

A COLLABORATIVE SCIENTIFIC INITIATIVE OF



THE TOHOKU PHARMACEUTICAL UNIVERSITY

DEPARTMENT OF PHYSIOLOGY AND ANATOMY



THE UNIVERSITY OF CALABRIA

DEPARTMENT OF PHARMACOBIOLOGY



THE UNIVERSITY MAGNA GRAECIA OF CATANZARO,
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THE UNIVERSITY CONSORTIUM FOR ADAPTIVE
DISORDERS AND HEADACHE (UCADH)



THE IRCCS SANTA LUCIA FOUNDATION/CERC

MOLECULAR TARGETS FOR NOVEL PAIN THERAPEUTICS

From basic research to clinical translation

Porto Pirgos Hotel (www.portopirgos.com)
Parghelia (VV), Calabria, Italy
22nd-24th September, 2010

UNDER THE AUSPICES



Ministry of Health (www.salute.gov.it/)



National Institute of Health (www.iss.it)



The International Society of Neurochemistry (<http://www.neurochemistry.org/>)



The Italian Society of Pharmacology (<http://www.sifweb.org>)



The Japanese Society of Pharmacology
(<http://plaza.umin.ac.jp/JPS1927/english/index.html>)

FINAL PROGRAMME AND ABSTRACT BOOK
(Eds. Laura Berliocchi, Hirocazu Mizoguchi and Luigi Antonio Morrone)

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MEETING VENUE

Porto Pirog Hotel (tel. 39 0963 600 351) is located at Parghelia (Vibo Valentia), in one of the loveliest spots of the Tirrenian Coast facing the still active Stromboli volcano. The international airport of Lamezia Terme (Catanzaro) is 30 Km from the Hotel. Further travelling information are available on the web at www.portopirogos.com. A reduced price has been agreed for the full board accommodation of participants to the workshop.

LANGUAGE

The official language of the conference is English.

ABSTRACTS SUBMISSION

Participants are welcome to submit abstracts for presentation at the meeting in the form of oral or poster communications to be held in the afternoon session of the 23rd. All abstracts will be for oral or poster presentation and should be written

according to the instructions given below. Deadline for submission: 15th July 2010. Abstracts must be submitted by e-mail to the secretariat (fico@unical.it), indicating "Pain meeting" as subject of the correspondence. Authors will be notified the acceptance of the abstract by August, 10th, 2010. Each abstract, written in times new roman (12 character), should contain a sentence stating the study objective; a brief statement of methods, if pertinent; a summary of the results and a statement of the conclusions. It is not satisfactory to say, "the results will be discussed". Use a short, specific title. Capitalize initial letters of trade names. Use standard abbreviations for units of measure. Other abbreviations should be spelled out in full at first mention, followed by the abbreviation in parentheses. Include the source of research support on the bottom line of the abstract. The presenting author assures the merit of the presentation and that all authors listed have had a significant role in the research being reported. The size of the poster will be 70 cm width and 100 cm height. Posters should be mounted on the numbered boards at the corresponding number as listed in the book of abstract (e.g. P1 to P24) and should be attended by one of the Authors during the whole duration of the poster session; the relative information will be communicated by the scientific secretariat via the letter of acceptance. Posters should be dismounted at the end of the poster session.

A selected number of presentations will be incorporated in the proceedings of the meeting and these will appear in an indexed Journal linked to Pubmed, ensuring that articles can be cited on Medline. Instructions to Authors will be available at <http://gbagetta.jimdo.com> as soon as possible.

REGISTRATION FEE

A registration fee of 345 US\$ must be payed at the time of abstract submission. The fee includes access to the meeting room, congress kit, cocktail at the opening ceremony, coffee breaks. Payment should be made to "MOLECULAR TARGETS FOR NOVEL PAIN THERAPEUTICS", Department of Pharmacobiology, University of Calabria, Via P. Bucci 87036 Rende (CS) Italy. **Bank details:** MONTE DEI PASCHI DI SIENA FILIALE 8473, Via Ponte Pietro Bucci, 87036 Arcavacata di Rende (Cosenza). Cin W, ABI 01030, CAB 80880, Bank Account 000000010947, IBAN IT 52W 01030 80880 000000010947; BIC PASCITMMXXX. Further administrative information can be obtained from Dr Daniela Marsili (tel. 39 0984 493219; email: dmarsili@unical.it).

FELLOWSHIPS AND FINANCIAL ASSISTANCE

A limited number of grants to support for the participation of PhD students and young Post-Docs which will participate in the meeting will be available from the International Society of Neurochemistry. Applicants should send their request via email to Prof. Giacinto Bagetta (g_bagetta@virgilio.it; <http://gbagetta.jimdo.com>).

SCIENTIFIC PROGRAMME

Wednesday, 22nd September

18.00 Welcome address

18.15 Invited Opening Lecture

*Chairperson: **Oliver J. Dolly** (Dublin)*

*Invited Speaker: **Shinobu Sakurada** (Sendai)*

Nociceptin-mediated nociceptive spinal transmission system

Thursday, 23rd September

Morning session

9.00-11.00 **MECHANISMS OF PAIN TRANSMISSION**

Chairpersons: Lucio Annunziato (Naples) & Flaminia Pavone (Rome)

9.00-09.30 *John N. Wood (London)*

From transduction to sensation – genes, cells and circuits

9.30-10.00 *Takaaki Komatsu (Fukuoka)*

Intrathecal morphine-3-glucuronide induces nociception through δ_2 -opioid receptors in the spinal cord

10.00-10.30 *Lucia Negri (Rome)*

Bv8/Prokineticins and their receptors: A new pronociceptive system

10.30-11.00 *Kazuhiko Yanai (Sendai)*

Roles of histamine in pain perception: Studies using histamine-related genes knockout mice

11.00-11.30 *Coffee Break*

11.30-14.00 **PAIN CONTROL AND SENSITIZATION PROCESS**

Chairpersons: Pierluigi Nicotera (Bonn) & Shiroh Kishioka (Wakayama)

11.30-12.00 *Steve P. Hunt (London)*

Descending control of pain

12.00-12.30 *Sabatino Maione (Naples)*

Forebrain TRPV1 receptor and pain mechanisms: role of glutamate and endovanilloids/endocannabinoids in microglial caspase signalling and neural activity in the prefrontal cortex of neuropathic mice

12.30-13.00 *Laura Berliocchi (Catanzaro)*

Differential phenotype features of neuropathic pain in mice bearing a dystonic genotype

13.00-13.30 *Giandomenico Iannetti (London)*

Functional brain imaging and central sensitization

13.30 **General Discussion**

Lunch Break

Afternoon session

Free oral and poster communications

Friday, 24th September

Morning session

8.30-14.00 **INFLAMMATORY MECHANISMS AND PAIN**

Chairpersons: Flavio Moroni (Florence) & Tatsuro Kohno (Niigata)

8.30-9.00 *Marzia Malcangio (London)*

Glial cells: new functions in chronic pain

9.00-9.30 *Tatsuro Kohno (Niigata)*

Role of bradykinin and antagonistic action of NSAID zaltoprofen on bradykinin-mediated enhancement of AMPA receptor activity in spinal dorsal horn neurons

9.30-10.00 *Shiroh Kishioka (Wakayama)*

Leptin and neuropathic pain

10.00-10.30 *Cristina Tassorelli (Pavia)*

Endocannabinoids and migraine

10.30-11.00 *Norikazu Kiguchi (Wakayama)*

Role of macrophage inflammatory protein-1 in the pathogenesis of neuropathic pain

11.00-11.30 *Coffee Break*

11.30-14.00 **NOVEL THERAPEUTIC APPROACHES**

Chairpersons: Norman G. Bowery (Birmingham) & Mitsuo Tanabe (Tokyo)

11.30-12.00 *Paola Sacerdote (Milan)*

Are recent advances in cellular and molecular mechanisms of opioids useful for a better pain therapy?

12.00-12.30 *Mitsuo Tanabe (Tokyo)*

Analgesic effects of gabapentin in neuropathic states and the descending noradrenergic system

12.30-13.00 *Hirokazu Mizoguchi (Sendai)*

A peptidic analgesic for treatment to morphine-resistant intractable pain

13.00-13.30 *Hiroshi Nagase (Tokyo)*

Design and synthesis of novel delta opioid agonists and their pharmacologies

13.30-14.00 *Oliver J Dolly (Dublin)*

Novel SNARE-inactivating biotherapeutics with anti-nociceptive potential

14.00 **General Discussion**

Afternoon session

**17.30-20.00 UCADH ROUND TABLE ON PAIN: FROM BASIC RESEARCH TO
REHABILITATION**

Chairpersons: Giuseppe Nappi (Pavia) & Giacinto Bagetta (Cosenza)

17.30-17.45 *Introduction by Giuseppe Nappi (Pavia)*

17.45-18.00 *Laura Berliocchi (Catanzaro)*
Experimental models of neuropathic pain

18.00-18.15 *Cristina Tassorelli (Pavia)*
Experimental models of headache

18.15-18.30 *Armando Genazzani (Novara)*
Trends in pain genetic

18.30-18.45 *Armando Perrotta (Pozzilli, IS)*
Neurophysiology of headache

18.45-19.00 *Giovanni Nicotera (Cosenza)*
Pain clinic and networking in Calabria

19.00-19.15 *Giorgio Sandrini (Pavia)*
Pain and rehabilitation

19.15-19.30 *Maria Gabriella Buzzi (Rome)*
Aging brain and pain

19.30 -20.00 *General Discussion Chaired by Fabio Antonaci (Pavia)*

Saturday, 25th September

Closing remarks and Departure

Social programme

Wednesday, 22th September
Thursday, 23th September
Friday, 24th September

19.00 Welcome cocktail
22.00 Folk music concert
20.30 Farewell Dinner