A. FUNDAMENTAL RESEARCH AND PHYSIOPATHOLOGY OF DISEASES OF THE NEUROMUSCULAR SYSTEM

1. Fundamental research projects aimed at increasing our understanding of molecular, cellular, physiological and pathological mechanisms, involving the structure and function of skeletal muscles, motor neurons, neuromuscular junctions, aging and degeneration/regeneration in physiological and pathological conditions.

2. Research projects aimed at increasing our understanding of the clinical and genetic heterogeneity of neuromuscular diseases.

3. Genetic cardiomyopathies with muscle structure abnormalities.

4. Understanding the physiopathology of smooth muscle in relation to neuromuscular diseases.

5. Differentiation of adult, embryonic and iPS stem cells into skeletal muscle or motor neurons (in physiological and pathological conditions).

6. Genetic/epigenetic regulation of genes and characterization of gene regulation networks within the neuromuscular system.

B. DEVELOPMENT OF INNOVATIVE THERAPEUTIC APPROACHES FOR RARE DISEASES

1/ Gene and/or cell therapy for rare disorders
   - Breakthrough innovation
   - Gene transfer and gene correction
   - Genome editing
   - Genetically modified cells
   - Development of delivery strategies
   - Control of the immune response (auto-immunity, anti-vector and anti-transgene responses, etc.)

2/ Strategies for modifying gene expression both at the gene and RNA level
   - Projects based on gene transfer, chemical molecules or biotherapies

3/ Pharmacotherapies of neuromuscular diseases
   The proposed projects must be clearly focused on neuromuscular diseases

4/ Translational research: tools for evaluation of treatments for neuromuscular diseases
   - Natural history of neuromuscular diseases
   - Outcome measures: functional, connect objects, imaging
   - Genomic, transcriptomic, proteomic, metabolomic biomarkers of pathologies and/or therapies
   - New cellular, tissue and animal models
   - Translational networking of basic, preclinical and clinical researchers with clinicians and industry professionals

TYPES OF FINANCING:

The selected projects will be subject to an agreement with AFM-Telethon. AFM-Telethon may decide to finance the selected project under a collaboration which entails a co-ownership of the results.

- Trampoline grant: intended to support young teams or investigators early in their professional career (either permanent or non-permanent position), and/or early stage innovative and risky projects. This grant is awarded for a maximum of 50,000 euros for one year.
- Research project for one year, renewable for a second year, and exceptionally for a third year.
- Post-doctoral fellowship for one year, renewable for a second year.
- PhD fellowship for a maximum of three years.

DEADLINES FOR APPLICATIONS:
confer to the Annual Calendar available on the AFM-Telethon website.

Access to the applicant portal

Laurence TIENNOT-HERMEN
President of AFM-Telethon

Odile BOESPFLUG-TANGUY
President of the Scientific Council

http://www.afm-telethon.com