



JEWELL RESEARCH LAB

FISCHELL DEPARTMENT OF BIOENGINEERING
UNIVERSITY OF MARYLAND - COLLEGE PARK

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POSTDOCTORAL POSITIONS AT THE INTERFACE OF BIOMATERIALS AND IMMUNOTHERAPY

The Jewell Research Lab in the Fischell department of Bioengineering at the University of Maryland (UMD) – College Park has openings for multiple postdoctoral researchers. The lab's current projects are supported 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. Project openings span basic studies of the interactions between biomaterials and immune tissues, design of new materials to engineer immune function, and translational targets in cancer and autoimmunity.

Compensation for these positions will be at or above NIH guidelines, and will include a competitive benefits and retirement package offered by UMD. Postdoctoral researchers are eligible for renewable, annual contracts with the expectation of completing 2-4 years of training. Flexibility to pursue research in personal areas of interest, apply for grants and fellowships, develop independent research thrusts, and build scientific management expertise will be encouraged.

The goal of the Jewell Lab is to understand the interactions between biomaterials and immune cells, and to exploit these interactions for therapeutic vaccines aimed at cancer and autoimmunity. We use biomaterials 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 the lab leads at the VA Medical Center. These efforts draw on a vibrant group of 16 postdocs, students, and support staff, integrating tools from immunology, engineering, chemistry, and medicine. 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, laser diffraction particle analyzer, high-speed preparative-scale centrifuges, programmable robotics system, and instruments for microfabrication. The Jewell Lab also contains a dedicated ABSL-2/BSL-2 cell culture facility, as well as multiple dedicated rooms in the newest campus vivarium, established in Clark Hall in 2019. These resources are in addition to more than 20 core instruments housed in the [BioWorkshop](#) core instrument facility, the translational instrumentation suite housed in the Clark hall vivarium, and numerous other facilities around campus. Research in the Jewell lab is further supported by the 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, and networking.



Qualifications and Application Procedure

The ideal candidate will have experience with both immunology and biomaterials, but opportunities to gain new skills in either area will be offered. Preference will be given to candidates with experience in three or more of the following areas: 1) translational research in rodents, 2) mouse models of autoimmunity/cancer, 3) biomaterials synthesis and characterization, 4) flow cytometry, 5) isolation/culture of primary immune cells, 6) histology/immunofluorescence.

Interested candidates should assemble a i) cover letter, ii) CV, iii) list of references, and iv) two first-author manuscripts. The cover letter should describe the candidate's research experience, project interests, career goals/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/eo/>).