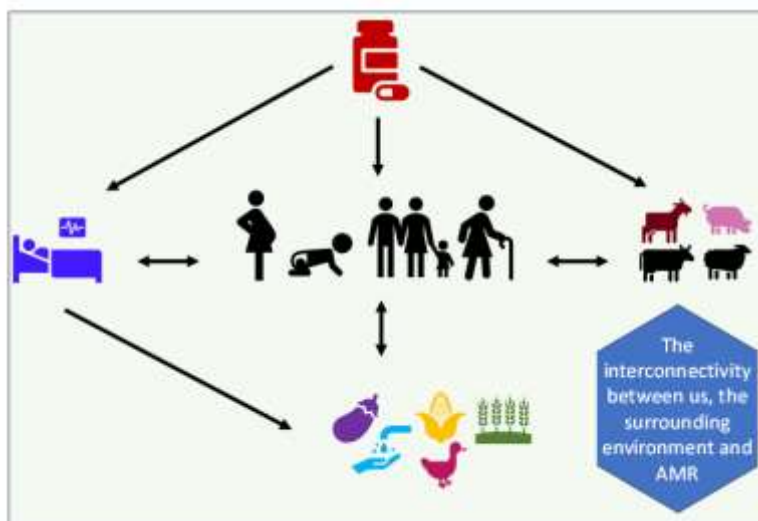


Café Scientifique Headingley

Monday 8th July 2024

Antimicrobial resistance:
new kid on the block or an underestimated old foe?

By: Arya Gupta



Outline: Antimicrobial resistance (AMR) is a looming threat and tipped to cause the largest number of mortalities in the next quarter of this century. If ignored AMR will be the biggest risk to public health, even putting routine surgeries at risk. AMR can arise because of a multitude of factors, such as – misuse and overuse of antibiotics or evolution of bacteria upon exposure to a given antibiotic.

In this talk Arya will explain the concept of AMR, how it arises, the transfer of AMR between bacteria, and the strategies that can be employed to combat its existential rise. He will also talk about his research on how one can use drugs normally used for treating other diseases such as diabetes and cancer to improve the activity of clinically used antibiotics and discuss the impact this research is likely to have. He will also discuss the importance of understanding the intricate interactions between nasal microbiota and bacteria capable of causing infections (pathogen), and how this can contribute to fighting the battle against AMR.

Speaker: Arya (pronounced as R-Joe) is a Senior Lecturer in Biomedical Sciences at Leeds Beckett University. A molecular microbiologist, his research interests are in infectious diseases and public health, with two primary areas of interest – i) understanding the interaction between nasal microbiota and *Staphylococcus aureus*; ii) identifying novel treatment regimens for bacterial infections by repurposing approved drugs. He is also interested in the development of rapid point-of-care diagnostic tools for bacterial infections. He also works with P.Happi, a start-up focussed on Femcare – particularly, a novel way to treat UTIs. Earlier this year Arya was shortlisted for the Royal Society Pairing Scheme and has been selected to be a mentor on the In2Science UK programme, which aims to improve access to careers in STEM for Year 12 students from low-income and disadvantaged backgrounds.

Venue: The New Headingley Club, 56 St Michaels Road, LS6 3BG

Time: Room opens 7:30pm, Talk begins promptly at 7:45pm

Entry: Donation please for room hire and expenses: £4 at the door



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