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Type: **Talk**

SHERLOCK and the Oder River disaster - using synthetic biology to detect algal blooms

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Prymnesium parvum, the so-called “golden algae”, is an algal species responsible for the 2022 disaster in the Oder River. Despite the serious threat that it poses, the methods of its detection are still time-consuming, tedious and ineffective. As a member of a team set to participate in the 2024 iGEM competition, I will present the results of our work, leading to the development of a more accurate technique. Centred around an innovative synthetic biology tool - the SHERLOCK (specific high-sensitivity enzymatic reporter unlocking) system - our test will make preventative monitoring of regions susceptible to algal blooms easier and more efficient.

Field

Biosciences

Length

Short 15 min

Authors: URBANELIS, Katarzyna (Faculty of Biochemistry, Biophysics and Biotechnology, Jagiellonian University in Kraków, Poland); Ms LUTEREK, Marta (Faculty of Biochemistry, Biophysics and Biotechnology, Jagiellonian University in Kraków, Poland); Ms KUROWSKA, Nina (Faculty of Biochemistry, Biophysics and Biotechnology, Jagiellonian University in Kraków, Poland)

Presenter: URBANELIS, Katarzyna (Faculty of Biochemistry, Biophysics and Biotechnology, Jagiellonian University in Kraków, Poland)