



# SENSORY ENCODING AND THE EMERGENCE OF MEMORY

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## Session 1

### Factors influencing brain function: evolutionary, attention and stress perspectives

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#### Factors determining the stress response in humans and its contribution to health and disease

Stress is considered one of the major environmental influences contributing to the psychological and physical health of an individual across the lifespan. Existing theories suggest that the way individuals react to stressors might be more important in determining the risk for disease than the actual stressors themselves.

My group has over the years contributed to this line of research, identifying personality, early developmental, brain integrity and system interaction factors which on the one hand influence stress perception and processing, and on the other hand can be used to identify vulnerability and resilience factors associating stress with disease. Recently, we have focused on trying to better understand the cross-talk between stress and energy systems and their combined contribution to the health of the individual.

After a concise overview of some of these findings, some of the more recent studies aiming at especially a better understanding of system interaction will be presented.

