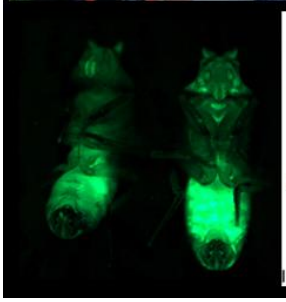
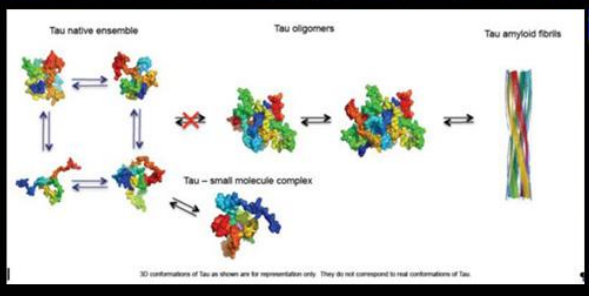
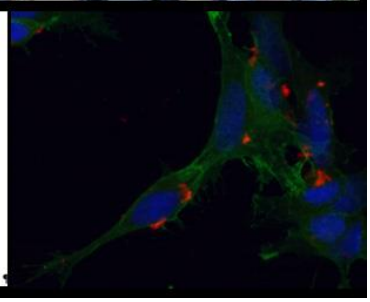
Open Positions for BSc and MSc Students

at the Hungarian Academy of Sciences and Eotvos University

The recently established Neurodegenerative Diseases Drug Discovery Research (NDDDR) group is seeking highly motivated BSc or MSc students who are interested to prepare their diploma or TDK works in a dynamic multidisciplinary research team. Prior experience in computational drug discovery methods, biophysical techniques, in vitro or in vivo molecular and cellular biological experiments, is not necessary, although candidates already with theoretical and/or experimental experience will be considered firstly. Moreover, candidates should have a basic to advanced knowledge of English.

Position(s) are open until filled.
Topics:
1.) Identification and characterization of covalent DJ-1 binding small molecules. Identified compounds could be further developed and utilized as imaging / therapeutic agents for Parkinson's Disease (PD) and cancer. The project involves liquid chromatography-mass spectrometry measurements as a primary screening approach for testing covalent DJ-1 binding of small molecules. Contact: Robert Kiss, PhD (kiss.robert@ttk.mta.hu)

2.) Elucidation of the chaperon function of DJ-1, a protein linked to the onset of Parkinson's Disease (PD) using in vitro biophysical methods. This project aims to elucidate the way DJ-1 may interact and influence the folding of proteins linked to the on-set of Alzheimer's Disease. Contact: Lilla Tóth (lilla.toth.8910@gmail.com)

3.) In vivo investigation of the effects and mechanism of action of small molecule inhibitors on protein aggregation, linked to the onset of Alzheimer's Disease (AD) in Drosophila melanogaster model systems. The candidate will learn the basics of maintaining fruit flies, fluorescent microscopy and many molecular techniques. Contact: Manuela Karpati, PhD (ELTE, manukarpati@gmail.com)

For more information, please contact any of the aforementioned researchers.