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Title: T cells in focus: Formation and function of tissue-resident memory

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Stellingen behorend bij het proefschrift getiteld: 'T cells in focus: formation and function of tissue-resident memory'

- Lineage tracing data provide evidence for a model in which CD8+ skin-T_{PM} arise from a circulating T_{PM} precursor. This thesis.
- Through sustained localization and interaction with dendritic cells, naïve T cells become trained in the lymph node for future skin residence as T_{RM}. Adapted from Farber, Science, 2019 on Mani et al., Science, 2019.
- 3. Tissue patrol is a property of human CD8+ skin-T_{BM}. This thesis.
- Skin-T_{RM} can mediate their protective effect over significant distances and function as a first line of defense against local (opportunistic) pathogens. This thesis.
- T_{RM}-mediated immunity to persisting papilloma virus drives protection from squamous skin cell cancer, demonstrating that the cross-protective function of T_{RM} extends to cancer control. Adapted from Hochheiser et al., Immunology & Cell Biology, 2019 on Strickley et al., Nature, 2019.
- CD8+ T_{RM} may be considered a population of pathogen-specific tissue-resident innate immune cells. This thesis.
- 7. Activation of tumor-associated T_{RM} with defined viral peptides can elicit highly effective cancer immunity, thereby providing a unique therapeutic avenue for cancer immunotherapy. *Adapted from Rosato et al.*, *Nature Communications*, 2019.
- The signals required for the establishment and stability of T_{RM} niches should be taken into account when designing tissue-targeted vaccination strategies. Adapted from Takamura et al., Frontiers in Immunology, 2018.
- Scientific stories need to compete with all other stories in the world, which do not necessarily rely on facts, therefore scientists need to tell their stories such that people can relate to them. Adapted from Sean B Carroll, 2019.
- 10. The image that you make with your microscope is the imagination you want to stimulate with reality. *Adapted from Scott Lorenzo*.