JOB DESCRIPTION
UNIVERSITY OF COLORADO AT DENVER

SCHOOL/DEPARTMENT: **School of Medicine/Department of Medicine**
HIRING UNIT: **Division of Renal Diseases and Hypertension**

POSITION TITLE: **POSTDOCTORAL FELLOW/TRAINEE**
POSITION CLASSIFICATION: **RESEARCH FACULTY**

Overall Description of Responsibility or Nature of Work

This position reports directly to Dr. Raphael Nemenoff in the Division of Renal Diseases and Hypertension and is responsible for designing and conducting experiments to explore the role of the tumor microenvironment in mediating therapeutic response in preclinical models of non-small cell lung cancer(NSCLC). The project uses an orthotopic immunocompetent model of lung cancer to study mechanisms associated with response to both immunotherapy and targeted therapy. Our group has developed a panel of murine models and murine lung cancer cells comprising the major oncogenic drivers of human NSCLC. Proposed studies focus on the defining critical interactions that determine the depth and duration of response to specific therapeutic approaches.

Specific Examples of Work

Animal models of Lung Cancer:

- Characterize changes in the tumor microenvironment in response to therapy
- Use multi-omics approaches to define pathways mediating immunosuppression
- Define mechanisms of resistance to immunotherapy or targeted therapy
- Immunohistochemical analysis of tissues
- Detailed analysis and recording of results

Examination of experimental samples

- Tissue processing
- Histologic analysis
- Immunofluorescence microscopy
- Flow cytometry

In vitro experiments:

- Examine interactions between immune cells and cancer cells in coculture
- Use CRISPR or shRNA approaches to target specific signaling patwhays

General laboratory support

- Maintenance of animal colony
- Assist with laboratory upkeep and supply ordering

Qualifications:

Minimum Requirements:

- Graduation from an accredited college or university with a PhD/MD in one of these fields of study: Immunology, Cancer Biology, Pharmacology.
- Minimum of 3 years experience working with relevant methods and assays
- Excellent communication and organizational skills
- The ability to work independently within the research lab

- Proficiency in Microsoft Word, Excel, and PowerPoint.

Desired or preferred:
- Proven experience and familiarity with murine models of cancer.
- Proven experience and familiarity with standard molecular biology techniques.
- Proven experience and familiarity with flow cytometry.
- Experience with Microsoft Word, Excel, Powerpoint, and Prism

Special conditions of employment:
- Irregular hours may be necessary for some experiments.

Salary & Benefits: Salary will be according to the NIH stipend levels. The University of Colorado offers a full benefits package. Information on University benefits programs, including eligibility, is located at cu.edu/employee.

APPLICATION:
- Applicants must apply through **cu.edu/cu-careers** Job posting number: 22915
- Required application materials:
  1) Cover letter
  2) Resume/Vitae

Special Notices to Applicants:
The University of Colorado at Denver is committed to providing a safe and productive learning and living community. To achieve that goal, we conduct background investigations for all final applicants being considered for employment. Background investigations include a criminal history record check, and when appropriate, a financial and/or motor vehicle history.

The Immigration Reform and Control Act requires that verification of employment eligibility be documented for all new employees by the end of the third day of work. The University of Colorado strongly supports the principle of diversity. We encourage applications from women, ethnic minorities, persons with disabilities and all veterans. Alternative formats of this ad are available upon request for persons with disabilities.

Please be advised that the University does check references as part of the employment process, and selection committee members may choose to contact work references during the search process other than those listed in your application.

The University of Colorado is committed to diversity and equality in education and employment.