# SPOTTED

# Spotted around the web: AI algorithms, amygdala overgrowth, ANK2 mutations

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### **Research roundup**

- Drugs that act on metabotropic glutamate receptors can mitigate behavioral effects of under- or overexpression of the MECP2 gene in mice, suggesting therapeutic strategies for people with Rett syndrome or MECP2 duplication syndrome. *Neuropharmacology*
- An artificial intelligence algorithm fed functional magnetic resonance imaging data was able to distinguish the brains of autistic boys from those of autistic girls. Spectrum covered the study last month. JAMA
- Prenatal supplements may weaken the association between maternal exposure to environmental pollutants and having a baby with a neurodevelopmental condition, according to a review of studies. *Current Environmental Health Reports*
- Suicidal ideation and suicide attempts in autistic people are linked to the feeling that they're a burden on others and mental rehearsals of suicide plans. (If you or someone you know is having suicidal thoughts, help is available. Here is a worldwide directory of resources and hotlines that you can call for support.) Molecular Autism
- A deep-learning algorithm can automate the analysis of data acquired via two-photon calcium imaging, which reveals communication between distinct neurons in living systems. *Nature Communications*
- The autism-associated gene ANK2 appears to regulate the differentiation and migration of neurons during cortical development. *Biochemical and Biophysical Research Communications*
- Autistic people say that having friendships with other autistic people helps them feel confident and happy. *Autism*
- The amygdala grows too rapidly between 6 and 24 months of age in some children with autism, but not in children with fragile X syndrome. *The American Journal of Psychiatry*
- A research consortium proposes that the Oculomotor Index of Gaze to Human Faces a battery of three eye-tracking assessments in children serve as a biomarker for autism in

clinical trials. *Molecular Autism* 

### Science and society

- The search for a new director of the U.S. National Institutes of Health has prompted discourse about shifts in its mission. *STAT*
- Many Ukrainian scientists are fleeing, fighting or sheltering in place with students, and many research buildings and sites have been damaged. *The Scientist*
- Children in the United States often wait months to get an autism diagnosis and then to get therapy, a situation that only worsened during the coronavirus pandemic. *CNN*

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