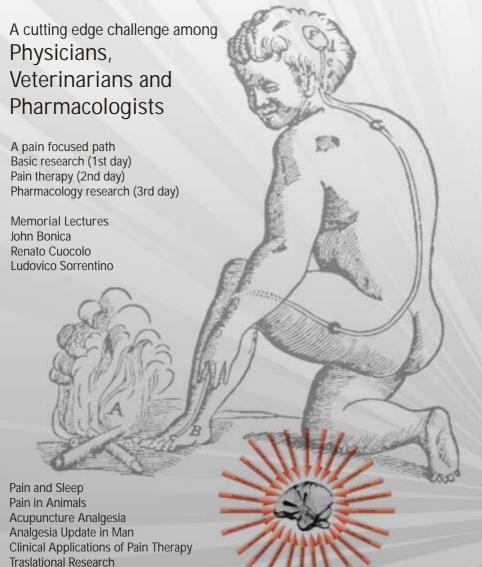
# Naples Pain Conference (NPC):

Research and Therapy for human and animal suffering

MAY 16<sup>th</sup> - 19<sup>th</sup>, 2010

Lipid Signalling in Pain Control Peripheral, Spinal and Supra-Spinal

Mechanisms of Pain Control



Continuing education credits for Vets

on "Pain Therapy" and "Animal Welfare"



#### Naples Pain Conference

Research and therapy for human and animal suffering



### PIO MONTE DELLA MISERICORDIA

www.piomontedellamisericordia.it

#### CULTURAL HAPPENING

#### THE EXPRESSION OF PAIN IN ART

Sunday May 16<sup>th</sup> 2010, 6 p.m.

at the "Quadreria" of the Pio Monte della Misericordia Naples, Via dei Tribunali 253

#### 18.00 - 18.10

### WELCOME TO NAPOLI

Prof. Giancarlo Vesce, NPC President

18.10 - 18.20

#### The "PIO MONTE DELLA MISERICORDIA"

Dr. Gian Paolo Leonetti di Santo Janni, Soprintendente al Pio Monte della Misericordia

18.20 - 18.30

**MESSAGE** from His Eminence the Cardinal Crescenzio Sepe, Archbishop of Naples

18.30 - 18.40

#### NOSTRA SIGNORA DELLA MISERICORDIA

Dott.ssa Maria Grazia Leonetti Rodinò di Miglione, former "Governatore al Patrimonio" of the Pio Monte della Misericordia

18.40 - 18.50

#### GESUALDO DA VENOSA

"Musicorum Princeps, Doloris Princeps"

Kathy Toma, painter, co-author of the book "GESUALDO DA VENOSA - FASTI DIMENTICATI DI UN PRINCIPE DEL RINASCIMENTO" 2009

18.50 - 19.00

#### ANIMAL PAIN IN ANCIENT CHRISTIAN POETRY

Prof. Antonio V. Nazzaro, professor of Ancient Christian Poetry, former Dean of the Faculty of Humanities at the University of Naples Federico II

Strictly personal invitation to obtain by Pio Monte della Misericordia Invito strettamente personale da richiedere al Pio Monte della Misericordia

## Organizing Institutions



University of Napoli Federico II



Istituto Italiano per gli Studi Filosofici



Second University of Napoli



University "Magna Grecia" of Catanzaro



University of Perugia



University of Michigan



College of Veterinary Medicine, Cornell University, Ithaca, NY.



Istituto Zooprofilattico Sperimentale del Mezzogiorno



AORN A. Cardarelli - Napoli



Ordini dei Medici Veterinari della Campania

### **WELCOME**

Naples Pain Conference (NPC):
Research and Therapy for human and animal suffering
MAY 16<sup>th</sup> - 19<sup>th</sup>, 2010

"To discuss and present the latest developments in Pain and Therapeutics"

Venue: Centro Congressi dell'Ateneo Federico II, via Partenope 36 - 80131 - NAPOLI, IT

#### **WELCOME TO A MULTIDISCIPLINARY PAIN CONGRESS:**

We are far from a full understanding of pain and analgesia. All of the human pain treatments are also in the domain of veterinary medicine, substantiating shared pain mechanisms by animals.

The quality and degree of suffering change with the stimulus, the individual, and with states of arousal and affect. These factors in turn alter pain control mechanisms.

In spite of a million years of humankind experience, and the developments in medicine, significant progress with pain knowledge is quite recent. Significant developments from the 1960s include the synthesis of new analgesic molecules and the Gate Control theory of pain, the discovery of the opiate receptor system in the 1970s and the cyclooxygenase discovery in the 1980s. More recent discoveries include evidence of spinal plasticity, of windup mechanisms that can prolong or enhance pain, and the therapeutic value of preemptive and multimodal analgesia. In spite of this progress most pain medications also cause a number of unwanted side effects.

Pain is a huge scientific and social issue raising ethical and economical problems. The Aim of this Conference is to update and share the latest developments regarding Pain mechanisms and therapeutics among basic scientists, physicians, and veterinarians.

On behalf of the scientific and organizing committees, I am honoured to invite you to join the Naples Pain Conference (NPC): Research and Therapy for human and animal suffering.

Giancarlo Vesce, NPC President



### Scientific Committee

#### Conference president

Giancarlo Vesce University of Napoli "Federico II"

Chairman of the Scientific Committee: Antonio Calignano University of Napoli Federico II



#### Scientific committee

Massimo Amadori IZS della Lombardia e dell'Emilia-Romagna

Maurizio Del Giudice Istituto Nazionale Tumori Fondazione G. Pascale

Giorgia Della Rocca University of Perugia (Italy)

Paula Larenza University of Pennsylvania, Philadelphia Biagio Lettieri Second University of Napoli

Ralph Lydic University of Michigan

Ermenegildo Santangelo University of Catanzaro

Charles Short Cornell University, Ithaca, NY

### **Organizing Committee**

### Chairman of the organizing committee

Vincenzo D'Amato

### Organizing committee

Carmine Cucciniello

Giuseppe Iovane Antonino Nizza Gaetano Oliva Serenella Papparella Maurizio Ribezzo Francesca Romano Bruna Santangelo Gaetano Scala Sabatino Troisi Luigi Zicarelli

## Speakers



Abdalla Karim School of Medicine - University "Magna Grecia" of Catanzaro

Adiletta Sisto School of Medicine - Università degli Studi di Napoli Federico II -Naples

Amadori Massimo IZS della Lombardia e dell'Emilia-Romagna

Caterina Aurilio School of Medicine - Second University of the Studies of Naples

Baghdoyan Helen A. University of Michigan Medical School

Brizio Nicola Acupuncture and Auriculopuncture Unit P.S.I. "S. Maria di Loreto Crispi" ASL NA1

Bufalari Antonello School of Veterinary Medicine of Perugia (Italy)

Calignano Antonio School of Pharmacy Federico II University of Naples

Castaldo Sigismondo DVM - Centro di Biotecnologie A.O.R.N. "A.Cardarelli"

Cavaliere Carlo School of Medicine - Second University of the Studies of Naples

Conti Maria Beatrice School of Veterinary Medicine of Perugia (Italy)

Cordella Cinzia School of Veterinary Medicine, Federico II, Naples

D'Agostino Giuseppe School of Medicine, Yale University

De Carlo Esterina IZS del Mezzogiorno

De Nicola Aniello San Leonardo Hospital, Castellammare di Stabia (NA)

De Rosa Giuseppe School of agronomy Federico II University of Naples

Della Rocca Giorgia School of Veterinary Medicine of Perugia (Italy)

Della Valle Maria Federica Innovet Osteoarthritis Veterinary Association

Di Cesare Mannelli Lorenzo University of Florence - School of Pharmacy

Di Iorio Carlo A.O.R.N. "A. Cardarelli" Napoli

Di Martino Irene School of Veterinary Medicine, Federico II, Naples

Di Marzo Vincenzo Medical College of Virginia at Virginia Commonwealth University in Richmond

Ferraro Fausto School of Medicine - Second University of the Studies of Naples

Filippi Claudia DVM PhD in Veterinary Anesthesia - Rome Italy

Fonda Diego School of Veterinary Medicine University of Milano (Italy)

Imeri Luca Medical School - University of Milan

Lacetera Nicola School of Agronomy - University della Tuscia

Larenza Paula School of Veterinary Medicine - University of Pennsylvania, Philadelphia

Lavano Angelo School of Medicine - University "Magna Grecia" of Catanzaro

Leonardi Fabio School of Veterinary Medicine of Parma

Lettieri Biagio School of Medicine - Second University of the Studies of Naples

## Speakers

Longo Francesco Italian Veterinary Acupuncture Society SIAV

Luna Stelio Pacca L. Faculdade de Medicina Veterinária e Zootecnia - Botucatu - BRAZIL

Luongo Carlo School of Medicine - Second University of the Studies of Naples

Luongo Livio Member of Italian Pharmacological Society (SIF)

Lydic Ralph University of Michigan Medical School

Maffi Sergio Coordinator of "VETPETPAIN"

Maione Sabatino School of Medicine - Second University of the Studies of Naples

Martin Jurado Olga School of Veterinary Medicine of Vetsuisse, University of Zurich

Mascolo Luigi School of Medicine - Second University of the Studies of Naples

Matassa Rosalba Ministero della Salute - Dipartimento della sanità pubblica veterinaria

Mattace Raso Giuseppina School of Pharmacy, Federico II University of Naples

Novello Lorenzo Italian Society of Veterinary Regional Anaesthesia and Pain Medicine (ISVRA)

Otto Klaus Hannover Medical School

Palomba Rosa School of Medicine - Federico II University of Naples

Passavanti Maria Beatrice School of Medicine - Second University of the Studies of Naples

Pastore Antonio School of Medicine - Università degli Studi di Napoli Federico II - Naples

Piomelli Daniele University of California - Director, Drug Discovery and Development IIT - Genoa

Russo Roberto School of Pharmacy of Federico II University of Naples

Santangelo Bruna School of Veterinary Medicine, Federico II, Naples

Santangelo Ermenegildo School of Medicine - University "Magna Grecia" of Catanzaro

Sasso Oscar School of Pharmacy of Federico II University of Naples

Savoia Gennaro Cardarelli Hospital , Napoli

Schilling Elizabeth College of Veterinary Medicine Western University of Health Sciences

Short Charles E. College of Veterinary Medicine, Cornell University, Ithaca, NY

Silvestri Rosalia School of Medicine - University of Messina, Italy

Siniscalco Dario School of Medicine - Second University of the Studies of Naples

Soja, Peter J School of Pharm. Sciences - The University of British Columbia, B.C.

Sucre Maria José San Leonardo Hospital, Castellammare di Stabia (NA)

Vesce Giancarlo School of Veterinary Medicine, Federico II, Naples

### May 17<sup>th</sup>

#### PAIN AND SLEEP - PAIN IN ANIMALS - ACUPUNCTURE ANALGESIA

#### 08.00 - Conference Registration

#### 09.00 - Conference Opening: "Federico II" Authorities welcome

Guido Trombetti Rector of the University of Napoli "Federico II"

Luciano Mayol President of the Pole for Life Science and Technologies

Luigi Zicarelli Dean of the School of Veterinary Medicine

Giovanni Persico Dean of the School of Medicine Giuseppe Cirino Dean of the School of Phamacy

#### 09.30 - John Bonica memorial lecture

The Past, Present, and Future Standards for Management of Pain Charles F. Short

Testimonial John Bonica at Naples - Alberto del Genio

10.30 - Coffee break

11.00 - PLENARY SESSION - PAIN and SLEEP

CHAIRMEN: Lydic - Vesce - Di Marzo

11.00 - Neurochemical mechanisms regulating sleep and pain Ralph Lydic

## 11.30 - Brain Regions and Neurotransmitters Mediating Opioid Induced Sleep Disruption

Helen A. Baghdoyan

## 11.50 - Gating of Sensory Inflow Through Nociceptive Pathways During Sleep

Peter J Soja

## 12.10 - Immune response, pain and sleep: brain mechanisms mediating cytokine effects on sleep

Luca Imeri

## **12.30** - Mesolimbic circuits in animal pain and analgesia Diego Fonda

13.00 - Discussion

13.30 - Lunch break

### May 17<sup>th</sup>



14.30 - PLENARY SESSION - PAIN in ANIMALS

CHAIRMEN: Larenza - Savoia - Di Cesare Mannelli

14.30 - Advances in perioperative pain recognition and management in animals Paula Larenza

15.00 - Assessment of the dose-dependent effect of butorphanol and morphine on the minimum anaesthetic concentration of isoflurane in chickens

Olga Martin Jurado

15.10 - Analgesic management of chronic osteoarthritic pain Antonello Bufalari

15.20 - Neuropathic pain in animals: neurophysiological considerations and therapeutical approach Giorgia Della Rocca

15.30 - Pain assessment in internal medical diseases in dog: preliminary observations Maria Beatrice Conti

15.40 - Target Controlled Infusion (TCI) of opioids: an overview Lorenzo Novello

15.50 - Multimodal Sedation and Pain Management in the Equine **Dental Patient** 

Elizabeth Schilling

16.00 - Discussion

16.30 - Coffee break



### May 17<sup>th</sup>

17.00 - Pain managment for gastric dilatation-volvulus syndrome and treatment in dogs

Claudia Filippi

17.10 - Value of local anesthesia as means of preemptive analgesia in small animal surgery

Bruna Santangelo

17.20 - Lidocaine constant rate infusion for surgical analgesia in dogs

Cinzia Cordella

17.30 - Attitude of Italian veterinarians interested in small animal surgery to post-operative pain in canine and feline patients: preliminary results from a web-based survey Sergio Maffi

17.40 - Discussion

17.45 - PLENARY SESSION - ACUPUNCTURE ANALGESIA

CHAIRMEN: Luna - Santangelo - Russo



17.45 - Use of acupuncture for analgesia. What is feasible? Stelio Luna

18.15 - Non - conventional treatment options for surgical and post - operative analgesia in dogs

Irene Di Martino

**18.25** - Analgesic effect of electro-acupuncture during TPLO in dog Fabio Leonardi

**18.35** - Fibromyalgia: how to treat by acupuncture *Nicola Brizio* 

**18.45** - Pain therapy by acupuncture in sport horses Francesco Longo

18.55 - Discussion

### May 18<sup>th</sup>

#### PAIN TREATMENT IN MAN AND ANIMALS

08.00 - Conference Registration

09.00 - PLENARY SESSION - ANALGESIA UPDATE in MAN

CHAIRMEN: Santangelo - Soja - Della Rocca

09.45 - Renato Cuocolo Memorial lecture
Pain assessment in non-comunicating critically ill patients
Ermenegildo Santangelo

**Testimonial** Renato Cuocolo and the Neapolitan School of Anaesthesiology Rosalba Tufano

**10.00** - Pain pathophysiology: an update by Functional Magnetic Resonance

Karim Abdalla

10.10 - Motor Cortex Stimulation (MCS) and Deep Brain Stimulation (DBS) as means of pain treatment

Angelo Lavano

10.20 - Discussion

10.30 - Coffee break

11.00 - PLENARY SESSION - CLINICAL APPLICATIONS OF PAIN THERAPY

CHAIRMEN: Savoia - Short - Sasso

**11.00 - Acute pain in children** *Gennaro Savoia* 

**11.30 - Cancer pain treatment** *Aniello De Nicola* 

11.50 - Pain management in the intensive care unit Maria José Sucre

### May 18<sup>th</sup>

- **12.10 Thoracic epidural analgesia** *Carlo Di Iorio*
- 12.30 Spinal cord stimulation in chronic pain control Fausto Ferraro
- 12.50 Emotional and physical pain in women with neurological pain related conditions: headache, fibromyalgia and RLS Lia Silvestri
- 13.10 Discussion
- 13.30 Lunch break
- 15.00 PLENARY SESSION TRASLATIONAL RESEARCH

CHAIRMEN: Otto - D'Agostino - Ferraro



15.00 - Adequate depth of anaesthesia - How can we avoid conscious perception of pain during experimental surgery in laboratory animals?

Klaus Otto

15.30 - Analgesic refinement of painful experiments in laboratory animals

Giancarlo Vesce

15.50 - MR analyses of gliosis and glutamate excitotoxicity in a mouse neuropathic pain model

Carlo Cavaliere

- 16.00 Analgesic strategy in swine experimental surgery models Sigismondo Castaldo
- 16.10 Discussion
- 16.30 Coffee break

### May 18<sup>th</sup>

#### ANIMAL WALFERE - ALTERNATIVE PAIN TRATMENT

08.30 - SESSIONE PARALLELA (Aula A) IL BENESSERE NEGLI ANIMALI DA REDDITO



09.00 - Apertura dei lavori

Antonio Limone - Commissario Istituto Zooprofilattico Sperimentale del Mezzogiorno Giuseppe Iovane - Direttore Istituto Zooprofilattico Sperimentale del Mezzogiorno

09.30 - La Legislazione in vigore sul benessere degli animali da reddito

Rosalba Matassa

10.00 - L'approccio immunologico alla valutazione del benessere animale

Massimo Amadori

10.30 - Coffee break

11.00 - Problemi pratici di adattamento all'ambiente delle bovine da latte con particolare riferimento allo stress da caldo Nicola I acetera

11.30 - Valutazione del benessere animale in allevamento con il metodo Welfare Quality®

Giuseppe De Rosa

12.30 - Adattamento all'ambiente di allevamento della specie bufalina

Esterina De Carlo

13.00 - Discussion

13.30 - Lunch break

Il corso si inserisce nell'ambito del progetto di ricerca finalizzata "L'adattamento degli animali agli ambienti di allevamento: ricadute su patologie e consumo di farmaci" (PRF 2006201, responsabile scientifico Dott. Massimo Amadori), finanziato dal Ministero della Salute e comprendente un'unità operativa rappresentata dall'Istituto Zooprofilattico Sperimentale del Mezzogiorno (responsabile scientifico Dott.ssa Esterina De Carlo).

### May 18<sup>th</sup>

15.00 - SESSIONE PARALLELA (Aula A) **ALTERNATIVE PAIN TREATMENTS** 

CHAIRMEN: Lettieri - Bufalari - Calignano



- 15.00 Effect of autonomic nervous system dysfunction on sudden death in ischemic patients with anginal syndrome died during electrocardiographic monitoring in ICU Biagio Lettieri
- 15.30 Ozone therapy in the treatment of pain in veterinary medicine Carlo Luongo
- 15.45 Action of oxygen-ozone mixture on activity of cytokines Dario Siniscalco
- 16.00 Analgesic effect of oxygen-ozone therapy in arterial obstructive pathology Luigi Mascolo
- 16.15 Discussion
- 16.30 Coffee break
- 17.00 SESSIONE PARALLELA (Aula A) OPIOID THERAPY and PAIN MEASUREMENT

CHAIRMEN: Chiefari - Fonda - Maione

- 17.00 Endocrine consequences of opioid therapy Caterina Aurilio
- 17.30 Multimodal analgesia: how and why? Sisto Adiletta
- 17.45 Mechanisms underlying analgesic tolerance and hyperalgesia to opioids Antonio Pastore

- 18.00 Pelvic pain evaluation in humans MR Passavanti
- 18.15 Discussion

May 19<sup>th</sup>

# PHARMACOLOGY and PHARMACEUTICAL RESEARCH



08.30 - Conference Registration



09.00 - PLENARY SESSION - LIPID SIGNALLING in PAIN CONTROL: GENERAL CONCEPTS

CHAIRMEN: Piomelli - Baghdoyan - Della Rocca

**09.00** - Ludovico Sorrentino Memorial **Endocannabinoid regulation of anxiety and mood** *Daniele Piomelli* 

**Testimonial** A memory of Ludovico Sorrentino Daniele Piomelli

10.00 - Role of neurosterioids in the analgesic and anti-hyperalgesic effects of PEA

Oscar Sasso

10.15 - Palmitoylethanolamide induces neurosteroids synthesis in C6 cells trough PPAR-ALPHA dependent mechanism Giuseppina Mattace Raso

10.30 - Use of palmitoylethanolamide (PEA) for controlling pain in small animal veterinary medicine: pre-clinical and clinical data *Maria Federica della Valle* 

10.45 - Discussion

11.00 - Coffee break

### May 19<sup>th</sup>

11.30 - PLENARY SESSION

LIPID SIGNALLING in PAIN CONTROL:
CELLULAR AND MOLECULAR TARGETS



CHAIRMEN: Di Marzo - Otto - De Nicola

11.30 - Role of TRP channels in pain and their interactions with phytocannabinoids and endocannabinoids

Vincenzo Di Marzo

12.00 - Involvement of opioid and cannabinoid receptors in the oxytocin-induced antihyperalgesic effect following ICV administration

Roberto Russo

12.15 - Central PPAR-alpha activation reduces pain and hyperalgesia in mice via nuclear factor kB inhibition Giuseppe D'Agostino

12.30 - Neuropathic pain: looking for a disease modifying agent Lorenzo Di Cesare Mannelli

12.45 - Endocrine and behavioural effects of transdermal buprenorphine in pain-suffering women of different reproductive ages

M. Caterina Pace

13.00 - Discussion

13.30 - Lunch break

### May 19<sup>th</sup>

15.00 - PLENARY SESSION - PERIPHERAL, SPINAL AND SUPRA-SPINAL MECHANISMS OF PAIN CONTROL

CHAIRMEN: Maione - Lydic -Vesce



**15.00** - Forebrain pain mechanisms Sabatino Majone

15.30 - Anesthetic - dependent actions on descending control of the spinothalamic tract

Peter J Soja

16.00 - Microglia activation in neuropathic pain is regulated by cannabinoid system

Livio Luongo

**16.30** - The palmitoylethanolamide: an important tool for pain management *Antonio Calignano* 

17.00 - Discussion

17.30 - CONFERENCE CLOSURE

## **Naples**

### **Discover Naples & Local Culture**

**May** is a special season for the City of Napoli: spring climate and cultural happenings typically attract tourists at this time of the year.

Pompeii, Capri, the Sorrento and the Amalfi coasts are close enough to be easily reached from the city centre.

Exclusive guided tours for conference attendees and accompanying guests persons will be available at reduced price by the travel agency Trial Travel: http://www.italytraveller.com/en/c/agency-trial-travel.

Every year, during the month of May the City promotes art exhibitions and special guided tours of the metropolis and surrounding area. Monuments and old buildings which can't be visited during the remaining of the year are kept open during the month of May in a happening named "Naples open doors".

A daily ordered event program named "Maggio dei monumenti" is launched every year by the City Council, to guarantee an intense cultural activity covering all arts.

#### 16<sup>th</sup> edition of Maggio dei Monumenti

Every year, the month of May in Naples is filled with cultural events with Maggio dei Monumenti.

The 2010 edition, called "Viaggio nella storia" (Travel in Naples history) cover weekends in the month of May. Most of the famous Neapolitan museums do offer discounted rates and some are free of charge during the Maggio dei monumenti weekends.



Weekend 15-17 May:

Walk from Castel dell'Ovo to Piazza San Domenico Maggiore

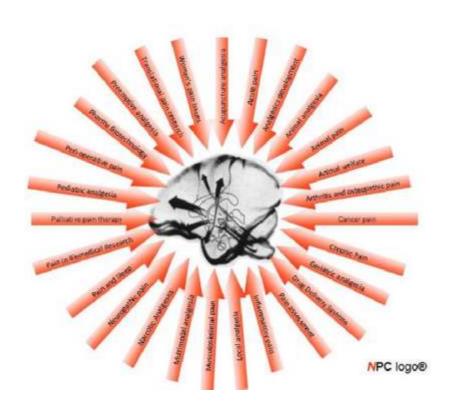
Weekend 22-24 May:

Walk from Museo Archeologico to Teatro Romano



# Note


# Note

























METROPOLITANA DI NAPOLI SPA