

**SPOTTED**

# Spotted around the web: Birth cohort research; DNA methylation; medical marijuana

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## Research roundup

- Birth cohorts are a valuable way to study genetic and environmental influences that contribute to autism. In 2020, *Spectrum* explored the idea that **heritability in autism** is not limited to genes. *Nature Reviews Neurology*
- Rett syndrome occurs in 7 out of every 100,000 girls globally, according to a review of prevalence studies. *Systematic Reviews*
- Poor sleep persists into adulthood in autistic people and is linked to anxiety, perceived stress and decreased physical health. *Autism Research*
- Autism-linked genetic syndromes, including Angelman, fragile X and Prader-Willi, tend to have distinctive profiles of autism traits. *Molecular Autism*
- A study of DNA methylation shows that syndromic and idiopathic autism share some gene pathways. *Molecular Psychiatry*
- Some 75 percent of U.K.-based general practitioners agreed that training in autism care is important, and a similar proportion reported never receiving such training, according to a survey. *Canadian Journal of Education and Social Studies*
- An international survey of autistic people, caregivers and criminal-justice professionals provides a basis for improving interactions between autistic people and law enforcement. *Journal of Autism and Developmental Disorders*
- Placenta DNA from autistic children is enriched for methylation on or near known autism-linked genes and may serve as an early biomarker of the condition. *Molecular Medicine*

**Epigenetic go-between:** Placenta DNA may mediate the link between a pregnant person's exposure and an autistic child's brain.

- Antipsychotic prescriptions in children and adolescents have increased over the past 20 years, according to a records review in England. *The Lancet Psychiatry*
- Autistic adults show no difference in stress responses whether an experimenter looks directly at their eyes or not; non-autistic people tend to have a stress response when the experimenter does not meet their gaze. *Autism*
- Clinicians tend to frame an autism diagnosis differently depending on a child's age: as a deficit to be remedied in younger children and as a social and cognitive difference to be understood in older children. *Sociology of Health & Illness*
- Mouse models of autism rely on well-established behavioral correlates to autism traits, according to a literature review. *Neuroscience & Biobehavioral Reviews*
- Researchers describe a new method, called xAtlas, for identifying gene variants — single-nucleotide variants and small insertions or deletions — from sequence data. *GigaScience*

## Science and society

- Lawmakers and advocates in Ohio continue to lobby for adding autism to the list of qualifying conditions for medical marijuana. *The Columbus Dispatch*
- Scientific journals are wrestling with how to handle papers generated, at least in part, by artificial intelligence chatbots such as ChatGPT. *Nature*
- Researchers seek to understand why autistic people have an increased likelihood of being transgender or nonbinary. *Spectrum* has covered the **fluidity of gender** identity in autism. *NPR*
- Some people object to using labels such as “autistic” or “bipolar” for anything but diagnosed conditions; autistic journalist Maia Szalavitz writes that broader use of these terms helps us to acknowledge the spectrum of human behavior. *The New York Times*
- Autistic journalist Eric Garcia writes that any news on early biomarkers of autism, usually viewed as positive progress, can be double-edged because it feeds into a narrative of fixing autistic people. *MSNBC*
- The Autism Science Foundation has launched a directory of research studies for families interested in participating. *Autism Science Foundation*
- Scientific journal editors often publish their own research in the journals they edit. *Nature*
- Some scientists argue that the ethical principles of animal research — replace, reduce, refine — should include a fourth “R”: repayment, which can include donations to lab animal sanctuaries. *The New York Times*

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