IRBLleida
Institut de Recerca Biomèdica

SEMINARI

"Precise engineering of the mammalian genome"

Ponent:

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Data: 12 de febrer de 2020

Horari: 12:00 hores

Lloc: aula 0.22, planta baixa part nova Unitat Docent

CERCA Centres de Recerca de Catalunya · Instituto de Salud Carlos III · Obra Social "La Caixa"

Programa impulsat per la Universitat de Lleida amb la col·laboració de l'Obra Social "LaCaixa"

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Abstract

Over the last decade, our capacity to engineering genomes has increased significantly impacting biomedical research and medicine. Despite important progress, mammalian genome engineering still faces important challenges such as limited multiplexability and difficulty to efficiently generate large edits.

I will present our past effort in using CRISPR/cas9 technologies to create pigs free of PERVs for xenotransplantation after tens of simultaneous edits, and new methodologies to deliver large constructs into mammalian cells in the context of gene therapy.

Short bio

Dr. Güelll is a tenure track Professor at Pompeu Fabra University. His laboratory is focused in leveraging new gene editing technologies for therapeutic purposes. They are applying a new precise gene delivery to congenital muscular dystrophy type 1A (MDC1A).

He was previously a Wyss Technology Development Fellow at the Wyss Institute (mentor: George Church, Harvard Medical School) where he developed gene editing technologies to create biocontained safe recoded microorganims and engineered pigs for xenotransplantation. He has spent an important part of his career in translational science. He is also the founding Scientist of eGenesis, a company aimed to provide an unlimited source of organs for transplantation, and cofounder of sbiomedic, a company developing novel therapeutic solutions using the skin microbiome. [https://www.upf.edu/web/synbio]

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