



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

16:20-17:45h

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:

'AI: No data, no money'

17:45h

Coffe Break

18:05h

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

Gabriel Lepousez:

'New perspectives in body-brain communications: how peripheral macrophages and gut microbiota-derived signals reach the brain'

7 June 2024

SCIENTIFIC FRONTIER

Advances in knowledge

10:00-11:00h

Presentations

Emilio Geijo-Barrientos:

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

Francisco Carratalá:

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

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

15:00-16:30h

Round table

Introductory guest 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

16:30-17:00h

Coffe Break

17:00-18:00h

Invited lecture

Dr. Paul Orchard:

'Cellular Therapy for Disorders Affecting the Nervous System'

20:00h

Congress dinner at Yimby Bilbao space

8 June 2024

CLINICAL FRONTIER

Advances on therapies

9:30-11:00h

Presentations

Marc Engelen:

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

Nathalie Cartier:

'Our experience on gene therapies on leukodystrophies'

Verónica Cantarín and Inés Solís:

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

11:00-11:30h

Coffe Break

11:30-12:40h

Presentations

Sara García Gil Perotin:

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

12:40-13:40h

Ane Fullaondo:

'Value-based medicine'

Pedro Carrascal:

'The patients' perspective in relation to the scientific and clinical process'

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

13:40-14:00h

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

***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

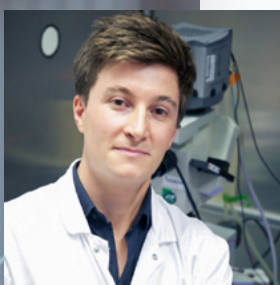
***Fernando de Castro***

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)



Gabriel Lepousez

D. in Neuroscience from the Pierre & Marie Curie University of Paris and researcher at the Pasteur Institute, in the Perception and Memory Unit. His research focuses on brain plasticity and circuit mechanisms underlying sensory perception and memory



Inés Solís

A medical specialist in Radiodiagnosis, she has been working at the Hospital Infantil Universitario Niño Jesús in Madrid since 2008. In recent years, she has focused her dedication to the field of Paediatric Neuroradiology, with special interest in leukodystrophies



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)



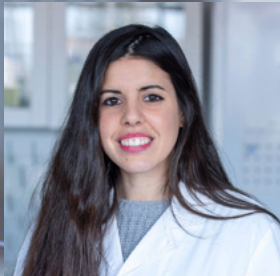
Julián Isla

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



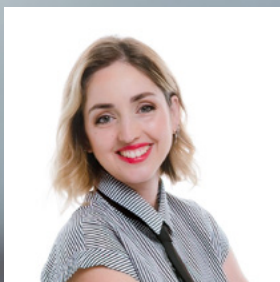
Salvador Martínez

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



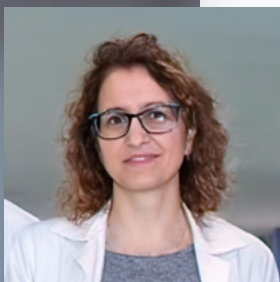
Sara Garcia Gil-Perotin

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

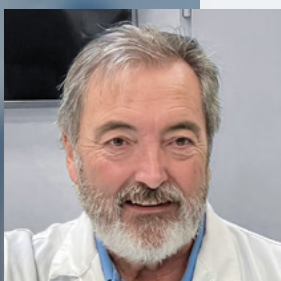
End of the session

***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)

***Mikel Renteria***

Telecommunications Engineer and Master in Business Administration (MBA). Director of The Walk On Project (WOP) Foundation. After almost 20 years developing his professional career in industrial companies, in senior management positions in the last decade, he decided to turn his life around when one of his sons was diagnosed with a serious neurodegenerative disease

***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

KONEKTAI PRE-SESSION



6 June 2024

KONEKTAI

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



YIMBY BILBAO SPACE

Ercilla street, 24, Bilbao (Spain)



10:00h

Welcome and presentation

10:05h

Lecture

Daniel Reguera, AI expert and disseminator:

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

10:25h

Lecture

Ander Ramos, Tecnalia:

'AI-piloted devices and technical solutions'

10:45h

Coffee break / Dynamics

11:05h

Lecture

Aitor Moreno Fernández de Leceta, Ibermática:

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

11:55h

Lecture

Julián Isla, Microsoft:

'Generative AI: This is just the beginning'

12:25h

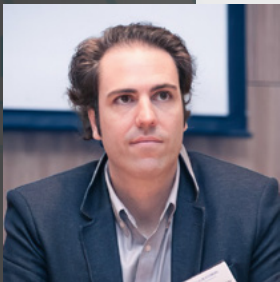
Round Table

13:00h

End of the day

***Aitor Moreno***

D. in Artificial Intelligence from the EHU/UPV, and head of quantum technologies at Ayesa, as well as principal investigator in quantum technologies within Ibermática Fundazioa. In addition, he teaches at the Universities of Deusto and UPV/EHU on computing topics, including artificial intelligence, robotics, automation and control, as well as quantum computing. With multiple publications on these topics, he is a regular speaker at national and international congresses and events in these disciplines

***Ander Ramos***

Director of the Neurotechnology Laboratory at Tecnalia and research scientist at the University of Tübingen. Translational technologist and neuroscientist with expertise in the design, development, testing, validation and regulation of neurotechnology. Leader in neuroprosthetics and neurotechnology

***Daniel Reguera***

D. in Applied Engineering. Professor and researcher in the area of Artificial Intelligence at Mondragon Unibertsitatea. His field of research focuses on the use of Data-Driven methods and Artificial Intelligence to analyze operator and process behaviors in order to optimize industrial systems

***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

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