

# BDR SEMINAR (Kobe & online hybrid)

Co-hosted by  
Multimodal ECM Seminar



Transformative Research Area (A)  
MULTIMODAL  
ECM

## Fiona Watt

King's College London/EMBL Heidelberg/EMBO

**Tuesday, July 16, 2024**

14:00-15:00

1F Auditorium, DB Building C, Kobe / Broadcast online via Zoom

Zoom meeting URL will be announced on the event day by e-mail.

※Non-BDR members: Please register from the following link.

<https://krs2.riken.jp/m/bdrseminarregistration> (Registration deadline: July 12)

## Dynamic regulation of stem cell fate in human epidermis

### Summary

The epidermis is the multilayered epithelium that forms the outer layer of human skin. It is maintained by stem cells that are attached to an underlying basement membrane. Cells undergo terminal differentiation as they detach from the basement membrane and move through the suprabasal epidermal layers to the tissue surface, from which they are shed. Tissue homeostasis depends on a balance between stem cell renewal and differentiation. While many of the molecular regulators of stem cell behaviour have been identified, how they are integrated and change over time are open questions. I will describe how new insights from single cell RNA sequencing of cells isolated directly from the skin, combined with new experimental models, are helping us to understand the combined effects of cell-ECM adhesion and cell-cell contact in regulating epidermal differentiation.

**Host: Hironobu Fujiwara**

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