



RESEARCH2REALITY

Shining a light on research & innovation.

Putting Together the Pieces of the Autism Puzzle

An interview with University of Toronto researchers:

Ada Chan, Graduate Student

Stephen Scherer, Geneticist

Ada Chan

Autism spectrum disorder is a common neurodevelopmental disorder that was characterized by two core symptoms: repetitive and restrictive behaviours, and social communication deficits.

Stephen Scherer

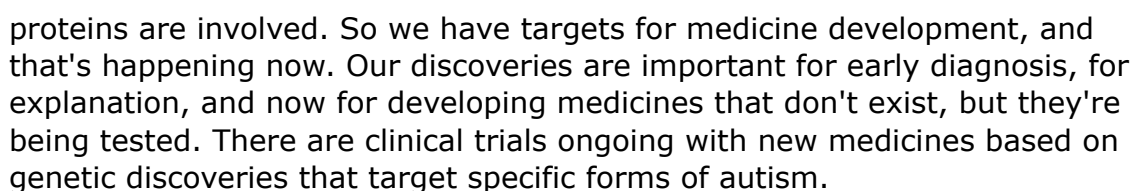
The whole hypothesis of what autism was based on data generated using very limited and antiquated technologies, really. So with these new genome-wide microarrays - it's a technology that allows us to scan the DNA at a much higher resolution - so essentially a telescope to look broader into the universe, but in this case to look deeper into the DNA, into the cell. And once we did that, we had explanations for ten percent of the families, why autism was coming about in their children. And just a year before that we didn't have those answers. This is nothing the parents can do, this is just genetics, it's just random.

How could your research lead to autism treatment?

Stephen Scherer

There's no medicine currently available to treat the core features of autism. But now that we've identified these genes, we immediately know which

TODAY'S RESEARCH. TOMORROW'S REALITY.



Ada Chan

It's really important to have good data and make sure that we report genetic findings about autism, that we're really confident about these so that families are appropriately informed about what's going on.

Stephen Scherer

Autism is a genetic condition. It captures the essence of what makes us human, why we communicate, how we socially interact, how we think. Studying individuals with autism, the goal is to help them, help their families, but also to better understand humans and what makes us tick.