

# Bain Group

- Mononuclear phagocytes (**macrophages & dendritic cells**) are essential for **mucosal homeostasis** and **tissue repair** but also drive **chronic pathologies e.g. IPF & IBD**
- Tissue macrophages & dendritic cells are **highly heterogeneous** – distinct functions by discrete subsets?
- Macrophage subsets can arise from **distinct precursors** – developmentally-distinct macrophages behave differently in health and inflammation
- **Environmental signals** imprint the identity and function of macrophages & dendritic cells – **nature of these signals is poorly understood**

## Mononuclear phagocyte biology at the mucosal barrier surfaces in health & disease

