

Postdoctoral Position in the Division of Nephrology, Washington University School of Medicine

An opportunity is immediately available for a Postdoctoral Research Associate at the Washington University Division of Nephrology. Our research is focused on homeostasis of organelles, including ER, mitochondria and lysosome (autophagy) in the kidney disease. The overall goals of our research are to delineate the molecular mechanisms underlying stress response-mediated kidney diseases, including nephrotic syndrome (NS), Alport syndrome, autosomal dominant tubulointerstitial kidney disease (ADTKD), acute ischemic kidney injury, and other acquired forms of ER disease, to develop ER stress biomarkers in human patients, and to identify novel drugs to restore the homeostasis of these organelles. (*Proc Natl Acad Sci* 2019; *JCI Insight* 2017; *J Am Soc Nephrol* 2016, *JCI* and *PNAS* 2021 under revision, with two issued patents related to the discovery of ER stress biomarkers and novel ER modulators).

The posted position will focus on mechanistic investigation of the therapeutic role of our newly patented biotherapeutic protein in the treatment of nephrotic syndrome and ER calcium dysregulation. We are using cutting-edge research approaches, including stably transfected or knock-down cells, molecular and cell biology, biochemistry, inducible transgenic, conditional knock-out and CRISPR generated knock-in mouse models, human iPSCs derived from patients, and state-of-the-art *in vitro* & *in vivo* imaging techniques. We are also collaborating with NIH labs for high throughput drug screening. In addition, we have access to multiple human kidney disease consortiums to acquire their genomic data, gene expression, histology from kidney biopsies, and urine samples. The PI is well funded by multiple grants from NIH, Department of Defense etc. and industry. The lab environment is highly supportive and the position will be stable for at least 3 years.

Required Qualifications:

A PhD or MD/PhD degree in biochemistry, molecular biology, molecular genetics or other related fields is required. A strong background in molecular biology or biochemistry is required. Previous working experience in ER, mitochondria or autophagy, or calcium signaling, or in podocyte biology or mouse genetic models of kidney disease is highly desired, but not required.

Department Summary:

The Washington University Division of Nephrology (<https://renal.wustl.edu>) is a top research-focused academic division. The research environment is outstanding.

Salary Range:

Commensurate with experience. Provide competitive salary with excellent fringe benefits. The living cost in St. Louis is very affordable.

Applicant Special Instructions:

If you are a highly career-oriented researcher and motivated to work hard, please email a CV, a cover letter and the names of three referees to:

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