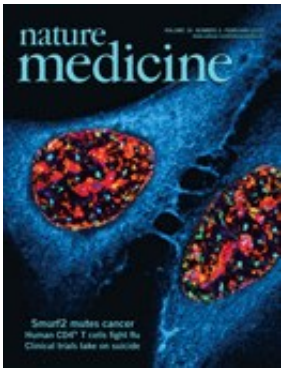
UNC investigator issues call to action for schizophrenia research

February 10 2012, By Tom Hughes



Dr. Sullivan's opinion piece is published in the February 2012 issue of Nature Medicine.

(Medical Xpress) -- Much of medical research is aimed at figuring out what role a single gene or molecule plays in the development of disease.

While that approach has proven to be tremendously helpful for many diseases, more than 20 years of "highly effortful" genetic studies in schizophrenia have failed to find any single factor that by itself causes this serious psychiatric disorder, writes University of North Carolina at Chapel Hill researcher Patrick F. Sullivan, MD, in an opinion piece published in the February 2012 issue of the journal Nature Medicine.

Instead, Sullivan argues, researchers should approach schizophrenia as a "pathway disease" – one that results not from a single cause but from

dozens or even hundreds of factors that collectively contribute to the development of disease.

“A priority for the field,” Sullivan writes, “must be to complete genomic screens of a sufficient number of cases to define the pathway components with precision.” He suggests that a study involving 50,000 cases and 50,000 controls would be a sensible target based on results from other human traits.

Knowledge gained from doing this work could possibly lead to the prevention of the development of schizophrenia in those at risk, Sullivan argues.

“Critically, it is possible that any such pathway is intrinsically modifiable and that people with schizophrenia are not ‘doomed from the womb’ but rather could anticipate return to relatively normal long-term function.”

Provided by University of North Carolina at Chapel Hill School of Medicine