



McGill University
 Research Expertise
 Faculty of Agricultural and Environmental Sciences
 21 111 Lakeshore Road
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 (December 2019)

Name	Theme	Research Expertise	Email address
Adamchuk, Viacheslav	Bioresource Engineering and Environment	Development and evaluation of sensor systems for on-the-go determination of soil and crop attributes, investigation of geospatial data acquisition, processing and interpretation techniques, and implementation of information technologies to improve value, quality and environmental safety of crop production.	viacheslav.adamchuk@mcgill.ca
Adamowski, Jan William Dawson Scholar Liliane and David M. Stewart Scholar in Water Resources	Bioresource Engineering and Environment	Adaptive, collaborative and integrated water resources management; modeling and forecasting of non-linear and non-stationary hydro-meteorological time series.	jan.adamowski@mcgill.ca
Akbarzadeh Shafaroudi, Abdolhamid	Bioresource Engineering	Design and multiscale multiphysics simulation of advanced, smart, biological, and porous composite materials and structures for energy harvesting, renewable energy, and structural health monitoring applications.	hamid.akbarzadeh@mcgill.ca
Agellon, Luis	Food and Nutrition	Nutrigenomics and nutrigenetics, lipid and bile acid metabolism, gene expression, nuclear receptors, transgenic and gene-disrupted mouse models of human diseases.	luis.agellon@mcgill.ca
Basu, Niladri Canada Research Chair in Environmental Health Sciences	Health and Environment	Exposure of humans and wildlife to toxic environmental chemicals, such as mercury; development, validation, and application of new approaches to rapidly test chemicals/samples for toxicity; global health focused on extractive sector activities (e-waste, artisanal and small-scale gold mining)	niladri.basu@mcgill.ca
Bayen, Stéphane	Food and Health	Analysis of trace chemical contaminants in food and environmental matrices; chemical risks in the food and feed chain; contaminant-food matrix interactions; bioavailability; human health risk assessment. Aquatic chemistry.	stephane.bayen@mcgill.ca
Bede, Jacqueline	Environment and Biosciences	Plant-insect interactions. Regulation of plant defense responses to caterpillar herbivory. Plant secondary metabolism. Peptide regulation of caterpillar digestive processes. Identification of pesticide synergists. Insect detoxification mechanisms	jacqueline.bede@mcgill.ca
Beech, Robin N	Health	Molecular biology and evolution of neurotransmitter receptors, mechanisms, development and spread of resistance to antiparasitic drugs and population genetics of parasitic nematodes.	robin.beech@mcgill.ca
Begg, Caroline	Environment	Soil-plant management in ecological agriculture. Food security in suburban environments.. Teaches ecosystem management and management of nutrients in agricultural systems.	caroline.begg@mcgill.ca
Bennett, Elena	Environment	Sustainable use and management of ecosystem services; multi-functional landscapes; human impacts on biogeochemical cycles; management of tradeoffs among ecosystem services, especially agricultural production and water quality; global food security, agriculture and the SDGs, land use change and water quality; urban ecology; communicating science; scenarios	elena.bennett@mcgill.ca
Bordignon, Vilceu	Health and Biosciences	Reproductive biology. In vitro fertilization. Embryo culture. Somatic cell nuclear transfer. Nuclear reprogramming. Animal cloning. Animal biotechnology.	vilceu.bordignon@mcgill.ca
Brazeau, Anne-Sophie	Human Nutrition	Glucose management during physical activity; Management of nocturnal hypoglycemia; Adolescence and young adulthood period; Social support for adoption and modification of health behaviors; Shared behaviors among family members; New technologies in disease management	anne-sophie.brazeau@mcgill.ca
Brown, Peter G.	Environment	Practical uses of philosophy to think critically about the goals of society; deterioration of Earth's life support capacity and the thought systems that facilitate and legitimate this decline; economics for the anthropocene	peter.g.brown@mcgill.ca
Buddle, Christopher	Environment	Ecology, biodiversity and natural history of insects and spiders, in forest, Arctic and agro-ecosystems	chris.buddle@mcgill.ca
Burgos, Sergio	Nutrition, Health and Biosciences	Molecular regulation of mammary nutrient metabolism and milk synthesis; role of dairy products in metabolic and musculoskeletal health in humans; environmental impact of dairy production.	sergio.burgos@mcgill.ca
Cardille, Jeffrey	Environment	Global land cover, Satellite remote sensing, Landscape ecology, Land use and climate change, Ecosystem and regional-scale hydrologic modeling, Geographic information science.	jeffrey.cardille@mcgill.ca
Cestari, Igor	Parasitology	Signal transduction and transcriptional control mechanisms that govern antigenic variation and life stage development in trypanosomes.	igor.cestari@mcgill.ca
Charron, Jean-Benoit	Biosciences	Chromatin regulatory mechanisms of stress tolerance in cereals, epigenetics, genomics, molecular biology, <i>Brachypodium distachyon</i> , barley, wheat.	jean-benoit.charron@mcgill.ca
Cherestes, Alice	Freshman	Active learning, with greater emphasis on developing student skills.	alice.cherestes@mcgill.ca



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Name	Theme	Research Expertise	Email address
Chevalier, Stéphanie	Human Nutrition	Human nutrition, protein metabolism, aging, muscle health and function (sarcopenia), insulin resistance, clinical trials, stable isotopes, body composition.	stephanie.chevalier@mcgill.ca
Clark, Grant	Bioresource Engineering	Ecological engineering, Scientific computing, Modeling and simulation, Microbiological systems, Agricultural systems, Complex adaptive systems.	grant.clark@mcgill.ca
Côté, Benôit	Environment	Eco-physiology of woody plant species. Relationships between soil fertility and hardwood forest species composition. Nutritional standards for hardwoods. Agroforestry.	benoit.cote@mcgill.ca
Cue, Roger I	Biosciences	Quantitative genetics. Dairy cattle, beef cattle a swine genetics. Estimation of genetic parameters from large-scale milk and beef recording data for production and reproduction traits. Mixed model methodologies.	roger.cue@mcgill.ca
de Blois, Sylvie	Environment	Landscape ecology and management. Plant ecology. Conservation within and outside reserves. Biodiversity and agriculture.	sylvie.deblois@mcgill.ca
Delormier, Treena Wasonti:io	Human Nutrition	Public health nutrition of Indigenous population and address health inequities by addressing the social determinants of health using participatory research approaches	treena.delormier@mcgill.ca
Driscoll, Brian	Microbiology	Molecular genetics and biochemical studies of bacterial gene expression, focusing on genes of carbon metabolism in <i>Sinorhizobium meliloti</i> , the nitrogen-fixing symbiont of alfalfa.	brian.driscoll@mcgill.ca
Duggavathi, Raj	Health and Biosciences	Study of molecular mechanisms controlling ovarian functions toward female reproductive health and sustainable dairy production	raj.duggavathi@mcgill.ca
Duhamel, Paul-Guy	Human Nutrition	Foodservice stages for Dietetic students. Valorisation of McGill's Food and Nutrition Laboratories to companies of the agrifood sector	paul-guy.duhamel@mcgill.ca
Dumont, Marie-Josée William Dawson Scholar	Biosciences	Bio-based polymers from proteins, starch, vegetable oils, cellulosic feedstock; platform chemicals; hydrogels, aerogels, cryogels, polyesters, foams, plastic sheets and elastomers; Physical properties; Characterization	marie-josée.dumont@mcgill.ca
Dunphy, Gary Brian	Biosciences	Virulence mechanisms of the bacterium <i>Xenorhabdus</i> in insects; insect immunity.	gary.dunphy@mcgill.ca
Dutilleul, Pierre R L	Biosciences	Applied statistics, biometrics, environmetrics, phytometrics, and spatio-temporal statistics in general. Fractal analysis of natural structures from computed tomography scanning data, multi-scale spatial analyses of plant-soil correlations, and periodicity analysis of dendrochronological and seismological series in particular.	pierre.dutilleul@mcgill.ca
Elliott, Kyle Canada Research Chair in Arctic Ecology	Environment	Arctic ecology, evolutionary ecology of senescence, ornithology, marine biology, wildlife conservation, ecophysiology, foraging behaviour.	kyle.elliott@mcgill.ca
Enright, Peter	FMT	Soil tillage. Conservation of soil and water. Farm building development.	peter.enright@mcgill.ca
Faucher, Sebastien	Environment	Water-borne pathogens and the regulation of virulence factors and genes involved in stress response	sebastien.faucher2@mcgill.ca
Fyles, James W George and Francis Tomlinson Chair in Forest Ecology	Environment	Forest bio-geochemistry. Relationships between plant nutrition, plant litter quality, litter decomposition and nutrient release, and soil nutrient dynamics. Management of forest soil fertility.	james.fyles@mcgill.ca
Geitmann, Anja Dean, FAES; Canada Research Chair in Biomechanics of Plant Development	Biosciences	Cellular plant development, Cell morphogenesis, Cytoskeleton-mediated intracellular transport, Cell biology, Live imaging, Electron microscopy	anja.geitmann@mcgill.ca
George, Saji Canada Research Chair (Tier II) in Sustainable Nanotechnology for Food and Agriculture	Food Safety	Developing sustainable nanotechnology applications for food and agriculture. Developing guidelines for safe use, tools for regulatory oversight, and safety assured nanotechnology for food safety and security.	saji.george@mcgill.ca
Georges, Elias CP Chair in Biotechnology	Nutrition and Health	Multidrug resistance in human cancer cells and <i>Plasmodium falciparum</i> . Antibody engineering for immunotherapeutic treatment.	elias.georges@mcgill.ca
Gravel, Valérie	Biosciences	Nutrient availability and plant uptake in organic cropping systems, plant growth regulation in sustainable production systems, microbial interactions within the soil-plant-environment continuum, and biological control of diseases and pests in sustainable fruit, vegetable and ornamental crops.	valerie.gravel@mcgill.ca



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Name	Theme	Research Expertise	Email address
Harou, Aurélie	Environment, Nutrition	Improvement of household food security to reduce poverty and malnutrition in sustainable ways; measuring how economic, political and climatic shocks affect human welfare, nutrition and household consumption and production decisions.	aurelie.harou@mcgill.ca
Hayes, John F	Biosciences	Dairy cattle quantitative and population genetics. Estimation of genetic parameters and associations of production traits with DNA and protein polymorphisms.	john.f.hayes@mcgill.ca
Head, Jessica	Environment	Genetic and epigenetic factors underlying responses to environmental contaminants in birds and other wildlife.	jessica.head@mcgill.ca
Hendrickson, Mary	Human Nutrition	Sustainable eating patterns, competency-based dietetic education, medical simulation for dietetics students, disordered eating, clinical nutrition	mary.hendrickson-nelson@mcgill.ca
Hickey, Gordon William Dawson Scholar	Environment	Sustainable natural resource management, policy and governance; environmental monitoring and assessment; community-based development; participatory approaches; innovation systems; food security.	gordon.hickey@mcgill.ca
Hoyos-Villegas, Valerio	Biosciences	Develop pulse crop cultivars for farmers and consumers that contain novel traits enhancing sustainability, productivity, nutrition and sensory experience.	valerio.hoyos-villegas@mcgill.ca
Humphries, Murray McGill Northern Research Chair	Environment	Mammalogy. Mammal energetics, behaviour, and ecology, especially in relation to hibernation, food and fat storage, and life histories.	murray.humphries@mcgill.ca
Ismail, Ashraf A	Food and Health	The study of food and biological systems by Fourier transform infrared spectroscopy. Development of new methods for bacteria identification.	ashraf.ismail@mcgill.ca
Jabaji, Suha	Biosciences	Molecular plant pathology; transcriptome, metabolome and gene expression of fungi. Biological control of plant pathogens. Molecular diagnostics of soil-borne pathogens. Fungal biology. Soil microbiology.	suha.jabaji@mcgill.ca
Jardim, Armando	Health	Characterization of <i>Leishmania</i> glycosome biogenesis and protein import machinery as potential drug target; Pore formation by <i>E. coli</i> type III secretion system; and identification of immunomodulatory molecules released by helminths.	armando.jardim@mcgill.ca
Kallenbach, Cynthia	Environment	Identifying and explaining the fundamental ecological and biogeochemical processes that characterize soil carbon and nutrient cycling, especially under managed ecosystems	cynthia.kallenbach@mcgill.ca
Karboune, Salwa	Food, Bioprocessing	Innovative green bioprocesses for the synthesis of novel food ingredients and nutraceuticals; Discovery and biochemical characterization of carbohydrate-active enzymes for the synthesis of tailored prebiotic oligosaccharides and functional polysaccharides from abundant simple sugars; Enzyme technology solutions towards efficient biomass conversion into highly valuable bioactive products.	salwa.karboune@mcgill.ca
Kimmins, Sarah Canada Research Chair in Epigenetics, Reproduction and Development	Biosciences	How paternal health in particular diet and exposure to toxicants effects the development and health of offspring in populations in Canada and South Africa (in indigenous and vulnerable populations as well as Canadian men in Ontario) with a particular focus is on understanding how environmental is transmitted via heritable information in the sperm known as the epigenome.	sarah.kimmins@mcgill.ca
Koski, Kristine G	Nutrition and Health	Maternal and child nutrition; nutrient composition of amniotic fluid, perinatal growth and fetal development; impact of diet/exercise on pregnancy and lactation; biochemical development of the fetus and neonate; interactions among malnutrition, parasite infections and immunity.	kristine.koski@mcgill.ca
Kosoy, Nicolas	Environment	Markets for ecosystem services from an institutional economics perspective, critical analyses of commodification of nature, Ecological economic.	nicolas.kosoy@mcgill.ca
Kubow, Stan	Food, Nutrition and Health	Oxidative stress; inflammation; nutraceuticals; simulated human gut digestion model; bioavailability; bioaccessibility; tissue and cell culture; tumor cell biology; functional foods; phytonutrient metabolism; bioactives, chemoprevention; toxicology; environmental pollutants; phytochemicals; antioxidants.	stan.kubow@mcgill.ca
Kushalappa, Ajjamada	Biosciences	Plant biotic stress resistance gene discovery through metabolomics, proteomics, RNA sequencing and gene silencing. Development of cisgenic crops resistant to biotic stress through genome editing.	ajjamada.kushalappa@mcgill.ca
Lefsrud, Mark William Dawson Scholar	Bioresource Engineering and Environment	Biomass production, controlled environments, secondary compounds and proteomics..	mark.lefsrud@mcgill.ca
Long, Thavy	Parasitology	Molecular mechanisms governing developmental processes and metabolism of helminth parasites; Chemical communication in host-parasite interaction and parasite-parasite interplay; mechanisms leading to drug resistance	thavy.long@mcgill.ca



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Lopes, Fernando	Parasitology	The role of helminth components in modulating the immunometabolism of immune cells to promote inflammation resolution in inflammatory conditions.	fernando.lopes@mcgill.ca
Madramootoo, Chandra A James McGill Professor	Environment	Development of new technologies to conserve water, reduce water pollution, and mitigate greenhouse gas emissions in agriculture. Led large multi-million dollar water and food security research and development projects in Quebec, and other parts of the world, including the Caribbean, Central Asia, Egypt, Pakistan, India, Sri Lanka, and Sub Saharan Africa.	chandra.madramootoo@mcgill.ca
Mailloux, Ryan	Human Nutrition	Impact of nutritional interventions and sex/gender on cell metabolism, bioenergetics, and redox signaling	ryan.mailloux@mcgill.ca
Marquis, Grace S	Food, Nutrition and Health	Maternal, infant, and child nutrition; global nutrition; breastfeeding and complementary feeding of infants and young children; community-based integrated interventions to improve rural nutrition	grace.marquis@mcgill.ca
McCourt, George	Environment	Markets for ecosystem services from an institutional economics perspective, critical analyses of commodification of nature, Ecological economic. Student Centered Research and Learning methodologies; Sustainable urban systems related to water, waste and energy flows; Geosystems and past and present climate change.	george.mccourt@mcgill.ca
McKinney, Melissa	Environment	Advanced chemical tracer approaches in marine mammals, as sentinels of ecosystem change, to evaluate fundamental questions about habitat use and feeding habits. how ecological changes interact with other anthropogenic stressors facing biota, particularly pollutants, pathogens, and parasites, and the cumulative effects of these stressors on individual and population health.	melissa.mckinney@mcgill.ca
Melgar-Quinonez, Hugo Ramiro Margaret Gilliam Scholar	Food, Health and Nutrition	Global Food Security; Causes and consequences of food insecurity for health and nutritional status; Validation and application of food security measurement tools; Impact evaluation of interventions and programs to fight food insecurity and undernutrition	hugo.melgar-quinonez@mcgill.ca
Molgat, Christian	FMT	Livestock management: Nutrition. Genetic progress. Herd management. Animal welfare.	chris.molgat@mcgill.ca
Mustafa, Arif	Biosciences	Dairy cattle nutrition. Ruminant carbohydrate and protein metabolism. Nutritional evaluation of new forages for dairy cows. Optimizing the feeding value of agricultural by-products for ruminant and monogastric animals.	arif.mustafa@mcgill.ca
Ngadi, Michael James McGill Professor	Food, Bioprocessing, Engineering	Food process engineering (food quality and safety); food properties; heat and mass transfer processes; deep-fat frying; hyperspectral imaging; non-thermal technologies (pulsed electric fields, ultraviolet, ozone, etc.) conversion of food processing waste	michael.ngadi@mcgill.ca
Nielsen, Daiva	Human Nutrition	Applying genomics to nutrition and lifestyle modification	daiva.nielsen@mcgill.ca
Orsat, Valérie	Bioprocesses and/or Bioresource Engineering	Impact of food processing on product quality and functionality; Extraction methods and by-product recovery; Engineered systems for functional ingredient production; Improved nutritional quality of foods for long term health.	valerie.orsat@mcgill.ca
Phillips, Sandy	Human Nutrition	Professional practice, accreditation standards, food intake patterns, nutritional analysis, and competency-based education.	sandy.phillips@mcgill.ca
Plourdes, Hugues	Human Nutrition	Exploring determinants associated with healthy behaviours, nutritional intake or needs and consumer's preferences.	hugues.plourde@mcgill.ca
Prasher, Shiv Distinguished James McGill Professor	Biosciences, Bioresource Engineering	Best/Beneficial Management Practices (BMPs) for reducing non-point source agricultural pollution from tile-drained rural watersheds under changing climatic conditions. Safe and effective use of wastewater in agriculture. Innovative green technologies for untreated or partially treated wastewaters.	shiv.prasher@mcgill.ca
Prichard, Roger K James McGill Professor	Biosciences and Health	Parasite control, mechanisms of action of anthelmintics and the genetics of drug resistance in parasitic nematodes of humans and animals.	roger.prichard@mcgill.ca
Qi, Zhiming James H. Brace Associate Professor	Environment	Water quality, hydrological, environmental and crop modeling, irrigation and drainage engineering, climate change impacts on bioresources	zhiming.qi@mcgill.ca



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Raghavan, G S Vijaya James McGill Professor	Bioprocesses and/or Bioresource Engineering	Postharvest technologies for food security and food safety. Electrotechnologies for drying and thermal processing of crops and produce, extraction of value compounds from agriculture residues, and disinfestation of grains. Enhancement of heat/mass transfer using particulate medium in spouted and fluid beds. Methods to extend storability and increase nutritive content of fresh produce in storage. International projects on post-harvest engineering to reduce food losses and drudgery.	vijaya.raghavan@mcgill.ca
Ramaswamy, Hosahalli	Food, Bioprocessing	Food processing. Thermal processing of foods and related process calculations. Overpressure processing of foods in thin profile packages. Continuous aseptic processing of low acid liquid and particulate foods. Food sterilization in rotational autoclaves. Microwave processing. Ultra high pressure processing.	hosahalli.ramaswamy@mcgill.ca
Rohrbach, Petra	Biosciences	Parasitology; molecular and cellular biology of malaria parasites; investigating mechanisms of drug resistance and ion homeostasis in Plasmodium falciparum using live cell imaging techniques.	petra.rohrbach@mcgill.ca
Ronholm, Jennifer	Food	Next-generation sequencing techniques to study the microbiome of food-producing animals; focus on understanding intestinal microbiome of humans, and correlations between intestinal microbial populations and various health outcomes have been observed.	jennifer.ronholm@mcgill.ca
Rose, Maureen	Human Nutrition	The acceptance and impact of food assistance activities. The effects of on-site/off/site work schedules on eating behavior and perceived nutritional health. The impact of nutrition education for children, adults, and seniors on nutrition knowledge and acceptance of a greater variety and more healthy foods. Methods of deriving accurate nutrient analysis of menu items.	maureen.rose@mcgill.ca
Routhier, Joane	Human Nutrition	Advancement and marketing of the profession, interviewing and counseling, media and public relations	joane.routhier@mcgill.ca
Roy, Denis	Environment	Ecology and evolution of fish and wildlife in relation to their use and sustainability as natural resources – adaptive divergence, population genetics/genomics and the use, refinement and development of bioinformatics protocols and techniques. Adaptive dynamics of mostly marine and freshwater fish in both natural and increasingly disturbed ecosystems. Arctic marine fish ecology and evolution.	denis.roy5@mcgill.ca
Salavati, Reza	Biosciences	Drug discovery, genomics, and gene regulation in three related trypanosomatid pathogens, together known as the Trityps.	reza.salavati@mcgill.ca
Scott, Marilyn Elizabeth	Biosciences	Host-parasite population dynamics. Epidemiology and community control of parasites. Experimental epidemiology in free-running arenas. Impact of malnutrition on immunity in infected laboratory models and human populations. Evolutionary ecology of guppy ectoparasites.	marilyn.scott@mcgill.ca
Seguin, Philippe	Biosciences	Management, physiology, and ecology of forage crops. New crops, new crop uses. Sustainable agricultural practices.	philippe.seguin@mcgill.ca
Simpson, Benjamin K	Food, Nutrition	Speciality enzymes from marine animals: their use in the transformation of foodstuffs and by-products of agricultural harvesting and processing into value-added products of commercial relevance (e.g., collagen, gelatin, natural pigments, bioactive peptides, antioxidants, etc.).	benjamin.simpson@mcgill.ca
Singh, Jaswinder	Biosciences	Functional genomics in small grain cereals using transposons and other reverse genetics tools; Exploring novel genes from wild and cultivated plant species including gene modification (editing) suitable for the breeding of next generation of crop plants.	jaswinder.singh@mcgill.ca
Smith, Donald L James McGill Professor	Food, Nutrition and Health	Crop physiology, crop ecology, crop production and crop quality. Legume nitrogen fixation. Plant nitrogen metabolism.	donald.smith@mcgill.ca
Strachan, Ian	Environment	The controls on trace gas exchange (e.g. CO ₂) between ecosystems and the atmosphere – especially those ecosystems that have been modified or are managed through human activity.	ian.strachan@mcgill.ca
Strömviik, Martina	Biosciences	Bioinformatics and genomics research on plant promoters, gene expression and functional anatomy.	martina.stromvik@mcgill.ca
Thériault, Pascal	FMT	Agricultural economics. Farm business management. Agri-food marketing. Entrepreneurship. International trade. Food waste. Value chain management. Information Management.	pascal.theriault@mcgill.ca

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Name	Theme	Research Expertise	Email address
Thomassin, Paul	Environment	Environmental and resource economics; economic-ecological macroeconomic modeling, non-market valuation of environmental goods, natural capital and wealth accounts, input-output modelling, climate change and its impact on agriculture, carbon trading, carbon offset markets, pollution abatement and agriculture, behavioural risk factors and the social determinants of health for non-communicable diseases, alternative energy, and life cycle analysis.	<p style="text-align: center;">paul.thomassin@mcgill.ca</p>
Titley-Péloquin, David		Numerical linear algebra; optimization; uncertainty quantification; data assimilation and forecasting problems; mathematics and science education.	<p style="text-align: center;">david.titley-peloquin@mcgill.ca</p>
Vasseur, Elsa Chairholder of the NSERC/Novolait/Dairy Farmers of Canada/Valacta Industrial Research Chair in Sustainable Life of Dairy Cattle	Biosciences	Cow comfort and management; Cow longevity; Environment and Society	<p style="text-align: center;">elsa.vasseur@mcgill.ca</p>
Wade, Kevin	Biosciences	Information systems in dairy cattle breeding and milk recording. Artificial intelligence in the development of on-farm decision-support systems. Quantitative genetics in dairy cattle.	<p style="text-align: center;">kevin.wade@mcgill.ca</p>
Wang, Yixiang	Food and Biosciences	Development of natural polymer based materials - nano/micro particles, nano/micro fibers, composite films, and hydrogels; understanding of relationship between molecular structure and functional properties.	<p style="text-align: center;">yixiang.wang@mcgill.ca</p>
Wees, David	Environment	Horticulture production. Sweet potatoes. Urban agriculture. greenhouses.	<p style="text-align: center;">david.wees@mcgill.ca</p>
Weiler, Hope LEAVE OF ABSENCE	Nutrition and Health	Fetal and early life origins of bone health and disease as dictated by nutrition and growth. Physiological response of bone metabolism and mass to nutrients such as vitamin D and polyunsaturated fatty acids.	<p style="text-align: center;">hope.weiler@mcgill.ca</p>
Whalen, Joann William Dawson Scholar	Environment	Soil fertility and on-farm nutrient management planning. Soil organic matter dynamics, carbon sequestration and greenhouse gases in agricultural systems. soil microorganisms and earthworms, their interactions and contributions to nutrient cycling and plant growth in agro-ecosystems.	<p style="text-align: center;">joann.whalen@mcgill.ca</p>
Whyte, Lyle	Microbiology	Polar microbial ecology and biodiversity, cold-adapted microorganisms, low temperature biodegradation and bioremediation. Molecular microbial ecology, environmental genomics.	<p style="text-align: center;">lyle.whyte@mcgill.ca</p>
Wykes, Linda J	Nutrition and Health	Protein and amino acid metabolism in humans (neonates to adults) and in piglet models studied with stable isotopes. Glutathione and plasma protein metabolism; enteral versus parenteral nutrition; malnutrition and response to stress; inflammatory bowel disease; nutrition support in surgical patients to promote protein synthesis.	<p style="text-align: center;">linda.wykes@mcgill.ca</p>
Xia, Jianguo (Jeff) Canada Research Chair in Bioinformatics and Big Data Analytics	Health and Biosciences	Bioinformatics and statistics for high-throughput omics data; host-parasite-gut microbiome interactions; environmental genomics and nutrigenomics, big data analytics and systems biology.	<p style="text-align: center;">jeff.xia@mcgill.ca</p>
Yaylayan, Varoujan	Food and Nutrition	Interaction of reducing sugars with amino acids and proteins. Chemistry of thermal generation of flavours and toxicants through the Maillard reaction and development of analytical methods for the detection of intermediates formed by this interaction. Microwave Assisted Processing.	<p style="text-align: center;">varoujan.yaylayan@mcgill.ca</p>
Zadworny, David	Biosciences	DNA markers associated with milk production traits in dairy cattle. Prolactin-mediated regulation of polyamine metabolism. Molecular cloning and expression of avian and bovine genes associated with reproduction and production traits.	<p style="text-align: center;">david.zadworny@mcgill.ca</p>
Zhao, Xin James McGill Professor	Biosciences	Dairy cattle biochemistry and physiology. Mastitis. Vaccine development. Alternatives to antibiotics as growth promoters, Antibiotic resistance. ent.	<p style="text-align: center;">xin.zhao@mcgill.ca</p>