

ANNUAL HIGHLIGHTS

2021 was a productive year for CeMiSt with **novel findings and publications**. CeMiSt discovered a new way of transfer of genes encoding antimicrobials, namely via prophages, demonstrated that antibiotics may profoundly affect the physiology of the producing microorganism, and also discovered that the biotransformation of microbial antibiotics by neighbouring microorganisms is part of a secondary metabolite network in microbial communities. CeMiSt developed the first ever selection marker-free CRISPR Cas9 system for gene editing in *Penicillium* and installed and implemented mass spectrometry imaging as an amazing tool for studying microbial secondary metabolites *in situ*.

The **peer-reviewed publication** list in 2021 includes 27 WoS journal articles, and Professor Tilmann Weber, DTU BioSustain, was included again in the Clarivate Highly Cited Researcher 2021 list.

CeMiSt hosted several in-person events, including a **CeMiSt lecture**, *Taking a Microscale Look at Host-Microbe Interactions: Visualizing Cells and Chemicals in One Picture* by Otto Mønsted Guest professor Manuel Liebeke from the Max Planck Institute for Marine Microbiology Germany, and also Professor Ingrid Bakke from the University of Trondheim, who visited the Center during a 4 month sabbatical.

CeMiSt members gave **invited talks** at a number of conferences, mostly held online and also engaged in **popular science outreach**, including a presentation at the public lecture series of the Royal Danish Academy of Science and Letters, and a podcast broadcasted by Science Stories. The 2nd CeMiSt **PhD thesis**, by Morten Lindqvist Hansen, was handed in December 2021 and the defense was held successfully February 2022.

CeMiSt held the **yearly 2-day-retreat** where all PhD students and postdocs presented their work and the Center participants discussed major findings and future ideas.



Several CeMiSt members **obtained new grants** including funding from Independent Research Fund Denmark, Innovation Fund Denmark, Novo Nordisk Foundation, and Villum Fonden. CeMiSt obtained its third Otto Mønsted Guest professorship allowing Professor Paul Jensen from UCSD a 3 months visit in 2022.

