2021 FHS Graduate Plenary Awards

A Celebration of Research and Professional Excellence

fhs.mcmaster.ca/grad/research_plenary.html
A Special Thank You to our Judges, Selection Committee Members, Moderators, and Panelists

Dr. Sara Andres
Dr. Arinjay Banerjee
Dr. Romina Brigardello-Peterson
Dr. Wenonah Campbell
Monica de Paoli
Sudeshna Dhar
Laura Garcia Diaz
Dr. Amy Gillgrass
Dr. Tom Hawke
Dr. Alison Holloway
Dr. Alex Hynes
Dr. Mark Inman
Dr. Susan Jack
Lisa Kokonge
Sujane Kandasamy
Kate Kennedy
Agata Kieliszek
Dr. Paul Kim
Dr. Colin Kretz
Nirushi Kuathasan

Anthony Le Fuentes
Dr. Mitch Levine
Dr. Joy MacDermid
Dr. Kim Madden
Rida Malik
Amal Mathai
Sarah Medeiros
Dr. Matthew Miller
Dr. Ram Mishra
Safiaa Naiel
Gayatri Nair
Taylor Nelles-McGee
Sawayra Owais
Dr. Tara Packham
Dr. Sandy Raha
Dr. Julie Richardson
Stephanie Saunders
Dr. Lisa Schwartz
Dr. Roma Sehmi
Sureka Selvakumaran

Allison Sohanlal
Dr. Elena Tonti
Dr. Lyn Turkstra
Dr. Judy West-Mays
Dr. Gerry Wright
Jeong-ah Yoo
Marie-Lee Yous
Katherine Zukotynski
Indigenous Students Health Sciences Office
Health Sciences Graduate Student Federation
Faculty of Health Sciences Post-Doctoral Fellow Association
2021 FHS Graduate Plenary Award Winners

**PechaKucha Presentation**
Nikoo Aghaei

**Oral Presentation**
Georgia Dominguez

**Graduate Student Leadership Award**
Monica De Paoli
Kanwal Singh
Kevin Kim
Celeste Suart

**Graduate Student Publication Award**
Daeria Lawson

**Graduate Student Teaching Assistant Excellence Award**
Bre-Anna Owusu

**Graduate Student Innovation & Entrepreneurship Award**
Maya Kshatriya

**Postdoctoral Fellow Innovation & Entrepreneurship Award**
Bianca Pfaffenseller
Patricia Hewston

**Postdoctoral Fellow Leadership Award**
Alejandra Chavez-Carbajal

**Postdoctoral Fellow Outstanding Achievement Award**
Patricia Hewston

**HSGSF Excellence in Open Communication and Collaboration Award**
Alannah Hillmer
Tushar Dhawan

**HSGSF Impact Award**
Daeria Lawson

**HSGSF Excellence in Graduate Student Supervision Award**
Michelle Phoenix

**FHSPDA Excellence in Graduate Teaching Award**
Lawrence Mbuagbaw

**Indigenous Students Health Sciences Award for Graduate Performance & Community Leadership**
Dr. Curtis Sobchak
GRADUATE PROGRAM AWARDS

Faculty of Health Sciences Graduate Programs

Outstanding Achievement Awards

Tatsiana Adamovich  Physiotherapy
Maya Albin  Speech-Language Pathology Program
Sharia Ali  Health Management
Nora Bakaa  Rehabilitation Science
Hannah Bauer  Occupational Therapy
Diane Begin  Rehabilitation Science
Arati Bhasin  Health Research Methodology
Shania Bhopa  Global Health
Emily Bordeleau  Biochemistry
Sarah Brassard  Neuroscience Graduate Program
Lindsey Carfrae  Biochemistry
Natalie Constantine  Physiotherapy
Alainna Crawford  Occupational Therapy
Eric Desjardins  Medical Sciences
Sudeshna Dhar  Medical Sciences
Parabhjot Doel  eHealth
Cara Evans  Health Policy
Maheen Farooqi  Health Research Methodology
Biban Gill  Chemical Biology
Joanna Gotfrit  Health Management
Janelle Gravesande  Rehabilitation Science
Jillian Halladay  Health Research Methodology
Samantha Harris  Nursing
Tracey Huber  Nursing
Laiba Jamshed  Medical Sciences
Samuel Jarman  Health Science Education
Rita Jezrawi  eHealth
Amiah Keresturi  Child Life and Pediatric Psychosocial Care
Kevin Kim  Health Research Methodology
Tim Klein  Biochemistry
Maya Kshatriya  Global Health
Anthony Le Fuentes  Child Life and Pediatric Psychosocial Care
Steve Lu  Rehabilitation Science
Vanessa (Thu) Ma  eHealth
Kailah Macri  Physiotherapy
Micayla Matthews  Public Health
Vanessa Mckenzie  Nursing
Sarah Medeiros  Medical Sciences
Handreen Mohammed  Child Life and Pediatric Psychosocial Care
Saeed  Global Health
Diego Monteverde  eHealth
Fabrice Mowbray  Health Research Methodology
Luwama Mulalu  Global Health
Matthew Mutamiri  Nursing
<table>
<thead>
<tr>
<th>Name</th>
<th>Program</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sukrit Narula</td>
<td>Health Research Methodology</td>
</tr>
<tr>
<td>Zil Nasir</td>
<td>Public Health</td>
</tr>
<tr>
<td>Nicole O’Brien</td>
<td>Occupational Therapy</td>
</tr>
<tr>
<td>Sawayra Owais</td>
<td>Neuroscience Graduate Program</td>
</tr>
<tr>
<td>Alexandra Parco</td>
<td>Biochemistry</td>
</tr>
<tr>
<td>Vidhi Patel</td>
<td>Neuroscience Graduate Program</td>
</tr>
<tr>
<td>Sophie Poznanski</td>
<td>Medical Sciences</td>
</tr>
<tr>
<td>Tameem Quader</td>
<td>Biomedical Discovery and Commercialization</td>
</tr>
<tr>
<td>Taigan Radomske</td>
<td>Global Health</td>
</tr>
<tr>
<td>Claire Ramlogan-Salanga</td>
<td>Health Science Education</td>
</tr>
<tr>
<td>Aric Rankin</td>
<td>Nursing</td>
</tr>
<tr>
<td>Julia Roglich</td>
<td>Nursing</td>
</tr>
<tr>
<td>Jill Scambler</td>
<td>Child Life and Pediatric Psychosocial Care</td>
</tr>
<tr>
<td>Joshua Shapiro</td>
<td>eHealth</td>
</tr>
<tr>
<td>Nicole Smith</td>
<td>Physiotherapy</td>
</tr>
<tr>
<td>Sophie Stasyna</td>
<td>Occupational Therapy</td>
</tr>
<tr>
<td>Celeste Suart</td>
<td>Biochemistry</td>
</tr>
<tr>
<td>Janice Tai</td>
<td>Biochemistry</td>
</tr>
<tr>
<td>Megan Vierhout</td>
<td>Medical Sciences</td>
</tr>
<tr>
<td>Martin Villegas</td>
<td>Biomedical Engineering</td>
</tr>
<tr>
<td>Haydn Walker</td>
<td>Medical Sciences</td>
</tr>
<tr>
<td>Rebecca Watson</td>
<td>Physiotherapy</td>
</tr>
<tr>
<td>Ria Wilson</td>
<td>Physiotherapy</td>
</tr>
<tr>
<td>Jack Yang</td>
<td>Medical Sciences</td>
</tr>
<tr>
<td>Sandy Zakaria</td>
<td>Biomedical Engineering</td>
</tr>
<tr>
<td>Ali Zhang</td>
<td>Biochemistry</td>
</tr>
<tr>
<td>Salam Zoha</td>
<td>Global Health</td>
</tr>
<tr>
<td>David Zorko</td>
<td>Health Research Methodology</td>
</tr>
</tbody>
</table>
McMaster University has an outstanding national and international reputation as one of the most successful research-intensive universities. Our Graduate Programs in Health Sciences form a key component of this strength, offering excellent training and experiences in health-related research fields. Health Sciences graduate students are immersed in a culture of collaboration and inter-professional learning. The diverse opportunities in our Master’s and Doctoral programs allow students to develop the important professional skills that become the foundation for future career successes and life-long learning. Our highly talented faculty and postdoctoral fellows are from many different departments and disciplines in the University, including the teaching hospitals in Hamilton, associated research institutes and centres, and multidisciplinary training programs offered in collaboration with other Faculties. Our programs embrace a culture of innovation, collaboration, excellence in mentorship, education, and research that enables graduate students to reach their maximum potential. We invite you to explore the many opportunities available within our graduate programs.

**BIOCHEMISTRY**

Biochemistry and Biomedical Sciences offers leading-edge training at the MSc, PhD, and MD/PhD levels. Our program is internationally recognized and research-intensive in a variety of scientific disciplines including stem cells and cancer research, developmental biology, metabolism, microbiology and infectious diseases, and structural biology. The graduate experience in our Department is defined by world-class training in a research laboratory, the synthesis of skills in experimental design, interpretation, and scientific communication, and strong mentorship from researchers in the biomedical sciences. At the heart of our program are 125 graduate students working in labs on the McMaster campus and in affiliated hospitals and research institutes across the city. Our program is supported by a world-class research infrastructure, allowing students to conduct studies that are creative and original with unparalleled depth of discovery.

**BIOMEDICAL DISCOVERY & COMMERCIALIZATION**

The Master of Biomedical Discovery and Commercialization program is a one-year, course-based Master’s that provides students with the scientific and technical knowledge and understanding that underlies breakthrough discoveries in the biomedical sciences and drug discovery. The program also provides an understanding of business fundamentals that are necessary to market such discoveries. One of the most important features of the program, the integration of business and science, is achieved through the Team Project, Scholarly Paper, and two M.B.A.-level Business courses. Experiential learning is obtained through a four- to eight-month community internship that provides students with an opportunity for creative exploration of Biomedical Research and Commercialization. The internship also provides students with an invaluable opportunity to expand their professional network and to develop and refine a sound career plan.
BIOMEDICAL ENGINEERING
McMaster University’s Faculties of Engineering and Health Sciences have been brought together to create a unique research and training program under the umbrella of the School of Biomedical Engineering (SBME). Improved healthcare and outcomes grounded in bioengineering require new approaches emphasizing integration and collaboration among traditional research areas. The School provides a unique collaborative environment that leverages our existing expertise in medical sciences and engineering, and links current and emerging areas of molecular, medical, and bioengineering research.

CHEMICAL BIOLOGY
Chemical biology involves the use of small molecules to affect living systems. Understanding the resultant interactions necessitates a multi-disciplinary approach that incorporates everything from synthetic and analytical chemistry to structural and molecular biology. Students are provided with research-intensive, multidisciplinary training at the interface of chemistry, biochemistry, and biology, with a primary emphasis on understanding how the chemical biology approach can be used to solve complex biological problems such as the mechanisms of disease, the regulation of biological pathways, and the roles of different biomolecules in controlling cellular function (or dysfunction).

CHILD LIFE AND PEDIATRIC PSYCHOSOCIAL CARE
The Master of Science in Child Life and Pediatric Psychosocial Care is the first program of its kind in Canada. It is a professional and practice-focused graduate degree offered through a blended delivery of online and in-class formats. Students will learn about pediatric psychosocial assessment, critically examine ethical issues, and apply theoretical knowledge and patient- and family-centred care principles to diverse pediatric clinical settings. Two streams are offered. Stream 1 provides academic and clinical training (2 internships) to prepare students with knowledge, clinical skills, and professional behaviours in their eligibility to certify and practise as entry-level child life specialists. Stream 2 provides practising health professionals with advanced practice skills in pediatric psychosocial care in a course-based format.

CLINICAL BEHAVIOURAL SCIENCES
The Clinical Behavioural Sciences Program is a Health Sciences Graduate Diploma Program. The course instructors are faculty from the Department of Psychiatry and Behavioural Neurosciences. The faculty are experienced clinicians with expertise in providing advanced training to professionals looking to enhance their skills. The program is designed for professionals who are working in the health services field. Courses are developed for adult learners and have an inter-professional, small-group approach. The emphasis of the program is not on new credentials or accreditation but on enhanced knowledge and skills. The program consists of formal teaching and clinical supervision in a number of course areas. Students from a variety of professional backgrounds, agencies, and hospitals study in the program, attending classes on a part-time basis while they continue in their usual employment. Students may choose to apply as post-degree students to complete a selected course, or diploma completion.

GRADUATE DIPLOMA IN CLINICAL EPIDEMIOLOGY (GDCE)
A unique option in Canada, the Graduate Diploma in Clinical Epidemiology (GDCE) is a completely online-delivered program, consisting of a harmonized package of four part-time courses that cover core topics of clinical epidemiology. GDCE builds on the strengths of the internationally respected Health Research Methods (HRM) graduate program. GDCE courses are recognized as equivalent to HRM courses on the same topics and are also taught by faculty members in the Department of Health Research Methods, Evidence, and Impact, a premier destination for graduate study and...
research in clinical epidemiology. GDCE is ideal for applicants with an interest in clinical epidemiology training without the commitment of an entire MSc degree, and with the flexibility to combine study with work without the need to attend classes on campus. Graduates will gain foundational knowledge in the tenets of evidence-based medicine and a skill set applicable in clinical, policy, management, and research settings. At GDCE completion, a formal graduate diploma is awarded.

CLINICAL INVESTIGATOR PROGRAM (CIP)
The Clinician Investigator Program is a Royal College of Physicians and Surgeons of Canada Program that is designed to help train clinician investigators to launch a career as academic physicians. Trainees are physicians who are in, or have recently completed, a Royal College of Physicians and Surgeons accredited Clinical Residency Program and are also enrolled in a Faculty of Health Sciences Graduate Program, which can be a MSc or PhD. The Clinician Investigator Program supplements the research training provided by the graduate programs through monthly academic sessions, presented by established clinician investigators, that focus on topics of particular relevance to clinicians who plan to spend a proportion of their time doing research. McMaster’s Clinician Investigator Program, which is one of the largest in Canada, currently has 39 trainees. The trainees come from a variety of clinical departments and are enrolled in a number of Graduate Programs (e.g., Health Research Methodology, Medical Sciences, Health Science Education, Biochemistry and Biomedical Sciences).

eHEALTH
The MSc eHealth degree is truly interdisciplinary and based on a partnership between the Faculties of Health Sciences (Department of Health Research Methods, Evidence, and Impact) and Engineering, and the DeGroote School of Business (Information Systems area). The objective of the program is to produce Master’s-level graduates with high quality training and experience in the broad interdisciplinary area that spans eHealth. The program has full-time, course-based and full-time, thesis-based streams as well as a course-based, part-time option. The program of study emphasizes industry-relevant academic research and development. Full-time students are on campus for two semesters taking courses and then they move to an eight-month internship experience. They then return for one or two semesters to complete outstanding courses and a scholarly paper or a thesis. This training provides them with unique expertise in enabling technologies that will contribute to advances in healthcare, especially at the system level.

GLOBAL HEALTH
The Master of Science in Global Health - an innovative program that prepares graduates for careers in a globalized world - received the 2015 Canadian Bureau for International Education (CBIE) Panorama Award for Outstanding International Education Program (Academic category). Developed in partnership with Maastricht University in the Netherlands, the program is collaborative and interdisciplinary, integrating education and research from the Faculty of Health Sciences, the Faculty of Social Sciences, and the DeGroote School of Business, and linking with partner universities in Colombia, India, and Norway. The program’s curriculum provides students with the experience and skills that a global marketplace demands: collaboration, cross-cultural intuition, self-management, accountability, and incisive decision-making in an international context. Students are exposed to global perspectives and gain hands-on field experience in low- and middle-income countries (LMICs). Faculty members teach and supervise from across the world and an international advisory board of global health experts provides strategic direction. Graduates leave the program equipped for leadership positions within key international health organizations, government and non-government agencies, and the private sector.
HEALTH MANAGEMENT
The Master of Health Management (MHM) is intended to provide regulated health professionals with a combination of core management skills (accounting, finance, marketing, human resource management, etc.) and a broad understanding of the Canadian healthcare policy development and service delivery environments (health system design, health policy analysis, and evidence-based decision making). This interdisciplinary program uses an online learning format alongside two short, onsite residency periods and attracts a diverse range of health professionals. A new full-time option has been recently added to the existing part-time learning approach for those interested in a more accelerated program.

HEALTH POLICY
McMaster University’s PhD in Health Policy prepares intellectual leaders in the field of health policy. Our interdisciplinary program is unique in Canada and draws outstanding and committed students from diverse graduate-training backgrounds, including interdisciplinary health fields, social sciences disciplines, and professional programs. The curriculum provides theory and empirical methods for framing, investigating, and answering crucial questions about health policy. Students receive general training across three field areas and specialize in one of: Health Economics; Political Studies; or Social Organization. Over 25 faculty supervisors in the Health Policy PhD Program hold appointments in departments across the University, including Health Research Methods, Evidence, and Impact; DeGroote School of Business; Economics; Family Medicine; Health Aging & Society; History; Oncology; Philosophy; Political Science; and Psychiatry & Behavioural Neuroscience. Graduates are equally well prepared for leadership positions in government, consulting, non-governmental organizations, or private industry.

HEALTH RESEARCH METHODOLOGY
The Health Research Methodology Program (HRM) offers training at the MSc and PhD level and students tailor their academic study in one of the five fields of specialization: Clinical Epidemiology, Biostatistics (PhD only), Health Services Research, Population and Public Health, and Health Technology Assessment. Students who do not wish to declare a field of specialization can take advantage of the flexibility in HRM Classic and tailor their educational plan to their own unique needs and interests. The goal of the HRM Program is to produce graduates with research methods skills that enable them to “push the boundaries of knowledge” relevant to improving clinical practice (including medical education research), strengthening health systems, and enhancing population health. The HRM Program offers an interdisciplinary educational model that draws on faculty members from numerous departments and disciplines, allowing students the unique opportunity to train with world-renowned health researchers who lead major studies based in numerous sites in Canada, North America, and beyond.

HEALTH SCIENCE EDUCATION
The Graduate Program in Health Science Education is designed for clinician-educators who wish to develop mastery in the science of teaching, learning, and health professions education. It is offered primarily online and offers practising professionals and direct-entry undergraduate students opportunities to build a comprehensive understanding of evidence-informed pedagogy and education research in professional health science disciplines. In particular, the program strives to provide synthesis of core competencies in the scholarship of education with influential practical application. Students will gain the skills, knowledge, and experiences necessary to succeed in a variety of areas of health science education and practice.
MEDICAL SCIENCES
With more than 80 faculty and 160 students, Medical Sciences is the largest graduate program in biomedical and health-related research in the Faculty of Health Sciences. Our programs are interdepartmental and interdisciplinary, ideally preparing students for future careers in biomedical and translational research. We offer MSc, PhD, and MD/PhD graduate education and training in five areas relevant to human health: Blood and Vasculature; Cancer and Genetics; Infection and Immunity; Metabolism and Nutrition; and Physiology and Pharmacology. Ongoing interactions between our basic scientists and our clinical faculty foster unique innovations providing opportunities for translational research spanning several disciplines.

NEUROSCIENCE
More than 70 faculty members from across campus have collaborated on the development of McMaster’s Neuroscience Graduate Program - a program designed to break through the conventional boundaries that inhibit leading edge, interdisciplinary research and study. The Neuroscience program covers the broadest spectrum of neuroscience: cellular and molecular; clinical and health; cognitive; computational; systems and behavioural; and neurotech. The Neuroscience Graduate Program connects students with an internationally recognized faculty of researchers and scholars, working within a closely-knit, resource-rich research environment. Current research projects within the faculty are aimed at improving human health and discovery in areas such as neural development, behavioural genetics, brain imaging, perception, pain, motor learning, vision, hearing, cancer, Alzheimer’s disease, autism, Parkinson’s disease, depression, bipolar disorder, dementia, anxiety, addiction, and more.

NURSING
The Nursing graduate program provides students with the opportunity to become advanced practice nurse and/or clinical health science investigators in nursing, contributing to the development of the theoretical basis of practice and to the development and evaluation of health care interventions and programs. Programs leading to the MSc (Course Based, Course Based Primary Health Care Nurse Practitioner, and Thesis Based) and PhD, as well as a Graduate Diploma in Primary Health Care Nurse Practitioner are offered. Students in the graduate program have access to the educational, research, and clinical resources of the Faculty of Health Sciences and the services of the Hamilton-Wentworth health care community.

OCCUPATIONAL THERAPY
The Master of Science program in Occupational Therapy is a two-year, course-based Master’s degree. Our mission is to prepare graduates with the requisite knowledge, skills, and professional behaviours to practise as entry-level occupational therapists in a range of institutional and community settings throughout Canada and the international community. Students achieve an understanding of the influence of family, society, culture, and physical environments as they explore the concepts of occupation and health across the lifespan within the context of client-centred practice. Graduates are prepared to function as independent practitioners, as members of interdisciplinary teams, as critical consumers of research, as agents of change, as leaders in their profession, and as lifelong self-directed learners.
PHYSIOTHERAPY
The Master of Science in Physiotherapy is a full-time, 24-month program comprised of academic courses, including clinical education courses. The goal of the entry-level professional program is to prepare students to practise physiotherapy in a variety of roles and diverse practice environments. Through a problem-based, small-group, self-directed learning approach, students develop the: (1) knowledge, skills, and professional behaviours that prepare them for mindful, ethical practice; and, (2) ability to apply their knowledge and skills in an evidence-based way to clients, patients, systems, and organizations.

PUBLIC HEALTH
The Master of Public Health program, within the Department of Health Research Methods, Evidence, and Impact offers students core courses in foundations of population/public health practice, population/public health epidemiology, biostatistics, population/public health policy, and population/public health research methods as well as two required seminar courses and electives. Students choose either a practicum or thesis option from a menu of local public health agencies/partners and McMaster faculty interested in population/public health. The goal of the MPH program is to train public health professionals/researchers with skills and knowledge to address complex public health issues. The areas of focus for the program include policy/management and population/public health research methods.

REHABILITATION SCIENCE
The Rehabilitation Science Graduate Program offers two graduate programs that lead to either a PhD or a Master’s degree. Graduates of the PhD program will be trained as rehabilitation scientists, prepared to advance rehabilitation research and transfer new knowledge into practice and policy. Within the Master’s degree there is a thesis option and a course-based option. The thesis option offers an opportunity to assume leadership positions in the rehabilitation community and contribute to rehabilitation science research. The course-based option is designed for practising health professionals who want advanced knowledge and opportunity to upgrade their qualifications to take on advanced practice and management roles. The program also has a Dual Degree Option Doctoral and Professional Degrees, which allows learners to obtain the established Master of Science in Occupational Therapy (OT) and Doctor of Philosophy in Rehabilitation Science (RS) OR the Master of Science in Physiotherapy (PT) and Doctor of Philosophy in Rehabilitation Science (RS) in 5 years.

SPEECH-LANGUAGE PATHOLOGY
The Master of Science in Speech-Language Pathology is a 23-month, full-time, course-based professional Master’s program. It prepares students with knowledge, skills, and professional behaviours to practise as entry-level speech-language pathologists. The program uses a problem-based, self-directed learning philosophy. Students will complete course work and clinical practice during their two study years. The program offers students an opportunity to learn in a variety of settings, including clinics, hospitals, schools, and homes.

MD/PhD
The McMaster University MD/PhD Program is designed to train the next generation of clinician scientists who will pursue research as a major career priority and be at the forefront of medical research and innovation. The program has a unique integrated format during which students will complete both the MD curriculum (to be eligible for MD residency programs) and the PhD requirements of one of the seven eligible graduate programs. PhD studies in the MD/PhD Program are available in Biochemistry, Medical Sciences, Health Research Methodology, Neuroscience, Biomedical Engineering, Health Policy, and Chemical Biology.
2021 FHS Graduate Plenary Awards

A Celebration of Research and Professional Excellence