

## Microbiology External Seminar Series



"Regulation of biofilm formation in a fungal pathogen"





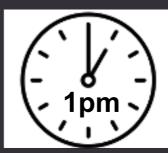
## Dr. Linda Holland Dublin City University

Linda Holland is an assistant professor in Microbiology at DCU, Dublin.

Candida parapsilosis and Candida albicans are important human fungal pathogens. In contrast to *C. albicans*, relatively little is known about the virulence properties of *C. parapsilosis*, a pathogen particularly associated with infections of premature neonates. A major virulence property associated with *C. parapsilosis* is its ability to form a biofilm. Biofilm infections are extremely difficult to treat and are associated with high levels of antimicrobial resistance.

My research involves using molecular tools and next generation sequencing technologies to study biofilm regulation in *C. parapsilosis*. We created the first large scale gene knock-out library for this pathogen. Using this library we were able to identify a putative biofilm regulatory network. Interestingly, we found extensive divergence between the biofilm regulators of *C. parapsilosis* and *C. albicans*. We also compared the transcription profile of *C. parapsilosis* and *C. albicans* biofilms and our analysis suggests the processes shared between the two species are predominantly metabolic.

Friday, 14th September 2018



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**ALL WELCOME**