Zoom on Griffith's legacy 2022
Today's models, approaches and concepts

Registration:

https://uwmadison.zoom.us/webinar/register/WN_I106G4DdQFGrXly4omgtjw

June 22, 2022

4:00pm* Introduction

4:05pm Structure-function studies of DNA uptake to the periplasm of *B. subtilis*
David Dubnau, Public Health Research Institute

4:35pm DNA at the surface of competent *S. pneumoniae* cells
Donald Morrison, University of Illinois Chicago

4:50pm Uptake of environmental DNA in *Bacillus subtilis* occurs all over the cell surface through a pilus structure
Alexandra Kilb (Peter Graumann lab), University of Marburg

5:05pm Identifying novel genes important in competence and transformation in *Streptococcus pneumoniae* through a genome-wide CRISPRi screen
Axel Janssen (Jan-Willem Veening lab), EPFL Lausanne

5:20pm Surfactin-mediated horizontal gene transfer in *Bacillus subtilis*
Danevcic Tjasa (Ines Mandic-Mulec lab), University of Ljubljana

5:35pm BREAK

5:50pm Natural transformation: more than just horizontal transfer of genes?
Ankur Dalia, Indiana University Bloomington

6:20pm The ecology and evolution of bacterial genomes
Michael Brockhurst, University of Manchester

6:35pm Evolutionary responses to codon usage of horizontally transferred genes
Martijn Callens (Stephanie Bedhomme lab), CNRS Montpellier

6:50pm Genomic surveillance in hospitals reveals outbreaks of antibiotic resistance genes
Ashlee Earl, Broad Institute

* London time

June 23, 2022

4:00pm* Introduction

4:05pm Transformation and intragenomic conflict in the pneumococcus
Alexandru Ion (Nicholas Croucher lab), Imperial College London

4:20pm Synthetic community informs transformation parameters
Ophelia Venturelli, University of Wisconsin Madison

4:35pm Distribution of fitness effects of cross-species transformation reveals potential for fast adaptive evolution
Mona Förster (Berenike Maier lab), University of Cologne

4:50pm The evolution of *Helicobacter pylori* populations through horizontal gene transfer
An Nguyen (Michael McDonald lab), Monash University

5:05pm The role of population bottlenecks in plasmid persistence
Andrea Weiss (Lingchong You lab), Duke University

5:20pm BREAK

5:50pm The induction of natural competence adapts *Staphylococcal* metabolism to infection
Daniel Lopez, Centro Nacional de Biotecnología

6:05pm Bacterial genome shuffling creates unique recombination patterns throughout the chromosome
Delyana Vasileva (Joshua Michener lab), Oak Ridge National Laboratory

6:20pm *Bacillus subtilis* nucleoid-associated EbfC protein affects genetic recombination
Ruben Torres (Juan Alonso lab), Centro Nacional de Biotecnología

6:35pm The RecA-directed recombination pathway of natural transformation initiates at chromosomal replication forks in *Streptococcus pneumoniae*
Calum Johnston (Patrice Polard lab), CBI Toulouse

6:50pm New method to address the variability of natural transformation
Jason Chirakadavil (Xavier Charpentier lab), INSERM

* London time