The Payseur lab at the University of Wisconsin-Madison invites applications for new postdoctoral positions.

We use genetics and genomics to understand mechanisms of evolution. Members of our group gain valuable experience integrating genomic and phenotypic data within a powerful evolutionary framework.

The new postdoctoral researchers will lead projects that use inbred strains of wild house mice as model systems to characterize the genetic determinants of phenotypic evolution. There are two research questions of special interest:

1. How do organisms evolve extreme phenotypes after colonizing islands? We have discovered genomic regions that contributed to the evolution of body size and behavior in mice from Gough Island. We seek new lab members who will characterize the molecular, cellular, developmental, physiological, and metabolic mechanisms by which genetic variants in these genomic regions act. This project is aimed at understanding the island rule, a general pattern in vertebrate evolution.

2. How does the meiotic recombination rate evolve? We have discovered substantial, inherited differences in the rate of recombination among wild mice. We seek new lab members who will compare crossover positioning across the genome and identify genetic and epigenetic factors responsible for the evolution of recombination rate. This project is aimed at understanding genetic variation in processes that govern inheritance.

Successful candidates will demonstrate a strong research record in the life sciences. Evidence of productivity in the form of first-authored publications and a Ph.D. in biology or a related field are required. Experience with molecular biology, cellular biology, developmental biology, physiology, metabolism, reproductive biology, genetics, genomics, mouse handling, or mouse husbandry is highly desirable. A desire to work with live mice from embryonic stages to adulthood is required. Applicants should be highly motivated and interested in contributing to a research team. Initial appointments will be for two years. Appointments may be renewed, contingent upon progress.

The Payseur lab offers a stimulating, interactive, and supportive climate with rich opportunities for professional development. In the 17 years since the group was founded, alumni have earned positions as tenure-track faculty, industry researchers, and graduate program coordinators. Bret Payseur meets regularly with each member of the group to discuss individualized training goals and all aspects of the scientific
The Payseur lab resides within the Laboratory of Genetics at the University of Wisconsin-Madison – a department with a storied history in genetics, molecular biology, and evolutionary biology. The department and the university are home to highly interactive faculty with broad and deep expertise across the life sciences. The lab enjoys local collaborations with leaders in molecular genetics, genomics, statistical genetics, computational biology, and evolutionary biology. The University of Wisconsin-Madison is consistently ranked as a top public university and is renowned for its strength in biological research. Madison is rated as one of the best places to live (https://livability.com/best-places/2022-top-100-best-places-to-live-in-the-us/top-100-2022-madison-wi), offering excellent restaurants, a thriving arts community, and an impressive assemblage of parks, bike paths, and lakes, only a few hours driving distance from Chicago and Milwaukee.

To apply, email to Bret Payseur (payseur@wisc.edu) a SINGLE PDF consisting of three pieces: (1) a brief (less than one page) research statement that clearly explains the motivation for applying, (2) an updated CV, and (3) contact information for two references. Review of applications will begin immediately. Interested individuals are encouraged to contact Bret Payseur with any questions. Informal inquiries are welcome.