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Imaging the (un)imaginable of the Barrier Immune system

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Imaging the (un)imaginable of the Barrier Immune System

1. A high dimensional tissue imaging approach is useful for multiple research questions related to the development and function of the human barrier immune system (This thesis)
2. Lineage-committed proliferating cells give rise to offspring within the developing human fetal intestinal immune system (This thesis)
3. The composition and distribution of immune cells from skin tissue demonstrates substantial heterogeneity among patients (This thesis)
4. The pixel-based analysis approach for IMC dataset reveals multiple clusters of pixels with features of both lymphoid and myeloid cells that were located in immune aggregates of lesional skin, pointing towards close cell-cell interactions related to the pro-inflammatory state in lesions (This thesis)
5. The combination of large-scale single-cell genomics and imaging technologies have enabled a systems-level mapping of the developing human immune system (Park, Jong-Eun et al., Science, 2020)
6. The distribution and function of infant T cells throughout the body are important for promoting immune health and protection in early life (Thome, Joseph J C et al., Nature Medicine, 2016)
7. The tissue microenvironment affects the transcriptional state of malignant T cells, likely contributing to the evolution of malignant clones (Herrera, Alberto et al., Blood, 2021)
8. Langerhans cells, epidermis-resident memory T cells and macrophages together contribute to healthy epidermal immune homeostasis (Zhou, Yuan et al., Cellular & molecular immunology, 2022)
9. Analyzing high-dimensional data is not without any obstacles, but with the right mentality and perseverance you can go a long way. Just like during your PhD journey.
10. Keep moving forwards with both learning and thinking.