



**CENTRE DE
RECHERCHE
EN MYOLOGIE**

Press Release



LMNA PRIORITY project awarded prestigious Leducq grant

The PRIORITY project has received a grant of 8,000,000 US\$ from the Leducq Foundation. The grant was awarded to the consortium for research into dilated cardiomyopathy (*LMNA*-DCM). The project is called **PRIORITY: Cardio-LaminoPathy: fRom pathomechanisms tO peRsonalized TherapY**.

(<https://www.fondationleducq.org/network/priority-cardio-laminopathy-from-pathomechanisms-to-personalized-therapy/>)

LMNA-related dilated cardiomyopathy (*LMNA*-DCM) is a severe and inherited disease caused by mutations in the *LMNA* gene. This gene provides instructions for making proteins called lamins (Lamins A/C), which help maintain the structure of the cell nucleus and play an important role in regulating chromatin organization, gene expression, and cytoskeletal organization by interacting with numerous other proteins. There is no effective treatment for *LMNA*-DCM because we do not fully understand the disease's underlying mechanisms. Therefore, the proposed PRIORITY (cardio-laminoPathy: fRom pathomechanisms tO peRsonalized TherapY) network aims to fill this knowledge gap and develop personalized, disease-modifying therapies.

Aims of PRIORITY

PRIORITY has three main Aims. Aim 1 investigates the clinical and genetic signs associated with *LMNA*-DCM, identifying factors to understand what factors affect the severity and progression of the disease. Aim 2 pursues the underlying disease mechanism(s) contributing to *LMNA*-related DCM, uncovering the complex cellular and molecular processes underlying the pathogenesis and disease progression using state-of-the-art technologies. Aim 3 develops mechanism-based therapies for *LMNA*-related DCM by leveraging existing concepts and novel findings from Aim 2, potentially offering personalized therapeutic options for *LMNA*-DCM patients.

Network

Our team is comprised of internationally renowned experts from prestigious European institutions (Sorbonne Université-Inserm, Amsterdam University, Maastricht University, University of Zurich, Paris-Cité University) and the USA (Duke, Cornell, and Stanford), along with early career investigators. We will partner with LMNAcardiac.org, a patient-led foundation, to ensure a patient-centered approach and to address the needs of those affected by *LMNA*-DCM. International collaborations and exchanges will offer unique interdisciplinary training opportunities for early career scientists in the network. Dr. Gisèle Bonne, Research Director Sorbonne Université-Inserm and Dr. Andrew Landstrom, Associate Professor Duke University School of Medicine, are the coordinators with the support of the Netherlands Heart Institute as coordinating office.

Do you want more information? Please contact Gisèle Bonne (gisele.bonne[a]inserm.fr)