

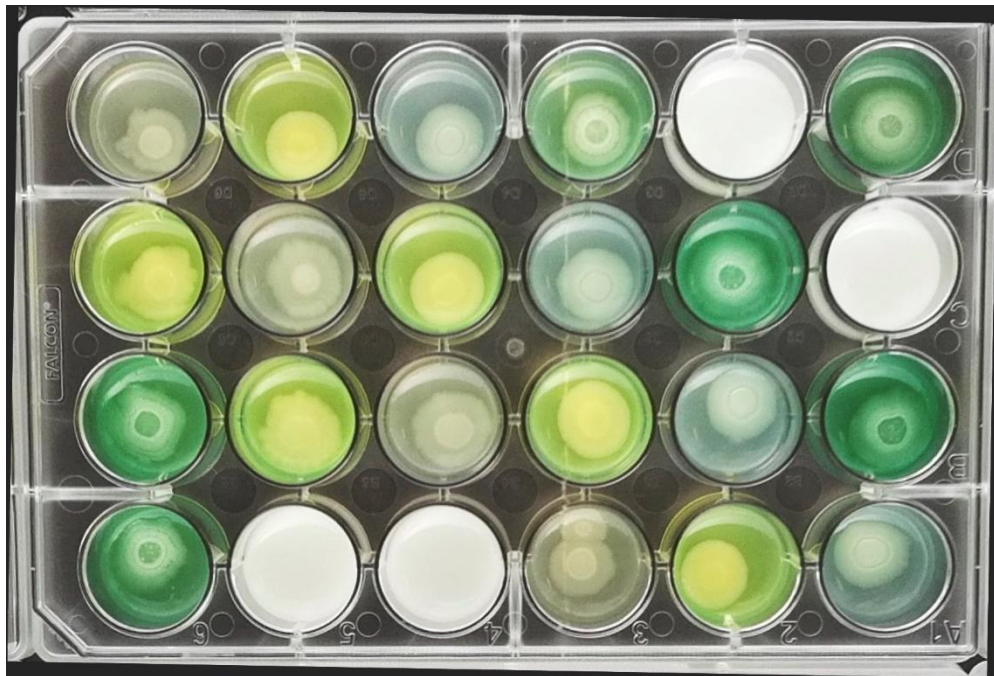
Venerdì 12 Maggio, ore 14:00

Consiglio Nazionale delle Ricerche
Istituto di Ricerca sulle Acque
AULA TONOLLI Largo Tonolli 50, Verbania Pallanza

Evolutionary games, ecological dynamics and probiotic effects induced by siderophores in bacterial communities

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<https://kuemmerli-lab.weebly.com/people.html>



Siderophores are a chemically diverse group of secondary metabolites produced by bacteria to scavenge iron from natural sources and host stocks. Siderophores are secreted and spur two types of interactions between bacteria. They can be shared as cooperative molecules among individuals that possess the matching receptor for uptake. Conversely, siderophores can be deployed as competitive agents to prevent competitors, lacking matching receptors, to access iron. In this talk, Rolf will show how these two interaction types drive evolutionary and ecological dynamics in bacterial communities and how they can be harnessed to develop probiotics to protect hosts from pathogens.