How does antibiotic resistance evolve and spread so quickly?

Dr Andrew Cameron

ABSTRACT: The severe health burden of bacterial infections will continue to increase with growing human populations, eroding environmental quality, and the loss of effective antibiotics. My lab’s goal is to reduce the incidence and burden of infection by preventing disease outbreaks and finding effective ways to treat resistant infections. With DNA sequence data we can find sources of infection and transmission routes in hospitals, communities, and natural environments. We also use this data to find the genes that cause resistance, and then track how these genes are spreading around the world. I will present examples of how my lab is characterizing the evolution of new resistance mechanisms. I will also present our collaborative work in sub-Saharan Africa to track how antibiotic resistance genes move between wild animals, water, and humans.

Bio: Dr. Cameron is an Associate Professor in the Department of Biology at the University of Regina, Saskatchewan. He co-founded and co-directs the Institute for Microbial Systems and Society, which connects government, industrial, and academic collaborators around the world. Dr. Cameron graduated with a BSc from VIU Biology, PhD from the University of British Columbia, and conducted a Postdoctoral Fellowship at Trinity College Dublin. He is an adjunct member of the VIU Department of Biology.

Wednesday, January 15, 2020
7:00 - 8:00 pm
Refreshments: 6:45 pm

Vancouver Island University, Arts and Sciences Building 355, Room 203