

PROFESSOR SI MING MAN

AUSTRALIAN NATIONAL UNIVERSITY 2022 FRANK FENNER PRIZE FOR LIFE SCIENTIST OF THE YEAR

Professor Si Ming Man has received the 2022 Frank Fenner Prize for Life Scientist of the Year in recognition of his significant contributions to the fields of immunology and infectious disease.

Immunology is a branch of medicine and biology that studies the human immune system, which protects the body against infections and microorganisms.

Professor Man has advanced our understanding of the role of inflammation in health and disease, and the microbes and molecules that inhibit or impact it. He leads a team of scientists at the Australian National University (ANU) to learn the ways human bodies use inflammation as a tool to fight infection.

He is recognised for discovering that the same immune receptors that recognise pathogens also have anti-inflammatory and anti-cancer capabilities. He has also partnered with gastroenterologists at the Canberra Hospital in two clinical studies to determine whether these immune receptors can be used as biomarkers to predict bowel cancer.

Professor Man's discoveries could lead to the development of targeted therapies for diseases caused by inflammation including sepsis, and treatments for autoinflammatory diseases such as skin inflammation and cancer. He has explored whether there are novel mutations in the gene Ku70 in bowel cancer patients that may lead to personalised precision.

Professor Man also discovered novel antimicrobial proteins with the potential to fight antibiotic-resistant bacteria, which could help fight the current global shortage of effective antibiotics. This led him to partner with CSL (Commonwealth Serum Laboratories) and CSIRO to test the proteins in our immune system and develop a new class of antimicrobial drugs that would reduce our reliance on antibiotics and harness our natural immune defences.

These drugs would not only benefit humans, but also the agricultural industry, as they would provide new opportunities for disease prevention and treatment in animals.

Professor Man is a highly influential figure in his field. His published research papers are in the top five per cent of cited literature in the PubMed database.

He is the recipient of numerous fellowships and grants, receiving \$8.4 million in funding to date which he has used to further his research.

He is also a mentor for young researchers in the field and is passionate about teaching and developing the next generation.

Professor Man leads an internationally recognised research team at the John Curtin School of Medical Research (ANU) and continues to improve health outcomes for Australia and beyond.

Career highlights

- 2021 Centenary Fellowship, CSL
- 2020 ClarivateTM Highly Cited Researcher, Clarivate
- 2020 Peter Doherty Leading Light Award, Australian Society for Medical Research
- 2020 Eppendorf Edman Early Career Researcher Award, Australian Society for Biotechnology & Molecular Biology
- 2020 Vice Chancellor's Award for Early Career Academics, Australian National University
- 2019 Commonwealth Health Minister's Award for Excellence in Health and Medical Research, Australian Federal Government
- 2019 Research Excellence Award, National Health and Medical Research Council
- 2019 Career Development Fellowship, National Health and Medical Research Council
- 2019 Edgeworth David Medal, The Royal Society of NSW
- 2019 Fellowship, Australian Society for Microbiology
- 2019 Pfizer-Showell Award, American Association of Immunologists
- 2017 Jim Pittard Early Career Award, Australian Society for Microbiology
- 2017 Postdoctoral Investigator Award, National Association of Research Fellows of National Health and Medical Research Council
- 2017 The Gordon Ada Early Career Research Award, John Curtin School of Medical Research (ANU)
- 2016 Milstein Young Investor Award, International Cytokine & Interferon Society
- 2016 Thermo Fisher Trainee Achievement Award, American Association of Immunologists
- 2015 Research Excellence Award, National Health and Medical Research Council
- 2015 Early Career Fellowship, National Health and Medical Research Council