Infectious diseases are a global threat that costs many lives and have a significant impact on society. The key to effectively fighting infectious diseases is gaining a detailed understanding of the underlying molecular mechanisms of various pathogens. Scientists at CSSB study the structure and function of pathogens and their interactions with the human body. CSSB's fundamental research seeks to enable the identification of targets for interventions.

At CSSB, three universities and six research institutes work together to gain fundamental insights into infection biology. To conduct their research, CSSB scientists use the first-class research infrastructure on the DESY campus in combination with in-house core facilities. The CSSB is a cooperation without legal personality. All partners act exclusively in their own name and on their own responsibility.

www.cssb-hamburg.de

The Academy of Sciences and Humanities in Hamburg brings together leading scientists and scholars from Northern Germany. It takes up socially relevant issues and debates, participating in their further development. In this way, it contributes to the national and international visibility of science and scholarship in Northern Germany. The Academy is organized into interdisciplinary working groups and supervises long-term scientific projects. Through joint projects and cooperations, it fosters collaboration between different disciplines at universities and other scientific institutions.

The Academy of Sciences and Humanities in Hamburg is a public body based in Hamburg. The president of the Academy is Prof. Dr. Mojib Latif. The Academy's basic facilities are financed by the Free and Hanseatic City of Hamburg.

www.awhamburg.de

CSSB
Centre for Structural Systems Biology

AKADEMIE DER WISSENSCHAFTEN IN HAMBURG

BIOFILMS:
The Sticky Science of Microbial Cities

Bacterial Communities in Health and Environment

Image credit: Jin Hwan Park, Ph.D., Fitnat Yildiz Laboratory, Microbiology and Environmental Toxicology Department, University of California Santa Cruz

BIOFILMS: THE STICKY SCIENCE OF MICROBIAL CITIES

Bacterial Communities in Health and Environment

Bacteria have a strong cooperative spirit and quickly form communities, known as biofilms. Biofilms can be found on ocean pipes, plant roots, people's teeth, hotel handrails – no surface is safe from their ingenuity.

With their sophisticated communication, bacteria "talk" to each other and even make plans. Biofilms are architecturally impressive microbial cities which our health and that of the environment often depend upon. In fact, humans are fundamentally reliant on biofilms acting on and within us. However, if the sensitive interplay gets out of balance, undesirable consequences such as antibiotic resistance can occur.

How do biofilms form? What does it know about their significance for health and the environment? How does science study their diversity? Are there „good" and „bad" biofilms? What could we learn from them? Could biofilms even help us on the way to creating a sustainable society?

Please register to attend this event:
www.cssb-hamburg.de/biofilms

PANEL DISCUSSION

WEDNESDAY, OCTOBER 4, 2023
19 – 21 UHR

Baseler Hof, Gartensaal
Esplanade 15, 20354 Hamburg

WELCOME ADDRESS

Prof. Dr. Mojib Latif
President of the Academy of Sciences and Humanities in Hamburg

PANEL

Prof. Dr. Meytal Landau
Centre for Structural Systems Biology (CSSB)
Deutsches Elektronen-Synchrotron (DESY)
University Medical Center Hamburg-Eppendorf (UKE)

Prof. Dr. med. Holger Rohde
University Medical Center Hamburg-Eppendorf (UKE)

Prof. Dr. Holger Sondermann
Centre for Structural Systems Biology (CSSB)
Deutsches Elektronen-Synchrotron (DESY)
Kiel University (CAU)

Prof. Dr. Fitnat Yildiz
University of California, Santa Cruz (UCSC)

MODERATION

Angela Grosse
Science Journalist

The panel discussion will take place in English.

After the one-and-a-half-hour discussion, there will be an opportunity for conversation and exchange with panel members.