Carphology by A Fo Ben

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Figure 1 The red red robin cannot go bob bob bobbing along when listening to the Archers.

TUNE IN, ZONE OUT?

We all know that too much television is bad for our children, but could too much radio be bad for our birdlife? Migratory birds have a bewilderingly accurate sense of direction that allows them to travel for thousands of miles to their breeding grounds when many people can barely find the hospital café. Academics studying the European robin (*Erithacus rubecula*) (figure 1) made the surprising discovery that robins were only able to orient to the correct migratory direction if housed in huts shielded from electromagnetic noise. This effect was not limited to one frequency—the whole of the AM radio range was implicated. Listening to the World Cup coverage on radio may be negative in more ways than one.

Nature 2014;509:353–6.

CRANIAL NERVE N

Anatomy pedants will be pleased to be reminded of the nervus terminalis. It is sometimes known as cranial nerve '0' or 'N' for nulla (as Roman numerals do not have a symbol for zero). We may be forgiven for not being overly familiar with this unmyelinated nerve: neurologists are a conservative bunch and we have only been aware of it for just over a century. The fibres end in the nasal mucosa and are thought to have a sensory and neuromodulatory function releasing luteinising hormone. The nervus terminalis has a tortured history —and was briefly referred to as cranial nerve II in German textbooks of the 1940s and 1950s, when they decided to 'drop' the optic nerve as being 'nothing more than a tract of the brain.'

Clin Anat 2014;27:46–53.

GETTING IT IN THE NECK

There are insufficient studies that help us direct treatments specifically in older adults. A meta-analysis of 44 studies comparing outcomes in younger and older adults following stroke focused on carotid endarterectomy versus carotid stenting; 512 685 individuals had the former treatment, 75 201 the latter. Stenting gave a greater risk of stroke in older adults (OR 1.56, CI 1.4 to 1.75) but an equivalent mortality. Carotid endarterectomy, on the other hand, had similar neurological outcomes, but compensated for by an increase in mortality (OR 1.62, CI 1.47 to 1.77) in older adults.

JAMA Surg 2013;148:1140–52.

MAPPA MUNDI

Two papers in *Nature* attempt a neuroscience holy grail; to map the brain. Pioneering research is paradoxically respected and clumsily inaccurate. Just as we may now condescend to laugh at the primitive maps from the voyages of discovery—so our neural maps will soon be rejected as outdated crude estimates. However, publically available comprehensive maps based on gene expression are landmark tools for research scientists. One paper describes a map of the developing human brain, the other a 'connectome' of the mouse. Politicians quite rightly call this 'big neuroscience'; brain mapping is an initiative funded and supported by none other than President Obama.

Nature 2014. Published Online First. doi: 10.1038/nature13186

Nature 2014. Published Online First. doi: 10.1038/nature13185

WATER, WATER EVERYWHERE

There is nothing worse than weak tea. But in a tepid beverage, exponents of homeopathy may see opportunity; if diluted further still, this disappointing brew could be used to cure tea-based ailments. 'The effectiveness of homeopathy for Clinical Conditions' is a large study funded by the Australian government that overwhelmingly shows that homeopathy has no effect on a range of diseases from asthma to cholera and eczema to malaria. Ingesting 'water cures' clearly can only bring the placebo and nocebo effect and are not an effective treatment for illnesses. It is therefore inconceivable to suppose that any current politician or healthcare official would be a proponent of this.

http://www.nhmrc.gov.au/your-health/complementary-medicines/homeopathy-review

OH RATS!

Is it better to regret something you have done, or something you have not? What is worse than missing out on your favourite meal? Realising that you are a rat, in a cage, being monitored for a neurobehavioural experiment on regret, perhaps. Scientists created a paradigm where rats had to choose whether to wait for a food reward, or move onto another one. Rats who waited longer and received their preferred flavours exhibited fewer signs of regret than those that moved on and had less delicious ratty food. I am enormously impressed that the researchers learned to differentiate between disappointment and regret in rats, as it can sometimes take me a week to realise that Mrs A Fo Ben has had her haircut...

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