

Postdoc in Molecular Neuroethology



The Delmore Lab (delmorelab.com) at Columbia University is seeking a motivated postdoctoral researcher to contribute to an NIH-funded project on the molecular neurobiology of seasonal migration.

The successful applicant will have the opportunity to contribute to multiple projects, but their primary focus will be a long-term study of a hybrid zone between two subspecies of Swainson's thrushes that exhibit dramatic differences in migratory behavior (orientation, timing, and distance). Our research combines work with both free-flying and captive birds to investigate the genetic and neural mechanisms that underlie migration. Initial projects could expand earlier [bulk RNA-seq analyses](#) using single-nucleus RNA sequencing and spatial transcriptomics with existing tissues. Pharmacological experiments could also be used to probe candidate receptors underlying migration. The postdoc will be encouraged to develop independent projects within the broad framework of neuroethology.

Applicants should have experience with tools commonly used in molecular and evolutionary neurobiology. For example, it would be great if they had experience with at least two of the following: molecular biology (e.g., library preparation), histology and neuroanatomy (e.g., brain sectioning, HCR), imaging (e.g., light-sheet microscopy), or computational approaches (e.g., image analysis, bioinformatics).

We are particularly interested in candidates who are excited by the opportunities and challenges of working in a non-traditional study system. Specifically, the ideal applicant will be enthusiastic about applying and adapting modern molecular neurobiology approaches in an emerging avian model, helping to advance our understanding of the neural mechanisms underlying complex behaviors.

Start date: Flexible but the sooner the better!

Funding: Fully funded and in line with guidelines from Columbia (minimum starting salary of 72K). NIH MIRA grant that does not end until Sept 2029.

Location: The Delmore lab is housed in the E3B department at Columbia. We are affiliated with the Zuckerman Mind Brain Behavior Institute, Neurobiology and Behavior Program at Columbia, and American Natural History Museum.

Experience: Ph.D. and expertise in neurobiology, molecular biology, animal behavior, or similar. Experience with birds is not necessary. Evidence of past productivity (e.g., first-author pubs and/or grants) and strong written and oral communication skills.

Application: Please send a curriculum vitae, one-page motivation letter and contact information for 2-3 references to Kira Delmore (ked2195@columbia.edu).