

SPOTTED

Spotted around the web: Connectome resource; GIGYF1 gene; *eLife* controversy

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WEEK OF MARCH 20TH

Research roundup

- Mice and zebrafish missing the autism-linked GIGYF1 gene show increased anxiety and decreased sociability. *Biological Psychiatry*
- Researchers have created a new resource: the connectomes of 40,000 people in the UK Biobank. *bioRxiv*
- Parents of autistic teenagers point to factors that support their children's mental health, such as communication skills and sibling relationships, and those that undermine it, such as severe sensory issues and difficult school environments. *Autism*
- Alternatives to animal research, such as computer simulations or in vitro methods, have improved but have not completely replaced drug testing in live animals, according to an editorial. *Drug Discovery Today*
- Fecal transplants appear to improve neuropsychological functioning in some people with autism, according to a meta-analysis of observational studies. *Frontiers in Psychiatry*
- P21-activated kinases play a role in neurodevelopmental conditions, according to a review of studies: PAK1 variants are generally linked to intellectual disability and PAK2 variants to autism. *Frontiers in Neuroscience*
- Autistic children show more improvement with a behavioral intervention when it is initiated at 18 months of age than when it's initiated at 27 months, according to a clinical trial. *Autism*

Evolving line: Two sister strains of mice have diverged over generations, in part because of a retrovirus.

- Variants of mTOR-related genes contribute to both large brain size and autism. *Journal of Child Psychology & Psychiatry*
- An activated endogenous retrovirus spurs copy number variants in two related BTBR mouse strains, which appear to model autism. *Molecular Psychiatry*
- A comparison of eight autism rating scales found that all can identify autism traits related to social communication, but variability among participants and across time suggests that choosing a scale for use as a clinical trial endpoint requires careful consideration. *Autism Research*
- An antisense oligonucleotide (ASO) therapy for Angelman syndrome successfully reactivates expression of the paternal allele of the deficient UBE3A gene in monkeys, according to a new study. The ASO is currently being tested in a clinical trial for people with the condition, and *Spectrum* covered the **interim results** last year. *Science Translational Medicine*

Science and society

- Psychiatrist Petrus deVries, at the University of Cape Town in South Africa, has received two prestigious awards in recognition of his work on child and adolescent mental health. *Spectrum* featured him in a **profile** last year. *University of Cape Town*
- The Biden Administration has put forth the FDA Modernization Act, which does away with the previous mandate to test drugs and biologics in animals. *Artificial Organs*
- Parents of children with neurodevelopmental conditions such as autism who communicate with the messaging app Telegram share regimens that include unproven and often harmful treatments such as ivermectin. *Vice*
- Michael Eisen, editor-in-chief of the journal *eLife*, has received a vote of no confidence from the editorial board after he implemented new practices; the journal now publishes all submissions alongside their peer reviews. *Nature*

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