Cell Death Signaling lab

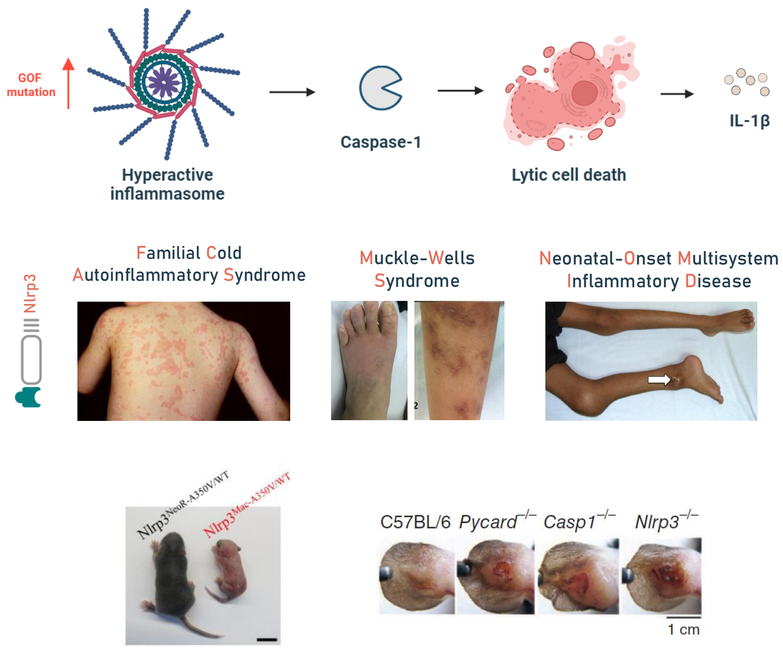
Pyroptosis, Epigenetics and Proteomics

Andy Wullaert, Wim Vanden Berghe, Xaveer Van Ostade

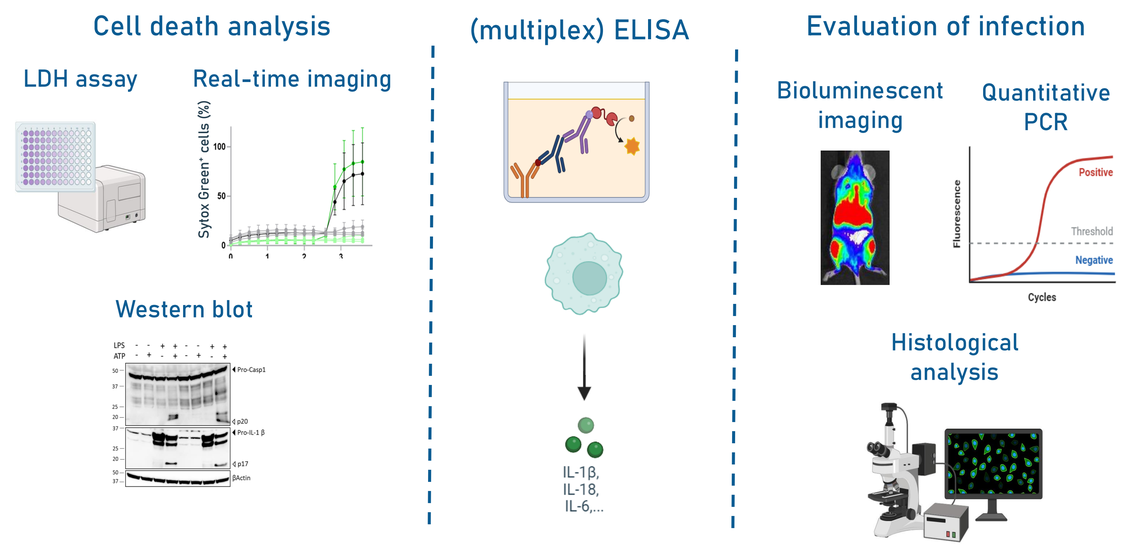
University of Antwerp
Cell death signaling lab
Pyroptosis team

Inflammasomes are large protein complexes activated by microbial- as well as danger-associated molecular patterns. Activated inflammasomes elicit pyroptotic cell death, which releases the pro-inflammatory cytokine IL-1β.

1. Inflammasome signaling is important in autoinflammatory disease and infection



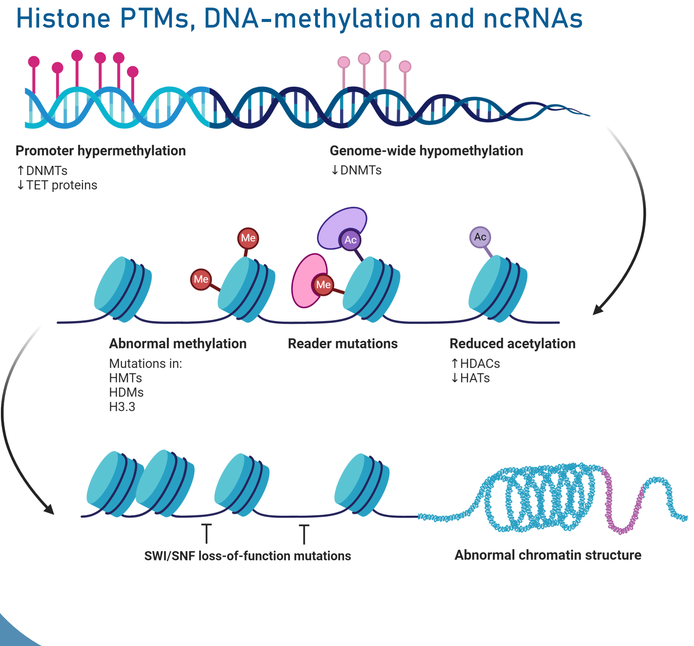
2. Techniques to evaluate the role of cell death and cytokine release in infections and autoinflammatory diseases



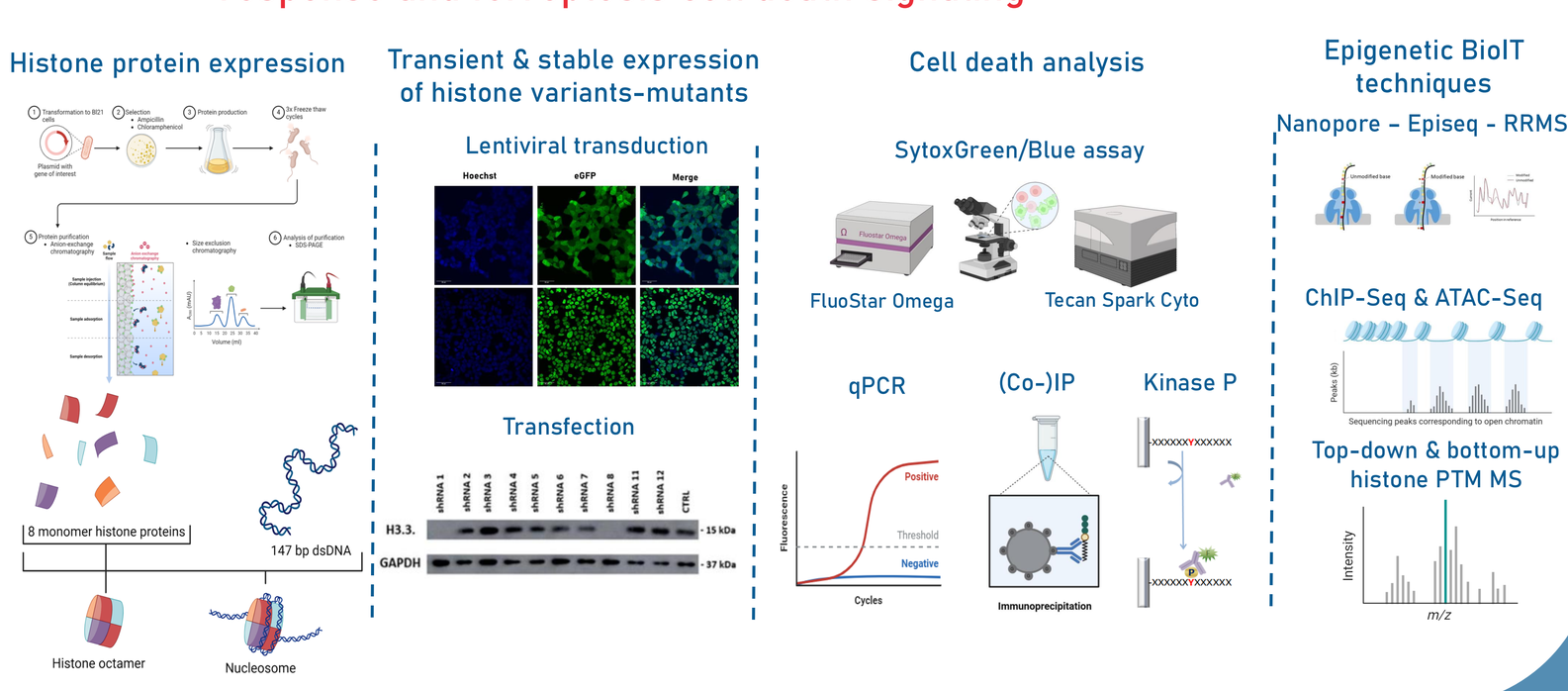
University of Antwerp
Cell death signaling lab
Epigenetics team

Epigenetics consists of the causative role of heritable and environmental changes in gene expression, without altering the DNA sequence.

1. Epigenetics is an important driver of cancer therapy resistance



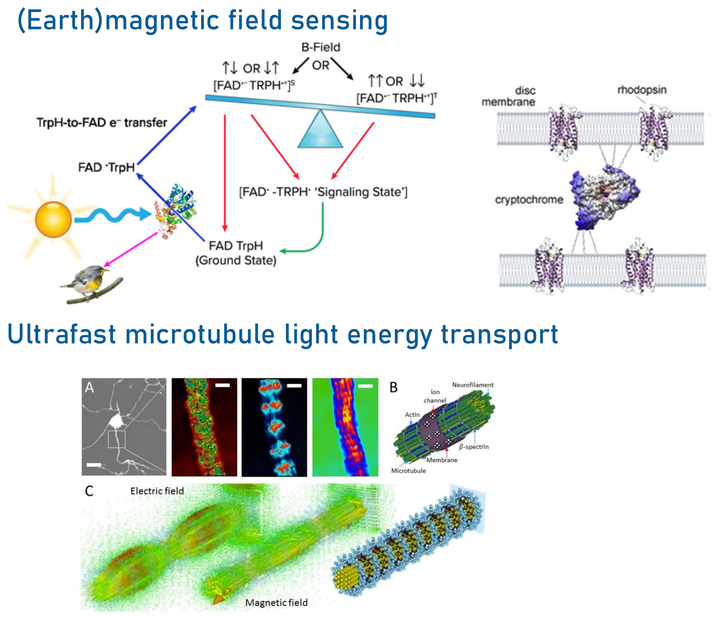
2. Techniques to evaluate the role of epigenetics in cancer therapy response and ferroptosis cell death signaling



University of Antwerp
Cell death signaling lab
Proteomics

Quantum Biology is the study of biological effects, based on the laws of quantum physics

1. Quantum biology may explain many unresolved questions about intra- and inter cellular/tissue signaling



2. Proteomics techniques to examine biological effects for a quantum origin