## SCIENTIFIC SEMINAR



Fátima Al-Shahrour

Centro Nacional de Investigaciones Oncológicas

## Bioinformatics strategies to target cancer genomes for precision medicine: use case in brain metastasis

The heterogeneity of cancer cells poses significant challenges in designing effective treatment strategies. Multi-omics data, and specifically, those derived from single-cell resolution techniques, offer an unprecedented opportunity to address therapeutic heterogeneity in tumors. In this talk, I will present bioinformatics strategies to target cancer genomes considering inter and intratumor heterogeneity. I will also present how we will apply these findings in the context of the Spanish National Network on Brain Metastasis cohort (RENACER).

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Fátima Al-Shahrour PhD, is head of the Bioinformatics Unit at Spanish National Cancer Research Centre (CNIO). Her research focuses on applying and developing computational methods to precision medicine, for the interpretation of cancer genomes, drug repositioning and prediction of anticancer therapies. Her group is an active node of the Bioinformatics European network ELIXIR (ELIXIR-ES; https://inb-elixir.es/), leading the ELIXIR Cancer Data Focus Group to provide the framework and expertise for the systematic analysis and interpretation of cancer genomes. She is also co-director of Master in Bioinformatics Applied to Personalized Medicine and Health (ISCIII-ENS; BSC; CNIO; SEBIOT; https://masterbioinformatica.com/). As result of her scientific career, she has published more than 100 peer-reviewed articles in cancer genomics and bioinformatics focused on translational cancer research.



SEVERO OCHOA

Thursday July 4 <u>Atrio 800</u> 12.00H

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