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RSWA Monthly Talks

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Emerging Antimicrobial Resistance from a One-health Perspective

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7.00 pm Kings Park Administration Building, Fraser Ave

The World Health Organization has described antimicrobial resistance as one of the major global health issues facing our generation. The use of antimicrobials in both humans and animals has accelerated the development and spread of antimicrobial resistance. Antimicrobial resistant bacteria pose serious consequences for human health due to limited therapeutic options, need for complex and expensive treatments, prolonged hospital stay, increased morbidity and mortality. Antimicrobial resistance is also a major problem for the animal health sector including companion animals and livestock. Antimicrobial resistant bacteria pose a major issue for animal health and welfare, biosecurity and also lead to production losses among food producing animals. Antimicrobial resistant bacteria can be transmitted between humans and animals via direct contact, environment or by the food chain. In addition, antimicrobial resistant bacteria from humans can transfer genetic material responsible for resistance to animals or vice versa. In the past two decades movement of humans and food products between different continents has increased significantly. This has led to major challenges in controlling the spread of antimicrobial resistance among humans and animals. In this talk, I will cover the emerging antimicrobial resistance from a One-health perspective.



Biography

Dr Sam Abraham



I grew up in Kerala, in the south west of India. In 2006, I received my BSc, in Zoology from Mahatma Gandhi University in Kerala. Shortly after, I moved to Australia in pursuit of higher education and joined the University of Wollongong to undertake a Masters in Biotechnology. Subsequently, I completed a PhD in Micro and Molecular Biology from the University of Wollongong (2012) undertaking my research at the Elizabeth Macarthur Agricultural Research Institute, New South Wales Department of Primary Industries. In 2012, I moved to the University of Adelaide, to undertake a post-doctoral research fellowship in Antimicrobial Resistance with A/Prof. Darren Trott. Along with A/Prof. Trott, I established the First National Network on Antimicrobial Resistance Surveillance in Australian Animals. In 2015, I joined Murdoch University as an academic lecture in veterinary and medical infectious diseases.