Washington University in St. Louis

SCHOOL OF MEDICINE

Job Description:

The Malone laboratory is a Human Kidney Transplant Immunology and Nephrology research Group headed by Dr. Andrew Malone and is located at Washington University in St. Louis, within the Department of Medicine, Division of Nephrology. Our focus is to gain an understanding of the immune cells driving the alloimmune response in the rejecting kidney transplant and how these cells interact with other immune cells and kidney cells. Our overarching goal is to gain scientific knowledge of the immune cell microenvironment in the rejecting kidney transplant and other kidney transplant diseases. We use cutting edge computational and wet lab experimental approaches such as single cell multiomics, high throughput sequencing methods, and multiparameter flow cytometry to determine immune responses. In parallel with our human studies we use a mouse model of kidney transplant rejection to further understand immune responses and efficacy of potential therapies.

Our research focus can be subdivided into four broad areas — 1) Single cell multiomics experiments using human kidney transplant biopsy tissues with rejection, normal tissue and other pathologies, 2) T and B cell repertoire analysis in tissue and blood from kidney transplant patients, 3) highly multiplexed imaging analysis on human kidney transplant biopsies, and 4) mouse models of kidney transplant rejection. We do all our own computational and bioinformatics analyses in house. We welcome a diverse group of individuals/candidates who are experienced, highly motivated and autonomous post-doctoral research scientists. The candidate will develop and carry out his/her own research projects aiming at deciphering mechanisms of immune responses in the human kidney transplant under the guidance of Dr. Malone. This position will allow the post-doc to develop their computational and coding skills in parallel with wet lab experiments. Successful candidates will develop new approaches and tools and participate and add their expertise to other projects ongoing in the group. Most importantly, candidates are highly encouraged to explore their own ideas, write grants, and present their work at conferences.

<u>Qualifications:</u> We have a well-funded postdoc position available, immediately. The candidate should have an interest in wet lab research and be able to work independently and interactively in a team setting, be responsible, organized and have enthusiasm for research. PhD (or equivalent) in immunology, genetics, and/or molecular/cell biology is required. A strong expertise in immunobiology and pathogenesis of immunological disorders is preferable. Experience in bioinformatics would be a plus but not required.

<u>Please contact</u> Dr. Malone (amalone@wustl.edu) directly with CV and cover letter with research interests.

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