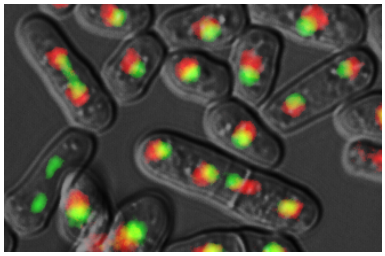
Ph.D. student position

Faculty of Science
CHARLES UNIVERSITY IN PRAGUE

is available in the Laboratory of Gene Expression Regulation, Department of Cell Biology, Charles University in Prague, Faculty of Science:

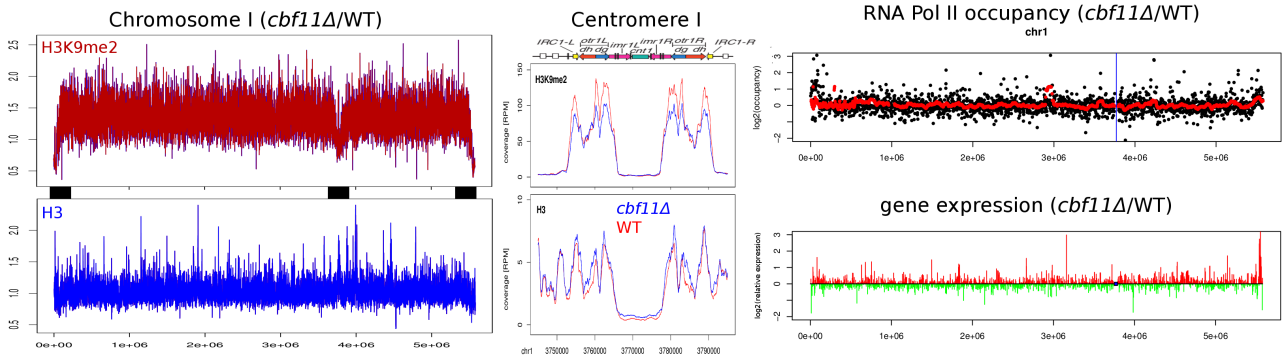
CSL protein as a novel regulator of chromatin structure in fission yeast



Cells need to maintain the structure and organization of chromatin in order to transfer genetic information faithfully to the next generations. To this end, elaborate cellular systems for the formation of specialized chromatin structures, such as heterochromatin, and for the regulation of three-dimensional positioning of chromatin within the nucleus have evolved, which are highly relevant to human disease. Our data suggest that Cbf11, a CSL (CBF1/Su(H)/LAG-1) transcription factor, plays an important role in the regulation of chromatin structure and genome stability in the fission yeast *Schizosaccharomyces pombe*, a favourite model for chromatin studies.

Using a wide range of targeted and genome-wide techniques, you will test for heterochromatin defects in *cbf11* mutant cells and map and characterize the genetic interactions of *cbf11* with the heterochromatin formation machinery in fission yeast. You will determine how local binding of Cbf11 to DNA affects global chromatin architecture and gene expression. You will cooperate with other lab members as well as with our foreign collaborators. The outcomes of the project will provide novel functional insight into chromatin biology and the maintenance of genome integrity, and the role of CSL proteins therein.

We are looking for a highly motivated person with experience in molecular biology and/or cell biology.



For more information contact the project supervisor:
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Deadline for application: April 30, 2014