

PHYSIOLOGY

How alcohol ramps up hunger signals

Brain cells that regulate appetite and feeding are activated by alcohol, offering a possible explanation for why drinking can lead to overeating.

Sarah Cains at the Francis Crick Institute in London and her colleagues exposed mice to alcohol for three days and found that the animals' food intake increased during that period. An analysis of mouse brain tissue showed that alcohol boosts the activity of *Agrp* neurons, which trigger feelings of intense hunger when stimulated. The activity level was similar to that caused by fasting or hunger hormones.

When the team silenced these cells in mice and then gave them alcohol, the animals did not increase their eating. *Nature Commun.* 8, 14014 (2017)

ECOLOGY

Invasive wild pigs spread across US

Eurasian wild pigs transmit disease and destroy crops in the United States, and are expected to spread throughout the country in the coming decades.

The invasive wild pigs (*Sus scrofa*; pictured) compete with



the country's native wildlife and cost the agricultural industry more than US\$1.5 billion a year. To predict their future spread, Nathan Snow, now at the USDA National Wildlife Research Center in Fort Collins, Colorado, and his colleagues modelled the distribution of wild pigs in the continental United States from 1982 to 2012. The authors found that, during this period, the pigs' rate of northward range expansion

accelerated from 6.5 kilometres to 12.6 kilometres per year. If this trend persists, wild pigs are predicted to reach most counties in 30–50 years.

A warming climate may aid the northerly spread of the animals, the authors say, adding that reducing the transport of wild pigs — both accidentally and for sport — will be important in limiting the invasion. *J. Appl. Ecol.* <http://doi.org/bwsp> (2016)



MICROBIOLOGY

Bacterial explorers move fast

Bacteria that were long thought to be stationary are capable of rapid movement across surfaces when grown alongside yeast.

Streptomyces bacteria are common in soil and generate many antibiotics. Marie Elliot at McMaster University in Hamilton, Canada, and her colleagues cultured *Streptomyces venezuelae* along with baker's yeast (*Saccharomyces cerevisiae*) for 14 days. They found that the bacteria form non-branched

filaments that spread over various surfaces (pictured) and obstacles. The 'explorer' cells released a volatile alkaline compound that stimulated physically separated *Streptomyces* to initiate exploration, and inhibited the growth of other bacteria.

This exploratory growth could be a way for the organisms to scavenge more nutrients, the authors say. *eLife* 6, e21738 (2017)

NEUROSCIENCE

Age sees boost in facial recognition

The brain is thought to trim back neural connections as it develops, but scientists report that the region we rely on to recognize faces continues to increase in size into adulthood.

Kalanit Grill-Spector at Stanford University in California and her