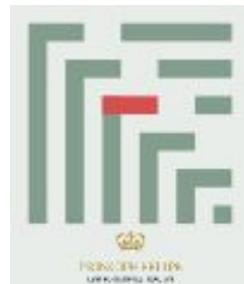


Bioinformatics & Biostatistics Unit

Máster en Bioinformática Aplicada a Medicina Personalizada y Salud

Francisco García García, fgarcia@cipf.es



The UBB-CIPF is a technical and scientific unit that aims to **promote biomedical research** from the interaction with the groups and services of our center.

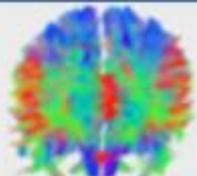


PRINCIPE FELIPE
CENTRO DE INVESTIGACION

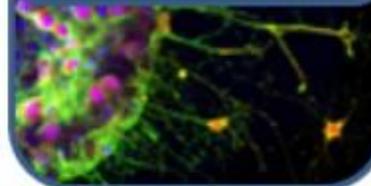
Molecular Basis
of Human
Diseases



Neuroinflammation
and neurological
impairment



Advanced
Therapies



New Technologies
For Biomedical
Research





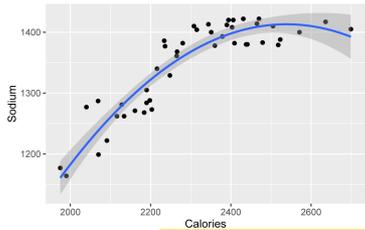
UBB team



<http://bioinfo.cipf.es/ubb/>



UBB activities

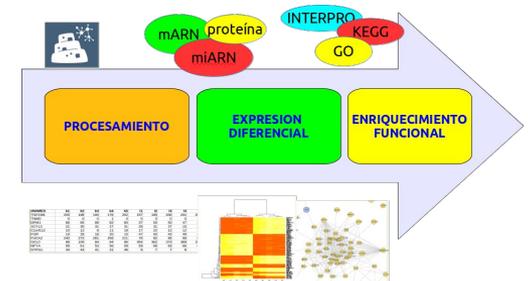
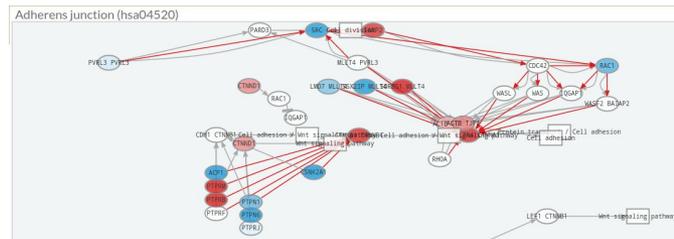


1. Consulting

2. Teaching

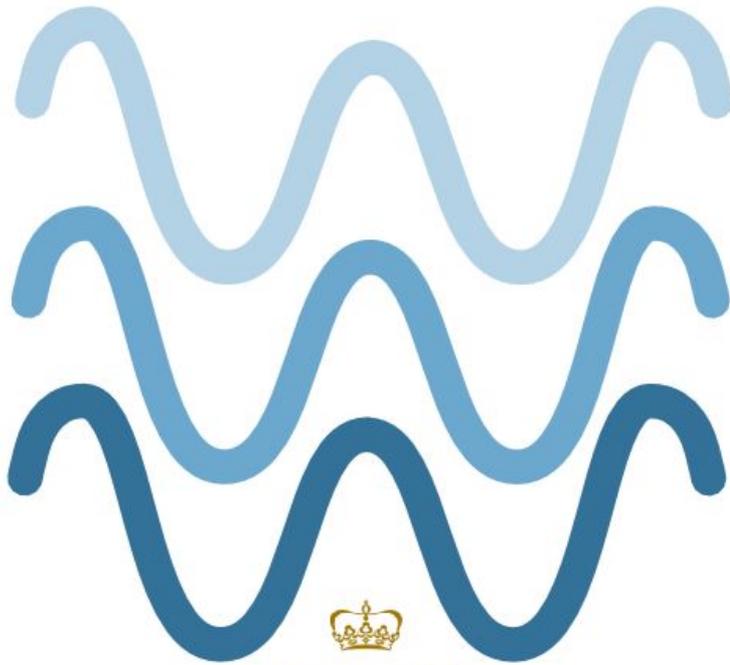
3. Cluster coordination

4. Research





Próximo curso en CIPF: 16-18 Oct 2019



PRINCIPE FELIPE
CENTRO DE INVESTIGACION

WODA

WEB-BASED
OMICS
DATA
ANALYSIS



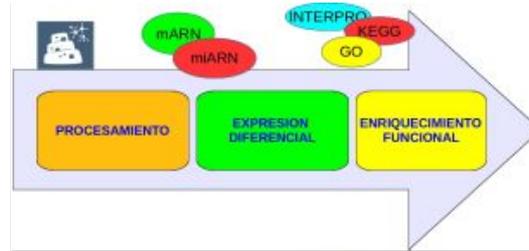
Métodos y herramientas

- Nuevos abordajes de estudios ómicos en el contexto de rutas de señalización.
- Métodos de metaanálisis funcional de estudios ómicos.

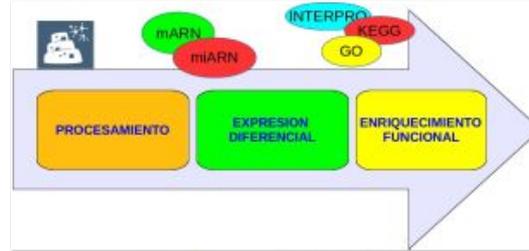


Metaanálisis de estudios ómicos

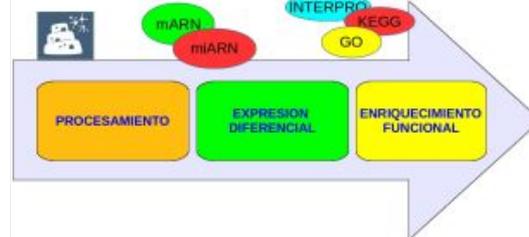
Estudio 1



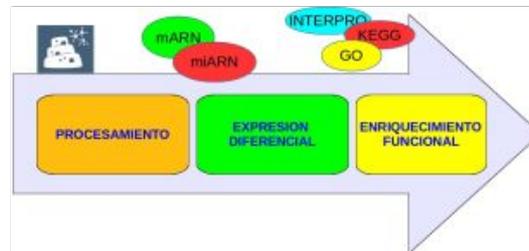
Estudio 2



Estudio 3

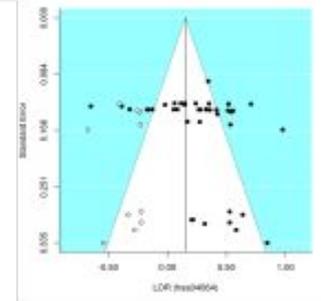
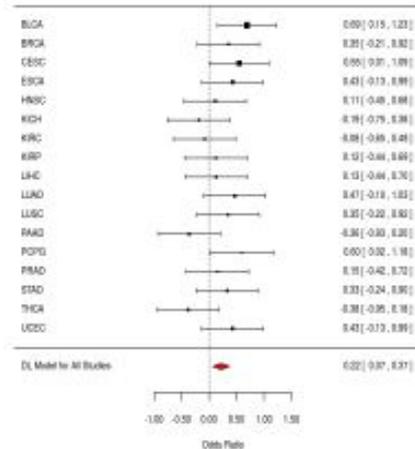


Estudio 4



Metaanálisis

GO:0005227 (calcium activated cation channel activity)





Projects

- A. **Gender differences** in Health, from big data approaches
- B. Understanding causative mechanisms in **comorbidities**

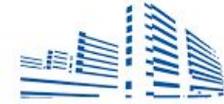


Gender differences in Health



PRINCIPE FELIPE
CENTRO DE INVESTIGACION

Liver
diseases



Instituto de Investigación
Sanitaria La Fe

Lung
cancer



PRINCIPE FELIPE
CENTRO DE INVESTIGACION

Cardiovascular
diseases



Fundación para el Fomento de la
Investigación Sanitaria y Biomédica
de la Comunitat Valenciana

Schizophrenia

Ethanol &
development



PRINCIPE FELIPE
CENTRO DE INVESTIGACION



Mechanisms in comorbidities

Comorbidities



Multimorbidities



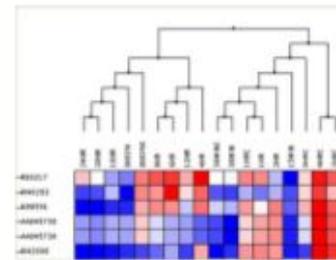
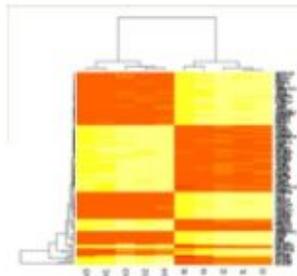
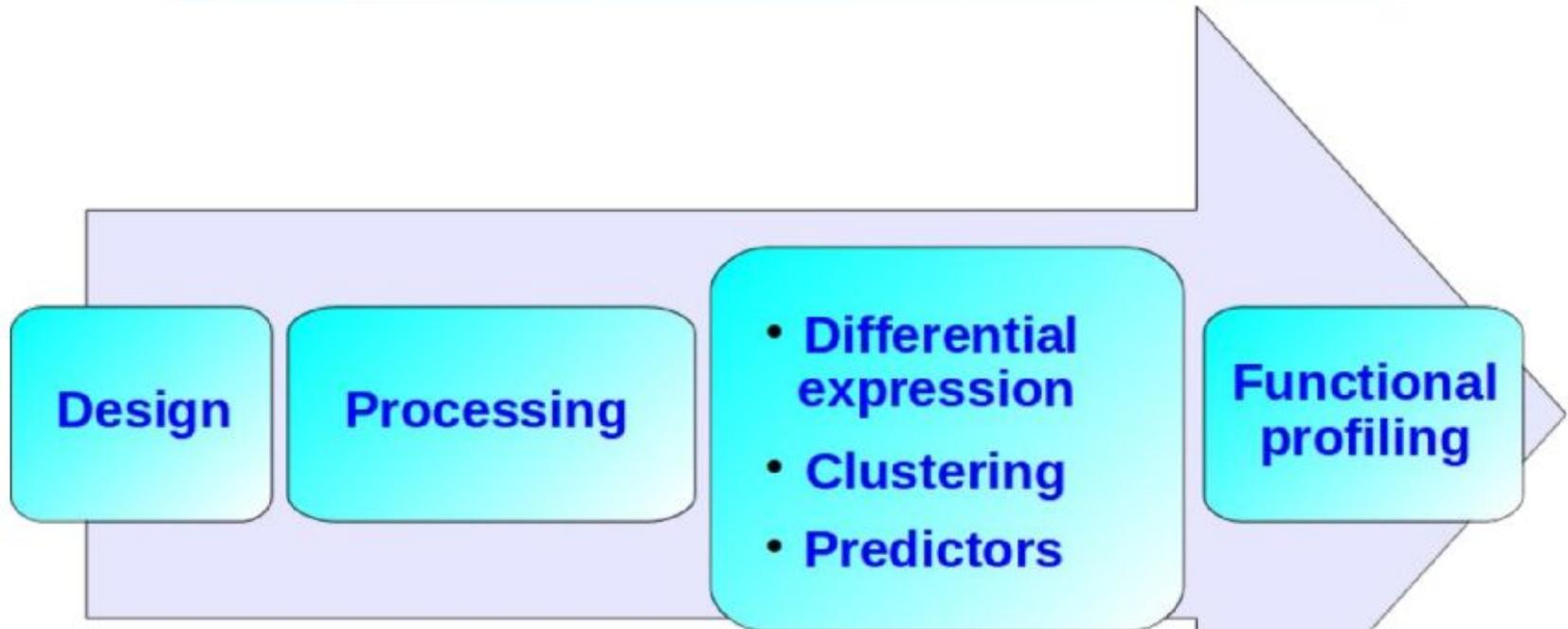
Outline

1. Introduction to Babelomics
2. Functional Profiling: ORA
3. Unsupervised Classification: Clustering
4. Supervised Classification: Prediction

Exercises:

<http://bioinfo.cipf.es/WODA/doku.php/program>

Outline



Any questions?

