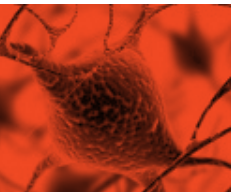

SUCCESSFUL**PROJECTS**

NeuConnect \\ NOVEL STRATEGIES FOR THE TREATMENT OF SCHIZOPHRENIA BASED ON GENETIC VARIATION OF THE NEURAL CELL ADHESION MOLECULE NCAM AND ENZYMES INVOLVED IN ITS POSTTRANSLATIONAL MODIFICATIONS

Austria\ Canada \ Finland \ France \ Germany \ Italy \ Israel \ Luxemburg \ Poland \ Romania \ Spain

Schizophrenia is a devastating psychiatric disease characterized by substantially disturbed cognition and emotion, affecting the most fundamental human features: language, thought, affect, perception, and sense of self. Even though medication is available to improve the symptoms of schizophrenia, not all patients benefit from these drugs. Current research revealed that the susceptibility to schizophrenia may be caused by disturbed brain development and maturation. A relevant molecule in this context is the neural cell adhesion molecule NCAM. The appearance of NCAM during brain development is subject to complex genetic and enzymatic control. The structures affecting the modulation of these control systems represent promising targets for innovative therapeutics for schizophrenia. The NeuConnect consortium will use a unique patient database to identify disease-related variations of NCAM and translate them into animal models. Investigations on the molecular causes and consequences of dysregulated NCAM in animal and cell models will be used to generate and test novel pharmaceuticals for their capacity to restore brain function and to improve clinical symptoms of schizophrenia. The interdisciplinary group of involved scientists and clinicians is perfectly suited to combine expert knowledge on genetic, molecular, neurobiological, and clinical aspects in order to establish new treatment strategies for schizophrenic patients.

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