



POSTGRADUATE COURSE IN 2018-19

NEUROBIOLOGY OF AUTONOMIC NERVOUS SYSTEM FUNCTIONS, INTEROCEPTION AND PAIN – (II EDITION IN BARCELONA)

Professor: Prof. Dr. Wilfrid Jänig, University of Kiel, Departament de Physiology, Germany

Dates:

- Course 1: November 9, 10, 11 and 19 of 2018
- Course 2: February 22, 23, 24, and 25 of 2019

Place: KENZEN FORMACIÓ – Avinguda Diagonal, 472-476, 08006 Barcelona.

Language: English. Translation into Spanish

Price: 1290 € (1.100€ before 6/7/2018)

Registration: info@ecosteopatia.com

Addressed to: Health care professionals (Physiotherapists, osteopaths, doctors, psychologists,...)

References: With the registration the student will be given material released by Professor Jänig (papers and book chapters)

Reviews from students: I Edition A Coruña 2016 - <https://youtu.be/NP21q04tyYE>

II Edition Barcelona 2017 - <https://youtu.be/BR76HUUbZU8>

Program:

Course 1: 9 – 12/ 11/ 2018

NEUROBIOLOGY OF AUTONOMIC NERVOUS SYSTEM (ANS)

Day 1 (9. 11. 2018)

Lecture 1.0 Introduction: Concept of the course

Lecture 1.1 General neurobiology of the ANS

Lecture 1.2 Functional anatomy of the peripheral ANS

Lecture 1.3 The peripheral ANS: the final autonomic pathway and its function

Lecture 1.4 The peripheral autonomic neurons and their transmitters

Discussion Session

Day 2 (10. 11. 2018)

Lecture 1.5 Transmission of signals in the peripheral ANS: neuroeffector transmission

Lecture 1.6 Transmission of signals in the peripheral ANS: ganglionic transmission

Lecture 1.7 The enteric nervous system: the third ANS

Lecture 1.8 Activity in autonomic neurons in vivo: the result of central integration

Discussion Session

Day 3 (11. 11. 2018)

Lecture 1.9 Spinal autonomic systems: the spinal cord as integrative organ

Lecture 1.10 Regulation autonomic functions by the lower brain stem: concept and functional anatomy

Lecture 1.11 Regulation of the gastrointestinal tract by the brain: vago–vagal systems, spinal intestino–intestinal systems and brain

Lecture 1.12 Integration of homeostatic regulations and behavior: hypothalamus and telencephalon

Discussion Session

Day 4 (12. 11. 2018)

Lecture 1.13 Sympathetic nervous system and immune system

Lecture 1.14 Sympathetic nervous system and inflammation

Lecture 1.15 The vagal afferent system: organ regulation & communication between body domains

Lecture 1.16 Autonomic nervous system and emotions viewed from a neurobiological perspective

Discussion Session

Course 2: 22. – 25. 2. 2019

NEUROBIOLOGY OF NOCICEPTION AND PAIN

Day 1 (22. 2. 2019)

Lecture 2.0 Summary of course 1: what have we learnt?

Lecture 2.1 Nociception and pain: the concept of pain and interoception

Lecture 2.2 The nociceptor

Lecture 2.3 The spinal cord: processing of nociception and interoception

Lecture 2.4 Representation of pain in the thalamo-cortical system

Discussion Session

Day 2 (23. 2. 2019)

Lecture 2.5 Cortical representation of pain and interoception

Lecture 2.6 Endogenous control of nociception and pain

Lecture 2.7 Mechanisms of deep somatic pain

Lecture 2.8 Mechanisms of visceral pain

Discussion Session

Day 3 (24. 2. 2019)

Lecture 2.9 Referred deep somatic and visceral pain

Lecture 2.10 Mechanisms of chronic inflammatory pain

Lecture 2.11 Mechanisms of neuropathic pain

Lecture 2.12 Sympathetic nervous system and pain: physiology

Discussion Session

Day 4 (25. 2. 2019)

Lecture 2.13 Sympathetic nervous system and pain: pathophysiology

Lecture 2.14 The Complex Regional Pain Syndrome as a model of integration: pain, sympathetic nervous system and control by the brain

Lecture 2.15 The “whole-body approach” in osteopathy and modern neurobiology of the regulation of the body – how does this fit together? Part 1

Lecture 2.16 The “whole-body approach” in osteopathy and modern neurobiology of the regulation of the body – how does this fit together? Part 2

Discussion Session

CV Wilfrid Jänig:

Wilfrid Jänig is the leading authority in Europe on the knowledge of the autonomic nervous system. His collaboration with the School of Osteopathy of A Coruña as a teacher is due to his interest in the investigation of the neurobiological basis of Osteopathic and Manual Medicine.

Wilfrid Jänig has received awards such as the Max-Planck in 1993, it has been part prestigious institutions as the Department of Neurobiology and Behavior, New York City, he has taught as a visiting scientist at various universities such as Monash University, the Baker Institute in Melbourne, University of Melbourne, University of Queensland / Brisbane and the Prince of Wales Medical Research Institute in Sydney, the University of Bristol in the UK. And he has been regularly teaching in the Department of Medicine of the University of California, San Francisco.

He is the author of 246 papers and reviews [2009-2014: 38], 55 textbook chapters [2009-2014: 15], 93 book chapters, editorials or commentaries [2009-2014: 14], 10 books published or numbers magazine [2009-2014: 4] and 1 book (2006 single author). [+info](#)

