

SPOTTED

Spotted around the web: The structural connectome; sleep genes; Australian guidelines

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Research roundup

- Autistic adults with gastrointestinal issues are more likely than their non-autistic peers to have psychiatric conditions, stress and other health concerns. ***Autism***
- Autism and attention-deficit/hyperactivity disorder receive much more genetic research attention than do other neurodevelopmental conditions, according to a meta-analysis. ***Nature Human Behaviour***
- Researchers have mapped white-matter tracts and analyzed genetic contributions thereof in 30,810 adults, in an effort to understand variation in the structural connectome and links to neurologic and psychiatric conditions. ***Science Advances***
- Germ cells from young and old male *Drosophila* have similar levels of de novo mutations, but young flies' cells remove more mutations during spermatogenesis. ***Nature Ecology & Evolution***
- The same copy number variants can be associated with several neurodevelopmental and psychiatric conditions and can have different effects in different people, according to a review. ***Molecular Psychiatry***
- Many genes that contribute to sleep difficulties and neurodevelopmental conditions are linked to synaptic function in cannabinoid, serotonergic and GABA-ergic pathways. ***Journal of Neuroscience Research***

Heritable pathways: Genetic variants influence white-matter structures, which connect brain regions.

- Human-specific factors that regulate cortical development are linked to neurodevelopmental conditions. *Nature Reviews Neuroscience*
- All of the elements of alexithymia assessed by the Perth Alexithymia Questionnaire are elevated, on average, in autistic people, according to a small study. *Spectrum* reported on how alexithymia may **confound research on emotion processing** in autism. *Australian Psychologist*

Science and society

- New clinical guidelines for the diagnosis and treatment of autism in Australia provide families with a road map for seeking appropriate care. *Spectrum* reported on the **draft guidelines** last year. *The Conversation*
- The U.S. National Institutes of Health is seeking information about the state of postdoctoral training in the biomedical research community; responses are due by 14 April 2023. [nih.gov](https://www.nih.gov)
- According to former scientists at Genentech, an internal review there found falsified data in a 2009 paper about Alzheimer's — on which the lead author was Marc Tessier-Lavigne, president of Stanford University and a former top executive at the biotech firm. *The Stanford Daily*
- A University of Virginia study is enrolling participants — babies up to 4 months old — in a study to assess potential epigenetic biomarkers for autism. *13 News Now*
- Autistic people have created their own short films to describe how they see the world, as part of a new two-episode documentary called “Inside Our Autistic Minds,” streaming on BBC TV. *The Guardian*
- Variability from unknown sources often occurs in laboratory mice — despite efforts to control for environmental and genetic factors — leading some researchers to seek more “natural” breeding and living conditions. *The New Yorker*

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