
Molecular mechanisms of muscle wasting during aging and disease

Congressi Stefano Franscini, Monte Verità, Ascona, Switzerland
September 11 - 16, 2022

SUNDAY

Arrival

16.00 - 18.00

Registration

18.00 -19.00

Reception

Keynote Lecture

19.00

Tony Wyss-Coray
Molecular pathways involved in aging

followed by an “icebreaker”

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MONDAY		12.09.2022
08.30 - 08.50	Welcome address from CSF and Monte Verità	
	Session Chair	Aging of skeletal muscle and stem cells N.N.
Speakers		
08.50 - 09.15	Jeff Dilworth	TBA
09.15 - 09.40	Michael Rudnicki	<i>Molecular Regulation of Muscle Stem Cell Function</i>
Short talks		
09.40 - 09.55	Jan Krützfeldt	<i>A myogenin+/CD74+ adult muscle stem cell population during regeneration of aged skeletal muscle</i>
09.55 - 10.10	Isabella Scionti	<i>LSD1 controls a nuclear checkpoint in Wnt/β-Catenin signaling to regulate muscle stem cell self renewal</i>
10.10 - 10.40 Coffee Break		
Speakers		
10.40 - 11.05	Tom Cheung	<i>Molecular pathways that control muscle stem cell quiescence in aging</i>
11.05 - 11.30	Alessandra Sacco	<i>Mitochondrial function in aging stem cells</i>
Short talks		
11.30 - 11.45	TBA	TBA
11.45 - 12.00	Xiaotong Hong	<i>Mitochondrial dynamics maintains stem cell regenerative competence throughout adult life by regulating metabolism and mitophagy</i>
12.00 - 13.30 Lunch Break		
	Session Chair	Disease of the nerve-muscle connection N.N.
Speakers		
13.30 - 13.55	Lin Mei	<i>Signaling at the neuromuscular junction</i>
13.55 - 14.20	Gregorio Valdez	<i>Aging of the neuromuscular junction and the capping Schwann cells</i>
Short talks		
14.20 - 14.35	Weichun Lin	<i>A feedback mechanism in atrophic muscle fibers to promote innervation and neuromuscular synaptogenesis</i>
14.35 - 14.50	Cristofer Calvo	<i>Myonuclei exhibit a multimodal transcriptional response to muscle denervation</i>
14.50 - 15.20 Coffee Break		
Speakers		
15.20 - 15.45	Lorenzo Puri	<i>Interactions between FAPs and the neuromuscular junction</i>
15.45 - 16.10	Justin Fallon	<i>The MuSK-BMP pathway regulates satellite cell quiescence, muscle-selective maintenance of myofiber size, and neuromuscular junction stability</i>
Short talks		
16.10 - 16.25	Lorenzo Giordani	<i>Spatially resolved transcriptomics reveals innervation-responsive functional clusters in skeletal muscle</i>
16.25 - 16.40	Elia Angelino	<i>C26 cachexia impairs adrenergic signaling through a TGF-beta/Activin mechanism</i>
17.00 - 19.00 Poster Session (with drinks and snacks)		
19.15 - 20.45 Dinner		

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TUESDAY		13.09.2022
	Session Chair	Muscle function and homeostasis N.N.
Speakers		
08.50 - 09.15	Benedicte Chazaud	<i>The resolution of inflammation during regeneration in aged skeletal muscle</i>
09.15 - 09.40	Foteini Mourkioti	<i>Telomere regulation during skeletal muscle homeostasis, disease, and aging</i>
Short talks		
09.40 - 09.55	Laura Pena Couso	<i>Macrophages support proteostasis and tissue function in skeletal muscle</i>
09.55 - 10.10	Marc Egerman	<i>Activin A and BMP9 crosstalk in human skeletal muscle cells</i>
10.10 - 10.40 Coffee Break		
Speakers		
10.40 - 11.05	Jerome Feige	<i>Targeting skeletal muscle bioenergetics and aging through mitochondrial calcium</i>
11.05 - 11.30	Erik Richter	<i>Phosphoproteomics of three exercise modalities identifies canonical muscle signaling and C18ORF25 regulating skeletal muscle function</i>
Short talks		
11.30 - 11.45	Lykke Sylow	<i>The mtRNA-stabilizing protein LRPPRC regulates mitochondrial structure and function in skeletal muscle</i>
11.45 - 12.00	Corentin Guilhot	<i>Effect of physical in-activity on muscle FAPs dynamic</i>
12.00 - 13.30 Lunch Break		
	Session Chair	Mechanisms of aging/Epigenetics and DNA damage N.N.
Speakers		
13.30 - 13.55	Luigi Ferruci	<i>Proteomics in sarcopenic human muscle</i>
13.55 - 14.20	Rafael de Cabo	<i>Effect of caloric restriction on longevity and sarcopenia</i>
Short talks		
14.20 - 14.35	Andrea Bonetto	<i>IGFBP1 mediates musculoskeletal deficits in colorectal cancer</i>
14.35 - 14.50	Yi-Ping Li	<i>UBR2 Targets Myosin Heavy Chain IIb and IIx for Degradation: Molecular Mechanism Essential for Cancer-Induced Muscle Wasting</i>
14.50 - 15.20 Coffee Break		
Speakers		
15.20 - 15.45	Vera Gorbunova	<i>Aging and DNA repair</i>
15.45 - 16.10	Collin Ewald	<i>Longevity interventions require proper mechanotransduction from muscular basement membrane across tissues via integrin, hemidesmosomes, and YAP1</i>
Short talks		
16.10 - 16.25	Vanina Romanello	<i>Peroxisomal-mitochondrial interaction impinging on muscle function</i>
16.25 - 16.40	Davide D'Amico	<i>Urolithin A improves muscle strength and impacts on biomarkers of cellular health in humans</i>
17.00 - 19.00 Poster Session (with drinks and snacks)		
19.15 - 20.45 Dinner		

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WEDNESDAY		14.09.2022
	Session Chair	Muscle size; force transduction and aging N.N.
Speakers		
08.50 - 09.15	Tea Shavlakadze	<i>Age-related gene expression changes in skeletal muscle point to potential mechanisms for sarcopenia</i>
09.15 - 09.40	Doug Millay	<i>Mechanisms involved in muscle hyperplasia</i>
Short talks		
09.40 - 09.55	Bert Blaauw	<i>Activation of Akt–mTORC1 signalling reverts cancer-dependent muscle wasting</i>
09.55 - 10.10	Daniel Ham	<i>Distinct and additive effects of calorie restriction and rapamycin in aging skeletal muscle</i>
10.10 - 10.40	Coffee Break	
Speakers		
10.40 - 11.05	Abigail MacKay	<i>Myotendinous junction – the weakest link?</i>
11.05 - 11.30	Christoph Handschin	<i>Transcriptional control of training adaptation: PGC-1α and beyond</i>
Short talks		
11.30 - 11.45	Alejo Efeyan	<i>The impact of nutrient – Rag GTPase signaling axis in mammalian aging</i>
11.45 - 12.00	Laetitia Mazelin	<i>Chronic activation of ALK5/TGFβ1 signaling in adult mouse skeletal muscle induces severe muscle wasting with concomitant impaired mitochondrial function</i>
12.00 - 13.30	Lunch Break	
AFTERNOON: free		
EVENING: free		

THURSDAY		15.09.2022
	Session Chair	Epigenetics of muscle aging and size control N.N.
Speakers		
08.50 - 09.15	Colin Crist	<i>The Adhesion G Protein-Coupled Receptor Gpr116 is Essential to Maintain the Skeletal Muscle Stem Cell Pool</i>
09.15 - 09.40	Vittorio Sartorelli	<i>Epigenetic regulation of myogenesis</i>
Short talks		
09.40 - 09.55	Andrea Graziani	<i>Pde4 induction mediates β-adrenergic dysfunction and contributes to skeletal muscle wasting in during cancer cachexia</i>
09.55 - 10.10	Davide Steffan	<i>Identification of a novel TFEB and exercise dependent gene</i>
10.10 - 10.40	Coffee Break	
Speakers		
10.45 - 11.10	Haim Cohen	<i>Maintaining healthy longevity by SIRT6</i>
11.10 - 11.35	Laurent Schaeffer	<i>The histone variant H2A.Z is required for DNA repair in muscle fibers and prevents premature aging</i>
Short talks		
11.30 - 11.45	Brian Uapinyoying	<i>Single-cell transcriptomics identify distinct features of Fibro/Adipogenic Progenitors from healthy and dystrophic muscles</i>
11.45 - 12.00	Nikki Marie McCormack	<i>Vamorolone shows efficacy and increases dystrophin protein in novel Becker muscular dystrophy mice</i>
12.00 - 13.30	Lunch Break	
	Session Chair	Muscle diseases and development of therapeutic strategies N.N.
Speakers		
13.30 - 13.55	Karyn Esser	<i>Circadian clock and muscle disease</i>
13.55 - 14.20	Gisele Bonne	<i>The role of lamin-A in senescence and muscle diseases</i>
Short talks		
14.20 - 14.35	Alyson Fiorillo	<i>The role of pathological miRNAs in Duchenne and Becker Muscular Dystrophy</i>
14.35 - 14.50	Sweta Girgenrath	<i>Endosomal Escape Vehicles to Enhance the Functional Delivery of Oligonucleotides in Preclinical Models of Neuromuscular Diseases</i>
14.50 - 15.15	Coffee Break	
Speakers		
15.15 - 15.40	Kevin Campbell	<i>Role of glycosylation in muscle wasting diseases</i>
15.40 - 16.05	Carsten Bönnemann	<i>Treatment options of severe neuromuscular diseases</i>
Short talks		
16.05 - 16.20	Judith Reinhard	<i>Therapeutic effect of linker protein-mediated gene therapy in a mouse model for LAMA2-related muscular dystrophy</i>
16.20 - 16.35	Alan Russell	<i>Modulating Fast Skeletal Muscle Contraction as a Novel Therapeutic Strategy for Muscular Dystrophy</i>
16.45 -	Poster Award Ceremony	
19.00 -	Transfer to Restaurant	
	GALA DINNER	

FRIDAY

16.09.2022

Departure