

University of Groningen

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

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DOI:
[10.33612/diss.204132461](https://doi.org/10.33612/diss.204132461)

IMPORTANT NOTE: You are advised to consult the publisher's version (publisher's PDF) if you wish to cite from it. Please check the document version below.

Document Version
Publisher's PDF, also known as Version of record

Publication date:
2022

[Link to publication in University of Groningen/UMCG research database](#)

Citation for published version (APA):
Gaviria Agudelo, C. (2022). *Modelling human skin: organotypic cultures for applications in toxicology, immunity, and cancer*. University of Groningen. <https://doi.org/10.33612/diss.204132461>

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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*