Title: *Clostridium difficile* infection differentially alters structure and metabolic activity of distinct cecal microbiomes to promote sustained colonization

**Running Title:**  *Clostridium difficile* alters nutrient-niche landscape in the gut to promote persistence

**Authors:** Matthew L. Jenior1, Jhansi L. Leslie1, and Patrick D. Schloss1

**Affiliations:**

1.) Department of Microbiology & Immunology; University of Michigan, Ann Arbor MI,

**Corresponding Author Contact Information:**

Patrick D. Schloss Ph.D.

The University of Michigan

Department of Microbiology & Immunology

1520A Medical Science Research Bldg. I

1150 W. Medical Center Drive

Ann Arbor, MI 48109

734-647-5801

pschloss@umich.edu