

THE CROATIAN ACADEMY OF SCIENCES AND ARTS
The Department of Biomedical Sciences in Rijeka
THE CLINICAL HOSPITAL CENTER RIJEKA
UNIVERSITY OF RIJEKA - FACULTY OF MEDICINE
THE CROATIAN NEUROLOGICAL SOCIETY
THE CROATIAN MEDICAL ASSOCIATION – Branch office Rijeka

**7th RIJEKA FORUM ON
NEURODEGENERATIVE DISEASES**

Neurodegenerative diseases: Mechanistic therapies - Hype or Hope?



Endorsed by Associations
“Parkinson i mi” and “Neurodeg”



Rijeka, September 18-20, 2023

8.30 am

University Campus Rijeka, Faculty of Civil Engineering
Lecture halls G-003 and G-004, Radmile Matejčić 3, Rijeka

Organizers

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Scientific Committee

Stipan Jonjić, Vladimira Vuletić, Nenad Bogdanović, John Hardy, Robert Živadinov,
Vanda Juranić Lisnić, Alen Ružić, Zdravka Poljaković

Organizing Committee

Vladimira Vuletić, president

Zoran Tomić, Eliša Papić, Valentino Rački, Ilija Brizić, Srđan Novak

Registration: online via [registration form](#)

Free admission for registrations

Information

Željana Mikovčić, Croatian Academy of Sciences and Arts, Department of Biomedical Sciences in Rijeka, Radmile Matejčić 2, Rijeka
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Anja Turkalj Mahmutović, LLM, Clinical Hospital Center, Department of Neurology, Cambierieva 17/8, Rijeka
Phone +385 (0)51 658 311 e-mail: neurologija@kbc-rijeka.hr

PROGRAM

OPENING

(8:30-9:00)

Introduction

Stipan Jonjić, M.D., PhD, Professor, Academician, Head of the Department of Biomedical Sciences in Rijeka, Croatian Academy of Sciences and Arts, Rijeka, Croatia

Vladimira Vuletić, M.D., PhD, Professor, Faculty of Medicine, University of Rijeka, Rijeka, Croatia

Welcome address

Zdravka Poljaković, M.D., PhD, Professor, President of the Croatian Neurological Society, Medical Faculty, University of Zagreb, Zagreb, Croatia

Alen Ružić, M.D., PhD, Professor, Director, Clinical Hospital Center, Rijeka, Croatia

Goran Hauser, M.D., PhD, Associate Professor, Dean, Faculty of Medicine, University of Rijeka, Rijeka, Croatia

Snježana Prijić Samaržija, PhD, Professor, Rector, University of Rijeka, Rijeka, Croatia

1st day – September 18th, 2023

PROGRAM

9:00 – 11:00 h

I. AMYLOID DISEASE - PATHOLOGY AND TREATMENTS

Chairmen: Nenad Bogdanović and Vladimira Vuletić

John Hardy, M.D., PhD, Professor, Institute of Neurology, University College London, London, UK
Amyloid therapies work (somewhat). What next?

Dean Nižetić, M.D, PhD, Professor, Blizard Institute, Barts and the London School of Medicine and Dentistry, London, UK

Uncovering pathogenic and protective mechanisms for Alzheimer's disease using human cerebral organoids

Catherine Mummery, M.D., PhD, Professor, National Hospital for Neurology and Neurosurgery, London, UK

Genetic therapies in dementia: innovation in early phase trials

Vladana Vukojević, Associate Professor, Karolinska Institute, Stockholm, Sweden
Amyloid nano-plaque detection with single-molecule sensitivity as a potential for early diagnosis of Alzheimer's disease

Break for refreshment: 11:00 – 11:30

11:30 – 14:00 h

II. PROTEINOPATHIES, TAUPATHIES, ALPHA-SYNUCLEOPATHIES - TOWARDS PERSONALIZED MEDICINE

Chairmen: Zvezdan Pirtošek and Nenad Bogdanović

Kailash Bhatia, M.D., PhD, Professor, Institute of Neurology, University College London, London, UK
“Atypical”- atypical parkinsonism

Elena Moro, M.D., PhD, Centre Grenoble University Hospital Center, and Grenoble Alpes University, Grenoble, France

Towards personalized medicine in neurodegenerative disorders: The importance of sex and gender

Nenad Bogdanović, M.D., PhD, Professor, Karolinska Institute, Stockholm, Sweden
Synuclein Family and three unpredictable children

Nir Giladi, M.D., Tel Aviv Medical Center, Center for Prevention and Treatment of Parkinson's Disease; Faculty of Medicine and Sagol School of Neuroscience, Tel Aviv University, Israel
What can be learned from the Biogen anti synuclein monoclonal Ab study and the Venglustat study in GBA PD, two negative clinical trials targeted the basic mechanisms of Parkinson's disease

Tamas Revesz, M.D, PhD, FRC Path, Professor Emeritus, Institute of Neurology, University College London, London, UK

An up-to-date classification of tauopathies

Lunch break: 14:00 – 15:00

15:00 – 18:00 h

III. NEURODEGENERATIVE DISEASES - BIOMARKERS AND TREATMENTS

Chairmen: Bettina Balint and Fran Borovečki

Bettina Balint, M.D., PhD, Department of Neurology, University Hospital Zurich, University of Zurich, Zurich, Switzerland

Autoimmune mechanisms of neurodegeneration

Mario Habek, M.D., PhD, Professor, University Hospital Centre Zagreb, Zagreb, Croatia

The importance of autonomic nervous system testing in early neurodegenerative diseases

Niels Bergsland, M.D., PhD, Professor, Department of Neurology, University at Buffalo, Buffalo, USA

New imaging biomarkers in Parkinson's disease

Borut Peterlin, M.D., PhD, Professor, University Medical Center Ljubljana, Ljubljana, Slovenia

Integratomics of Parkinson's disease: towards the mechanisms of disease

Zvezdan Pirtošek, M.D., PhD, Professor, University Medical Center Ljubljana, Ljubljana, Slovenia

Visuo-spatial impairment in Parkinson's disease - associated cognitive decline

Fran Borovečki, M.D., PhD, Professor, University Hospital Centre Zagreb, Zagreb, Croatia

Biomarkers in early Alzheimer's disease

2nd day – September 19th, 2023

9:00 – 11:00 h

IV. MULTIPLE SCLEROSIS

Chairmen: Robert Živadinov and David Bonifačić

Robert Živadinov, M.D., PhD, Center for Biomedical Imaging at Clinical Translational Science Institute and Department of Neurology, University at Buffalo, Buffalo, USA

Role of iron in multiple sclerosis: Should we target neurodegeneration and repair?

Menno Schoonheim, M.D., PhD, Associate Professor, VU University Medical Center, Amsterdam, Netherlands

Cognitive reserve and network efficiency in multiple sclerosis

Michael G. Dweyer, PhD, Department of Neurology, University at Buffalo, Buffalo, USA
Artificial intelligence in multiple sclerosis and other neurodegenerative disorders

David Bonifačić, M.D., PhD, Assistant Professor, Clinical Hospital Center Rijeka, Rijeka, Croatia
Disease Modifying Therapies (DMT) in multiple sclerosis - now and in the future

Break for refreshment: 11:00 – 11:30

11:30 – 14:00 h

V. NEUROPLASTICITY AND NEURODEGENERATIVE DISEASES

Chairmen: Paolo Manganotti and Gabriela Novotni

Vida Demarin, M.D., PhD, Professor, Academician, Secretary of the Department of Medical Sciences of the Croatian Academy of Sciences and Arts, President of International Institute for Brain Health, Zagreb, Croatia

Harnessing neuroplasticity in neurodegenerative disorders

Amos D. Korczyn, M.D., PhD, Professor Emeritus, CONy President, Tel Aviv University, Tel Aviv, Israel

Mechanistic therapies in Parkinson's disease - Hype or Hope?

Nataša Klepac, M.D., PhD, Professor, University Hospital Centre Zagreb, Zagreb, Croatia

The holy grail of cognitive training in the treatment of cognitively impaired patients

Gabriela Novotni, M.D., PhD, Professor, University Clinic of Neurology, Medical Faculty, University "Ss Cyril and Methodius", Skopje, North Macedonia

Deciphering neurodegenerative diseases - from a clinician's perspective to future implications

Paolo Manganotti, M.D., PhD, Professor, Cattinara University Hospital ASUGI and University of Trieste, Trieste, Italy

Brain stimulation in neurodegenerative diseases

Lunch break: 14:00 – 15:00

15:00 – 16:30 h

VI PARKINSON'S DISEASE

Chairmen: Maja Trošt and Norbert Kovacs

Vladimira Vuletić, M.D., PhD, Professor, Clinical Hospital Center Rijeka and Faculty of Medicine, University of Rijeka, Rijeka, Croatia

Nonmotor symptoms (NMS) in Parkinson's disease - Is this the way towards personalized medicine

Norbert Kovacs, M.D., PhD, Professor, Department of Neurology, University of Pecs, Pecs, Hungary
Functional symptoms in Parkinson's disease patients treated with device-aided therapies

Dejan Georgiev, M.D., PhD, Professor, University Medical Centre Ljubljana, Ljubljana, Slovenia
Mechanisms of action of deep brain stimulation: do we really know how does it work?

Maja Trošt, M.D., PhD, Professor, University Medical Centre Ljubljana, Ljubljana, Slovenia
Is parenteral levodopa treatment a mechanistic one?

Break for refreshment: 16:30 – 17:00

17:00 – 18:00 h

VII. OTHER NEURODEGENERATIVE DISORDERS AND NEUROLOGICAL CONDIOTION

Chairmen: Dejan Georgiev and Darko Chudy

Darko Chudy, MD, PhD, Professor, University Hospital Dubrava, Zagreb, Croatia
Deep brain stimulation (DBS) in patients with disorder of consciousness - updates

Ivana Munitić, M.D., PhD, Professor, Department of Biotechnology, University of Rijeka, Croatia
Neuroimmunity in amyotrophic lateral sclerosis (ALS) – mechanistic potential

Martin Rakuša, M.D., PhD, Professor, University Hospital Center Maribor, Maribor, Slovenia
Biomarkers of frontotemporal dementia (FTD)

Slavica Kovačić, M.D., PhD, Clinical Hospital Center Rijeka, Rijeka, Croatia
Role of magnetic resonance imaging (MRI) in the modern treatment of neurodegenerative diseases

3rd day – September 20th, 2023

9:00 – 12:30 h

Satellite symposium: CNS disorders associated with COVID-19 and other viral infections

Chairman: Stipan Jonjić

Gregor Hutter, M.D., PhD, Professor, Department of Biomedicine, University of Basel, Basel, Switzerland

Actionable biomarkers for NeuroCOVID and LongCOVID

Glenn Bantug, M.D., PhD, Department of Biomedicine, University of Basel, Basel, Switzerland
Metabolic drivers of T and B cell function in CNS pathologies

Thomas Blank, PhD, University of Freiburg, Freiburg, Germany
The Brain and Persistent Marks Of Early MCMV Infection

Ilija Brizić, PhD, Assistant Professor, Faculty of Medicine, University of Rijeka, Croatia
Glial cell adaptation to latent cytomegalovirus Infection in the central nervous system

Marina Babić Čač, PhD, Assistant Professor, Faculty of Medicine, University of Rijeka, Croatia
Immune cell crosstalk during neuroinflammation - role for cellular stress sensors

Break for refreshment: 12:30 – 13:00

13:00 – 15:00 h

YOUNG RESEARCHER FORUM Lectures TBA

15:00 – 16:00 h

POSTER SECTION

16:00 – 17:30 h

CLOSING REMARKS

Chairman: Vladimira Vuletić



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“The Epidemiology of Parkinson's Disease in Croatia and the Influence of Genetic Factors and Microbiota on the Progression and Treatment Outcomes of the Disease”