

POSTERSESSIONS 1 - 6 Monday Sept 7

Posters Session 1	P01.01	Belinda Bullard, Department of Biology, University of York, UK	Tropomyosin as a stretch sensor in the activation of insect flight muscle (66)
	P01.02	Laurin Hanft, University of Missouri	Afterload Dependence of Cardiac Function Is Regulated by Cardiac Myosin Binding Protein C (cMyBP C) (11)
	P01.03	Anthony Hessel, University of Muenster	Increasing I-Band Titin Compliance Shifts the Structure and Function of Intact Rat EDL Muscle During Peak Twitch and Tetanic Contraction Towards a Less Active State (8)
	P01.04	Venus Joumaa, University of Calgary	Preservation of force following active stretch in damaged skinned muscle fibres: a perplexing observation (72)
	P01.05	Vincenzo Lombardi, University of Florence	Dual Filament Regulation of the afterload contraction of the mammalian heart (103)
	P01.06	Weikang Ma, Illinois Institute of Technology	Porcine Left Atrial and Ventricular Thick Filaments Exhibit Distinct Resting Structures and Calcium-dependent Responses (35)
	P01.07	Lorenzo Marcucci, Padova University	Beyond diffusion: modeling dextran effects on SRX estimation in skinned muscle fiber mantATP chasing (74)
	P01.08	Joy Pajarla, Yale University	A model that includes cardiac thick filament cooperativity produces realistic Ca2+-dependent myofilament dynamics (121)
	P01.09	Daniel Zornow Kruse, Aarhus University	Effects of thick-filament modulation by piperine and mavacamten on work capacity and glycogen depletion in response to work-matched stretch-shortening contractions in isolated slow rat skeletal
	P01.10	Nicoletta Piroddi, University of Florence	Comparison of the Inhibition Mechanisms of Fast Skeletal and Slow Cardiac Contractile Properties by Aficamten and Mavacamten in the 15–25°C Temperature Range (117)
Posters Session 2	P02.01	Theresa Hofmann, Universitätsklinikum Münster	Trdn-as directs m6A-dependent transcriptional termination for accurate triadin isoform switching, preventing aberrant dyads and cardiomyopathy
	P02.02	Vincent Jacquemond, CNRS-Univ Lyon 1 UMR5261 - Inserm U1315	Excitation-contraction coupling dysfunction in muscle fibers from a mouse model of spinal muscular atrophy
	P02.03	Alain Lacampagne, Inserm / Cnrs / Montpellier University	Acute ciguatoxin exposure disrupts cardiac RyR2 function, inducing arrhythmias and acute heart failure phenotype: implications for an emerging climate-sensitive cardiotoxic disease
	P02.04	Elena Lilliu, Medical University of Vienna	Phasic Store-operated Calcium Entry in skeletal muscle
	P02.05	Zoltán Singlár, University Of Debrecen	CB1R blockade improves force generation and motor coordination without interference with calcium signaling in mdx mice
	P02.06	Mónika Sztretye, University of Debrecen	Evaluation of the Interplay Between Statins and the Endocannabinoid System in Skeletal Muscle
Posters Session 3	P03.01	Mónika Gönczi, University Of Debrecen	Alteration of septin expression, co-localization of cytoskeletal proteins, cell cycle progression, and calcium handling in Septin7 knockdown myogenic cell line
	P03.02	Carol Gregorio, Icahn School of Medicine at Mount Sinai	The N-terminal actin-binding site of Lmod2 promotes controlled pointed end elongation
	P03.03	Miklós Kellermayer, Semmelweis University	Titin's PEVK domain is a Liquid-Liquid Phase Separating Protein
	P03.04	Wolfgang Linke, University of Münster	Novex-3 titin defines a structural and signaling hub at the cardiac Z-disk and is dysregulated in heart failure
	P03.05	Andrea Balogh-Molnar, Semmelweis University	Ion-Dependent Modulation of Titin Proteolysis Reveals the Physiological Relevance of Short Titin forms
	P03.06	Nóra Beatrix Máthé, Faculty of Medicine, University of Debrecen	The role of Septin expression and function in human skeletal muscle cell cultures
	P03.07	Jolanta Nowak, Nencki Institute Of Experimental Biology PAS	INVOLVEMENT OF UNCONVENTIONAL MYOSIN VI IN AORTIC MORPHOLOGY AND FUNCTION
	P03.08	Katarzyna Robaszkiewicz, Kazimierz Wielki University	Regulation of gelsolin-dependent actin filament dynamics by tropomyosin isoforms Tpm2
	P03.09	Małgorzata Siatkowska, Kazimierz Wielki University	Modeling Osteosarcoma Actin Dynamics In Vitro: TPM2 Downregulation Facilitates Cofilin-Mediated Dissociation of Fascin Bundles
	P03.10	Matt Stroud, King's College London	Harnessing nucleoskeleton remodelling to mitigate muscle decline
	P03.11	Laszlo Szabo, University of Debrecen	The effect of simulated space conditions on the cytoskeletal septin system and mechanotransduction via Piezo1
Posters Session 4	P04.01	Sonia Calabrò, University of Padova	Neuromuscular development is aberrant in germ-free mice, and post-weaning colonization selectively rescues skeletal muscle but not peripheral nerve defects
	P04.02	Dana Cizkova, Charles University, Faculty of Medicine in Hradec Kralove	Nestin re-expression in the heart of adult and aged spontaneously hypertensive rats: Comparison to conplastic SHR-mtBN strain and co-localization with connexin 43
	P04.03	Michael Cowley, Stellenbosch University	From Quiescence to Activation: CLEM-based evidence of Three-Dimensional Remodeling of Human Satellite Cells Following Exercise
	P04.04	Alicia Cuber Caballero, King's College London	Super-resolution fluorescence microscopy to obtain a unified M-band model of titin
	P04.05	Philipp Galuska, Universität Wien	From Dynamic Z-Bodies to Ordered Z-Discs: Molecular Mechanisms of Early Myofibrillogenesis
	P04.06	Mathias Gautel, King's College London	Titin kinase: dead or alive?
	P04.07	Utku Gulbulak, University of Kentucky	MyoProfiler: Open-source software to analyze patterns of fluorescently labeled sarcomeric proteins
	P04.08	Jagannath Maharana, Max-Planck Institute for Molecular Physiology	Molecular architecture of the native muscle M-band
	P04.09	Francis Pacagnelli, University of Western São Paulo	Muscle-Specific Inhibition of MicroRNA Function Alters Extracellular Matrix and Inflammatory Pathways During Disuse-Induced Skeletal Muscle Atrophy
	P04.10	Alicia Peschel, Max Planck Institute of Molecular Physiology	Structural investigation of the jellyfish sarcomere by cryo-electron tomography
	P04.11	Momcilo Prodanovic, Filamentech D.O.O. Beograd	PREDICTING EQUATORIAL X-RAY FIBER DIFFRACTION PATTERNS DURING CARDIAC TWITCH
	P04.12	Michael Radke, MDC-Berlin	The M-Band of the Sarcomere- more than an anchor / Exploring the sarcoremic M-Band with Titin-BioID knock-in mice
	P04.13	Martin Rees, King's College London	The generation and validation of a de novo-designed titin binder for use in fluorescence microscopy
	P04.14	Aditya Aniruddha Sane, Ibdm (Marseille)	DNA-PAINT imaging reveals a thick filament subdivision in Drosophila sarcomeres required to power flight
	P04.15	Morgan Seffrood, University of Arizona	Structural Dynamics of Slow Skeletal MyBP-C N-terminal Domains: Effects of Phosphorylation and Splicing in the N-terminal Linker
	P04.16	Victoria Trinkaus, Max-Planck-Institut für Molekulare Physiologie	Structural Basis of Cardiac Thick Filament Activation
	P04.17	Andreas Unger, University Muenster	Microscopical characterization of Novex-3 titin to assess its functional role in cardiomyocytes under physiological and disease states.
	P04.18	Dorjana Zerbo Šporin, University of Primorska, Faculty of Health Science	Slower Gait Speed as a Predictor of Increased Frailty Risk in Nursing Home Residents
Posters Session 5	P05.01	Maral Azodi, Deutsches Herzzentrum der Charité (DHZC)	Altered FHL2 signaling following titin N2B deletion in human iPSC-derived cardiomyocytes
	P05.02	Kristina Bardova, Institute Of Physiology, Czech Academy of Sciences	Physiological Consequences of Muscle Non-Shivering Thermogenesis: Delayed Regulation and Contractile Dysfunction
	P05.03	Cinzia Barresi, Medical University of Vienna	Analysis of the MuSK interactome identifies a novel regulator of neuromuscular junction development
	P05.04	André Mourão Batista, IPEN São Paulo	Raman spectroscopy and machine learning in the classification of muscle fiber types
	P05.05	Anderson Z. Freitas, Nuclear and Energy Research Institute	Phenotypic Characterization of Skeletal Muscle Fibers by Raman Spectroscopy: A Molecular Signature-Based Approach

	P05.06	Isabel Martin, Universität Konstanz	Proximity-dependent labelling to identify mechanosensory signalling cascades of titin-like kinases
	P05.07	Glen Pyle, Dalhousie Medicine	Sex differences in the cardiac effects of chronic pain
	P05.08	Glen Pyle, Dalhousie Medicine	Laying the Foundation for Cardiovascular Disease: Sex-Dependent Effects of Early Life and Environmental Stress on Oxidative Stress in the Heart
	P05.09	Fernando Ribeiro, Uppsala University	Protecting the Diaphragm from Acute Disuse: MuRF1 as a Promising Therapeutic Target
	P05.10	Maira Rossi, University of Pavia	Single-nucleus transcriptomics reveals myonuclear state remodeling and altered cell-cell communication during human disuse muscle atrophy.
	P05.11	Nejc Umek, Faculty of Medicine, University of Ljubljana	A Skeletal Muscle-Adapted Workflow for Xenium Spatial Transcriptomics Analysis
	P05.12	Alexandra Winant, University of Copenhagen	Integrated single-myofiber multi-omics links inflammatory state to myosin energetics in ICU-acquired weakness
Posters Session 6	P06.01	Takayuki Akimoto, Waseda University	The miR-23 cluster microRNAs control muscle mass and slow fiber formation
	P06.02	Jana Disch, Institut für Modellierung und Simulation Biomechanischer Systeme (IMSB), Universität Stuttgart	A computer model of integrated glycolytic and mitochondrial ATP synthesis to uncover proton dynamics in active skeletal muscle fibers
	P06.03	Alexandra Dorn, Amsterdam UMC	Fast skeletal myosin inhibition improves muscle energetics in a mouse model for hypercontractile Nemaline myopathy type 6
	P06.04	Matthias Ernst, Medical University of Vienna	Empagliflozin Improves Mitochondrial Structure and Oxidative Metabolism in Pressure Overload-Induced Cardiac Remodeling
	P06.05	Aneta Fenclová, Charles University	Myokine levels during early stages of mild cold acclimation in rat skeletal muscle
	P06.06	Torri Heiser, University of Calgary	Energy Consumption After Active Stretch in Single Skinned Muscle Fibres
	P06.07	Filip Jezek, University of Michigan	A Mechanistic, ATP-Dependent Cross-Bridge Model of Cardiac Muscle Mechanics Under Energetic Stress
	P06.08	Ulrik Mjaaseth, University of Oslo	All-trans retinoic acid alters lipid metabolism in human myotubes in part through modulation of mitochondrial function
	P06.09	Kathy Myburgh, Stellenbosch University	Maturation-Dependent Characterisation of C2C12 Myotube Structure and its Contractile Responsiveness to Electrical Pulse Stimulation
	P06.10	Maria Jolanta Rędowicz, Nencki Institute of Experimental Biology, Polish Academy Of Sciences	Myosin VI Regulates Myoblast Fusion Through Redox-Dependent Mechanisms
	P06.11	Anja Srpčič, University Medical Centre Ljubljana	IL-6 expression modulates the signalling and metabolic response to recombinant IL-6 in primary human myoblasts
	P06.12	Katarina Miš, University Of Ljubljana, Faculty Of Medicine	Department of Metabolism and Endocrinology of Skeletal Muscle at the Alliance4Life Virtual Research Center

POSTERSESSIONS 7 - 10 Tuesday Sept 8

Posters Session 7	P07.01	Vigdis Aas, Oslo Metropolitan University	Extracellular vesicles from electrical pulse-stimulated human skeletal muscle cells can be taken up by hepatoma HepG2 cells and improve fatty acid oxidation
	P07.02	Elisabeth Barton, University of Florida	Fibro-adipogenic precursors are required for load-induced muscle hypertrophy
	P07.03	Beatrix Dienes, University of Debrecen	Piezo1 Regulates the Skeletal Muscle Length–Tension Relationship Through Channel-Independent Mechanotransduction
	P07.04	Marta Gawor, Nencki Institute of Experimental Biology PAS, Warsaw, Poland	Myosin VI regulates chromatin organisation and transcription in myoblasts
	P07.05	Áron Gere, University of Debrecen	The effects of microgravity and proton irradiation on the biophysical properties, Piezo1-induced mechanotransduction and myogenic differentiation of C2C12 cells
	P07.06	Luuk Kemna, Amsterdam University Medical Centre	Dynamic loading of Engineered Heart Tissue: measuring workloads
	P07.07	Walter Herzog, University of Calgary	SARCOMERE LENGTH AND FORCE BEHAVIOR WITH LOCAL DEACTIVATION
	P07.08	Masataka Kawai, University of Iowa	The Effect of Temperature on Force Generation Step – Overview
	P07.09	Annika J. Klotz, University of Muenster	Loss of titin-based elasticity elevates end-diastolic pressure through geometric remodelling
	P07.10	Meriem Matouk, University of Versailles Saint Quentin En Yvelines	No evidence of the presence of dystrophin protein in rodent muscle stem cells
	P07.11	Beatrice Pistolato, Italian Institute of Technology	Proprioception: the ‘sixth sense’ that guides octopus during motion
	P07.12	Roberto Silva-Rojas, Centro Nacional de Investigaciones Cardiovasculares (CNIC)	Myofiber reprogramming and muscle rejuvenation by titin cleavage
	P07.13	Emrulla Spahiu, Hannover Medical School, Institute of Molecular And Cell Physiology	Calmodulin-mediated modulation of cardiac myosin function
	P07.14	Chris Tiessen, University Of Calgary	Isometric Contraction Induces Passive Force Enhancement in Skeletal Muscle
	P07.15	Tim J. van der Zee, KU Leuven	Computational cross-bridge model explains why muscle stiffness is reduced after shortening
	P07.16	Apostolos Papandreou, National and Kapodistrian University of Athens	Systemic Adaptations to Different High-Intensity Interval Training Modalities in National-Level Flatwater Kayak Athletes
Posters Session 8	P08.01	Callum Dark, Murdoch Children's Research Institute	Making mature muscle: Investigating metabolic and developmental pathways for improving the maturation of bioengineered muscle
	P08.02	Marta Hanczar, Amsterdam UMC	Muscle-microenvironment- in-a-dish: a novel model reveals that endothelial cells modulate muscle contractility and gene expression
	P08.03	Tania Incitti, AstraZeneca AB	Advanced in vitro modelling of human skeletal muscle enables physiologically relevant target validation.
	P08.04	Thorsten Jonas, Optics11 Life	A contractility platform for 3D engineered muscle tissues
	P08.05	Kathy Myburgh, Stellenbosch University	Myoblast Derived Small EVs Loaded with fluorescent miR-26: A Therapeutic Model for Small EV Uptake by Skeletal Muscle Myoblasts In Vitro and Subsequent Myogenic Response to Cargo
	P08.06	Malte Rinn, University Medical Center Göttingen	Human Myomatrix Muscle Organoids Capture Collagen VI-Related Dystrophy Phenotypes
	P08.07	Jiahao Zhao, Medizinische Hochschule Hannover (MHH)	Antifibrotic Effects of LNA-21, MEG3 on Human Lung Tissue Using a Living Pulmonary Punch Preparation Model
Posters Session 9	P09.01	Wilson Agyapong, Hannover Medical School	Mavacamten elicits conserved and model-specific responses across cardiac models of hypertrophic cardiomyopathy
	P09.02	Melissa Amerudin, King's College London	Truncated titin is expressed in a cell-specific and muscle-specific manner in vivo
	P09.03	Mamta Amrute, Hannover Medical School	Insights into Mavacamten’s Effect on the Actomyosin Crossbridge Cycle at the Single-Molecule Level
	P09.04	Ana Isabel Antunes Gonçalves, Medical University of Vienna	Blocking IL-6 Reverses Multi-Organ Dysfunction in Cancer Cachexia
	P09.05	Annie Brong, University of Maryland, Baltimore	Deciphering the source of sex differences in the Obscn-Δlg58/59 mouse model exhibiting cardiac remodeling and arrhythmia
	P09.06	Kenneth Campbell, University of Kentucky	Extracellular fibrosis and low phosphorylation of myofilament proteins predict diastolic deceleration time in a cohort of 90 patients
	P09.07	Stuart Campbell, Yale University	Effects of cMyBP-C Loss on the Contractile Behavior of Isometrically Loaded Human Engineered Heart Tissue
	P09.08	Olivier Cazorla, Phymedexp Inserm - Cnrs – Univ Montpellier	Right Heart dysfunctions of experimental-induced exacerbated emphysema: bisoprolol misses the target

	P09.09	Chahida Chaami, University of Copenhagen	Exploring the biochemical potency for diabetic failing hearts (HFpEF)
	P09.10	Weronika Ficerman-Kuta, Nencki Institute of Experimental Biology, Polish Academy of Sciences	The role of unconventional myosin VI in the differentiation and energy metabolism of cardiac mesenchymal stem/stromal cells
	P09.11	Natalia Georgiadou, University of Leeds	Understanding heart failure phenotypes: effects on cardiomyocyte organisation
	P09.12	Larissa Hartmann, University Ulm /Uniklinik Ulm (Innere Medizin II)	Pharmacological inhibition of valosin-containing Protein (VCP) Triggers Cardiac Hypertrophy and Heart Failure in Vivo
	P09.13	Bogdan Iorga, Hannover Medical School (MHH)	Primary effects of the HCM-causing myosin mutation G716R on human ventricular myofibril function and modulation by mavacamten
	P09.14	Jan Karchňák, Charles University	MIRO1 SHAPES HEART'S RESPONSE TO I/R INJURY AND FIBROSIS
	P09.15	Xaver Koenig, Medical University of Vienna	IL-6-Dependent Remodelling of Cardiac Ca ²⁺ Handling in the C26 Colon Carcinoma Model of Cancer Cachexia
	P09.16	Christopher Lewis, University of Copenhagen	Leveraging AI for the Design of Novel Therapies Targeting Myosin Heavy Chain for the Treatment of Inherited Cardiomyopathies
	P09.17	Wolfgang Linke, University of Münster	Selective titin cleavage primarily inhibits cardiac elastic recoil to induce diastolic dysfunction and proliferation of fibroblasts
	P09.18	Elise Melhedegaard, University of Copenhagen	Altered sarcomeric structure and function in canine myxomatous mitral valve disease
	P09.19	Maya Nouredine, University of Birmingham	Integrated Functional and Structural Analysis of Cardiomyopathy Mechanisms Reveals Protein Destabilisation in an Alpha-actinin-2 Variant
	P09.20	Marta Rocha, Medical University of Vienna	Impaired cardiac function, stress-intolerance, protein aggregation, and intercalated disc derangement: hallmarks of plectin-related cardiomyopathy
	P09.21	Tim Scholz, Hannover Medical School	The Hypertrophic Cardiomyopathy associated myosin mutation R723G increases myosin motor domain stiffness
	P09.22	Yimin Shen, James Black Centre 125 Coldharbour Lane	PSAT1 mediates cardiac fibroblast phenotypic switching via metabolic remodeling in pressure overload induced myocardial fibrosis
	P09.23	Egor Shepelev, Bach Institute of Biochemistry, Research Center of Biotechnology, Russian Academy of Sciences	Cardiomyopathy-associated variants R105H and D254N affect Tpm1.1 structure and function
	P09.24	Andreu Slushchev, Russia, Moscow, Research Centre of Biotechnology, Russian Academy of Sciences	Pseudophosphorylation modulates the functional properties of cardiomyopathy-associated tropomyosin mutants.
	P09.25	Gemma Toerien-Howie, Cardiff University	Investigating anti-arrhythmic properties of the myofilament desensitiser mavacamten in a model of hypertrophic cardiomyopathy
	P09.26	Tianbang Wang, Hannover Medical School	Probing the Functional Effect of cardiac modulators on the Actomyosin Crossbridge Cycle using Optical Tweezer-based Measurements
Posters Session 10	P10.01	Cristian Romeo Revnic, Umf Carol Davila	THE IMPACT OF ISCHEMIA REPERFUSSION UPON YOUNG AND OLD RAT HEART PHYSIOLOGY AND ULTRASTRUCTURE
	P10.02	Fleur Van Brakel, Amsterdam UMC	The effect of non-invasive ventilation on the respiratory muscle pump in end-stage COPD
	P10.03	Carlos Acosta, Nencki Institute of Experimental Biology	MK5 is required Skeletal Muscle adaptations to Exercise: a special focus on Sarcopenia
	P10.04	Lorenza Brocca, University of Pavia	Oxidative stress and proteostatic impairment characterize COPD skeletal muscle without a detectable inflammatory cytokine response
	P10.05	Claude Collet, INRAE	DIAMIDE INSECTICIDES INTERFERE WITH CALCIUM HOMEOSTASIS IN MOUSE AND HONEY BEE MUSCLE CELLS
	P10.06	Alexandra Dorn, Amsterdam UMC	Hypercontractility at the sarcomere level contributes to muscle stiffness in patients harboring a novel variant in TPM3
	P10.07	Karla P. Garcia-Pelagio, Universidad Nacional Autonoma de Mexico	Pelvic radiotherapy induces musculoskeletal dysfunction in geriatric rats
	P10.08	Romane Idoux, PGNM-INMG	A Bethlem myopathy zebrafish model reveals CaV1.1 as the missing link between collagen VI deficiency and muscle dysfunction
	P10.09	Per Harald Jonson, Folkhälsan	SUMOylation studies on SMPX
	P10.10	Abraha Kahsay, Umea University	Role of Fhl5 in Extraocular muscle resistance to muscular dystrophies
	P10.11	Tom Kerkhoff, Amsterdam UMC	The effects of serum, containing myositis-specific autoantibodies, on muscle fiber contractility in Immune-Mediated Necrotizing Myopathy
	P10.12	Patryk Konieczny, Adam Mickiewicz University	DP71 uncouples early survival from functional differentiation in dystrophin-deficient muscle
	P10.13	Sarah Konze, Hannover Medical School	hiPSC-derived skeletal muscle cell model of N-acetylneuraminate pyruvate lyase (NPL) - linked myopathy
	P10.14	Paulina Kościelniak-Wawro, Adam Mickiewicz University	Small activating RNAs targeting the UTRN promoter upregulate utrophin in DMD-deficient human cell lines
	P10.16	Joanna Moraczewska, Kazimierz Wielki University in Bydgoszcz	Dysregulation of Thin Filament Stability and Length Maintenance by Myopathy-Linked Mutations in TPM2
	P10.17	Albert Bálint Papp, University of Debrecen	Impaired skeletal muscle regeneration in the absence of adenosine A2A receptor
	P10.18	Fernando Ribeiro, Uppsala University	Myosin Post-Translational Modifications Associated With Critical Illness Myopathy
	P10.19	Cristiana Sazzi, Università Di Pavia	Fibro-adipogenic progenitors from hindlimb-suspended mice induce myotube atrophy in vitro
	P10.21	Vincenzo Sorrentino, University of Siena	miR-486 exerts protective effects in Ryr1-IT mice, a mild model of RYR1-related myopathies (RYR1-RM)
	P10.22	Ewa Stępnia-Konieczna, Poznan University of Life Sciences	Targeted RNA activation of MBNL1 corrects spliceopathy in myotonic dystrophy and provides a framework for dual-paralog therapeutic enhancement.
	P10.23	Brigitta Tillmann, University Of Debrecen	The expression of cytoskeletal septins and SOCE complex proteins during spontaneous muscle regeneration in mdx mice
	P10.24	Ya Wen, Jiaxing Hospital of Jiaxing University	Rescuing the Diaphragm: Human Bone Marrow Mesenchymal Stromal Cells (BM-MSCs)-Derived Extracellular Vesicles Reverse Ventilator-Induced Diaphragm Dysfunction and Reactivate Satellite Cells
	P10.25	Xiang Zhang, Jiaxing Hospital of Jiaxing University	Longitudinal transcriptomics reveals the role of ferroptosis in the progression of critical illness myopathy
	P10.26	Iletizia Zullo, Irccs Ospedale Policlinico San Martino	Effects of Physical Exercise in a Zebrafish Model of Neuroinflammation