

SPECIAL REPORT SUBARTICLE

Editors' picks: Our favorite stories from 2014

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There was no shortage of **big autism news in 2014**, and we covered it all. But the biggest stories aren't necessarily the best. Here are some gems you may have missed over the year.

Genetics first: A fresh take on autism's diversity

Each child with autism is different from the next. One approach rapidly gaining momentum makes sense of this diversity by grouping children together based on their genetics, then looking for patterns in their symptoms. In this long feature, Sarah DeWeerdts explored the potential of the 'genetics-first' approach, talking to both scientists and the families of the children involved.

Mystery gene uncovered in autism studies may steer neurons

Two massive sequencing studies published in November identified ANK2 as a top autism candidate. But autism researchers know little about this gene beyond that. Jessica Wright investigated this newcomer to the field and found researchers who have been studying its function for decades.

Suicidal thoughts alarmingly common in people with autism

Several large studies of adolescents and adults with autism reveal that bleak moods and suicidal despair are extremely common, particularly among those on the milder end of the spectrum. Sarah DeWeerdts produced a gripping look at the difficulty in recognizing and coping with this suicidality because people with autism don't talk about their emotions in typical ways.

Studies try to pin down timing of 'early' autism treatment

In the sometimes-contentious field of autism, most researchers agree that early diagnosis and intervention is crucial. Yet there's surprisingly little hard evidence about whether early initiation of behavioral therapy improves the lives of people with autism, and when best to start it. Sarah DeWeerdts explored this conundrum and the efforts underway to solve it.

Widely used genetic technique may lead to spurious results

Researchers have long suspected that a popular method used to mimic the effects of mutations may lead to misleading results. This suspicion about shRNA's off-target effects turned out to be well founded, as Jessica Wright discovered in this piece.

Autism characteristics differ by gender, studies find

Two studies published in March support the notion that autism looks different in girls than it does in boys. Sarah DeWeerdts took a close look at gender differences in autism and explained why the experiences of boys and girls with the disorder — and their underlying biology — may be distinct.

Studies question link between head circumference, autism

Two studies published in October cast doubt on the long-held link between head size and autism. Although Leo Kanner included 'macrocephaly' in his original description of the disorder, Nicholette Zeliadt discovered why this symptom is not one-size-fits-all.

Web of genes may hold clues for autism treatments

Most of the genes that have emerged as the strongest autism candidates have turned out to regulate the expression of hundreds, if not thousands, of other genes. Jessica Wright dove into this complexity and discovered that some scientists see it as an opportunity rather than a challenge.



Brain development gene emerges as strong autism candidate

Children with autism who have mutations in the gene ADNP share similar facial features, including high hairlines, prominent foreheads and unusually shaped eyes. Following a series of papers implicating this gene's role in autism, Kate Yandell took a close look at its relationship to the disorder.

Facial measurements resurface in search for autism clues

Some children with autism have unusual facial features, which may hold clues about the origins of the disorder. Nicholette Zeliadt found that new tools are breathing new life into the controversial field of dysmorphology.