

TRPV1 in pain and beyond  
Istvan Nagy and Francisco Cruz

The vanilloid type 1 transient receptor potential receptor (TRPV1) has been identified as a non-selective cationic channel expressed selectively by a sub-population of primary sensory neurons, and being responsible for the detection of noxious heat in naive-, and for the development of heat hyperalgesia in pathological conditions. Recent findings, on the one hand, shed light on the mechanisms and regulations of TRPV1 activation and expression in primary sensory neurons, and on the spinal processing of TRPV1 activity-produced information in physiological and pathological conditions. On the other hand, however, recent findings also revealed that TRPV1 is expressed in other than primary sensory neurons, and it is involved in other functions than pain. This interdisciplinary session brings together experts, who would present and discuss the most recent basic science and clinical data on various aspects of TRPV1

Participants:

Francisco Cruz, Institute of Histology and Embryology and Department of Urology, Faculty of Medicine, University of Porto, Porto, Portugal  
TRPV1 expression in human urothelium.

Ana Charrua, Institute of Histology and Embryology, Faculty of Medicine, University of Porto, Porto, Portugal.  
Regulation by inflammation of a TRPV1 splice variant in primary sensory neurons.

Peter Santha, Department of Physiology, University of Szeged, Szeged Hungary.  
TRPV1 and insulin, pain and diabetes.

Istvan Nagy, Department of Anaesthetics and Intensive Care, Imperial College London, United Kingdom.  
Relationship between TRPV1 and inhibitory receptors in primary sensory neurons.

Klara Matesz, Department of Anatomy, Histology and Embryology, Faculty of Medicine, University of Debrecen, Debrecen, Hungary.  
Termination pattern of TRPV1-expressing fibres in the spinal dorsal horn.