Graduate Programs
Dept. of Geography and Environmental Studies
Carleton University
Why a graduate degree? Why Geography?

• More job opportunities available to those with a graduate degree
• Awesome experience doing fieldwork
• Small classes
• Opportunity to work with a group of your peers in an exciting academic environment
• Work with experts conducting cutting edge research
DGES Professors’ Research Interests

• The following is a collection of some of the projects that our professors are currently working on with their graduate students

• Email the profs directly (contact info on each page) to discuss research ideas for graduate work
Patricia Ballamingie
patricia_ballamingie@carleton.ca

• Environmental conflict & democracy
  – First Nations & environmental justice

• Sustainable community & localizing food systems
  – Urban agriculture & resilience

• Engaged scholarship
  - Community-university partnerships
Mike Brklacich
michael_brklacich@carleton.ca

• Human dimension of global environmental change (GEC)
  – Social vulnerability and human security
  – Food security
• Community responses to multiple stresses
  – Capacity of Canada’s rural communities to adapt to uncertain futures
  – Southern Africa vulnerability initiative
Chris Burn
chris_burn@carleton.ca

- Permafrost studies in the Yukon and western Arctic

![Installation of ground temperature cable, Herschel Island](image1)

![Ice-wedge polygons in Old Crow Flats](image2)

![Ground ice near Mayo, YT](image3)
Emilie Cameron
emilie_cameron@carleton.ca

- Critical northern geographies
- Geographies of resource extraction, empire, and labour
- Race, nature, and environmental knowledge
- Geographies of Indigenous/non-Indigenous relations, colonialism, and Indigenous self-determination
- Feminist, poststructuralist, postcolonial, anti-racist, and political economic theories and approaches

"Road to the Mine" by Jimmy Kamimmalik, 2009
Simon Dalby
simon_dalby@carleton.ca

- Critical geopolitics, "The Bush Doctrine", the war on terror and the revolution in military affairs.
- Environmental change and the security discourses that shape international policy responses.
Elyn Humphreys  
elyn_humphreys@carleton.ca  

Soil-plant-atmosphere interactions  
• Micrometeorological measurements of trace gas exchange  
• Leaf-level studies

Southern Arctic, NWT

Mer Bleue bog, Ottawa ON
Doug King
doug_king@carleton.ca

- Remote sensing and GIS of forests and wetlands
- Mapping vegetation structure, composition and health
- Habitat mapping
Fran Klodawsky  
fran_klodawsky@carleton.ca

- Critical social geography  
  - Research to end homelessness  
  - Inclusive cities in Canada and internationally
- University-community research collaborations
- Urban and neighbourhood scale research
• Relationships between Inuit language, knowledge, and use of northern environments
• Sea ice and marine environments
• Cross-cultural, collaborative research methods
• Linking Inuit and scientific knowledge in a complementary manner
• Northern content and contributions in education materials and programs
Scott Mitchell
scott_mitchell@carleton.ca

- Spatial pattern and ecosystem processes
  - Biodiversity and productivity
  - Anthropogenic impacts
  - Uncertainty of land cover maps
  - GIS & landscape models
Derek Mueller
derek_mueller@carleton.ca

- Glaciology of ice shelves and other thick coastal ice in the Canadian High Arctic
- Remote sensing to detect and evaluate cryospheric change
- Impacts of Arctic climate change
Mike Pisaric
mike_pisaric@carleton.ca

- Historical climate and fire frequency analysis using pollen, charcoal, lake sediment, and tree ring records
Murray Richardson
murray_richardson@carleton.ca

• Landform mapping with remote sensing and digital terrain analysis
• Hydrology and water-quality research in boreal regions (field and model-based approaches)
• Light Detection and Ranging (LiDAR) applications in hydrology and the biogeosciences
Derek Smith
dereka_smith@carleton.ca

- Mapping indigenous territories and natural resource use in rain forest regions of Central America and Mexico
- Traditional Geographic knowledge
- Cultural Landscapes of the Yucatan Peninsula

Adult paca (*Agouti pacas*).
Fraser Taylor
fraser_taylor@carleton.ca

- The application of geographic information processing to the analysis of topics of interest to society in a national and international context and the display of the results using multimedia and multi-sensory cartography
- The creation of cybercartographic atlases with northern and aboriginal communities
- Indigenous and local knowledge
- Regional and Rural Development in developing nations
- Geographic information management and "Crowd sourcing"
Jill Wigle
jill_wigle@carleton.ca

- Environmental and social dimensions of urbanization in Latin America
- "Greenbelt governance" in Ottawa and Mexico City
- Informal urbanization in cities of the global south
- Spatial governance and informality in Mexico City
- Mexico City
Theresa Wong
theresa_wong@carleton.ca

- Politics and discourses of development: power/knowledge, social movements
- Postcolonial geographies
- Nature-society relations
- East and Southeast Asia
Some Recent MA Theses

• Neighbourhoods Matter: Examining Neighbourhood Significance through the Eyes of Women Who Live in Supportive Housing (Klodawsy)

• Global Governance and Food Security Discourses: The FAO and the Via Campesina (Brklacich)

• Contested Discourses of Sustainability in Old Ottawa South (Ballamingie)

• Impacts of Indigenous Subsistence Hunting on Wildlife Abundance in the Rio Platano Biosphere Reserve, Honduras (Smith)
Some Recent MSc Theses

• The Development of near-surface ground ice at Illisarvik, Richards Island, Northwest Territories (Burn)

• Assessing Carbon Effluxes and Decomposition Rates of Wetland Reclamation Trials, Fort McMurray, Alberta (Humphreys)

• Evaluation of EvapoTranspiration Estimation Methods and Their Impacts on Crop Yield Simulations (Mitchell)

• Multivariate forest modelling and mapping using Quickbird imagery and topographic data in Chelsea, Québec (King)
Some Recent PhD Theses

• **Toward Interactive Audiovisual Cartography: Motivations, Design Strategies, and Methods** (Taylor)

• **Mobilizing Grandmotherhood: Possibilities of Global Connections** (Brklacich)

• **Spaces of Co-existence: The Processes and Prospects of Living with Endangered Species** (Wallace)

• **The Strategic Logic of Space Weapons: U.S. geopolitics, science fiction, and reality** (Dalby)