Postdoctoral position investigating the role of endoplasmic reticulum stress in regulation of Arabidopsis immune responses.

A postdoctoral position is available in the Karolina Mukhtar’s lab in the Department of Biology at the University of Alabama at Birmingham, AL, USA
http://www.uab.edu/cas/biology/kmukhtar

Inositol-Requring Enzyme 1 (IRE1) is a highly conserved eukaryotic ER stress sensor. While chronic ER stress is linked with metazoan immune disorders, the role of IRE1 in plant immunity remains elusive. Our laboratory established the first known connection between the IRE1 and its client mRNA for the bZIP60 transcription factor in Arabidopsis immune signaling (Moreno et al. 2012). The successful candidate will be involved in a project addressing the molecular mechanisms of biotic stress-dependent IRE1a activation kinetics under oscillating ER stress conditions using genetic and biochemical approaches, and systematic dissection of the IRE1 protein domains in signal perception and transduction. Further duties include assisting in the supervision of graduate and undergraduate students, development of appropriate experiments, collection and analysis of data, interpretation of results, formulation of conclusions, and documentation in a final written form.

The successful candidate will be very well organized, dedicated, have excellent written, oral, and interpersonal communications skills and the ability to work both independently and collaboratively with co-workers. Excellent benefits package is available.

**Required qualifications:**

- A Ph.D. in biology, genetics, molecular biology, plant pathology or the equivalent,

- a track record of research productivity that **includes first-author publication(s)** in peer-reviewed journals,

- previous experience with Arabidopsis molecular biology and protein biochemistry techniques.

**Desired qualifications:**

- Experience in Arabidopsis-microbes interactions

- confocal microscopy

- Gateway cloning and generation of transgenics

- RNA-seq analyses
APPLICATION: Applicants should submit a letter of application addressing all of the above required and preferred qualifications, current curriculum vitae including a list of publications, and the names and e-mail addresses of three references as one pdf file to:

Dr. Karolina Mukhtar  
Department of Biology, University of Alabama at Birmingham,  
1720 2nd Avenue S, CH 371  
Birmingham, AL 35294-1170 USA

electronically by email to: kmukhtar (at) uab.edu.

The University of Alabama at Birmingham is a major research university in the South-East that is particularly renowned for its programs in biomedical and natural sciences. The urban campus houses over 2,000 faculty and 16,000 staff with a student population exceeding 18,000.

UAB is classified as one of 115 U.S. Highest Research Activity (R1) Universities by the Carnegie Foundation and is well known for its excellent training and support of postdoctoral scholars, ranking at #1 nationwide as the “Best Place to Work as a Postdoc” among academic institutions (The Scientist, April 2013). Birmingham is the largest city in the state of Alabama, with metro population exceeding 1 million, and is home to high-quality medical facilities, many fine restaurants, a historic theater, a symphony orchestra, an opera, a ballet, and nationally known events such as the Sidewalk Moving Picture Festival. The Birmingham metropolitan area has consistently been rated as one of America's best places to work and earn a living based on the area's competitive salary rates and relatively low living expenses.

UAB is an Equal Opportunity/Affirmative Action Employer committed to fostering a diverse, equitable and family-friendly environment in which all faculty and staff can excel and achieve work/life balance irrespective of ethnicity, gender, faith, gender identity and expression as well as sexual orientation.