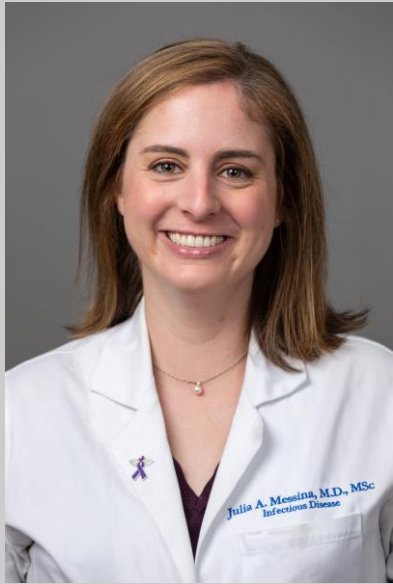




Julia Messina



Emerging and Infectious Disease

Research emphasis:

Dr. Messina's research focuses on the interplay between the gut microbiome and enterococcal bloodstream infections (BSI) in patients with hematologic malignancies. Typically, these patients' gut microbiomes move toward a state of enterococcal abundance over the course of therapy which can lead to enterococcal BSI. Dr. Messina is performing metagenomics analyses of patients' stool samples and enterococcal BSI isolates to characterize the state of enterococcal abundance and identify enterococcal genetic lineages that are associated with BSI.

Application:

- Clinical epidemiology of multidrug-resistant organisms
- Gut microbiome
- Whole genome sequencing of enterococci
- Metagenomics

Collaboration potential:

- Correlative studies of the epidemiology of multidrug-resistant organisms between humans and animals
- Comparative studies of the gut microbiome in humans and animals

Selected publications:

Messina, JA, Cober, E, Richter, SS, Perez, F, Salata, RA, Kalayjian, RC, *et al.* (2015). Hospital Readmissions in Patients With Carbapenem-Resistant *Klebsiella pneumoniae*. *Infection Control & Hospital Epidemiology*. 2015: 1-8.

Messina, JA, Thaden, JT, Sharma-Kuinkel, BK, & Fowler Jr, VG. Impact of Bacterial and Human Genetic Variation on *Staphylococcus aureus* Infections. *PLoS pathogens*. 2016: 12(1).

Messina, JA, Wolfe, CR, Hemmersbach-Miller, M, Milano, C, Todd, JL, Reynolds, J, Alexander, BD, Schell, WA, Cuomo, CA, Perfect, JR. Genomic Characterization of Recurrent Mold Infections in Thoracic Transplant Recipients. *Transplant Infectious Disease*. 2018 May 31:e12935.

Messina, JA. Sinha, R, Starr, K, Arshad, M, Alexander, BD, Chao, NJ, Sung, AD. Clinical and Genomic Characterization of Recurrent Enterococcal Bloodstream Infection in Patients with Acute Leukemia. *Open Forum Infectious Diseases*, Volume 5, Issue 6, 2018 June 1, ofy107

Medical Instructor, Duke University Department of Medicine, Division of Infectious Diseases

B.S. University of California Santa Barbara, Goleta, CA
M.Sc. Virginia Commonwealth University, Richmond, VA
M.D. Virginia Commonwealth University, Richmond, VA

Address:

315 Trent Drive, Hanes House, Room 181
Durham, NC 27710

Phone: 919-684-8111

Email: Julia.messina@duke.edu