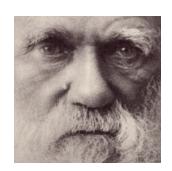


VNIVERSITAT (Cavanilles VALÈNCIA (Institut Universitari Cavanilles de Biodiversitat i Biologia Evolutiva









Seminar(i)

Insect Interactions with Viruses: What Doesn't Kill You Makes You Stronger

Salvador Herrero

BIOTECMED - University of Valencia

Lepidopteran insects are extensively exploited by parasitic wasps using them as oviposition hosts. However, lepidopteran insects are also commonly exposed to viral double-stranded infections DNA by large viruses, including baculovirus, entomopoxvirus and ascovirus. In addition, parasitic wasps require the action of symbiotic viruses to suppress the host immunity allowing the successful development of the parasite. Such multitrophic interactions among viruses, parasitoid wasps and their insect hosts results in overlapping of ecological niches among multiple genomes which may drive divergent evolutionary pressures and promote the exchange of genetic information through horizontal gene transfer (HGT). In this work we report the discovery of multiple events of gene acquisition and domestication of viral-derived genes by Lepidoptera. By deciphering the molecular function of the acquired genes, we provide evidences of HGT as important driving forces in the virus-parasitoidlepidopteran host evolutionary arms race.

WHERE?

WHEN? LANGUAGE? Online. Zoom registration link: https://links.uv.es/cafepau/Salva Herrero Thursday 25/03/2021 - 12:00 h **English**

