



FOUNDATION OF THE  
SOCIETY FOR THE STUDY OF  
NEUROPROTECTION AND  
NEUROPLASTICITY



International  
School of Neurology



UMF  
IULIU HATIEGANU  
UNIVERSITY OF  
MEDICINE AND PHARMACY  
CLUJ-NAPOCA



Institute for  
Neurological Research  
and Diagnostic



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*Journal of Medicine  
and Life*



# Seminars

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

17 MARCH, 2021  
VIRTUAL MEETING



# Welcome Address

It is a pleasure to welcome you to the 62<sup>nd</sup> edition Seminars - 17 March, 2021. 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

# Organizers



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Academia de  
Științe Medicale  
din România



## SPEAKERS



# SPEAKERS

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 (231 papers indexed on Web of Science-*ISI*, H-index: 23) as well as contributions in monographs and books published by prestigious international publishing houses.



**Dafin F.  
Muresanu**  
*/Romania*

# SPEAKERS

Prof. Dr. Dafin F. Muresanu has been honoured with: „Dimitrie Cantemir” Medal of the Academy of The Republic of 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.

# SPEAKERS

Dr. Fisher was affiliated with the University of Massachusetts Medical School for 35 years and is currently an emeritus Professor of Neurology. He began work part-time at Beth Israel Deaconess Medical Center in Boston with an appointment at Harvard Medical School in August, 2014. He has a long track record in performing MRI-based experiments in rat stroke models to evaluate the presence and evolution of the ischemic penumbra. Using diffusion/perfusion MRI his experimental group has evaluated the effects of therapies on the progression of the diffusion/perfusion mismatch. Dr. Fisher has extensive experience in organizing and implementing clinical acute stroke therapy trials with a particular interest in imaging-based trials. He has performed these trials with co-investigators at multiple sites around the world. He has maintained an active clinical practice for many years with an emphasis on patients with cerebrovascular disorders as well as broad range of other neurological illnesses. He has published extensively and has published over 260 peer-reviewed articles with an h-index of 72 and has edited or co-edited 13 books. He currently serves as editor-in-chief of Stroke and will continue in that position until 2020.



**Marc Fisher**

/USA

# **SCIENTIFIC PROGRAM**



# Scientific program

**17 MARCH, 2021**  
**VIRTUAL MEETING**

**12:00 – 12:30** Antiplatelet therapy for secondary stroke prevention  
Dafin F. Mureşanu/ Romania

**12:30 – 13:15** Identifying and implementing translational stroke research  
Marc Fisher/ USA

**13:15 – 14:00** Secondary Stroke Prevention  
Marc Fisher/ USA

## **ABSTRACTS**



# Abstracts

## IDENTIFYING AND IMPLEMENTING TRANSLATIONAL STROKE RESEARCH

MARC FISHER  
/USA

Translational stroke research represents the interface between basic science advances in the cerebrovascular field and determining if these advances are helpful for the diagnosis and treatment of stroke patients. The traditional approach to translational stroke research has been to identify basic research advances that may potentially be clinically useful such as the discovery of a novel pathway of ischemic brain injury that can be ameliorated by a drug targeted towards this mechanism of injury. At the translational stage this new drug will be tested in appropriate animal models and if it is effective future clinical trials will be organized based upon the stroke modeling data. Another approach to translational research is reverse translation that occurs when a clinical advance triggers basic science research studies such as understanding how a novel therapy may improve stroke outcome or determining how an imaging modality can distinguish between infarction and the ischemic penumbra. A third approach to translational research is lateral translation that is characterized by basic research to improve upon a currently effective therapy. An example of this approach would be the development of better thrombolytic agents than tPA that have enhanced clot lysis effects and a better safety profile.

# Abstracts

## SECONDARY STROKE PREVENTION

MARC FISHER  
/USA

After an initial ischemic stroke an important aspect of patient care is to reduce the risk of subsequent strokes. Good control of vascular risk factors such as hypertension, diabetes and hypercholesterolemia are key components of the effort to reduce recurrent stroke risk. For patients with large or small vessel disease as the mechanism for their stroke, antiplatelet therapy should also be employed. Either aspirin or clopidogrel can be prescribed and it is unclear if one drug reduces subsequent stroke risk more than the other. The combination of aspirin and extended release dipyridamole is another option that in the large PROFESSIONAL trial reduced the risk of subsequent ischemic stroke similarly to clopidogrel but with more side effects such as headache and dizziness. The combination of aspirin and clopidogrel should be considered for 3 months in patients with intracranial large vessel stroke. For patients with stroke secondary to atrial fibrillation anticoagulation is recommended. Warfarin was the only option for many years, but four newer oral anticoagulants are now available. I recommend that dabigatran or apixaban be considered for some atrial fibrillation related stroke patients because both have a lower risk of intracranial hemorrhage than warfarin and dabigatran also significantly reduced the risk of subsequent ischemic stroke as compared to warfarin. Apixaban was at least as good as warfarin in reducing ischemic stroke risk as compared to warfarin and had a substantially lower risk of all types of major bleeding side effects. The data are less compelling for rivaroxaban and edoxaban so I do not recommend them.





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