

## סדנת "פיזיותרפיה ושינה"

תתקיים במרכז רפואי ת"א (בי"ח איכילוב) אולם ההרצאות בבניין השיקום 1- בתאריכים 21-22.1.2020

*Theoretical basics and physiotherapeutic treatment possibilities*

Dr Cristina Frange & Dr Cristina Staub

### Description and conception

The effect of sleep on health, as well as on the regeneration after accident and illness is underestimated. Although the research of sleep has made great progress and sleep management in elite sports is already established, sleep is rarely discussed in the physiotherapy practice. For example, in persons with sleep deprivation or impaired sleep quality, hormone production changes with respect to leptin and ghrelin. An associated weight gain may provoke cardiovascular syndromes. Syndromes of the nervous and immune systems as well as pain syndromes are also influenced by sleep disorders.

This course explains the complex relationships between sleep, activity, recovery and discomfort. The medical treatment options for common disorders, such as medication for insomnia and positive airway pressure for obstructive sleep apnoea, are explained and physiotherapeutic alternatives are shown. After the course, you will be able to apply simple physiotherapy diagnostic and therapeutic procedures.



*Vicious circles in connection with sleep*

### Aims

- To know the effects of sleep disorders
- To understand the basics of sleep physiology
- To include specific sleep questionnaires in the anamnesis
- To know various diagnostic options and to be able to decide which one has to be chosen
- To know the basics of sleep pathology and the characteristics of the most important clinical pictures
- To recognize when a patient must be referred to a physician
- To know the possible therapies for the diseases discussed
- To be able to explain sleep and behavior tips with background information to the patients
- To be able to instruct various relaxation techniques
- To know different positioning and bed adjustments
- To be able to adapt some simple aids against snoring and apneas
- To be able to perform specific sleep massages (against bruxism, stress, headaches, etc.)
- To critically analyze the literature related to sleep
- To sleep well

### Target group

Physiotherapists and physiotherapy students

**Special preparations of the attendees**

**Participants are required to bring a yoga mat**

**Sleep diary: To be completed during the 2 weeks before the course.**

**מחירים:** חבר עמותה 750 ₪ לא חבר עמותה: 950 ₪

לתקנון ביטולים [לחץ כאן](#)

לחידוש חברות בעמותה [לחץ כאן](#)

להרשמה [לחץ כאן](#)

## Schedule

Day 1	Topic	
8:30-9:00	Registration	
9:00-9:45	Introduction: normal human sleep	<i>Dr Frange &amp; Dr Staub</i>
9:45-10:30	Sleep purpose and consequences of sleep problems / sleep deprivation	<i>Dr Frange</i>
10:30-10:45	Coffee Break	
10:45-11:30	Sleep purpose and consequences of sleep problems / sleep deprivation	<i>Dr Frange</i>
11:30-12:15	Sleep physiology	<i>Dr Staub</i>
12:15-12:45	Lunch Break	
12:45-13:30	Practical part I: Relaxation and breathing techniques, scents, activation exercises	<i>Dr Staub</i>
13:30-14:15	Sleep pathology I	<i>Dr Frange</i>
14:15-14:30	Coffee Break	
14:30-15:15	Sleep pathology II	<i>Dr Frange &amp; Dr Staub</i>
15:15-16:00	Practical part: Head massages	<i>Dr Staub &amp; Dr Frange</i>

Day 2	Topic	
8:30-9:00	Gathering	
9:00-9:45	Sleep pathology III	<i>Dr Frange &amp; Dr Staub</i>
9:45-10:30	Subjective sleep anamnesis	<i>Dr Frange &amp; Dr Staub</i>
10:30-10:45	Coffee Break	
10:45-11:30	Practical part II: Role plays	<i>Dr Frange &amp; Dr Staub</i>
11:30-12:15	Objective sleep diagnostics	<i>Dr Staub</i>
12:15-12:30	מה צריך לדעת לפני שממליצים על מזרן?	M.H. – מיכל ניסנבויים – P.P.T פיזיותרפיסטית - עמינח
12:30-13:00	Lunch Break	
13:00-13:45	Sleep therapies I: Insomnia, restless legs syndrome	<i>Dr Staub</i>
13:45-14:15	Sleep therapies II	<i>Dr Staub</i>
14:15-14:30	Coffee Break	
14:30-15:15	Practical part III: Practicing the therapy skills	<i>Dr Staub &amp; Dr Frange</i>
15:15-16:00	Practical part IV: Case studies	<i>Dr Frange &amp; Dr Staub</i>

## Day 1

- **Lecture 1:** Introduction: normal human sleep
  - Sleep duration and hypnogram: changes during life (newborn, elderly)
  - Circadian preferences (night owl and early bird)
  - Sleep as a topic in physiotherapy
- **Lecture 2:** Sleep purpose and consequences of sleep problems / sleep deprivation
  - Influences on cardiovascular, endocrinologic, metabolic, memory and respiratory processes, on psyche and on pain
- **Lecture 3:** Sleep purpose and consequences of sleep problems / sleep deprivation
  - Influences on cardiovascular, endocrinologic, metabolic, memory and respiratory processes, on psyche and on pain
- **Lecture 4:** Sleep physiology
  - Sleep stages and circles (definitions by polysomnography)
  - Sleep regulation: two-process model
  - The effects of behavior therapy

· **Lecture 5:**

Practical part: Relaxation and breathing techniques, scents, activation exercises;

- **Lecture 6:** Sleep pathology I
  - Insomnia
  - Circadian rhythm sleep disorders
  - Hypersomnias
- **Lecture 7:** Sleep pathology II
  - Restless legs syndrome and periodic limb movement disorder
  - REM sleep behavior disorder
  - Sleep related bruxism

· **Lecture 8:**

Practical part: Head massages

## Day 2

- **Lecture 9:** Sleep pathology III
  - Sleep breathing disorders: e.g. obstructive sleep apnea, OSA
  - Practical part: CPAP, first adaptation to CPAP (Desensibilization)
- **Lecture 10:** Subjective sleep anamnesis
  - Approved questionnaires
  - Individual questionnaires
- **Lecture 11:** Practical part: Role plays
  
- **Lecture 12:** Objective sleep diagnostics;
  - Actigraphy, pulse oximetry, respiratory polygraphy
- **Lecture 13:** Sleep therapies I for insomnia and restless legs syndrome
  - Behavior therapy: sleep hygiene, sleep rituals, consumption
  - Body therapies: relaxation procedures, etc.
- **Lecture 14:** Sleep therapies II
  - OSA therapies: physiotherapy alternatives to positive airway pressure as e.g. positional treatments, Velumount® palatal device, mandibular advancement device, nasal dilators, mucosa care, training (especially oropharyngeal exercises)
- **Lectures 15:** Practical part: Practicing the therapy skills
  
- **Lecture 16:** Practical part: Case studies

## Speakers

**Cristina Staub** (PT, PhD) studied neurophysiology and linguistics after her physiotherapy education in order to know more about the effects of (nonverbal) communication in the treatment success. She additionally completed educations in performing and analyzing polysomnography and graduated with PhD about correlations between physiologic and neuropsychologic parameters in persons with obstructive sleep apnea (OSA).

Because more than 30% of the population suffer from some sleep disturbances, often without optimal treatments, she is looking for individual alternative solutions, doing research about those, and applying them in practice. She is the Swiss delegate of the International Organization of Physical Therapists in Mental Health (IOPTMH) and a member of the board of the Swiss Working Group for Physiotherapy in Psychosomatics and Psychiatry (SAG PPP). At the WCPT Congress in 2019, she co-chaired the discussion session on sleep together with WCPT Vice-President Margot Skinner.

**Cristina Frange** (PT, PhD) is a postdoctoral fellowship at the Neurology and Neurosurgery Department, Universidade Federal de São Paulo (UNIFESP) and supported by Sao Paulo Research Foundation (FAPESP). She is investigating the treatment of sleep disturbances with physiotherapy, and the impact of sleep on rehabilitation. Her current project explores if Global Posture Reeducation can improve motor rehabilitation and sleep in patients after stroke, and also the impact of sitting and physical activity on rostral fluid shift and its contribution to obstructive sleep apnea. She studied the relationship between sleep and chronic pain in her PhD at the Sleep Division at UNIFESP. She attends daily at her office in São Paulo. At the WCPT Congress in 2019, she was one of the speakers of the discussion session on sleep.