



doi:10.1136/pn-2022-003599

CRANIAL FIFTH COLUMNISTS

Over time, and more rapidly in some disorders, our brains accumulate genetic mutations that we were not born with. A total of 131 human brains (44 neurotypical, 19 with Tourette syndrome, 9 with schizophrenia and 59 with autism) were analysed for somatic mutation following whole genome sequencing. Then rate of accumulating these variants were not uniform; most brains had 20–60 detectable single-nucleotide mutations, but 6% of brains harboured hundreds of somatic mutations. Mutations were more frequent at greater age and brains with autism showed an excess of variation in genes associated with transcription factor binding motifs in enhancer-like regions in the developing brain. If you are now worried about the health of your mutating bonce, can A Fo Ben reassure you that you cannot/have not passed these changes on to your children? *Science*. 2022;3776605,:511-517.

BRODMANN BE DAMNED!

A Fo Ben has to admit to preferring articles that dare to suggest ‘everything you were taught about this is wrong’ because once you’ve been taught something, and promptly forgotten it, this means you are no longer obliged to re-learn it. In neuroimaging research, anatomical areas are parcellated based on a combination of cytoarchitectonic, structural or functional MRI data. How accurate are these areas? How accurate are the boundaries? Canadian researchers found that functional boundaries performed no better than chance; in contrast resting-state fMRI delineation performed admirably (but

combining functional with anatomical data was substantially inferior). In short, function trumps structure—as function probably spans major anatomical landmarks.

Hum Brain Mapp. 2022;43(12):3706-3720.

ONE BAD APPLE?

Have you come across the ‘Problematic paper screener?’ One of the many ways it identifies scientific papers that are seriously seriously fishy (think lazily written, or worse produced by bots) is to look for tortured phrases. Do you know your *Counterfeit Consciousness* from your *Perhaps Manufactured Acumen*? Or is it *Synthetic Perspicacity*? Or are these tortured phrases for Artificial Intelligence? Never afraid of biting the hand that feeds it, AFB was disappointed that not a single problematic article has been flagged in any BMJ published journal. The Problematic paper screener looks at many other metrics of sloppy writing, possible plagiarism and also ‘feet of clay’—papers that rely on citations from unreliable papers. <https://dbrech.irit.fr/pls/apex/f?p=9999:1>

ICU, EEG IN ICU

EEG abnormalities following return of circulation in survivors of cardiac arrest are common, but what to do? An open-label trial of suppressing rhythmic and periodic EEG patterns detected on continuous EEG monitoring randomised people to standard care—or standard care plus 48 hours of anti-seizure medication. A total of 172 people were enrolled; 62% had myoclonus. In the antiseizure treatment arm 48 hours of complete suppression of rhythmic and

periodic EEG activity occurred in 56% (2% in controls). At 3 months the outcome was dire for all (90% in treatment and 92% in control arm). End points such as mortality were unchanged but length of stay in ICU was longer for those treated with epilepsy medication. Old heads will not be surprised to know that the outcome was treat the patient, not the EEG.

N Engl J Med. 2022;386(8):724–734.



Can we take a moment to celebrate these embroidery nerones from Dr Ali Christy, Paediatric Neurologist, Oregon (Twitter @ OligoclonalBand)

Funding The authors have not declared a specific grant for this research from any funding agency in the public, commercial or not-for-profit sectors.

Competing interests None declared.

Ethics approval Not applicable.

Provenance and peer review Commissioned; internally peer reviewed.

Data availability statement No data are available.

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