



News > National

Australia's top female doctors and scientists changing the world

From a scientist studying babies' poo to another looking at how a brain can be repaired in a person with MS – meet some of Australia's most inspiring women.



Hayley Goddard

10 min read March 20, 2023 - 4:06PM

Dr Sophie Payne, neuroscientist, Bionics Institute

Dr Sophie Payne has created and is testing a small medical device that could help stimulate the body's natural healing system to combat diseases such as Chron's or rheumatoid arthritis, which affects half a million Australians.

The device is a tiny electrode — about the size of a thumbnail — that can during surgery be attached to the vagus nerve, which controls several organs including the body's anti-inflammatory response.

“Around 80 per cent of people with Crohn's disease require surgery to remove damaged sections of their bowel, and unfortunately, there are few effective treatments to prevent the disease recurring at the operation site,” she said.



Neuroscientist Dr Sophie Payne. Picture: Supplied