

IN BRIEF

PAIN

Placebo and personality

A new study suggests that personality traits can predict how an individual will respond to placebo pain relief when given a painful saline injection into the jaw muscle. People who scored highly for resilience, altruism and straightforwardness, and had low scores for anger and hostility were most likely to report a reduction in pain when given a placebo. These subjects also showed reduced levels of stress hormones and higher release of endogenous opioids during placebo administration.

ORIGINAL RESEARCH PAPER Pecina, M. *et al.* Personality trait predictors of placebo analgesia and neurobiological correlates. *Neuropsychopharmacology* 16 Nov 2012 (doi:10.1038/npp.2012.227)

NEURODEGENERATIVE DISEASE

Immune cell migration in Huntington's disease

The huntingtin (*HTT*) gene, which is mutated in Huntington's disease, is expressed in non-neuronal cells as well as neurons. Here, both microglia and peripheral immune cells from newborn mutant *Htt* mice showed markedly impaired migration, and this impairment could be reproduced by expressing a mutant *Htt* fragment in microglial cell lines. Peripheral immune cells from pre-symptomatic individuals with the Huntington's disease mutation also showed impaired migration, suggesting that these immune changes contribute to the development of the disease.

ORIGINAL RESEARCH PAPER Kwan, W. *et al.* Mutant huntingtin impairs immune cell migration in Huntington disease. *J. Clin. Invest.* 19 Nov 2012 (doi:10.1172/JCI64484)

SENSORY PROCESSING

Inhibition in the awake cortex

The responses of the cortex to sensory stimulation seem to rely on a balance between excitation and inhibition. Previous studies of such responses have largely used anaesthetized animals; now, Haider *et al.* report that recordings of visually evoked responses from the cortex of awake mice show much greater levels of widespread inhibition, resulting in more spatially selective and short-lived cortical responses to sensory stimulation than are seen in anaesthetized animals. This synaptic inhibition might be modulated by attention or reward-related factors to influence visual processing.

ORIGINAL RESEARCH PAPER Haider, B., Häusser, M. & Carandini, M. Inhibition dominates sensory responses in the awake cortex. *Nature* 21 Nov 2012 (doi:10.1038/nature11665)

BEHAVIOURAL NEUROSCIENCE

Don't stand so close to me ...

Oxytocin has been dubbed the 'social hormone' for its ability to facilitate the formation of social bonds. However, it seems that its role is more subtle and complex than that. Here, researchers gave men doses of oxytocin before introducing them to attractive females. Men who were in a monogamous relationship increased the distance between themselves and the women if they had received oxytocin compared with similar men who had not received the hormone, whereas single men did not. However, the hormone had no effect on the men's interactions with other men or on their judgements of attractiveness. Oxytocin might therefore promote faithfulness in monogamous relationships by preventing men from signalling romantic interest by approaching attractive women.

ORIGINAL RESEARCH PAPER Scheele, D. *et al.* Oxytocin modulates social distance between males and females. *J. Neurosci.* 32, 16074–16079 (2012)