

SFB 35 Colloquia in Membrane Transport

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"Sert gene variation and risk for emotional disorders - contributions from rodent studies"

Identifying biological mechanisms through which genes lead to individual differences in emotional behavior is paramount to our understanding of how such differences confer risk for neuropsychiatric illness. The emergence of techniques such as in vivo imaging of brain function in humans and genetic engineering in rodents has provided important new in-sights into the impact of serotonin (5-HT), a key modulator of emotional behavior, on neural systems subserving anxiety and depression. A major finding has been the discovery of genetic variation in a crucial regulatory molecule within the 5-HT system, the 5HT transporter (5-HTT), and its influence on emotional traits. The study of the 5-HTT provides a new foundation for understanding the neurobiological and genetic basis of emotional regulation and affective illness.