





# **ESPRM UEMS-PRM SCHOOL on**"Rehabilitation of pain and pain-related disability"

24-28 September- 2023
Piacenza- Italy

#### Aim

The recognition that acute and chronic pain have two distinct mechanisms and that <u>chronic pain is a disease in its own right</u> has been a major insight. More recently WHO have stated that <u>chronic pain is a disabling disease</u> and therefore that physical and rehabilitation 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, to improve their ability to interpret clinical, instrumental and laboratory finding and to establish the most appropriate rehabilitation as well as pharmacological treatment to overcome pain and the related disabling condition.

PRE SCHOOL LECTURES (recorded and available on the school website two months before the beginning of the School)

Approx 3-4 hours of lectures on different topics (20' each) covering from anatomy of the sensory system with particular emphasis on the nociceptive pathways to the different types of pain to understand their mechanisms.

Specific pre-school lectures will cover the following topics of the utmost importance

Nikolaos Barotsis Arun Baskar Kristian Borg Anthony Dickenson Efthimios Kouloulas Marco Vitale

- Anatomy of the nociceptive system
- Acute and chronic pain
- Transition between acute to chronic pain
- Nociceptive
- Inflammatory
- Neuropathic
- Nociplastic
- Mixed pain (post surgical pain)

Questionnaire for assessing the adequacy of basic knowledge will be send by mail to the accepted attendants. Participants should fill and send the questionnaire to the School' secretary before the School starts.

# **SUNDAY**

# 18:00-19:30 Opening Ceremony and welcome cocktail

Programmed lectures (10')

Pain rehabilitation: what does it mean Nicholas Christodoulou (past President ESPRM)

Pain and disability: a subtle interplay Klemen Grabljevec (President ESPRM)

The ISPRM position Pain and rehabilitation: an international intersociety perspective Francesca Gimigliano (President ISPRM)

Pain in rehabilitation a matter that need priority Jorge Lains (past President ISPRM)

The EFIC cooperation plan Luis Garcia-Larrea (EFIC President) on teleconference

# **MONDAY**

#### Morning session 8:00 to 13.00

## THE BASICS

08:00 – 09:00 Concepts reappraisal from the pre-school lessons: Per Hansson, Anthony Dickenson

- Anatomy of the nociceptive system
- Acute, chronic and the transition between acute to chronic pain
- Nociceptive
- Inflammatory
- Neuropathic
- Nociplastic
- Mixed pain (post surgical pain)

#### COLLECTING THE PATIENT'S HISTORY: PATIENT'S FREE REPORTS AND QUESTIONNAIRES

**09:00 – 09:30 The interview: between holistic approach and quantitative data collection.** Patients speak of their complain using spontaneous pain descriptors and other pain-related terms that not always are immediately translated into "medical terms". The interview is therefore critical in addressing the clinical examination. **Roberto Casale** 

09:30-10:30 A critical reappraisal of questionnaires- Why, when and how to use them.

- Pain questionnaires A critical reappraisal of their usefulness and limits with special regards on (MPQ-SF2, DN4, Chronic Pain Grade, etc.;) Giorgio Ferriero
- Quality of life and other questionnaires on the activity of the day living Jorge Lains
- Pathology related questionnaires Giorgio Ferriero
- ICF and ICD-11 and pain Francesca Gimigliano

#### 10:30 to 11:00 Coffee Break

## THE CLINICAL APOPROACH

## 11:00-12:30 1st interactive session.

The clinical examination: from theory to bed side practice. The working hypothesis. Per Hansson

To make a first essential working hypothesis is fundamental for a meaningful instrumental examination and tailored rehabilitation plan. A patient/actor will be provided

PAIN DIAGNOSTICS. How and when ask for an instrumental and laboratory examination and what we should expect from them.

**12:30-13:00 Laboratory red flags. Biomarkers for musculoskeletal conditions** Key points to make a differential diagnosis between nociceptive and neuropathic pain. (blood samples for inflammatory markers, etc.) **Gewndolyn A. Sowa** 

## Lunch 13:00 to 14:00

## Afternoon session 14:00 to 18:30

**14:00-14:45** An anatomo-functional reappraisal of pain imaging. The *image* of pain or the *imaging* of pain: indeed, not a question of small goat's wool. A common misunderstanding is that neuroimaging can tells us where "the pain "is. Roland Peyron"

14:45-15:15 Routine and pain related neurophysiology: what they can and cannot tell us. Luis Garcia-Larrea General view on Routine neurophysiology (Clinical indications and limitations)

15:15-15:45 Why physiatrists should do musculoskeletal ultrasound Levent Özçakar

# 15:45-16:15 Diagnostic and Interventional pain sonology Fabrizio Micheli

16:15 to 16:45 Coffee Break

# 2<sup>nd</sup> interactive session & question time

The matching problem or the diagnostic congruity Per Hansson

A clinical case After these sessions, on a clinical case basis, participants will be invited to summarize the salient points of the readings that most differ from what they already knew and to express their doubts, possibly highlighting new concepts or differences with their previous knowledge

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"The trouble with the world is that the stupid are cocksure and the intelligent full of doubt. (Bertrand Russell)

# **TUESDAY**

#### Morning session 8:00 to 13.00

#### **GOALS FOR OPTIMUM PAIN THERAPY**

Precision & personalized pharmacological pain therapy that could lead to functional recovery.

Dealing with complex clinical rehabilitation picture that has a combination of acute as well as chronic pain. Magdi Hanna – Riccardo Torta

#### 08:00 -09:30

- NSAIDs (role of selective and none selective ) Magdi Hanna
- Atipical opioids, Tramadol and Tapentadol: different pharmacological profiles and different indications -when and where Magdi Hanna
- Opioids: role in both acute and chronic and where we are with Opioids crisis story Magdi Hanna
- Anticonvulsants, Antidepressants: role and limitations in central and peripheral sensitizations Riccardo Torta

#### SOME SPECIAL ISSUES ON SYSTEMIC PHARMACOTHERAPY IN REHABILITATION.

09:30 -10:00 Nociplastic pain: What kind of treatments we may expect to work Riccardo Torta

10:00-10:30 Medical cannabis and cannabinoids: Role in Chronic pain and particularly 'Nociceptive pain " Magdi Hanna

Coffee break 10.30 to 11:00

11:00 - 11:30 Transdermal & topicals for nociceptive and neuropathic pain (buprenorphine; 5% lidocaine, 8% capsaicin, etc.) Zaira Simeionidou

11:30- 12:00 Nutraceuticals and food for pain. Roberto Casale

12:00-12:30 Drugs that may work on Neuro-immune system-pain interaction Magdi Hanna

12:30 -13:00 Neuropathic pain and rehabilitation: A systematic review of international guidelines Andrea Bernetti

#### **Lunch 13:00 to 14:00**

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

14:00-14:30 Multimodal: Pharmacological as well as combination of pharmacological and non-pharmacological therapy Magdi Hanna

#### **PHYSICAL TREATMENTS**

## 14:30-16:30 GENERAL CONCEPT ON PHYSICAL STIMULATION MODALITIES

- Mechanical stimulation (painful & non painful stimulation), vibration, massage and shockwaves Nikolaos Barotsis
- TENS and other Electrical Therapies Andrea Bernetti
- Heat & Cold: a real-world analysis Catarina Aguiar Branco
- LASER which one and for what Roberto Casale

## Coffee break 16.30 to 17:00

#### 3<sup>rd</sup> interactive session

17:00 – 18:30 The chronic pain patient in practice. Per Hansson

Under the guidance of an expert clinician the participants will be divided in small groups and guided through an outpatient consultation from interview to plan a treatment.

What we have to learn to do, we learn by doing it.	
	Aristotle

# **WEDNESDAY**

#### Morning session 8:00 to 13:00

**NEUROMODULATION Peripheral, DRG, SC & Motor Cortex Stimulation** In pain rehabilitation, neuromodulation with invasive or minimally invasive treatments are increasingly used. As well as for pharmacological treatments, where present, guidelines will be reported. Where these are not available, meta-analysis and review data will be reported. Single publications will be reported in a balanced way.

**08:00 – 08:30 EFNS & EAN guidelines on neuromodulation for neuropathic pain** - a real word analysis Vs evidence based. When to use/prescribe or not to use invasive or minimally invasive treatments **Arun Baskar** 

08:30-09:15 Motor cortex stimulation for chronic pain Luis GARCIA-LARREA

09:15-09:45 Autonomic nervous system stimulation and its inference on pain Cosimo Cosentino

#### **MOVEMENT AS PAIN THERAPY**

09:45- 10:30 Mirror Therapy and VR for pain control in a rehabilitation setting AS Rothgangel

Coffee Break 10:30 to 11:00

11:00-11:30 Physical activity and exercise for chronic pain Francesca Gimigliano

11:30-12:00 Neurodynamic techniques: is there any differences from simple movements? Ziad Hawamdeh

## SPECIAL TECHIQUES.

In this second part some specific minimally invasive treatments frequently used in rehabilitation are discussed. Some of them have a solid foundation of scientific publications. Others, on the other hand, although routinely used, have little studied or incompletely applied neurophysiological bases.

12:00-12:30 Oxigen-Ozone (O2O3) for pain: when and why it may work Alessandro DeSire

12:30-13:00 Botulin Toxin for pain and spasticity: the chicken egg problem? Klemen Grabljevec

## Lunch 13:00 to 14:00

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

#### SPECIAL CLINICAL PICTURES Pain in woman

Rehabilitation encompasses a wide range of basic pathologies where some form of disability and pain related disability are always present. For this reason it is unrealistic to cover in a single edition of the School all the possible pathologies of rehabilitation competence. Thus, a decision has been taken to have for every edition of the School a specific rehabilitation topic. For this edition the topic chosen is pain in woman as gender in rehabilitation is one of the most impelling topic in modern rehabilitation.

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14:00-14:15 Pain in woman. A need for priorisation

14:15- 14:45- Low back pain (LBP) and failed back surgery syndrome a rehabilitation emergency Gwendolin A Sowa

14:45- 15:15 Pain in the elder woman: a priority for rehabilitation Xanthi Michail

15:15-15:45 Chronic Pelvic Pain Gianfranco Lamberti

15:45-16:30 Fibromyalgia Piercarlo Sarzi Puttini

Coffee break 16.30 to 17:00

# 3<sup>th</sup> interactive session

17:00 – 18:30 The clinical examination & treatment of a chronic pain patient in practice Per Hansson; Roberto Casale; Fabrizio Micheli; Klemen Grabljevec; Alessandro De Sire

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Under the guidance of an expert clinician the participants will be guided from the interview and clinical examination to the decision to prescribe invasive or minimally invasive treatments.

"I always do what I don't know how to do, to learn how to do it."

Vincent Van Gogh

# **THURSDAY**

#### Morning session 8:00 to 13:00

#### THE BIO-PSYCHO-SOCIAL MODEL

08:00 - 08:30 The bio-psycho-social model in pain medicine Riccardo Torta

08:30-09:00 The bio-psycho-social model in a rehabilitation setting of persons living with chronic pain. Zala Kuret
09:30 – 10:00 Telemedicine and the bio-psycho-social model: what we can and cannot expect from it. Mauro Zampolini

10:00-11:00 CLOSING LECTURE Lectura Magistralis on

## To be defined

#### 11:00-12:30 CLINICAL LEARNING EXERCISES & QUESTIONNAIRES

At the end of School, all participants should be able to interview, visit and prescribe appropriate pharmacological and rehabilitative treatment for a patient with chronic disabling pain, making use of what they learned. To better assessing the competence acquired along with a traditional written learning questionnaire, skills assessment will carried out following the CEX/C methodology\*. Both skill assessment and questionnaires (paper work) are mandatory for credits

Take home messages: don't leave the school with doubts

\*The CEX/C is a method of assessing skills essential to the provision of good clinical care and to facilitate feedback. It assesses the trainee's clinical and professional skills in outpatient clinics. It was designed originally by the American College of Physician. Trainees will be assessed on different clinical problems related to pain and disability.

The assessment involves observing the trainee interact with a patient in a clinical outpatient setting. The areas of competence covered include: consent, history taking, physical examination, professionalism, clinical judgement, communication skills, organisation/efficiency and overall clinical care.

https://www.google.it/url?sa=t&rct=j&q=&esrc=s&source=web&cd=&ved=2ahUKEwjr3vGrr5D7AhW7QPEDHYf3AlsQFnoECAsQ AQ&url=https%3A%2F%2Fwww.acponline.org%2Fclinical-information%2Fclinical-resources-products%2Fpain-managementlearning-hub&usg=AOvVaw00hWwm69-3dL4JEbVWxbS5

"Theory is when you know everything but nothing works. Practice is when everything works but you don't know why. In any case, we always end up with combining theory with practice: nothing works and we don't know why. " A. Einstein

