CMPS Seminar

Birte Höcker from the Max Planck institute for developmental biology will give a seminar describing her work to understand protein fold evolution and how these insights could be used to design new proteins.

When/Where: Thursday 5/3, 15.15 in lecture hall K:E

Titel: On the evolution and design of proteins from subdomain sized fragments

Abstract: Natural proteins are ubiquitous, very diverse and participate in virtually every cellular process. We want to understand how these diverse structures and functions evolved and how we can use similar mechanisms to design new proteins.

We use bioinformatic tools to identify evolutionary links between different protein folds and follow up evolutionary hypotheses by experimental reconstruction. Moreover, we construct hybrid proteins from subdomain sized fragments of these different folds, thereby establishing a new design approach based on fragment recruitment.

Host: Ingemar André