

A **Post-doctoral Research Scholar position is now open in the Puram Lab** (PI: Sidharth Puram, MD PhD) at the Washington University School of Medicine in St. Louis, Missouri (oto.wustl.edu/puramlab), integrated into the Departments of Genetics and Otolaryngology-Head and Neck Surgery. Our research is dedicated to describing and investigating the mechanisms underlying tumor heterogeneity in head and neck cancers (squamous cell carcinoma, salivary gland cancers, and other tumors). We have advanced the application of single cell sequencing technologies to rigorously pursue this research, with our work providing the first detailed atlas of an epithelial tumor through studies of head and neck cancer patients (Puram et al., *Cell*, 2017).

We are seeking a highly motivated, hard working, rigorous, and curious post-doctoral fellow who aspires to join a multidisciplinary research team focused on fundamental challenges in tumor biology including dysregulated signaling, metastasis, treatment resistance, and recurrence. The post-doctoral position calls for an individual who is seeking to advance their skill set and depth of knowledge, along with finely honing their existing research skills. This person will perform and oversee 2-3 major research projects over a 3-5 year period, collaborating on other projects as necessary. Ideal candidates will be enthusiastically seeking a position that fosters their own scientific growth and development as well as ability to contribute to both fundamental and translational science.

Potential projects include: (1) Defining expression and epigenetic heterogeneity in head and neck cancers in contexts such as metastasis, recurrence, or treatment failure, (2) dissecting the pathways and mechanisms that may underlie changes in cell states such as partial epithelial-to-mesenchymal transition, (3) establishing novel model of human tumors (e.g. PDX) and using these to advance mechanistic studies as well as directly comparing them to patient samples. Tissue culture, genome editing, invasion/proliferation assays, and biochemistry approaches (western blot, co-IP, etc) are heavily relied upon techniques.



Applicants should have a PhD and demonstrate relevant research experience, with a strong track record of prior success and prior first-author (or co-first) publications. Excellent collaborative skills and communication are required. Skills in molecular biology, tumor sample processing, functional assays, and genomics are highly relevant (experience in bioinformatics is valued as well).

The Washington University School of Medicine is a top 10 medical school, offering a highly interactive and stimulating environment for scientists in training. Post-doctoral candidates will benefit from the extremely collaborative environments of the Departments of Genetics and Otolaryngology-Head and Neck Surgery as well as the vibrant scientific community within the Couch Biomedical Research Building. In addition to high-quality research facilities, career and professional development training for postdoctoral researchers is provided through the Career Center, Teaching Center, Office of Postdoctoral Affairs, and campus groups. Additional information on being a postdoc at Washington University in St. Louis can be found at postdoc.wustl.edu/prospective-postdocs. Washington University Medical School is located in the Central West End, a chic and trendy neighborhood adjacent to major restaurants and the largest park in the US (Forrest Park). We offer a competitive salary and benefits consistent with NIH guidelines.

If interested, please submit a CV, cover letter describing your research interests, and contact information for three references who can comment on your experience and abilities to sidpuram@wustl.edu. Applications will be reviewed until the position is filled. Washington University is an equal opportunity employer with applicable EEO and affirmative action regulations.

PRIMARY DUTIES AND RESPONSIBILITIES:

1. Manages their own project, which should lead to a first author publication.
2. Develops expertise in single cell genomics/transcriptomics, molecular biology experience, and advanced functional assays/imaging.
3. Expands proficiency in career skills, including writing, public speaking, networking, and critical evaluation of scientific literature. Presents scientific work both inside and outside the University with excellent oral communication skills.
4. Prepares and submits papers on research with excellent writing skills.
5. Assists with grant review, preparation, and reporting.
6. Independently designs and conducts experiments with the ability to analyze results critically and troubleshoot challenges, including the conscientious and ethical discharge of these responsibilities.
7. Read and review primary literature, with critical analysis and integration of prior and new findings into daily experimental design and project goals
8. Supervise and mentor laboratory staff and graduate students as assigned, assuring appropriate study procedures, review of staff work, and teaching scientific skills.
9. Provide input and suggestions to the laboratory supervisor to develop procedure manuals and operational/technical guidelines for lab studies.
10. Maintain compliance with good laboratory practice including the maintenance of adequate research records.
11. Engage in open and timely discussion with his/her mentor regarding possession or distribution of material, reagents, or records belonging to their laboratory and any proposed disclosure of findings or techniques privately or in publications.
12. Collegial conduct towards co-trainees, staff members and members of the research group.
13. Adherence to all applicable University policies, procedures and regulations. All data, research records and materials and other intellectual property generated in University laboratories remain the property of the University.