## VNIVERSITAT D VALÈNCIA (Ö') Institut Cavanilles de Biodiversitat i Biologia Evolutiva



## Seminar

## A closer look at the plasmid paradox

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Plasmids are important drivers of bacterial evolution. For example, plasmids have played a pivotal role in the evolution of antibiotic resistance in pathogenic bacteria by allowing resistance genes to rapidly spread between bacterial strains. However, it is challenging to understand how plasmids can persist in bacterial populations over the long term because of the fitness cost they impose on their hosts (the 'plasmid paradox'). In this talk I will discuss our recent experiments studying the molecular basis of the cost produced by a plasmid in *Pseudomonas aeruginosa* and the effects of compensatory adaptation and positive selection on the population genetics of plasmids.

*Place* Seminar Room, basement, redbrick building *Day* Thursday, April 30, 2015 *Time* 12:30