

Postdoctoral Fellow in Comprehensive Diabetes Center

A post-doctoral position is immediately available in the laboratories of Drs. Hubert Tse (Department of Microbiology) and Chad Hunter (Department of Medicine) in the UAB Comprehensive Diabetes Center. This is a joint NIH R01-funded research project with both labs that will examine the role of oxidative stress on autoimmune and beta-cell responses in Type 1 diabetes (T1D). Through the use of novel immunotherapeutics and murine models of T1D, we can determine how reactive oxygen species (ROS) synthesis contributes to innate immune responses and autoreactive T cell effector mechanisms involved in pancreatic beta-cell destruction (Padgett, *et al. NY Annals*, 2013). We seek a motivated, creative, independent, and energetic applicant to contribute to various projects within the labs, including:

1. To determine the role of ROS synthesis on beta-cell development and differentiation.
2. To define the role of ROS synthesis on beta-cell-mediated inflammatory responses.
3. To determine if antioxidant treatment can preserve the function of beta-cells.

The laboratory uses immunological methods, molecular biology, cellular biochemistry, redox biology, murine models of T1D, human clinical samples, microscopy, and flow cytometry to define novel mechanisms of autoimmune dysregulation and beta-cell responses in T1D. The applicant will be mentored in a unique and collaborative research environment studying immunological mechanisms of autoimmune diabetes and beta-cell biology and responses. Drs. Tse and Hunter are long-standing collaborators with excellent resources and support provided by the Departments of Microbiology and Medicine, the UAB Comprehensive Diabetes Center, and the NIH-funded Diabetes Research Center.

Candidates must have a recent Ph.D. and/or M.D., or equivalent. Priority will be given to qualified candidates with a strong background in immunology, molecular biology, biochemistry, flow cytometry, and diabetes-related research. Experience with rodent models is also preferred, but not required. Salary will follow NIH guidelines commensurate with training and experience. Competitive applicants will have a proven track record in terms of publications and independent funding. At this time we are not able to sponsor applications for US work authorization.

If interested, please send a letter describing your research experience/interest/future career aspirations, your CV, and contact information for three references electronically to:

Hubert M. Tse, Ph.D. Associate Professor, Department of Microbiology, Comprehensive Diabetes Center, University of Alabama at Birmingham, SHEL 1202, 1825 University Boulevard, Birmingham, AL 35294 htse@uab.edu

AND

Chad S. Hunter, Ph.D. Associate Professor, Department of Medicine, Comprehensive Diabetes Center, University of Alabama at Birmingham, SHEL 1211, 1825 University Boulevard, Birmingham, AL 35294 huntercs@uab.edu

About our Postdoc Office:

UAB is committed to the development and success of outstanding postdoctoral scientists. Here at UAB, nearly 300 postdoctoral fellows are training currently in a variety of disciplines. Competitive postdoc awards are available including internships, grant incentives, funds to enhance education and collaboration outside UAB, and teaching opportunities at local universities. There is also a Postdoc Research Day with monetary awards. The Office of Postdoctoral Education strongly encourages UAB research mentors to follow the National Research Service Award stipend level guidelines, and postdoctoral scholars qualify for health, life, and other insurances. They also have the right to participate in the university's 403(b) program and enjoy vacation, sick leave, maternity/paternity leave, and other benefits.

About the University:

The University of Alabama at Birmingham (UAB) is a research university and academic health center that discovers, teaches, and applies knowledge for the intellectual, cultural, social, and economic benefit of Birmingham, the state, and beyond. UAB is internationally renowned for its intensely collaborative culture that has — for more than five decades —

produced breakthroughs in education, health care, research, and service. UAB was ranked #1 in the United States, and in the top 10 worldwide, in the Times Higher Education World University Rankings, 2018 Young University Rankings.

Spanning more than 100 city blocks, UAB is the state of Alabama's largest single employer with some 25,000 employees and has an annual, state-wide economic impact exceeding \$7.15 billion. U.S. News & World Report's 2020 "America's Best Graduate Schools" ranks 14 UAB graduate programs among the nation's top 25 and 10 UAB specialties were ranked among the nation's top 50 in the magazine's 2018-2019 Best Hospitals report. UAB research grants and awards are at a record high, exceeding \$527 million in FY18, including \$320 million in NIH funding for FY18. UAB ranks 31st among all universities in federal research funding and 15th among public universities. UAB's NIH funding continues to grow among peer institutions in the Southeast and beyond, with the university ranking 20th among all universities in NIH funding and eighth among public universities. The UAB School of Medicine is ranked 21st among medical schools in NIH funding and eighth among public medical schools.

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, race, national origin, age, genetic or family medical history, gender, faith, gender identity, and expression as well as sexual orientation. UAB also encourages applications from individuals with disabilities and veterans.

For more information on Equal Opportunity and Affirmative Action at UAB, visit the [UAB Office of Diversity, Equity and Inclusion](#) or call (205) 934-8762. Or contact the office at 701 20th Street South, AB 336, Birmingham, AL 35294-0103.