



MEDICAL UNIVERSITY  
OF BIALYSTOK

# Medical University of Białystok

## PROTEOMICS

**Dominik Cysewski**

Medical University of Białystok  
Clinical Research Centre



**Clinical  
Research  
Centre**



MEDICAL UNIVERSITY  
OF BIALYSTOK

# Proteomics Group

**Tomasz Kowalczyk PhD**

**Arkadiusz Żbikowski MSc**

**Gabriela Żynel, MSc**



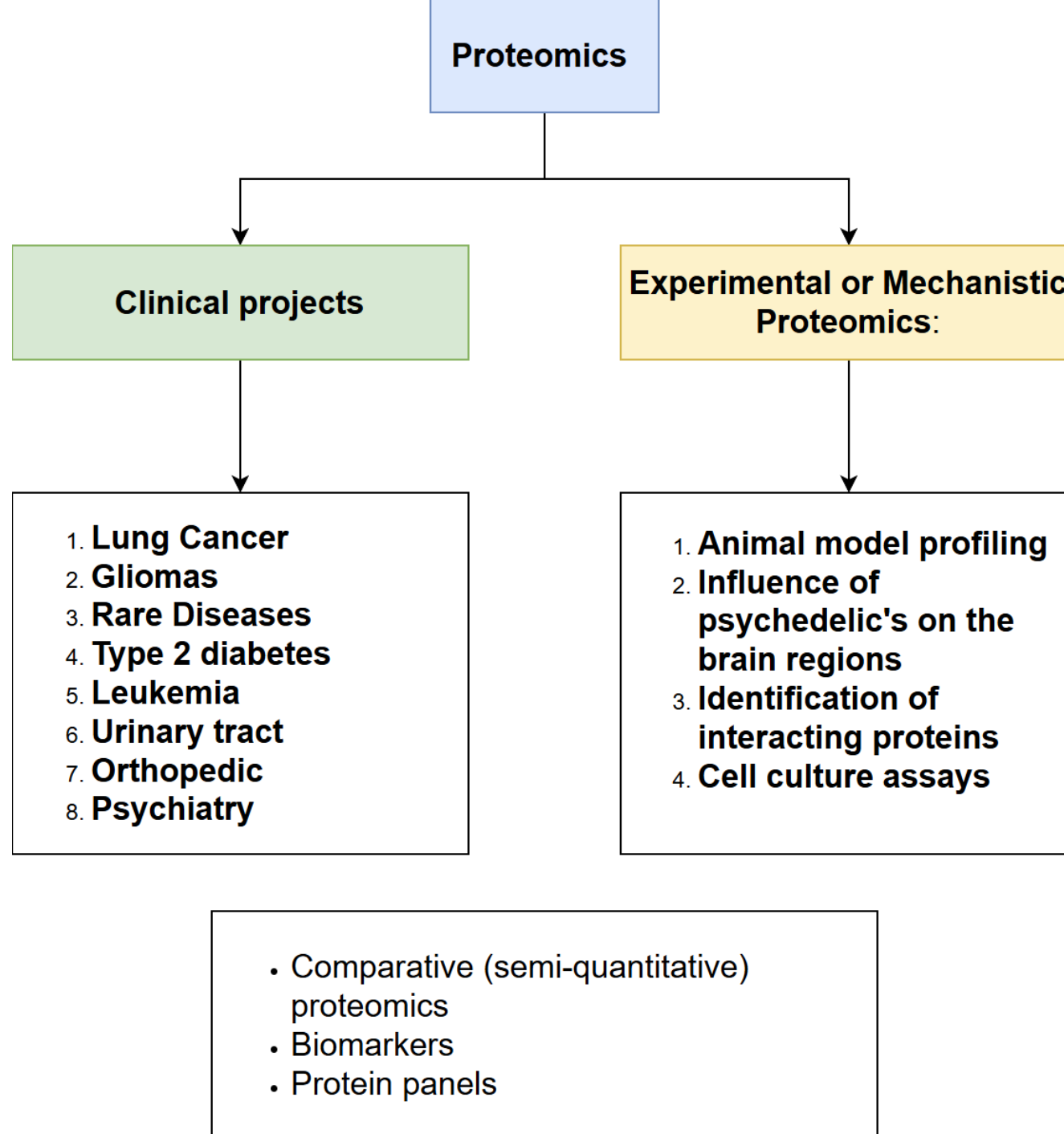
# Equipment

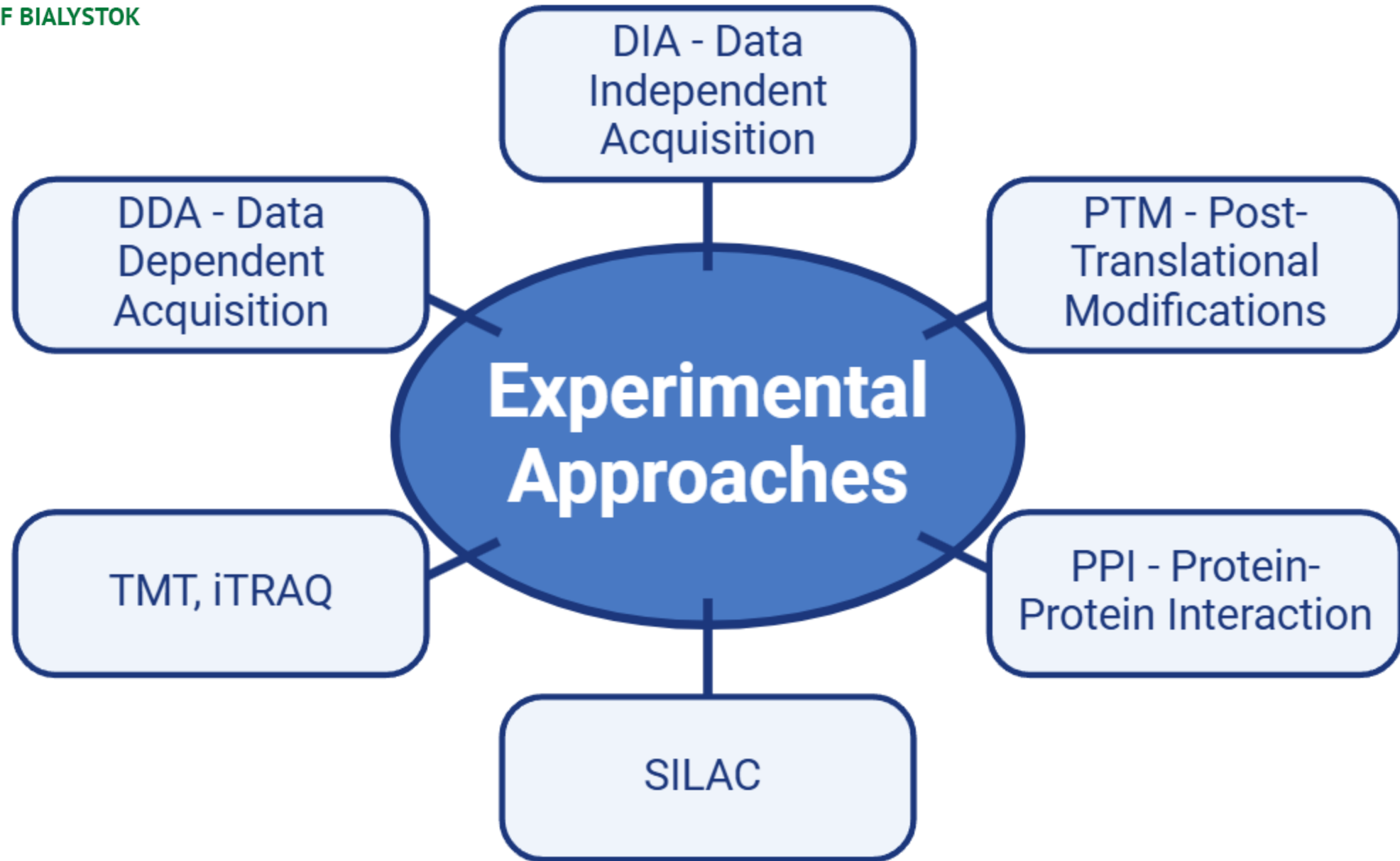


Orbitrap Fusion Thermo Scientific



Hudson Solo SOL9 Automated Liquid Handler System





# Multi-tissue comparative analysis of Pacs2(E209K) mouse model with WT (C57BL) mice

Model

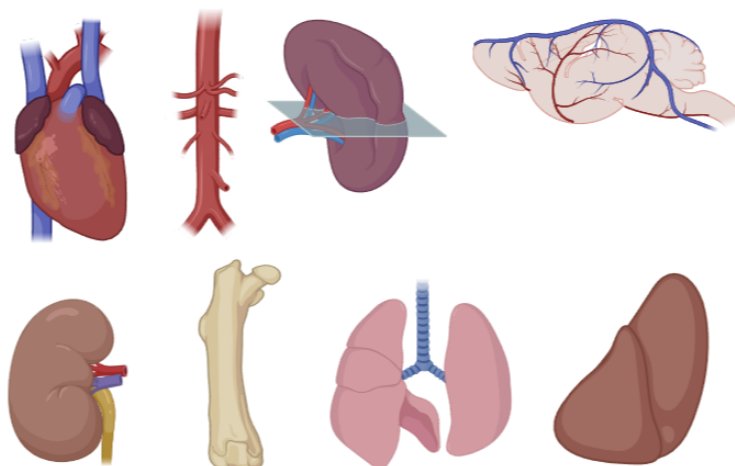
1



1. Pacs2(E209K) N=6
2. WT (C57BL) N=6

Material  
isolation

2



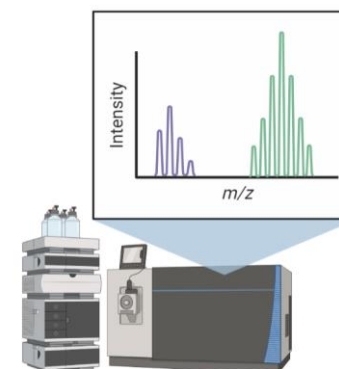
Samples  
processing

3

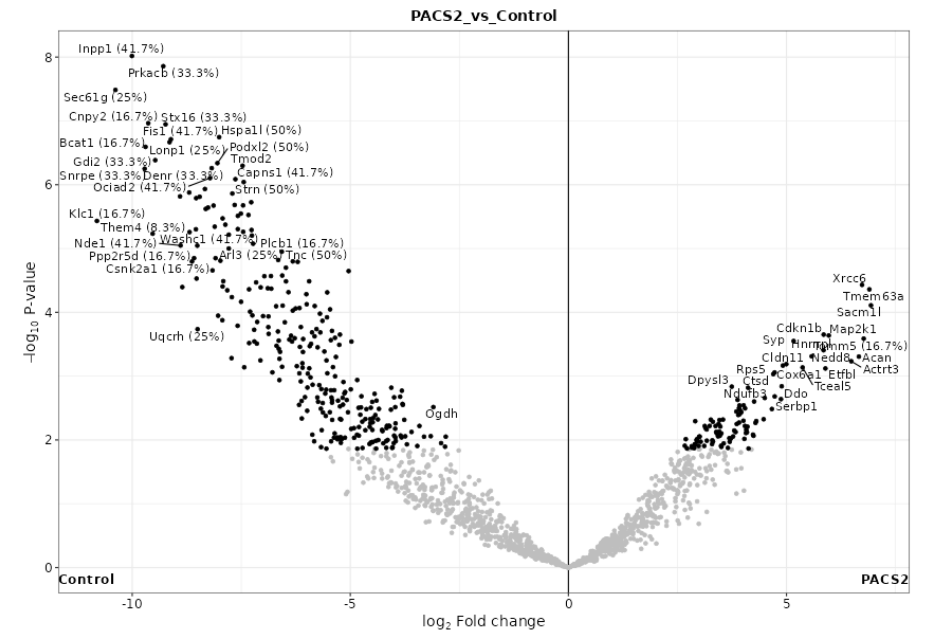
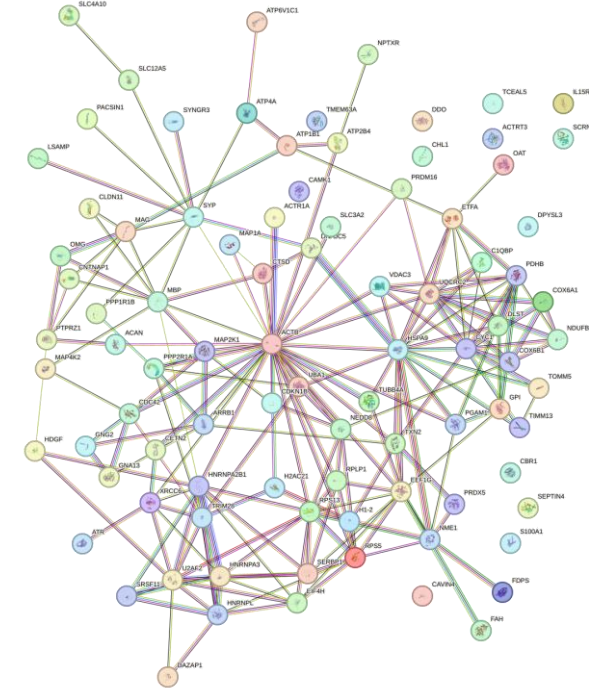
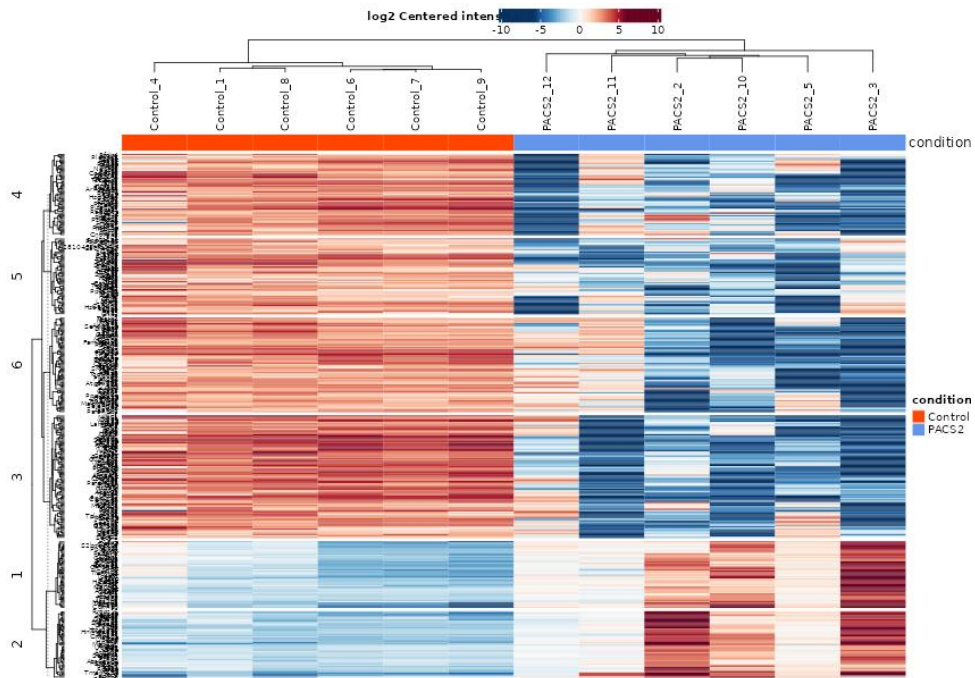
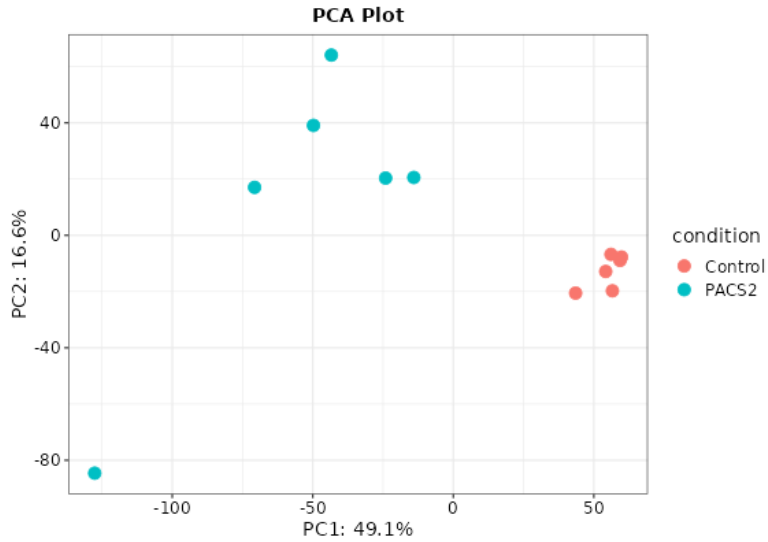
homogenization  
isolation of  
proteins and  
metabolites

Sample  
analysis

4



4000 – 8000 proteins per tissue





MEDICAL UNIVERSITY  
OF BIALYSTOK

# Collaboration

- Nencki Institute of Experimental Biology PAS
- Czech Centre for Phenogenomics
- The Jackson Laboratory
- Institute of Biochemistry and Biophysics
- University of Warsaw
- Max Planck Institute of Biophysics
- Medical University of Warsaw
- University of Pécs Medical School



MAX-PLANCK-INSTITUT  
FÜR BIOPHYSIK



[dominik.cysewski@umb.edu.pl](mailto:dominik.cysewski@umb.edu.pl)

