

## DiSCourse Seminar

The Department of Microbiology and the Digital Science Center would like to invite you to the following presentation:

### Luis Miguel Rodríguez-Rojas

How can you live together? Using environmental genomics to understand how microbes form communities

Microbial communities can form in most known surfaces and fluids on Earth, colonizing every corner of the planet known to humans (including ourselves). Remarkably, these communities typically comprise a large diversity of organisms, but we still understand very little about how different species coexist in diverse communities in different environments, a problem known as community assembly. During the past two decades, advances on high-throughput DNA sequencing have unlocked a treasure trove of data, that combined with statistical and computational advances in bioinformatics permit now the exploration of these questions using environmental genomics. Here, I will present a series of results demonstrating different methods in genomics and metagenomics to illuminate the roles of intrinsic species traits, the interactions between them and with the environment, and migrations into the processes of community assembly and coexistence. In particular, I will focus on the effects of disturbances on microbial communities and the effects of specialization, which will be illustrated through the impact on the beach sand microbial communities of the catastrophic April 2010 Deepwater Horizon Oil Spill in the Gulf of Mexico.

**Date and Time:** Friday, 2 July 2021, 12:00 CEST (noon)

**Please note:** This presentation will be given **online** in [Big Blue Button](#). Participants do not need to register.

**Guests are welcome!**