

6th Annual Conference on

MICROBIOLOGY

&

Annual Conference on

MICROBES AND BENEFICIAL MICROBES

October 16-17, 2017 Baltimore, USA

Identification and characterization of alternative antimicrobials against *Gardnerella vaginalis***Megan Ross**

Laurentian University, Canada

Gardnerella vaginalis is the etiological agent of bacterial vaginosis (BV). Chronic BV infection affects women of child bearing ages on a global scale resulting in serious co-morbidities and pregnancy complications. Menace of increasing rates of antibiotic resistance has limited the success of antibiotic therapy outcomes and has increased the risk of chronic infection. Alternative therapeutic methods must be established to effectively treat BV. In this pilot study, a collection of *G. vaginalis* isolates consisted of 3 ATCC strains and 14 clinical isolates obtained from the National Microbiology Laboratory, was established. Antibiotic susceptibility profiles and genomic diversity of the collection was determined through Epsilometer test and genotyping, respectively. The isolates were determined to belong to at least three genotypes by ARDRA. A total of thirty-three bacterial isolates with potential antagonistic activities against *G. vaginalis* collection were isolated and further analyzed to determine their target range profiling and specificity. The nature of antimicrobial agents produced by anti-GV isolates were determined via genome sequencing and pangenomic analysis to be genetically regulated short peptides. Further characterization of these antibacterial peptides is underway.

Biography

Megan Ross has completed her Honors BSc at Trent University and is currently an MSc candidate at Laurentian University. She works under the supervision of Reza Nokhbeh at Health Science North Research Institute.

meross@hsnri.ca

Notes: