



CICLO DE CONFERÊNCIAS 2014/2015  
**CENTRO DE INVESTIGAÇÃO**  
ISPA - INSTITUTO UNIVERSITÁRIO



# RAPID AND CONTEXT-DEPENDENT PLASTICITY OF HUMAN OLFACTORY FUNCTIONS

Aversive conditioning augments our discriminatory abilities, making us better able to discriminate between relevant and non-relevant signals. It has been long been hypothesized that this originates from a cognitive modification of the sensory stimulus' quality. In this talk, I will outline results from an ongoing project where we pursued the alternative hypotheses, in conflict with the cognitive literature; that aversive conditioning of a stimulus would increase the detectability (sensitivity) of that specific stimulus, thus demonstrating sensory rather cognitive based augmentation. Together, our results obtained using both behavioral and neuroimaging methods indicate that increasing the biological salience of an olfactory stimulus gives it priority to sensory processing, which in turn augment sensory acuity (about 200%) in an odor-specific manner.



**12 JANEIRO 2015**

12H30

**SALA DE ATOS**

**ENTRADA LIVRE**

**Johan N. Lundström**

Division of Psychology, Department of Clinical Neuroscience, Karolinska Institutet  
Monell Chemical Senses Center, Philadelphia  
Department of Psychology, University of Pennsylvania, Philadelphia

ISPA



CI

CENTRO  
DE INVESTIGAÇÃO

Rua Jardim do Tabaco, 34  
1149 - 041 Lisboa

T. 218 811 700  
F. 218 860 954

ci@ispa.pt  
[www.ispa.pt](http://www.ispa.pt)

Segue nos em  
[www.facebook.com/ISPA.IU](https://www.facebook.com/ISPA.IU)