

# Stanford

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## Bryan Merrill

Ph.D. Student in Microbiology and Immunology, admitted Autumn 2015

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#### EDUCATION AND CERTIFICATIONS

- MS, Brigham Young University , Microbiology and Molecular Biology (2015)
- BS, Brigham Young University , Molecular Biology (2014)

#### LINKS

- ResearchGate: [https://www.researchgate.net/profile/Bryan\\_Merrill](https://www.researchgate.net/profile/Bryan_Merrill)

### Publications

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#### PUBLICATIONS

- **Recovery of the Gut Microbiota after Antibiotics Depends on Host Diet, Community Context, and Environmental Reservoirs.** *Cell host & microbe*  
Ng, K. M., Aranda-Díaz, A., Tropini, C., Frankel, M. R., Van Treuren, W., O'Laughlin, C. T., Merrill, B. D., Yu, F. B., Pruss, K. M., Oliveira, R. A., Higginbottom, S. K., Neff, N. F., Fischbach, et al  
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- **Bystander Phage Therapy: Inducing Host-Associated Bacteria to Produce Antimicrobial Toxins against the Pathogen Using Phages.** *Antibiotics (Basel, Switzerland)*  
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- **A PCR-Based Method for Distinguishing between Two Common Beehive Bacteria, *Paenibacillus larvae* and *Brevibacillus laterosporus*** *APPLIED AND ENVIRONMENTAL MICROBIOLOGY*  
Berg, J. A., Merrill, B. D., Breakwell, D. P., Hope, S., Grose, J. H.  
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- **Complete Genome Sequences of 18 *Paenibacillus larvae* Phages from the Western United States.** *Microbiology resource announcements*  
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- **A PCR-BASED METHOD FOR DISTINGUISHING BETWEEN TWO COMMON BEEHIVE BACTERIA, *PAENIBACILLUS LARVAE* AND *BREVIBACILLUS LATEROSPORUS*.** *Applied and environmental microbiology*  
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- **Complete Genome Sequences of *Paenibacillus larvae* Phages BN12, Dragolir, Kiel007, Leyra, Likha, Pagassa, PBL1c, and Tadhana.** *Genome announcements*  
Walker, J. K., Merrill, B. D., Berg, J. A., Dhalai, A., Dingman, D. W., Fajardo, C. P., Graves, K., Hill, H. L., Hilton, J. A., Imahara, C., Knabe, B. K., Mangohig, J., Monk, et al  
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- **Transient Osmotic Perturbation Causes Long-Term Alteration to the Gut Microbiota.** *Cell*  
Tropini, C., Moss, E. L., Merrill, B. D., Ng, K. M., Higginbottom, S. K., Casavant, E. P., Gonzalez, C. G., Fremin, B., Bouley, D. M., Elias, J. E., Bhatt, A. S., Huang, K. C., Sonnenburg, et al  
2018; 173 (7): 1742
- **Genome Sequences of 19 Novel *Erwinia amylovora* Bacteriophages.** *Genome announcements*  
Esplin, I. N., Berg, J. A., Sharma, R., Allen, R. C., Arens, D. K., Ashcroft, C. R., Bairett, S. R., Beatty, N. J., Bickmore, M., Bloomfield, T. J., Brady, T. S., Bybee, R. N., Carter, et al  
2017; 5 (46)
- **Bacteriophages as an alternative to conventional antibiotic use for the prevention or treatment of *Paenibacillus* larvae in honeybee hives** *JOURNAL OF INVERTEBRATE PATHOLOGY*  
Brady, T., Merrill, B. D., Hilton, J. A., Payne, A. M., Stephenson, M. B., Hope, S.  
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- **DDX6 Represses Aberrant Activation of Interferon-Stimulated Genes.** *Cell reports*  
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- **A gut bacterial pathway metabolizes aromatic amino acids into nine circulating metabolites.** *Nature*  
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- **Software-based analysis of bacteriophage genomes, physical ends, and packaging strategies** *BMC GENOMICS*  
Merrill, B. D., Ward, A. T., Grose, J. H., Hope, S.  
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- **Characterization of Five Novel *Brevibacillus* Bacteriophages and Genomic Comparison of *Brevibacillus* Phages** *PLOS ONE*  
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- **Putative type 1 thymidylate synthase and dihydrofolate reductase as signature genes of a novel bastille-like group of phages in the subfamily Spounavirinae** *BMC GENOMICS*  
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- **Genome Sequences of Five Additional *Brevibacillus laterosporus* Bacteriophages.** *Genome announcements*  
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- **Correction for Sheflo et al., Complete Genome Sequences of Five *Brevibacillus laterosporus* Bacteriophages.** *Genome announcements*  
Sheflo, M. A., Gardner, A. V., Merrill, B. D., Fisher, J. N., Lunt, B. L., Breakwell, D. P., Grose, J. H., Burnett, S. H.  
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- **The Genomes, Proteomes, and Structures of Three Novel Phages That Infect the *Bacillus cereus* Group and Carry Putative Virulence Factors** *JOURNAL OF VIROLOGY*  
Grose, J. H., Belnap, D. M., Jensen, J. D., Mathis, A. D., Prince, J. T., Merrill, B. D., Burnett, S. H., Breakwell, D. P.  
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- **Characterization of *Paenibacillus* larvae bacteriophages and their genomic relationships to firmicute bacteriophages** *BMC GENOMICS*  
Merrill, B. D., Grose, J. H., Breakwell, D. P., Burnett, S. H.  
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- **Genome Sequences of Three Novel *Bacillus cereus* Bacteriophages.** *Genome announcements*  
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- **Genome sequences of five b1 subcluster mycobacteriophages.** *Genome announcements*

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- **Complete Genome Sequences of Five *Paenibacillus* larvae Bacteriophages.** *Genome announcements*

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