

Securing the Integrity of the Food System

The Faculty of Agricultural and Environmental Sciences of McGill University is a world leader addressing the challenges associated with ensuring a reliable, safe, and robust food system, stretching from production to processing, manufacturing, storage, distribution and consumption of safe and healthy foods. The Faculty comprises departments, schools, institutes and centres devoted to teaching, research, and public engagement and outreach in all aspects of food production, food science, human nutrition, plant and animal health, food safety and food security. These are areas of academic priority in the University and Faculty Strategic Plans.

To capitalize on new undergraduate and graduate curricula, infrastructure improvements, recruitment of Chairs and Scholars, and external research and endowed support for our growing programs in nutrition, health, parasitology, water, food safety and food security, the Faculty is embarking on an ambitious academic recruitment program. We seek highly talented individuals who will lead innovative research programs focused on the development of the next generation of analytical tools, models and methodologies aimed at delivering a secure and safe food system, nationally and internationally. These recruitments will strengthen the Faculty's teaching and research programs in "omics" technologies, food toxicology, risk assessment and mitigation, systems analysis and modeling, and public and social policy implications of technology advances in the agriculture-food-nutrition-health continuum.

Applications are invited for tenure track positions at the rank of Assistant/Associate Professor in the following areas of specialization:

Plant and/or animal metabolomics

The successful candidate will develop an independent research program that studies the metabolic response of plants and/or animals to growing conditions and stresses and/or identifies biomarkers that will be used in improvement programs aimed at increasing yield and quality of plant and/or animal products. Qualifications include: Ph.D. in analytical chemistry, plant or animal genetics, biochemistry or related field; strong post-doctoral experience in relevant areas such as analytical chemistry, including mass spectroscopy, chromatography, and method development.

Large scale biological data systems

The successful candidate will conduct research on the analysis and integration of metabolomics, proteomics, transcriptomics, and other "omics" datasets derived from environmental, food, plant, microbial, experimental animal or human samples. The focus is on systems-level studies using approaches such as network analysis of biological systems, their interactions with biotic and abiotic factors, and the discovery of corresponding biomarkers. Applicants should have a strong background in statistical modeling and machine learning and extensive experience in handling large-scale data, including those from next-generation sequencing, microarrays, genome annotations, in silico modelling and metabolic network reconstruction. Qualifications include: Ph.D. in biology, bioanalytical chemistry, bioinformatics, or a related field; experience in the development of cutting-edge computational, mathematical, and/or statistical methodologies; biological database construction and management; and hands-on experience with relevant technology platforms.

Social impacts of technology

The successful candidate will undertake research and teaching in the area of social impacts of technology in food and agriculture at the local, regional or international level. Candidates may approach this from a variety of perspectives, such as historical, ethical, equity, economic, policy, governance, attitudes, perceptions, behaviours and risks. Qualifications include: Ph.D. in social or natural sciences; demonstrated ability in research and teaching; experience in working with the private and/or public sectors would be an asset.

Food safety and risk analysis

The successful candidate will undertake teaching and research in the area of food toxicology with strong emphasis on risk analysis of food toxicants and contaminants and their impact on food quality and safety. The preferred candidate will have experience in developing and applying novel techniques and risk assessment practices to food safety issues with specific focus on contaminants and food toxins. Qualifications include: Ph.D. in food toxicology or food science; experience in statistical or mathematical modeling of risk analysis methods would be an asset.

General information:

All candidates are expected to lead externally funded research programs and are encouraged to seek funding from government, industry and private sources. They must be committed to teaching at the undergraduate and graduate levels and to the supervision of graduate students. Candidates are expected to serve on departmental, faculty and university committees, and participate in their professional societies. Collaboration with other researchers at McGill, as well as in the relevant university research centres is encouraged.

McGill's Faculty of Agricultural and Environmental Sciences is located on the Macdonald Campus, 30 km from the city of Montreal. The Campus comprises 650 hectares of farm and forested lands, commercial and research animal facilities, experimental field stations and state-of-the-art student learning facilities. Additional information concerning McGill and its Faculty of Agricultural and Environmental Sciences can be found on their respective web sites (www.mcgill.ca, www.mcgill.ca/macdonald).

McGill University is committed to diversity and equity in employment. It welcomes applications from: women, Aboriginal persons, persons with disabilities, ethnic minorities, persons of minority sexual orientation or gender identity, visible minorities, and others who may contribute to diversification. All qualified applicants are encouraged to apply; however, in accordance with Canadian immigration requirements, Canadians and permanent residents will be given priority.

Application procedure:

Applicants should submit by August 31, 2013, their curriculum vitae, statements of their research and teaching philosophies and the names, email addresses and telephone numbers of at least 3 professional references, who can evaluate their candidacy, directly to:

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