Applied Health Sciences expansion building is rapidly taking shape. Over the winter months contractors completed extensive underground work and poured foundation for the 56,000 square-foot facility. During the summer, visible progress was marked by the erection of a four-storey steel frame linking B.C. Matthews Hall with the Lyle Hallman Institute for Health Promotion. Slated to open in September 2016, the new building will house the School of Anatomy, a 350-seat lecture theatre, new spaces for Kinesiology undergraduate experiential learning, state-of-the-art research laboratories, and collaborative work spaces for students.

For updates on the expansion visit: uwaterloo.ca/ahs-expansion-building.

Applied Health Sciences proudly honoured Dan Latendre (BA ’88, RLS) as the 2015 AHS Alumni Achievement Award recipient and Christina Marchand (BSc ’14, HEALTH) as the 2015 AHS Young Alumni Award recipient at spring convocation.

The Faculty is pleased to announce the July 1, 2015 appointments of Rhona Hanning as associate dean, graduate studies and Jack Callaghan as interim associate dean, research.

Kinesiology graduate Schuyler Schmidt (BSc ’15) was the recipient of the 2015 Alumni Gold Medal for outstanding academic achievement and extracurricular involvement.

Laurie Hoffman-Goetz was honoured with the Award of Excellence in Graduate Student Supervision to recognize her outstanding success and commitment in the supervision of graduate students.
MICHAEL MACKINLEY and SIERRA PALANIYANDI took top spots in the 3-Minute Thesis competition. With just one slide and three minutes each to explain their research, Mackinley examined “The interaction between early and late-life exposures in predicting cognitive resilience in older adulthood,” and Palaniyandi presented on “Mercury and selenium in Inuit traditional foods.”

A team of innovators from SPHHS won the Infoway Innovation Award as part of the Hacking Health Design Challenge. The team members developed a digital health solution idea with the potential to improve the quality of life of Canadians learning to live with the effects of cardiac disease.

ALUMNI PROFILE

CHRISTINA MARCHAND
New SPHHS grad heads startup for Ugandan mothers
Social entrepreneur Christina Marchand (BSc ’14, HEALTH, MPH candidate) launched FullSoul to raise money for mothers and babies in Uganda. Watch her story at: uwaterloo.ca/public-health/marchand

SCHOOL OF PUBLIC HEALTH AND HEALTH SYSTEMS

National chairs in youth health and disease prevention

The Canadian Institutes of Health Research (CIHR) recently appointed Professors Scott Leatherdale and David Hammond as Applied Public Health Chairs for their pioneering work in youth health and chronic disease prevention. The prestigious positions, awarded only every five years, include close to a million dollars each in funding for highly focused research programs of national relevance to public health.

Leatherdale, an expert in youth health and an advisor for provincial and national policy-makers, will use the award to further expand his project, COMPASS — the world’s largest and most comprehensive longitudinal study of youth focused on developing programs and policies to reduce the future cancer burden in Canada.

Hammond will lead a new clinical trial investigating the use of e-cigarettes as smoking cessation aids, and will continue his research on nutritional labelling, caffeinated energy drinks, and medical marijuana use among Canadians.

“The number of obese children has tripled over the past 30 years, and smoking rates remain stalled at more than 4 million Canadians. Even small changes in tobacco or nutrition policies have unparalleled potential to improve population-level health,” said Hammond.

interRAI tools changing health-care practices

Providers of mental-health services still rely on intervention techniques such as physical restraints and confinement to control some psychiatric hospital patients, a practice which can cause harm to both patients and care facilities, new research from the School of Public Health and Health Systems reveals.

“The latest findings show that almost one in four psychiatric patients in Ontario hospitals are restrained using control interventions, such as chairs that prevent rising, wrist restraints, seclusion rooms or acute control medications,” said Professor John Hirdes, senior author on the study and head of interRAI Canada, an international research network that develops mental-health assessment tools.

The study is just one of several projects led by Hirdes and SPHHS graduate students published in a special issue of the peer-reviewed journal, Healthcare Management Forum. The issue focuses on how interRAI assessment tools can be used to improve mental-health services for patients.

“interRAI assessments are improving the quality of services across the continuum of care by identifying the strengths, preferences and needs of vulnerable persons and by benchmarking the outcomes of care at the facility level,” said Hirdes.

The special issue also reports that delays in transferring mental-health patients out of hospitals and into other care settings costs the government an average of $7,650 per patient, and Francophone Ontarians are one third as likely to have daily contact with psychiatrists at admission compared to English-speaking patients after controlling for a variety of other explanatory factors.
Pan Am Games: Leveraging a legacy

With no breaks and G-force speeds, track cycling kicks biking into high gear. And now recreational athletes from around the Greater Toronto Area can take the sport for a test spin as part of a unique project led by Professor Luke Potwarka and the Town of Milton.

The project is part of a strategic plan to leverage a legacy from the 2015 Pan Am Games and ensure that Milton’s new $56 million velodrome, constructed specifically to host Pan Am and Parapan Am track cycling events, is used to its full potential for years to come.

“From Athens to Beijing, there are many examples of mega sporting venues standing empty after the original event,” said Potwarka. “We are going to make sure that doesn’t happen in Milton. But to do that, we have to work for it.”

To encourage a new generation of track cyclists, Potwarka handed out free try-the-track vouchers to randomly selected spectators after Pan Am cycling competitions at the velodrome. His goal is to not only encourage recreational athletes to take up track cycling, but also to study people that become attracted to the sport, and follow them over several years.

“For the first time we can get baseline data, because very few people have been able to take up track cycling recreationally in our region,” he said. “As a researcher, this is a once in a lifetime opportunity to study sport participation in this context.”

Pitch contest supports innovation in AHS

Social entrepreneurs take note, there are big ideas coming out of AHS. In March, nine student teams pitched concepts for new social ventures to a panel of community and University judges at the inaugural Big Ideas Challenge for Health and Well-being. Hosted by Professor Karla Boluk and Tania Del Matto, director of St. Paul’s GreenHouse, the event challenged participants to develop interventions with the goal of improving quality of life for individuals or communities. The winning ideas won space at St. Paul’s GreenHouse, the only campus-linked accelerator residence in Canada focused on social innovation and entrepreneurship.

The winners were:

**HEART HELPERS** » A non-profit, heart-healthy meal delivery program that offers older adults at risk or living with cardiovascular disease a simple, inexpensive way to reduce their risk factors by modifying their diet.

**MARLENA BOOKS** » Committed to meaningful leisure for older adults of all abilities by creating books to meet the needs of older adults with Alzheimer’s, dementia, and other conditions.

**NODE** » Offers smart, beautifully designed, custom-fit compression sleeves for breast cancer survivors suffering from lymphedema.

**PANIC, ANXIETY & STRESS SUPPORT (PASS) KIT** » A first aid kit for mental health and well-being to address the increasing incidence of mental-health issues among students.
Erin Wong was named Co-op Student of the Year for her work at Sunnybrook Health Sciences Centre. She led the development of a research protocol for focused ultrasound to help in the treatment of bone metastases.

Clark Dickerson has been awarded a Canada Research Chair for his work in shoulder mechanics including assessing shoulder biomechanics and workplace injury prevention and preventative strategies to ensure shoulder health.

Stuart McGill will be inducted as a Fellow in the Canadian Academy of Health Sciences (CAHS) in September 2015 for his leadership, creativity, and commitment to advancing the field of health sciences.

Focus on nutrition

Some Canadians living in long-term care homes are poorly nourished, and Professor Heather Keller is out to understand why. With more than $600,000 in research funding from the Canadian Institutes of Health Research (CIHR), Keller is leading a first-of-its-kind study into factors impacting food intake in long-term care settings.

“We know that food intake in long-term care tends to be poor, and that residents have poor nutrition as a result,” said Keller, a Schlegel Research Chair in nutrition and aging. “Is the food unappealing? Is the setting institutional? Are residents having physical trouble eating?”

To conduct the complex study, teams of researchers will monitor the food intake patterns of 800 randomly selected residents in 32 long-term care homes located in four different provinces. The pioneering project will evaluate how factors like meal quality, food access and mealtime experience impact food consumption.

“It’s not just one thing impacting food intake. If we can understand broadly what is happening, what are the big deterrents to food intake, we can successfully intervene on a large scale,” she said. “Poor food intake is both preventable and treatable.”

The study’s findings are expected to help optimize health-care practices and enhance the quality of life of Canada’s aging population.

Research centre set to change trajectory of aging

When the Faculty’s new Advanced Aging Research Centre (ARCH) opens its doors this fall, it will bring researchers from across disciplines together to develop personalized approaches to health care aimed at changing the course of aging. Sound like something out of a sci-fi novel? Not for Bill McIlroy, chair of the Department of Kinesiology and head of ARCH. “People don’t age one system at a time, so if you want to tackle the challenges of aging, you’ve got to assess the whole body and all the systems together,” he said.

The new centre will house specialized, state-of-the-art labs to examine the metabolic, neurologic, cardiovascular and musculoskeletal changes that happen as people age. Researchers hope not only to better understand the aging process, but develop tailored interventions that can reduce risk for chronic diseases and slow the progression of age-related change.

In addition to conducting research and running clinical trials, the centre will focus on developing new, wearable technologies for seniors — innovations that will allow researchers to continuously and remotely monitor changes in health status. “Slow but accumulating changes in health are difficult to detect,” said McIlroy. “The occurrence and progression of age-related change and disease are remarkably different for each person.”

With a $1.3 million grant from the Canada Foundation for Innovation (CFI), ARCH will contain the most comprehensive collection of equipment focused on aging in the country. “ARCH is the first facility of its kind in Canada,” said McIlroy. “It will provide a gold-standard of testing that will allow researchers to take the national lead in advancing new technologies and best practices for healthy aging.”
Presenting sponsors of this year’s University of Waterloo President’s Golf Tournament were AHS alumna and owner of Lug travel accessories, Ami Richter (BA ’01, RLS) and co-founder Jason Richter. Richter was a member of the varsity tennis team and she wanted to give back to student athletes through the annual fundraiser. Pictured left to right: Waterloo President Feridun Hamdullahpur, Ami and Jason Richter and Devon Rizzo, a varsity golf athlete.

KIN alumna Lou LeRoux (BSc ’74, KIN) (pictured left with the KIN class of 1974) shares: “Returning to Waterloo for our 40th reunion was without a doubt, one of the highlights of my life! Reconnecting with classmates from the past is like entering uncharted territory, but the chemistry we had 40 years ago and the entire weekend is one we look forward to repeating for our 45th. I would encourage all grads to return to Waterloo, not so much to relive the past (although those memories are fabulous), but to share the present.”

Over 25 AHS alumni came back to campus, braving the January weather to share their career paths, tell students about their chosen fields and provide insights into the job market today. The annual Speed Networking event includes a variety of professions and attracts well over 150 career-minded AHS students. Interested in volunteering? Email us at ahsalumni@uwaterloo.ca.

Healthy ideas do start here … AHS Fun Run still going strong after 30 years!

Sometimes the simplest ideas have the legs to go the distance. At least that’s what happened with the AHS Fun Run.

In the early 1980s, Tina Roberts, a Health Studies graduate and AHS staff member at the time, was looking for a way to bring alumni back to campus to connect with faculty, staff and current students. Known for its strong sense of community, and focus on health and well-being, Tina had to look no further than her home Faculty for inspiration. And so the AHS Fun Run was born.

Held on a snowy November day in 1985 as part of Waterloo’s homecoming celebrations, the inaugural race drew close to 100 alumni, students, faculty and staff. Now the longest-standing Reunion tradition at the University, the run has continued over 30 years — through snow, sleet, sun and rain.

Watch the evolution of the AHS Fun Run in our anniversary video: uwaterloo.ca/ahs/fun-run-video, and please join us for this year’s event as part of Reunion on Saturday, October 3, 2015.

We are thrilled to welcome back special guest, two-time Olympic gold medalist and Kinesiology grad, Heather Moyse (BSc ’00), as race grand marshal. Whether you are a serious runner looking to compete in the 5k or plan to walk the 2.5k and enjoy the family-friendly activities, there is something for everyone.

uwaterloo.ca/ahs-fun-run

Mari-Beth Davis
Alumni Advancement Officer
mbdavis@uwaterloo.ca
Come back to campus, meet up with friends and relive your fondest university memories.

SATURDAY, OCTOBER 3, 2015

AHS FUN RUN » Walk. Run. Just have fun!
B.C. Matthews Hall | 8:00 a.m. sign-in | 10:15 a.m. race start
uwaterloo.ca/ahs-fun-run

AHS ALUMNI REUNION BANQUET
Federation Hall | University of Waterloo | 5:30 to 10:00 p.m.
Celebrating the anniversaries of the graduating classes of ’75, ’80, ’90 and ’95.
uwaterloo.ca/ahs/alumni-reunion-banquet

Be sure to register early uwaterloo.attend.com!

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