Schedule Course: Mechanisms of Biofilm Formation and Prevention (180208-09)

Thursday, 8th of February 2018

9:00 Practicals in four groups:
Set up a biofilm model: Identification of organism
Assessment of colony morphology biofilm: Inocculate microorganism to investigate colony morphology
Strategies to identify extracellular matrix components of biofilms: Discussion and demonstration of strategies to isolate extracellular matrix components
Strategies to assess enzymatic activities of biofilm proteins: Set up of enzymatic reaction

Lectures

11:00-12:00	What is a biofilm?	*Speaker to be announced*
12:00-13:00	Second messenger signaling in biofilms	*Ute Römling, KI*
13:00-14:00	*Lunch break*	
14:00-15:00	Antibiofilm compounds	*Annelie Brauner, KI*
15:00-16:00	Antibiofilm surfaces	*Agneta Richter-Dahlfors, KI*
16:00-17:00	Continuation and presentation of practicals by the four groups	
18:00	*Dinner*	

Friday, 9th of February 2018

9:00-10:00	Continue with practicals in four groups	
10:00-11:00	*In vivo* biofilm models	*Keira Melican, KI*
11:00-12:00	Clinical impact of biofilm formation	*Oana Ciofu, University of Copenhagen*
12:00-13:00	*Lunch break*	
13:00-14:00	Fungal biofilm formation	*Sulman Shafeeq, KI*
14:00-15:00	Cell surface components of biofilms	*Tim Schulte, KI and SciLifeLab*
15:00-17:00	Evaluation and conclusion of experimentation, group presentation	

Course prerequisite:
Bring your own microorganism and establish a biofilm model (can be provided)

Tutors: Petra Lüthje, Sulman Shafeeq, Shady Mansour Kamal, Fengyang Li

Course venue: Course laboratory, Department of Medical Biochemistry and Biophysics, Scheeles väg 2 and MTC seminar room A301, Department of Microbiology, Tumor and Cell Biology, Karolinska Institutet (KI)