After 18 years of research, Indian and Australian scientists have identified a new gene directly linked to schizophrenia.

Scientists from the University of Queensland (QBI) in Australia and a team of Indian researchers analysed the genomes of over 3,000 individuals and found those with schizophrenia were more likely to have a particular genetic variation.

The team of Indian researchers was led by R. Thara, co-founder and director of the Chennai-based Schizophrenia Research Foundation.

Bryan Mowry from QBI said such studies had predominantly been done in populations with European ancestry, with more than 100 schizophrenia-associated variants identified previously.

“Looking at other populations can highlight different parts of the genome with a more robust association with the disease,” Dr. Mowry said.

“This study identified a gene called NAPRT1 that encodes an enzyme involved in vitamin B3 metabolism — we were also able to find this gene in a large genomic data-set of schizophrenia patients with European ancestry,” he said.

Function in the brain
“When we knocked out the NAPRT1 gene in zebrafish, brain development of the fish was impaired — we are now working to understand more deeply how this gene functions in the brain,” Dr. Mowry said.

“Our studies aim to shed more light on what makes people susceptible to schizophrenia and possible treatments for the future,” Dr. Mowry added. According to a statement released by the university, Dr. Mowry and Dr. Thara met in the late 1990s when they discussed studying a population in India.

“Thara is a driving force for research into schizophrenia in India and her team in Chennai has been central in recruiting patients, while QBI has been able to fund the processing of blood samples they’ve collected,” Dr. Mowry said.