SCENTINEL 1^{st} Workshop at IRB on single cell library preparation and sequencing analysis $2\text{-}7^{th}$ Sept.2024

The IRB partner Institute hosted the 1st SCENTINEL Workshop in person at the IRB premises in Barcelona between 2-7th Sept.2024, a milestone in the implementation of the project.





The aim of the first workshop was the transfer of knowledge of the leading IRB to the widening IMBB personnel is the following areas:

<u>A) Genomics methodologies</u> used for single cell RNA-seq by the IRB Functional Genomics Facility (CF) (crucial for saving time and money is setting up the new methodologies at IMBB and importantly ensuring high data quality)

<u>B) Biostatistics/bioinformatics methodologies</u> used for analysis of single cell genomics datasets by the IRB Biostatistics Facility (instrumental in ensuring FAIR principles, quality of analysis for complex data that otherwise can mislead scientific interpretations)

For these objectives, six people from the widening IMBB Institute participated:

- 1. Vasiliki Theodorou (VT), project's co-coordinator, SC, co-PI and project manager, senior research scientist, Genomics and Bioinformatics expert, former Head of IMBB Genomics Facility
- 2. Mathieu Lavigne (ML), project's co-PI, PI, current Head of IMBB Genomics Facility
- 3. Eirini Stratidaki (ES), Genomics Facility Personnel
- 4. NIki Antonia Gounalaki (NG), Genomics Facility Personnel
- 5. Emmanouil Dialynas (ED), project's Data Steward, IMBB IT and Genomics Facility assistant
- 6. Electra Tsaglioti (ET), Lavigne lab, Bioinformatics Research Assistant



and 7. Konstantina Fillipopoulou (KF), from the partner CNRS IJM, Konstantinidis lab, Postdoctoral scientist sc genomics and analysis experienced researcher.

<u>A) Genomics methodologies</u>: The Workshop involved biological experiments as well as presentations and discussions amongst IMBB, IRB and IJM partners for best practices in project management, sample preparation and overall Genomics Facility functionality.



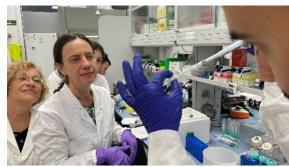








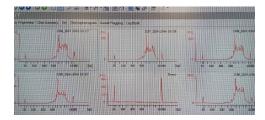


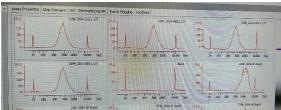






IRB Functional Genomics members, CF Manager Freddy Monteiro and team members (special thanks to David Fernández) organized and led the experimental part of the workshop, resulting in the first single cell libraries of the consortium on Drosophila tumor material!!

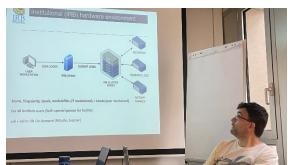


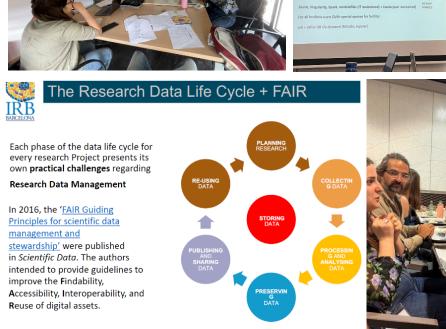


Special thanks to Tano Gonzales and lab members for hosting our flies in IRB labs and sharing incubators, stereoscopes and lab spaces.

B) Biostatistics methodologies. The IRB Biostatistics/bioinformatics Core Facility, led by Camille Attolini, organized a series of presentations for overall Bioinformatics Core Facility functionality, FAIR Data Management, single cell analysis pipelines from data acquisition to final reporting, involving many members of her team that presented to all partners that attended the workshop. Many thanks to IRB OscarReina, Adria Caballe, Ines Cobo, Anna Diez and Lidia Mateo and of course Camille Attolini for openly sharing their best practices and their bioinformatics expertise.







For more: https://rdmkit.elixir-europe.org

Adapted from: https://www.youtube.com/watch?v=OL_Vd9dd-AQ

Strengthening european collaboration and cultural exchange

