

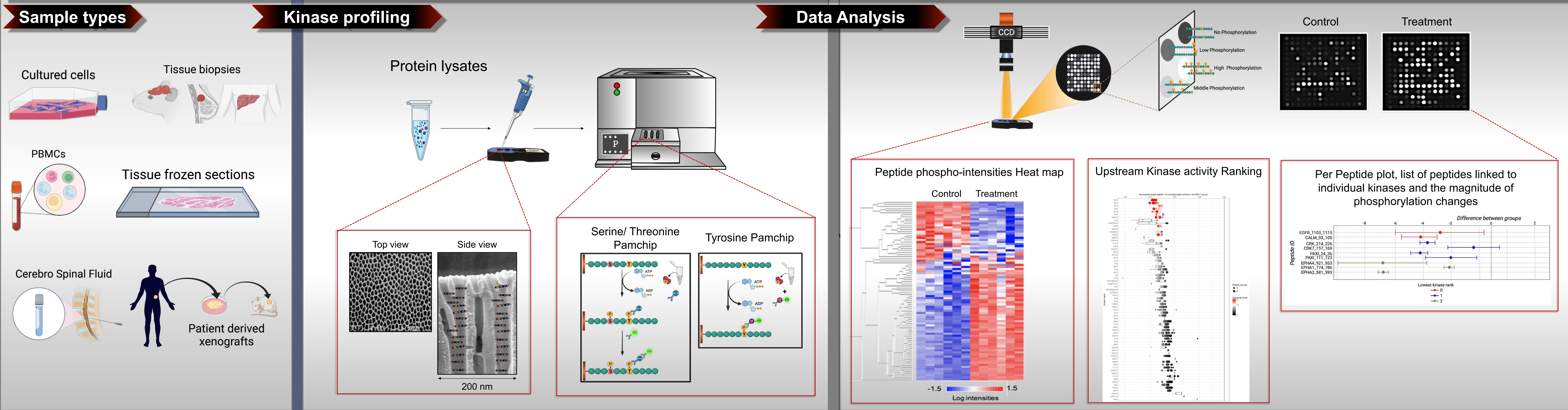
University of Antwerp  
PPES | Proteinscience, Proteomics  
and Epigenetic Signaling

## BACKGROUND

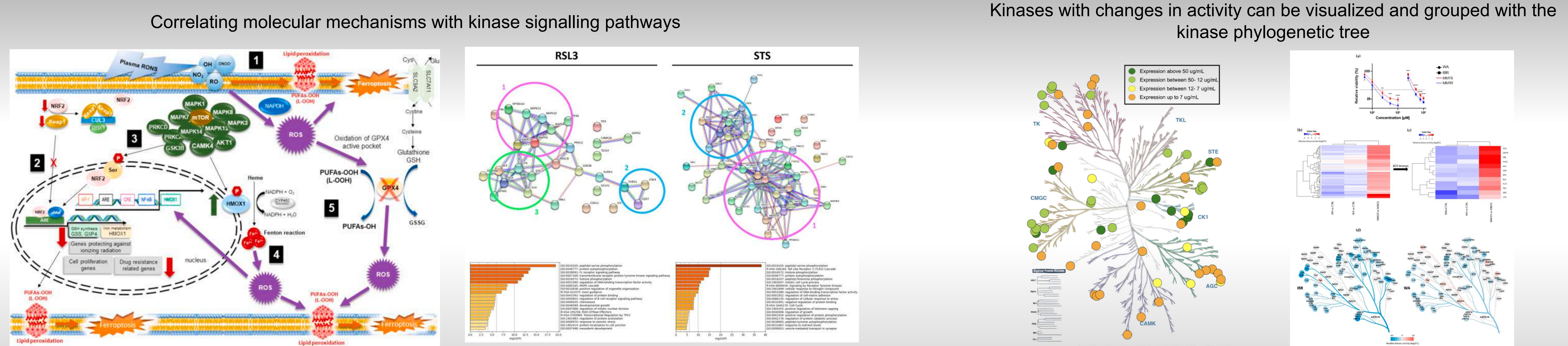
Protein kinases are key regulators of cellular signalling in health homeostasis and pathogenesis. Altered activity of more than 400 human kinases have been implicated in the pathogenesis of an increased number of diseases. Therefore, these molecules are regarded as highly important drug targets, and are the subject of intensive research activity.

Phospho-peptide array technology allows the parallel measurement of multiple kinase activities in cells and in-patient samples, by profiling peptide phosphorylation changes using a pharmacology-on-chip approach.

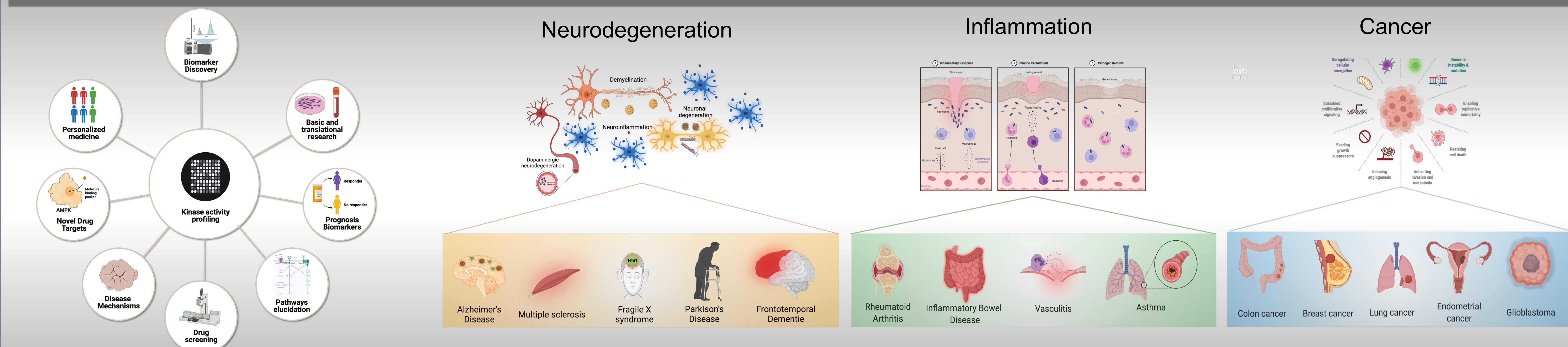
## TECHNOLOGY



## Data mining



## APPLICATIONS



## REFERENCES

- Phosphocatalytic Kinome Activity Profiling of Apoptotic and Ferroptotic Agents in Multiple Myeloma Cells. *Int J Mol Sci.* 2021; 22(23):12731.
- The steroidal lactone withaferin A impedes T-cell motility by inhibiting the kinase ZAP70 and subsequent kinome signaling. *J Biol Chem.* 2021; 297(6):101377.
- Covalent Cysteine Targeting of Bruton's Tyrosine Kinase (BTK) Family by Withaferin-A Reduces Survival of Glucocorticoid-Resistant Multiple Myeloma MM1 Cells. *Cancers (Basel).* 2021; 13(7):1618.
- Physical plasma-derived oxidants sensitize pancreatic cancer cells to ferroptotic cell death. *Free Radic Biol Med.* 2021;166:187-200.
- Profiling Activity of Cellular Kinases in Migrating T-Cells. *Methods Mol Biol.* 2019;1930:99-113.



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