

The Tate lab in the Department of Biological Sciences at Vanderbilt University is recruiting a motivated and creative Postdoctoral Scholar broadly interested in the evolutionary processes that shape immune systems.

About the position: The Postdoctoral Scholar will study the **evolution of stage-structured immune responses** using a combination of laboratory experiments and genomic/transcriptomic approaches in a model insect system (*Tribolium castaneum*). Possible projects include a) experiments and/or computational approaches to define the genetic basis of natural variation in immune responses across life stages using wild-derived populations and b) the experimental evolution of stage-specific immune responses against parasites in the face of developmental constraints. The postdoc will work directly with the PI to design and conduct experiments, analyze the results, and prepare them for publication. The postdoc should be comfortable conducting research with a high degree of independence, learning new methods, writing manuscripts, and presenting their work at conferences. The postdoc should also be willing to co-mentor undergraduate and graduate students. The postdoc will have flexibility to develop independent lines of research during their appointment, and will be provided training on computational and theoretical approaches to enrich their project if desired. **The position is available** as early as September 2025, and the start date is negotiable.

About the lab: The Tate Lab is a collegial group of students, postdoctoral fellows, and staff studying the ecology, evolution, and systems biology of infection and immunity by integrating experimental and theoretical methods. We value collaboration and prioritize the 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 array of research labs with particular strengths in evolution, organismal biology, molecular biology, and neuroscience. The Tate Lab is also affiliated with the *Center for Evolutionary Studies*, the *Institute of Infection, Immunology and Inflammation*, 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 founded in 1873 and 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 experience in experimental evolution, invertebrate infection models, and/or ecological or evolutionary immunology is strongly preferred. The candidate should have excellent task management (experiments likely to be complex), strong oral and written communication skills, and be collegial and collaborative. The candidate should have a track record of scientific publications and conference presentations commensurate with career stage.

Compensation: Full salary and benefits are available for at least three years. The initial appointment will be for one year, renewable upon satisfactory performance and continued availability of funding.

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 immediately and will continue until the position is filled.

Questions about this position can be directed to:

Ann Tate, Ph.D.
Vanderbilt University Biological Sciences
465 21st Ave S
Nashville, TN 37232
(615) 936-4494
a.tate@vanderbilt.edu