

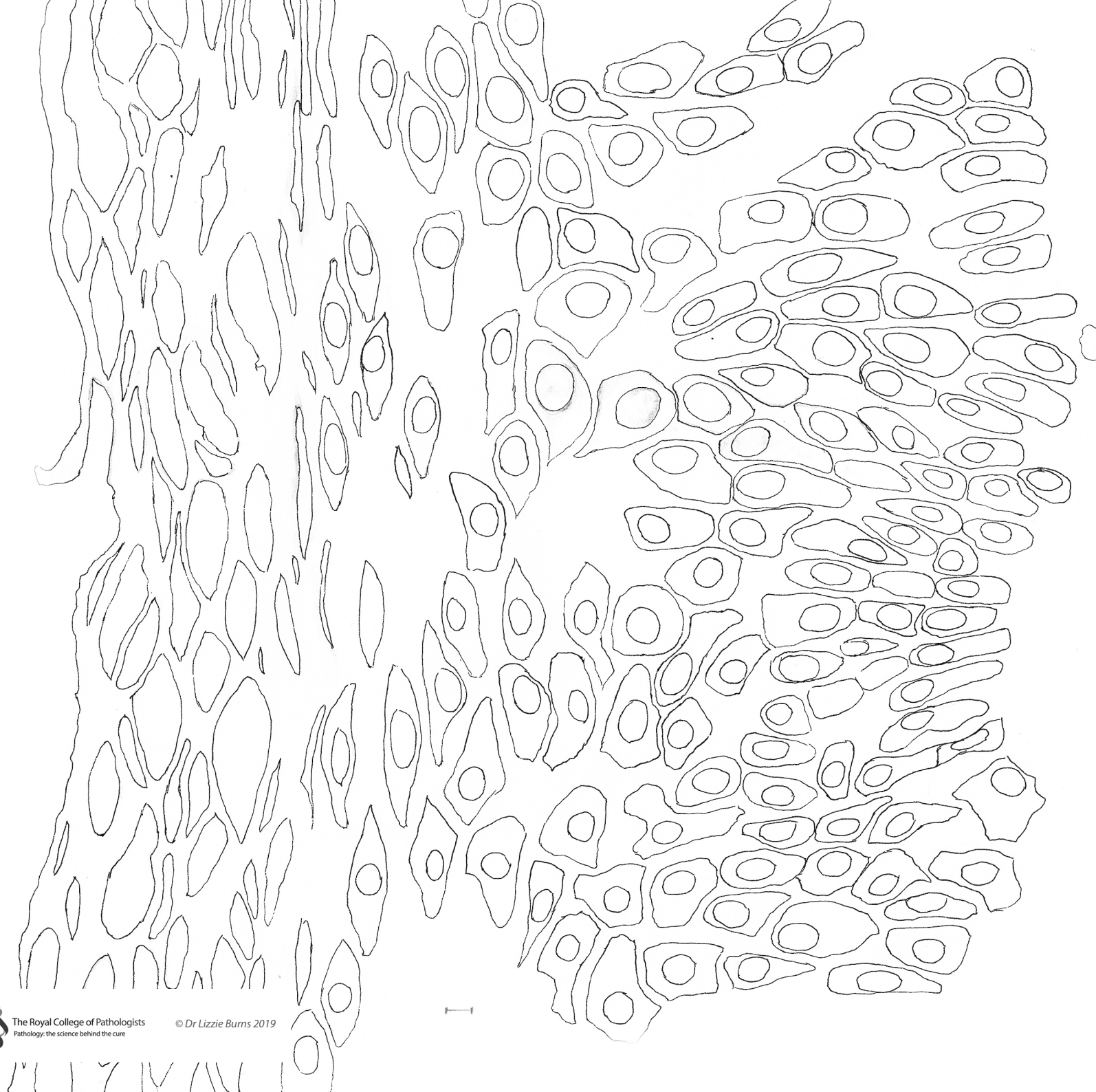
Protecting your body: skin

You are formed of extraordinary, tiny units of life called cells. Add colour to reveal the intricate beauty of cells within the organ that protects you: skin. The outside layers of skin seen on the left side are in contact with the air, while healthy growing skin cells inside your body are seen on the right.

As well as physically protecting your body, your skin insulates you, allows the sensation of touch and makes vitamin D. Your skin has many layers, including cells called melanocytes to help absorb harmful UV light, which can damage DNA. To help prevent cancer (melanoma) you need to avoid too much sunlight, though some is needed to help make the 'sunshine', vitamin D, for absorbing calcium to keep your bones strong.

Inside cells, nuclei contain DNA. Cells can divide to help renew your skin. As cells grow towards the air they move further away from their blood supply and start to die off, becoming empty and allowing your skin to be shed and renewed. Help draw in more cells. Cells towards the right give us the beautiful, varied and unique colours of your skin colour. Add your own unique colours to these deep layers and let them lighten as they come towards the air. Add shades to your beautiful skin to reveal the patterns within.

This view is unusual, representing skin seen in cross section. The bar at the bottom represents 10 micrometres (one hundredth of a millimetre). Three cells would fit across the width of a human hair.



Histopathology
Skin tissue/biopsy