FOUNDATION OF THE SOCIETY FOR THE STUDY OF NEUROPROTECTION AND NEUROPLASTICITY

International School of Neurology

UMF IULIU HAȚIEGANU UNIVERSITY OF MEDICINE AND PHARMACY CLUJ-NAPOCA

RoNEURO Institute for Neurological Research and Diagnostic

FUNDATIA JURNALULUI Journal of Medicine and Life

Seminars

Department of Neurosciences University of Medicine and Pharmacy "Iuliu Hatieganu" Cluj-Napoca | Romania

13 APRIL, 2022

VIRTUAL MEETING

Welcome Address

It is a pleasure to welcome you to the 88th edition Seminars 13 April, 2022. The seminar is hosted by the Department of Neurosciences, Faculty of Medicine, "Iuliu Hatieganu" University of Medicine and Pharmacy, Cluj-Napoca. This seminar aims to establish itself as a highly useful framework that will enable local specialists to benefit from the expertise of our invited speakers who are part of associated international faculty of our Department of Neurosciences Cluj-Napoca, Romania and RoNeuro Science network. Our scope is to flourish over years and set up an educational vector aiming to meet our junior and senior specialists' needs.

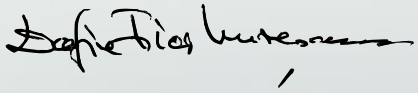
In contrast to large international conferences, the intention behind these seminars is to create an informal and intimate setting, which hopefully will stimulate open discussions.

Due to the uncertainties about the continuing impact of the COVID-19 pandemic, our events will be held in the virtual space, for the time being. As organizers, we would therefore be deeply grateful if you participate and share your time with us.

We are looking forward to your active participation in this educational event!

With consideration,

Prof. Dr. Dafin F. Muresanu,
Chairman Department of Neurosciences, Faculty of Medicine,
"Iuliu Hatieganu" University of Medicine and Pharmacy,
Cluj-Napoca, Romania



Program Coordinator

Dafin F. Mureşanu

President of the European Federation of NeuroRehabilitation Societies (EFNR)

Chairman of EAN Communication and Liaison Committee

Co-Chair EAN Scientific Panel Neurotraumatology

Past President of the Romanian Society of Neurology

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

International Guest Lecturer

Claudio Bassetti

Dean, Medical Faculty, University Bern

President
European Academy of Neurology

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

Organizers

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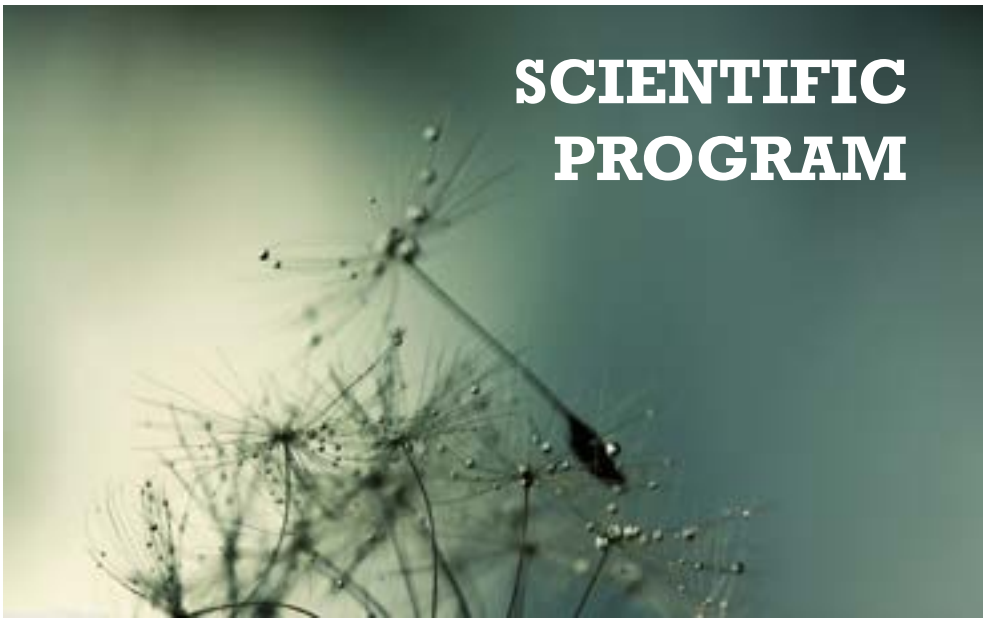


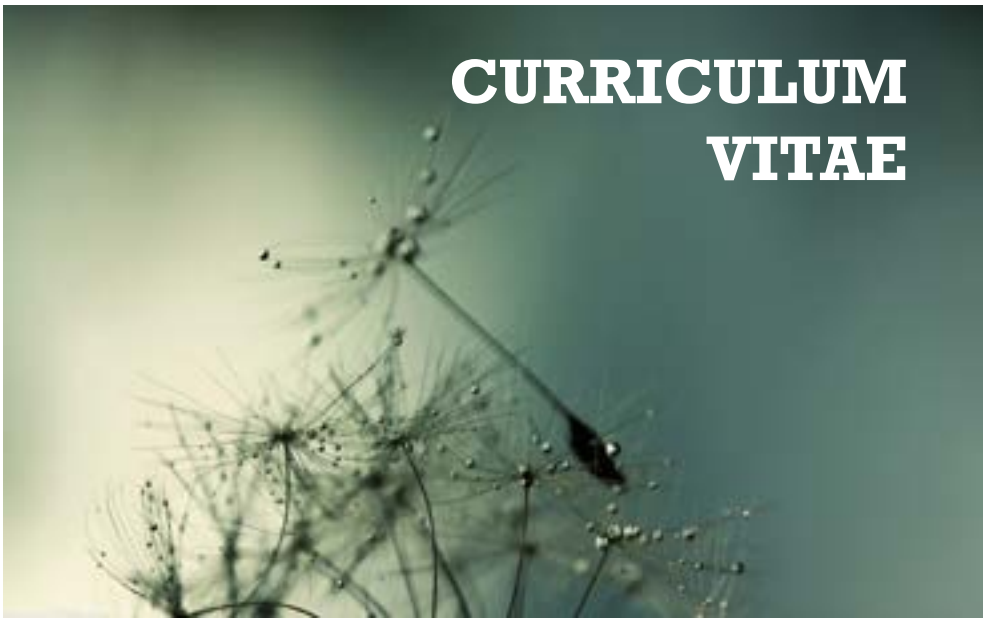
SCIENTIFIC PROGRAM

Scientific program

13 APRIL, 2022

VIRTUAL MEETING

13:00 – 13:45	Sleep and Neurology Claudio Bassetti /Switzerland
13:45 – 14:20	Sleep and Dementia Claudio Bassetti /Switzerland
14:20 – 15:10	Sleep and Movement Disorders (SRMD) Claudio Bassetti /Switzerland


CURRICULUM
VITAE

SPEAKER

Dafin F. Muresanu
/Romania

Professor of Neurology, Senior Neurologist, Chairman of the Neurosciences Department, Faculty of Medicine, "Iuliu Hatieganu" University of Medicine and Pharmacy Cluj-Napoca, President of the European Federation of Neurorehabilitation Societies (EFNR), Chairman Communication Committee of the European Academy of Neurology (EAN), Past President of the Romanian Society of Neurology, President of the Society for the Study of Neuroprotection and Neuroplasticity (SSNN), Chairman "RoNeuro" Institute for Neurological Research and Diagnostic, Corresponding Member of the Romanian Academy, Member of the Academy of Medical Sciences, Romania and secretary of its Cluj Branch. He is member of 17 scientific international societies (being Member of the American Neurological Association (ANA) - Fellow of ANA (FANA) since 2012) and 10 national ones, being part of the executive board of most of these societies. Professor Dafin F. Muresanu is also a specialist in Leadership and Management of Research and Health Care Systems (specialization in "Management and Leadership, Arthur Anderson Institute, Illinois, USA, 1998"; "MBA – Master of Business Administration - Health Care Systems Management, The Danube University - Krems, Austria, 2003"). He has performed valuable scientific research in high interest fields such as: neurobiology of central nervous system (CNS) lesion mechanisms; neurobiology of neuroprotection and neuroregeneration of CNS; the role of the Blood-brain barrier (BBB) in CNS diseases; developing comorbidities in animal models to be used in testing therapeutic paradigms; nanoparticles neurotoxicity upon CNS; the role of nanoparticles in enhancing the transportation of pharmacological therapeutic agents through the BBB; cerebral vascular diseases; neurodegenerative pathology; traumatic brain injury; neurorehabilitation of the central and peripheral nervous system; clarifying and thoroughgoing study on the classic concepts of Neurotrophicity, Neuroprotection, Neuroplasticity and Neurogenesis by bringing up the Endogenous Defense Activity (EDA) concept, as a continuous nonlinear process, that integrates the four aforementioned concepts, in a biological inseparable manner.

Professor Dafin F. Muresanu is coordinator in international educational programs of European Master (i.e. European Master in Stroke Medicine, University of Krems), organizer and co-organizer of many educational projects: European and international schools and courses (International School of Neurology, European Stroke Organisation Summer School, Danubian Neurological Society Teaching Courses, Seminars - Department of Neurosciences, European Teaching Courses on Neurorehabilitation) and scientific events: congresses, conferences, symposia (International Congresses of the Society for the Study of Neuroprotection and Neuroplasticity (SSNN), International Association of Neurorestoratology (IANR) & Global College for Neuroprotection and Neuroregeneration (GCNN) Conferences, Vascular Dementia Congresses (VaD), World Congresses on Controversies in Neurology (CONy), Danube Society Neurology Congresses, World Academy for Multidisciplinary Neurotraumatology (AMN) Congresses, Congresses of European Society for Clinical Neuropharmacology, European Congresses of Neurorehabilitation). His activity includes involvement in many national and international clinical studies and research projects, over 500 scientific participations as "invited speaker" in national and international scientific events, a significant portfolio of scientific articles (260 papers indexed on Web of Science-ISI, H-index: 25) as well as contributions in monographs and books published by prestigious international publishing houses. Prof. Dr. Dafin F. Muresanu has been honoured with: „Dimitrie Cantemir" Medal of the Academy of The Republic of

SPEAKER

Moldova in 2018, Ana Aslan Award 2018 - “Performance in the study of active aging and neuroscience”, for the contribution to the development of Romanian medicine, National Order “Faithful Service” awarded by the President of Romania in 2017; “Iuliu Hatieganu” University of Medicine and Pharmacy Cluj-Napoca, Faculty of Medicine, the “Iuliu Hatieganu Great Award 2016” for the best educational project in the last five years; the Academy of Romanian Scientists, “Carol Davila Award for Medical Sciences / 2011”, for the contribution to the Neurosurgery book “Tratat de Neurochirurgie” (vol.2), Editura Medicala, Bucuresti, 2011; the Faculty of Medicine, “Iuliu Hatieganu” University of Medicine and Pharmacy Cluj-Napoca “Octavian Fodor Award” for the best scientific activity of the year 2010 and the 2009 Romanian Academy “Gheorghe Marinescu Award” for advanced contributions in Neuroprotection and Neuroplasticity.

SPEAKER

Claudio Bassetti
/Switzerland

Claudio Bassetti was born and raised in Ticino, is married and father of three boys. He received his MD degree from the University of Basel in 1984. He trained in neurology in Bern and Lausanne and performed research fellowships in basic neurophysiology (Basel) and sleep medicine (Ann Arbor, USA). In 2000 he was appointed professor of neurology at the University of Zurich. In 2009 he founded the Neurocenter of Southern Switzerland which he directed for 3 years. Since 2012 he is full professor of neurology at the University of Bern and director of the neurology department at Inselspital. Bassetti authored over 400 scientific publications and eight books. He pioneered the research on the bidirectional relationship between, sleep, sleep disorders and stroke using both a human and animal/ experimental approaches. He made also fundamental contributions to our understanding of narcolepsy, including the recent discovery of specific autoreactive-T lymphocytes supporting the hypothesis of an autoimmune etiology. He served as president of the European Neurological Society, European Sleep Research Society and Swiss Neurological Society and was the founder of the Swiss Federation of Clinical Neurosocieties. In 2018 he became an elected member of the Swiss Academy of Medical Sciences. He currently serves as president of the European Academy of Neurology and as the Dean of the Medical Faculty in Bern.

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
2) Bassetti C, Aldrich MS. Idiopathic hypersomnia. A series of 42 patients. Brain 1997
3) Bassetti C, Vella S, Donati F. SPECT during Sleepwalking. Lancet 2000
4) 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
5) 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
6) Pace M, Baracchi F, Gao B, Bassetti C. Identification of sleep-modulated pathways involved in neuroprotection from stroke. Sleep 2015
7) Brill AK, Horvath T, Seiler A, Camilo M, Haynes AG, Ott SR, Egger M, Bassetti CL. CPAP as treatment of sleep apnea after stroke- a meta-analysis of randomized trials. Neurology 2018
8) Leemburg S, Gao B, Cam E, Sarnthein J, Bassetti CL. Power spectrum slope is related to motor function after focal cerebral ischemia in the rat. Sleep 2018
9) Latorre D, Kallweit U,....Bassetti C*, Sallusto F*. T cells in patients with narcolepsy target self-antigens of hypocretin neurons. Nature 2018 (*co-shared last authors) 10) Bassetti C.L.A., A. Adamantidis, D. Burdakov, et al. Narcolepsy. Nature Rev Neurol 2019


ABSTRACTS

Abstracts

SLEEP AND NEUROLOGY

CLAUDIO BASSETTI
/Switzerland

INTRODUCTION: the main theories on the function of sleep (neuronal restoration/ integrity[1,2]; learning/memory
consolidation[3-5]; energy saving/allocation6) and the principles of sleep staging/ scoring and sleep-wake regulation are presented.

EPIDEMIOLOGY AND CLINICAL FEATURES: 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[7-12].

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-RELATED MOVEMENT DISORDERS (SRMD)

CLAUDIO BASSETTI
/Switzerland

The vignette of a patient with a 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[13,14]. The concept of „state dissociation" as pathophysiological principle of (most)
SMD is presented[15,16.]

EPIDEMIOLOGY, CLINICAL ASPECTS: sleepwalking and REM sleep behavior disorder are the most important complex SRMD[17-21]. The list of other SRMD is shortly discussed[13,14,22.]

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

Abstracts

SLEEP AND DEMENTIA

CLAUDIO BASSETTI
/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[3,32,33] and the sleep-wake changes observed during aging are presented34. Experimental studies linking sleep loss with the accumulation of toxic proteins in the brain are shown[35,36.]

EPIDEMIOLOGY AND CLINICAL ASPECTS: sleep-wake changes in the pre-symptomatic, early and advanced phases of dementia syndrome including M. Alzheimer and M. Parkinson are shown[37,38.]

DIAGNOSIS/MANAGEMENT: the diagnostic work-up and treatment options for demented patients with sleepwake disturbances are discussed[39,40]

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“RoNeuro”
Institute for Neurological Research and Diagnostic,
Cluj-Napoca, Romania

Tel.: 0374 46.22.22

str. Mircea Eliade nr. 37, 400364 Cluj-Napoca, România
Fax: 0374.461.674; Email: receptie@roneuro.ro

www.roneuro.ro