I am seeking motivated, enthusiastic postdoctoral fellows to study mechanisms of nutrient sensing and signaling. I have funding for these positions for at least one year, with the expectation of continued support. This is an excellent opportunity to establish an independent project on a novel problem.

We are studying a novel glucose signal transduction pathway that begins with glucose sensors in the membrane and ends at a transcription factor in the nucleus. We can trace the glucose signal from the cell surface all the way to the nucleus, and I believe recent breakthroughs have left us poised to come to a true understanding of how this novel signal transduction pathway works.

A complete list of our publications and my CV can be found at:
<http://www.ucdenver.edu/academics/colleges/medicalschool/departments/biochemistry/Faculty/PrimaryFaculty/Pages/Johnston.aspx>

The lab is in new state-of-the-art space in the highly collegial Department of Biochemistry and Molecular Genetics at the University of Colorado School of Medicine in Denver. I can report that Denver is a great place to live, and that CU Medical School and our Department is a great place to do science! Check it out at:
<http://www.ucdenver.edu/academics/colleges/medicalschool/departments/biochemistry/Postdocs/Documents/PostdocTalkingPoints.pdf>

Motivated, curious and independent individuals interested in joining me in Denver should send (preferably by e-mail) a letter of inquiry stating research interests along with a CV.
Postdoctoral positions

**Nutrient Sensing and Signaling**

Mark Johnston Laboratory
Department of Biochemistry and Molecular Genetics
University of Colorado School of Medicine, Denver, CO

**Glucose sensing and signaling**

Glucose fuels life, and organisms have evolved sophisticated mechanisms for sensing and responding to this key nutrient. This is especially apparent in the yeast *S. cerevisiae*, which has several ways of sensing the widely varying amounts of glucose it encounters during its lifetime. We are studying a novel glucose signal transduction pathway that begins with glucose sensors in the membrane and ends at a transcription factor in the nucleus. We can trace the glucose signal from the cell surface all the way to the nucleus, and we are poised to come to a true understanding of how this novel signal transduction pathway works. Our studies extend to the pathogenic yeast *C. albicans* because it offers an informative evolutionary comparison, and because this central signaling pathway may provide therapeutic targets.

Simpson-Lavy KJ, **JOHNSTON M**. SUMOylation regulates the SNF1 protein kinase. *Proc Natl Acad Sci U S A.* 2013 110:17432-7. PMID: 24108357; PMCID: PMC3808588

Kuttykrishnan S, Sabinaa J, Langton LL, **JOHNSTON M**, Brent MR. Quantitative model of glucose signaling in yeast reveals an incoherent feed forward loop leading to a specific, transient pulse of transcription. *Proc Natl Acad Sci USA*, 2010; 107:16743-8. PMID: 20810924


A complete list of publications from the lab can be viewed at:
<http://www.ucdenver.edu/academics/colleges/medicalschool/departments/biochemistry/Faculty/PrimaryFaculty/Pages/Johnston.aspx>

The University of Colorado is committed to diversity and equality in education and employment.