

11:00-14:00	<b>Registration</b>	
14:00-14:30	<b>Welcome</b>	
<b>Patient organizations (I) Patient experiences</b>		<i>Moderators:</i> <b>Esther Fernández Gracia Mary Mack</b>
14:30-14:50	<b>Rogier Veltrop</b> (LMNA Cardiac Foundation and Maastricht University, The Netherlands) <i>"LMNAcardiac ; bridging science and patients"</i>	
14:50-15:10	<b>Elena Recio</b> <i>"My history"</i>	
15:10-15:30	<b>Sammy Basso</b> (Associazione Italiana Progeria Sammy Basso, Vicenza, Italy) <i>"A life with Progeria: a perspective of the patient role in research"</i>	
<b>Opening key note lecture</b>		<i>Chair:</i> <b>Vicente Andrés</b>
15:30-16:30	<b>Hesham A. Sadek</b> (University of Texas Southwestern Medical Center, TX, USA; Centro Nacional de Investigaciones Cardiovasculares Carlos III (CNIC), Madrid, Spain) <i>"Oxygen and Heart Regeneration: An Evolutionary Tradeoff"</i>	
16:30-17:00	<b>Coffee break</b>	
<b>Clinical aspects of laminopathies (I)</b>		<i>Moderators:</i> <b>David Araujo-Vilar Georgia Sarquella-Brugada</b>
17:00-17:20	<b>David Araujo</b> (Universidad de Santiago de Compostela, Spain) <i>"Type 2 Familial Partial Lipodystrophy: what about men?"</i>	
17:20-17:40	<b>Corinne Vigouroux</b> (Inserm and Faculté de Médecine Sorbonne Université, Paris, France) <i>"Metabolic laminopathies: a multi-faceted clinical approach"</i>	
17:40-18:00	<b>Leslie Gordon</b> (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) <i>"Progeria: The Journey to the Cure"</i>	
18:00-18:20	<b>Rebecca Brown</b> (NIH, Bethesda, USA) <i>"A systematic review of metabolic drug efficacy in familial partial lipodystrophy type 2"</i>	
18:20-18:30	<b>Birutė Burnytė</b> (Institute of Biomedical Sciences, Faculty of Medicine, Vilnius University Lithuania) <i>"Clinical and genetic characterisation of Lithuanian patients with muscle laminopathies"</i>	
18:30-18:40	<b>Sergi Cesar</b> (Arrhythmia, Inherited Cardiac Diseases and Sudden Death Unit, Hospital Sant Joan de Déu Spain) <i>"Different disease progression velocity in two female monozygotic twins diagnosed with LMNA-related congenital muscular dystrophy"</i>	
18:40-18:50	<b>Valerie Decostre</b> (Institute of Myology, Paris France) <i>"Quantification of skeletal muscle strength in laminopathies"</i>	
18:50-20:00	<b>Welcome drinks</b>	

## Mechanisms of laminopathies (I)

Moderators:  
Vicente Andrés  
Magda Hamczyk

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

11:00-11:30 **Coffee break**

## Clinical aspects of laminopathies (II)

Moderators:  
Agnieszka Madej-Pilarczyk  
Karim Wahbi

11:30-11:50	<b>Susana Quijano-Roy</b> (Hôpital Raymond Poincaré, Paris, France) <i>"Clinical aspects of the pediatric laminopathies, an update"</i>
11:50-12:10	<b>Karim Wahbi</b> (AP-HP, Université de Paris, Cochin Hospital, Paris, France) <i>"Future clinical challenges in adult-onset cardiolaminopathies"</i>
12:10-12:30	<b>Lorenzo Maggi</b> (IRCCS Fondazione Istituto Neurologico Carlo Besta, Milan, Italy) <i>"Natural history studies in Skeletal Muscle Laminopathies- implications for clinical trials"</i>
12:30-12:50	<b>Agnieszka Madej-Pilarczyk</b> (The Children's Memorial Health Institute, Warsaw, Poland) <i>"Skeletal muscle laminopathies in children - questions, challenges and surprises"</i>
12:50-13:10	<b>Georgia Sarquella-Brugada</b> (Hospital Sant Joan de Déu, Barcelona - Universitat de Barcelona, Spain) <i>"Congenital LMNA: special patients, special cardiac features"</i>
13:10-13:20	<b>Davide Castagno</b> (University of Turin - "Città della Salute e della Scienza di Torino" Hospital Italy) <i>"Long-term outcomes and arrhythmic presentations of LMNA-related heart disease: insights from a single-centre experience"</i>
13:20-13:30	<b>M<sup>a</sup> Cristina Carella</b> (Cardiology Unit, Interdisciplinary Department of Medicine, University of Bari Aldo Moro, Bari, Italy ) <i>"Cardiac features and genotyp-phenotype correlations in patients with laminopathies: A single-center prospective study"</i>

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 Vigouroux15:00-16:30 *"Exploring new ideas and old, unsolved hypotheses related with clinical aspects of laminopathies"*

## Biomarkers

Moderators:  
Silvia Bonanno  
Eric Schirmer16:30-16:40 **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)17:10-17:20 **Steve 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 straited 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** (INSERM U974 Centre de Recherche en Myologie 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 Hutchinson-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 &amp; Farewell