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## REASONS NOT TO BE CHEERFUL

Yet another reason to be grateful for registries in the Nordics (Denmark, Finland, Iceland, Norway and Sweden). Of over 4.5 million children that they could identify 38 661 as having a mother with epilepsy, 42.6% took an antiseizure medication when pregnant. Unsurprisingly valproate exposure increased the risk of having a psychiatric diagnosis by the age of 18 years; this was predominantly a neurodevelopmental diagnosis (adjusted HR, aHR 1.80, which equates to 11% more - 42% in exposed vs 31% unexposed). What is novel, and a cause for concern were the risks associated with other epilepsy drugs. Prenatal exposure to topiramate was associated with attention-deficit/hyperactivity disorder (aHR 2.38; 95% CI 1.40 to 4.06) and exposure to levetiracetam was associated with anxiety (aHR 2.17; 95% CI 1.26 to 3.72) and attention-deficit/hyperactivity disorder (aHR 1.78; 95% CI 1.03 to 3.07).

*JAMA Neurol.* 2023 Apr 17:e230674.

## DISTRESSED GENES

Casual observers of the biopsychosocial model overlook the 'bio' bit at

their peril. An intriguing new study aiming to look at the metabolic consequences of being a trauma survivor report 'methylome' changes associated with functional neurological disorder (FND). This is a genome wide study of epigenetic changes, here methylation of DNA, in 57 patients with FND and 47 controls. They found a common epigenetic 'signature' enriched for biological pathways implicated in chronic stress and chronic pain. There was no single common pathway: methylation levels of genes included in the top two shared pathways hardly overlapped (immune response and neuronal function related pathways).

*Prog Neuropsychopharmacol Biol Psychiatry.* 2023;125:110756.

## SCROTAL RECALL

The former editor of Private Eye, Peter Cook developed an upper-class character Sir Arthur Streeb-Greebling whose pastimes evoked the ambition of the Victorian polymaths, but were essentially pointless. Foremost among these was his attempt to teach ravens to fly under water. *'Difficult? Yes I think the word difficult is an awfully*

*good one here'* So spare a modicum of thought for the authors who attempted to assess the beauty standards that society would expect of the scrotum, and so to get ahead of the next unrealistic cosmetic fad. They conclude, 'Ultimately, it was barely possible to identify a 'beautiful' scrotum; we must instead speak of the least ugly.' File this CPD under the continuing theme of 'neurology/urology switchboard misunderstanding'.

*J Cosmet Dermatol.* 2023 Apr 10. doi: 10.1111/jocd.15712.

## BREAKING CAJAL'S CABAL

AFB relishes nothing more than the noise of a sacred cow who is meeting the abattoir staff. Spare a thought for Santiago Ramón y Cajal when he reads about the neurones that connect without synapses in Science. We have to step away from human neuroscience to consider the ctenophore (marine comb jellies) nerve-net which suggests a complex evolutionary history of the animal nervous system (figure 1). They used high-resolution three-dimensional electron microscopy, to reveal that nerve-net neurones are not separate entities, but rather are interconnected through continuous neurite plasma membranes without evidence of synapses.

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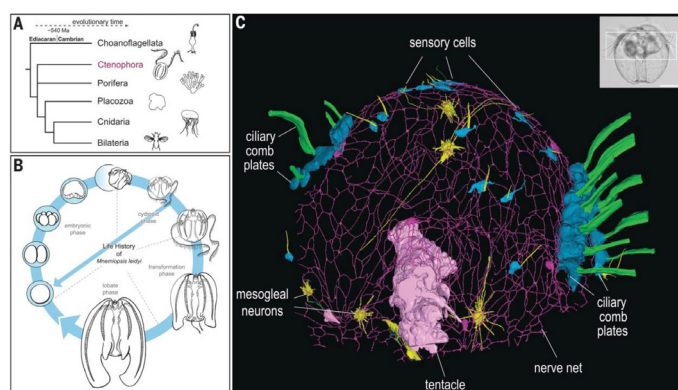
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**Figure 1** Ctenophores and their nervous system. (A) Ctenophores as one of the earliest branching extant lineages of the animal kingdom. (B) The ctenophore *Mnemiopsis leidyi* exhibits complex life cycle stages (C) three-dimensional reconstruction of the nerve net, comb rows, sensory cells, mesogleal neurons and a tentacle.