

# PhD on Brain Evolution

Freie Universität Berlin, Germany

Group of Katja Nowick

Our group “Human Biology and primate Evolution“ investigates the molecular evolution of humans using state-of-the art experimental and computational methods. Our focus is on differences in gene regulation, evolution of transcription factors and non-coding RNAs and their influence on the evolution of the brain, its development and functions.

The PhD student will participate in a project investigating molecular and environmental factors that determine brain size and cognitive abilities. As model system, this project will use rodents from Chernobyl, whose brain size depends on the level of radiation they are exposed to. RNA-Seq data from different areas of the brain from animals with high, medium and low doses of radiation will be analyzed. The goal is to determine expression differences and differences in co-expression networks that might be linked to brain size, shyness-boldness and exploratory behaviors, while controlling for bodily physiological costs and exercise capacity. The molecular data will be compared with behavioral and physiological data obtained from the same animals to decipher molecular signatures of behavioral performance.

Requirements for the position are a Master in Biology or Bioinformatics or another relevant field. The ideal candidate would have a strong interest in evolution, neuroscience, molecular biology and/or ecology and experience in the analysis of gene expression data.

If interested, please send a motivation letter including your CV and two reference letters to [katja.nowick@fu-berlin.de](mailto:katja.nowick@fu-berlin.de).

