

Scholarship in motion



Susan Elliott
Dean, Faculty of Applied Health Sciences

Researchers in the Faculty of Applied Health Sciences have a long history of working together to find new and creative ways to tackle global health issues. In so doing, it is vital that we take a comprehensive approach to understanding the complex problems that impact health and wellbeing, so that we can build communities, schools, and workplaces that facilitate and promote healthy choices and therefore healthy people.

As a health researcher, I understand the complexity of health issues and the importance of a transdisciplinary approach to linking evidence and action. This is illustrated in a framework I recently developed to guide my own thinking: *Scholarship in Motion* (Figure 1) starts with a problem and moves to action, while working through four stages: knowledge creation; knowledge synthesis; knowledge translation; and, knowledge mobilization. Now more than ever we need to examine problems in context and bring

different disciplinary lenses to bear on developing and designing initiatives that will link evidence to action, a central tenet of the transdisciplinary approach to solving problems.

It is exciting to be able to showcase the world-class research happening in Applied Health Sciences and to highlight just a few of the unique ways we are successfully translating research-to-practice-to-policy in order to meet health challenges both now and in the future.

The SCHLEGEL-UW RESEARCH INSTITUTE FOR AGING is a multidisciplinary program that studies the aging process with a goal to create knowledge to improve the quality of life for our aging population. **Knowledge creation** involves the discovery of new information. Andrew Laing, assistant professor in Kinesiology, is improving the quality of life for seniors by applying different mathematical models to predict loads experienced by the body during falls and to experiment with various elements (e.g., floor surfaces) to minimize the risk and severity of injury.

The PROPEL CENTRE FOR POPULATION HEALTH IMPACT conducts solution-oriented research, evaluation, and knowledge synthesis aimed at preventing some of the most significant chronic diseases facing society. **Knowledge synthesis** takes existing knowledge that is fractured, disparate, or unorganized, and synthesizes it to make it useful to policy and decision makers, as well as researchers. Scott Leatherdale and Steve Manske help schools, public health units, and communities, identify trends and develop strategies to advance the health of young people. By collecting data about school children's smoking, eating, physical activity, and mental fitness habits, the School Health Action Planning and Evaluation System (SHAPES) provides the groundwork for informed policy development and planning.



Figure 1: Scholarship in Motion




*Sherry Dupuis and Lisa Loiselle of MAREP work with a committee of persons living with dementia, family members, and partners in care to plan **A Changing Melody**: an information-sharing forum for those whose lives are touched by Alzheimer's disease or related dementia.*

Once knowledge has been synthesized, knowledge creators can begin the process of **knowledge translation**, whereby knowledge creators translate knowledge to user groups in meaningful ways. David Hammond, who serves as advisor for the World Health Organization (WHO) on tobacco control, has conducted research around the world on the effectiveness of graphic warning labels on cigarette packs, providing evidence of their ability to curb smoking behaviour. Hammond has helped to create packaging and labeling guidelines for 172 countries and, earlier this year, assisted the U.S. federal Food and Drug Administration in the development of new warning labels – leading to the most significant change in American cigarette packaging in 25 years.

We ultimately strive to achieve **knowledge mobilization** as part of the knowledge continuum. Essentially, this involves the sharing of knowledge amongst users themselves. In May 2011, over 300 international participants gathered for A Changing Melody forum, hosted by the Kenneth G. Murray Alzheimer Research and Education Program (MAREP). The sharing forum, like other MAREP resources, is developed by persons with early stage dementia, family members, and professionals so they may learn with and from each other about actively improving quality of life throughout the dementia journey.

There is no question that a transdisciplinary approach is imperative. As scientists, we must communicate about the importance of problems, the need for knowledge, and the need for action, in order to effectively deal with existing and emerging health issues. ■



The faculty is proud to announce the appointment of **Suzanne Tyas** as Associate Dean, Graduate Studies, as of July 1, 2011. Tyas, a specialist in epidemiology, joined the department of Health Studies and Gerontology in 2006.



The Faculty of Applied Health Sciences proudly honoured **Ildikó M. Dénes (HSG '98)** as the 2010 AHS Alumni Achievement Award recipient and **Heather Moyse (KIN '00)** as the 2010 AHS Young Alumni Award recipient at the 2010 fall convocation.

HSG grad **Jordi McLeod (MSc '10)** was the recipient of the 2010 Alumni Gold Medal for outstanding academic performance in a master's program. KIN grad **Steve Denniss (PhD '11)** was the recipient of the 2011 Governor General's Academic Gold Medal. Each of these medals is awarded annually to a Waterloo graduate.

Measuring what matters

Step aside GDP. An innovative initiative is underway at Waterloo to demonstrate that measuring wellbeing is as important as measuring money.



The Honourable Roy Romanow (centre) joins Director Bryan Smale and Project Manager Linda McKessock for the launch of the Canadian Index of Wellbeing.

The Honourable Roy Romanow joined campus leaders in April 2011 to officially launch the Canadian Index of Wellbeing (CIW) Network at the University of Waterloo and introduce its signature product: the Canadian Index of Wellbeing.

“Most Canadians realize that our wellbeing cannot be measured by just narrow economic measures like the GDP,” said Romanow, chair of the network’s advisory board and former Commissioner on the Future of Health Care in Canada. “The Canadian Index of Wellbeing is a national tool for tracking and reporting on our overall wellbeing, on the

things that matter to Canadians. The Index provides a snapshot of our country’s progress – or lack of it.”

Researchers say using measures such as the GDP as a surrogate for wellbeing are misleading because they make no distinction between economic activity that creates benefit and that which causes harm. They also ignore many genuine contributions to wellbeing, such as volunteer work and unpaid care-giving.

The Canadian Index of Wellbeing covers eight areas of life in Canada: our standard of living, our health, the vitality of our communities, our education, the way we use our time, our participation in the

“Collectively this Index helps us to determine trends in our overall quality of life, giving us a powerful tool for action.”

GOVERNOR GENERAL DAVID JOHNSTON

democratic process, the state of our leisure and culture, and the quality of our environment. The CIW also shines a spotlight on the interconnections among these important areas: how, for example, income and education are linked to changes in health. These eight areas were chosen based on the values of Canadians, through an in-depth public consultation process across Canada.

If you can't count it, it doesn't count

Over a decade ago, Hugh Mackenzie of the Toronto-based Atkinson Charitable Foundation asked what it would take to create a tool that could measure Canadian wellbeing. “We have to confront the reality that in the world we live in, if we can't count it, it doesn't count,” Mackenzie said. “It's not just a matter of coming up with a set of numbers that measure something; it's what you do with them. It's how you think about public policy and other responses you could make to that information to move that dial.”

The CIW, funded by the Atkinson Charitable Foundation and a funders' alliance, has since published research reports and highlights on the eight domain areas as a foundation for developing a comprehensive composite index.

Last year, the network began searching for a permanent home. Romanow insists Waterloo was an obvious choice because of its reputation as an innovative and visionary university. “Waterloo's Faculty of Applied Health Sciences has been an international leader for over 40 years in research related to promoting health and optimizing quality of life,” explains Romanow. “They have a proven track record in delivering and translating research to drive behaviour and policy change. It was a natural fit.”

Waterloo becomes home-base for coordinating the Canadian Index of Wellbeing Network, a non-partisan group of national and international leaders, researchers, organizations, and grass roots Canadians committed to improving and protecting quality of life across the country. At the helm is director Bryan Smale of Recreation and Leisure Studies aided by two CIW staff, Lynne Slotek and Linda McKessock, who moved with the project. As author of the CIW's leisure and culture domain report, Smale has a long-standing connection to the project and looks forward to collaborating with researchers both at Waterloo and across the nation.

“The CIW provides a great platform to bring together interdisciplinary researchers concerned with the ways in which the many domains of our lives contribute to our wellbeing,” says Smale. “By bringing together individuals with expertise on the many different aspects of wellbeing, including health, we can begin to unravel the complex interconnections played out in our daily lives that define our wellbeing.”

The network is guided by an advisory board of accomplished Canadian and international experts. Romanow serves as chair, while The Honourable Monique Bégin, Canada's former Commissioner to the World Health Organization's Commission on Social Determinants of Health, serves as deputy chair.

His Excellency the Right Honourable David Johnston, Governor General of Canada was an early supporter of the CIW and shared his vision for the CIW via video greetings at the April launch.

“Collectively this Index helps us to determine trends in our overall quality of life, giving us a powerful tool for action,” proclaimed Johnston. “Can we imagine a national project that uses this Index in communities all across Canada with the aim of showing an upward trajectory year by year?”

The CIW is also at the forefront of a global movement. Around the world, a consensus is growing about the need for a more comprehensive and transparent way to measure societal progress – one that accounts for more than just economic indicators such as the Gross Domestic Product and takes into account the full range of social, health, environmental, and economic concerns of citizens.

Canada will be at the leading edge later this fall with the release of the first-ever composite Canadian Index of Wellbeing. The Index will measure, track, and report on wellbeing trends, stimulating discussion about the types of policies, programs, and activities that would move our country closer to the vision of enabling all Canadians to share in the highest wellbeing status.

For full reports, summaries, ideas for positive change, and updates on the Canadian Index of Wellbeing, visit ciw.ca. ■

Indicators of wellbeing

The CIW uses 64 key indicators to measure Canada's progress in eight categories:

Community vitality

- » strength, activity and inclusiveness of relationships between residents, private sector, public sector, and civil society organizations

Democratic engagement

- » participation of citizens in public life; the role Canadians and their institutions play as global citizens

Education

- » literacy and skill levels in children and adults

Environment

- » wise use of our natural environment, including prevention of waste and damage

Healthy populations

- » physical, mental, spiritual, and social wellbeing

Leisure and culture

- » activity that involves all forms of human expression, in particular arts and recreational activities

Living standards

- » level and distribution of income and wealth

Time use

- » how people experience time and how time use affects wellbeing

The 64 measures will be combined into a single index number, that can be tracked up or down over time.

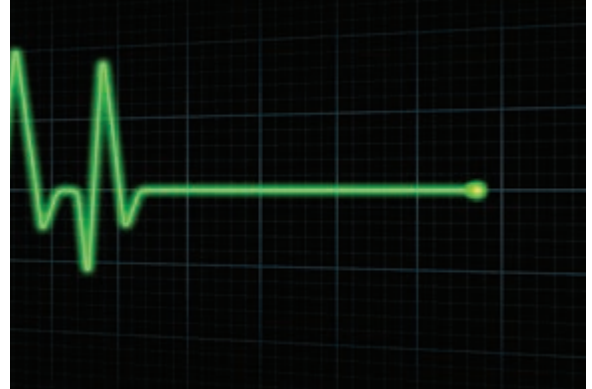
 CANADIAN
Index
OF WELLBEING
Measuring what matters

An ounce of prevention

For the first time, Canadians may have a shorter life expectancy than their parents. Chronic diseases such as cancer, diabetes, and cardiovascular disease account for 89% of Canadian deaths. These illnesses are straining the health care system, threatening social programs, and undermining national productivity, yet prevention efforts have been largely neglected.

Evidence must be gathered and generated to ignite, support, and refine prevention initiatives. Waterloo is taking a leading role with the creation of a new Centre for Excellence in Chronic Disease Prevention. Housed in the Propel Centre for Population Health Impact, and building on Propel's impressive track record of solution-oriented research, the Centre will act as a catalyst bringing together Waterloo experts from across campus with a shared interest in chronic disease prevention.

This interdisciplinary network will first focus on tobacco control and obesity prevention – challenging two of the most significant risk factors for chronic disease. “Chronic disease prevention is central to improving the health of populations,” says Barbara Riley, Propel's Co-director. “Propel has established relationships with policy, advocacy, practice, and research leaders around the world. By leveraging the breadth and depth of chronic disease research at Waterloo, we can dramatically increase our impact on policy and practice within Canada and beyond.” ■



» If the major risk factors for chronic disease were eliminated, at least 80% of heart disease, stroke, and type 2 diabetes and 40% of cancer would be prevented.

WORLD HEALTH ORGANIZATION. PREVENTING CHRONIC DISEASE: A VITAL INVESTMENT. 2005

RBC Retirement Research Fellowships



Kinesiology graduate **Katelyn Fraser (KIN '11)**, pictured left, starts graduate school this Fall and got an early start on her thesis during her final undergraduate year thanks to the RBC Retirement Research Undergraduate Fellowship program. As one of the first fellowship recipients, Fraser worked with professor Richard Hughson to investigate the relationship between the environment and cardiovascular health in an aging population, a research theme she plans to further develop in her graduate studies. “I was able to acquire an in-depth understanding of aspects that influence an older individual's physical activity level and how environmental factors can play a role in the decision to be physically active,” explains Fraser. “By examining the role of the environment, we can create a basis for more population-based strategies that can increase physical activity, which can ultimately prevent or delay the onset of cardiovascular disease.”

The fellowship program is part of the RBC Retirement Research Centre at the University of Waterloo – a unique collaboration that focuses on providing practical information and tools to empower people to learn, understand, and prepare for physical, psychological, and financial health and wellbeing in retirement.

rbc.com/retirementcentre ■

HSG becomes School of Public Health and Health Systems

The Department of Health Studies and Gerontology (HSG) has a legacy of innovation and is proud to claim many “firsts” in Canada: the first to offer multidisciplinary graduate and undergraduate programs in health promotion and disease prevention; the first university to develop transdisciplinary graduate programs in population health and a PhD in Aging, Health and Well-Being; the first Gerontology unit to offer a graduate degree; and the first to deliver a Master of Public Health program through distance education. With a 35-year history of ground-breaking education, the Department is now transforming into a new and distinctive School of Public Health and Health Systems.

Officially approved in June and effective September 2011, the School builds upon current strengths in chronic disease prevention and management, health and aging, health services, and health informatics and will expand its focus to reflect emerging issues. By integrating public health with “systems thinking” – a vital component in understanding the complex systems involved in both causing and solving public health problems – the School will be blazing a new path and will be well-positioned to develop new, innovative approaches to expand public health capacity.

“Problems such as aging populations, soaring rates of chronic disease, spiralling health care costs and fragmented health care services, widespread outbreaks of food and water borne illness, and growing inequalities in health status are all a sign that public health and health systems are more relevant today than ever before,” says Paul McDonald, former chair of HSG and inaugural director of the School of Public Health and Health Systems. “However, we can’t continue to rely on organizational and training models from 100 years ago. We need to start breaking old moulds and rethink how we can tackle a new set of emerging health problems.”

The School aims to advance learning, knowledge, practice, and capacity in the fields of public health and health systems through strategic partnerships and excellence in teaching, research, and service. A strong focus on transdisciplinary practice will see team members from different fields come together to develop shared concepts and methods

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PAUL McDONALD



that integrate and go beyond their respective disciplinary perspectives.

Working at the connection points of disciplinary boundaries catalyzes and supports discovery of innovative solutions that will contribute to reducing the morbidity, mortality, and social and economic burden of disease. The School of Public Health and Health Systems goals focus on:

- » Providing opportunities for training and research to solve priority national and global challenges in public health and health systems
- » Cultivating networks and partnerships to foster research-to-practice-to-policy opportunities
- » Creating new opportunities and different models for training programs that are more accessible, responsive, and relevant. These include easy-access courses and degree programs through on-line or on-site delivery formats, full and part-time study options, custom-designed professional training and development programs, and potential new programs in areas such as health informatics, health program/policy evaluation, health promotion, and public health.
- » Providing greater consumer orientation, easier access, and participation in a ‘hands-on’ problem-based learning environment
- » Providing integrated ‘service centres’ for training students and fostering community outreach
- » Fostering greater integration and new transdisciplinary research and service clusters in collaboration with other academic units

The outstanding reputation of the Department of Health Studies and Gerontology has been built on a truly pioneering spirit; one that approached health and health care in a distinctly unique way. This bold and vibrant legacy will continue with the transformation into the new School of Public Health and Health Systems. ■

THE LATEST

NEWS



David Hammond received Canada's Premier Young Researcher Award; a CIHR career development prize given to Canada's brightest young researchers at the beginning of their careers.

PhD candidate **Andrew Costa (HSG '07)** received the CIHR-IHSPR Rising Star Award and Age+ Prize, in recognition of excellence in research in aging.

Kaitlyn Whelan (HSG '11) was selected by the Faculty of Applied Health Sciences and the Faculty of Environment to represent the graduating class as Valedictorian at the spring 2011 convocation ceremony.



Neilkamal Mundi (HSG '11) was the recipient of the 2011 Alumni Gold Medal for undergraduate academic achievement.

interRAI to the rescue

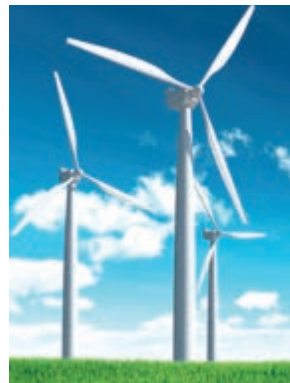
An assessment program and database designed to improve health care for frail seniors unexpectedly became a critical emergency response tool following the February 2011 earthquake in New Zealand.

The computerized instrument, developed by interRAI – an international collaboration of researchers, is a standardized tool for assessing and monitoring the health needs of frail seniors living at home. Used in Ontario by Community Care Access Centres, the database identifies seniors at risk, flagging physical and mental health conditions.

Upon hearing of the quake, members of interRAI realized their databases held valuable information that could lead rescuers to the homes of New Zealand's most vulnerable citizens. John Hirdes, lead Canadian researcher, was part of the long-distance rescue effort.

"The goal was to develop a type of emergency triage system to help health care staff identify the elderly people at greatest risk of harm after the earthquake – those alone and unable to take care of themselves – and prioritize them for immediate follow-up within 48 hours," explains Hirdes. Until the New Zealand crisis, the tool had not been considered an emergency response tool, but Hirdes is now liaising with Canadian officials to discuss its potential application in emergency situations here at home.

The noise about wind turbines



People who live near wind farms often report that noise and vibrations caused by wind turbines are creating sleep disruptions and other health-related problems. Yet, there is an absence of convincing evidence in scientific literature to support the assertion that wind turbine noise does indeed cause significant adverse health effects. Philip Bigelow, an environmental epidemiologist, and Stephen McColl, a risk assessment researcher specializing in environmental health, are joining forces with renewable energy specialists in Waterloo's Energy Research Centre and other experts across campus to investigate potential impacts of renewable energy technologies on the health of rural populations.

"We've assembled a multidisciplinary team in order to carry out one of the first in-depth clinical and epidemiological assessments on the human health effects of both audible and low frequency sound from wind turbines," explains Bigelow. "By including nursing professionals and other specialized health expertise on the team, we're hoping to use clinical and biological markers of stress to examine the association of exposure to wind turbine noise with sleep disturbances, fatigue, headache, depression, and other psychophysiological problems."

Bigelow and McColl acknowledge that wind turbines are the fastest growing renewable energy technology in Canada and believe their research will be vital to better understanding the impact of wind power on the health of individuals and communities. Their goal is to contribute to the development of less intrusive energy technologies, and help to inform planning and practices that address potential health issues.

MPH students land WHO internships

With over 7,000 applications and only 140 spaces, Master of Public Health classmates Anya Shen, Pegah Shamsipour, and Francine Darroch were delighted to be awarded a prestigious World Health Organization (WHO) internship in winter 2011.

Shen joined the TBTEAM (**T**B **T**Echnical **A**ssistance **M**echanism): part of the WHO's commitment to dramatically reduce the global burden of tuberculosis by 2015. "I updated their Expert Roster - a platform that connects clients (country disease programs, ministries of health, etc.) who need technical assistance with TB experts," explains Shen. "I also established a steering committee and drafted a feedback strategy to help safeguard the quality of technical assistance."

Darroch, a specialist in obesity, worked in population-based prevention and surveillance within Chronic Diseases and Health Promotion. Shamsipour joined Food Safety and Zoonoses investigating leptospirosis and monitoring the risk of Japanese food products following the earthquake and radioactive event. All agree it was a life-changing opportunity. "Working at WHO provided insights into policy development and the complexities involved in creating policy - and ultimately changes - in countries," explains Darroch. "It was wonderful to work in an extremely diverse workplace and to meet so many individuals dedicated to making the world a healthier place."

"To have three of the 140 interns come from our program is astonishing," says Paul McDonald. "It speaks to the qualities of our students, the transformative opportunities available, and the impact these bright minds will have on the future of public health."

» Dr. Judy Kruger HSG '93



What does the University of Waterloo and the Centers for Disease Control and Prevention (CDC) in Atlanta have in common? Well-respected international reputations and **Dr. Judy Kruger.**

Kruger is currently a senior scientist for the Research Team in the Epidemiology Branch of the Office on Smoking and Health. She engages in research that raises awareness about the diseases caused by tobacco

use, and helps prevent initiation and promote cessation in youth and adults.

"Getting people to do less of something as opposed to more is a different approach to promoting behaviour change," Kruger explains. And this is made more challenging by the addictive nature of smoking behaviour, and the changing tobacco products being sold. Kruger and her colleagues are up against the billions spent annually and the creativeness of the tobacco industry to reach new customers. These conditions add to the demands of researchers to think outside of the box when planning ways to gain accurate measures of prevalence and to observe behaviour. For example, "attending a Friday night drag race at the Atlanta Motor Speedway is a great way to observe tobacco manufacturers' promotion of new products since advertising in some of these venues is not banned."

Kruger's "fascination with the lifestyle behaviours people choose to engage in" was fueled by her experience in the Health Studies and Gerontology program. While a student, she was exposed to valuable opportunities, such as gaining research experience working for what is now the Propel Centre for Population Health Impact, and learning about international internship opportunities with the World Health Organization. Kruger's undergraduate experience was her "window into the colossal and wonderful world of international health."

Today, Kruger is energized by legislative changes and the dedication of the researchers she collaborates with. Tobacco use is one of the leading preventable causes of death worldwide, making her work timely and poised to have an impact.



Dr. Margaret Chan, Director-General of WHO, greets interns in Geneva, Switzerland.

Recreation and Leisure Studies

THE LATEST

NEWS



The department proudly welcomes two new faculty members:



Bryan Grimwood joins RLS as an Assistant Professor in the Tourism and Parks Management area.



Katie Misener arrives in March 2012 as an Assistant Professor in the Recreation and Sport Business area.

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A new honours degree in Tourism and Parks Management will be offered starting September 2011. The major offers undergraduates an in-depth look at the issues that impact parks and tourism, including planning, management, and funding.

.....
Joel Brooks, 3B Therapeutic Recreation, won Waterloo's Co-op Student of the Year for his work with youth within a Cree community, as part of the Gaul Youth Development Institute.



Celebrating excellence in research

Recently ranked for the second consecutive decade as North America's top university for leisure research, the University of Waterloo is paying it forward with the establishment of the Susan M. Shaw and Roger C. Mannell Leisure Research Award. The award recognizes outstanding individuals' career research achievements, serves as a catalyst for the academic field, and reinforces Waterloo's position as a driving force in leisure research.

The first recipient, Ed Jackson, was honoured last fall for his research on outdoor recreation participation and attitudes to the natural environment, and constraints to leisure. This year's honouree, Karla Henderson of North Carolina State University, has published over 350 scholarly papers, most recently focusing on gender, quality experiences and physical activity. Henderson (pictured below) was on campus in June to receive the award and an honorary degree.

Namesake retires

The Award's name commemorates the outstanding contributions of Waterloo faculty members Sue Shaw and Roger Mannell. Shaw retires this year following an esteemed 20-year career at Waterloo. "Much of what we know of leisure and gender can be traced to Sue's work," explains department chair, Mark Havitz. "She has pioneered research on time use and time stress; the intersection of work, leisure and family; and changing ideologies of motherhood and fatherhood. We will miss Sue's leadership, disarming grace, and exceptional scholarship, and wish her all the best in her retirement."



Waterloo professors Sue Shaw and Roger Mannell congratulate Karla Henderson (centre) as the 2011 recipient of the Shaw Mannell Leisure Research Award.

» Victoria Behune RLS '78



Victoria Behune believes everything should be based on a plan. Her thirty-year career in tourism is the product of a plan, which as a student started with the goal of being the president of a company.

The combination of Behune's unwavering passion for tourism, and commitment to lifelong learning has left her feeling "as invigorated and challenged" by her career now as she was when she was a Recreation and Leisure Studies student at Waterloo.

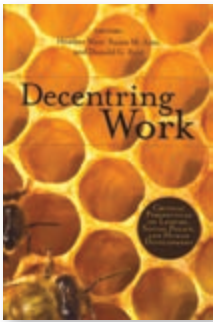
Seeking leadership opportunities as a student, Behune became the president of the Waterloo Ski Club. Behune built the club into the largest on campus, and it was this experience which paved the way for her earliest career success.

Throughout her career Behune has viewed each position as an opportunity to learn. She has shared her expertise with many companies including Tourism Toronto - overseeing sponsorship and partnerships, the McMichael Canadian Art Collection - focusing on brand management and visitor experience, and the Canadian Automobile Association - learning about global and retail tourism.

In 2006, Behune's plan came to fruition as she accepted the role of President and CEO of the Ontario Tourism Education Corporation (OTEC), a human resource development organization for the tourism and hospitality industry.

So what comes next after achieving a lifelong goal? For Behune it's continuing to guide the growth of the tourism industry. "I learned while taking Recreation and Leisure Studies that we are in the people business and that our goal is to make a difference in people's lives whether through recreation, travel, exercise, or therapy." She is motivated by OTEC's values of making a difference and effecting change; values which she learned long ago at Waterloo.

Behune recently spoke to the graduating class of 2011 about what comes next. Her message, "continue to learn and grow as leaders for our industry," and, above all, have a plan.



Decentring work

We all like to think we are more than our work – but most of us also have choices in terms of what we do for pay and/or how we spend our time outside of paid work. For those who find it challenging or impossible to access the world of paid work, this can be very marginalising. **Decentring Work**, edited by professors Heather Mair and Susan Arai with

Donald Reid of the University of Guelph, questions

how and why we have come to value paid employment as the marker of social success and individual self-worth, and investigates the role that leisure might play in its stead.

Throughout the book, leading scholars probe dimensions of marginalization and oppression experienced by groups such as women living in poverty, new immigrants, and older adults. They show how leisure can be a vital element in confronting issues surrounding homelessness, incarceration, dementia care, disability, and ethnicity.

"Volunteering and engaging in recreation and leisure are excellent alternatives for developing the self and contributing to community," says Mair. "The book makes a strong argument for policy change. Re-drawing the relationship between paid work and worth is an issue that must be taken up at the community level."

RLS Founders Entrance Scholarship

Introducing a recreation and leisure program at a university level was a lengthy and complex process in 1968. Addressing the need to provide leadership to leisure studies in society and developing a program that combined knowledge of people, environment, and management and that prepared graduates for careers in a variety of public and private agencies required the strong commitment and dedication of passionate individuals who had a vision to make that dream a reality.

Jack Pearse, well-known for his founding of Camp Tawingo, approached the Ministry of Education in 1968 and received approval to develop this innovative new degree program at the University of Waterloo. Pearse, along with Chuck Griffith and David Ng, played a transformational role in those early years, creating the internationally renowned Department of Recreation and Leisure Studies that has evolved to become one of the oldest, largest, and most prestigious programs of its kind in Canada. A special entrance award – the **RLS Founders Entrance Scholarship** – has been created in their honour and will help attract students to the department who have demonstrated strong academic performance and who have contributed to their community through recreation involvement and leadership. Donations are gratefully accepted – <https://ecommunity.uwaterloo.ca/giving> or contact Bonnie Oberle, Office of Development (boberle@uwaterloo.ca).

Kinesiology

THE LATEST

NEWS



Colleagues and students gathered in May to honour **Hugh Scoggan** and wish him well in his retirement following 33 years of service in the School of Anatomy and Department of Kinesiology. While invoking the highest standards of respect and dignity, Scoggan (centre, with Richard Staines and Steve Prentice - former and current head of the School of Anatomy respectively) shared his unwavering passion for and commitment to teaching human anatomy with thousands of students and mentored hundreds of volunteer teaching assistants. The School continues his legacy, welcoming **Tamara Stock**, Senior Demonstrator in Anatomy to the team in July of this year.



Richard Hughson was appointed as the Schlegel Research Chair in Brain Health and Vascular Aging in 2010. Hughson's research examines the link between cardiovascular aging and changes in brain blood flow.

New faces

The Department of Kinesiology is pleased to welcome the following new faculty members:



Stacey Acker | BIOMECHANICS

PhD, Queen's University

Research interests: combining modeling expertise with applied research to address basic and applied health problems related to healthy knee function and osteoarthritis



Robin Duncan | NUTRITION

PhD, University of Toronto

Research interests: the relationship between nutrition and molecular determinants of health and disease; Nutrigenomics; functional genomics/new gene discovery; and the etiology, prevention, and treatment of chronic diseases



Laura Middleton | RESEARCH DESIGN AND NEUROSCIENCE

PhD, Dalhousie University

Research interests: advancing the applied understanding of the relationship between exercise and cognitive determinants of health and function; rehabilitation of cerebrovascular disease; and lifestyle determinants of cognitive impairment and dementia

Food for thought

Waterloo Kinesiology is becoming a growing hub of opportunity for students and researchers interested in understanding the mysteries and mechanisms of human nutrition.

A new undergraduate Minor in Human Nutrition provides students with knowledge of nutritional biochemistry, digestion, absorption, and metabolism. Available with any four-year major at Waterloo, the program examines the role of nutrition throughout the life cycle, the importance of nutrition in preventing chronic diseases, and the social and economic influences on nutrition.

"The Minor in Human Nutrition teaches students to evaluate nutrient intakes of individuals, and appraise the intake of nutrients at the population level," explains program coordinator, Ken Stark. "While it is not intended as a basis for certification as a registered dietitian, students will be equipped to provide nutritional advice based on scientific evidence and principles of human nutrition."

Expanded course offerings and research opportunities in nutrition are also on their way thanks to the addition of faculty member Robin Duncan (pictured above) and a soon-to-be-named Schlegel Research Chair in Nutrition. Over \$3.5M in physiology laboratory infrastructure investments are bolstering dynamic research programs in nutrition and health including chronic disease prevention, lipids and energy metabolism, vascular biology, and factors influencing dietary choices.

Shouldering the burden

Musculoskeletal disorders (MSDs) pose both significant personal and financial burdens. These painful and often disabling injuries are a significant workplace health and safety issue associated with massive economic costs. Forty-three percent of all lost time injuries in Ontario are due to MSDs.

Clark Dickerson, associate professor in Kinesiology, was recently honoured with a prestigious national award, the Northern Digital, Inc. Promising Young Investigator Award from the Canadian Society for Biomechanics (CSB), for his work in addressing MSDs. He is examining the possibility of a link between rotator cuff disease and muscle fatigue. This competitive award is presented to an emergent Canadian biomechanics researcher within the first six years of their independent career as a scientist. Three of Dickerson's students were also honoured as finalists by CSB and Waterloo was the only Canadian university represented in all four CSB award categories.

Dickerson's research, in partnership with the Centre of Research Expertise for the Prevention of Musculoskeletal Disorders (CRE-MSD), aims to improve occupational and daily living through research into shoulder function and dysfunction. Dickerson is currently involved in research examining police cruisers' interior designs for risks to the upper extremity and back for mobile police officers.

Musculoskeletal disorders can have a profound effect on workers and workplaces – keeping people from doing their jobs and costing employers millions every year. Dickerson's research will result in better protection for workers, more effective treatments, lower rates of disability in the population, increased productivity, and higher quality of life.



Dickerson (far right standing) and graduate students use a robotic arm and 3D motion-tracking to assess shoulder loading and posture.

» Dr. Tyler Damen KIN '06



Skin cancer now affects one in every seven people in North America. Like many AHS alumni, **Dr. Tyler Damen** is trying to change this statistic, but unlike many he is also part of it.

Damen was always interested in chiropractic; in fact, he chose the Waterloo Kinesiology program because he wanted “the best science-based program available” to prepare him. With co-op placements and courses

like Biomechanics, Damen left Waterloo in 2006 with self-confidence and a passion for the human body.

Shortly after starting Chiropractic College, Damen was diagnosed with melanoma. The cancer had spread from a mole on his back to his lymph nodes. After finishing cancer treatment in 2007, he saw an opportunity for chiropractors to meaningfully contribute to the early detection of skin cancer in their patients.

With the support of Canadian Memorial Chiropractic College, Princess Margaret Hospital Foundation, his physicians, family, and friends, Damen founded the charity Chiro Care. The goal of Chiro Care is to educate chiropractors on how to identify possible skin cancers, and to fund treatment research and patient care. The charity's first achievement was publishing a clinical reference tool called **The Chiropractor's Guide to Skin Cancer**, which helps chiropractors provide better and complete care to patients.

In addition to his commitment to Chiro Care, Damen recently renovated a historical building in his hometown of Strathroy and opened his own integrated health clinic called Damen Optimal Health Team. Their goal is to “facilitate the body's methods of healing in the most efficient manner with the least amount of resulting dysfunction.” If you ask Damen how life is treating him, he will tell you he is in his dream job and excited about what the future will bring. “Whether through chiropractic treatment or flagging other potential health concerns, there is no better reward than taking away a person's pain!”



Black bean, tuna, and quinoa salad

A recently rediscovered ancient grain native to South America, quinoa is high in protein including all nine essential amino acids. In addition to protein, quinoa features a host of other health-building nutrients such as manganese, magnesium, iron, copper, and phosphorus.

- 1½ cup canned or pouch tuna
- 1 can (19 oz) black beans
- ¼ cup chopped parsley
- 3 green onions, diced
- 1 cup quinoa
- 2 tsp. chili powder
- 1 tsp. ground cumin
- 3 tbsps. rice wine vinegar
- ½ cup olive oil
- 1 tomato, chopped
- 2 celery stalks, finely diced

- Juice of 1 lemon
- Pinch salt & pepper to taste

Rinse the quinoa, and cook for 20 minutes in 1½ cups simmering water or vegetable broth. Set aside to cool. Fluff with a fork before adding to other ingredients. Mix the spices together; add the flaked tuna, and diced vegetables. Add the parsley, olive oil, vinegar; toss gently. Add the cooked quinoa and beans to the tuna mixture, and mix gently.

Refrigerate, and serve over your favourite greens.

Recipe courtesy of:
 Norm Susanna, Manager
 Tech Town Café
 David Johnston Research
 and Technology Park
 340 Hagey Boulevard, Waterloo



SNAP!

CAPTURING THE AHS COMMUNITY IN ACTION



Pictured left to right:
Heather Moyse (KIN '00),
Dr. Cal Keil (HSG '82), and
Victoria Behune (RLS '78),
 congratulated our graduating
 students and provided words
 of wisdom for the future
 at the annual AHS Grad
 Send-Off event in March.



Faculty **Paul McDonald**, left, and **John Garcia**, far right, gather with the door prize winners at the AHS alumni and students get-together held at The Ontario Public Health Convention.



AHS students enjoy the comfort of their new BMH student lounge. The renovated lounge includes study, office, eating, and meeting space.

The **Mighty Esdra Smibbles** (left) logged 3,788,734 steps in Propel staff's 8-week pedometer challenge, leaving **Steve Manske** and **Barb Riley** (right), with 2,689,845 steps, in their treadmill dust.



« Paralympian **David Willsie** inspired students with his talk *Changing Minds, Changing Lives: Rehabilitation Through Sport* during Therapeutic Recreation Awareness Week.



⤴ Astronaut **Robert Thirsk** shared experiences of his 6-month expedition aboard the International Space Station, where he conducted experiments led by **Richard Hughson** (centre), and congratulated **Mike Sharratt** (right) and the Schlegel-UW Research Institute for Aging for their participation in the Get Fit For Space program.

» ALUMNI MESSAGE



⤴ Alumni Advancement Officer **Stephanie Johnson** (centre) is joined by fellow AHS young alumni attending a Waterloo alumni networking event held at The Boiler House in Toronto.

REUNION²⁰¹¹

As an AHS alumna myself, returning to campus to be your Alumni Advancement Officer has been a homecoming experience and has reconnected me to the faculty. BMH, although renovated, still contains the same AHS energy I remember as a student. I invite you to join me in reconnecting with the Faculty.

A popular time to revisit campus is during Waterloo's Homecoming. This year, the annual celebration formerly known as 'Homecoming' has been renamed REUNION. The name change was made to better reflect the interests of the Waterloo alumni community, increase alumni engagement, and build on the strengths of past homecomings.

AHS will continue to host the Fun Run as part of the REUNION 2011 schedule. The AHS Fun Run has been celebrating active living for 26 years and offers something for everyone.

For more information about reconnecting with your fellow alumni at the AHS Fun Run on September 24th, 2011, visit ahs.uwaterloo.ca/alumni/funrun

Stephanie

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RE connect

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EDITORIAL TEAM

Michelle Douglas-Mills
Stephanie Johnson
Meredith McGinnis

CONTACT

519-888-4567, ext. 32610
ahsalumni@uwaterloo.ca

CONTRIBUTORS

Nancy Fenton
Kate McCrae
Norm Susanna

DESIGN

Creative Services, CPA

PHOTOGRAPHY

Jonathan Bielaski
Margaret Burnett
CIHR
Michelle Douglas-Mills
Paul Eagles
Lisa Horvath
Chris Hughes
Stephanie Johnson
Vincent Lyons
Newschool Photography
Joe Petrik
Greg Tjepkema
Angela Verberne
World Health Organization

» Looking to hire an AHS co-op student?

Get more information about employer opportunities by contacting Waterloo Co-operative Education: cecs.uwaterloo.ca

» Thinking about returning to school?

Take a look at our AHS graduate programs: ahs.uwaterloo.ca/prospective.html

» Can you spot potential?

Refer an outstanding highschool student to one of Waterloo's undergraduate programs: referstudents.uwaterloo.ca

» Want to revisit campus?

Join friends and former classmates on Saturday, September 24 for REUNION 2011 and the 26th annual AHS Fun Run: alumni.uwaterloo.ca/alumni/reunions

Want to reconnect with AHS?

Contact the AHS Alumni Advancement Officer, Stephanie Johnson, to learn about opportunities for alumni engagement: sj5johnson@uwaterloo.ca

ahs.uwaterloo.ca/alumni



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Applied Health Sciences
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