

Correlative Light and Electron Microscopy (CLEM) Based Analysis of Disease

Correlative light and electron microscopy (CLEM) is a synergistic microscopy approach for obtaining structure and function information from single cells and tissue samples. Correlation is obtained by overlay on ultrastructure of either biochemical information from other microscopy modalities such as immunocytochemistry, MRI or analytical platforms such as imaging mass spectrometry.

Competitive advantage

• The Correlative Microscopy Facility, Ingham Institute is an Australian-first initiative for the application of correlative and 3D microscopy to cancer research.

Impact

 Improving the efficiency of pathological testing protocols, enhanced understanding of disease pathogenesis and mechanisms at the subcellular level and improved treatments and interventions leading to practice policy change.

Successful outcomes

- Discovery of chronic inflammatory pathway in age-related macular degeneration
- Identification of new biomarkers in stroke endovascular thrombectomy blood clots

Our partners

- Ingham Institute for Applied Medical Research
- NSW Health Pathology
- NSW Brain Clot Bank

More Information

Associate Professor Murray Killingsworth

Faculty of Medicine

T: +61 2 8738 5392 E: m.killingsworth@unsw.edu.au

UNSW Knowledge Exchange knowledge.exchange@unsw.edu.au www.capabilities.unsw.edu.au

+61(2)93855008