

Department: The Ragon Institute
Position Title: Research Fellow
Position #:

Position Overview:

The DeKosky Laboratory for Immune Engineering and Drug Discovery (<https://cheme.mit.edu/profile/brandon-dekosky/>, Google Scholar link: <http://scholar.google.com/citations?user=z6TwVlwAAAAJ&hl=en>) is seeking to hire a new postdoctoral researcher to advance new approaches in antibody discovery and protein drug engineering. These efforts will advance antibody improvement technologies while also generating new and improved antibody drug products. We are looking for enthusiastic individuals that are curious about immune protection and want to participate in the exciting world of diving deeply into understanding how monoclonal antibodies can be leveraged to fight diseases. The selected candidate will join a dynamic research team at the forefront of antibody engineering and perform experiments to discover and improve antibody molecules. Important drug targets include but are not limited to antiviral antibodies and anti-malarial antibodies for clinical use. These projects are fully funded by the several organizations, including the US National Institutes of Health and collaborative projects with the Bill and Melinda Gates Foundation, with several ongoing efforts and new projects ready to begin.

Required qualifications include a Ph.D. at the time of appointment or soon thereafter in immunology, biochemistry, biotechnology, bioinformatics, microbiology, or a related field. Preference will be given to researchers with experience in molecular biotechnology, protein display and genetic manipulation, NGS and bioinformatic analysis, and antibody engineering.

The DeKosky laboratory provides a rich and collaborative scientific environment focused on human immunology and drug discovery. The Ragon Institute is an internationally renowned immunology-focused research center located in Kendall Square, Cambridge, Massachusetts, and with affiliations with MGH, Harvard, and MIT. This position is ideal for individuals who are interested in launching a career as biomedical research leaders in either academia or industry. Successful candidates will be immersed in a diverse scientific community and become experts in advanced high-throughput drug development and establish cutting-edge drug screening approaches while being a part of a supportive, highly collaborative research environment with state-of-the-art facilities. The hired candidate will also be an affiliate of MIT, with access to MIT campus research resources and community facilities.

Job Duties:

50% Research - Design and execution of scientific projects

Carrying out original research relative to the laboratory mission. Advance research that pertains to current research topics at the lab, particularly for implementing and advancing new display technologies for antibody discovery and improvement. Work with other lab researchers to implement experiments and to consolidate data into presentable formats. Plan and implement scientific studies.

30% Reporting - Write reports and papers

Writes technical reports and scientific papers for peer reviewed journals. Additional responsibilities include assisting in the preparation of preparation of grants/contracts and proposals for federal, state and charitable organizations and industrial clients.

15% Collaboration - Assist other laboratory members and research collaborators with scientific projects

Assist the principal investigator to provide experimental and technical supervision of one or more technician, graduate student and/or post-doctoral researchers and/or fellows. Coordinate with collaborators to advance scientific research projects and proposals.

5% Laboratory protocol - Routine lab management

Ensuring systems are in place for efficient planning of lab supplies, records and document management as well as experimental protocols and data, and coordination of good lab practices and lab safety.

Skills and Competencies Required:

- Ability to analyze and interpret data sets & communicate data in a clear and concise manner
- Expertise in molecular biology techniques (e.g., PCR, plasmid amplification, cloning, culture of microorganisms)
- Ability to work in a team environment, meet deadlines, and prioritize and balance work from multiple individuals
- Good communication skills
- Good time management skills
- Ability to perform multiple tasks independently
- Independently motivated, detail orientated, and good problem solving ability
- A willingness to learn and grow

Required Qualifications:

1. Ph.D. in the area of immunology, biochemistry, biotechnology, bioengineering, bioinformatics, microbiology, or a related field.

Preferred Qualifications:

1. Research experience in the study of cellular or phage display, B cells, or antibodies, or closely related areas.
2. Demonstrated ability to work successfully as part of a collaborative research effort.
3. Publications or other evidence of scholarly achievement

Timeline: Review of applications will begin in June 2022 and will continue until the positions are filled. A start date beginning in summer 2022 is anticipated.

Contact Information: Dr. Brandon DeKosky at dekosky@mit.edu