

Thursday, November 14th

13:00-13:15 Welcome. **Florence Niedergang** (director of Institut Cochin, Paris, France),
Florian Britto, Pascal Maire, Benoit Viollet (organizers)

Session 1 - Inter-cellular and inter-organ communications in physiopathology

Chaired by Catherine Postic, Thierry Launay, Iryna Pirozhkova

13:15-14:00 **Keynote: Bente Pedersen** (University of Copenhagen, Denmark)

Exercise as medicine: focus on myokines

14:00-14:30 **Jennifer Arrondeau** (ENMC, UMR 8251, Paris, France)

Effect of physical activity on glucose uptake by cancer tumors: “MUSCULOPET study”

14:30-15:00 **Jacob Smith** (University of Barcelona, Spain)

Circadian rhythms in muscle-liver crosstalk

15:00-15:30 **Benedicte Chazaud** (INMG, Lyon, France)

The regenerative niche for skeletal muscle regeneration after exercise-induced muscle injury

Break

Session 2 - From pluripotent stem cells to skeletal muscle adaptation limits

Chaired by Athanassia Sotiropoulos, Glenda Comai, Pascal Maire

16:15-17:00 **Keynote: Olivier Pourquié** (Harvard Medical School, USA)

Deconstructing human skeletal muscle development in vitro

17:00-17:30 **François Goldwasser** (Hôpital Cochin & Institut Cochin, Paris, France)

Host metabolism and antitumour immunotherapy

17:30-18:00 **Angèle Merlet** (Université Saint Etienne, France)

Exercise therapy: what effect on physical fitness and skeletal muscle tissue? Example of sickle cell disease and perspectives in other pathologies

18:00-18:30 **Christophe Handschin** (Biozentrum, University of Basel, Switzerland)

The multicellular mechanistic underpinnings of exercise adaptation in skeletal muscle

18:30-18:50 Meeting with Olympic athletes

19:00-20:30 Cocktail/diner - Cloître Port-Royal

Friday, November, 15th

Session 3 - Muscle activity, neuromuscular diseases and therapy

Chaired by Anne Houdusse, Isabelle Richard, Benoit Viollet

- 09:00-09:45 **Keynote: Helen Blau** (Baxter Laboratory for Stem Cell Biology, Stanford University School of Medicine, US)
Forget the exercise, take a pill
- 09:45-10:15 **Serge Braun** (AFM-Téléthon, EVRY, France)
Gene therapy of neuromuscular diseases and potential impact of muscle exercise on therapeutic efficacy
- 10:15-10:45 **Olivier Biondi** (Université Evry Paris Saclay, France)
Precision exercise in neuromuscular disorders: disease-specific adaptations on mouse models

Break

Session 4 - Muscle activity, neuromuscular diseases, and aging

Chaired by Delphine Duprez, Frédéric Relaix, Sabrina Pichon

- 11:15-11:45 **Patricia Thoreux** (CIMS, Hôpital Hôtel Dieu – HUPC, Paris, France) and **Pascal Laforet** (Paris Saclay University, France)
Neuromuscular diseases and physical activity: what to think about in 2024
- 11:45-12:15 **Laurent Schaeffer** (INMG, Lyon, France)
Chromatin, DNA repair and muscle aging
- 12:15-12:45 **Jerome Feige** (Nestlé Institute of Health Sciences S.A., Lausanne, Switzerland)
Mitochondrial Calcium Import Regulates Performance and Aging of Skeletal Muscle
- 12:45-13:15 **Florian Britto** (Institut Cochin, Paris, France)
Influence of myofibers typology and metabolism on muscle hypertrophy

Lunch - Cloître Port-Royal

Session 5 - Myofiber diversity, metabolism and physiopathology

Chaired by Capucine Trollet, Helge Amthor, Frédéric Bouillaud

- 14:45-15:30 **Keynote: Marco Sandri** (VIMM, University of Padua, Italy)
Novel insights linking mitochondria, bioenergetics, DNA damage and inflammation with sedentary life
- 15:30-16:00 **Julien Ochala** (University of Copenhagen, Copenhagen, Denmark)
Linking myosin to muscle metabolism
- 16:00-16:30 **Kristian Gundersen** (Institutt for Biovitenskap, Universitetet i Oslo, Norway)
What determines muscle fiber size?
- 16:30-17:00 **Jean-François Toussaint** (IRMES, URP 7329, INSEP, Paris, France)
Olympism & paralympism: research, limits & development

18:00-19:00 Conférence grand public / General public lecture. **Irène Margaritis** (ANSES)