



**Conference on Structure and Dynamics of the Sarcomere**  
**4-6 May 2016**  
**Hotel M, Belgrade, Serbia**

# PROGRAM

## Wednesday 4 May

11:30 - 13:30 **REGISTRATION**

13:30 - 14:00 **OPENING REMARKS**

14:00 - 15:00 **Giorgio Valle**

Genes, functions and phenotypes: past, present and visions for the future

15:00 - 15:30 **Mathias Gautel**

The intrasteric regulation of sarcomeric alpha-actinin: insight into Z-disk assembly and a foundation to understand hereditary myopathies

### SESSION 1: STRUCTURE OF THE SARCOMERE

15:30 - 16:00 **Pradeep Luther**

Molecular structure of the Z-band in vertebrate muscle

16:00 - 16:30 **Kristina Djinovic Carugo**

Toward the molecular structure of muscle Z-disk: by lego building blocks

16:30 - 17:00 **Roberto Steiner**

Toward the molecular structure of the M-band: by lego building blocks

17:00 - 17:15 **Vid Puz**

Structural insight into the myotilin-actin interaction

17:15 - 17:30 **Antonio Sponga**

Structural characterization of FATZ-1 in complex with  $\alpha$ -actinin-2

17:30 - 17:45 **Phillip Hornburg**

Structural investigation and characterization of the Titin-Obserin complex from the Z-disk in the sarcomeric structure of muscle cells

17:45 - 20:00 **POSTER SESSION / DINNER**

# Thursday 5 May

## SESSION 2: DECIPHERING THE FUNCTION OF SARCOMERIC PROTEINS, part I

- 09:00 - 09:30 **Bjarne Udd**  
Complex titin processing of normal C-ter and in titinopathies
- 09:30 - 10:00 **Ralph Knoell**  
ZBTB17, cell survival and heart failure
- 10:00 - 10:15 **Vincenzo Sorrentino**  
Loss of sarcomeric M-line organization in the diaphragm muscle of obscurin knockout mice following exercise
- 10:15 - 10:30 **Julia Schuld**  
*Xirp1/Xirp2<sup>ko/kd</sup>* mice show fiber type-specific hypertrophy of skeletal muscles
- 10:30 - 11:00 **COFFEE BREAK**
- 11:00 - 11:30 **Wolfgang Linke**  
Titin determines passive and active mechanical properties of the sarcomere
- 11:30 - 12:00 **Dieter Fürst**  
Regulation of Filamin C dynamics in muscle cells
- 12:00 - 12:15 **Marie-Louise Bang**  
Myopalladin promotes muscle growth through activation of the MRTF-SRF pathway
- 12:15 - 12:30 **Jovana Jasnic-Savovic**  
Differential expression and localization of Ankrd2 isoforms in human skeletal and cardiac muscles
- 12:30 - 14:00 **POSTER SESSION / LUNCH**

## SESSION 3: DECIPHERING THE FUNCTION OF SARCOMERIC PROTEINS, part II

- 14:00 - 14:30 **Belinda Bullard**  
The importance of obscurin and the kinase domains in the development of a normal sarcomere
- 14:30 - 15:00 **Elisabeth Ehler**  
Formins follow function - also in the sarcomere
- 15:00 - 15:15 **Eyal Schejter**  
The Fhod-family formin Fhos is a major mediator of sarcomeric thin filament array assembly and maturation in *Drosophila* indirect flight muscles
- 15:15 - 15:30 **Arkadi Shwartz**  
Maintenance of sarcomeric thin filament arrays in *Drosophila* indirect flight muscles
- 15:30 - 16:00 **COFFEE BREAK**

## SESSION 4: ZEBRAFISH IN MUSCLE RESEARCH

- 16:00 - 16:30 **Didier Stainier**  
Imaging cardiac formation and function in zebrafish
- 16:30 - 17:00 **Wolfgang Rottbauer**  
Zebrafish models for sarcomeric diseases – a medical perspective
- 17:00 - 17:30 **Anders Arner**  
Physiological studies of muscle in zebrafish larvae – exploring mechanisms in human muscle disease
- 17:30 - 17:45 **Srdjan Boskovic**  
Characterization of MARPs in zebrafish
- 17:45 - 20:00 **POSTER SESSION / DINNER**

**Friday 6 May**

## SESSION 5: DISEASES OF THE SARCOMERE /PART I

- 09:00 - 10:00 **Hanns Lochmüller**  
TREAT-NMD neuromuscular network & other international initiatives for translational research
- 10:00 - 10:30 **Homa Tajsharghi**  
Myosin heavy chains isoforms and myosin myopathies
- 10:30 - 10:45 **Zacharias Orfanos**  
Sarcomeric damage *in vitro* and in muscular disease
- 10:45 - 11:00 **Ehab Essawy**  
Signaling genes expression and muscle adaptability after Botulinum Toxin type-A injection in spastic CP muscle
- 11:00 - 11:30 **COFFEE BREAK**

## SESSION 6: DISEASES OF THE SARCOMERE / PART II

- 11:30 - 12:00 **Katarina Pelin**  
Molecular diagnostic of nemaline myopathy and related disorders caused by nebulin mutations
- 12:00 - 12:30 **Annemieke Aartsma-Rus**  
Dystrophin domains and function: considerations for antisense-mediated exon skipping
- 12:30 - 12:45 **Jelena Nikodinovic Glumac**  
A novel recessive *TTN* founder mutation is causing a distal myopathy phenotype in a Serbian patient cohort
- 12:45 - 13:30 **CLOSING REMARKS AND LUNCH**