



# 25 Breakthroughs in Georgia



## NO. 16:

### A method to detect autism earlier

Identifying autism spectrum disorder early can have a profound impact on the lives of the very young.

That's because the human brain grows and develops exponentially in the first months and years of life. The earlier intensive therapy can begin for children with autism, the better they will be able to develop to their full potential.

Here's the problem: autism is typically not diagnosed until a child reaches the age of 4 or 5 – years after the “window of opportunity” for capitalizing on the brain's rapid early development.

But scientists at Emory University developed eye-tracking technologies and methods that identified markers of autism by the sixth month of life. At that tender age, their research showed, babies who began to make less eye contact with human faces were eventually diagnosed with autism.

The discovery — made by Ami Klin, a GRA Eminent Scholar, Warren Jones and others at the Marcus Autism Center and Children's Healthcare of Atlanta – was historic. Autism markers had never been observed so early in a child's life. The breakthrough means that new intervention strategies might be developed in the future to help children with autism much sooner than it is now possible.

This summer, Klin, Jones and Marcus Autism Center colleagues began preparing a major clinical trial for detecting autism in toddlers, which the National Institutes of Health identified as the most pressing need in the field. The FDA is monitoring the trial.

If successful, the trial would be a major advance toward the goal of universal screening for autism in toddlers using a community-viable tool. And the technology could radically change patterns of early screening in primary care, thus expanding access to services and maximizing the potential for the many thousands of children affected by autism.

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