

# ARMI EXTERNAL SEMINAR SERIES 2022



## Differentiation and dedifferentiation in adult mammalian epidermis

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### Abstract

The epidermis is a multilayered epithelium that forms the outer covering of the skin. The basal cell layer is attached to a basement membrane and contains stem cells that self-renew and generate differentiated cells. Differentiation occurs as cells move through the suprabasal epidermal layers. Cells that have reached the final stage of differentiation are shed from the skin surface. Under steady state conditions epidermal differentiation is irreversible. However, during wound healing some differentiated cells return to the stem cell compartment. In this presentation I will describe an experimental mouse model of wound-induced dedifferentiation in which we are comparing the transcriptional trajectories of differentiation and dedifferentiation and the interplay between intrinsic and extrinsic regulatory signals.

### Bio

Fiona Watt obtained her first degree from Cambridge University and her DPhil, in cell biology, from the University of Oxford. She was a postdoc at MIT, where she first began studying differentiation and tissue organisation in mammalian epidermis. She established her first research group at the Kennedy Institute for Rheumatology in London and then spent 20 years at the CRUK London Research Institute. She helped to establish the CRUK Cambridge Research Institute and the Wellcome Trust Centre for Stem Cell Research and in 2012 she moved to King's College London to found the Centre for Stem Cells and Regenerative Medicine. From 2018 to 2022 she was on secondment as Executive Chair of the Medical Research Council. In 2022 she moved to Heidelberg where she runs a lab at EMBL and is EMBO Director.



### EVENT DETAILS

#### DATE:

Tuesday, 02<sup>nd</sup> August 2022

#### TIME:

05.00p.m. AEST

#### VENUE:

Zoom details to be circulated via email on 19<sup>th</sup> July morning  
Please register via this [online form](#) to receive Zoom details

#### HOST:

Dr Julien Legrand & Dr. Lulu Xing



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