Stress, Genes and Memory: from Basic Research to Clinical Implications

Stress hormones have a profound impact on learning and memory. I will talk about the memory-modulating effects of glucocorticoids and the clinical implications with regard to the treatment of anxiety disorders. In particular, I will argue that the inhibiting effect of glucocorticoids on the retrieval of aversive memory and the enhancing effect on memory extinction are beneficial with regard to alleviating symptoms. These effects on memory make glucocorticoids also a good candidate for combining with psychotherapy. Finally, I will present genetic and epigenetic findings related to memory and discuss how these findings might contribute to the development of novel therapeutic approaches.