

Communities



Research

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Co-operating to solve problems

Research at Guelph **influences a diversity of communities**, in Guelph and throughout the world. As our population ages and changes, our researchers are responding by examining questions related to aging, disease, disabilities and nutrition. Food policy, elder care food standards, cultural practices, and the availability of diverse food products are among the issues being explored at Guelph that affect communities.

Researchers might ask how climate change affects a community, how people can **co-operate with their neighbours** to solve problems, and how making local choices, such as buying local food, affects communities.

Researchers at Guelph share the insights they glean with communities of place and communities of interest to help policy-makers make decisions and to meet the needs of community members.

Sharing knowledge is about putting knowledge in the public domain and exploring the impacts within the global system. When a discovery is made or a question is answered, sharing it widely can influence personal and broader policy choices. Our work can change many things, including how neighbourhoods view themselves and how others view a neighbourhood or community.

The following pages highlight the University of Guelph's commitment to **informing practices and policy** by sharing our research expertise and results with communities and policy-makers.



RESEARCH HIGHLIGHT

A multidisciplinary, Guelph-based international research team led by School of English and Theatre Studies Prof. Ajay Heble is investigating how improvised music can serve as a model for political, ethical and cultural co-operation. The researchers believe that taking a creative, improvisational approach allows for cross-cultural communication and dialogue that brings diverse ethnic, cultural and linguistic communities together.

- Climate change severely impacts Inuit communities, affecting traditional activities, such as ice travelling and hunting. To help them deal with change, a team of Guelph researchers in Rigolet, Nunatsiavut are teaching **digital storytelling**. This involves community members creating their own three- to five-minute first-person narrative videos, highlighting and sharing how climate change impacts their physical, mental, emotional and spiritual well-being.
- Physical or mental disabilities shouldn't prevent people from expressing themselves creatively. Recognizing this, Fine Arts researchers at Guelph are collaborating on an international project designing **free webcam-based software** called Adaptive Use Musical Instruments for the Physically Challenged. The software allows children with little mobility to play virtual instruments by translating their movements into music, eliminating barriers between so-called able-bodied and non-able-bodied musicians.
- Providing women with the best medical options during the birthing process helps ensure the safety of mothers and newborns. Yet, many less affluent women in developing countries resist seeking out medical treatment during labour and delivery. That's why a Guelph Political Science researcher is working with the Canadian Red Cross in Honduras to help **attract more women to birthing clinics** by studying how these women's birthing preferences impact whether they look for medical treatment.

RESEARCH HIGHLIGHT

Guelph School of Environmental Design and Rural Development Prof. Glen Filson is working with project manager Bamidele Adekunle (left) and FarmStart startup programs manager Sridharan Sethuratnam (right) on ways to grow, sell and market a host of ethnic vegetables to Canada's many diverse populations who crave the tastes of their native countries. This work could create a massive potential market for Canadian farmers and introduce many different ethnic culinary cultures to entirely new audiences of consumers across the country.

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- To help deal with the **human papillomavirus**, Guelph researchers were part of a team that devised a mathematical model to analyze national vaccine policies. Now, they are using the same model to study other human diseases plaguing developing countries. They hope their model will expand understanding of treatment options in underdeveloped countries and help government policy-makers create effective national health programs and strategies.
- Canada's highly multicultural population has created a rich literary culture. Researchers from Guelph's TransCanada Institute have created a **collaborative space for scholars and students** to research various aspects of Canadian literature and translate their studies into useful knowledge.



birthing papillomavirus bilingualism science forum
 science in the community surround sound local food sexuality
 the physically challenged learning from past populations
 collaborative space gender roles eating environments
 ethnic vegetables minimizing stress dietary change



RESEARCH HIGHLIGHT

Workplace stress affects everyone differently. Prof. Gloria Gonzalez-Morales, Department of Psychology, is looking at how factors such as workplace environment and gender can dictate how an individual perceives stressful situations. Researchers have discovered management techniques that companies can implement to minimize stress and maximize the performance of their employees.

- Scientific or environmental discussion shouldn't be restricted to the university campus. With this in mind, Guelph researchers organized Café Scientifique, a monthly discussion series that acts as an **open forum for members of the community** to explore many current hot topics in science, technology and the environment outside of a traditional academic setting.

- **Sexuality** is a weighty subject for many Canadians. It impacts their romantic lives, as well as their overall body health. Department of Family Relations and Applied Nutrition researchers are leading an innovative study which looks in-depth at the connections between body composition, body image, relationship quality and sexual well-being.

- When arts and science disciplines connect, understanding advances. That concept led Guelph researchers to form the Arts, Science and Technology Research Alliance, which acts as a forum for the Guelph community to **explore how science is involved in social, political and cultural processes**, as well as to better understand the social and cultural context in which science is developed.

- Canada has always been home to an active French-English language debate, with accompanying political and social movements. Guelph historians are researching how **Canadian groups promoted or opposed bilingualism**, the response to bilingualism and the associated ideological factors. Ultimately, these researchers want to discover how bilingualism affects jobs, lobby groups and Canadian society as a whole.

- The Centre for Public Health and Zoonoses (CPHAZ) recognizes the links between environmental, animal and human health. To forge connections between the animal health research community and the public health research community, CPHAZ focuses on sharing ideas, findings and technology. The centre dedicates itself to public outreach initiatives to **educate people about disease risks associated with pets**.

- Family Relations and Applied Nutrition researchers are looking at how to **improve eating environments** within long-term care facilities to create a communal environment where older adults feel involved, valued and more willing to socialize. Older adults tend to view their mealtimes first and foremost as a social occasion. The more they socialize, they more they eat. However, these mealtimes are often difficult for those with dementia, who struggle to adapt to new foods, people and environments.

- In real-life situations, all sound is surround sound. To make a realistic audio experience, Fine Art and Music researchers are developing a way to incorporate **surround sound into live recordings and performances**. In addition to providing unique experiences to the listening community, researchers hope to highlight environmental issues such as noise pollution and disappearing habitats.
- With organic and health-enhanced foods increasingly available, Guelph researchers are surveying Canada's diverse consumer population to track **attitudes towards food, diet and health**, in addition to consumers' acceptance of new food innovations and likeliness to make dietary changes over time. This research includes industry and government policy-makers, and aims to understand how people view the food system and what types of products or innovations Canadians want to see on store shelves.
- Breaking down barriers between urban and rural communities can begin with **local food**. And as Canadians move towards purchasing more locally produced foods, researchers from Guelph's Department of Environmental Design and Rural Development are working with farmers to help them create a closer relationship with urban consumers. They hope this will help farmers capitalize on the numerous economic opportunities presented by the local food movement.
- Gambling and other **self-destructive behaviours** threaten to pull apart communities, families and relationships. So why do people do it? A Marketing and Consumer Studies researcher found feelings of worthlessness drive these self-destructive behaviours. The researcher also found that guilt—or regret for one's actions, rather than shame for them—may be an important element in helping curb compulsive gambling.
- Links to entire **Canadian communities and populations of the past** have been made possible thanks to Economics and History researchers at Guelph. They're using the SHARCNET supercomputer network and pre-1900 Canadian census data to build detailed population databases to study societal trends of the past and relate them to today's economic, social and health-related problems.
- Ontario's rural communities depend on steady interaction in the **rural-urban fringe area**. Environmental Design and Rural Development researchers found horse farms located in fringe areas bridge the gap between urban cities and rural towns and act as a central point where both urban and rural communities mutually support each other through tourism and commerce.
- Traditional gender roles have shifted dramatically with each passing decade. Now a Guelph theatre studies researcher is incorporating a drag element to Shakespearean plays so that both performers and audiences alike can **explore and question traditional gender roles**—not only in theatrical performance, but within society as well.



RESEARCH HIGHLIGHT

The Guelph Guitar Project's purpose is to spread community and cultural awareness through a guitar called The Storyteller, created by Integrative Biology professor Doug Larson from items that have a distinct historical connection to the city and the university. For example, the guitar's construction includes part of an 1877 Sleeman Breweries advertisement, a nail from the university's first gymnasium and leftover fabric from Biltmore Hats in the guitar strap. The Guelph Guitar Project visits elementary and secondary schools to share and spread the stories behind the instrument's construction.

ANDRA ZOMMERS

- Factors such as workplace environment and gender can dictate how an individual perceives stressful situations, says a University of Guelph psychologist. Researchers have discovered management techniques that companies can implement to **minimize stress** and maximize the performance of their employees.

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