Metro (UK)

May 12, 2011 Thursday   
Edition 1;   
Scotland

**New treatment for** **schizophrenia**  
**SECTION:** NEWS; Pg. 34  
  
**LENGTH:** 119 words

SCIENTISTS have identified a potential target for the treatment of schizophrenia.

The condition affects four in every 1,000 people in the UK, causing hallucinations, delusions and muddled thought or speech.

Glasgow University researchers say a protein critical for normal brain function may offer fresh treatment hope.

The substance, DISC1, plays a key role in the development of the brain cortex.

Researchers have been working to understand how defects in the cortex - known to play a part in schizophrenia - are formed.

The team has shown DISC1 acts as 'a molecular switch' to control two key stages in the development of the cortex.

It is hoped medicines can now be developed to take advantage of this 'switch'.

The Express

May 12, 2011 Thursday   
Scottish Edition

**Scots unlock clue to mental illness**  
**BYLINE:** By Judith Duffy  
  
**SECTION:** NEWS; 10  
  
**LENGTH:** 210 words

SCOTS scientists have uncovered clues to how schizophrenia is triggered which could lead to new treatments for the debilitating disease.

Researchers at the University of Glasgow have discovered how a protein linked to the mental health condition acts as a switch to control key stages in the development of the brain.

It is hoped the findings could lead to the development of drugs which can correct defects in brain function which trigger schizophrenia, as well as mood disorders and autism.

Schizophrenia sufferers experience symptoms such as hearing voices, paranoid delusions and muddled thought or speech.

According to the latest figures, around 3,000 people in Scotland are admitted to hospital every year with the disorder.

Study leader Professor Miles Houslay, of the Institute of Neuroscience and Psychology at the University of Glasgow, said:

"Schizophrenia, mood disorders and autism cause great emotional and financial hardships for individuals, their families and for society as a whole.

"Because of this we desperately need to know what goes wrong in the brain that leads to these debilitating conditions."

The study, published in the journal Nature, has shown that protein DISC1 acts as a switch which controls key stages in the development of the cortex.

The Scotsman

May 12, 2011, Thursday   
1 Edition

**Scottish experts aiming to switch off schizophrenia**  
  
**BYLINE:** Lyndsay Buckland  
  
**SECTION:** Pg. 14  
  
**LENGTH:** 462 words

SCOTS scientists have raised hope of new treatments for schizophrenia.

The team, from Glasgow University, focused their attention on a protein in the body known as DISC1, which plays a role in brain development.

Researchers found that defects in the protein could be rectified with drugs to combat their effects on schizophrenia.

The research, published in the journal Nature, opens up the prospects of new ways of tackling the condition, which affects between two and four people per 1,000 in the UK population.

It has been widely thought that DISC1, which plays a vital role in the development of the brain cortex, may also influence the risk of schizophrenia and other disorders such as autism.

This part of the brain is responsible for functions such as memory, attention, thought, language and consciousness, but until now it was not clear how defects in this area developed to cause mental health problems.

The DISC1 protein acts as a "control centre" in the brain by recruiting other types of protein and attracting them together on the surface where they can work to control brain development.

Professor Miles Houslay, of the Institute of Neuroscience and Psychology at Glasgow University, said: "While it is now well-recognised that DISC1 is a major susceptibility factor for these brain diseases, we still don't understand enough about the range of processes it controls and how they go wrong in mental illness."

But the researchers, working with US colleagues from Johns Hopkins University in Maryland, Duke University in North Carolina and scientists at Keio University, Tokyo, have now moved a step closer to understanding how the protein could be harnessed for new treatments.

They showed that DISC1 acts as a "molecular switch" that controls two key stages in the development of the cortex.

One of these stages involves how cells in the cortex multiply in development, while the other relates to how brain cells migrate within the cortex to specific locations that allow them to work properly.

This knowledge could be used to design drugs able to correct any defects which lead to problems developing.

"These processes are critical for normal brain function," Prof Houslay said.

"However, as these new results show that DISC1 is a protein whose function can be dynamically regulated, it opens up the possibility of pharmaceutical and biotech companies designing new medicines able to correct defects in DISC1 that lead to the debilitating disease of schizophrenia."

Billy Watson, of the Scottish Association for Mental Health, said: "Schizophrenia is one of the most-misunderstood mental health conditions, and this kind of research is important in helping us understand its causes.

It's equally important that we fight the stigma associated with mental health conditions."