

Recruiting: Postdoctoral Scholar

The Tate lab in the Department of Biological Sciences at Vanderbilt University is recruiting a Postdoctoral Scholar interested in translation efficiency during innate immune responses to work on an NIH-sponsored project in collaboration with colleagues at Rutgers University.

About the position: An early and efficient response to infection can spell the difference between asymptomatic clearance of microbes and disease-induced mortality. However, the primary response involves the differential expression of thousands of transcripts competing for rapid translation. We hypothesize that small differences in the translation efficiency of some antimicrobial peptides, for example, could explain variation in resistance to infection. The Postdoctoral Scholar will use ribosomal profiling (Ribo-Seq), proteomics, and metabolic profiling in an insect model system to investigate the consequences of variation in translation efficiency for the dynamics of innate immune responses and infection outcomes.

Ideal candidates will be comfortable conducting research with a high degree of independence, learning new methods, writing manuscripts, and presenting their work at conferences. Short periods of travel (1-2 weeks) to work with collaborators at Rutgers University will be required. The postdoc should be willing to co-mentor undergraduate and graduate students, and bring a collaborative and collegial spirit to the lab. **The position is available** as early as mid-summer 2022, although the start date is negotiable.

About the lab: The Tate Lab is a collegial group of students, postdoctoral fellows, and staff studying the evolutionary ecology and systems biology of infection and immunity by integrating computational methods with experiments in insects. We value collaboration, cohesiveness, and inclusivity. The lab prioritizes development of trainees' career and professional skills. More about our group can be found on our webpage: <https://my.vanderbilt.edu/tatelab/>

About the institution: The Department of Biological Sciences contains a highly collaborative set of research labs with particular strengths in evolution, molecular biology, and genetics. The Tate Lab is affiliated with the *Institute of Infection, Immunology and Inflammation* (VI4), the *Center for Evolutionary Studies*, the *Quantitative Systems Biology Center*, and the *Data Science Institute*, which connect and provide resources to researchers with similar interests across Vanderbilt University and Medical Center. The *Vanderbilt Office of Biomedical Research and Training* provides an array of resources for the career development of Postdoctoral Scholars, and hosts an active Postdoctoral Association. Vanderbilt is a renowned private R1 research institution located in the heart of Nashville, Tennessee. Nashville is internationally recognized for its music and culinary scene, and is surrounded by state parks and other opportunities to escape into nature.

Required qualifications: A Ph.D. in a biological or related discipline (or firm expectation of receiving one prior to starting the position).

Preferred qualifications: Previous research experience in the generation and analysis of high-throughput sequencing data or related types of datasets is strongly preferred. The candidate should be creative and self-motivated, have strong oral and written communication skills, and be collegial and collaborative. The candidate should have a track record of scientific publications (pre-prints are acceptable) and conference presentations commensurate with career stage.

Compensation: Full salary and benefits will be provided. The initial appointment will be for one year, with the expectation of renewal in subsequent years depending upon satisfactory performance.

How to apply: Please send a CV and a cover letter (1-2 pages) describing research interests and experience, future career goals, and reason for interest in this particular position. Please include the contact information for three academic references at the end of the cover letter. Using the email header "Postdoc position interest," please send these materials to a.tate@vanderbilt.edu. Review of applications will begin on **May 1st, 2022** and will continue until the position is filled.

Questions about this position can be directed to:

Ann Tate, Ph.D.
Assistant Professor of Biological Sciences, Vanderbilt University
a.tate@vanderbilt.edu

