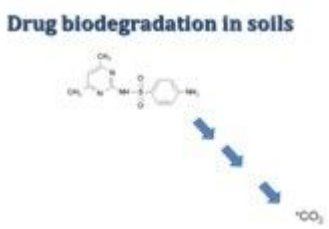
"Meet the Microbiologist" Submission Instruction

When sending the Vignette please ensure it includes:

1. Your photo and any images you need to insert related to your research. All images are in one of these file formats: JPG, PNG or Gif. Please send all images separately not inserted in the Word file. You can also provide captions for the research related images.
2. Title you wish for your Vignette
3. Text, comprising one or two paragraphs
4. Link to one or more websites
5. A few lines describing your lab or other work environment

Sample Meet the Microbiologists Submission
(There are many other examples on http://www.csm-scm.org/)

Agriculture, Microbiology, the Environment, and Human Health



One of humanity's great challenges is to feed the growing world population. Fortunately, Canada is one of the Earth's great "breadbaskets". This country's agriculture and agri-food system generates about 8% of the total Gross Domestic Product, and provides about one in eight jobs, a hugely important sector of the national economy. About 6% of the Canadian territory is farmed to grow crops and livestock, and much of the production is in proximity to water resources whose quality is important to both citizens and wildlife. Within this context, our team conducts research to evaluate and to devise means of managing the risk to water from contaminants generated in agricultural production. Our specific interests concern the ecology of enteric microorganisms in the agro-ecosystem; the fate of veterinary and human drugs following the application of manures or biosolids to soils; and the impact of agricultural production practices on the development of bacterial resistance to antibiotics. In partnership with numerous national and international collaborators, our experimental work is undertaken from the bench to the watershed scale. We utilize both conventional and molecular means to detect, enumerate, isolate and characterize indicator and pathogenic microorganisms obtained from environmental matrices impacted by agriculture. The sources of enteric pollution are elucidated at policy-relevant scales, and environmental bacteria are characterized with respect to human health risk. The microbial basis for the biodegradation in soils of pharmaceuticals, hormones and other organic chemicals of anthropogenic origin is investigated. Information from these studies is used to help inform the development of agricultural practices and policies that are protective of environmental quality and human health.

Edward Topp

Our research team employs the tools of environmental microbiology to devise agricultural methods that are safer for people and the environment. Graduate students and postdoctoral fellows in the group will have the opportunity to get involved in an eclectic range of innovative research projects with tangible public good outcomes.