

Maria Liaskos



project summary

An inaugural inspiring women fellowship is awarded to Dr Maria Liaskos from The Hudson Institute of Medical Research's Centre for Innate Immunity and Infectious Diseases to continue the momentum of her current research program.

Dr Liaskos, who previously secured ARC funding, has received an NHMRC grant while on maternity leave and is focused on examining the mechanisms of immune suppression during *Helicobacter* infection, a bacterium in the stomach affecting more than three billion people worldwide, and is a causative agent of gastric cancer.

The fellowship will significantly enhance her competitiveness and allow her to balance a career with raising two young children.

The fellowship will also support Maria's expanding research program, giving her more 'hands' in the lab by hiring a research assistant to continue to progress the research during a period of part time employment while returning to work from her second period of maternity leave.

The fellowship will also provide funding for a full time PhD student for its duration. This is vital to ensuring the re-establishment of Maria's research team, which has been significantly reduced due to career interruptions and having to decline the supervision of PhD students. It will also help foster the next generation of researchers.

Maria has two children, and by acting as a role model to younger women wanting to undertake a career in STEM, Maria is working to enhance cultural change, proving that women can have leadership positions, successful STEM careers, flexible work hours, a strong support network and still be great mothers.

personal history

Dr Maria Kaparakis-Liaskos obtained her PhD from the Department of Microbiology and Immunology at the University of Melbourne in 2005, under the supervision of Professor Richard Strugnell.

Since graduating, Dr Liaskos' research interests have focused on understanding the mechanisms underlying the induction of inflammation and pathology in response to bacterial infection, and in particular, to the gastric pathogen *Helicobacter pylori*.

She undertook her postdoctoral studies in the laboratory of Associate Professor Richard Ferrero at Monash University, where she examined innate immune responses to *Helicobacter pylori*.

In 2009, Dr Liaskos joined the Centre of Innate Immunity and Infectious Diseases, at Monash Institute of Medical research, now named the Hudson Institute of Medical Research.

Dr Maria Liaskos

For Dr Liaskos, currently undertaking her second period of maternity leave, the inspiring women fellowship will ensure her research continues its forward momentum.

Her current research focuses on understanding the role of NOD1 in responding to bacterial infections and in the development of pro-inflammatory cytokine responses.

Her recent research has identified the intracellular location of NOD1, as well as the mechanisms whereby NOD1 detects Gram negative bacterial peptidoglycan, resulting in the generation of autophagy and the production of pro-inflammatory cytokines by the host.

These recent findings elucidate the cellular processes underlying NOD1-driven pathology and have the potential to advance the design and development of therapeutics against NOD-Like Receptor (NLR) driven disease states.

other inspiring women fellows:

/ Dr Catherine Satzke
/ Dr Natalie Hannan
/ Dr Emily Nicholson

host institution

HUDSON
INSTITUTE OF MEDICAL RESEARCH

further information

veski.org.au/inspiring-women

about the inspiring women fellowships

The inaugural inspiring women fellowships, funded by the Victorian Government through the Office of the Lead Scientist and delivered by **veski**, are designed to support outstanding female leaders who are planning for, experiencing, or returning from a career break.

