Modelling human skin: organotypic cultures for applications in toxicology, immunity, and cancer

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Stellingen behorende bij het proefschrift

Modelling human skin: organotypic cultures for applications in toxicology, immunity, and cancer

1. Dermo-epidermal equivalents have tremendous potential to improve current *in vitro* skin equivalents by more closely recapitulating different human cutaneous conditions *(This thesis)*.

2. Fibrin scaffolds provide a valuable means of recreating the dermal compartment as it allows skin cells growth, migration, and differentiation in addition to their high cost-effective obtainment *(This thesis, e.g. Gsib et al. 2017).*

3. Keratinocytes isolation and culture are essential for generating human skin models with reliable epidermal tightness and differentiation *(This thesis)*.

4. Fibrin-based dermo-epidermal models can assess chemical hazards and may become a promising tool for toxicological applications *(This thesis)*.

5. 3D fibrin-based skin substitutes promote the differentiation of blood precursors into potentially different subsets of dendritic cells with migratory capacities, providing an improved system to model skin immunity *(This thesis)*.

6. The culture and propagation of BCC-derived cells are effectively supported by highly complex media and conditions that favor attachment and prevent differentiation *(This thesis)*.

7. A combination of 3D modelling and a classification system based on the karyotypic landscape could greatly benefit the diagnosis and treatment of BCC *(This thesis)*.

8. PRMT5-MEP50 complex may confer aneuploidy tolerance through the reduction of aggregation-induced proteotoxic stress, making it a potential target for the treatment of aneuploid cancers *(This thesis)*.

9. Después de 30 años investigando, nos hemos dado cuenta de que siempre acertamos a la última. *Eduardo Anitua*

10. Beginning with something that everyone understands, continuing with something that only the specialists understand, and finishing with something not even the speaker understands. *Unknown*