The impact of developmental heat stress on reproductive traits in Drosophila melanogaster

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With global warming, organisms are facing more severe, more frequent, and longer periods of heat stress, hence it is crucial to understand how they will respond to increasing temperatures. Unfortunately, few studies have examined the effect of exposure to high temperature on reproductive traits. This is important because reproduction is often negatively affected at lower temperatures than those affecting survival. Moreover, a decrease in fertility is expected to have serious effects on population persistence.

In Encontro Sciencia, I will show how exposure to heat stress during development impacts different reproductive traits, from behaviour to offspring production. This was done using sequenced isogenic lines of Drosophila melanogaster, incorporating both phenotypic and genetic data. We studied both sexes and analysed the impact of both constant and fluctuating temperatures.

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12h00-13h00