Postdoctoral Position

THE UNIVERSITY OF ALABAMA AT BIRMINGHAM

The Zhang Lab is looking for a postdoctoral scholar. We are a very collegial and diverse group working on an exciting new research area integrating autophagy, metabolism and redox signaling in the context of cardiovascular and Alzheimer's diseases in the Department of Pathology and the Center for Free Radical Biology at the University of Alabama at Birmingham. We have a strong track record in developing Post-Docs in their independent careers.

Responsibilities:
Taking the initiative in finding solutions to scientific problems in day to day research
Collegially and professionally engage in collaborations with peers
Investigating autophagy, metabolism and redox signaling in cultures of neurons, astrocytes and microglia, and mouse models
Present original research at scientific meetings and publish research results with high rigor and reproducibility in peer reviewed high impact scientific journals.

Minimum qualifications:
PhD in Biochemistry, Cell Biology, Neuroscience or related field.
Demonstrated creativity, independent, high motivation, and good communication skills
Strong work ethic and the ability to work both independently and in a team.

Preferences:
Experience in working with translational models
Experience in cell culture
Experience in microscopy and immunohistochemistry
Experience in basic molecular biology techniques
Experience in writing and publishing research articles

Those interested in the position should email a cover letter with a summary of research experience, interest and objectives, a current CV and contact information for 3 references to Dr. Jianhua Zhang (zhanja@uab.edu).
Application review will begin immediately and will continue until a suitable candidate is selected.

Example of a prior postdoc publications:

1. **Wani W,** Boyer-Guittaut M, Dodson M, Chatham J, Darley-Usmar V, Zhang J (2015) Regulation of autophagy by protein post-translational modification. Laboratory Investigation 95:14-25. PMCID:PMC4454381
2. **Wani W,** Chatham J, Darley-Usmar V, McMahon L, Zhang J (2017) O-GlcNAcylation and neurodegeneration. Brain Res Bulletin 133:80-87 PMCID:PMC5292095
3. Redmann M, Benavides GA, Berryhill TF, **Wani WY,** Ouyang X, Johnson MS, Ravi S, Barnes S, Darley-Usmar VM, Zhang J (2017) Inhibition of autophagy with bafilomycin and chloroquine decreases mitochondrial quality and bioenergetic function in primary neurons. Redox Biology 11:73-81 PMCID:PMC5124357
4. Redmann M, **Wani W,** Volpicelli-Daley L, Darley-Usmar V, Zhang J (2017) Trehalose does not improve neuronal survival on exposure to alpha-synuclein pre-formed fibrils. Redox Biology 11:429-437 PMCID:PMC5220183
5. Cheng S, **Wani WY,** Hottman DA, Jeong A, Cao D, LeBlanc KJ, Saftig P, Zhang J*, Li L* (2017) Haplodeficiency of Cathepsin D does not affect cerebral amyloidosis and autophagy in APP/PS1 transgenic mice. J Neurochem 142(2):297-304 *Co-corresponding author PMCID:PMC5499660
6. **Wani WY,** Ouyang X, Benavides GA, Redmann M, Cofield JS, Shacka JJ, Darley-Usmar V, Chatham JC, Zhang J (2017) O-GlcNAc regulation of autophagy and α-synuclein homeostasis; implications for Parkinson's disease. Molecular Brain 10:32 PMCID:PMC5517830
7. Dodson M, Benavides G, Johnson M, Redmann M, **Wani WY,** Ouyang X, Cofield SS, Mitra K, Darley-Usmar V, Zhang J (2017) Regulation of autophagy, mitochondrial dynamics and cellular bioenergetics by 4-hydroxynonenal in primary neurons. Autophagy 13(11):1828-1840 PMCID:PMC5788494
8. Redmann M, Benavides BA, **Wani WY,** Berryhill TF, Ouyang X, Johnson MS, Ravi R, Mitra K, Barnes S, Darley-Usmar VM, Zhang J (2018) Methods for assessing mitochondrial quality control mechanisms and cellular consequences in cell culture. Redox Biology 17, 59-69 PMCID:PMC6006680
   Wright JN, Benavides GA, Johnson MS, **Wani W,** Ouyang X, Zou L, Collins H, Zhang J, Darley-Usmar V, Chatham JC (2019) Acute increases in *O*-GlcNAc indirectly impair mitochondrial bioenergetics through dysregulation of LonP1-mediated mitochondrial protein complex turnover. American Journal of Physiology-Cell Physiology 316: C862-C875. PMCID:PMC6620580
9. Ouyang X, Ahmad I, Johnson M, Redmann M, Craver J, **Wani WY,** Gloria A Benavides, Chacko B, Li P, Young M, Jegga A, Darley-Usmar V, Zhang J (2020) A novel function of nuclear receptor binding factor 2 (NRBF2) in learning and memory. Lab Inv