

## ADVANCES IN PSYCHIATRIC GENETICS

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*In order to understand the etiology and pathophysiology; to improve treatment and prevention, genetic study in psychiatry is crucial. Modern psychiatry emphasizes the reality of psychiatric disorder. The validity of a psychiatric disorder includes specific biosocial risk factors and specific pathological mechanism. The development of molecular genetic technology gave a great momentum in the progress of psychiatric genetics.*

*There are five questions waited to be answered in psychiatric genetics: 1) Is there genetic factor in the etiology of a specific psychiatric disorder? 2) What is the clinical meaning of genetic factor in the specific disorder? 3) Where is the localization of the gene related to the specific disorder? 4) How the responsible gene of the specific disorder works? 5) Are there any way for intervention?*

*Twin and adoption studies clearly show that there is genetic factor in the etiology of schizophrenia and alcoholism. The genetic studies of these two disorders will be present in this symposium. The genetic factor was represented in the presence of same disorder in the first degree relatives (FDR) in illustrating the clinical meaning of the genetic factor. In schizophrenia (SCH), these cases with early age of onset had higher prevalence of SCH in the FDR. In the male SCH cases without family history of SCH had higher possibility of having winter birth. Those SCH cases have positive family history had higher possibility of relapse of positive symptoms. The localization of SCH genes had been approached by classical genetic marker, and by candidate gene and positional cloning strategies. Currently, encouraging findings of SCH gene(s) were reported that chromosome 6p, 11, 19, 22 might be possible localizations.*

*In alcoholism genetic studies, subtyping of alcoholism is crucial. Four psychopathological levels were identified as the targets of genetic studies: 1) peripheral protective level, 2) CNS protective level, 3) CNS indirect alcohol-seeking level, and 4) CNS direct alcohol-seeking level. Currently, the peripheral protective level had impressive progress. Aldehy dehydrogenase gene (located in chromosome 12) and alcohol dehydrogenase gene (located in chromosome 4) were found to be responsible genes. The other three levels of genetic studies are still going on.*

