



doi:10.1136/practneurol-2016-001468

## HIT AND MS

Bad news for MSologists this month when researchers from Canada comprehensively cured MS with the trivial process of immunoablation and autologous haemopoietic stem-cell transplantation. They report on 24 patients with who had their aggressive MS “fully halted” (terminally so in one case). Their definition of “fully halted” differs from mine, with follow-up as long as 12 years in one case, and under 4 years in another. Brain atrophy reduced to control rates and even an increase in EDSS was seen in a third. Now that the work of MSologists, after diagnosis, will be taken over by specialist nurses they may want to retrain in new areas...such as the neurological complications of immunoablation and autologous haemopoietic stem-cell transplantation.

*Lancet* 2016. pii: S0140-6736(16)30169-6. [Epub ahead of print]

## GUT FEELING

‘Germ free’ animals can be studied to identify the influences of microbiota: “the ecological community of commensal, symbiotic and pathogenic microorganisms that literally share our body space”. Culling germ-free mice and comparing them to their more traditionally-raised equals, researchers looked at differential gene expression with RNA sequencing. Unbiased analyses of the prefrontal cortex identified that nearly 200 genes were differentially expressed and of these 15% of the upregulated genes were involved with myelination. This

overexpression was region and sex specific. Further electron microscopy work showed that the absence of microbiota results in hypermyelinated axons in the prefrontal cortex of these mice. What this means to our patients not raised in a germ-free bubble remains to be seen. However it does appear that cortical myelination relies on the presence of functional microbiota.

*Transl Psychiatry* 2016;6:e774.

## BREVITY IS THE SOUL OF WHAT?

The maxim—*everything should be made as simple as possible, but not simpler* (spuriously attributed to Einstein)—can be taken to extremes. The shortest abstracts on record are for: ‘Guaranteed Margins for LQG Regulators,’—Abstract ‘There are none’, ‘Can apparent superluminal neutrino speeds be explained as a quantum weak measurement?’—Abstract: ‘Probably not.’ And shorter still, ‘Is the sequence of earthquakes in Southern California, with after-shocks removed, Poissonian?’—Abstract ‘Yes’. And in the same vein, ‘Does the one-dimensional Ising model show intermittency?’—Abstract: ‘No’. This last is a winner of the fêted IgNobel prize. So A Fo Ben is posed to ask—‘Can the article abstract be truncated any further?’—‘N’.

## HEARTS AND MINDS

A landmark study was published this month in NEJM on sudden cardiac death in young adults. Chris Semsarian and colleagues did

the seemingly impossible and collected clinical and autopsy information on all sudden cardiac deaths among people (up to 35 years of age) in Australia and New Zealand from 2010 to 2012. These 490 people provide a unique resource. Clinically relevant cardiac gene mutations were identified in 31 of 113 cases (27%) of cases of unexplained sudden cardiac death. It was adequately funded by National Health and Medical Research Council of Australia and brought together teams across two nations. This is a great model and proves that this is not just possible for epilepsy and SUDEP, but necessary.

*N Engl J Med* 2016;374:2441–52.



**Figure 1** Do you have a microbiologist in your life who yearns for a mixed media, work-related piece of art? Fret no more because Elin Thomas from Bristol and Blaenavon crochets exquisite moulds and lichens. They are available on her Etsy page (ElinArt) or at ElinThomas.com



CrossMark