Endorsed By:













Rehabilitation of pain & pain-related disability
Focus on central pain:

CPSP & SCI

Piacenza 22-26 September 2024 @ La Bellotta

PRELIMINARY PROGRAMME

AIM OF THE SCHOOL

The recognition that acute and chronic pain have two distinct mechanisms and that **chronic pain is a disease in its own right** has been a major insight.

More recently WHO have stated that <u>chronic pain is a disabling disease</u> and therefore that <u>physical and rehabilitation</u> medicine has a pivotal role in the management of the chronic pain patient and related disability.

In our daily practice we witness cases in which pain is the generator of disability as well as cases where the disability is becoming unbearable because of the presence of chronic pain.

The School will assist clinicians to refine their clinical diagnostic approach to identify various phenotypes of pain - nociceptive, neuropathic, Nociplastic-, to improve their ability to interpret clinical, instrumental and laboratory finding and to establish the most appropriate rehabilitation as well as physical and pharmacological treatment to overcome pain and the related disabling condition.

The 2024 edition is focused on central pain. Chronic Post Stroke Pain (CPSP) and pain in Spinal Cord Injuries (SCI) are already "per se" a dramatic clinical condition. In clinical practice this situation can be even more disabling as other form of pains i.e nociceptive and nociplastic are overlapping the neuropathic component making a correct diagnosis and rehabilitation approach not so easy to disentangle. A better understanding of the complexity of pain in stroke and spinal cord injured patients has an important role in providing appropriate and adequate rehabilitation management for these patients.

The School structure is of a **residential school** and will have **front lessons**, **hands-on sessions and workshops**.

Front lessons will last 45 minutes with 15 minutes for questions & answers.

The School is prepared to host the attendants and to give them full board accommodation.

Dinners with the Faculty are also free from charge and are a distinguish feature of the school.

PRELIMINARY PROGRAMME

SUNDAY

18:00-19:00 Welcome Reception at "Palazzo Farnese"

Presentation of the School's program (hybrid presentation)

Klemen Grablijevec President ESPRM Nicholaos Barotsis UEMS PRM Board Mauro Zampolini PRM Section of UEMS Roberto Casale School's Director

MONDAY /// Morning session 8:00 to 13.00

08:00-09:00 Physiopathology of pain. Mechanisms of Acute and Chronic Pain; nociceptive, neuropathic

and Nociplastic pain (60')

Anthony Dickenson

This pivotal lecture will cover mechanisms of pain in a translational context to patients. Transduction, Transmission, Perception, Modulation. Pain without nociception and nociception without pain.

09:00-10:30 The clinical examination of the pain patient (90')

Per Hansson

This basic tutorial will examine the diagnostic approach to pain in general and in a stroke patient in particular in a rehabilitation context. Nociceptive, Nociplastic, Neuropathic pain all these forms of pain can be concomitant superimposed or mixed in stroke. In practice the interview is pivotal in addressing the clinical examination and to make a first essential working hypothesis and to address further instrumental examinations and a tailored rehabilitation plan.

10:30-11:00 **Coffee Break**

11:00-13:00 STROKE

Stroke is the third leading cause of disability and death worldwide with a total of 12.2 million incident cases of stroke and 6.5 million stroke related deaths. The incidence of PSP varies widely from 10% to 70%. The vast difference can be explained by different study designs, cohort samples and follow up period. A better understanding of this type of pain has an important role in providing appropriate and adequate rehabilitation management for these patients.

11:00-12:00 The clinical rehabilitation approach

Xiaolei Hu

12:00-13:00 The clinical approach to Chronic Post Stroke Pain (CPSP)

Volodymyr Romanenko

13:00-14:00 **Lunch**

///////////// Afternoon session 14:00 to 18:30

14:00-16:00 Spinal Cord Injury (SCI)

Neuropathic pain is present in 40% to 50%, usually develops within the first year, and tends to become chronic However other form of pain may be present and of relevance in a rehabilitation program. Shoulder, wrists and back pain, muscle weakness, and spasticity are common in the chronic phase. Heterotopic ossification, and pain related to spasms and muscle contractures are other examples of nociceptive pain. Visceral pain is also present. Thus, pain may be therapeutically challenging and has a substantial impact on rehabilitation and on quality of life.

14:00-15:00 The clinical rehabilitation approach

Belgin Erhan

15:00-16:00 Nociceptive and neuropathic (central & peripheral) pain coexistence in the SCI patient.

Roberto Casale

16:00-16:30 **Coffee Break**

16:30-18:30 The language of pain and suffering

Questionnaires, diaries and pain mapping in stroke and SCJ patients. Which questionnaires and how to use them to assess pain and disability - *Giorgio Ferriero*

- Pain questionnaires A critical reappraisal of their usefulness and limits in CPSP and SCI with special regards on (MPQ-SF2, DN4, Chronic Pain Grade,etc;).
- Stroke and SCI specific questionnaires
- · Quality of life and other questionnaires on the activity of the day living.

The language of pain

Roberto Casale

Personal experience or universal feeling? Between "Scilla and Cariddi" in collecting the clinical history.

1st Interactive "Eclectic" Session

Theory and practice, an interactive lesson. Are we able to describe sensory experiences in words?

Enrico Fermi & Roberto Casale

"..... but let a sufferer try to describe a pain in his head to a doctor and language at once runs dry....." Virginia Woolf "On Being III" 1926.



City of Piacenza /// Credits: Luca Gionelli - Opera propria

TUESDAY /// Morning session 8:00 to 12:30

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08:00-12:30	Diagnostics Objective pain diagnostics in poststroke and SCI patients help or hinder? The anatomical lesion, the motor impairment and pain. Differentials between CPSP, nociplastic and nociceptive poststroke / SCI pains.
08:00-09:00	Chronic Post Stroke Pain (CPSP) and imaging Roland Peyron & Luis Garcia-Larrea
09:00-10:00	SCI Neurophysiological Measures Roland Peyron & Luis-Garcia Larrea
10:00-10:30	Coffee Break
10:30-11:30	Cognitive impairment and Post Stroke Pain Marijana Bras
11:30-12:30	Testing the autonomic nervous system with some easy bed side examination: what they can tells us about pain and rehabilitation in these patients. Kestutis Petriconis
12:30-14:00	Lunch
///////////////////////////////////////	Afternoon session 14:00 to 18:30
14:00-16:00	Clinical pharmacology
	Pain in stroke patients can be nociceptive, nociplastic as well as neuropathic. Moreover, sometimes these components are overlapping. It is therefore pivotal to have pharmacological basis to treat these three different forms of pain.
14:00-14:40	Drugs acting on transduction, transmission and on modulation
	Diego Fornasari
14:40-15:20	Drugs for nociceptive, nociplastic and neuropathic pain Riccardo Torta
15:20-16:00	Hidden pain " acute and chronic back pain in SCI and post stroke pain patients: critical appraisal for current guidelines
	Magdi Hanna
16:00-16:30	Coffee Break
16:30-18:30	2nd Interactive Session Stroke: The clinical examination in practice. Under the guidance of an expert clinician the participants will be guided through an outpatient consultation from the interview to the clinical examination of a patients affected by CPSP. Per Hansson & Xiaolei Hu

WEDNESDAY ///Morning session 8:00 to 13:00

16:30-18:30

4th Interactive Session

Per Hansson & Daiana Popa

clinical examination of a SCI patient.

08:00-10:00	How does a central lesion affect skeletal muscle The functional consequences of a central nervous system lesion lead to adaptations ar modifications within the nervous system, but also changes in the skeletal muscle. Both stroke ar SCI greatly affects muscle in two different directions: loss and overactivity.
08:00-08:40	The striated muscle: Contractures, spasms and spasticity Marcos Sganzos - Clinical differences - Common mechanisms and Inference with pain
08:40-09:20	Botulin toxin for spasticity & pain in CPSP and SCI Klemen Grabljevec
	When, how much and where to inject.
09:20-10:00	What we should expect from a botulin toxin treatment for pain and spasticity <i>TBD</i>
	Beyond Botulin Toxin: Baclofen, alcholization, phenol, cryoablation
10:00-10:30	Coffee Break
10:30-13:00	Neuromodulation for both sensory and motor symptoms in CPSP and SCI
	Central lesions cause changes in several neural networks affecting both pain and motor control. The modulation of these processes through noninvasive brain stimulation, has been proposed in a rehabilitation context as a viable intervention that could promote post-stroke clinical recovery, functional independence as well as modulate pain.
08:00-09:00	Beep brain, cortical stimulation and SCS
	Luis Garcia-Larrea & Roland Peyron
	 rTMS repetitive Trans Cranial Magnetic Stimulation tDCS transcranial Direct Current Stimulation MCS Motor Cortex Stimulation
13:00-14:00	Lunch
111111111111111111111111111111111111111	Afternoon session 14:00 to 18:30
14:00-16:00	3rd Interactive Session
	Instrumental appraisal of muscle on the use of Botulin Toxin
14:00	The use of sEMG to assess muscle structure Alberto Rainoldi
15:00	Ultrasound in Contractures, muscle spasms and spasticity
	Nikolaos Barotsis

The clinical examination of the disability and pain related disability in a SCI patient in practice Under the guidance of expert clinicians, the participants will be guided from the interview and

THURSDAY ///Morning session 8:00 to 13:00

08:00-09:00

Return to work with pain

Ziad Hawamdeh

Neural Plasticity, Artificial Neural Network and Rehabilitation

Giorgio Ferriero & Roberto Casale

10:00-10:30

Coffee Break

The PRM of the future present: Al in rehabilitation

Mauro Zampolini

Reappraisal of difficult topics & Take-home messages

In this setting, the clinical and diagnostic tools learned during the School will be discussed and compared, with teachers, in relation to real clinical cases.

Learning questionnaires

Learning questionnaires Closing down of the school

BOARD OF PRESIDENTS

Nikolaos Barotsis, Roberto Casale, Klemen Grabljevec, Mauro Zampolini

SPEAKERS

Nickolaos Barotsis Diego Fornasari Xiaolei Hu Volodymyr Romanenko Marijana Bras Luis Garcia-Larrea **Kestutis Petriconis** Marcos Sganzos Riccardo Torta Roberto Casale Klemen Grablievec Roland Peyron Anthony Dickenson Magdi Hanna Daiana Michaela Popa Mauro Zampolini

Belgin Erhan Per Hansson Alberto Rainoldi

Giorgio Ferriero Ziad Hawamdeh

GENERAL INFORMATION

Structure of the School

The School is residential. English is the official language of the School. No translation will be provided.

EACCME European (CME) credits will be requested.

An opening ceremony is planned on Sunday afternoon. Lessons start on Monday at 08:00 am and end on Thursday noon with front lessons, hands-on sessions and workshops.

To dedicate more time to workshops and hand-on sessions, some general topics like anatomy and neurophysiology of the somatosensory system, but not only, will be accessible on web by the attendants before the school starts. An hybrid teaching system is also provided.

All front lessons will be recorded and available on the school podcast after the end of the school.

Dinners with the Faculty are a distinguish feature of the school.

School venue

The School is located at "La Bellotta" an ancient college renovated in 2005.

Address: Strada Valconasso, 10, 29010 Valconasso - Pontenure (PC)

Accommodation

"La Bellotta" is located few miles from Piacenza city center. Participants will be accommodated in single rooms with private bathroom. Meals will be prepared and served inside the structure. A cafeteria is also present.

Other accommodation options are available on request.

Registration

Register online at www.defoe.it by 10th September 2024. The course is open to a maximum of 30 delegates.

Fees

School's fee is 1.250,00 €. It covers all the teaching materials – including pre-school and other recorded materials – and a full board accommodation (see above) for all the length of the school (IN September 22nd - OUT Thursday 26th).

Fees may be partially covered by grants offered by the entities who endorsed the School Programme. However, detailed procedures about Grant applications are still to be defined. Information will be published on the event webpage. Grants won't cover travel expenses.

To secure your seat, you are required to pay a non-refundable deposit of € 650. The balance, if not covered by a grant, must be paid by 10 September.

How to reach Piacenza

By plane

Milano Linate, Milano Malpensa and Orio al Serio are the nearest airports (Ryanair, EasyJet and other low cost companies). The three airports are easily and frequently connected to Milano Centrale train station.

<u>By train.</u> Piacenza is on the Milano-Bologna train-line. There are trains from Milano Centrale every hour. Milano Centrale is easily connected with all the three airports of the region: Milano Linate; Milano Malpensa and Orio al Serio. Connections (busses & trains) from the airports are frequent and all stop at Milano Centrale train station.

By car: Piacenza is extremely well connected as it is at a crossroad between the Milano-Bologna-Roma and the Torino-Piacenza-Venezia motorways.

CME Provider & PCO

