

SPOTTED

Lab-grown embryos; 3D genome architecture; preterm outcomes

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- Naive human stem cells can grow into a laboratory embryo that meets key developmental milestones. *Spectrum* has previously reported on **lab-grown mouse embryos** created by the same research group. [Nature](#)
- Autistic children and adolescents engage in camouflaging behaviors to fit into non-autistic settings, which can be stressful even as it becomes habitual. [Research in Autism Spectrum Disorders](#)
- Genetic engineering of human stem cells to create commonly observed deletions on chromosome 15 may provide more consistent cell models of Angelman and Prader-Willi syndromes, according to a preprint. [bioRxiv](#)
- The 3D genome architecture of cerebellar cells is remodeled across the lifespan — in both mice and people. *Spectrum* **covered** this research last year, before its publication. [Science](#)
- Mice carrying variants of the autism-linked SHANK3 gene show behavioral changes that are mitigated by oral acetate treatment. [Brain, Behavior, and Immunity](#)
- Ubadah Sabbagh, a Massachusetts Institute of Technology researcher born in Syria, has won the 2023 Young Arab Pioneers Award and other accolades for his research on brain circuits involved in neurodevelopmental conditions. [The McGovern Institute](#)
- People with variants of the gene TBL1XR1 show a wide range of phenotypes, including autism, global developmental delay, hypotonia and epilepsy. [Gene](#)
- Mice missing the autism-linked gene FOXP1 in the cortex show changes in cortical neuron structure, altered responses to tactile stimuli and heightened fear responses. [Molecular Autism](#)

Barrel roles: Cortical serotonin staining shows structural form development in wildtype mice (left) and those missing FOXP1 (right).

- The International Society for Autism Research has a program to help academics collaborate with autistic community members to boost participatory research studies. *Spectrum* reported on [these efforts](#) last year. [Autism Research](#)
 - Children with congenital heart defects have an increased likelihood of having a developmental condition such as autism or intellectual disability, according to records from nearly 2 million children. *Spectrum* reported on [this association](#) in July. [Birth Defects Research](#)
 - Researchers have launched a public database of short tandem repeats across the human genome. *Spectrum* reported on [DNA repeats in autism](#) in 2020. [Journal of Molecular Biology](#)
 - Children born before 33 weeks' gestation appear to fall into four distinct neurobehavioral profiles, with 85 percent having no or mild developmental delay and few behavioral issues. [Pediatric Research](#)
 - Addressing social and psychological factors has lowered the high blood pressure of an autistic woman whose hypertension was resistant to medical treatment. [Journal of Hypertension](#)
 - Autistic people do not appear to have problems with predictive sensory processing but face challenges in changing conditions, according to a new study. *Spectrum* has an [explainer](#) on the predictive coding theory of autism. [PLOS Computational Biology](#)
 - The organization Women in Neuroscience has profiled Camilla Bellone, a University of Geneva researcher who studies synaptic function and social behavior. [Stories of Win](#)
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