Novel Pain Therapeutics:

From Basic Research to Clinical Translation and Rehabilitation

23rd-25th October, 2019

University Club,

University of Calabria,

Rende (Cosenza), Italy

Under the Auspices of

Italian Society of Pharmacology

Japanese Society of Pharmacology

Italian Society of Neurological Rehabilitation

A Collaborative Scientific Initiative of

The University of Calabria, Rende (Cosenza), Italy

The University Magna Graecia, Catanzaro, Italy

The Tohoku Medical and Pharmaceutical University, Sendai, Japan

Daiichi University of Pharmacy, Fukuoka, Japan

Sant’Anna Institute for Neurological Rehabilitation, Kroton, Italy

Preliminary Program

Wednesday 23rd October, 2019

Afternoon 17.00 – 19.00

Opening Ceremony

Meeting rationale, Giacinto Bagetta, (Cosenza)

Welcome address, Gino Mirocle Crisci, Rector of University of Calabria (Cosenza)

Welcome address, Maria Luisa Panno, Head of Department of Pharmacy, Health Science and Nutrition, University of Calabria (Cosenza)

Opening Lectures

17.30-19.00

Chairpersons: Shinobu Sakurada (Sendai) / Giacinto Bagetta (Cosenza)

Hiroshi Nagase (Tsukuba) Design and synthesis of orexin receptor selective ligands and their pharmacology

Cristina Tassorelli (Pavia) At the edge of migraine therapy

Welcome Cocktail

Thursday 24th October, 2019

Morning Session 9.30-13.00

Basic Mechanisms of Pain

Chairpersons: Diana Amantea (Cosenza) / Makoto Inoue (Urbana-Champaign)

9.30 – 10.00 Stefania Ceruti (Milan) Purinergic mechanisms and glial cells

10.00 - 10.30 Oliver J Dolly (Dublin) SNAP-25 cleaving botulinum neurotoxins suppress cytokine elevation in DRGs of pain transducers, TRP /V1 and /A1 channels

10.30 - 11.00 Sabatino Maione (Naples) Role of glutamate and endocannabinoids in the plastic changes associated with neuropathic pain

Coffee Break

Basic Mechanisms of Pain

Chairpersons: Laura Berliocchi (Catanzaro) / Tsukasa Sakurada (Fukuoka)

11.30-12.0 Shiro Kishioka (Wakayama) Peripheral administration of 42 nAChR agonist ameliorates neuropathic pain elicited by type 2 diabetes mellitus in mice.

12.00 - 12.30 Kengo Hamamura (Fukuoka) Effects of continuous subcutaneous administration of bergamot essential oil in mice with partial sciatic nerve ligation

12.30 – 13.00 Alberto Chiarugi (Florence) Dexpramipexole blocks Nav1.8 sodium channels and affords analgesia in multiple nociceptive and neuropathic pain models

13.00-15.00 Lunch Break and Poster Discussion

Afternoon Session 15.00 – 18.30

Inflammation and Pain

Chairpersons: Luigi A Morrone (Cosenza) / Kosuke Aritake (Fukuoka)

15.00 - 15.30 Hirokazu Mizoguchi (Sendai) Management of morphine-resistant inflammatory pain

15.30 – 16.00 Tomonori Kaifu (Sendai) A glycosylation enzyme ameliorates experimental autoimmune encephalomyelitis through increasing ligand for an inhibitory C-type lectin receptor

16.00 - 16.30 Makoto Inoue (Urbana-Champaign) Neuroimmunology in inflammatory disease

Coffee Break

Histamine in Pain and Itch

Chairpersons: Patrizio Blandina (Florence) / Shinobu Sakurada (Sendai)

17.00 – 17.30 Tadaho Nakamura (Sendai) Behavioral changes related to increased brain histamine

17.30 – 18.00 Lorenzo di Cesare Mannelli (Florence) Histamine in pain modulation: a role for opioid tolerance management

18.00 – 18.30 Mariaconcetta Durante (Florence) Cross-talk between histamine H4 receptor and A3 adenosine receptor on CD4+ T cells in resolution of neuropathic pain states

Friday 25th October, 2019

Morning Session 9.30-13.00

Translational Research

Chairpersons: Alberto Chiarugi (Florence) / Hirokazu Mizoguchi (Sendai)

9.30 - 10.00 Giulia Magni (Milan) Nutraceuticals and trigeminal pain

10.00 - 10.30 Serena Boccella (Naples) Role of PEA in the hippocampal plasticity associated with neuropathic pain

10.30 – 11.00 Giovanni Appendino (Novara) Botanicals and pain

Coffee Break

Translational Research

Chairpersons: Paolo Tonin (Kroton) / Hiroshi Nagase (Tsukuba)

11.30 – 12.00 Tatsuro Kohno (Sendai) Underlying mechanisms of acetaminophen in the spinal dorsal horn neurons

12.00 – 12.30 Francesca Guida (Naples) Oral cannabidiol prevents chronic pain and neurological dysfunctions in a mouse model of mild traumatic brain injury

12.30 – 13.00 Roberto Russo (Naples) TRPM8 modulators in pain perception

13.05-15.00 Lunch Break and Poster Discussion

Afternoon Session 15.00 – 18.30

Rehabilitation and Pain

Chairpersons: Giorgio Sandrini (Pavia)/ Shiro Kishioka (Wakayama)

15.00-15.30 Roberto De Icco (Pavia) Vagus nerve stimulation and pain suppression in migraine

15.30 – 16.00 Francesco Riganello (Kroton) Role of autonomic system in the vegetative status

16.00 - 16.30 Giorgio Sandrini (Pavia) Italian consensus conference on pain in neurorehabilitation:recommendations in dementia and disorders of consciousness

# 16.30 – 17.00 Damiana Scuteri (Cosenza) Neuropsychiatric symptoms of dementia: role of pain and essential oil of bergamot as a novel therapeutic

Coffee Break

Future Perspectives in Pain Research

Chairpersons: Tatsuro Kohno (Sendai) / Oliver J Dolly (Dublin)

17.30 - 18.00 Kosuke Aritake (Fukuoka) Inhibitor for hematopoietic prostaglandin D synthase accelerates wound healing

18.00 – 18.30 Ernesto Fedele (Genoa) Modulation of glutamate release by presynaptic NMDA receptors as a functional model to investigate pain mechanisms

18.30 Closing Ceremony

**Presidents**

Giacinto Bagetta

Maria Tiziana Corasaniti

Shinobu Sakurada

Tsukasa Sakurada

Giorgio Sandrini

Paolo Tonin

**International Organizing Committee**

Damiana Scuteri

Hirokazu Mizoguchi

Luigi A. Morrone

Chizuko Watanabe

**Scientific Committee**

Annagrazia Adornetto

Diana Amantea

Laura Berliocchi

Patrizio Blandina

Stefania Ceruti

Alberto Chiarugi

Oliver J Dolly

Ernesto Fedele

Hiroko Hagiwara

Livio Luongo

Sabatino Maione

Fumito Naganuma

Laura Rombolà

Rossella Russo

Syun Watanabe

**Scientific Secretariat**

Damiana Scuteri BSc Pharm, PhD

Department of Pharmacy, Health Science and Nutrition

University of Calabria

87036 Rende (CS) Italy

Phone/Fax 39 0984 493462

Email: [damiana.scuteri@unical.it](mailto:damiana.scuteri@unical.it)

Chizuko Watanabe BSc Pharm, PhD

Tohoku Medical and Pharmaceutical University

4-4-1 Komatsushima, Aobaku

Sendai, Miyagi 981-8558, Japan

Phone +81 222 344181 Fax +81 222 752013

Email: [w-chizu@tohoku-mpu.ac.jp](mailto:w-chizu@tohoku-mpu.ac.jp)

**Sponsors**

University of Calabria, Rende (Cosenza)

Department of Pharmacy, Health Science and Nutrition, University of Calabria Rende (Cosenza)

**Meeting Venue**

University Club at University of Calabria, Via Pietro Bucci 87036 Arcavacata di Rende Cosenza. The International Airport of Lametia Terme (Catanzaro) is 60 Km from the University of Calabria. Further travelling information is available on the web (https://www.unical.it/portale/index.cfm).

**Registration Fee**

No fee is to be payed but a registration is needed to attend the meting and this should be sent to the Scientific Sectretariat.

**Fellowships and Financial Assistance**

A limited number of bursaries will be available upon request for supporting young researchers (PhDs and Post-Docs) attending the meeting. The request should be submitted to the Scientific Secretariat.