



Propuesta de Trabajo Fin de Máster
Año académico 2021-2022
MÁSTER EN MÉTODOS COMPUTACIONALES EN CIENCIAS

Project Nº 22 ASIGNADO
Título: Studying the transition from Myelodysplastic syndrome to Acute Myeloid from a transcriptomics point of view
Departamento/ Laboratorio: Computational Biology Tecnun
Director: Fernando Carazo Correo electrónico: fcarazo@tecnun.es Codirector: Marian Gimeno Correo electrónico: mgimenoc@unav.es
Resumen MDS is a severe and rare blood disorder in which the blood cells remain in an immature stage. This disease in some cases converts into Acute Myeloid Leukemia, an deathly blood cancer with no cure at present. We are collaborating with a researcher at KTH and we have access to a relatively large cohort of MDS patients with its clinical record. In some of them, the disease converted into AML. Dysregultaion of Alternative Splicing (AS) seems to play a key role in both MDS and AML. The objective of this PFM is to study AS in MDS: detect aberrant genes, study the splicing factors that are driving them and the functional consequences. Within this context, the MSc Student will run a proprietary pipeline to study splicing, check the coherence of the results (by checking the literature), and generate hypothesis on potential drivers of the transition from MDS to SML. It is expected to write and publish a manuscript with the results of this project

OPTATIVAS RECOMENDADAS

- 1.
- 2.
- 3.
- 4.