

**Zoological Institute of Christian-Albrechts University Kiel (Germany)**

**offers one PostDoc position for 24 months**

**in the field of Developmental Biology**

We are looking for an enthusiastic and ambitious postdoctoral fellow to spearhead a project funded by the German Science Foundation (DFG) and conducted in the Department of Cell and Developmental Biology at University of Kiel in the group of Alexander Klimovich.

**Your project: Uncovering the role of taxonomically restricted genes in the basal metazoan *Hydra***

Taxonomically restricted genes (TRG), often referred to as “orphan genes”, are highly abundant in animal genomes, yet their functional role remains a major puzzle in developmental biology. It remains unclear, what cellular roles do TRGs play, how do they complement the conserved molecular toolkit of Metazoa, and how do lineage-specific genes contribute to development, gene-environment interactions, and clade-specific adaptations.

The aim of your project will be to uncover the functional diversity of TRGs and to explore the role of TRG-encoded proteins in conferring cell type identity, and particularly – in the individualization of neuronal types. To tackle this problem, we will: i) improve the assembly and annotation of *H. vulgaris* AEP genome; ii) systematically identify and classify the proteins encoded in TRGs within *Hydra* genome; iii) reveal the principles of their expression, and iv) infer their structure and function. This will provide a ground for further hypothesis-driven functional analysis of individual TRGs and their families using transgenesis. This study promises insights into the role of genomic novelty in evolution and diversification of metazoan cell types, particularly, the neurons.

**Your profile:** We are looking for a person holding a PhD or equivalent degree in Biology with a focus on developmental, molecular, or evolutionary biology. Experience in bioinformatics, e.g. genome annotation pipelines and analysis of genome-wide expression profiles, including single-cell RNAseq datasets, is expected. Knowledge and experience in cell and molecular biology, imaging and generation of transgenic animals is an asset. We are looking for someone with creative ideas, enthusiasm for research, solid analytical and conceptual skills.

**Our offer:** We offer a contract (TV-L 13, 100%) starting at the next possible time, limited for 24 months. Besides your salary, the funds for consumables and student helpers are secured.

For more information, you are welcome to visit our website:

<https://www.alexander-klimovich.com/>

For further details and questions, please contact Alexander Klimovich, Zoological Institute, Christian-Albrechts University Kiel, via e-mail:

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