

INDO-SWISS MEETING  
October 12-13<sup>th</sup> 2009

Title:

**Towards a regulatory map of the genome of *Mycobacterium tuberculosis***

Claudia Sala,  
Global Health Institute  
Ecole Polytechnique Fédérale de Lausanne  
CH-1015 Lausanne  
Switzerland

Abstract:

Chromatin immunoprecipitation and hybridization to microarrays (ChIP-on-chip) is a powerful tool for investigating the interaction of transcription factors with the genome *in vivo*. We developed protocols for ChIP-on-chip and ChIPSeq analysis in *Mycobacterium tuberculosis* and are studying the distribution of DNA-binding proteins throughout the genome.

My talk will focus on the genome-wide distribution of BlaI, a winged-helix family member that served as proof-of-principle in the development of the ChIP-on-chip technique, and of RNA polymerase in *Mycobacterium tuberculosis* upon different growth conditions.

The potential of ChIP-on-chip and ChIPSeq is nowadays wide and still expanding: these applications may complement or even replace the transcriptomic approach and contribute to the identification of functional promoter sequences and their control by different sigma factors.