11:00-14:00	**Registration**
14:00-14:30	**Welcome**

Patient organizations (I)
Patient experiences

Moderators:
Esther Martínez
Rogier Veltrop

14:30-14:50	**Rogier Veltrop** (LMNA Cardiac Foundation and Maastricht University, The Netherlands) *"LMNAcardiac ; bridging science and patients"*
14:50-15:10	**Elena Recio** *"My history"*
15:10-15:30	**Sammy Basso** (Associazione Italiana Progeria Sammy Basso, Vicenza, Italy) *"A life with Progeria: a perspective of the patient role in research"*

Opening key note lecture

Chair:
Vicente Andrés

15:30-16:30	**Hesham A. Sadek** (University of Texas Southwestern Medical Center, TX, USA; Centro Nacional de Investigaciones Cardiovasculares Carlos III (CNIC), Madrid, Spain) *"Oxygen and Heart Regeneration: An Evolutionary Tradeoff"*
16:30-17:00	**Coffee break**

Clinical aspects of laminopathies (I)

Moderators:
David Araujo-Vilar
Georgia Sarquella-Brugada

17:00-17:20	**David Araujo** (Universidad de Santiago de Compostela, Spain) *"Type 2 Familial Partial Lipodystrophy: what about men?"*
17:20-17:40	**Corinne Vigouroux** (Inserm and Faculté de Médecine Sorbonne Université, Paris, France) *"Metabolic laminopathies: a multi-faceted clinical approach"*
17:40-18:00	**Leslie Gordon** (Boston Children's Hospital and Harvard Medical School, MA, USA; Hasbro Children's Hospital and Warren Alpert Medical School of Brown University, Providence, RI, USA; The Progeria Research Foundation, Peabody, MA, USA) *"Progeria: The Journey to the Cure"*
18:00-18:20	**Rebecca Brown** (NIH, Bethesda, USA) *"A systematic review of metabolic drug efficacy in familial partial lipodystrophy type 2"*
18:20-18:30	**Birutė Burnytė** (Institute of Biomedical Sciences, Faculty of Medicine, Vilnius University Lithuania) *"Clinical and genetic characterisation of Lithuanian patients with muscle laminopathies".*
18:30-18:40	**Sergi Cesar** (Arrhythmia, Inherited Cardiac Diseases and Sudden Death Unit, Hospital Sant Joan de Déu Spain) *"Different disease progression velocity in two female monozygotic twins diagnosed with LMNA-related congenital muscular dystrophy"*
18:40-18:50	**Valérie Decostre** (Institute of Myology, Paris France) *"Quantification of skeletal muscle strength in laminopathies"*
18:50-20:00	**Welcome drinks**

Mechanisms of laminopathies (I)

Moderators:
Vicente Andrés
Magda Hamczyk

09:00-09:20	**Vicente Andrés** (Centro Nacional de Investigaciones Cardiovasculares Carlos III, CNIC, Madrid, Spain) *"Endothelial YAP/TAZ activation in Hutchinson-Gilford progeria syndrome: From mechanisms to candidate therapies"*
09:20-09:40	**Magda Hamczyk** (Universidad de Oviedo, Asturias, Spain) *"Endothelial-to-mesenchymal transition in progerin-driven accelerated atherosclerosis"*
09:40-10:00	**Susana Gonzalo** (Saint Louis University, MO,USA) *"Sterile inflammation in HGPS: mechanisms and targets for therapies"*
10:00-10:20	**Sophie Zinn-Justin** (Atomic Energy and Alternative Energies Commission, France) *"Structural characterization of Barrier-to-Autointegration Factor interaction with partners in health and diseases"*
10:20-10:40	**Abigail Buchwalter** (University of California, San Francisco, CA, USA) *"Long lifetime and tissue-specific accumulation of the A-type lamins in Hutchinson-Gilford progeria syndrome"*
10:40-10:50	**Adrián Fragoso-Luna** (Centro Andaluz de Biología del Desarrollo Spain) *"Knockdown of microtubule and lysosomal regulators alleviates embryonic lethality in a Nestor Guillermo Progeria C. elegans model"*
10:50-11:00	**Louise Benarroch** (Sorbonne Université, Inserm, Institut de Myologie, Centre de Recherche en Myologie France) *"Identification of potential genetic modifiers underlying phenotypic variability in a French family with striated muscle laminopathies"*
11:00-11:30	**Coffee break**

Clinical aspects of laminopathies (II)

Moderators:
Agnieszka Madej-Pilarczyk
Karim Wahbi

11:30-11:50	**Susana Quijano-Roy** (AH-HP, Hôpital Raymond Poincaré, Paris, France) *"Clinical aspects of the pediatric laminopathies, an update"*
11:50-12:10	**Karim Wahbi** (AP-HP, Université de Paris, Cochin Hospital, Paris, France) *"Future clinical challenges in adult-onset cardiolaminopathies"*
12:10-12:30	**Lorenzo Maggi** (IRCCS Fondazione Istituto Neurologico Carlo Besta, Milan, Italy) *"Natural history studies in Skeletal Muscle Laminopathies- implications for clinical trials"*
12:30-12:50	**Agnieszka Madej-Pilarczyk** (The Children's Memorial Health Institute, Warsaw, Poland) *"Skeletal muscle laminopathies in children - questions, challenges and surprises"*
12:50-13:10	**Georgia Sarquella-Brugada** (Hospital Sant Joan de Déu, Barcelona - Universitat de Barcelona, Spain) *"Congenital LMNA: special patients, special cardiac features"*
13:10-13:20	**Davide Castagno** (University of Turin - "Città della Salute e della Scienza di Torino" Hospital Italy) *"Long-term outcomes and arrhythmic presentations of LMNA-related heart disease: insights from a single-centre experience"*
13:20-13:30	**Maria Cristina Carella** (Cardiology Unit, Interdisciplinary Department of Medicine, University of Bari Aldo Moro, Bari, Italy) *"Cardiac features and genotypr-phenotype correlations in patients with laminopathies: A single-center prospective study"*
13:30-15:00	**Lunch**
14:20-14:50 **Regeneron Satellite Talk**	**Judith Altarejos** *(Director of Research- Obesity Metabolism & Muscle Diseases, Regeneron)* *"From bench to bedside: development of REGN4461, a novel leptin receptor antibody for leptin deficiency"*

Clinical aspects Brain Storming

Moderators:
Leslie Gordon
Lorenzo Maggi
Corinne Vigouroux

15:00-16:30	*"Exploring new ideas and old, unsolved hyppotheses related with clinical aspects of laminopathies"*

Biomarkers

Moderators:
Silvia Bonanno
Eric Schirmer

16:30-16:40	**Eric Schirmer** (University of Edinburgh, Scotland, UK) *"The Search for Biomarkers for the Skeletal Muscle Laminopathies"*
16:40-16:50	**Rocio Toro** (Universidad de Cadiz, Spain) *"Novel biomarkers in LMNA-related DCM through miRNA"*
16:50-17:00	**Catherine Badens** (Hopital d'enfants de la Timone, Marseille, France) *"Enhanced cell viscosity: a new phenotype associated with lamin A/C alterations"*
17:00-17:10	**Robert Carlier** (AH-HP R Poincaré Hospital, Garches, France) *"Retrospective analysis of whole body MRI in a serie of 15 Emery-Dreyfuss and congenital laminopathy patients"*
17:10-17:20	**Stephen Jenkins** (University of Edinburgh, Scotland, UK) *"Sex differences in lamin A levels in immune cells"*
17:20-17:30	*Final Discussion*
17:30-18:00	**Coffee break**
18:00-18:30	**Lightening Poster (odd-numbered posters)** *One minute presentation each poster*
18:30-20:00	**POSTERs (odd numbered posters)**

Mechanisms of laminopathies (II)

Moderators:
Gisèle Bonne
Giovanna Lattanzi

09:00-09:20	**Gisèle Bonne** (Sorbonne Université, Inserm, Institut de Myologie, Centre de recherche en Myologie, Paris, France) *"Recent insights in the pathophysiological mechanisms of striated muscle laminopathies"*
09:20-09:40	**Chiara Lanzuolo** (CNR Institute of Biomedical Technologies, Milan, Italy) *"Role of DNA conformation in laminopathies"*
09:40-10:00	**Philippe Collas** (University Oslo, Norway) *"Chromatin (de)regulation in lipodystrophic laminopathies"*
10:00-10:20	**Ohad Medalia** (University of Zurich, Switzerland) *"Structural insight into lamin-chromatin interactions"*
10:20-10:40	**Rafal Czapiewski** (The University of Edinburgh) *"NET39 knockout yields strong muscular dystrophy phenotype in mice"*
10:40-10:50	**Sengupta Kaushik** (Biophysics & Structural Genomics Division, Saha Institute of Nuclear Physics, India) *"Effects of DCM mutants of lamin A on nuclear architecture and function"*
10:50-11:00	**Marta Amorós-Pérez** (Centro Nacional de Investigaciones Cardiovasculares (CNIC)) *"Lamin A/C expression in hematopoietic cells: Regulation during aging and role in mouse atherosclerosis"*
11:00-11:10	**Barbara Teodoro-Castro** (Saint Louis University United States of America) *"Lamins dysfunction-induced replication fork instability and its consequences"*
11:10-11:40	**Coffee break**

Laminopathies Models

Moderators:
Elisa Di Pasquale
Roland Foisner

11:40-12:00	**Elisa Di Pasquale** (CNR Institute of Genetic and Biomedical Research, Unit of Milan, Italy) *"LMNA and beyond: iPSC-based cardiac models to study Cardiolaminopathy".*
12:00-12:20	**Roland Foisner** (Max Perutz Labs, Medical University of Vienna, Austria) *"Endothelial and paracrine senescence pathways contribute to cardiovascular disease in progeria"*
12:20-12:40	**Elisa Schena** (CNR Institute of Molecular Genetics "Luigi-Luca Cavalli Sforza, Unit of Bologna, Italy) *"Altered adipose tissue dynamics associated to LMNA mutations"*
12:40-13:00	**Qiuping Zhang** (British Heart Foundation Centre of Research Excellence, King's College London, UK) *"A novel mouse model of nesprin-1 associated dilated cardiomyopathy"*
13:00-13:20	**Elif Oral** (University of Michigan, USA) *"Learning Mechanisms of fat loss in Lamin a related Lipodystrophy"*
13:20-13:30	**Bruno Cadot** (Sorbonne Université, Inserm, Institut de Myologie, Centre de recherche en Myologie, Paris, France) *"A 3D myotube chip to study muscular diseases"*
13:30-13:40	**Daniel Moore** (University College London) *"Using patient iPSC-derived skeletal muscle models for development of a CRISPR-based exon removal therapeutic strategy".*
13:40-15:00	**Lunch**
14:30-14:50 **AELIP Satellite Talk**	*"Social and health resources for individuals and families affected by lipodystrophies"*

Mechanisms Brain Storming

Moderators:
Susana Gonzalo
Chiara Lanzuolo
Eric Schirmer

15:00-16:30	*"Exploring new ideas and old, unsolved hypotheses related with mechanisms of laminopathies"*

Drug-based Therapies

Moderators:
Antoine Muchir
Elisa Schena

16:30-16:50	**Antoine Muchir** (Sorbonne Université, Inserm, Institut de Myologie, Centre de recherche en Myologie, Paris, France) *"Alteration of cytoskeleton in cardiolaminopathy"*
16:50-17:10	**Giovanna Lattanzi** (CNR Institute of Molecular Genetics "Luigi-Luca Cavalli Sforza", Unit of Bologna, Italy) *"Nuclear receptor dynamics in response to drug treatments in progeroid laminopathies"*
17:10-17:20	**Ryszard Rzepecki** (University of Wrocław, Wrocław, Poland) *"Testing genetic drugs for gene therapy strategies for Hutchison-Gilford Progeria Syndrome"*
17:20-17:30	**Cecilia Thairi** (IRCCS Humanitas Research Hospital, Rozzano (MI) – Italy Italia) *"NAT10 inhibition in Cardiolaminopathy: investigation of the effect of Remodelin on iPSC-derived"*
17:30-18:00	**Coffee break**
18:00-18:30	**Lightening Poster (even-numbered posters)** *One minute presentation each poster*
18:30-20:00	**POSTERs (even numbered posters)**

Patient organizations (II)	*Moderators:* **Eleonora Cugudda** **Gustavo Dziewczapolski** **Susana Quijano**
09:00-10:30	Please join us for a live "**Ask the Expert**" session where patient representatives will bring questions from the laminopathy-affected communities about the state of research towards treatments and care to be discussed with the attending experts in the field
10:30-11:00	**Group photo**
11:00-11:30	**Coffee break**
Advanced therapies for laminopathies	*Moderators:* **Anne Bertrand** **Ignacio Pérez de Castro**
11:30-12:00	**Dirk Grimm** (Heidelberg University, Germany) *"AAV (finally) flexes its muscles - novel myotropic vectors for treatment of laminopathies and other muscle disorders"*
12:00-12:20	**Anne Bertrand** (Sorbonne Université, Inserm, Institut de Myologie, Centre de recherche en Myologie, Paris, France) *"Challenges in gene therapy for striated muscle laminopathy"*
12:20-12:40	**Ignacio Pérez de Castro** (IIER, Instituto de Salud Carlos III, Spain) *"Heterogeneous responses to the application of different gene therapy strategies on an Lmna-R249W mouse of LMNA-related congenital muscular dystrophy"*
12:40-12:50	**Gwladys Revêchon** (Karolinska Institutet, Sweden) *"Base editing and antisense therapy in progeria"*
12:50-13:00	**Eleonora Cattin** (University of Modena and Reggio Emilia Italy) *"CRISPR/Cas9-based genome editing for correction of X-linked Emery-Dreifuss Muscular Dystrophy"*
Closing key note lecture	*Chair:* **Gisèle Bonne**
13:00-14:00	**Colin Stewart** (ASTAR Skin Research Laboratories, Singapore) *"The Lamins in Development and disease – a 40-year journey from basic science to gene therapy"*
14:00-15:00	**Awards & Farewell**