News in brief

YOUNG BRAIN FLUID IMPROVES MEMORY IN OLD MICE

Cerebrospinal fluid (CSF) from young mice can improve memory function in older mice, researchers report in *Nature* (T. Iram *et al*. *Nature* **605**, 509–515; 2022).

A direct brain infusion of young CSF probably improves the conductivity of the neurons in ageing mice, which improves the process of making and recalling memories.

CSF is a cocktail of essential ions and nutrients that cushions the brain and spinal cord and is essential for normal brain development. But as mammals age, CSF loses some of its punch. Those changes might affect cells related to memory, says co-author Tal Iram, a neuroscientist at Stanford University in California.

The researchers found that young CSF helps ageing mice to generate more early-stage oligodendrocytes, cells in the brain that produce the insulating sheath around nerve projections and help to maintain brain function.

The team suggest that the improvements are largely due to a specific protein in the fluid.

"This is super exciting from the perspective of basic science, but also looking towards therapeutic applications," says Maria Lehtinen, a neurobiologist at Boston Children's Hospital in Massachusetts.

ANEMONES SUGGEST WHY SUNSCREEN TURNS TOXIC IN SEA

A common but controversial sunscreen ingredient that is thought to harm corals might do so because of a chemical reaction that causes it to damage cells in the presence of ultraviolet light.

Researchers have discovered that sea anemones, which are similar to corals, make the sun-blocking molecule oxybenzone water-soluble by tacking a sugar onto it. This inadvertently turns oxybenzone into a molecule that — instead of blocking UV light — is activated by sunlight to produce free radicals that can bleach and kill corals. The animals "convert a sunscreen into something that's essentially the opposite of a sunscreen", says Djordje Vuckovic, an environmental engineer at Stanford University in California.

It's not clear how closely these laboratory-based studies mimic the reality of reef ecosystems. The concentration of oxybenzone at a coral reef can vary widely, depending on factors such as tourist activity and water conditions. And other factors threaten the health of coral reefs; these include climate change, ocean acidification, coastal pollution and overfishing. The study, published on 5 May (D. Vuckovic *et al*. *Science* **376**, 644–648; 2022) does not show where oxybenzone ranks in the list.

Gender bias worms its way into parasite naming

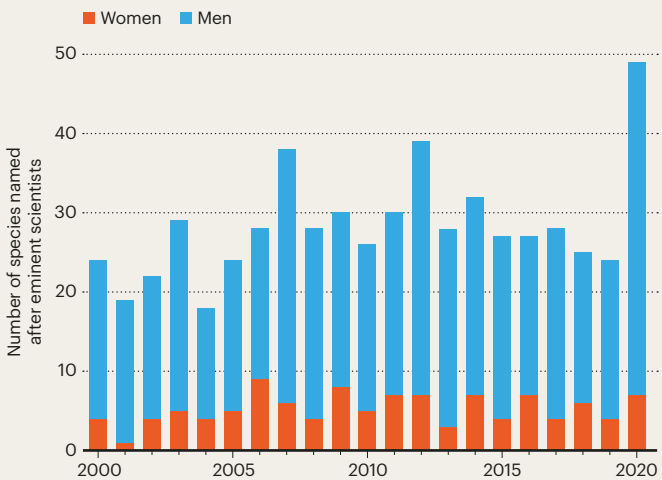
A study examining the names of nearly 3,000 species of parasitic worm discovered in the past 20 years reveals a markedly higher proportion named after male scientists than after female scientists — and a growing appetite for immortalizing friends and family members in scientific names.

Robert Poulin, an ecological parasitologist at the University of Otago in Dunedin, New Zealand, and his colleagues combed through papers published between 2000 and 2020 that describe roughly 2,900 new species of parasitic worm (R. Poulin *et al*. *Proc. R. Soc. B* https://doi.org/htqn; 2022). The team found that well over 1,500 species were named after their host organism, where they were found or a prominent feature of their anatomy.

Many others were named after people, ranging from technical assistants to prominent politicians. But just 19% of the 596 species named after eminent scientists were named after women, a percentage that barely changed over the decades (see 'Parasite name game'). Poulin and his colleagues also noticed an upward trend in the number of parasites named after friends, family members and even pets of the scientists who formally described them. This practice should be discouraged, Poulin argues.

PARASITE NAME GAME

From 2000 to 2020, nearly 600 newly described parasites were named after an eminent scientist — only 19% of them women. The proportion named after women has remained essentially static over those two decades.



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