Schizophrenia, bipolar disorder, alcoholism may have common genetic link

A rare gene variant discovered by UCL scientists is associated with an increased risk of developing schizophrenia, bipolar disorder and alcoholism, confirms new research.

People with the variant are around two to three times more likely to develop schizophrenia or alcohol dependence, reports a new UCL study. The variant, which is found in approximately one in every 200 people, is also associated with a threefold risk of developing bipolar disorder, as previously shown by the same UCL group. The research, published in Psychiatric Genetics, is based on genetic analysis of 4,971 people diagnosed with one of the three disorders compared with 1,309 healthy controls. It found that people with the variant of the GRM3 gene, thought to be important in brain signalling, were at increased risk of developing bipolar disorder, schizophrenia and alcohol dependence.

GRM3's association with schizophrenia was also confirmed by a global study involving a consortium of over 200 institutions including UCL. The research, published in Nature, involved searching the genomes of 36,989 people with schizophrenia and 113,075 healthy subjects from across the world. About 108 different genetic locations were found to be associated with the disease, but GRM3 is the only one for which a specific mutation responsible has been identified.

Read the full, original story: Gene variant linked to schizophrenia, bipolar, and alcoholism