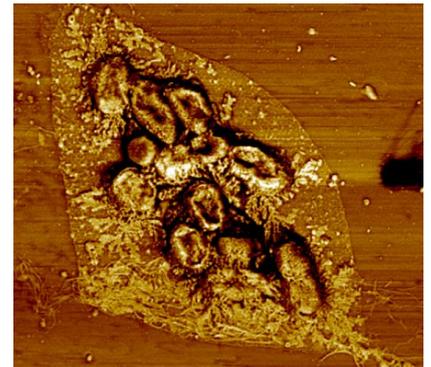


Biofilm: Social microbiology ?

For many years we microbiologists had the misconception that bacteria were loners – they're not!

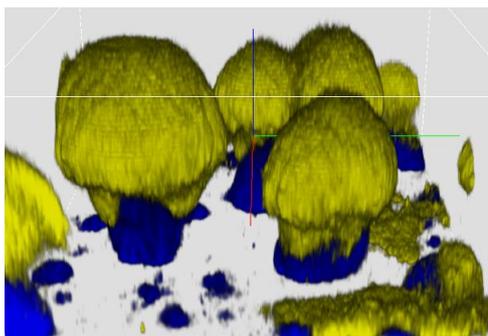


Beginning biofilm formation
(Photo Mingdong Dong)

Monday, 25 May, 2009, 13:00-17:00. Lundbeck-Auditoriet, Biocentret, Ole Maaløes Vej 5, 2200 Copenhagen N

Keynote Speaker:

J. William Costerton, Director for Biofilm Research, Center for Genomic Sciences, Allegheny-Singer Research Institute, USA. *The biofilm paradigm makes all the difference: Culture-negative infections.*



Biofilm in the lungs in cystic fibrosis (Photo M. Givskov)

Speakers:

Michael Kühl, Prof., Univ. of Copenhagen, *Microbial mats – the ultimate biofilm ecosystem*

Rikke Louise Meyer, Assoc. prof., Univ. of Aarhus, *Nanotechnology approaches for combating biofilms*

Michael Givskov, Prof., Univ. of Copenhagen. *Immune system beats biofilm: How a chemical gives the immune system the upper hand*

Following the talks the Danish Microbiological Society will host a small reception with snacks and drinks for all participants. The seminar is free of charge, but for practical reasons, you must register ahead of time: Send a mail to Bo Jensen at boje@bio.ku.dk, and as the subject, write "DMS biofilm" and give the number of participants you are registering for.

Abstract: We microbiologists were trained to believe in a bacterium as a free-living organism. We've spent many years and much research money trying to culture them in pure culture. However, William Costerton showed us several years ago that holes in our teeth are the result of a "film of organisms" that represent a multi-species cooperation. Now, we know that this complex interaction partly arises from molecular quorum sensing, as exemplified in the serious human disease cystic fibrosis. Also microorganisms in the natural environment exploit biofilm as a means of overcoming extreme physical and chemical limitations, e.g., in hot springs, in marine snow, and in microbial mats. In the near future, the newest developments in nano-technology will be exploited in a concerted way to prevent biofilm formation in our technological surroundings. At the end of this afternoon, we may discover that biofilm is an important factor in even more microbiological niches.