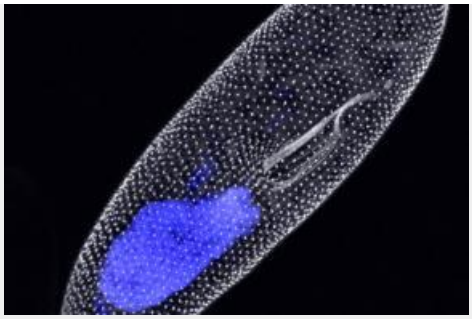

(https://lbbe.univ-lyon1.fr/sites/default/files/styles/img__1280x768__image_scale__crop_main/public/media/images/2021_08_02_paramecium.jpg?itok=a8WCUe5t)

Burst of selfish genetic elements in paramecium

A recent paper involving the LBBE demonstrates massive colonization of protein-coding exons by selfish genetic elements in Paramecium genomes

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Transposable elements are mobile genetic elements that have the ability to multiply within the genome of their host. Like viruses, transposable elements hijack cellular machinery for their own replication. The coding regions of genomes constitute a no-man's land for intragenomic parasites, as any insertion into these regions is generally counter-selected. A recent study, lead jointly by researchers at the LBBE and the IJM, shows that a particular class of transposable element has succeeded in bypassing this constraint to invade the coding regions of the paramecium genome.

Sellis S *, Guérin F*, Arnaiz O, Pett W, Lerat E, Boggetto N, Krenek S, Berendonk T, Couloux A, Aury J-M, Labadie K, Malinsky S, Bhullar S, Meyer E, Sperling L, Laurent Duret L*, Duharcourt S*. Massive colonization of protein-coding exons by selfish genetic elements in Paramecium germline genomes. PLOS Biology.

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