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MICROBIOME RESEARCH CENTRE TO HELP REVOLUTIONISE MEDICINE

Ground-breaking research into the ecosystem of bacteria in our bodies and how it can transform human health has been given a boost, with the NSW Government committing \$1.5 million towards the completion of the Microbiome Research Centre (MRC).

The MRC, based at St George Hospital, will lead international research collaborations into how microbiota play a unique role in both sickness and health, and how it can be harnessed to treat, prevent and cure complex diseases.

Leisa Rathborne, General Manager, St George Hospital, said the Centre will be a world-class bio-informatics facility which aims to understand the cause and effect of specific bacteria, and translate those discoveries into effective treatments to save lives.

"Inside every one of us are trillions and trillions of bacteria and other microbes and each of these communities is known as microbiome. Each person's microbiome is as unique as a fingerprint and could hold the key to treating many conditions," Ms Rathborne said.

"Dysfunctional microbiomes are associated with chronic diseases including cancer, obesity, diabetes, asthma, Alzheimers as well as autoimmune diseases like multiple sclerosis and rheumatoid arthritis, and various neurodevelopment disorders like autism".

The Microbiome Research Centre is a collaboration between the St George and Sutherland Medical Research Foundation (SSMRF), the University of New South Wales (UNSW) and the South Eastern Sydney Local Health District (SESLHD).

Professor Emad El-Omar, Professor of Medicine, UNSW, St George Hospital and the Director of the MRC, said the facility will improve research capacity by attracting more expert researchers not only from around the country but also from around the world.

"There will be unrivalled opportunities for the next generation of researchers in medicine and allied health specialities on offer at the Centre. Their job is to diagnose what has previously been impossible to detect, and then to treat the conditions," Professor El-Omar said.

While the refurbished Centre will officially open for business in February next year, microbiome research is already underway in the existing laboratories, with several teams investigating some of the Australian Government's health care priorities.

Jacquie Stratford, CEO, St George and Sutherland Medical Research Foundation said the MRC is the most significant breakthrough for medical research in the St George and Sutherland catchment area and will be the nucleus for sustained growth in the field.

"Microbiome research truly is the new frontier of medicine and this investment from the NSW Government, along with the \$1 million pledged by the South Eastern Sydney Local Health District and last year's Commonwealth grant will progress our work immeasurably," Ms Stratford said.

"The MRC is fully embedded in a clinical setting and this will facilitate the translation of research into the health system to improve health outcomes. It will showcase NSW research excellence and deliver bench top discoveries to the bedside."

For more information go to <u>http://www.stgeorgemrf.com.au/mrc/</u>