CIBERehd UNIVERSIDAD DE NAVARRA (CB06/04/0006)
2021-22 ONLINE SEMINARS

Clínica Universidad de Navarra

Cima Universidad de Navarra

"Prometheus *revisited*: Unexpected roles for alternative splicing in liver regeneration"

6th October 2021

16:00-17:00 (CET)

Zoom link
(ID: 954 5608 3836)

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For many genes, steady-state messenger (m)RNA levels provide an inaccurate reflection of the extent to which they are translated into proteins. This seminar will focus on post-transcriptional mechanisms that affect the "quality" and "quantity" of RNAs produced in a cell-type- and context-dependent manner. First, I will describe the identification of a conserved developmentally regulated alternative splicing program that supports terminal differentiation, functional competence, and postnatal maturation of hepatocytes. Second, I will show evidence that following liver injury, this developmental splicing program is transiently re-activated to rewire a critical signaling pathway that enables proper liver regeneration. Third, I will demonstrate that in severe alcoholic hepatitis, the sustained re-activation of this developmental program causes hepatocytes to shed adult functions and become more regenerative but threatens overall survival by populating the liver with functionally-immature cells.

Links: ORCID, Kalsotra Lab

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