Date: 9th December 2016

Speaker: Angela Nobbs, University of Bristol

Biography:

Angela Nobbs received her Bsc (Hons) in Applied Microbiology at the University of Manchester in 1999. She was awarded a PhD in Molecular Microbiology at the University of Bristol in 2003, where her studies focused on streptococcal interactions with human epithelial cells and mechanisms of streptococcal colonization. This theme was continued with her first postdoctoral appointment at the University of Minnesota, where she worked on the role of streptococcal surface adhesins in mediating interbacterial competition, and on characterization of housekeeping transpeptidase sortase A. She then expanded this area to investigate the role of sortase A in pilus assembly by group B Streptococcus with a Marie Curie Fellowship at Novartis Vaccines, Siena. She returned to the University of Bristol in 2008 and was appointed Lecturer in Oral Microbiology in 2009. Current projects focus on the interactions of streptococci with the fungus Candida albicans, with host epithelial and endothelial cells, and on the impact of such interactions on microbial colonization and pathogenesis.

Title: Streptococci: away from home and mixing with the wrong crowd
Aims:

*Streptococcus* bacteria have evolved to become exquisitely adapted to colonisation of their hosts. Many species are life-long and dominant members of the commensal microbiota on mucosal membranes of the oropharynx and upper respiratory tract. Other species colonise the intestinal and genital tracts of humans and other animals. The success of streptococci as colonisers can be attributed, in part, to the array of protein adhesins that are expressed on their cell surface. Collectively these facilitate interactions with a variety of host substrata and with other members of the resident microbiota. This presentation will describe our research into the molecular basis of streptococcal colonisation and disease, with specific focus on 2 ongoing projects: i) the associations of oral streptococci with cardiovascular disease and ii) the implications of Group B *Streptococcus* interactions with fungus *candida albicans*.

Outcomes:
Define diseases associated with *Streptococcus gordonii* and S. *agalactiae*

Explain role of protein adhesins in streptococcal colonisation and disease

Describe mechanisms of:
*Streptococcus-platelet* interactions
*Streptococcus-Candida albicans* interactions