

Society for Reproduction and Fertility Travel Grant Award 2015

Recipient: Stefanie Nadj, PhD student, University of Leeds

Supervisor: Dr. David Miller

Workshop: EBML-EBI: Network and Pathway analysis

I would like to thank the SRF for awarding me a travel grant to attend the network and pathway analysis workshop in Hinxton, UK from 2.11 until the 6.11.15. The workshop had delegates from multiple European countries as well as representatives from Israel and Australia.

The aim of this practical course was to give life scientists training on how to explore and use protein interaction bioinformatics resources. This one week course was aimed at bench-based biologists, who are involved in or embarking upon protein interaction and/or pathway related projects to explore the data repositories, resources and tools available to explore and analyse large datasets. Principles of biological network and pathway analysis were introduced and case studies presented.

After an introduction to molecular interactions and how to make use of the IntAct molecular interaction database and PSICQUIC database we focused on identifier mapping and also got hands on training in exploring IntAct, PSICQUIC and also basics in example network analysis, cytoscape and cytoscape add-ons which provide a computational analysis of protein post-translational networks. During the course we also spoke about visualization challenges and solutions from pathways to networks and the Reactome analysis tool.

During two lunch breaks all of the participants had the chance to present their work with a poster presentation and to get in touch with the other participants in a social environment.

Over all the workshop was an excellent experience which broadened my knowledge of the current field of pathway and network analysis using cytoscape for my own data analysis and now enables me to better help people in my group and also at the institute to analyse their data using cytoscape and the before mentioned add-ons.