

15th Swiss Meeting on Muscle Research

Macolin / Magglingen

16th-18th November 2025

Preliminary Programme



The Swiss Meeting on Muscle Research was launched by the FSRMM in 1996 based on the initiative of its former Scientific Director, Prof. Denis Monard, as a biannual meeting to learn about the progress of funded projects.

Meanwhile, it has developed into a meeting for all researchers working in basic science and clinics who are devoted to the understanding and treatment of neuromuscular diseases in Switzerland. The purpose of the meeting is to discuss the latest results, initiate collaborations, exchange samples and ideas and to get to know each other better.

To foster scientific exchange and to promote young scientists, the FSRMM keeps the participation in this meeting free of charge.

Programme

Sunday, November 16th

16:30-17:15 Arrival, Check-in

17:15-18:30 Welcome Apero

18:30-19:30 Dinner

19:30-19:35 Meeting opening (Alain Pfulg and Markus Rüegg)

19:35-20:20 Keynote lecture:

Session 1: Fibrosis in neuromuscular disorders

Chair: Markus Rüegg

20:20-20:40 Persistent tissue regeneration and transforming growth factor- β induced fibrosis in the masseter muscle of mdx5Cv mice
Aouatef Djeraba Ait-Lounis, University of Geneva

20:40-21:00 Biofabrication of a 3D microphysiological platform for the study of the human muscle microenvironment in aging and disease
Simone Bersini, Ente ospedaliero cantonale, Lugano

Monday, November 17th

Session 1: New diagnostic approaches

Chair: Werner Z'Graggen

8:30-8:50 Towards an effective multimodal biomarker panel for ALS/FTD spectrum diagnosis
Nils Briel, Universitätsspital Zürich

8:50-9:10 ALS Registry Switzerland
Jan Loosli, Universitätsspital Zürich

9:10-9:30 Open and reproducible pipeline for the acquisition and analysis of muscle MRI data in Facioscapulohumeral Muscular Dystrophy
Claudia Weidensteiner, Universität Basel

9:30-9:50 Open MRI Pipeline for muscle strain calculation Introduction
Marta Brigid Maggioni, Universität Basel

9:50-10:00 Téléthon

10:00-10:30 Coffee break

Session 2: Mitochondrial involvement in health and disease

Chair: Antoine Clery

- 10:30-10:55 The silent isoform: alternative splicing of PLIN3 reveals mitochondrial targeting with elusive protein expression
Axel Aguetaz, University of Lausanne
- 10:55-11:20 How does nutrition impact skeletal muscle metabolic health? Novel connections involving lipids
Cassandra Tabasso, University of Lausanne
- 11:20-11:45 An updated inventory of genes essential for oxidative phosphorylation identifies a mitochondrial origin in familial Ménière's disease
Marcell Harhai, University of Lausanne
- 11:45-12:10 New aspects of TGF β signaling in muscle regeneration
Jérémy Kessler, University of Geneva

12:10-13:30 Lunch

Poster session

- 13:30-15:30 ALL POSTERS, coffee and tea

Session 3: Muscle structure and performance

Chair: Susan Treves

- 15:30-15:55 Characterization of skeletal muscles from STIM1L KO mice
Stéphane Koenig, University of Geneva
- 15:55-16:20 The novel roles of STIM1S and STIM1L in skeletal muscle architecture
Tahir Idris, University of Geneva
- 16:20-16:45 A subsynaptic kinase regulates muscle fiber identity and its restoration ameliorates cancer cachexia
Volkan Adak, University of Basel
- 16:45-17:10 Zebrafish as a model for human skeletal muscle quality: identifying critical windows for intervention
Mauricio Castro Sepulveda, University of Lausanne
- 17:10-17:35 Muscle spindle function and its impact on the musculoskeletal system
Alexis Ruiz, University of Basel

17:35-17:45 Break

Session 4: Satellite cells and regeneration

Chair: Francesca Amati

- 17:45-18:10 Chemical reprogramming of committed mouse myoblasts into myogenic stem cells with satellite cell characteristics
Ori Bar-Nur, ETH Zürich
- 18:10-18:35 Human muscle reserve cells represent a quiescent and heterogeneous stem cell population characterized by distinct Pax7 expression and stem cell states
Thomas Laumonier, University of Geneva

18:35-19:00 Orai3 and AHNK2 regulate the activation of human skeletal muscle stem cells in vitro
Mélanie Forgeaud, University of Geneva

19:00-20:30 Dinner
Poster prize committee meets over dinner

Evening program

20:30-23:00 free beer at poster site

Tuesday, November 18th

Session 1: New therapeutic perspectives

Chair: Christoph Handschin

- 9:00-9:25 Wif1 modulates the inflammatory microenvironment in LAMA2 Muscular Dystrophy
Eleonora Maino, University of Basel
- 9:25-9:50 Dual AAV gene therapy using laminin-linking proteins ameliorates muscle and nerve defects in LAMA2-related muscular dystrophy
Judith Reinhard, University of Basel
- 9:50-10:15 Pharmacological inhibition of LIN28 reverses dysregulated ion channel and miRNA expression in myotonic dystrophy
Alok Behera, University of Geneva / ETH Zürich
- 10:15-10:40 Lysosomal signalling meets glucose homeostasis: a novel perspective in the fight of Pompe disease
Andrea Armani, University of Zürich
- 10:40-11:05 High pressure melts toxic fibrils and uncovers hidden biomolecular states driving neuromuscular disease
Mihajlo Novakovic, ETH Zürich

11:05-11:15 *Concluding remarks and poster prizes (Markus Rüegg)*

11:15-11:45 *Coffee Break and Poster removal*

Departure