

Friday 5 May 2017
Kl. 10.00–12.00
Kungl. Vetenskapsakademien
Lilla Frescativägen 4A, Stockholm



**KUNGL.
VETENSKAPS-
AKADEMIEN**

THE ROYAL SWEDISH ACADEMY OF SCIENCES

Memories of smell: Olfactory learning and the human brain

The sense of smell, olfaction, is an ancient sensory system that is intimately linked to memory and emotion. This event highlights how olfactory research in psychology and neuroscience has provided new insights in human learning and memory. The event includes the second installment of the Stockholm Brain Lecture series with Jay Gottfried, Professor of Neurology at Northwestern University, USA. The event is sponsored by the Royal Swedish Academy of Science class for humanities and for outstanding services to science, and the Board of Human Sciences, Stockholm University.

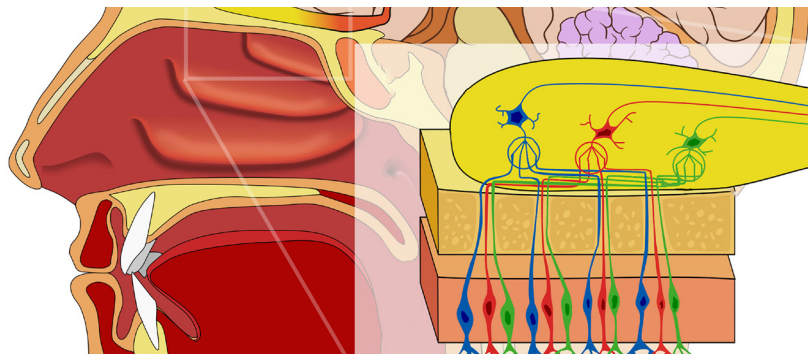


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10.00 Welcome address

Jonas Olofsson, Associate Professor of Psychology at Stockholm University, and Pro Futura Scientia fellow at the Swedish Collegium for Advanced Study.

10.10 Smell loss: A marker of dementia

Maria Larsson, Professor of Psychology at Stockholm University and director of the Gösta Ekman Laboratory

10.45 Coffee break

11.00 Stockholm Brain Lecture: Olfactory learning and categorization in the human brain

Jay Gottfried, Professor of Neurology at Northwestern University

An essential function of the brain is to encode and interpret the behavioral salience of environmental stimuli. For much of the animal kingdom, odors are essential for directing animals toward a wide array of salient stimuli, including food, family, friends, and mates. It follows that the olfactory system should share intimate anatomical overlap with limbic brain regions involved in the control of emotion, decision making, and goal-directed behavior. Research in our lab combines sensory psychophysics with functional MRI, multivariate pattern-based analysis, intracranial EEG recordings, and, more recently, anatomical and histological methods, to investigate odor processing in human piriform (olfactory) cortex. In this lecture, I will focus on our recent studies examining olfactory perceptual learning and associative conditioning, and will also present new data on olfactory targeted memory reactivation in the sleeping human brain. Finally, this presentation will illustrate how sniffing and smelling can profoundly shape network dynamics and oscillations in the human limbic system, with relevance for memory and behavior.

For registration and further information visit <http://kva.se/memoriesofsmell>

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