ANNOUNCEMENT for a MASTER PROJECT
in an interdisciplinary collaboration between Mijakovic Lab and Westerlund Lab

Duration: min 6-12 max months
Start: Fall 2015/ Spring 2016
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Use of nanofluidic channels to study binding of phosphorylated proteins on DNA

The Mijakovic Lab has recently established that phosphorylation of key DNA-binding proteins (such as the DNA recombinase RecA (Bidnenko et al. 2014) and the global gene regulator AbrB (Kobir et al. 2014)), affects their DNA binding properties and their respective physiological roles. The exact mechanism of this regulation is unknown. The Westerlund Lab has developed advanced analytical techniques to study DNA-protein complexes using nanofluidic channels.

In this project the two labs combine their skills, implementing nanofluidics to explain the phosphorylation-based regulation of proteins that regulate genes in living organisms.

References