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Title:	Investigations into the eco-immunological interactions between Drosophila melanogaster and its bacterial pathogens using experimental evolution
Authors:	<a href="#">Aparajita</a>
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Abstract:	Parasites and pathogens are omnipresent and affect the overall health of the infected hosts. It has been suggested that the identity of the pathogen can have a major effect on the evolutionary interactions and the associated costs. Further, hosts adapting to a particular pathogen are expected to trade-off their ability to withstand infection from a different pathogen. To assess the evolutionary consequences of host-pathogen interactions, I worked on two sets of evolved Drosophila melanogaster populations. In one set, I evolved flies against a Gram-positive bacterial pathogen, Enterococcus faecalis, while in the other set, they evolved against a Gram-negative pathogen, Pseudomonas entomophila. The immunocompetence of these evolved flies were explored to answer various eco-immunological questions, such as: (a) life-history traits and trade-off, (b) role of juvenile nutrition on adult immune function, (c) evolution of specificity, and (d) host fitness consequences of co-infection. Overall, I found that selected populations show (a) no trade-offs with life history traits, (b) survive better even under poor nutrition, (c) evol
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