



Mardi 6 février 2018, 11:00

Salle de réunion

GENOME FRAGMENTATION IN ENDOSYMBIONTS: GOOD, BAD OR JUST UGLY?

par

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🔍 The genomes of endosymbiotic bacteria are often extremely stable in structure, size, and gene content. For example, endosymbionts in insects diverged by tens or hundreds of millions of years often have genomes almost completely conserved in gene order and content.

🔍 This conservation is thought to reflect the importance of the endosymbiont to its host: these bacteria often provide essential nutrients or defensive functions.

🔍 In this talk, I will show that an endosymbiont of cicadas has repeatedly fractured into complexes of distinct genomic and cellular lineages. I will discuss how these patterns show interesting parallels to the genomic instability seen in some mitochondria.

📌 **Lukasik P, Nazario K, Van Leuven JT, Campbell MA, Meyer M, Michalik A, Pessacq P, Simon C, Veloso C & McCutcheon J, 2017.** Multiple origins of interdependent endosymbiotic complexes in a genus of cicadas. *Proc. Nat. Acad. Sci. USA*, **115**:E226-E235.

📌 **Campbell MA, Lukasik P, Simon C & McCutcheon J, 2017.** Idiosyncratic genome degradation in a bacterial endosymbiont of periodical cicadas. *Current Biology*, **27**:3568-3575.

