ICFO



ICFO Colloquium: Writing genomes and metagenomes, and the advent of synthetic evolution

MARC GUELL

May 08, 2026
10:00 to 11:00
ICFO Auditorium

PROFILE:

Marc Güell is an ICREA Research Professor, working at Pompeu Fabra University. His wor includes several synthetic biology advances (radically recoded genome, PERVs-free pigs novel gene writing technologies, skin microbiome engineering) that have produce important impact (>24,000 citations, 4 companies developing therapies, patents licensed t leading companies) and he is currently developing new principles for biological engineerin and synthetic evolution (https://synbio.upf.edu). He is an EMBO Young Investigator and member of Academia Joven de Espana. He has been recognized as 'Highly Cited Researcher' (2019); and with the National Research Award to the young talent (2018), the August Pi i Sunyer Award (2021) and the National Research Award Angela Ruiz Robles (2022).

ABSTRACT:

Our research is focussed in developing new principles and technologies to engineer biological systems. AI is revolutionizing biodesign, and its coupling with multiplex DN writing enables a new concept of synthetic evolution which promises to accelerate synthet c biology. First, I will present our vision on how we are leveraging bioprospecting, AI a d evolution to create new biological functions. Then, I will focus on 1) how we developed a gene writer for human cells and its deployment ex vivo (T cells) and in vivo (liver targeting).) how we use Cutibacterium acnes as a chassis to engineer human skin properties.

** If you require an accommodation to participate in this event due to a disability, please contact the Events Team at events@icfo.eu as soon as possible.

Hosted by: Pelayo Garcia de Arquer