

Research backs theory on autism, schizophrenia

November 30 2009

(PhysOrg.com) -- New research by Simon Fraser University evolutionary biologist Bernard Crespi reinforces his theory that autism and schizophrenia are diametric or opposite conditions based on genes.

His latest study, Comparative Genomics of [Autism](#) and Schizophrenia, is published today (Nov. 30) in the *Proceedings of the National Academy of Science*.

"Our findings provide new insights into the 'genomic architecture' of these major human mental illnesses," says Crespi, who a year ago stunned the global scientific community with his theory suggesting that genes passed on from either parent can steer [brain](#) development in certain directions.

Crespi says the work supports the hypothesis that risks of autism and schizophrenia "have evolved in conjunction with the evolution and elaboration of the human social brain."

Crespi's latest research involves analyses of all of the genetic and genomic data available on autism and schizophrenia.

With it, Crespi and his research team evaluated and tested alternative theories for the relationship of autistic conditions with schizophrenia conditions.

Among their findings, data from studies of head and brain size

“phenotypes” -the physical or biochemical characteristics of organisms as determined by genetics and the environment - show that autism is commonly associated with developmentally enhanced brain growth, while schizophrenia is characterized by reduced brain growth.

"The most significant finding of this research is its clear support for the model of autism and [schizophrenia](#) as being diametric or opposite conditions," says Crespi.

Provided by Simon Fraser University

Citation: Research backs theory on autism, schizophrenia (2009, November 30) retrieved 18 April 2024 from <https://medicalxpress.com/news/2009-11-theory-autism-schizophrenia.html>

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