



JEWELL RESEARCH LAB

FISCHELL DEPARTMENT OF BIOENGINEERING
UNIVERSITY OF MARYLAND - COLLEGE PARK

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STAFF IMMUNOLOGIST POSITION AT THE INTERFACE OF IMMUNOLOGY AND ENGINEERING

Position Description:

The Jewell Research Lab in the Fischell department of Bioengineering at the University of Maryland (UMD) – College Park has an opening for a permanent, full-time Staff Immunologist. The lab's current projects are funded by 5 R01 and R01-equivalent awards from the NIH and US Department of Veterans Affairs (VA), as well as grants from leading foundations and pharma/biotech companies. These sources support translational work focused on cancer and autoimmune disease, as well as basic studies of the immune system that leverage unique features of biomaterials and nanotechnology as tools.

The individual recruited to fill this Research Scientist position will provide research leadership and immunological expertise, working closely with Dr. Jewell to drive the lab's research forward. This role will involve designing and leading research projects, authoring grants, developing new technical capabilities and research models in the group, disseminating research through high impact papers and conference presentations, contributing to trainee development, and generally functioning as a senior researcher to enable fore-front research and translation.

The minimum requirements for the position are completion of a postdoc in immunology and a PhD in immunology, or closely related fields. Candidates with research experience beyond the postdoctoral level are also encouraged to apply. Strong applicants will be well-versed in some or all of the following areas:

Technical skills: i) flow cytometry, ii) isolation and culture of primary immune cells, iii) pre-clinical rodent models of autoimmunity/cancer, iv) breeding and generation of rodent models, v) PCR/gene expression analysis, vi) histology/immunofluorescence, vii) statistics, bioinformatics, and high dimensionality data sets.

Leadership: i) designing and managing research projects, ii) contributing to NIH grant writing, iii) working in high-energy multidisciplinary teams, iv) mentoring trainees

The minimum starting salary is \$80,000-\$100,000/year, but this range may be higher for more senior candidates, commensurate with experience. The position also include a competitive benefits and retirement package offered by UMD, including retirement, tuition waivers for immediate family members, and a formal career advancement track that offers numerous opportunities for promotion and career development. Flexibility to pursue research in personal areas of interest, lead grants, direct new research thrusts, and participate in career growth activities will be encouraged.

About the Jewell Lab

The goal of the Jewell Lab is to harness nanotechnology and biomaterials as tools to study immune function, and to exploit these materials for potent, selective immunotherapies targeting cancer and autoimmunity. We use engineered materials ranging from degradable polymers, to lipids, to self-assembled materials. Our work involves materials synthesis and characterization, cell and pre-clinical animal models, and research with human patient samples supported through projects we lead at the VA Medical Center. These efforts draw on a vibrant group of 16 postdocs, students, and support staff, integrating tools from immunology, engineering, medicine, and chemistry. For more info visit jewell.umd.edu

The Jewell Lab consists of more than 2000 ft² of dedicated research space in the state-of-the-art [A. James Clark Hall](#). Some of the specialized equipment in the lab



includes a dedicated flow cytometer, LED fluorescence dissection microscope, fully automated video fluorescence microscope with cell incubation system, laser diffraction particle analyzer, high-speed preparative-scale centrifuges, programmable robotics, and instruments for microfabrication. The Jewell Lab also contains a dedicated ABSL-2 and BSL-2 cell culture facility, as well as multiple dedicated rooms in the newest campus vivarium, established in Clark Hall in 2019.

The resources above are in addition to more than 20 core instruments housed in the department's [BioWorkshop](#) core instrument facility, including multiple flow cytometers, confocal microscope with FLIM and picoQuant capabilities, full histology suite, microCT, advanced RT-PCR system, high-content plate reader, and others. Also housed in Clark hall is a translational instrumentation suite in the vivarium that offers IVIS, PET/SPECT/CT, Doppler imaging, irradiator system, and other pre-clinical research tools. Numerous additional core facilities are available around campus to support research, including the [Maryland NanoCenter](#), campus microscopy facilities, and a variety of cores for biological, genomic, structural, and molecular characterization. Research in the Jewell lab is also enabled by the lab's formal connections to the Greenebaum Cancer Center, U.S. Dept. of VA, and University of Maryland Medical School. Additionally, UMD is located near top government research and funding agencies including NIH, FDA, DoD, NSF, and NIST. This proximity provides unique opportunities for research, funding, career developing, and networking.

Application Process

Interested candidates should assemble a i) cover letter, ii) CV, iii) list of references, and iv) two first-author research papers that are published or accepted for publication. The cover letter should describe the candidate's research experience, career goals, interest and expectations for the position, and preferred start date. E-mail the application as a single PDF file to cmjewell@umd.edu.

The University of Maryland, College Park complies with all applicable federal and state regulations regarding nondiscrimination and affirmative action; all applicants will receive full consideration (<https://uhr.umd.edu/eeo/>).