NATIONAL INSTITUTE FOR PHYSIOLOGICAL SCIENCES

The 44th NIPS International Symposium

The 5th Asian Pain Symposium

Asian Pain Symposium 2013

APS 2013
Okazaki JAPAN

December 18th-20th,2013

Okazaki Conference Center(OCC)

Okazaki, Aichi, Japan

Oral Session

December 18 (Wed)

Session1 Chair; Koichi NOGUCHI (Hyogo College of Medicine)

S1-1 13:00-13:25

Takayuki NAKAGAWA (Department of Molecular Pharmacology, Graduate School of Pharmaceutical Sciences, Kyoto University, Japan)

Roles of TRPA1 in Oxaliplatin-Induced Acute Peripheral Neuropathy

S1-2 13:25-13:50

Kazue MIZUMURA (Department of Physical Therapy, College of Life and Health Sciences, Chubu University, Japan)

Muscle Pain and Neurotrophic Factors

S1-3 13:50-14:25

Lan BAO (Institute of Biochemistry and Cell Biology, Shanghai Institutes for Biological Sciences, Chinese Academy of Sciences, China)

The trafficking regulation of $Na_v1.8$ in primary sensory neurons

Session2 Kazue MIZUMURA (Chubu University)

S2-1 14:45-15:10

Seiji ITO (Kansai Medical University, Japan)

Bifurcate roles of nitric oxide in neuropathic pain

S2-2 15:10-15:35

Koichi NOGUCHI (Hyogo College of Medicine, Department of Anatomy and Neuroscience, Japan)

Pronociceptive Lipid Mediators In Spinal Cord In Neuropathic Pain

S2-3 15:35-16:10

Seog Bae OH (Department of Neurobiology and Physiology, Seoul National University School of Dentistry, Korea)

Chronic Pain as an Intractable Neuroinflammatory Disease

Session3 Seiji ITO (Kansai Medical University)

S3-1 16:30-16:55

Makoto TOMINAGA (Okazaki Institute for Integrative Bioscience, Japan)

Molecular mechanisms of nociception through TRPA1 activation

S3-2 16:55-17:30

Xu ZHANG (Institute of Neuroscience and State Key Laboratory of Neuroscience, Shanghai Institutes for Biological Sciences, Chinese Academy of Sciences, China)

Role of FXYD2, γ subunit of Na^+,K^+-ATPase, in inflammatory pain

December 19(Thu)

Session4 Makoto TOMINAGA (Okazaki Institute for Integrative Bioscience)

S4-1 9:00-9:25

Junichi NABEKURA (National Institute for Physiological Sciences, Japan)

Remodeling of Synapses in Mouse Somatosensory Cortex in Chronic Pain

S4-2 9:25-10:00

Min ZHUO (University of Toronto, Canada)

Presynaptic form of long-term potentiation in the anterior cingulate cortex mediates injury-related anxieity

Session5 Fusao KATO (Jukei University School of Medicine)

S5-1 10:20-10:45

Yasushi KURAISHI (Graduate School of Medicine and Pharmaceutical Sciences, University of Toyama, Japan)

Involvement of Oxidative Stress in Herpes-Associated Acute Pain and Itch in Mice

S5-2 10:45-11:10

Emiko SENBA (Department of Anatomy & Neurobiology, Wakayama Medical University, Japan)

Exercise training attenuates neuropathic pain by modulating microglial activation

S5-3 11:10-11:45

Bai Chuang SHYU (Institute of Biomedical Sciences, Academia Sinica, Taiwan)

Differential mechanisms of $P2X_7$ and BDNF in central post-stroke pain

Session6 Emiko SENBA (Wakayama Medical University)

S6-1 13:15-13:40

Makoto TSUDA (Department of Molecular and System Pharmacology,Graduate School of Pharmaceutical Sciences, Kyushu University, Japan)

Microglial transcription factors and neuropathic pain

S6-2 13:40-14:15

Yong-Jing GAO (Institute of Nautical Medicine, Nantong University, China)

Chemokine-mediated astroglial-neuronal interaction in neuropathic pain

S6-3 14:15-14:40

Hiroshi UEDA (Department of Molecular Pharmacology and Neuroscience, Nagasaki University, Japan)

Roles of amplification of LPA synthesis through microglial activation in neuropathic pain

Session7 Hiroshi UEDA (Nagasaki University)

S7-1 15:00-15:25

Masabumi MINAMI (Hokaido University, Japan)

Role of the Bed Nucleus of the Stria Terminalis in Pain-induced Aversion

S7-2 15:25-16:00

Xian-Guo LIU (Pain Research Center of Sun Yat-sen University, China)

Cytokine microenvironment hypothesis of chronic pain

Session8 Masabumi MINAMI (Hokaido University)

S8-1 16:20-16:45

Ryusuke KAKIGI (National Institute for Physiological Sciences, Japan)

Pain and Itch Perception in Humans

S8-2 16:45-17:20

Wei-Zen SUN (National Taiwan University Hospital, Taiwan)

Awake or asleep? Behavioral correlates of the brain metabolic activity and functional connectivity by pregabalin, alpha-2-delta antagonist, in awake neuropathic pain model

December 20 (Fri)

Session9 Yasushi KURAISHI (Toyama University)

S9-1 9:30-9:55

Hidemasa FURUE (National Institute for Physiological Sciences, Japan)

Spinal GABAergic Excitation by Optogenetic Activation of Descending Noradrenergic System

S9-2 9:55-10:20

Guang-Yin XU (Institute of Neuroscience, Soochow University, China)

Epigenetic regulations of chronic visceral pain in functional gastrointestinal disorders

Session10 Hidemasa FURUE (National Institute for Physiological Sciences)

S10-1 10:40-11:05

Fusao KATO (Department of Neuroscience,Jikei University School of Medicine, Japan)

Nociceptive Amygdala in Various Chronic Pain Models

S10-2 11:05-11:40

Jun CHEN (Fourth Military Medical University, China)

Painful neuropathy and the environment - Prediabetes and Metabolic syndrome, risks of a ‘western lifestyle’

Poster Session

P1 Yiming ZHOU (National Institute for Physiological Sciences, Japan)
Identification of a splice variant of mouse TRPA1 that regulates TRPA1 activity

P2 Masayuki TAKAISHI (Mandom corp., Technical Development Center, Japan)
1,8-cineole, a TRPM8 agonist, is a novel natural antagonist of human TRPA1

P3 Meng ZHAO (Graduate School of Pharmaceutical Sciences, Kyoto University, Japan)
Mechanism of TRPA1 activation in oxaliplatin-induced acute peripheral neuropathy

P4 Kimiaki KATANOSAKA (Research Institute of Environmental Medicine, Japan)
TRPV1- and V2-negative Heat-sensitive Primary Afferent Neurons in Mouse Dorsal Root Ganglia

P5 Shinya KASAI (Tokyo Metropolitan Institute of Medical Science, Japan)
Reduced Supraspinal Nociceptive Responses and Distinct Gene Expression Profile in CXBH Recombinant Inbred Mice

P6 Noboru IWAGAKI (University of Glasgow, UK)
Physiological and Morphological Characterisation of PrP-GFP Inhibitory Interneurons in the Superficial Dorsal Horn of Young Adult Mice

P7 Toshiharu YASAKA (Saga University, Japan)
Excitatory and inhibitory spinal lamina II interneurons that receive inputs from putative low-threshold mechanoreceptors in adult rats

P8 Eiichi KUMAMOTO (Saga University, Japan)
Vanilloid Zingerone Enhances Spontaneous Excitatory Transmission by Activating TRPA1 but not TRPV1 Channels in the Adult Rat Substantia Gelatinosa

P9 Qing-Tian LUO (Saga University, Japan)
Carvacrol Enhances Spontaneous Excitatory Transmission and Produces Outward Current in Adult Rat Superficial Dorsal Horn Neurons

P10 Keisuke KOGA (National Institute for Physiological Sciences, Japan)
Presynaptic P2X3 receptor activates GABAergic inhibitory interneurons in Substantia Geratinosa of rat spinal dorsal horn

P11 Koki IWASA (University of Fukui, Japan)
Contribution of zinc to the pain-induced ERK phosphorylation and neuronal plasticity in the spinal dorsal horn

P12 Daisuke UTA (National Institute for Physiological Sciences, Japan)
Firing pattern and morphological analysis of substantia gelatinosa neurons receiving TRPA1-expressing afferents in adult rat spinal dorsal horn.

P13 Shun WATANABE (Kitasato University, Japan)
The roles of glycosphingolipids on regulation of peripheral glutamate levels during nociception.

P14 Ichiro OKAYASU (Nagasaki University, Japan)
Evaluation for tactile sensory and pain thresholds in the face, tongue, hand and finger of symptom-free subjects

P15 Kanako SO (Kyoto University, Graduate School of Pharmaceutical Sciences, Japan)
Redox-sensitive TRPA1 is involved in dysesthesia induced by transient hindlimb ischemia-reperfusion in mice

P16 Hiroki OTA (Teikyo University, Faculty of Medical Technology, Japan)
Contribution of TRPV1 and TRPV4 in Delayed Onset Muscle Soreness

P17 Teruaki NASU (Mejiro University, Japan)
Analgesic Effect of Intramuscular Injected Neurotropin (NTP) in Repeated Cold Stress model

P18 Shiori MURASE (Chubu University, Japan)
A synergetic effect of nerve growth factor (NGF) and glial cell line-derived neurotrophic factor (GDNF) in inducing muscular mechanical hyperalgesia in rats

P19 Koei HAYASHI (Nagoya University, Japan)
Muscular Mechanical Hyperalgesia Occurs in a Stretch Speed-Dependent Manner after Lengthening Contraction in Rats

P20 Hiroshi IKEDA (University of Fukui, Japan)
Involvement of astrocytes in the long-term facilitation of neuronal excitation in the anterior cingulate cortex of mice with inflammatory pain

P21 Miho SEKIGUCHI (Fukushima Medical University School of Medicine, Japan)
The Effect of Non-Noxious Stimulation in Pain-Related Behavior Compared with Repeated Restraint Stress in an Experimental Nucleus Pulposus Applied Rat Model

P22 Yuka KOBAYASHI (Wakayama Medical University, Japan)
Interaction between macrophage inflammatory proteins and matrix metalloprotease 12 in macrophage is involved in neuropathic pain.

P23 Norikazu KIGUCHI (Wakayama Medical University, Japan)
Histone H3 acetylations enhances chemokine expression leading to neuropathic pain

P24 Nozomi AKIMOTO (National Institute for Physiological Sciences, Japan)
Effect of Chemokine (C-C motif) ligand 1 on Synaptic Transmission in the Spinal Dorsal Horn

P25 Yasufumi HAYANO (Graduate School of Medicine, Osaka University, Japan)
Netrin Acts As a Pain-Inducing Factor in Adult Spinal Cord

P26 Koichi ISAMI (Kyoto University, Graduate School of Pharmaceutical Sciences, Japan)
Peripheral nerve injury-induced infiltration of bone marrow-derived cells into the spinal cord in neuropathic pain: roles of TRPM2

P27 Kiyomi HORI (Kanazawa University Graduate School of Medical Science, Japan)
P2X3,2/3 and ASICs contribute to muscle hyperalgesia and intermittent claudication in a new rat model of peripheral arterial disease.

P28 Koji DOGISHI (Graduate School of pharmaceutical sciences, Kyoto University, Japan)
Behaviors associated with pain in mice model of chronic inflammatory and overactive bladder by intravesical injection of hydrogen peroxide

P29 Nguyen Huu Tu (Department of Medical Chemistry, Kansai Medical University, Japan)
Energy coupling of axon-Schwann cells by Nax and endothelin in nerve regeneration

P30 Tsutomu HAYASHI (Graduate School of Engineering, University of Fukui, Japan)
Involvement of Extracellular Signal-Regulated Kinase and NMDA receptor in the Anterior Cingulate Cortex to the affective component and hypersensitivity of pain

P31 Syuntaro TAKASU (Graduate School of Engineering, University of Fukui, Japan)
Contribution of the descending pain inhibitory system to the analgesic effect by smelling the aroma oil