



INTRODUCTION

Circadian Rhythm Summer School (CRSS) is a part of the University of Split School of Medicine project – Internationalisation of Higher Education. This summer school course is developed by a group of professionals with experience in sleep medicine and circadian rhythms, and it is based on idea to improve basic universities curriculums lacking this approach. This booklet will provide you with important information about this course, including learning outcomes, content and methods and means of realization of activities you will participate in.

The summer school program is tailored to the target group - future and current professionals in the field of sleep medicine and circadian rhythm. The purpose of the summer school program is to provide professional training for professionals and students.

Newly acquired knowledge in this area will give participants better insights in importance of sleep and circadian (wakefulness-sleep) rhythm for quality of life, for an individual's health and for work and study performance. By applying this knowledge upon completion of the summer school, the participants will help the whole society preventing the modern lifestyle and health consequences of inadequate sleep hygiene and increase the public awareness of this important topic. Also, providing students mobility and visits of the leading world experts in the fields of circadian rhythm and sleep medicine will have a positive impact of positioning Split and the University of Split School of Medicine as a respectful and recognizable destination in this area of biomedicine and health.

The program is structurally composed according to curricular components: aim and purpose of the program; learning outcomes; thematic units; teaching methods and means of teaching; scoring and evaluation.

Note: Nouns and other prepositional words used in this document are masculine, gender neutral, referring to male and female persons and have no discriminatory meaning.



PURPOSE AND AIM OF PROGRAM

The Circadian Rhythm Summer School aims to provide you with the selective set of useful knowledge intended for students and practitioners in sleep medicine and circadian rhythm. So, if you are a beginner in the field of sleep medicine and circadian rhythm or an experienced professional with expertise, this summer school, offers interesting topics and challenges for every day practice. The purpose of the Summer School Program "Circadian Rhythm" is to contribute to: – implementation of the guidelines of the educational committee EduComm of the European society ESRS presented in the Catalogue of knowledge and skills. Those guidelines are the product of consensus of top European sleep medicine experts and are approved by all European National Sleep Societies within the Assembly of National Sleep Societies, ANSS).

THE AIM OF THE PROGRAM IS TO:

- enable the students and young professionals from different countries to gain experience of the multicultural and interdisciplinary learning through this study program
- 2. offering the possibility to establish cooperation among participants and lecturers in the fields of Circadian rhythms
- 3. enhance students' mobility
- gain more theoretical and practical knowledge in sleep medicine and circadian rhythms through teaching modules and in the modern environment.



LEARNING OUTCOMES

Summer school students will know and be able to:

- Describe, identify and explain neurophysiology and neurobiology of sleep and wakefulness.
- Analyze and incorporate control mechanisms responsible for the regulation of sleep and wakefulness.
- Specify and describe the changes that occur in different systems (cardiovascular, respiratory, gastrointestinal and endocrine system) during sleep and wakefulness.
- Identify, describe and explain circadian rhythm sleep disorders.
- Name, explain, apply and critically judge diagnostic procedures such as questionnaires, polysomnography, multiple sleep latency test, maintenance of wakefulness test, reaction time tests and actigraphy in assessment of sleep disorders.
- Analyze, relate and discuss the pathophysiological mechanisms of circadian rhythm sleep disorders and the relationship with clinical symptoms and possible comorbidities.
- Name, discuss and evaluate the diagnostic and therapeutic procedures used in the diagnosis and treatment of circadian rhythm sleep disorders.
- Critically judge educational materials, participate in argumentative discussion and construct opinions.
- Apply the knowledge and demonstrate the skills in applying human bioelectrical recordings (EEG, EMG, EOG) and their interpretation.



TARGET GROUP

The program is aimed at students at the University of Split School of Medicine (Medicine, Dental Medicine, Pharmacy) or similar studies (Nursing, Psychology) recognized in the Republic of Croatia; or in the countries from which the diplomas of similar studies are recognized in the Republic of Croatia.

PLAN AND PROGRAM

The summer school curriculum "Circadian Rhythm" is organized in five modules in accordance to Catalogue of Knowledge and Skills and designed to have more practical exercise and workshops and less theoretical lectures. Students are tutored by their appointed mentors. Each five students will have their own mentor. There is also a possibility of occasional individual consultations with the provider of the study.



THE FOLLOWING MODULES ARE INCLUDED IN THE SUMMER SCHOOL CURRICULUM:

| CLASS | HOURS IN SUMMER SCHOOL | | | ECTS |
|--|------------------------|----------|------------|------|
| | Lectures | Seminars | Practicals | |
| Introduction to circadian rhythm | 3 | 4 | 2 | 0.4 |
| Circadian rhythm and sleep | 4 | 4 | 2 | 0.4 |
| Neuroendocrinology of circadian rhythm sleep disorders | 3 | 1 | 4 | 0.4 |
| Circadian rhythm sleep disorders | 2 | 2 | 5 | 0.4 |
| Circadian rhythm sleep disorders: treatment | 2 | 2 | 0 | 0.4 |
| Total | 14 | 13 | 13 | 2.0 |



EVALUATION OF THE SUMMER SCHOOL REALIZATION

The Circadian Rhythm Summer School presupposes the evaluation of the organization and realization of the summer school. The implementation of the summer school will be evaluated in three ways: registering the attendance at all the classes, completing practical work at the laboratory and getting signature of the mentor, following by the final exam.

REFERENCES:

- 1. Pevernagie D; Steering Committee of European Sleep Research Society. European guidelines for the accreditation of Sleep Medicine Centres. J Sleep Res. 2006;15:231-8.
- 2. Fischer J, Dogas Z, Bassetti CL, Berg S, Grote L, Jennum P, Levy P, Mihaicuta S, Nobili L, Riemann D, Puertas Cuesta FJ, Raschke F, Skene DJ, Stanley N, Pevernagie D; Executive Committee (EC) of the Assembly of the National Sleep Societies (ANSS); Board of the European Sleep Research Society (ESRS), Regensburg, Germany. Standard procedures for adults in accredited sleep medicine centres in Europe. J Sleep Res. 2012;21:357-68.
- 3. Penzel T, Pevernagie D, Dogas Z, Grote L, de Lacy S, Rodenbeck A, Bassetti C, Berg S, Cirignotta F, d'Ortho MP, Garcia-Borreguero D, Levy P, Nobili L, Paiva T, Peigneux P, Pollmächer T, Riemann D, Skene DJ, Zucconi M, Espie C; Sleep MedicineCommittee; European Sleep Research Society. Catalogue of knowledge and skills for sleep medicine. J Sleep Res. 2014;23:222-38.
- 4. Claudio Bassetti, Zoran Dogas, Philippe Peigneux. Sleep Medicine Textbook. European Sleep Research Society; Regensburg 2014.
- 5. Photo: www.visitsplit.com

For more information, please contact:

University of Split School of Medicine Šoltanska 2, 21000 Split, Croatia +385 21 557858 www.mefst.hr

crss@mefst.hr

or scan:



More info about EU Funds: www.strukturnifondovi.hr

The contents of this publication are the sole responsibility of University of Split School of Medicine