



Australian
National
University

PhD exit seminar: A genetic analysis of *Escherichia coli* using bioinformatic methods

Friday 17 May 2013, 2pm

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Gould Seminar Room, (Rm 235) Gould Buildingc (Bldg. 116), Linnaeus Way, ANU



Escherichia coli is the best-known species of Enterobacteriaceae. The species is genetically diverse and includes both commensal variants and various pathogenic strains and plays a significant role in veterinarian, environmental, and medical science. To understand the diversity within *E. coli*, *E. coli* from a variety of sources: humans, animals, and environment were investigated using a comparative genomic approach. In this study, phylogroup F: an recently described group of *E. coli* strains was investigated. Strains belonging to phylogroup F were found to be closely related to phylogroup D strains known to be responsible for extra-intestinal infection. In addition, conjugative plasmids: key agents

in the adaptation of *E. coli* populations were investigated. These plasmids have changed their role as mediators of intra- and interspecies interactions to become associated with *E. coli* virulence. The outcome of this study leads to significant advances in our understanding of the diversity presented in *E. coli* species.

Presented by

Research School of
Biology

ANU College of
Medicine, Biology
& Environment

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This lecture is free and open to the public

EEG seminar information:
<http://biology.anu.edu.au/News/events-eeeg.php>

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