

**Job Title:** Postdoctoral Research Associate

**Job Description for posting:**

**POSITION SUMMARY:**

The Disease Imaging and Therapy lab is a preclinical multimodal imaging laboratory that aims at modulating the availability of surface targets by elucidating their regulatory mechanisms to enhance antibody- and non-antibody-based tumor therapies. The research program has four major goals:

1. Use biomolecules as tumor-targeting agents to deliver imaging or cytotoxic cargo.
2. Use multimodal imaging to monitor the binding of molecular-targeted compounds to tumors before and during therapy.
3. Use genetic and temporal pharmacologic approaches to modulate tumor biology in ways that enhance tumor binding of antibody- and non-antibody-based cancer therapies.
4. Improve cancer diagnosis and treatment by combining basic tumor biology with preclinical knowledge and clinical needs.

We seek a highly motivated and productive Postdoctoral Research Associate with a Ph.D. in Chemistry, Biochemistry, or a related field to help achieve the four primary goals of our research program. Expertise in tumor biology or oncology is highly desirable. The applicant will work under the supervision of Dr. Patrícia Ribeiro Pereira, Ph.D.

**PRINCIPAL DUTIES & RESPONSIBILITIES:**

**Essential Functions:**

1. Works with cell lines, fresh cultures of tumors, and patient-derived xenografts
2. Develops radiolabeled biomolecules and cell labeling technologies, dosimetry, and pharmacodynamics/pharmacokinetics studies
3. Correlates molecular imaging findings with the respective tumor's genetic profile
4. Modulates tumor biology by using genetically modified mouse models and pharmacologic approaches
5. Uses multimodal imaging to visualize cancer-immune cell interaction
6. Converts novel scientific ideas to hypothesis-driven scientific experiments
7. Designs and conducts experimental methods while critically interpreting experimental results
8. Presents research findings to a multidisciplinary audience

**Minimum Qualifications:**

The appointee has earned a Ph.D. in Chemistry, Biochemistry, or a related field, M.D., D.Sc., or equivalent terminal or doctoral degree.

**Preferred Qualifications:**

Candidates with a background in pharmacology, biochemistry, immuno-oncology but limited to no experience in radiochemistry/molecular imaging are encouraged to apply. We are looking for an enthusiastic and motivated individual with good verbal and written communication skills and a strong interest in our research program and laboratory environment. The applicant should be fearless to learn new techniques, design research projects independently, and be willing to prepare grants and manuscripts.

**Special Instructions to Applicants:**

Interested applicants should send a CV with contact information of references and cover letter (describing relevant expertise and scientific interests) to Dr. Patrícia Ribeiro Pereira, Ph.D., at [ribeiroperairap@wustl.edu](mailto:ribeiroperairap@wustl.edu).