

RESEARCH PATHWAYS TO A SUSTAINABLE FUTURE

An Introduction to the Researchers



Emily RobinsonFood Education Manager, University of Guelph

Emily is an accomplished researcher and passionate champion for environmental sustainability in foodservice. She also has substantial experience working in local and world-renowned restaurants which deeply informs her approach. Emily's research focuses on the reduction of single-use plastics in back-of-house of Canadian restaurants to help foodservice navigate the single-use plastic ban. She found that cost, lack of time, and suppliers were the most common barriers, and there was a notable difference between intension and application of sustainability initiatives. Emily has also examined the impact of COVID-19 on foodservice sustainability initiatives and food waste in long-term care homes.



Dr. Andrew MacDougallProfessor in Integrative Biology, University of Guelph

Andrew examines the structure and function of plant communities and how they are altered by the impacts of global environmental change. A core research initiative that Andrew leads is to quantify the ecosystem services on farms. With his team, Andrew measures the impact of farming on air, water, and biodiversity and collaborates with farmers for remediation efforts. Since 2016, 66 farms in Ontario have demonstrated the positive effects of ecosystem restoration on beneficial insects, soil organic matter, and stable carbon. The research highlights the economic aspects of "farming services" in precision agriculture and shows how small changes on farms can significantly enhance environmental sustainability.



Dr. Asim Biswas

Professor in Environmental Sciences, OAC Research Chair in Soils and Precision Agriculture, University of Guelph

Asim's research focuses on data-driven enhancements to the productivity and resilience of agri-food systems in an environmentally sustainable manner. One project Asim leads is addressing the escalating costs of crop inputs with precision agriculture. Asim's team is integrating on-the-ground, aerial, and remote soil sensors to develop a tool that farmers can use to analyze their fields and adjust inputs. Precisely customizing the application of inputs will enhance crop yields, reduce costs, and promote environmental well-being. The tool will also provide an efficient alternative to laboratory analysis for site-specific needs.



Dr. Kate ParizeauAssociate Professor in Geography, Environment & Geomatics, University of Guelph

Kate delves into the social dimensions of waste, focusing on food waste in Ontario. Her research examines waste as a lens to understand complex systems of social organization, including urban inequality, waste management systems, and food insecurity. Kate's recent research investigates waste across the food value chain in Ontario, with a focus on household food waste generation. Kate's team has shown that 64% of food waste could be prevented, based on audits of household waste streams. Through surveys, Kate has found that awareness, household composition, and convenience have a substantial impact on peoples' disposal habits.



Dr. Silvia SarapuraAssistant Professor in Environmental Design & Rural Development,
University of Guelph

Silvia's research takes an interdisciplinary approach to building local and resilient agrifood systems, including topics such as rural planning for development, gender transformative change and agricultural research and development. One of Silvia's current projects is investigating how gender-based violence impacts temporary foreign workers in Canada's agricultural sector. Temporary foreign workers are more vulnerable to gender-based violence due to structural inequities, lack of status, and limited rights. The project aims to identify opportunities for research, provide critical information for evidence-based policy decisions, and contribute to combating and mitigating gender-based violence in Canada.



Visit the <u>Arrell Food Summit website</u> for a full schedule and list of speakers. www.arrellfoodsummit.ca

