

The cover motif of our Annual Report — the first-ever such report for the Dalla Lana School of Public Health since it was re-established in 2008 — is an eye-catching pattern reproducing a subtly distinctive and beautiful shape. The shape is the Ebola virus, arguably the biggest global public health crisis of the last year, and the cause of an epidemic that, as of June 1, 2015, killed more than 11,000 women, men and children. It is a case study that touches on almost every aspect of public health and its significance for the future of our entire society.

Although Canada was fortunate to have escaped the epidemic — unlike what happened with the SARS epidemic of 2003 — Dalla Lana School of Public Health faculty, students and alumni

brought their world-leading skills to curb the epidemic and plunged in with conviction and passion. Ross Upshur, Professor and Head of our Division of Clinical Public Health, co-chaired the World Health Organization (WHO) expert panel on Ebola's ethical issues, particularly with respect to quarantine policy and the use of untested vaccines, among other issues. Rob Fowler, Associate Professor in our Institute of Health Policy, Management and Evaluation (IHPME), served as one of WHO's clinical leaders, directing on-the-ground teams in West Africa and developing clinical management guidelines. Finally, as described in this report, David Fisman, Professor in our Division of Epidemiology (and co-author of one of the world's first scientific papers

modeling the Ebola epidemic curve),
Professor Upshur and other faculty
collaborated with a group of students to
establish an Ebola Working Group that
hosted seminars, facilitated the delivery
of critically-needed supplies to Sierra
Leone during the epidemic's peak and
organized a symposium highlighting
lessons learned from the outbreak.

And what is to be learned? For Canada and the world, it is another reminder that public health is an enormous part of our globalized infrastructure that functions like our collective "immune system," protecting us every day in a way that touches on every human experience.

Much of that infrastructure, like the Ebola virus on our cover, is relatively hidden, but actually in plain view, providing services that many of us take for granted, like the occupational and environmental health systems and professionals (still missing in many countries) that provide safe water, food, air and workplaces; and the epidemiology and biostatistics professionals who survey, monitor, and analyze the data that tell us how we are doing and what needs attention. Some of the infrastructure is in plain view to consumers, like the health system, for which public health's focus on management, health services, health systems, and health policies (our IHPME) provides the evidence, tools and professionals to optimize efficacy, efficiency and organization. Some of it is a balance between society and individuals, like the role of policies that influence smoking, dietary, physical activity, sexual behaviours, income and poverty, and other factors that are the purview of social and behavioural health science professionals.

Building on a proud history dating back to the creation of the School of Hygiene in 1927, its re-emergence in 2008 and naming courtesy of a spectacular gift by Paul and Alessandra Dalla Lana, the Dalla Lana School of Public Health is a thriving community of researchers, teachers, students and professionals dedicated to improving population health, creating healthy public policies and preventing disease. Now on a steep trajectory of growth and development — a process that I have been fortunate to have led since arriving in 2012 — the School is expanding its footprint to harness the power of one of the world's leading research, teaching and learning networks with far-reaching benefits for Torontonians and people across the globe.

This 2014-2015 annual report takes stock of the School's recent growth, particularly since its transition to become the first new faculty at the University of Toronto in 15 years in 2013, and celebrates the many accomplishments and milestones of students, faculty, staff, alumni and partners.

One important milestone was the July 1, 2014 shift of IHPME's home faculty from the Faculty of Medicine to

the Dalla Lana School of Public Health, creating one of the world's largest public health schools with a shared vision of improving health and health systems. Since the transition, which brought more than 20 core faculty, 300 partner-based faculty and almost 400 students into the School, many synergies have surfaced, particularly in global health, big data and cross-taught courses, with many faculty collaborating on new teaching and research initiatives.

Last November, after two years of planning by an organizing committee

course volunteered to work on global health projects at the School.

I am also delighted that in the last year we launched the first fundraising campaign for a Canadian public health school, with an outstanding lead gift of \$10-million from Michael and Amira Dan, to the Waakebiness-Bryce Institute for Indigenous Health.

I invite you to read more about these stories and many more in this report. In the pages that follow, you will see how our students, faculty, staff, alumni and partners contribute to a thriving



of more than 40 of the School's biggest global health stars and a large contingent of students, the School's University-wide Institute for Global Health Equity and Innovation (IGHEI) hosted a transformative Global Health Summit. The Summit launched a suite of initiatives that will capitalize on our global health strengths, partnerships, including the safe spaces initiative created by IGHEI to discuss difficult issues to advance innovative solutions to big global health problems.

The School also made progress in developing a global and public health undergraduate program this year with the hugely successful Grand Opportunities in Global Health course, which was conducted in an innovative inverse class format. More than 75 per cent of the 72 students that took the

community of researchers, teachers, public health professionals and clinicians.

I extend my sincere appreciation to our faculty members, staff and students for their outstanding work this year — as well as to our broader community of alumni and supporters for their most generous support. I look forward to the coming year as we continue to connect and integrate across disciplines, institutions and around the world to make a boundless impact in health education and research.

Howard Hu

Dean, Dalla Lana School of Public Health

Dalla Lana School of Public Health AT A GLANCE

85 CORE FACULTY 725
FACULTY IN
PARTNER INSTITUTIONS

596 MASTER'S PROGRAM STUDENTS

233
PHD PROGRAM
STUDENTS

RESIDENTS AND
POST-DOCTORAL FELLOWS

\$27.2 MILLION IN ANNUAL RESEARCH FUNDING

Graduate Degree Programs

DALLA LANA SCHOOL OF PUBLIC HEALTH (DLSPH)

PHD

Biostatistics

Epidemiology

Social and Behavioural Health Sciences

Occupational and Environmental Health

MASTER OF PUBLIC HEALTH (MPH)

Epidemiology

Family and Community Medicine

Health Promotion

Nutrition and Dietetics

Occupational and Environmental Health

MASTER OF SCIENCE (MSc)

Biostatistics

MASTER OF SCIENCE IN COMMUNITY HEALTH (MScCH)

Addictions and Mental Health

Family and Community Medicine

Health Practitioner Teacher Education

Occupational Health Care

Wound Prevention and Care

INSTITUTE OF HEALTH POLICY, MANAGEMENT AND EVALUATION (IHPME)

PHI

Clinical Epidemiology and Health Care Research

Health Services Research

MASTER OF SCIENCE (MSc)

Clinical Epidemiology and Health Care Research

Health Services Research

Quality Improvement and Patient Safety

Health Technology Assessment and Management

MASTER OF HEALTH INFORMATICS (MHI)

MASTER OF HEALTH SCIENCE IN HEALTH ADMINISTRATION (MHSc)



A GATEWAY TO GLOBAL HEALTH UNDERSTANDING FOR UNDERGRADUATE STUDENTS

A gateway course in global public health, "Grand Opportunities in Global Health" invites students from Arts and Science programs to explore the history, concepts and future of global public health. Led by Professors Abdallah Daar and Andrea Cortinois, the course follows an innovative format including online and face-to-face classroom components. This "inverted classroom" encourages students to view content online and then practice what they've learned in the classroom. Outside of class, students view short video lectures by leading researchers, complete readings and interact among themselves online. During class, students participate in small-group discussions and other shared activities.

"While we were hopeful that the course content and approach would stimulate a positive response, the feedback we received from students during the course and through a final, internal evaluation greatly exceeded our expectations," said Cortinois. "Our public health colleagues also embraced the course. Over time, it became a sort of 'Thursday evening club' for friends passionate about global health!"

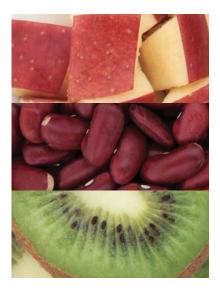
EXPANDING DIETETIC TRAINING TO MEET NUTRITIONAL NEEDS OF PEOPLE LIVING WITH MULTIPLE CHRONIC ILLNESSES

The School's Nutrition and Dietetics Program strengthened its partnerships with Toronto Public Health and University Health Network to provide graduates with the skills and insight to deliver optimal care in different environments and to patients with unique combinations of chronic illnesses.

Rather than training dietitians to treat specific diseases in particular setting, such as a clinic, hospital or in the community, the new partnership, spearheaded by Program Director Ann Fox, looks at health more holistically from prevention to palliation.



Professor Andrea Cortinois co-leads "Grand Opportunities in Global Health," an undergraduate gateway course in global and public health.



In doing so, the program will help the health system adapt to the growing number of patients living with multiple chronic conditions, such as arthritis, cancer and diabetes. This new hub for nutrition and dietetics education operates jointly with the Department of Nutritional Sciences and offers lifelong learning to mid-career professionals.

DLSPH EBOLA WORKING GROUP TAKES THE LEAD IN EBOLA RESPONSE

Students proactively rallied to support communities and health professionals in West Africa and organized learning opportunities that examined the recent Ebola pandemic with a public health lens.

Working with Save the Children, firstyear epidemiology students Courtney Smith, Garvin Leung and Tonya Campbell connected with people from Njala University in Bo, Sierra Leone, delivering masks, gloves, disinfectant and other Ebola protective supplies to where they were much needed.

"Our professors stress that public health is an interdisciplinary field. This has given us first-hand, global experience collaborating with people in different sectors towards one common goal: containing the West African Ebola outbreak," said Campbell.

The group, led by Professors David Fisman, Ross Upshur, James Orbinski and Daniel Sellen, also organized a community outreach program that included lunch and learn sessions where guest speakers discussed the outbreak. Students also shot a video on the streets of Toronto to raise awareness of myths and misunderstandings related to the disease.

On April 22, students hosted an interdisciplinary symposium to translate knowledge into action. Among the panelists was Jordan Tustin, a PhD candidate in Epidemiology at DLSPH. In Guinea, she worked as a consultant for the World Health Organization tracking cases of the disease.

Tustin told the Toronto Star on her return: "As human beings with compassion and as countries with great resources, we need to put more efforts into the response," she said. "We can't become complacent just because it is not in our backyard. One Ebola case is one too many."



Photo by European Commission DG ECHO via Flickr.



Photo by ©EC/ECHO/Jean-Louis Mosser via Flickr.





DLSPH RESEARCH AMONG THE TOP-CITED

Professor Prabhat Jha showed that tripling taxes on cigarettes around the world would prevent 200 million premature deaths from smoking.

According to the Altmetric tracking firm, Jha's is one of the highest scoring papers ever published by the prestigious

New England Journal of Medicine. Jha showed that a large tax increase would double the street price of cigarettes in some countries.

"This would be especially effective in low- and middle-income countries, where the cheapest cigarettes are relatively affordable and where smoking rates continue to rise," said Jha, also Centre for Global Health Research director at St. Michael's Hospital.

A paper by Professors Anthony Miller, Cornelia Baines, Teresa To and Steven Narod published in the British Medical Journal (BMJ) is another important article. Their paper showing the limited ability of mammography screening to improve mortality is the BMJ's most-read article in 2014.

The research showed that annual mammography in women aged 40 to 59 does not reduce mortality from breast cancer beyond that of physical examination or usual care when adjuvant therapy for breast cancer is freely available. Their findings garnered great interest among media, health professionals and women around the world who questioned assumptions about breast cancer screening so resources can be focused more effectively.

BIG GAINS FROM BIG DATA

Every time a Canadian visits a doctor, pharmacist or hospital, data are generated, which can be collected, linked and analyzed to help researchers conduct studies more efficiently. DLSPH researchers are making significant contributions to big data science and improving the health of Canadians and the system as a whole.

Professors France Gagnon and David Henry hosted "Big Data for Health,"



Professor Prabhat Jha is an internationally-renowned epidemiologist whose top-cited research underlines the need for all counties to increase tobacco taxes.



Photo by Valentin Ottone via Flickr.

a summer 2014 workshop of more than 100 scientists who discussed different ways of linking laboratory and population health data.

"Finding ways to break down the disciplinary, institutional and national silos are imperative and U of T is stepping up to the plate," said Gagnon, Associate Professor of Epidemiology, Canada Research Chair in Genetic Epidemiology and co-director of the Canadian Institutes of Health Research STAGE program.

Professors Laura Rosella and David Henry hosted a fall workshop on Big Data for Health Policy with internationally recognized speakers. Professor David Henry works with the Institute for Clinical Evaluative Sciences (ICES) to promote a wide range of research with linked health data. Henry is optimistic about gains to be made from big data research, but he cautions:

"Machine learning, applied to health data, can complement but cannot replace the traditional hypothesis-driven approaches to population health research. Fortunately, U of T has great strengths in both."

THREE NEW RESEARCH CHAIRS ADDRESS HEALTH NEEDS OF VULNERABLE PATIENTS GLOBALLY

New Canadian Institutes of Health Research (CIHR) Applied Public Health Chairs are supporting the work of Paula Braitstein and Janet Smylie, both Associate Professors of Epidemiology at the Dalla Lana School of Public Health. Braitstein works with Moi University in Eldoret, Kenya to evaluate an existing approach to addressing HIV infection, called FLTR (Find, Link, Treat, Retain). She hopes to also apply the method to the country's large population of street youth. "I can't fix a lot of the underlying problems, but I can stop them dying of HIV," Braitstein said.

Smylie, who is based at St. Michael's Hospital where she directs the Well Living House Action Research Centre for Indigenous Infant, Child and Family Health and Wellbeing, is working in partnership with national and regional Aboriginal communities to transform public health interventions and build on Indigenous systems of health knowledge and practice.

Her Chair is aligned with DLSPH's new Waakebiness-Bryce Institute for Indigenous Health. "Efforts to address the systemic health inequities experienced by Indigenous peoples in Canada compared to the general population need to be led by Indigenous communities and build on community strengths," said Smylie, who is Métis.

Lisa Forman received a Canada Research Chair Tier 2 in April 2015 in Human Rights and Global Health Equity. Her research focuses on advancing health as a human right for all as an integral component to health equity. "The right to health is a fundamental human right, recognized in international law, which can help political and health leaders to better address global health inequities," said Forman, who is the Lupina Assistant Professor in Global Health and Human Rights at DLSPH and director of the Comparative Program on Health and Society at the Munk School of Global Affairs.

HEALTHIER CITIES AND COMMUNITIES HUB SEED GRANT RESEARCH

More than half of the world's population lives in urban areas. As more people migrate to cities to seek employment, public health professionals must be thinking about ways to ensure that those cities promote health equity for all citizens.

Health inequities persist in the GTA and cities across the globe. That's why a consortium of partners at DLSPH, the Wellesley Institute and Toronto Public Health awarded the first Healthier Cities and Communities seed grants in early 2015. These funded projects will support community, public sector and university-based collaborators working together on solutions-focused research

aimed at protecting and enhancing wellbeing in cities and communities.

This seed grant initiative — catalyzed by DLSPH's Healthier Cities & Communities Hub — forges a new model for catalyzing partner-based, solutions-focused research, education and knowledge exchange. The call received 30 applications, most of which were community-university partnerships in the following theme areas: resilient cities, the built environment and health and place-based interventions.

"These teams bring together community and public service innovators as well as experts in community engagement, architecture, business, medicine, engineering and public health," said Professor Daniel Sellen, DLSPH's Associate Dean of Research who chaired the review committee.

"The projects will generate and share evidence on potentially effective solutions to health challenges faced by many people in the GTA," Sellen said.

From creating a time bank in Toronto's St. James Town community to measuring the health impact of extreme temperatures on homeless populations, the family of seed-funded projects will address a range of social determinants of health to improve the health of people living in the GTA and beyond.



Paula Braitstein



Lisa Forman



Janet Smylie and her sons, Jay and Quinn

SETTING THE STAGE FOR A NEW GENERATION OF GENETICISTS

An emerging cadre of researchers are being exposed to cross-disciplinary training that combines genetics, biology, epidemiology, mathematics and statistics in the Canadian Institutes of Health Research STAGE program. The program is co-directed by France Gagnon, DLSPH Associate Professor and Canada Research Chair in Genetic Epidemiology, and Shelley Bull, DLSPH Professor of Biostatistics, and integrates population health training for a stronger impact on public health.

The exponential surge of "big data," the unprecedented quantities of information generated from the advance of DNA sequencing technologies and population-based studies, calls for a skill set that includes strong quantitative skills, sound biological knowledge and a deep understanding of population health principles.

"These new 'geneticists' will have the ability to resolve complex issues in the design and analysis of population health studies. They will be able to identify and characterize genetic determinants for complex diseases, measure the population health impact and design studies of the molecular basis of complex diseases," said Gagnon, whose own research has improved understanding of genetic factors leading to blood clots in deep vein thrombosis patients.

PREDICTING HIGH-COST HEALTHCARE USERS

Professors Laura Rosella and Walter Wodchis looked deeper into the personal history of high cost users — the five per cent of patients who account for two-thirds of health care spending.

"Most research focuses on finding efficiencies once patients are already in the system as a high-cost user, but we wanted to know who these people were before they became patients," said Rosella. They linked Canadian Community Health Survey data to medical claim data over a five year period. Results showed that before these people became high-cost users, many were

struggling in other parts of their life in areas such as income, housing and food security.

"We already have lots of data on what happens in health care, and so the focus was on efficiency, but this research is helping to change the conversation to be more about the conditions that support healthy lives."

NO TIME TO WASTE

Infectious disease epidemiologists David Fisman and Ashleigh Tuite created the one of the first international models to predict the spread of Ebola that took into account efforts to fight it. By characterizing the disease's "basic reproductive number" early in the epidemic, they estimated that the virus would balloon to several hundred thousand cases if containment and control efforts did not improve.

Their research paper published in The Lancet, Ebola: No Time To Waste, reinforced the need for strong and coordinated action. Their model projected an extremely large epidemic if the fight against the disease slows, a point that's been picked up by international media.

"The urgency of timely intervention in the Ebola epidemic cannot be overstated," said Fisman, Professor of Epidemiology at DLSPH. "Researchers have asserted that the epidemic is proceeding in virus time, with a response on bureaucratic time."



Professor Laura Rosella's research illuminates the conditions that support healthy lives.



RENEWING PARTNERSHIPS TO STRENGTHEN CIRCUMPOLAR HEALTH SYSTEMS

The Institute for Circumpolar Health Research (ICHR) is an important northern research hub for U of T that brings people, facilities, and resources to bear on health-related research in the Northwest Territories and the broader circumpolar world.

The School is deepening its partnership with ICHR to adopt health systems performance and measurement to a northern context, as well as anticipate changing patient needs in the North, a region on the front lines of climate change.

Assistant Professor Susan Chatwood is ICHR's Executive and Scientific Director and is a 2015-2016 Fulbright Arctic Initiative Scholar. Chatwood is one of three Canadian scientists participating in an international Arctic network that will collaborative on issues related to energy, water, health and infrastructure, all of which intersect with public health.

In 2015, she also participated in a Canadian Institutes of Health Researchfunded circumpolar research initiative that informed the Arctic Council on issues related to mental wellness and resilience in circumpolar communities.

Adalsteinn Brown, DLSPH Chair of Public Health Policy and Director of the Institute of Health Policy, Management and Evaluation, visited ICHR in September 2014 to help renew its vision and mission.

"As we usher in an age of health system evolution that is deeply affected by the changing physical and political environments, it's crucial that we strengthen our partnerships in the north and consider new research avenues that support Canadian health system improvement."



Professors Susan Chatwood and Adalsteinn Brown in the Northwest Territories. DLSPH is helping shape health in the Canadian North and the broader circumpolar world.

CULTIVATING INTERNATIONAL PARTNERSHIPS

Howard Hu, Dean and Professor of Environmental Health, Epidemiology, and Global Health, is establishing new partnerships in China and South Asia that will allow for an exchange of ideas and information that can improve population health in Canada and around the world.

In December 2014, he visited Shanghai Jiao Tung University School of Public Health and the Shanghai Centers for Disease Control; the Chinese University of Hong Kong and Hong Kong University; the ASEAN Institute and the School of Public Health of Mahidol University, the Thai Health Promotion Foundation, and the Ministry of Public Health of Thailand to discuss collaboration platform opportunities.

These partnerships are part of a global engagement strategy that will help train young and mid-career professionals to be globally-minded future leaders.

"Canadian health leaders have much to learn from innovations in rapidly-developing economies, many of which have leap-frogged North America and Europe in terms of efficiency, cost-effectiveness, utilization of technology and social innovations, and our students have enormous amounts to learn from an infusion of scholars from around the world in the classroom," said Hu.



SPECIAL EVENTS AT DLSPH

The DLPSH community brought health professionals together at number of academic events to share ideas and insights on improving health for all.

Challenging Health Inequities:
Indigenous Health Conference
(November 20-21, 2014). Led by DLSPH
Assistant Professor Anna Banerji, the
conference hosted physicians, nurses,
social workers, community health
representatives, policy makers and public
health specialists with a goal to improve
cultural sensitivity about Indigenous
health in Canada.

The Public's Health: a Symposium on Public Health Histories (March 5-7, 2015). The symposium featured a roundtable discussion, led by DLSPH Professor Anne-Emanuelle Birn, an academic day with a series of peerreviewed sessions on public health histories and a public day, hosted by DLSPH Professor Ross Upshur. The public day included a collaborative public health history presentation, the product of a six-month project in which U of T grad students were paired with local high school students to help their younger peers sharpen their critical thinking and research skills.

First Peoples, Second Class
Treatment: a community conversation on racism in health care (February 3, 2015). This event launched a report co-authored by Janet Smylie, DLSPH Associate Professor, Director, Well Living House, Centre for Research on Inner City Health, Li Ka Shing Knowledge Institute, St. Michael's Hospital, that explored, "What are the fundamental ways in which racism is responsible for the alarming disparities in health between Indigenous and non-Indigenous people?"

From Global Mess to Local Stress (October 17, 2014). The seventh annual student-led conference explored ideas around bringing the health impact of environmental harm to the forefront of public health. The conference questioned whether the Canadian and global public health community has considered environmental harm to our planet as a fundamental public health concern.

PROVIDING EVIDENCE TO ADDRESS TOBACCO MYTHS

The Ontario Tobacco Research Unit (OTRU) has shown that raising tobacco taxes will not spark the contraband market. The research team, led by Robert Schwartz, analyzed trends in tobacco taxes and contraband tobacco use

since 2007 and found contraband use in Ontario is not correlated with changes in tobacco taxes.

"Less tobacco use translates into lives saved and healthcare costs averted. At the same time, government revenues increase," said Schwartz, DLSPH Associate Professor.

Schwartz's research has also bolstered the case that many films aimed at youth audiences feature characters who smoke on screen. The research showed that, of the 1,434 top-grossing movies released in theatres from 2004 to 2013, 57 per cent featured on-screen tobacco, of which 86 per cent were rated for youth in Ontario. This evidence gives weight to the argument that stronger measures are needed to limit youth exposure to

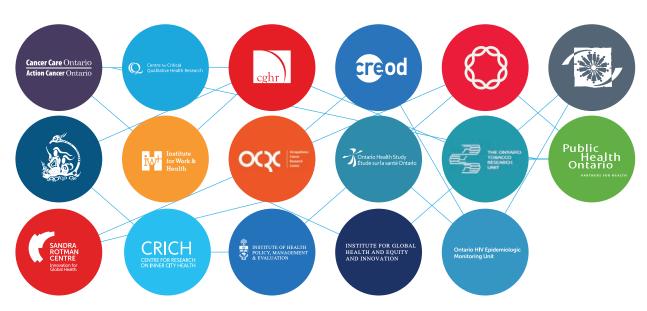
smoking in films.

"I strongly recommend that movies with tobacco imagery require adult ratings to reduce youth smoking uptake,"

In September 2014, OTRU received \$1-million in funding from the Health System Research Fund to study e-cigarettes and reducing tobacco use in Aboriginal communities.

said Schwartz.

AFFILIATED CENTRES AND UNITS WITH THE SCHOOL





GROWING OUR FACULTY

Our network of faculty leaders expanded in the last year, adding 113 new professors, including 15 core faculty, who are blazing new trails in research, education and service, both in public health and health systems.

OFFICE OF GLOBAL PUBLIC HEALTH EDUCATION AND TRAINING

DLSPH's Office of Global Health Education and Training is the home of DLSPH's Global Health Emphasis program. Under the direction of Arun Chockalingam, Professor of Epidemiology and Global Health, it oversees international practicum placements, international student exchanges, global health speakers and seminars among other projects.

One such project conducted by the Office in summer 2014 is a mapping exercise illustrating DLSPH's global health activity. Of the 451 core and partner organization-based faculty surveyed, 83 faculty members are involved in 162 projects in 107 countries. Education and training projects are most prevalent followed by occupational health, drug policy and maternal and child health.

The Office is building a database of all DLSPH global health projects, exploring student mentorship opportunities and creating resources for faculty and students interested in global health.

TOWARDS 2021 AND BEYOND

Professors Daniel Sellen and Adalsteinn Brown will lead the School through a strategic planning exercise, Towards 2021 and Beyond, culminating in early 2016.

Since the Institute of Health Policy, Management and Evaluation (IHPME) joined DLSPH in July 2014, DLSPH became Canada's largest and highest-ranked faculty of public health, underlining the need for an integrated strategic plan for the entire faculty. DLSPH's current strategic plan expires in 2015 and IHPME's is mid-way complete with most goals met.

"There are many strategic opportunities to balance deepened local impact with broader global leadership and we want to prioritize what best serves the School's future mission and vision," said

Sellen, Associate Dean of Research, who will co-chair the Strategic Planning Committee with Professor Brown, IHPME's Director.

Starting with stocktaking and wide consultation within and beyond the School in summer 2015, Professors Sellen and Brown will work with five subcommittees that will explore opportunities in curricular enhancement, building research capacity, strengthening and diversifying institutional relationships, finding synergies between population health and health systems and identifying the right measures and benchmarks to measure the many activities in education, research and service.

"Strategic plans are meant to mobilize and energize the School, and the process should ensure this," said Professor Brown, noting that a School-wide retreat will be held in November 2015 to review a draft plan.

The final plan is expected in February 2016.



Professor Daniel Sellen, Associate Dean of Research, is co-chairing the School's strategic planning process.





Left to right: Amira Dan, Michael Dan, Howard Hu, Jan Longboat, Madeleine Dion Stout, Jeff Reading.

ADVANCING OUR MISSION AND VISION

Philanthropy is integral to advancing DLSPH's mission, vision and programs. Over the next year, with the support of our donors, we intend to further develop our areas of strength, with a particular strategic focus on: Using Big Data for Health; the Health of Indigenous Communities; Integrating Public Health and Primary Care; Healthier Cities and Communities; and Global Health. These areas of strength are dynamic, cross-disciplinary and cross-cutting.

For example, the use of big data may help to promote healthier cities and communities, including Indigenous communities, while the integration of public health and primary care could have huge potential for global health. In addition, the Institute of Healthy Policy, Management and Evaluation's work in improving health systems can be assisted by big data, and can contribute to healthier communities, as well as better integration of public health and primary care.

Among other new funds, the \$10-million gift commitment from Michael and Amira Dan to establish the Waakebiness-Bryce Institute for Indigenous Health in June 2014 is one success story. The Boundless Campaign for the Dalla Lana School of Public Health will continue with generous donor support for new chairs and professorships, student scholarships and program and research projects.

DLSPH is grateful to all supporters whose investment in public health helps move the School towards a vision of ensuring healthy lives for everyone, both in Canada and around the world.

To establish a named fund to benefit students, faculty and programs, or to support annual programs or how to include DLSPH in estate planning, please contact Beth McCarthy, Director of Advancement at:

Beth.mccarthy@utoronto.ca or visit dlsph.utoronto.ca to make a donation today.



Institute of Health Policy, Management and Evaluation (IHPME)

MAKING A GREATER COLLECTIVE IMPACT ON PUBLIC HEALTH

On July 1, 2014, IHPME's home faculty shifted from the Faculty of Medicine to the Dalla Lana School of Public Health, creating one of the world's largest public health schools. Together, the School explores questions and interconnections in clinical policy, including: how (and what) care should be delivered, health system policy (how should care and other services be organized), population health policy (how to elevate overall health and the broader determinants of health), and health system design.

"Within the next five years or so, global governments will be looking for assistance in shaping or revising the health systems within their own countries," said Adalsteinn Brown, IHPME Director and Dalla Lana Chair in Public Health Policy. "Building from IHPME's capacity in policy at all levels, the two academic units will offer a wide range of solutions that extend beyond traditional educational and independent research projects."

RESEARCH ON PROLONGED SITTING MAKES THE WORLD "STAND UP" AND TAKE NOTICE

When IHPME PhD Candidate Avi Biswas published a systematic review in the prestigious Annals of Internal Medicine, he reached an audience that went far beyond the experts. His study showed that prolonged periods of sitting can have serious health consequences irrespective of whether one exercises regularly. His research was covered by over 20 Canadian and international news broadcasts and more than 130 newspapers.

"A lot of the media attention has focused on the message that sitting is



Professor Adalsteinn Brown, IHPME Director, and Professor Howard Hu, DLSPH Dean, harmonized health policy and public health, creating one of the world's largest public health schools.

bad for you. Sitting is not inherently bad for you, but like most things, doing it in excess is. It's also not very hard to reduce the risks from long periods of sitting by taking a standing or walking break every 20-40 minutes while still making sure to exercise regularly," said Biswas.

BRINGING PRACTICAL EXPERIENCE FROM FIELD SETTING DIRECTLY INTO THE CLASSROOM

Dr. Omid Shabestari holds one of IHPME's partnered positions as a data scientist with Cancer Care Ontario, a role he assumed in spring 2014. IHPME's partnered positions provide an opportunity for new faculty to work at U of T as well as within a field setting. Partnered positions also exist at the Bridgepoint Collaboratory for Research and Innovation, the SickKids Research Institute and the Toronto Central Communicate Care Access Centre. IHPME is planning a total of five partnered positions.

UNDERSTANDING SUCCESSFUL MODELS OF INTEGRATED CARE

An international team, led by IHPME Associate Professor Walter Wodchis, is addressing shared challenges in delivering integrated care to complex patients. Advancing international research developed in collaboration with The Commonwealth Fund (US) and The Kings Fund (UK), Wodchis has embarked on a five-year team grant from the Canadian Institutes for Health Research and the Health Research Council of New Zealand.

"As part of the effort, a host of IHPME faculty are advancing the understanding of integrated care, including understanding what it is, who needs it, and most importantly, how it can be implemented," said Wodchis, noting that his team's research was developed and is being implemented with key stakeholders including patients, caregivers, providers and policy makers."

Institute for Global Health Equity and Innovation

REFRESHING THE VISION OF DLSPH'S UNIVERSITY-WIDE GLOBAL HEALTH INSTITUTE

What if we could give birth to a global movement that will propagate contagious ideas and innovative projects that could lead to a healthier and fairer future for all? What if we could forge alliances across traditional boundaries, harnessing our collective talent and creativity, to create a pandemic of health?

These are some of the questions guiding the reinvention of the Institute for Global Health Equity and Innovation (IGHEI). Founded in 2012 and housed at DLSPH, this university-wide entity began its transformation before and during *Creating a Pandemic of Health*, a global health summit that hosted more than 750 attendees and hundreds of remote



Professor Alex Jadad is the interim director of the Institute for Global Health Equity and Innovation.

participants from across the globe in November 2014.

"The Institute will be a reservoir for contagious ideas for a healthier world," said Professor Alejandro (Alex) Jadad, IGHEI's Interim Director who is a Canada Research Chair in eHealth Innovation and a lead Summit co-chair. Jadad works closely with Rani Kotha, IGHEI's Senior Strategist and executive co-chair of the Summit.

The Institute collaborates across U of T with researchers from U of T's faculties of Medicine, Arts and Science, Management, Applied Science and Engineering, Nursing and Pharmacy, among many other local, national and international partners.

The Health of Humanity project is one of IGHEI's first initiatives that will analyze self-reported health data from 600,000 people from 121 countries to determine how healthy people feel, also known as "salutometrics," an innovative way to measure health.



Lisa Forman and Ophira Ginsburg at the Global Health Summit.



Global Health Summit co-chairs: Abdallah Daar, Ross Upshur, Rani Kotha and Alex Jadad

Institute for Indigenous Health

INSTITUTE NAMED TO HONOUR CANADIANS' COMMITMENT TO INDIGENOUS PEOPLES

A transformative institute aimed at creating thriving health in Indigenous communities received the name, Waakebiness-Bryce Institute for Indigenous Health, on March 23 at a naming ceremony attended by more than 150 DLSPH faculty, staff, alumni and partners.

The Institute was created in June 2014 with a \$10-million gift from Michael and Amira Dan and cultivates partnerships with Indigenous communities, supports Indigenous faculty and provides seed funding to support pilot projects.

Professor Jeffrey Reading is the Institute's inaugural interim director and brings more than two decades of experience in enhancing knowledge in Indigenous health issues.

"It's exciting to return to Toronto and have the opportunity to play a role in the development of this Institute, one than 20 years of experience working in the health sector in Canada and began his career as a nurse in Ontario. Nowgesic received his PhD in Social and Behavioural Health Sciences at DLSPH in 2015 and has published papers in HIV, tuberculosis, diabetes, nursing, public health, research capacity and infrastructure.

Clinical Public Health Division

A NEW GENERATION OF HEALTH CARE LEADERS

A new generation of health professionals and health researchers are leading the way in integrating primary care and preventive medicine to improve population health. The Division of Clinical Public Health is attracting emerging young leaders in the field to boost public health research and offer medical students enhanced learning.

Dr. Andrew Pinto received a New Investigator Award in Clinical Public Health, the first jointly funded research award between DLSPH and U of T



Michael Dan and Jeff Reading, lead benefactor and interim director of the Waakebiness-Bryce Institute for Indigenous Health.

of the first of its kind in the world," said Professor Reading, who received his PhD in Epidemiology at DLSPH in 1994 and led a movement calling for a national advanced research agenda in the area of Aboriginal people's health. Assistant Professor Earl Nowgesic is the Institute's Interim Associate Director. He has more Medicine's Department of Family and Community Medicine. His research evaluates interventions on social determinants of health, such as employment or income, and how these determinants can be better addressed by family physicians.

"My own work is divided between research and clinical practice, and I am interested in using ideas from the public health space in the clinical world. I think there is a middle ground that has not been fully explored between patient interactions, which happen at the individual level, and public health, which happens at the population level," says Pinto, who is a graduate of the Public Health and Preventive Medicine Residency Program.

Drs. Barry Pakes and Onye Nnorom are now leading DLSPH's Public Health and Preventive Medicine Residency Program, the largest of its kind in Canada. Program graduates are equipped to take on leadership roles in public health management and policy development. Pakes is also leading the Global Health Education Initiative – the only comprehensive global health curriculum for physician specialist trainees in the world — that has an alumni network of more than 100 graduates who are leaders across Canada and globally.

Dr. Allison Chris is the new course director for the Community, Population and Public Health course in the undergraduate MD program in U of T Medicine. The course will teach medical students all aspects of public and population health, including learning opportunities in community settings. The course was launched in August 2014 and will be delivered to students during first and second year.

In August 2014, Dr. Aaron Orkin became the School's first clinical public health fellow, in collaboration with St. Michael's Hospital. Orkin's research explores access to health services for vulnerable populations and the intersection between public health and clinical medicine. His CMAJ Open study examined the fate of migrant farm workers in Ontario who are deported and fired without medical care or income security following workplace injuries or illness.

"Although they have health insurance during their employment in Canada, migrant workers face challenges in accessing health care, including language barriers, long work hours, lack of knowledge about the health care system and limited transportation."



Biostatistics Division

NEW STATISTICAL METHODS SHED LIGHT ON VACCINATIONS AND ADVERSE EFFECTS

Potential adverse effects of early childhood vaccinations are a topic of increasing interest and frequently misunderstood. One reason may be that certain rare health events in early childhood may occur around the same age as the scheduled vaccinations, though they are completely unrelated to the vaccination itself.

DLSPH Assistant Professor Olli Saarela developed new statistical methods to control for confounding variables, such as age, when assessing the relationship between vaccinations and adverse outcomes. Saarela's research pooled vaccination information (i.e. whether children were vaccinated or unvaccinated) for more efficient estimation of vaccination effects. He also proposed a novel visual comparison of adverse outcome incidence rates in vaccinated and unvaccinated populations over time.

LARGEST-EVER PSYCHIATRIC GENETICS STUDY

Jo Knight, Associate Professor of Biostatistics and senior scientist at the Centre for Addiction and Mental Health, collaborated on the biggest-ever psychiatric genetics study examining the genetic roots of schizophrenia. Her team partnered with more than 100 researchers from around the world to identify more than 100 spots in human DNA that are believed to contribute to the risk of developing schizophrenia.

"This really is the beginning of a group of many studies that will produce lots more information about the disease as people drill down into very specific hypotheses and try to test interactions with the environment, or gene-to-gene interactions," said Knight, noting that the study included genetic information from more than 150,000 people — nearly 37,000 of them diagnosed with schizophrenia.

Epidemiology Division

CANADIAN IMMUNIZATION RESEARCH NETWORK LAUNCHED TO RESPOND TO POTENTIAL PANDEMICS

The Canadian Immunization Research Network (CIRN) is a new, national network of vaccine researchers who develop and test methodologies related to the evaluation of vaccines as they pertain to safety, effectiveness and program implementation and evaluation. Several DLSPH researchers with Public Health Ontario appointments are making important contributions, including: Professors Jeff Kwong, Laura Rosella, Shelley Deeks, Shelly Bolotin, Sarah Wilson and Natasha Crowcroft as principal investigators. Other DLSPH investigators include: Brenda Coleman, Allison McGeer, David Fisman and Beate Sander.

"CIRN is an important step forward for applied immunization research in Canada and will make a huge impact on moving forward the quality and effectiveness of the scientific evidence supporting immunization programs in Ontario," said Natasha Crowcroft, Associate Professor of Epidemiology and Clinical Public Health at DLSPH and Chief of Applied Immunization Research at Public Health Ontario.

BETTER OUTCOMES FOR YOUNG WOMEN WITH BREAST CANCER

Canada's best minds in breast cancer research are forming, "Towards better outcomes for young women with breast cancer: A Pan-Canadian Collaborative," a national research team dedicated to investigating the unique biology of breast cancer in women under 40 and

gaining new information about breast cancer prevention, risk reduction and care that addresses their distinct needs.

The project is led by DLSPH Epidemiology Professor Steven Narod, who is also Senior Scientist and Director, Familial Breast Cancer Research Unit, Women's College Research Institute and Tier 1 Canada Research Chair in Breast Cancer. It will establish a Canadian Young Breast Cancer Cohort comprised of 1,200 newly-diagnosed young women, with all stages of breast cancer, from 28 sites across Canada. The team will also assemble a database of 3,000 women who have previously been diagnosed with breast cancer when they were under the age of 40 in order to assess longer term outcomes.

A NEW TOOL TO PREDICT DIABETES

The number of people with diabetes in Ontario more than doubled from 546,000 in 2000 to 1.2 million in 2010, increasing further to 1.5 million in 2014. According to Canadian Diabetes Association estimates, the number is expected to grow to 2.2 million by 2024.

Laura Rosella developed a policy tool to show the effectiveness of interventions at the population level using a CIHR operating grant. Using the technology, public health units, provincial policy makers and community planners can see how much a particular intervention, such as improving walkability of neighbourhoods or food-related measures, would mean fewer people getting diabetes in ten years time. The tool also calculates projected health care savings from the lower incidence rate that would result from a particular intervention.

"We've worked directly with people in government and local health units to determine the interventions we used in the model," said Rosella, Assistant Professor of Epidemiology at DLSPH. "Now, we're training public health units to run the models themselves — when they have that ability, they are more likely to use it."

Social and Behavioural Health Sciences Division

SEX EDUCATION BY THEATRE

Shira Taylor, a doctoral candidate in the Division of Social and Behavioural Health Sciences, produced SExT: Sex Education by Theatre, a theatrical show written and performed by youth in Toronto's Flemingdon/Thorncliffe Park neighbourhood to educate young adults about sex. The show premiered in July 2014 at the Ontario Science Centre.

"SExT gives youth a voice," said Taylor who produced the show as part of her thesis with funding by the Canadian Institutes of Health Research's Social Research Centre in HIV Prevention in partnership with the Flemingdon Health Centre. "Its peer-to-peer approach delivers sex-ed tailored to the needs of youth, instead of inviting experts to talk at them."

ADDRESSING DRUG USE IN PRISONERS

Drug use among men in provincial correctional facilities in Ontario remains high, according to the first Canadian study on the subject in the last decade led by DLSPH researchers.

"Since many people lack access to health care and social services in the community, the time in custody provides



Students practicing for SeXT: Sex Education by Theatre.

a valuable opportunity to provide or link with services which could decrease drug use and its associated harms," said the study's lead author Dr. Fiona Kouyoumdjian, a graduate of DLSPH's PhD Epidemiology and Public Health and Preventive Medicine Residency Programs.

Kouyoumdjian co-authored the study with Professor Liviana Calzavara, who served as Social and Behavioural Health Sciences Division Head from July 2013 until March 2015, and Sue Bondy, Associate Professor of Epidemiology. Their research recommends a standardized approach to harm reduction efforts for persons in custody, including access to drug abuse treatment, hepatitis A and B vaccination, needle exchange and other measures.

NATIONAL RECOMMENDATIONS FOR HARM REDUCTION AND HIV PREVENTION AMONG DRUG USERS

DLSPH Associate Professor Carol Strike was part of a Canadian Institutes of Health Research–funded team that produced the Best Practice Recommendations for Canadian Harm Reduction Programs, which has become the most downloaded and watched on the Canadian AIDS Treatment Information Exchange website. It features up-to-date scientific evidence about risk, behaviours and prevention of HIV, hepatitis C, hepatitis B and other harms.

While earlier recommendations were released by some provinces, this national effort was developed to promote consistent, high-quality harm reduction services to people who use drugs in Canada. A cross-Canada, multi-stakeholder team with representation from researchers, service providers, policy makers, and people with lived experience using drugs collaborated on the recommendation.



DLSPH researchers recommend a standardized approach to harm reduction efforts for persons in custody. Photo by Ryan via Flickr.

SYMPOSIUM IN HONOUR OF JOAN EAKIN

The DLSPH community said goodbye to Professor Joan Eakin, Director of the Centre for Critical Qualitative Health Research ('CQ') and Adjunct Scientist at the Institute for Work & Health, who retired in June 2014.

More than 125 friends, students and colleagues gathered in October 2014 for a celebration of Joan's tremendous contributions in the areas of work, health and critical qualitative research and speakers discussed the influence of Eakin's research and scholarship.

Eakin is a sociologist by discipline and her research focuses mostly on the social dimensions of work and health, including the socio-political contingencies of prevention, work injury and disease, compensation and disability, and the occupational health and safety system.

Occupational and Environmental Health Division

HONOURING A LEGACY

The DLSPH community celebrated the 100th Anniversary of the Gage Building on February 10, 2015.

"Understanding and celebrating history helps us connect our contemporary work to communities of the past and find inspiration in the process," said James

Professor James Scott and Martha Smith (great-granddaughter of Sir William Gage) at Gage Building 100th Anniversary.

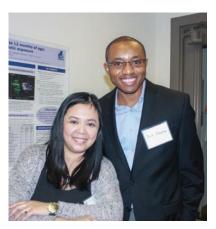
Scott, Head of the Occupational and Environmental Health Division, who has studied and worked in the Gage Building for more than 20 years.

Sir William Gage had a strong influence on public health in Ontario and Canada, including support for early infrastructure that underpinned Canada's public health response to tuberculosis. "One hundred years later, Sir William Gage's vision of the importance of the environment as a key determinant of health remains alive and well within the School," said Scott.

GRAND CHALLENGES GRANT TO EXAMINE WORKPLACE HAZARDS IN INDIA

Paul Bozek, Lecturer in the Division of Occupational and Environmental Health, and Donald Cole, Professor of Epidemiology and Global Health, received a Grand Challenges Canada grant to address silica exposure problems among agate jewellery producers in Gujarat, India. They will work with Workplace Health Without Borders (WHWB), a Canadian non-governmental organization (NGO) and People's Training and Research Centre (PTRC), an Indian NGO.

Tens of millions of Indian workers are exposed to deadly silica dust that can cause cancer, tuberculosis and lung disease. "Controlling workplace hazards in developing countries is truly a grand challenge. Technical solutions commonly applied in the developed



Agatha Blancas and Obidi Ezezika at the Gage Building 100th Anniversary

world are very difficult to implement, due to lack of resources, energy and water," explained Bozek. Through this project, DLSPH and its partners will develop a toolkit of technical, social and business approaches to preventing occupational disease.

INFANT MICROBIOME RESEARCH RECEIVES BRUCE SQUIRES AWARD

Professor James Scott, Dr. Meghan Azad and Dr. Anita Kozyrskyj received a Bruce Squires Award for their study that found variability of gut flora in healthy infants with different diet and delivery methods.

The Award is presented annually to the authors of a research article that promotes high standards of reporting and evidence-based medicine. The article was one of the most highly cited CMAJ articles in 2014 and had significant downloads.

Their research examined the microbiome of 24 infants who were recruited as part of the Canadian Healthy Infant Longitudinal Development cohort and found that infant gut flora varied by delivery and breastfeeding status.

"Gut microbes clearly play an important role in human health and disease, but microbiome research is a relatively new field, and most studies have been conducted in adults," said Azad, the study's principal investigator and a DLSPH graduate.



Faculty Awards & Honours

DALLA LANA SCHOOL OF PUBLIC HEALTH (DLSPH)

Allison McGeer

May Cohen Award for Women Mentors (2015)

Andrea Sass-Kortsak

American Industrial Hygiene Association Distinguished Fellow

Anna Banerji

Dr. Norman L. Jones Award, Pulsus Group

Anne-Emanuelle Birn

Top 300 Women Leaders in Global Health, The Graduate Institute Geneva

Arjumand Siddigi

Robin Badgley Award for Teaching Excellence (Early, 2013-2014)

France Gagnon

Anthony Miller Award for Excellence in Research (2013-2014)

Healthier Cities & Communities Hub

Sheila Lupson Healthy Community Recognition Award (2014)

Janet Raboud

Ontario HIV Treatment Network Career Scientist Award (2005-2014)

Julie Foisy

DLSPH Staff Recognition Award (2013-2014)

Kevin Thorpe

Robin Badgley Award for Teaching Excellence (Open, 2013-2014)

Laura Rosella

Canadian Society for Epidemiology and Biostatistics Early Career Award (2015)

Connaught New Researcher Award (2014-15)

Lisa Forman

Ludwig and Estelle Jus Memorial Human Rights Prize (2015)

Michael D. Escobar

Fellow of the American Statistical Association

Susan Chatwood

Fulbright Arctic Initiative Scholar

Suzanne Jackson

John Hastings Award for Excellence in Service to the University and the Community (2013-2014)

Vivek Goel

C.P. Shah Alumni Award of Excellence (2013-2014)

INSTITUTE OF HEALTH POLICY, MANAGEMENT AND EVALUATION (IHPME)

George Tomlinson

Best Thesis Supervisor, IHPME

James Mullen

Best Practicum Supervisor, IHPME

Jeremy Veillard

Best New Course Offered, IHPME

Kathleen Pritchard

Thomson Reuters top scholar

Kerry Kuluski

Best Instructor, IHPME

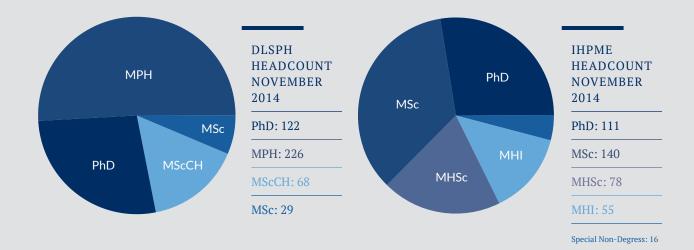
Tony Culyer

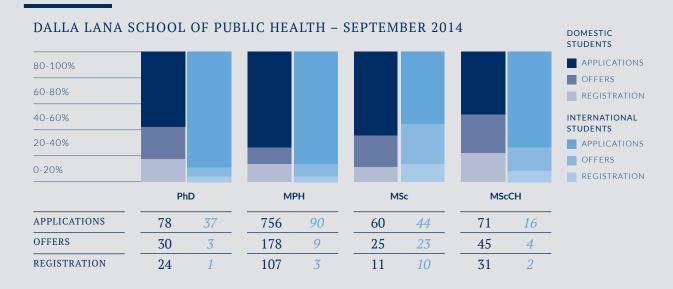
University of the Witwatersrand Wits Distinguished Visiting Scholar 2015 & as the 2015 Hall Laureate Award, Justice Emmett Hall Memorial Foundation

Yvonne Bombard

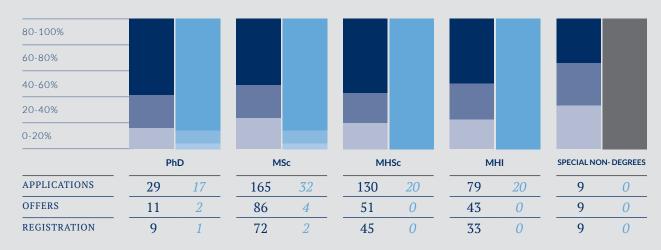
CIHR new investigator award

Facts & Figures





INSTITUTE OF HEALTH POLICY, MANAGEMENT AND EVALUATION - SEPTEMBER 2014



FACULTY STAFF

85 CORE FACULTY

725
FACULTY IN PARTNER INSTITUTIONS

36 ADMINISTRATIVE 34
RESEARCH STAFF
(APPOINTED)

4
PROMOTED TO
ASSOC. PROFESSOR

4
PROMOTED TO
PROFESSOR

37
RESEARCH STAFF
(CASUAL)

18
POST-DOCTORAL
FELLOWS

8
ENDOWED
CHAIRS

CANADA
RESEARCH CHAIRS

Combined data DLSPH and IHPME

Combined data DLSPH and IHPME

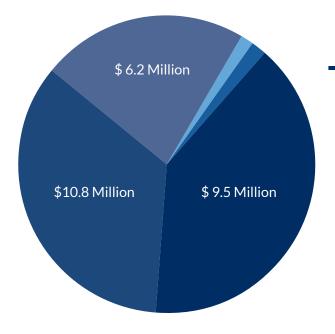
RESEARCH

Our researchers are highly productive, contributing to U of T as the top-ranked university in Canada for both total number of peer-reviewed publications and of scholarly citations in the areas of health care sciences and services, health policy and services and public, environmental and occupational health.

Core faculty with research roles contributed to an average of eight published, peer-reviewed papers and five peer-reviewed presentations.

Total research funding awarded to DLSPH investigators was \$27,205,349, including IHPME and funds administered through affiliated institutions,

in the federal fiscal year 2013-14, of which \$11,205,813 was administered on-campus.



TOTAL RESEARCH FUNDING: \$27,205,349

Not-for-profit: \$10,820,018

Tri-council agencies: \$9,454,269

Government: \$6,163,829

Corporate: \$383,753

Institutional Initiatives: \$383,480

The Dalla Lana School of Public Health is grateful for the leadership and support of founding benefactors Paul and Alessandra Dalla Lana.

"The decision to narrow in on the school and work with U of T was an easy one because we were looking for an opportunity to contribute that could make an impact and build upon excellence."

— Paul Dalla Lana



