

Mystery of the mind: How autism got its start in the developing brain

Here are some of the key points [neuroscientist Kevin] Pelphrey made on how autism may get its start in the developing brain, how the disorder is different between boys and girls, and how large, long-term studies of children with autism might yield clues about the condition.

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[SN:] How close are scientists to an autism biomarker? [Pelphrey:] Biological signatures, or biomarkers, of autism might enable both earlier detection and a way to see if interventions to treat the disorder are working. In 2017, researchers found [signatures of autism](#) in the brains of 6-month-old babies who would go on to be diagnosed with the disorder at age 2. Other attempts to find autism markers involve [abnormal neural activity](#), differences in [eye contact](#) and even changes in [gut microbes](#).

But for a biomarker to be useful, it needs to check a lot of boxes, Pelphrey said. It must be reliable, predictive, informative at the individual level and easy to bring into pediatricians' offices, among other things. So far, none of the proposed biomarkers check all of those boxes.

Along with colleagues, Pelphrey is studying the utility of a brain-imaging technique that could make spotting abnormal neural activity a little easier for clinicians. Called functional near-infrared spectroscopy, it uses light to measure oxygenated blood as a proxy of brain activity. The method is less precise than MRI but cheaper.

Read full, original post: To unravel autism's mysteries, one neuroscientist looks at the developing brain