

# Major pledge will boost brain research into causes of autism

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Autism will be better understood thanks to a substantial investment from a US philanthropic foundation to the University of Edinburgh.

The Simons Foundation has pledged £20 million for pioneering studies into the biological mechanisms that underpin changes in [brain development](#) associated with [autism](#).

Researchers say the investment could eventually lead to new treatments for people with [autism spectrum disorders](#).

Autism spectrum disorders affect approximately 75 million people worldwide. Key symptoms include altered social interaction, communication and restricted and repetitive behaviour. The disorders are often associated with intellectual disability or impaired motor control.

The Simons Initiative for the Developing Brain will be based at the University of Edinburgh's Patrick Wild Centre for Research into Autism, Fragile X Syndrome and Intellectual Disabilities.

Experts will use advanced techniques to probe [brain](#) development in the presence of DNA changes that are known to cause autism.

They will investigate how variations in the wiring of the brain can impact on way the brain processes information, which ultimately underlies our intellectual and social abilities.

The initiative will enable brain scientists to work more closely with clinical teams that care for children and their families and will facilitate the development and testing of new therapies.

Professor Peter Kind will serve as Director of the new Simons Initiative for the Developing Brain, and also of the Patrick Wild Centre, established by private donations from families affected by Fragile X Syndrome and other forms of autism.

Professor Kind said: "This is an amazing opportunity to bring together a range of scientific and clinical expertise at the University with the aim of understanding how the brain develops on multiple levels, including molecular biology, neural circuitry, genetics, behaviour and cognition.

"By combining these approaches, we will learn how a healthy brain matures and gain valuable insights into the developmental origins of autism.

"Using this knowledge, we aim to deliver new diagnostic tools, better therapeutics and new interventions to the clinic that will address the causes and consequences of autism."

Louis F. Reichardt, director of the Simons Foundation Autism Research Initiative said, "The Patrick Wild Center has already made seminal contributions to understanding how RETT and Fragile X genes control brain development, and they have even identified promising approaches to treatment. We hope the foundation's support will enable them to apply these types of studies to other conditions on the autism spectrum."

"Professor Kind and his colleagues have been doing outstanding, innovative work, both in the lab and in their clinical studies," said Marilyn Simons, president of the Simons Foundation. "We are proud to support this further exploration into the biology of the [developing brain](#)."

Jim Simons, chair of the Simons Foundation, added, "We are confident that the great scientists already in place, coupled with the comprehensive facility being developed, will accelerate understanding of autism and hasten the development of meaningful treatments."

Professor Sir Timothy O'Shea, Principal of the University of Edinburgh said: "We are tremendously grateful to the Simons Foundation for their generosity and vision. Their investment is a landmark commitment amidst an on-going effort from donors at all levels to deepen our research programmes and accelerate progress in medical science."

Provided by University of Edinburgh

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