

VITA

1. Don Thushara Galbadage
2. 2901 Stadium Drive
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3.
 - a. Ph.D. in Medical Sciences (May 2017)
Texas A&M University, College of Medicine, Bryan, TX
Research Emphasis: Molecular Microbiology & Pathogenesis
Dissertation: Characterization of *Caenorhabditis elegans* as a *Mycobacterium marinum* Virulence Model
Dissertation Advisor: Jeffrey D. Cirillo, Ph.D.

M.P.H. in Epidemiology (August 2008)
The University of Texas, School of Public Health, Houston, TX
Practicum: Quality Control in a CAP-Certified Clinical Laboratory
Thesis: Increased sensitivity of ETEC detection in stool cultures by increasing the number of *E. coli* colonies tested
Thesis Advisor: Herbert L. DuPont, M.D.

B.S. in Biology (May 2007)
Minors in Chemistry and Mathematics
Texas Christian University, Fort Worth, TX
Graduated Cum Laude, TCU Scholar Award
Research: Temperature-dependent lifespan in *C. elegans*
Research Advisor: Philip S. Hartman, Ph.D.
 - b. Academy for Future Faculty (AFF), CIRTL Associate – Fellow (2019)
Faculty Assessment Fellow, Biola University (2023-24)
 - c. Associate Professor
 - d. August 2024 Associate Professor
 - e. NA

- f. Associate Professor of Public Health (August 2019 – July 2024)
Department of Kinesiology and Public Health,
Biola University, La Mirada, CA

Post-Doctoral Research Fellow (June 2017 – August 2019)
Department of Microbial Pathogenesis & Immunology,
Texas A&M University, College of Medicine, Bryan, TX
 - g. Director of Public Health Programs (August 2020 – July 2024)
Department of Kinesiology and Public Health,
Biola University, La Mirada, CA
 - h. NA
 - i. Steward Research Faculty Fellow, Biola University, La Mirada (2023)
- 4.
- a. APHS 20003 Global Healthcare Systems
PHLT 505 Principles of Epidemiology
PHLT 610 Public Health Integrative Experience
PHLT 620 Public Health Practicum
PHLT 640 Global Communicable Disease Control
PHLT 654 Epidemiology of Chronic Disease
KNES 107 Lifetime Wellness
KNES 200 Public Health Principles and Practice
KNES 355 Health Care Systems
KNES 458 Health Science Practicum
KNES 475 Public Health Capstone Practicum
GNST 102 First Year Seminar: The Biola Experience - Exploring Health
BIOS 236 Principles of Human Anatomy and Physiology
BIOS 282 Microbiology Lab
MPIM 601 Microbial Pathogenesis of Human Disease Guest Lecturer (Spring 2019)
Clinical Synthesis and Integration Exercise (CSIE) Co-Facilitator (August 2018 – May 2019)
 - b. APHS 20003 Global Healthcare Systems
 - c. NA
 - d. NA

- e. NA
 - f. N/A
 - g. NA
- 5.
- a. **Galbadage, T.**, Liu, D., Tour, J.M., Cirillo, J.D., & Gunasekera R.S. (2025). Microbicidal Mechanisms for Light-Activated Molecular Nanomachines in *Mycobacterium smegmatis*: A Model for Pathogenic Bacteria. *OpenNano*, 100240. <https://doi.org/10.1016/j.onano.2025.100240>

 - Park, J. Y., Peterson, B. M., Kim, J., **Galbadage, T.** (2024) Driving Under the Influence of Alcohol in People With Major Depressive Episodes and Alcohol Use Disorder. *Substance Use & Addiction Journal*. 2024;0(0). doi:10.1177/29767342241265876

 - Gunasekera, R. S., Raja K. K. B., Hewapathirana S., Tundrea, E., Gunasekera V., **Galbadage, T.**, Nelson, P. A. (2023). ORFanID: A Web-Based Search Engine for the Discovery and Identification of Orphan and Taxonomically Restricted Genes. *PLoS One*; doi: 10.1371/journal.pone.0291260

 - Park, J. Y., **Galbadage, T.**, Lee H., Wang, D. C., Peterson, B. M. (2023). Mental health, substance use, and the importance of religion during the COVID-19 pandemic. *Mental Health, Religion & Culture* doi: 10.1080/13674676.2023.2202382

 - Holt A., Cahill J., Ramsey J., Martin C., O'Leary C., Moreland R., Maddox L.T., **Galbadage T.**, Sharan R., Sule R., Cirillo J.D., Young R. (2021). Phage-Encoded Cationic Antimicrobial Peptide Required for Lysis. *Journal of Bacteriology* JB. 00214-21. doi: 10.1128/JB.00214-21

 - Galbadage, T.**, Peterson, B. M., Wang, D. C., Wang, J. S., & Gunasekera, R. S. (2020). Biopsychosocial and Spiritual Implications of Patients with COVID-19 Dying in Isolation. *Frontiers in Psychology* 11:588623. doi: 10.3389/fpsyg.2020.588623

 - Galbadage, T.**, Peterson, B. M., Wang, J. S., Jayasekara, A., Ramirez, D. A., Awada, J., Walsh, J. P., & Gunasekera, R. S. (2020). Molecular Mechanisms Lead to Sex-Specific COVID-19 Prognosis and Targeted Therapies. *Frontiers in Medicine (Lausanne)* 7:589060. doi: 10.3389/fmed.2020.589060

Jalali, A. M., Peterson, B. M., & **Galbadage, T.** (2020). Early COVID-19 Interventions Failed to Replicate 1918 St. Louis vs. Philadelphia Outcomes in the United States. *Frontiers in Public Health* 8:579559. doi: 10.3389/fpubh.2020.579559

Galbadage, T., Peterson, B. M., Awada, J., Buck, A. S., Ramirez, D. A., Wilson, J., & Gunasekera, R. S. (2020). Systematic Review and Meta-Analysis of Sex-Specific COVID-19 Clinical Outcomes. *Frontiers in Medicine (Lausanne)*, 7, 348. doi: 10.3389/fmed.2020.00348

Galbadage, T., Peterson, B. M. & Gunasekera, R. S. (2020). Does COVID-19 Spread through Droplets Alone? *Frontiers in Public Health*, 8, 163. doi: 10.3389/fpubh.2020.00163

Gunasekera, R. S., **Galbadage, T.**, Ayala Orozco, C., Liu, D., García-López, V., Troutman, B. E., Tour, J. J., Pal, R., Krishnan, S., Cirillo, J. D. & Tour, J. M. (2020). Molecular Nanomachines Can Destroy Tissue or Kill Multicellular Eukaryotes. *ACS Applied Materials & Interfaces*, 12, 13657-13670. doi: 10.1021/acsami.9b22595

Bartzatt, R., Sule, P., **Galbadage, T.**, & Cirillo, J. D. (2019). Aromatic Hydrazone Compounds That Inhibit the Growth of *Mycobacterium tuberculosis*. *Journal of Advances in Medical and Pharmaceutical Sciences*, 1-11. doi: 10.9734/jamps/2019/v21i430148

Galbadage, T., Liu, D., Alemany, L. B., Pal, R., Tour, J. M., Gunasekera, R. S., & Cirillo, J. D. (2019). Molecular Nanomachines Disrupt Bacterial Cell Wall Increasing Sensitivity of Extensively Drug-Resistant *Klebsiella pneumoniae* to Meropenem. *ACS nano*, 13, 14377-14387. doi: 10.1021/acsnano.9b07836

Worstell, N. C., Singla, A., Saenkham, P., **Galbadage, T.**, Sule, P., Lee, D., Mohr, A., Kwon, J.S.I., Cirillo, J.D. & Wu, H. J. (2018). Hetero-multivalency of *Pseudomonas aeruginosa* lectin LecA binding to model membranes. *Scientific reports*, 8(1), 1-11. doi: 10.1038/s41598-018-26643-7

Galbadage, T., Shepherd, T. F., Cirillo, S. L., Gumienny, T. L., & Cirillo, J. D. (2016). The *Caenorhabditis elegans* p38 MAPK Gene plays a key role in protection from mycobacteria. *Microbiologyopen*, 5(3), 436-452. doi: 10.1002/mbo3.341

Vigil, K. J., Jiang, Z. D., Chen, J. J., Palumbo, K. L., **Galbadage, T.**, Brown, E. L., Yiang, J., Koo, H., DuPont, M.W., Ericsson, C. & Adachi, J. A. (2009). Coliform and

Escherichia coli contamination of desserts served in public restaurants from Guadalajara, Mexico, and Houston, Texas. *The American journal of tropical medicine and hygiene*, 80(4), 606-608.

doi: 10.4269/ajtmh.2009.80.606

Galbadage, T., Jiang, Z. D., & DuPont, H. L. (2009). Improvement in detection of enterotoxigenic *Escherichia coli* in patients with travelers' diarrhea by increasing the number of *E. coli* colonies tested. *The American journal of tropical medicine and hygiene*, 80(1), 20-23. doi: 10.4269/ajtmh.2009.80.20

Galbadage, T., & Hartman, P. S. (2008). Repeated temperature fluctuation extends the life span of *Caenorhabditis elegans* in a daf-16-dependent fashion. *Mechanisms of ageing and development*, 129(9), 507-514. doi: 10.1016/j.mad.2008.04.012

b. *Book Chapters*

Payton, C., **Galbadage, T.**, Martinez, J. (In Press). Assessing and Monitoring Population Health Status (EPHS 1). In *Health Equity and Systems Thinking in Public Health* (Chapter 3). Kendall Hunt Publishing Company

Sharan, R., **Galbadage, T.**, Saenkham, P., Moule, M., Sule, P., Kong, Y., Cirillo, J. D. (2019). Optical In Vivo Imaging in Tuberculosis Research. In *Tuberculosis Host-Pathogen Interactions* (pp. 155-200). Springer, Cham.

Preprint Publications

Jalali, A. M., Khoury, S. G., See, J., Gulsvig, A. M., Peterson, B. M., Gunasekera, R. S., Buzi, G., Wilson, J., & **Galbadage, T.** (2020). Delayed Interventions, Low Compliance, and Health Disparities Amplified the Early Spread of COVID-19. *medRxiv* 2020.07.31.20165654. doi: 10.1101/2020.07.31.20165654

c. NA

d. *Research Poster Presentations*

Steinhubel S., Galbadage T. (2022, November). *The Patient is a Vital Stakeholder in the Success of Hospital Antibiotic Stewardship Programs*. Student poster presented at Children's Hospital of Orange County (CHOC) Research Institute 2022 Research Week, Scientific Poster Symposium, Virtual Platform.

Arthur M., Galbadage T., Gunasekera R.S. (2022, February). *Killing Viruses (Bacteriophages) By Molecular Nanomachines*. Student poster presented at the

American Association for the Advancement of Science (AAAS) Annual Meeting, Virtual Platform.

Galbadage T., Sharan R., Sule P., Eijk M., Lin J. S., Didwania M., Jenssen H., Haagsman H. P., Seo J., Kirshenbaum K., Schepers U., Barron A. E., Cirillo J.D. (2018, September). *Efficacy of peptides and peptoids against pan-resistant K. pneumoniae*. Poster presented at the 3rd Annual Texas A&M Postdoctoral Association (PDA) Research Symposium, College Station, TX.

Galbadage T., Dongdong L., Pal R., Tour J. M., Cirillo J. D., Gunasekera R.S. (2018, February). *Light-activated molecular machines cause cell death in bacteria and C. elegans*. Poster presented at the Molecular Basis of Infectious Diseases (MBD) Retreat, Houston, TX.

Research Oral Presentations

Galbadage T., Ayala-Orozco C., Dongdong L., Troutman B., Pal R., Liopo A., Cirillo J. D., Krishnan S., Tour J. M., Gunasekera R. S. (2018, March). *In vivo action of molecular nanomachines increases mortality in eukaryotes and destroys prokaryotes*. Texas Genetic Society (TGS) Platform presentation at the Annual Meeting, College Station, TX.

Galbadage T., Dongdong L., Pal R., Tour J. M., Cirillo J. D., Gunasekera R.S. (2018, February). *Light-activated molecular machines cause cell death in bacteria and C. elegans*. Post-doctoral presentation at the Molecular Basis of Infectious Diseases (MBID) Retreat, Houston, TX.

- e. Frontiers Topic Editor, Biofilm Dynamics: Interdisciplinary Insights into Microbial Interactions within the Context of Microbiomes and Host Health, Frontiers in Bacteriology Journal (2024 – Present)
Review Editor, Frontiers in Cellular and Infection Microbiology Journal (2018 – Present)
Review Editor, Frontiers in Bacteriology Journal (2022 – Present)
Peer-Reviewer, Journal of Medical Microbiology (2018 - Present)
Peer-Reviewer, Access Microbiology Journal (2019 – Present)
- f. NA
- g. NA
- h. NA

6.
 - a. APHS Curriculum Committee (2024 – Present)
 - b. HCNHS Curriculum Committee (2024 – Present)
 - c. NA
 - d. NA
 - e. American Public Health Association (APHA) Member (2020 – Present)
Conference on Undergraduate Research (CUR) Member (2025 – Present)
 - f. NA
 - g. NA