

XIIIth INTERNATIONAL COURSE ON CHRONOPHARMACOLOGY

Summer School 2012

Day	Date	Time	Topics	Lecturer
Mon	30.7.	09.00	OPENING ADDRESS: DEAN OF THE FACULTY, PROF. BICKER	
SEMINAR 1: BASICS IN BIOLOGICAL RHYTHM RESEARCH I				
		09.15-10.00	Introduction, history, and basics in chronobiology	Lemmer
		10.00-11.00	Morphology and histology of biological clocks	Fleißner ♀
		11.00-12.00	Effects of light on circadian rhythms: Entrainment, phase-shifting, phase-response curves, Aschoff's Rules	Edmunds
		14.00-15.00	Clock genes and their regulation	Albrecht
		15.00-17.00	<i>Practical course: measuring own circadian rhythms in blood pressure and heart rate by ABPM, skin temperature, peak flow, activity, grip strength</i>	Gorbey, Lemmer
SEMINAR 2: BASICS IN BIOLOGICAL RHYTHM RESEARCH II				
Tue	31.7.	09.00-10.00	Biological rhythms in plants	Wagner
		10.00-11.00	Rhythms in arthropods	Fleißner ♂
		11.00-12.00	Signal transduction between circadian oscillators and cell cycle clocks	Edmunds
		14.00-15.00	Development of circadian systems: Effects of environmental light	Canal
		15.00-16.00	Methods in quantifying biological rhythms	Gorbey
		16.00-17.00	<i>Practical course: measuring own circadian rhythms in blood pressure and heart rate by ABPM, skin temperature, peak flow, activity, grip strength</i>	Gorbey, Lemmer
		At night 19.00	<i>Practical course in the Sleep Lab, Theresienkrankenhaus</i>	Schmitt
SEMINAR 3: RADIOTELEMERTY, DRUG DELIVERY, KINETICS				
Wed	01.8.	09.00-10.00	Use of radiotelemetry in chronopharmacologic research	Lemmer
		10.00-11.00	Drug delivery and chronotherapeutics	McInnes
		11.00-12.00	Chronopharmacokinetics	Gorbey
		14.00-15.00	Chronopharmacology in the elderly	Bruguerolle

15.00-17.00	<i>Practical course: measuring own circadian rhythms in blood pressure and heart rate by ABPM, skin temperature, peak flow, activity, grip strength</i>	Gorbey, Lemmer
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**SEMINAR 4:
EPIDEMIOLOGY, PAIN, CARDIOVASCULAR SYSTEM**

Thu 02.8.	09.00-10.00	Chronobiology and chronopharmacology of pain	Lemmer
	10.00-11.30	Shift Work with special reference to: Tolerance - Desynchronization - Sports and Obesity	Reinberg
	11.30-12.30	Chronopathology of hypertension	Middeke
	14.00-15.30	Chronopharmacology of the cardiovascular system: hypertension, angina pectoris	Lemmer
At night 19.00	<i>Practical course in the Sleep Lab, Theresienkrankenhaus</i>		Schmitt

**SEMINAR 5:
SHIFT WORK, ACCIDENTS, ASTHMA, SLEEP APNEA,
ENDOCRINOLOGY,**

Fri 03.8.	09.00-10.00	Chronoepidemiology	Manfredini
	10.00-11.00	Chronobiology of asthma and chronopharmacology of asthma medications	Smolensky
	11.00-12.00	Sleep apnea	Schmitt
	14.00-15.00	Risk of accidents in adults and children	Reinberg
	15.00-16.00	Chronobiology and chronopharmacology of melatonin, hormones and drugs	Touitou
	17.00 -	<i>Evening Session in the Biergarten</i>	

**SEMINAR 6:
CANCER, PSYCHIATRY , JET-LAG**

Sat 04.8.	09.00-10.30	Chronopharmacology/- chronotoxicology of anticancer agents: animal experiments and patient chronotherapy	Levi
	10.30-11.30	Chronobiology of psychiatric diseases	Cajochen
	11.30-12.30	Jet-Lag	Edwards
	13.00	Written examination - Distribution of the Diploma	Lemmer
