VEILLE BIOTECHNOLOGIQUE

Biomolécules

20/11/2019

Le secret de la longévité découvert grâce à un ver

Working with *Caenorhabditis elegans*, a transparent nematode found in soil, researchers from a Washington's University found out that the nervous system controls the tiny worm's cuticle, a skin-like exterior barrier, in response to bacterial infections. *C. elegans* nematode has a relatively simple structure but it shares genetic similarities with more complex mammals including humans, so this discovery holds implications for human health as well.

Key words : cuticle, collagene, nervous system, infection resistance, longevity

https://www.sciencedaily.com/releases/2019/11/191120144950.htm

Biomolécules

19/11/2019

Les ciseaux CRISPR-Cas9 ont encore frappé

The first patients in each of two early-stage clinical trials testing CRISPR-based treatments for inherited blood disorders have been symptom free for several months with normalized hemoglobin levels. The therapy, known as CTX001, is applied to blood stem cells removed from the patient to cleave the *BCL11A* gene that represses the production of fetal hemoglobin. These cells are then reinfused to provide a healthy supply of this protein.

Key words : blood cells, clinical research, clinical trials, CRISPR, drug developement

https://www.the-scientist.com/news-opinion/early-results-are-positive-for-experimental-crispr-therapies-66755

Biomolécules et microorganismes

15/11/2019

Les bactéries seraient à l'origine des plantes terrestres

The first terrestrial pioneers were bacteria and fungi, and some of these microbes lent a helping hand to an ancestor of plants and some algae, researchers reported on November 14 in *Cell.* The finding provides support for the controversial idea that bacteria can transfer genes not just among themselves, but also to more complex species.

Key words : terrestrial plants, microorganism, horizontal gene transfer, evolution, algae

https://www.the-scientist.com/news-opinion/genes-from-bacteria-likely-aided-plants-move-to-land-66735

Biomolécules

20/11/2019

Un lien entre migraine et surconsommation d'opioïdes

To alleviate migraine pain, people are commonly treated with opioids. But, while opioid treatment can provide temporary pain relief for episodic migraines, prolonged use can increase the frequency and severity of painful migraines. Researchers have tried to understand how opioids cause this paradoxical increase in pain for a decade, but the mechanism remained elusive -- until now.

Key words : migraine, opioids, proteomic

https://www.sciencedaily.com/releases/2019/11/191120131307.htm

Biomolécules

20/11/2019

Des protéines liées à l'obésité et les maladies métaboliques

The signaling protein, known as PGRMC2, had not been extensively studied in the past. [...] But the lab of Enrique Saez, PhD, saw that it was most abundant in fat tissue -- particularly in brown fat, which turns food into heat to maintain body temperature -- and became interested in its function there.

Key words : protein, fat, obesity, disease

https://www.sciencedaily.com/releases/2019/11/191120175618.htm

Alan LE FEUVRE
Victor LE BARS