

Title: Postdoctoral Fellow/Research Associate in Computational Biology
Institution: University of Maryland School of Medicine
Location: Baltimore, Maryland

The Pedra and Serre laboratories in the Department of Microbiology and Immunology and the Institute of Genome Sciences at the University of Maryland School of Medicine are recruiting a postdoctoral fellow or a Research Associate with expertise in computational biology to study molecular interactions between the deer tick *Ixodes scapularis*, human pathogens (e.g., *Borrelia burgdorferi* and *Anaplasma phagocytophilum*) and the mammalian host. The Pedra Laboratory integrates the disciplines of microbiology, immunology and entomology to examine tick-borne diseases. The Serre laboratory is interested primarily in malaria research and *Plasmodium vivax* with a focus on genomic approaches.

This Postdoctoral position will be a joint mentorship between the Pedra and the Serre labs. Representative publications of our groups include: O'Neal *et al.*, *BioRxiv* 2022; Oliva Chávez *et al.*, *Nature Communications* 2021; Bogale *et al.*, *PNAS* 2021; O'Neal *et al.*, *eLife* 2020; Sa *et al.*, *PLoS Biology* 2020; Samaddar *et al.*, *Trends Parasitology* 2020; McClure Carroll *et al.*, *PNAS* 2019; Kim *et al.*, *Nature Communications* 2017; Shaw *et al.*, *Nature Communications* 2017; McClure *et al.*, *Nature Reviews Microbiology* 2017.

The Pedra and Serre laboratories value diversity and inclusivity and take advantage of an academic/research environment where professional growth and distinct career choices are appreciated. Motivated and ingenious trainees are encouraged to pursue independent projects. The Baltimore-Washington Metropolitan area is well-placed geographically, famous for its rich history, elegant cities and beautiful natural scenery. The Metro Region is an especially attractive workplace for young professionals, due to its moderate cost of living, nice blend between urban/suburban life, and a booming life science/technology industry.

The applicant will improve/optimize the annotation of the *Ixodes scapularis* genome and enable the analysis of multi-omic datasets. The trainee will also analyze large arthropod and mammalian datasets with the intent to study human disease. PhD in bioinformatics/computer science or life sciences with a focus on bioinformatics is required. Research areas can be as diverse as RNA-Seq, scRNA-Seq, metabolomics, proteomics, ChIP-Seq, cheminformatics and structural informatics. We expect that the successful candidate will complement and synergize with the current research projects available in both laboratories. Creative trainees will be encouraged to establish their own independent research program. No prior experience in vector-borne diseases is necessary.

To apply: Please submit a CV (3 pages or less), a letter summarizing research interests, experience and goals (1 page or less), and the names and phone numbers/e-mail of three references to: Dr. Joe Pedra, Ph.D., Associate Professor, E-mail: jpedra@som.umaryland.edu (pedralab.com); twitter: [@ThePedraLab](https://twitter.com/ThePedraLab)