



UNIVERSITY OF
GEORGIA



CENTER FOR VACCINES
AND IMMUNOLOGY

Postdoctoral Research Position in Structural Immunology/Vaccinology

The Mousa Laboratory at the University of Georgia (UGA) Center for Vaccines and Immunology (CVI) <https://vet.uga.edu/cvi> in Athens, GA is seeking **TWO** creative and enthusiastic postdoctoral fellows to drive forward research projects focused on monoclonal antibody therapies and epitope-focused vaccine design. These are multidisciplinary projects with enormous training opportunity in human immunology, virology, bacteriology, animal models of infection, and structural biology, including X-ray crystallography and cryo-electron microscopy. The Mousa Laboratory studies monoclonal antibodies as therapeutics and to inform vaccine design. The projects focus on the isolation of antibodies, and the immunological and structural characterization of antibody interactions with viral and bacterial antigens. The postdoctoral fellow will also design protein vaccine constructs informed by structural data, and will examine the experimental vaccines in animal models. The Mousa Laboratory uses a number of techniques that offer high potential for training including: X-ray crystallography, electron microscopy, flow cytometry assays, protein biochemistry, biolayer interferometry, virus growth and neutralization analysis, single-cell sequencing, and monoclonal antibody isolation, among many other techniques. The postdoctoral fellows will be expected to design and conduct research within a specified field while receiving advanced training from the Principal Investigator to enhance professional skills and research independence needed for pursuit of a career in research (**academia and industry both encouraged**). The postdoctoral fellow will be expected to design and evaluate experiments, develop new ideas and promote current research, and prepare and publish scientific manuscripts under the direction of the Principal Investigator. The postdoctoral fellow may be responsible for operation of scientific equipment. The postdoctoral fellow may be responsible for teaching techniques to others, including training of students and supervision of research staff.

Positions are temporary appointments as a research trainee. The initial appointment is for one year, and renewal is expected if progress is satisfactory. Appointments cannot exceed five years.

MINIMUM QUALIFICATIONS: A doctoral degree or equivalent (Ph.D., M.D., ScD., D.V.M., etc.) in an appropriate field is required. Excellent scientific writing ability and strong oral communication skills are required, as is the ability to work effectively and collegially with colleagues.

ADDITIONAL PREFERRED QUALIFICATIONS: Previous experience working in the immunology field. Experience with animal studies is preferred but not required.

SCIENTIFIC ENVIRONMENT: The CVI at UGA is a unique and collaborative research environment currently housing five research laboratories focusing primarily on respiratory pathogens and emerging infectious diseases. The Mousa Lab is housed in the CVI and trainees have generous bench space, and access to state of the art instrumentation. Our lab is also part of the Department of Infectious Diseases, a unique environment with a focus on cutting edge techniques and both basic and translational science, and with strengths in immunology, vaccinology, drug discovery, and investigation of host-pathogen interactions.

UGA is the oldest state-chartered institution of higher education in the United States. UGA provides educational and research services to over 40,000 individuals, including almost 10,000 doctoral and professional students. With almost \$500 million in annual research expenditures, and NIH awards totaling more than \$83 million annually, UGA has an estimated \$7.4 billion annual impact on the economy of Georgia. UGA is a member of the Southeast Regional Access Collaborative Access Team (SER-CAT) at Argonne National Laboratory, and abundant beamtime is available. We also have access to the Electron Microscopy facility at Emory University, which includes a FEI Talos Arctica 200 KV cryo-electron microscope, and access to 300 kV microscopes through national cryo-EM centers.

Interested applicants should send their CV and list of 2-3 references to Jarrod Mousa, Ph.D. at jarrod.mousa@uga.edu.