

Evolution and ecology of a Drosophila-Spiroplasma defensive symbiosis

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Multicellular organisms commonly harbour microbes that protect them against natural enemies, and these defensive symbionts are important players in host-parasite evolution and ecology. We have been studying a symbiosis between *Drosophila* flies and a maternally inherited bacterial endosymbiont called *Spiroplasma* that protects against infection by parasitic nematodes and parasitic wasps. Protection appears to involve toxins called ribosome-inactivating proteins (RIPs). *Spiroplasma* genomes encode a diverse repertoire of RIP toxins, and we speculate that toxin diversity and evolution play an important role in specificity against different enemies.

Tuesday - January 28, 2020

FCUL (Building C2), 12h00-13h00, room 2.2.14

