



Schuyler Chambers

Postdoctoral Scholar, Chemistry

Bio

PROFESSIONAL EDUCATION

- Doctor of Philosophy, Vanderbilt University (2021)
- Bachelor of Science, University of Nebraska Lincoln (2016)

STANFORD ADVISORS

- Lynette Cegelski, Postdoctoral Faculty Sponsor

Publications

PUBLICATIONS

- **Like mother, like microbe: human milk oligosaccharide mediated microbiome symbiosis.** *Biochemical Society transactions*
Chambers, S. A., Townsend, S. D.
2020; 48 (3): 1139-1151
- **Bioorthogonal human milk oligosaccharide probes for antimicrobial target identification within *Streptococcus agalactiae*.** *Carbohydrate research*
Chambers, S. A., Townsend, S. D.
2020; 488: 107895
- **Synthetic Ellagic Acid Glycosides Inhibit Early Stage Adhesion of *Streptococcus agalactiae* Biofilms as Observed by Scanning Electron Microscopy.** *Chemistry (Weinheim an der Bergstrasse, Germany)*
Chambers, S. A., Gaddy, J. A., Townsend, S. D.
2020; 26 (44): 9923-9928
- **A Solution to Antifolate Resistance in Group B *Streptococcus*: Untargeted Metabolomics Identifies Human Milk Oligosaccharide-Induced Perturbations That Result in Potentiation of Trimethoprim.** *mBio*
Chambers, S. A., Moore, R. E., Craft, K. M., Thomas, H. C., Das, R., Manning, S. D., Codreanu, S. G., Sherrod, S. D., Aronoff, D. M., McLean, J. A., Gaddy, J. A., Townsend, S. D.
2020; 11 (2)
- **Analysis of Susceptibility to the Antimicrobial and Anti-Biofilm Activity of Human Milk Lactoferrin in Clinical Strains of *Streptococcus agalactiae* With Diverse Capsular and Sequence Types.** *Frontiers in cellular and infection microbiology*
Lu, J., Guevara, M. A., Francis, J. D., Spicer, S. K., Moore, R. E., Chambers, S. A., Craft, K. M., Manning, S. D., Townsend, S. D., Gaddy, J. A.
2021; 11: 740872
- **Analysis of virulence phenotypes and antibiotic resistance in clinical strains of *Acinetobacter baumannii* isolated in Nashville, Tennessee.** *BMC microbiology*
Boone, R. L., Whitehead, B., Avery, T. M., Lu, J., Francis, J. D., Guevara, M. A., Moore, R. E., Chambers, S. A., Doster, R. S., Manning, S. D., Townsend, S. D., Dent, L., Marshall, et al
2021; 21 (1): 21

- **Antibacterial and Anti-biofilm Activity of the Human Breast Milk Glycoprotein Lactoferrin against Group B Streptococcus.** *Chembiochem : a European journal of chemical biology*
Lu, J., Francis, J. D., Guevara, M. A., Moore, R. E., Chambers, S. A., Doster, R. S., Eastman, A. J., Rogers, L. M., Noble, K. N., Manning, S. D., Damo, S. M., Aronoff, D. M., Townsend, et al
2021; 22 (12): 2124-2133
- **Group B Streptococcus cpsE Is Required for Serotype V Capsule Production and Aids in Biofilm Formation and Ascending Infection of the Reproductive Tract during Pregnancy.** *ACS infectious diseases*
Noble, K., Lu, J., Guevara, M. A., Doster, R. S., Chambers, S. A., Rogers, L. M., Moore, R. E., Spicer, S. K., Eastman, A. J., Francis, J. D., Manning, S. D., Rajagopal, L., Aronoff, et al
2021; 7 (9): 2686-2696
- **Analysis of Antimicrobial and Antibiofilm Activity of Human Milk Lactoferrin Compared to Bovine Lactoferrin against Multidrug Resistant and Susceptible Acinetobacter baumannii Clinical Isolates.** *ACS infectious diseases*
Avery, T. M., Boone, R. L., Lu, J., Spicer, S. K., Guevara, M. A., Moore, R. E., Chambers, S. A., Manning, S. D., Dent, L., Marshall, D., Damo, S. M., Townsend, S. D., Gaddy, et al
2021; 7 (8): 2116-2126
- **The Innate Immune Glycoprotein Lactoferrin Represses the Helicobacter pylori cag Type IV Secretion System.** *Chembiochem : a European journal of chemical biology*
Lu, J., Haley, K. P., Francis, J. D., Guevara, M. A., Doster, R. S., Craft, K. M., Moore, R. E., Chambers, S. A., Delgado, A. G., Piazuelo, M. B., Damo, S. M., Townsend, S. D., Gaddy, et al
2021; 22 (18): 2783-2790
- **Leveraging Stereoelectronic Effects in Biofilm Eradication: Synthetic #-Amino Human Milk Oligosaccharides Impede Microbial Adhesion As Observed by Scanning Electron Microscopy.** *The Journal of organic chemistry*
Moore, R. E., Craft, K. M., Xu, L. L., Chambers, S. A., Nguyen, J. M., Marion, K. C., Gaddy, J. A., Townsend, S. D.
2020; 85 (24): 16128-16135
- **Vitamin D and Streptococci: The Interface of Nutrition, Host Immune Response, and Antimicrobial Activity in Response to Infection.** *ACS infectious diseases*
Guevara, M. A., Lu, J., Moore, R. E., Chambers, S. A., Eastman, A. J., Francis, J. D., Noble, K. N., Doster, R. S., Osteen, K. G., Damo, S. M., Manning, S. D., Aronoff, D. M., Halasa, et al
2020; 6 (12): 3131-3140
- **Two-step conversion of unprotected oligosaccharides to generate bioorthogonal oligosaccharide tool compounds.** *MethodsX*
Chambers, S. A., Townsend, S. D.
2020; 7: 100996
- **Lactoferrin: A Critical Mediator of Both Host Immune Response and Antimicrobial Activity in Response to Streptococcal Infections.** *ACS infectious diseases*
Lu, J., Francis, J., Doster, R. S., Haley, K. P., Craft, K. M., Moore, R. E., Chambers, S. A., Aronoff, D. M., Osteen, K., Damo, S. M., Manning, S., Townsend, S. D., Gaddy, et al
2020; 6 (7): 1615-1623
- **The DARK Side of Total Synthesis: Strategies and Tactics in Psychoactive Drug Production.** *ACS chemical neuroscience*
Chambers, S. A., DeSousa, J. M., Huseman, E. D., Townsend, S. D.
2018; 9 (10): 2307-2330