

Invitation to the conference

Perception and the Mind- from Chemistry to Emotions

15-16 September 2014

House of the Estates, Helsinki



The Finnish Society
of Science and Letters



The Royal Society
of Arts and Sciences in
Gothenburg

The Finnish Society of Sciences and Letters
and
The Royal Society of Arts and Sciences in Gothenburg
invite you to the conference

Perception and the Mind – from Chemistry to Emotions

Date: 15 - 16 September 2014
Venue: The House of the Estates, Snellmaninkatu/Snellmansgatan 9-11, Helsinki

Chemical reactions in our brains, generating molecules with highly specific properties, govern our senses. Happiness, sorrow, love, horror etc., all have a molecular background which we are now beginning to understand. By stimulating such senses on volunteers in experimental trials one has been able to monitor how the concentration of certain neurotransmitters varies in the brain fluid. With the help of MRI scans one has been able to distinguish the chemistry in the brain of three related senses: desire, passion and devotion. Transmitter substances in the brain, such as dopamine, noradrenalin and serotonin, are important for triggering these senses but endorphins and other hormones also play an important role.

These are fascinating phenomena, lying in the field where chemistry, biology and behavioural science meet. The topic also has a human sciences dimension. The way we experience music or a piece of art when we get carried away with it is also related to brain activities.

Flavours, both natural and synthetic ones, are important for the communication between individuals. Feromones can either attract or repel insects and are now commercially used for such purposes. Human perspiration is usually regarded as something unattractive but may, if the brain so decides, be perceived as attractive. We use fragrances to improve the way we smell and the mixing of fragrances into a perfume is an art based on many centuries of experience.

In this symposium the subject “perception and the mind” will be treated from different viewpoints. The professional background of the invited speakers varies widely but they share a common interest of how the brain functions when we get carried away by our feelings. After each lecture there will be time set aside for comments and questions and we expect that these transdisciplinary topics will encourage stimulating discussion.

The Finnish Society of Sciences and Letters and The Royal Society of Arts and Sciences in Gothenburg wish your welcome to participate in this conference!

Marianne Stenius Carl G. Gahmberg
President Permanent Secretary

Krister Holmberg Birger Karlsson
President Secretary General

The Finnish Society of Sciences and Letters

The Royal Society of Arts and Sciences in Gothenburg

PROGRAM

House of the Estates, hall 15

Monday, 15 September 2014

Session 1 Chair: Krister Holmberg, The Royal Society of Arts and Sciences in Gothenburg

13.00-13.15	Marianne Stenius , The Finnish Society of Sciences and Letters. President	Opening words
13.15-14.00	Arvid Carlsson , University of Gothenburg. Nobel laureate. Pharmacology	My 70 years in research – looking back, and ahead
14.00-14.45	Tom Reuter , University of Helsinki. Sensory biology	Emotional aspects of sensory experience, from pain to vision
14.45-15.15	<i>Coffee</i>	

Session 2 Chair: Carl G. Gahmberg, The Finnish Society of Sciences and Letters

15.15-16.00	Ulf Ellervik , Lund University. Chemistry	The chemistry of pleasure
16.00-16.45	Riitta Hari , Aalto University. Brain research	Movement and social interaction – indispensable ingredients of the human mind
16.45-17.30	Fredrik Ullén , Karolinska Institute. Neuroscience	The neurobiology of musical expertise – from neuroimaging to behavior genetics
17.30-18.15	Petri Toiviainen , University of Jyväskylä. Music	Dynamics of music processing in the brain and the body
18.15-19.00	<i>Finnish Society of Sciences and Letters monthly meeting (members only).</i>	
19.15	Conference Dinner at the Bourse Club.	

Tuesday, 16 September 2014

Session 3 Chair: Birger Karlsson, The Royal Society of Arts and Sciences in Gothenburg

9.00-9.45	Mikael Landén , University of Gothenburg. Psychiatry and Neurochemistry	From despair to euphoria and back again. What we can learn about the neurochemistry of mood regulation from bipolar disorder research
9.45-10.30	Gunnar Bergström , University of Gothenburg. Chemical Ecology	Scents rule! A few examples of behaviour-guiding pheromones in animals, and pollination-stimulating odours among flowering plants: chemistry, biology, and evolution
10.30-11.15	Lars Berggren , Åbo Akademi University. Art History	Art and perception – from emotion to chemistry
11.15-12.00	<i>Light lunch</i>	

Session 4 Chair: Marianne Stenius, The Finnish Society of Sciences and Letters

12.00-12.45	Eva Bojner Horwitz , Uppsala University. Public Health	Dance, well-being and memory
12.45-13.30	Jan-Ivar Lindén , Universities of Helsinki and Heidelberg. Philosophy	Apperception as a problem of philosophical psychology
13.30	Krister Holmberg , The Royal Society of Arts and Sciences in Gothenburg. President	Closing remarks

Each slot extends over 45 minutes; however, the intention is that the actual lecture should be confined to 30 minutes allowing 15 minutes for discussion.

REGISTRATION

The conference is open to the public and free of charge but advance registration is required. Registration should be done online at www.scientiarum.fi by **September 1, 2014**.

INFORMATION AND CONTACT

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ABOUT THE ORGANIZERS

The Finnish Society of Sciences and Letters was founded in 1838 to promote scientific discussion and publication within sciences and humanities. It aims to promote the sciences by organizing lectures, seminars and symposiums concerning current topics, conducting publication activity, distributing research grants and awards, contributing to the research community's contacts both nationally and internationally and offering the Society members multidisciplinary contacts.

The Royal Society of Arts and Sciences in Gothenburg was founded in 1778. It is an independent learned society encompassing different disciplines in Sciences, Arts and Social Sciences. Its general objectives are to promote scientific exchange among different disciplines. The activities are mainly focused on lectures, conferences and publications. Support to researchers is given through grants. In addition, a number of prizes are awarded on a regular basis. New scientific needs, not yet recognized in the regular university system, are identified and promoted.