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IULIU HAȚIEGANU  
UNIVERSITY OF  
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ROMANIA



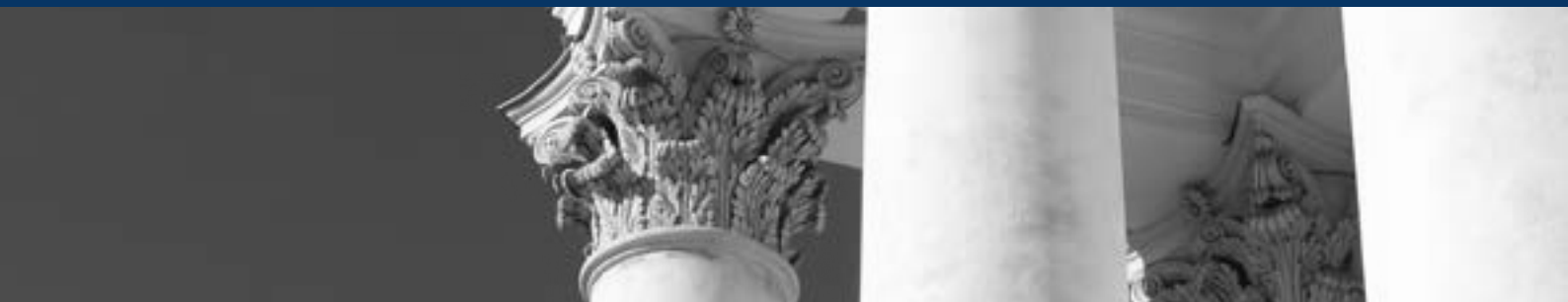
"IULIU HAȚIEGANU" UNIVERSITY  
OF MEDICINE AND PHARMACY  
DOCTORAL SCHOOL

# NEUROSCIENCE PROGRAM

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2016-2017 | SECTION 4

FRIDAY, 24 FEBRUARY | UMF "IULIU HAȚIEGANU" | CLUJ-NAPOCA | ROMANIA



# PhD NEUROSCIENCE PROGRAM COORDINATOR



## Dafin F. Mureșanu

President of the Romanian Society of Neurology

Co-Chair EAN Scientific Panel Neurorehabilitation

Vice President European Federation of NeuroRehabilitation Societies (EFNR)

Professor of Neurology, Chairman Department of Neurosciences "Iuliu Hatieganu" University of Medicine and Pharmacy, Cluj-Napoca, Romania

Chairman "RoNeuro" Institute for Neurological Research and Diagnostic

President of the Society for the Study of Neuroprotection and Neuroplasticity (SSNN)

# INTERNATIONAL GUEST LECTURER



## Claudio Bassetti

Vice-Dean, Medical Faculty, University Bern

Full Professor of Neurology and Chair,  
Neurology Department,  
University Hospital, Bern  
Switzerland

# PhD NEUROSCIENCE PROGRAM FACULTY 2016-2017

Jaroslav Aronowski /USA

Claudio Bassetti /Switzerland

Natan Bornstein /Israel

Michael Brainin /Austria

Michael Chopp /USA

Attila Csányi /Hungary

László Csiba /Hungary

Marc Fisher /USA

Wolf Dieter Heiss /Germany

Peter Jenner /UK

Tudor Jovin /USA

Maurizio Leone /Italy

Dafin F. Mureşanu /Romania

Dieter Meier /Germany

Milija Mijajlovic /Serbia

Maura Pugliatti /Italy

Johannes Vester /Germany

Gregory J. del Zoppo /USA

# ORGANIZER



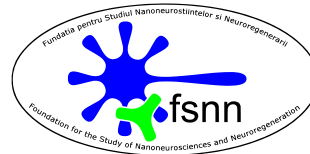
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# ACADEMIC PARTNERS



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## **COURSE PROGRAM**

# COURSE PROGRAM

**FEBRUARY 24<sup>TH</sup>, 2017**

"MULTIMEDIA" AUDITORIUM,

"IULIU HATIEGANU" UNIVERSITY OF MEDICINE AND PHARMACY

CLUJ-NAPOCA, 8 VICTOR BABES STREET

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09:50 – 10:00

Dafin F. Mureşanu /Romania  
Welcome Address

10:00 – 10:45

Claudio Bassetti /Switzerland  
Sleep and Neurology

10:45 – 11:30

Claudio Bassetti /Switzerland  
Sleep and Movement disorders

11:30 – 12:00

Coffee Break

12:00 – 12:45

Claudio Bassetti /Switzerland  
Sleep and Epilepsy

12:45 – 14:00

Session Break

14:00 – 14:45

Claudio Bassetti /Switzerland  
Sleep and Dementia

14:45 – 15:30

Claudio Bassetti /Switzerland  
Sleep and Stroke



## **INTERNATIONAL GUEST LECTURER**



# CLAUDIO BASSETTI

## SWITZERLAND

### CURRICULUM

1985	Medical degree (MD), University of Basel
1985-6	Research fellowship (experimental neurophysiology), Physiology Dept., Basel
1988-1992	Neurology residency, University Hospitals, Bern and Lausanne (FMH 1992)
1992-2001	Attending physician, Neurology Dept., University Hospital (Inselspital), Bern
1995-6	Research fellowship (sleep), Neurology Dept., Michigan UoM, Ann Arbor (USA)
1997	Venia docendi (associate professor) in neurology, University of Bern
2001-2009	Professor and Vice-Chair, Neurology Dept., University Hospital, Zurich
2009-2011	Founder/1st Director, Neurocenter of Southern Switzerland, Lugano
2012-	Full Professor of Neurology and Chair, Neurology Dept., University Hospital, Bern

### EXPERTISE

Clinically	general neurology, sleep, stroke, movement disorders
Scientifically	sleep and stroke, narcolepsy, human and animal research

### PUBLICATIONS (February 2017)

Articles: 365; Books: 8; Citation index 12'000; H-Index: 58

### REPRESENTATIVE PUBLICATIONS

- 1) Bassetti C, Aldrich M, Chervin R, Quint D. Sleep apnea in patients with TIA and Stroke. A prospective study of 59 patients. *Neurology* 1996; 47: 1167-73
- 2) Bassetti C, Vella S, Donati F. SPECT during Sleepwalking. *Lancet* 2000; 356: 484-5
- 3) Khatami R, Maret S, Werth E, Rétey J, Schmid D, Maly F, Tafti M, Bassetti CL. A monozygotic twin pair concordant for narcolepsy-cataplexy without any detectable abnormality in the hypocretin pathway. *Lancet* 2004; 363: 1199-00
- 4) Schwartz S, Ponz A, Poryazova R, Werth E, Boesiger P, Khatami R, Bassetti CL. Abnormal activity in hypothalamus and amygdala during humour processing in human narcolepsy with cataplexy. *Brain* 2008; 131: 514-22
- 5) Hermann D, Bassetti. Role of sleep disordered breathing and sleep-wake disturbances for stroke and stroke recovery, *Neurology* 2016; 87: 1407-1416
- 6) Pace M, Adamantidis A, Facchin L, Bassetti C. Role of REM sleep, melanin concentrating hormone and orexin/hypocretin systems in the sleep-deprivation pre-ischemia. *PLoSone* 2017; DOI:10.1371/journal.pone.0168430



## EDITORIAL ACTIVITIES

Chief editor Clinical and Translational Neurosciences

Deputy Editor European Neurology

Associate Editor Sleep; Journal of Sleep Research; Sleep Medicine

Editorial board Belgian Neurological Journal; Somnologie; Neurobiology of Sleep/Circadian Rhythms

Memberships and awards

2008 Foreign Honorary Member, Belgian Neurological Society

2008 M. Aldrich Award, Ann Arbor, University of Michigan, USA

2008-12 President, Swiss Neurological Society (SNG)

2008-12 President, European Sleep Research Society (ESRS)

2009/2011 Dejerine Dubois Prize, Swiss Neurological Society

2010 Pisa Sleep Award

2009-13 Founder and 1st President, Swiss Federation of Clinical Neurosocieties (SFCNS)

2013-4 President, European Neurological Society (ENS)

2013- Board member, Swiss Academy of Medical Sciences (SAMW)

2015- Board member, Swiss Clinical Trials Organization (SCTO)

2015 Honorary Member, European Academy of Neurology

2015- Board Member, Swiss Heart Foundation

2016- Vice-Dean for Research, Medical Faculty, University of Bern



## **ABSTRACTS**

## SLEEP AND NEUROLOGY

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### CLAUDIO BASSETTI

Vice-Dean, Medical Faculty, University Bern

Chairman and Head, Neurology Department, Inselspital, Bern University Hospital, Bern, Switzerland

Introduction: the main theories on the function of sleep (neuronal restoration/integrity<sup>1,2</sup>; learning/memory consolidation<sup>3-5</sup>; energy saving/allocation<sup>6</sup>) and the principles of sleep staging/scoring and sleep-wake regulation are presented.

Sleep and neurology: the frequency of sleep-wake disturbances (SWD) in neurological patients and the overall impact of SWD on the course of neurological disorders is discussed. Important causes of „neurogenic“ insomnia (e.g. restless legs syndrome, stroke, Creutzfeldt-Jakob disease, frontal lobe lesions, M. Alzheimer) hypersomnia (e.g. narcolepsy, stroke, Parkinsonism) and parasomnia (e.g. Parkinsonism) are presented<sup>7-12</sup>.

Diagnosis/management: history taking in patients with SWD, when to refer patients to specialized sleep centers and treatment options for neurogenic SWD are presented.

## SLEEP AND MOVEMENT DISORDERS

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### CLAUDIO BASSETTI

Vice-Dean, Medical Faculty, University Bern

Chairman and Head, Neurology Department, Inselspital, Bern University Hospital, Bern, Switzerland

The vignette of a patient with a sleep related movement disorder (SRMD) is presented at the beginning, and its solution at the end of the lecture.

Introduction: the physiology of motor control in sleep and the variety of physiological sleep-associated motor activities are briefly discussed<sup>13,14</sup>. The concept of „state dissociation“ as pathophysiological principle of (most) SMD is presented<sup>15,16</sup>.

Sleep-related complex movement disorders: sleepwalking and REM sleep behavior disorder are the most important complex SRMD<sup>17-21</sup>. The list of other SRMD is shortly discussed<sup>13,14,22</sup>.

Diagnosis/management: the diagnostic work-up and treatment options for patients with SRMD are discussed.

## SLEEP AND EPILEPSY

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### CLAUDIO BASSETTI

Vice-Dean, Medical Faculty, University Bern

Chairman and Head, Neurology Department, Inselspital, Bern University Hospital, Bern, Switzerland

The vignette of a patient with a paoxysmal sleep-related episode is presented at the beginning, and its solution at the end of the lecture.

Introduction: the regulation of the thalamo-cortico-thalamic rhythms during the normal sleep-wake cycle and the role of NREM and REM sleep in epileptogenesis are briefly presented<sup>23-26</sup>. The concept of a „final comon“ pathway of parasomnias and sleep-related epilepsies and the corresponding clinical manifestations is discusses<sup>27</sup>.

Sleep and epilepsy: the most important sleep-related epilepsy syndromes (including the so-called sleep hypermotor epilepsy, SHE) and sleep-epilepsy interactions are presented<sup>28,29</sup>.

Diagnosis/management: the diagnostic work-up and treatment options for patients with sleep-related epilepsy and for those with detrimental sleep-epilepsy interactions are discussed<sup>30,31</sup>.

## SLEEP AND DEMENTIA

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### CLAUDIO BASSETTI

Vice-Dean, Medical Faculty, University Bern

Chairman and Head, Neurology Department, Inselspital, Bern University Hospital, Bern, Switzerland

The vignette of a patient with cognitive decline and a sleep disturbance is presented at the beginning, and its solution at the end of the lecture.

Introduction: the suggested mechanisms of sleep-related memory consolidation<sup>3, 32, 33</sup> and the sleep-wake changes observed during aging are presented<sup>34</sup>. Experimental studies linking sleep loss with the accumulation of toxic proteins in the brain are shown<sup>35,36</sup>.

Sleep and dementia: sleep-wake changes in the pre-symptomatic, early and advanced phases of dementia syndrome including M. Alzheimer and M. Parkinson are shown<sup>37, 38</sup>.

Diagnosis/management: the diagnostic work-up and treatment options for demented patients with sleep-wake disturbances are discussed<sup>39,40</sup>.

# SLEEP AND STROKE

## CLAUDIO BASSETTI

Vice-Dean, Medical Faculty, University Bern

Chairman and Head, Neurology Department, Inselspital, Bern University Hospital, Bern, Switzerland

The vignette of a patient with stroke and a questionable sleep disturbance is presented at the beginning, and its solution at the end of the lecture.

Introduction: the autonomic changes occurring during normal sleep and secondary to sleep disordered breathing (SDB) and other sleep disorders are presented<sup>41</sup>. Experimental studies illustrating the effects of sleep manipulations on the evolution of stroke are shown<sup>42-44</sup>.

Sleep and stroke: the data suggesting SDB (and other sleep disorders) as independent risk factors for stroke are discussed<sup>11,45,46</sup>. Current knowledge on frequency and consequences of SDB and other sleep-wake disorders on the outcome of stroke are discussed<sup>11,47,48</sup>.

Diagnosis/management: the diagnostic work-up and treatment options for stroke patients with sleep-wake disturbances are discussed<sup>49</sup>.

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11. Hermann DM, Bassetti CL. Role of sleep-disordered breathing and sleep-wake disturbances for stroke and stroke recovery. *Neurology* 2016;87:1-10.
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