

Dr Lisa Stinson, Postdoctoral Research Fellow, The University of Western Australia



Dr Lisa Stinson is a microbiologist ecologist at The University of Western Australia. Her research interests include the early life microbiome, the human milk microbiome, and the developmental origins of health and disease. She completed her PhD in 2019, with a thesis that was placed on the Dean's Honourable Mention List. Dr Stinson's research has received numerous awards and significant media attention. Recently, she was selected as one of the ABC's Top 5 Scientists of 2020. Dr Stinson is currently a postdoctoral researcher in the Human Lactation Research Group at The University of Western Australia, where she aims to understand the microbial and non-microbial factors in human milk that shape infant and lifelong health.

Bugs, breasts, babes, and beyond

Though it was once considered sterile, we now understand that human milk contains a multitude of micro-organisms, including bacteria, viruses, and fungi. These act to seed the infant microbiome, which in turn influences infant immune and metabolic development and life-long health. This talk will take you on a flash tour of the human milk microbiome, introducing you to the main microbes present, their origins, and their roles. Given the importance of the human milk microbiota, donor milk-fed and formula-fed infants may be negatively impacted by a lack of exposure to maternal microbes. Could we intervene to modulate these products and improve infant health? Can we harness what we know about the human milk microbiome to prevent and treat mastitis? And finally, given that the human milk microbiome varies with maternal health and lifestyle factors, could we – and *should* we – modulate the human milk microbiome using interventions such as diet and pre/probiotics?