



HARVARD SCHOOL OF PUBLIC HEALTH

Department of Immunology and Infectious Diseases, Adjunct Professor



THE BUCK INSTITUTE FOR RESEARCH ON AGING

Adjunct Professor

UNIVERSITY OF CHILE

Institute of Biomedical Sciences, Full Professor

Claudio Hetz, Ph.D.



Universidad de Chile



Santiago, 13 of February 2019

The **Biomedical Neuroscience Institute** (www.bni.cl) and the **Geroscience Center for Brain Health and Metabolism** (www.gerochile.cl) are seeking for highly-qualified and motivated applicants for a full time postdoctoral position at the laboratory of Proteostasis Control and Biomedicine of the University of Chile

Post-Doc Positions: Two positions available funded for a 2 to 3 year period.

Starting date: April 2019 or upon agreement.

Project: The project is part of a larger initiative involving collaboration with different labs in the US, Europe and Chile. This laboratory focuses on understanding the molecular basis of proteostasis control and its relationship to pathological conditions affecting the nervous system. The project aims to the study cellular strategies involved in adaptation to chronic endoplasmic reticulum (ER) stress. The ER has important cellular functions, highlighting its role as sophisticated machinery for protein folding and secretion. ER stress engages an integrated signaling pathway known as the "Unfolded Protein Response" (UPR), which aims to restore homeostasis. Nevertheless, the mechanisms that control the transition from an adaptive state to cell death processes remain unknown and is a central subject of our research. We are currently developing a systematic approach to underscore the effects of targeting the UPR in several brain diseases using preclinical models. He/she investigates signal transduction pathways regulating stress pathways (UPR, autophagy and apoptosis). Furthermore, he/she supports the Chair in teaching and student supervision.

Qualifications: Candidates are expected to hold a PhD in Biology or similar education, preferentially with several years of experience. Furthermore, a strong practical and theoretical background and experience in protein biochemistry, cell biology, molecular biology and/or animal experimentation is of advantage. Good English language skills required.

Complete applications, including CV, publication list and 2 references should be submitted to Dr. Claudio Hetz (chetz@hsph.harvard.edu) or call +56 (2) 29786506. Website: www.hetzlab.cl

Selected publications:

Urrea et al (2018) IRE1 α governs cytoskeleton remodeling and cell migration through a direct interaction with Filamin A. *Nature Cell Biology*. 20: 942-953.

Medinas et al., (2018) Endoplasmic reticulum stress leads to accumulation of wild-type SOD1 aggregates associated with sporadic amyotrophic lateral sclerosis. *Proc Natl. Acad. Asci USA*. 115:8209-8214.

Sepulveda et al (2018) Interactome screening identifies a novel function of the collagen chaperon Hsp47 as an adjustor of the unfolded protein response (UPR) transducer IRE1 α . *Mol Cell*. 69:238-252.

Hetz C. and Papa F. (2018). The unfolded protein response and cell fate control. *Molecular Cell*. 69:169-181.

Hetz C. and Saxena S. (2017). ER stress signaling, regulation and pathological implications. *Nature Rev Neurology*. 13:477-491.

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