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

8th RIJEKA FORUM ON NEURODEGENERATIVE DISEASES

The regulation of gene expression in neurological disease and neuroimmunology





Endorsed by Associations

"Parkinson i mi" and "Neurodeg"



Rijeka, September 16-18, 2024 08:30 am

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

Organizers

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

Scientific Committee

Stipan Jonjić, Vladimira Vuletić, Nenad Bogdanović, John Hardy,
Alen Ružić, Zdravka Poljaković

Organizing Committee Vladimira Vuletić, president

Zoran Tomić, Eliša Papić, Valentino Rački, 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
Phone: 051 584 578, e-mail: rimed@hazu.hr

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 16th, 2024 PROGRAM

9:00 - 12:00 h

I. ALZHEIMER'S DISEASE UPDATES

Chairmen: Nenad Bogdanović and Elka Stefanova

John Hardy, M.D., PhD, Professor, Institute of Neurology, University College London, London, UK **Neurodegeneration as a symptom of exhaustion of degradative systems**

Nenad Bogdanović, M.D., PhD, Professor, Karolinska Institute, Stockholm, Sweden Perspective: antibody treatment of neurodegenerative disorders

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

Emerging therapies in Alzheimer's disease: translating genetics into clinical impact

Silva Katušić Hećimović, PhD, Professor, Ass. Professor, Institut Ruđer Bošković, Zagreb, Croatia Which comes first: neuroinflammation or neurodegeneration – the case of juvenile Alzheimer's disease

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

The riddle of Alzheimer's disease

Elka Stefanova, M.D., PhD, Professor, School of Medicine, University of Belgrade, Belgrade, Serbia The Role of Fluid Biomarkers in AD Diagnosis - report from the Memory clinic

Discussion: 12:00 - 12:15

Break for refreshment: 12:15 - 12:30

12:30 - 14:30 h

II. ALPE ADRIA SECTION AND MOVEMENT DISORDERS (1st PART)

Chairmen: Vladimira Vuletić and Maja Trošt

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

A peek into what DBS will be able to do in the next 5 years

Kailash Bhatia, M.D., PhD, Professor, Institute of Neurology, University College London, London, UK A new gene for Parkinson's and new predictive biomarker

Angelo Antonini, M.D.,PhD, Professor, Neurology Clinic Padua and University of Padua, Padua, Italy **Disease modifying strategies**

Michele Tinazzi, M. M.D.,PhD, Professor, University of Verona, Verona, Italy **Axial Postural abnormalities in PD**

Discussion: 14:30 - 14:45

Lunch break and Flesh presentation of young researchers: 14:45-15:45

15:45 - 17:45 h

III. ALPE ADRIA SECTION AND MOVEMENT DISORDERS (2nd PART) TREATMENTS

Chairmen: Vladimira Vuletić and Maja Trošt

Aleksandra Tomić, M.D., PhD, School of Medicine, University of Belgrade, Belgrade, Serbia **Genetic landscape of complex dystonia syndromes**

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

Maja Trošt, M.D., PhD, Professor, University Medical Centre Ljubljana, Ljubljana, Slovenia Switching and combining DAT in advanced PD and safety of advanced treatments

Iva Stanković, M.D., PhD, Assistant Professor, School of Medicine, University of Belgrade, Belgrade, Serbia

An update on multiple system atrophy

Milica Ječmenica-Lukić, M.D., PhD, Assistant Professor, School of Medicine, University of Belgrade, Belgrade, Serbia

Atypical atypical parkinsonism: the catalogue of genetic and immune-mediated mimics

Discussion: 17:45 - 18:00

2nd day – September 17th, 2024

9:00 - 11:00 h

IV. MULTIPLE SCLEROSIS AND NEUROIMMUNOLOGY

Chairmen: Borut Peterlin and David Bonifačić

Celia Oreja-Guevara, MD, PhD, University Hospital San Carlos and Complutense University of Madrid, Madrid, Spain

Are imaging (MRI) and biomarkers useful tools for disease monitoring in NMOSD?

Borut Peterlin, M.D., PhD, Professor, University Medical Center Ljubljana, Ljubljana, Slovenia **Genetics in Multiple sclerosis**

Gregor Brecl Jakob, M.D., PhD, Assistant Professor, University Medical Center Ljubljana, Ljubljana, Slovenia

Clinical, MRI and laboratory correlates of degeneration/progression in MS

David Bonifačić, M.D., PhD, Assistant Professor, Clinical Hospital Center Rijeka, Rijeka, Croatia Epstein–Barr virus and multiple sclerosis: moving from questions of association to questions of mechanism

Discussion: 11:00 - 11:15

Break for refreshment: 11:15 - 11:30

11:30 - 14:10 h

V. NEURODEGENERATIVE DISORDERS UPDATES

Chairmen: Patrick Küry and Zvezdan Pirtošek

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

The role of stress in neurodegenerative Diseases

Patrick Küry, M.D., PhD, Professor, Medical Faculty, Heinrich-Hein University of Düsseldorf, Düsseldorf, Germany

Functional assessment of endogenous retrovirus mediated neurodegeneration via transcriptome analysis

Dinko Mitrečić, M.D., PhD, Professor, Croatian Institute for Brain Research, Zagreb, Croatia How do stem cells change expression of genes involved in cell death and autophagy in the neural tissue affected by hypoxia?

Zvezdan Pirtošek, M.D., PhD, Professor, University Medical Center Ljubljana, Ljubljana, Slovenia **Can lamarckism explain cognitive evolution in humans?**

Ivana Munitić, M.D., PhD, Professor, Faculty of Biotechnology and Drug research, University of Rijeka, Croatia

Analysis of optineurin variants in neurodegenerative diseases

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

What is in a name and what is in the brain - a few short dementia stories on genotype/phenotype correlation and protein aggregation

Jason Cannon, PhD, Professor, Purdue University, West Lafayette, SAD Parkinson's disease risk and mechanisms from military relevant organophosphate exposures

Fran Borovečki, M.D., PhD, Professor, University Hospital Centre Zagreb, Zagreb, Croatia Immunogenetics of Parkinson's disease-a single cell sequencing approach

Discussion: 14:10 - 14:25

Lunch and Flesh presentation of posters of young researchers:14.25-15.25

15:25 - 17:15 h

VI. PARKINSON'S DISEASE UPDATES ON GENETICS AND NEUROIMMUNOLOGY

Chairmen: Slavica Kovačić and Vladimira Vuletić

Slavica Kovačić, M.D., PhD, Assistant Professor, Clinical Hospital Center Rijeka, Rijeka, Croatia Longitudinal changes in free-water of the substantia nigra in PD

Dejan Georgiev, M.D., PhD, Professor, University Medical Centre Ljubljana, Ljubljana, Slovenia **Genetic testing before deep brain stimulation for movement disorders: is it really needed?**

Nataša Klepac, M.D., PhD, Professor, University Hospital Centre Zagreb, Zagreb, Croatia How can non-pharmacological interventions support a person with cognitive impairment?

Darko Chudy, MD, PhD, Professor, University Hospital Dubrava, Zagreb, Croatia **Parkinson's disease updates**

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

Microbiota and neurodegenerative diseases

17:15 h

VII. CLOSING REMARKS

Chairman: Vladimira Vuletić

ABSTRACTS