



**WOP
KONEXTA**

**INTERNATIONAL
NEUROSCIENCE
CONGRESS**

**AT THE FOREFRONT OF
KNOWLEDGE AND THERAPIES
IN CONGENITAL OR ACQUIRED
DEMYELINATING DISEASES**

**BILBAO 2024
JUNE 6, 7 & 8**

6 June 2024

TECHNOLOGICAL FRONTIER

Significant technological advances in the diagnosis, treatment and monitoring of demyelinating diseases

15:00-16:00h Registration and collection of credentials

16:00-16:20h Welcome

16:20-17:40h Presentations

Mercedes Lachén:

'Neuroproteomics: opportunities, challenges and clinical potential'

Silvia de Santis:

'Non invasive MRI-based biomarkers to detect and characterize axonal pathology in early multiple sclerosis patients'

Julián Isla:

'Data mining and IA on the clinical management of neurodegenerative diseases. Opportunities and barriers'

17:40h Coffe Break

18:00h Round table

Opportunities that new technologies bring to science and the clinic. The panel will try to answer the questions: Do they respond to the real needs of scientists, clinicians and patients? What does it take to realize their potential?

19:00-20:00h Invited lecture

Catherine Lubetzki:

'On electrical activity and myelin: a clinical perspective'

7 June 2024

SCIENTIFIC FRONTIER

Advances in knowledge

9:30-11:00h

Presentations

Francisco Carratalá:

'Red flags in the early clinical detection of demyelinating diseases in children'

Bernard Zalc:

'Deleterious consequences of perfluoroalkyl substances accumulation into the myelin sheath'

Emilio Geijo-Barrientos:

'Myelin and neuronal function: the neurobiology of demyelination problems'

11:00-11:30h

Coffe Break / Posters

11:30-13:00h

Presentations

Federico Pallardó:

'Role of calcium in demyelinating diseases'

Salvador Martínez:

'Cellular therapy in congenital demyelinating disorders'

Fernando de Castro:

'Future of scientific investigation on neurodegenerative diseases'

13:00-15:00h

Lunch / Posters

15:00-17:00h

Round table

Introductory invited lecture

José María Moraleda:

'TERAV network looks for new therapeutic solutions'

The panel will try to answer the questions: Are scientific efforts responding to clinical demands? Which pathogenic fields need the most effort to understand the underlying mechanisms? What do scientists ask of patients? What do patients ask scientists for? All of this seeks to enhance translability and new scientific approaches based on clinical needs

17:00-17:30h

Coffe Break

17:30-18:30h

Invited lecture

Dr. Paul Orchard

20:00h

Congress dinner

8 June 2024

CLINICAL FRONTIER

Advances on therapies

9:30-10:45h

Presentations

Marc Engelen:

Adrenoleukodystrophy (ALD). 'From axonal degeneration to clinical trials'

Verónica Cantarín:

'Our experience with intrathecal cell therapies with mesenchymal cells in infantile cerebral X-linked adrenoleukodystrophy'

Nathalie Cartier:

'Our experience on gene therapies on leukodystrophies'

10:45-11:15h

Coffe Break

11:15-12:30h

Presentations

Sara García Gil Perotin:

'Autologous hematopoietic precursor transplantation on multiple sclerosis: our experience and new perspectives'

12:30-13:30h

Round table

Technological, scientific, clinical, and patient studies around regulation and legality for the promotion of clinical trials and personalized therapies. Physicians' need for knowledge about the mechanisms of action and availability of objective biomarkers of the evolution of the disease. Scientists need about clinical studies that are actually possible. Patients perspective in relation to the therapeutic process, scientific evolution and dynamics of clinical trials

13:30-14:00h

Synthesis –
Acknowledgments

***Ane Fullaondo***

With a degree in Biology and a PhD in Genetics, she decided to make the leap from the laboratory to management. After seven years dedicated exclusively to basic science, she joined the Biosistemak project (Research Center on Chronicity of the Basque Country, an international benchmark in the study and analysis of the chronically ill) in 2013. She is currently the scientific director of Biosistemak

***Bernard Zalc***

Relevant academic researcher at the French Institute of Medical and Health Research. The author has contributed significantly to research on the following topics: Oligodendrocytes and Myelin. The author has a hindex of 49, co-authored 115 publications and received 7797 citations. Bernard Zalc's previous affiliations include Pierre-and-Marie-Curie University

***Catherine Lubetzki***

Professor of Neurology at Sorbonne University and medical director of the Paris Brain Institute. She is vice president of the Sorbonne University foundation. Catherine belongs to different committees and steering bodies such as the ARSEP (French Multiple Sclerosis association for research) or the International Progressive MS Alliance Scientific Steering Committee

***Emilio Geijo Barrientos***

Professor of Physiology at the Faculty of Medicine of the UMH. Researcher at the Institute of Neurosciences as principal investigator of the Research Group: Neurobiology of mental, neurodegenerative and neurooncological diseases. International leader in electrophysiological studies of cortical circuits



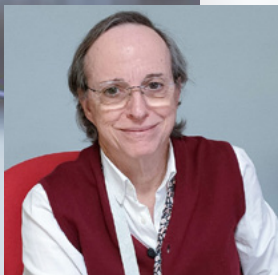
Federico Pallardó

Member of the CIBERER steering committee (responsible for training), he is the director of CIBERER-Biobank of ISCIII. and expert in neurodegenerative diseases. He is currently a professor at the University of Valencia, being dean of the Faculty of Medicine and Dentistry of the University of Valencia between 2011 and 2017. He has been a visiting professor at the Chicago Medical School. He has been director of the Central Research Unit, coordinating the basic research laboratories of INCLIVA for more than ten years. He is group leader of the CIBER in its rare diseases division since 2007



Fernando de Castro

Senior Scientist at the CSIC and principal investigator of the Developmental Neurobiology Group-GNDe at the Instituto Cajal-CSIC. His main research interests range from oligodendroglioneogenesis and myelination to the pathophysiology of demyelinating diseases (multiple sclerosis, leukodystrophies) and the search for cellular and molecular mechanisms to effectively (re)myelinate. Current president of the Spanish Glial Network



Francisco Carratalá

Neuropediatrician at the Hospital Universitario San Juan de Alicante for 29 years and the first neurologist member of the European Neuropediatric Society (EPNS)



José María Moraleda

Coordinator of the Spanish network of advanced therapies (TERAV), for 11 years head of the Hematology Service and the Hematopoietic Transplant and Cell Therapy Unit of the Virgen de la Arrixaca University Hospital in Murcia, professor at the University of Murcia and president of the Spanish Society of Hematology and Hemotherapy (SEHH) (2013-2016)



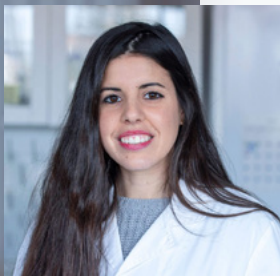
Julián Isla

Software engineer at Microsoft, advisor to the European Medicines Agency and member of the 29 Foundation, father of a son affected by a neurodegenerative disease who carries out an important international activity to promote the use of AI and other technologies for the diagnosis and cure of these diseases



Marc Engelen

She is currently working in the Department of Pediatric Neurology and specifically in the center for white matter disorders at the VU University Medical Center (UMC), Amsterdam. Marc has an intense research activity in leukodystrophies, especially in adrenoleukodystrophy



Mercedes Lachén

Navarra BIOMED researcher specialist in proteomics in neurodegenerative diseases



Nathalie Cartier

Director of the INSERM lab NeuroGenCell (Gene and cell Therapy for neurodegenerative diseases of adults and children) at the Paris Brain Institute (ICM) at the Pitié Salpêtrière Hospital in Paris. She acted as an investigator in the framework of the first gene therapy developed (in X-ALD) and her group is actively working on the development of gene therapies in neurodegenerative diseases. Recent awards: Grand Prix de la Fondation pour la Recherche médicale (2019), Grand prix de l'Académie des Sciences 2019



Paul Orchard

Medical Director of the Inherited Metabolic and Storage Diseases Program and Professor in the Department of Pediatrics, Division of Cell Therapy and Blood and Marrow Transplantation at the University of Minnesota Hospital. Dr. Orchard's focus is on the use of hematopoietic stem cell transplantation and other cell therapies for inherited metabolic disorders, with special interest in inherited leukodystrophies, mucopolysaccharidoses and osteopetrosis. His clinical research focuses on the evolution of novel and combination therapies to decrease toxicity and improve outcomes, with special interest in the use of gene therapy approaches, with extensive experience in leukodystrophies



Pedro Carrascal

Current General Director of the Patients' Organizations Platform (POP). Director of ADEMBI (Multiple Sclerosis Association of Bizkaia) for 25 years (until 2022), as well as Esclerosis Múltiple Euskadi and Esclerosis Múltiple España, positions he held simultaneously during those years



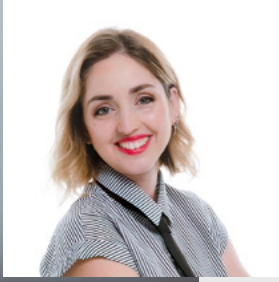
Salvador Martínez

Director of the Instituto Neurociencias de Alicante (IN), UMH-CSIC (April 2016-November 2020), Professor of Human Anatomy Medicine Univ. Murcia and UMH (since 2004), Professor of the Master of IN (since 2004) and Pasteur Institute of Paris (since 2005), Full Professor and Professor of the Universities of Murcia and Miguel Hernández de Elche



Sara Garcia Gil-Perotin

Neurologist at La Fe Hospital in Valencia and in charge of the follow-up and registry of MS patients transplanted with bone marrow progenitors, as a member of the ADWP of the EBMT



Silvia de Santis

Principal Researcher at the Institute of Neurosciences (CSIC-UMH), San Juan de Alicante



Verónica Cantarín

Exclusive dedication to neuropaediatrics since 2009, PhD in 2021 with outstanding "Cum Lauden" from the Autonomous University of Madrid. In recent years I have focused my interest in the field of neuroimmunology and acquired brain injury where I have carried out several research projects. Head of the CLINICAL LINKED GROUP GV23/ER/3 of the Centro de Investigación Biomédica en Red para Enfermedades Raras (CIBERER)-Instituto de Salud Carlos III

VENUE MAIN PROGRAM



The Centennial Auditorium of the University of Deusto, in Bilbao, will host the sessions of the main program. It is a modern space with a capacity for 350 people that has the most modern technology in its more than 500 m²

Avda. de las Universidades, 24, Bilbao (Spain)



5 June 2024

KONEKTA OPEN

The near future of medicine and the potential of Artificial Intelligence and other technologies in healthcare

 **YIMBY BILBAO SPACE**
Ercilla street, 24, Bilbao (Spain)

- 18:30h** Doors opening
- 19:00h** Welcome and start of the session by **Mikel Renteria:**
'Jon and the history that unites us forever to Salvador and Moraleda'
- 19:05h** Lecture
José María Moraleda:
'Impact of advanced therapies in 21st century medicine'
- 19:30h** Lecture
Salvador Martínez:
'Use of our own body cells as medicines'
- 20:00h** Lecture
Mikel Renteria:
'The enormous potential of Artificial Intelligence and other technologies in health'
- 20:30h** End of the session

KONEKTAI PARALLEL SESSION



6 June 2024

KONEKTAI

Possibilities that the explosion of AI and other technologies bring to neuroscience



YIMBY BILBAO SPACE

Ercilla street, 24, Bilbao (Spain)

AI

10:00h

Welcome and presentation

10:10h

Lecture

Daniel Reguera, AI expert and disseminator:

'Different technological aspects of AI and its applicability in health'

10:30h

Lecture

Julián Isla, Microsoft:

'Potential of AI in disease diagnosis and characterization processes. The need for data'

10:50h

Coffee break / Dynamics

11:15h

Lecture

Aitor Moreno Fernández de Leceta, Ibermática:

'Quantum computing: a new AI applied to the conformation of new clinical solutions'

12:05h

Lecture

Ander Ramos, Tecnalia:

'AI-piloted devices and technical solutions'

12:25h

Round Table

13:00h

End of the day

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