

advanced phase Postdoc "Evolutionary and functional characterization of primate transcription factors ("TFome")"

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The era of genomic sequencing has provided the research community with invaluable resources for studying human evolution. Now it is time to move from a simple cataloguing of sequence differences to a functional evolutionary genomics. In this respect, transcription factors (TFs) represent a very fascinating class of proteins, because they regulate the expression of many genes and are therefore a potential important source for phenotypic differences between species. Unfortunately, at this time the function of many human TFs is not known. Furthermore the origin of many human TFs is only preliminarily investigated due their complicated evolutionary history and genomic organization. To extend these studies, the project's focus is to 1) significantly improve the annotation of TF genes in non-human primate genomes to identify human-specific TFs and 2) functionally investigate selected TFs with human-specific changes in primate cells. The results of this study will greatly enhance our understanding of primate evolution and human-specific traits.

Projektbeteiligte

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