



Life Sciences Seminar

Dissecting the lifecycle of bacteria - from environmental to patient samples

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Bacteria rarely occur as isolated organisms, making interactions with surrounding cells crucial for their survival. These bacterial cell-cell interactions are highly diverse as they serve various purposes, ranging from mutualistic and symbiotic to opportunistic and pathogenic. Key players in mediating these interactions are often macromolecular multi-protein complexes. However, getting a complete picture of cell-cell interactions is inherently difficult as they happen on several scales of resolution. Using an integrative imaging approach from light microscopy to cryo-electron tomography of cryo-focused ion beam thinned samples and single-particle cryoEM, we aim to dissect the various strategies of bacteria to shape their environment. By combining our imaging with complementing techniques, we demonstrate how bacteria are able to communicate with their sister cells, predate on other bacteria to protect their niche or infect eukaryotic cells to hide from host defenses.

Thursday, June 15, 2023 02:00pm - 03:00pm

Central Building Mondi 2



This invitation is valid as a ticket for the ISTA Shuttle from and to Heiligenstadt Station.

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<https://ista.ac.at/en/campus/how-to-get-here/> The ISTA Shuttle bus is marked ISTA Shuttle (#142) and has the Institute Logo printed on the side.