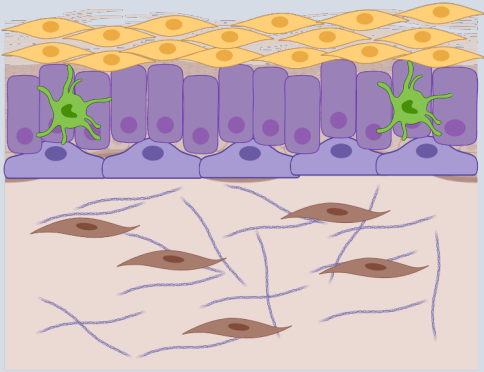



Systems Immunology Group


What We do


- We carry out research to try and learn more about your skin and how it interacts with your immune system.
- We investigate the changes that take place in skin with conditions such as eczema and psoriasis.
- We use computer models to try and predict how your skin will react under different conditions.

What is your skin made of?

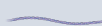


 Outer dead skin cells called keratinocytes protect from the outside environment.

 Younger keratinocytes underneath replace dead ones in a few days.

 Langerhans cells sense outside dangers to the skin and tell the immune system when to act.

 Fibroblasts support the skin by creating a scaffold structure to build on.

 Collagen fibers are like ropes that form the scaffold of the dermis.

Why is your skin important?

- Your skin provides a barrier that protects you from things in the environment that could cause you harm, for example bad bacteria or chemicals.
- Your skin helps to protect you from the harmful effects of the sun.
- Your skin can detect when you are hurt and instruct cells to repair the damage.
- Your skin can recognise some bad bacteria and viruses and tell your body to produce an immune response.

Find out more!

- Follow us on Twitter! @SIG_PolakLab
- Visit our website, <https://www.southampton.ac.uk/ita/index.page?>