

## **Chimeric regulatory subunits of PKA**

The regulatory (R) subunit of PKA-related kinase is responsible for the temperature response in *T. brucei* but does not bind the classical second messenger cAMP. The task is a domain shuffling between this protein and the R-subunit of mammalian PKA (cAMP responsive, not activated by cold shock) to identify the critical regions for the respective activation. For domain shuffling, 3<sup>rd</sup> generation "Golden Gate" cloning will be used. Constructs will be tested in an *in vivo* kinase reporter assay upon gene transfer to trypanosomes.

*Methods:* "Golden Gate" cloning, culture and transfection of *T. brucei*, Western blotting, kinase assays.