

Funding injection of \$8 M for Strep A vaccine research in Australia

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Strep A bacteria causes strep throat and scarlet fever and is a major driver of antibiotic use in children

Australia's University of Queensland (UQ)-led research effort to develop an mRNA vaccine against Group A Streptococcus (Strep A) has secured almost \$8 million in philanthropic funding.

The Leducq Foundation has announced support for the project that could reduce Strep A infections, which cause more than 500,000 deaths a year – with about 70 per cent resulting from rheumatic heart disease.

Professor Mark Walker from UQ's Institute for Molecular Bioscience said there was no vaccine for prevention of Strep A, but efficacy data from the team's preclinical studies was promising.

"The support from the Leducq Foundation will allow us to build on research already underway at UQ where we have been collaborating with Moderna to develop an mRNA vaccine against Strep A," Professor Walker said.

The Strep A bacteria causes strep throat and scarlet fever and is a major driver of antibiotic use in children. Repeated infections can lead to rheumatic heart disease, the most significant cause of childhood death due to heart failure.

Dr David Milan, Leducq Chief Scientific Officer, said this innovative approach to a Strep A vaccine fell squarely within the cardiovascular disease mission of the Leducq Foundation.

Immunologist Professor Gabrielle Belz from UQ's Frazer Institute said, "We hope further research and testing will establish proof of concept and ultimately translate into a mRNA vaccine that provides long term immune protection."

The team includes researchers from UQ, the University of Melbourne, the Murdoch Children's Research Institute, Emory University, CONACYT (Mexico) and Moderna.