Plan: Elution strategies for 96 well filter plates filled with chromatography media.

The work will be a 30p (20 weeks: January 2012 – June 2012, Master´s Degree project.

Background:
High throughput screening (HTS) of chromatographic parameters is becoming more and more used within the biopharmaceutical industry. Requirements are usually a parallel workflow and miniaturized formats to obtain throughput and yet keep sample consumption low. A commonly used HTS application is screening of best binding capacities at different chromatographic conditions. For selectivity studies there are, however, not yet a common HTS approach.

Purpose:
In this work, two different approaches for high throughput screening of selectivity will be investigated; an elution approach and an adsorption isotherm approach.
Initially, pure proteins with specific properties and mixtures of those will be used. After that, a real sample will be studied using both methodologies. Column verification of microtiter plate experiments will be performed.