

SCIENTIFIC PROGRAM

Wednesday May 21th

02:00pm – 02:30pm “Introduction and welcoming”
Antoine Muchir, Inserm, Paris, France

Session | Laminopathic lipodystrophy

Chairs: Giovanna Lattanzi, Estelle Nobécourt

02:30pm – 02:45pm “LMNA mutations and FPLD – new data”
Ferruccio Santini, University Hospital of Pisa, Italy

02:45pm – 03:00pm “A lipidomic score to reassess BMI in patients with FPLD2”
Estelle Nobécourt, CHU de Nancy, France

03:00pm – 03:15pm “New Developments on FPLD in Men”
David Araújo-Vilar, University of Santiago de Compostela, Spain

03:15pm – 03:30pm “Sclerostin and bone metabolism in FPLD2”
Marie-Christine Vantyghem, Centre Hospitalier Universitaire de Lille, France

03:30pm – 03:45pm “Epicardial fat in metabolic laminopathies”
Bénédicte Gaborit, Aix-Marseille University, Inserm, Marseille, France

03:45am - 04:20am Coffee Break and Poster Viewing

04:20pm – 04:40pm “Spatial chromatin rearrangement in lipodystrophic laminopathies”
Philippe Collas, University of Oslo, Norway

04:40pm – 05:00pm “Molecular signatures, physiological features and response to insult in cells isolated from perifacial adipose tissue of Dunnigan patients”
Margherita Maffei, National Council of Research, Pisa, Italy

05:00pm – 05:20pm “How adipocytes are lost in FPLD2?”
Ormand Macdougald, University of Michigan, United States of America

05:20pm – 05:40pm “Metabolic similarities between EDMD and lipodystrophy”
Eric Schirmer, University of Edinburgh, United Kingdom

05:40pm – 06:00pm “Lipodystrophy in laminopathies: unraveling brown and white adipocyte behavior in relevant body districts”
Giovanna Lattanzi, Institute of Molecular Genetics, Bologna, Italy

8:00pm – 11:30pm *Conference Gala Dinner*

Thursday May 22nd

Session| Common features among laminopathies

Chair: to be determined

- 9:00am – 9:15am** *“DNA double-stranded breaks, a hallmark of aging, defined at the nucleotide resolution, are increased and associated with transcription in the cardiac myocytes in LMNA-cardiomyopathy”*
Ali J Marian, University of Texas Health Sciences Center, Houston, United States of America
- 9:15am – 9:30am** *“Cardiac metabolic alteration in LMNA cardiomyopathy”*
Wilfried LeGoff, Sorbonne University, Inserm, Paris, France
- 9:30am – 9:45am** *“Role of lipodystrophy in Hutchinson-Gilford progeria syndrome and therapeutic opportunities”*
Vicente Andres, Centro Nacional de Investigaciones Cardiovasculares Carlos III (CNIC), Madrid, Spain
- 9:45am - 10:30am** Coffee Break and Poster Viewing

Session| Pathogenesis of laminopathies (1)

Chairs: Antoine Muchir

- 10:30am - 10:45am** *“Vascular alterations in Hutchinson-Gilford progeria syndrome: role of vascular smooth muscle and endothelial cells”*
Ignacio Benedicto, Centro de Investigaciones Biológicas Margarita Salas (CIB-CSIC), Madrid, Spain, Spain
- 10:45am - 11:00am** *“Endothelial lamin A/C down regulation drives age associated vascular dysfunction and cardiovascular disease”*
Iñigo Ruiz de Lara, Centro Nacional de Investigaciones Cardiovasculares Carlos III (CNIC), Madrid, Spain
- 11:00am - 11:15am** *“Proteome wide identification of the endogenous ADP-ribosylome of cardiac tissue in LMNA cardiomyopathy”*
Deena Marie Lesli Pedrioli, Zurich University, Switzerland
- 11:15am - 11:30am** *“Splicing alterations in EDMD and different muscular dystrophies”*
Vanessa Todorow Yale University, Boston, United States of America
- 11:30am - 11:45am** *“Nuclear envelope alterations in different muscular dystrophies – tertiary nuclear envelopopathies?”*
Peter Meinke, University of Munich, Germany

11:45am - 12:00pm *"Subtype specific iPSC derived cardiomyocytes to unravel distinct cellular and molecular mechanisms of LMNA cardiomyopathy"*
Cecilia Thairi, Humanitas Cardio Center, Milan, Italy

12:00pm - 01:15pm Lunch and Poster Viewing

Session| Pathogenesis of laminopathies (2)

Chair: Anne Bertrand

01:15pm – 01:30pm *"Nuclear and cytoplasmic alterations in a Nestor Guillermo Progeria C.elegans model"*
Adrian Frago Luna, Universidad Pablo de Olavide, Sevilla, Spain

01:30pm – 01:45pm *"Getting to the heart of LMNA dilated cardiomyopathy – identifying early disease drivers through a multi-level transcriptomics approach"*
Noam Zurela Sopilniak, Cornell University, Ithaca, NY, USA

01:45pm – 02:00pm *"Role of POLD1 in HGPS cells"*
Camilla Cerchier, Unit of Bologna, Bologna, Italy

02:00pm – 02:15pm *"Characterization of cardiac models from an isogenic allelic series of LMNA mutated hiPSC lines generated using the novel and highly efficient targeting platform, STRAIGHT-IN"*
Viviana Meraviglia, Leiden University Medical Center (LUMC), 2333 ZA Leiden, The Netherlands

02:15pm – 02:45pm Coffee Break and Poster Viewing

Session| Clinical phenotypes

Chair: Gisèle Bonne

02:45pm – 03:15pm *"Persistent unmet needs in the prevention of sudden death in Laminopathies"*
Karim Wahbi, APHP, Paris, France

03:15pm – 03:45pm *"OPALE, Observatory of PATients with Laminopathies & Emerinopathies: a patient registry for disease natural history and deciphering of Genotype-phenotype relations."*
Gisèle Bonne, Inserm, Paris, France

03:45pm – 04:15pm *"LAMIN: the LMNA mutation registry of North America"*
Gabrielle Monaco, Duke University School of Medicine, Durham, USA

04:15pm – 04:45pm *"Current major development efforts towards the cure for Progeria"*
Leslie Gordon, Progeria Research Foundation

04:45pm – 05:00pm Break

Session | Pathogenesis of laminopathies (3)

Chair: Bruno Cadot

05:00pm – 05:15pm *“CardioLaminopathy lessons learned: from skin to heart”*
Rogier Veltrop, Maastricht University, The Netherlands

05:15pm – 05:30pm *“Why is lamin cardiomyopathy a perfect storm for arrhythmias”*
David Hutchings, University of Manchester, United Kingdom

05:30pm – 05:45pm *“Microtubules forces drive nuclear damage in LMNA cardiomyopathy”*
Daria Pavlov, Weizmann Institute of Science, Israel

05:45pm – 06:00pm *“Tackling nuclear shape abnormalities as therapy in LMNA cardiomyopathy”*
Antoine Muchir, Inserm, Paris, France

Friday May 23rd

Session | Towards patients

Chair: Rogier Veltrop

09:00am – 09:15am *“Targeting inflammatory pathways to ameliorate cellular and organismal decline in laminopathies”*
Susana Gonzalo, Saint Louis University, United States of America

09:15am – 09:30am *“CRISPR/cas9 system to correct mutations in EDMD1 patient’s cells: generation of in vitro models to identify biomarkers for EDMD”*
Alessandra Recchia, University of Modena and Reggio Emilia, Modena, Italy

09:30am – 09:45am *“An AAV gene therapy functional cure for LMNA dilated cardiomyopathy”*
John Lee, Nuevocor

09:45am – 10:00am *“From Screens to Therapeutics: How DREAMS Uses AI to Unlock Drug Targets and Repositioning Opportunities”*
Nicolas Maignan, Kantify

10:00am - 10:15am Break

10:15am – 10:30am *“Developmental origins of LMNA-cardiomyopathy”*

Francesca Rochais, Aix Marseille University, Inserm, Marseille, France

10:30am – 10:45am *“Genome editing in LMNA cardiomyopathy”*

Jean-Sébastien Hulot, Hôpital Européen Georges Pompidou, Paris, France

Session | Patient's organizations and round tables

Chair: LMNA cardiac

10:45am – 01:00pm