

DEPARTMENT OF BIOMEDICAL SCIENCES PhD Program in Biomedical Sciences Coordinator prof. Ornella Rossetto

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Università degli Studi di Padova

#### PhD Program in BIOMEDICAL SCIENCES

PROGRESS REPORT – XXXVII-XXXVIII- XXXIX cycle Academical year 2023/24 September 11, 12, 13 2024

#### Wednesday, September 11th 2024

8:45	Prof.ssa Ornella Rossetto	Welcome Note & Introduction Remarks	
9:00		Boschelle Chiara	The role of androgen receptor in clear cell renal cell carcinoma
9:30	Chair Dott.ssa Emy Basso	Amoretti Stefano	Botulinum neurotoxin as a tool to study the plasticity of neuromuscular junction
10:00		Arnst Nikita	Neuroinflammation in Alzheimer's disease
10:30		Benetollo Alberto	Small molecule-based treatments for rare disease. In vitro and in vivo studies
11.00	Break		
11:15		Scantamburlo	The immunometabolism of Neurofibromatosis type 1 - related tumors
	Chair	FIGILESCO	
11:45	Dott.ssa Agnese De Mario	Bregolin Elisa	Central Nervous System in physiological and pathological condition.
12:15		Fietta Anna	Exploring the role of hypoxic extracellular vesicles in neuroblastoma metastasis using in vivo model and microfluidic chips
12:45	Break		
13:45		Frigo Elena	Exploring the functions of F-ATP synthase through genetic manipulation of Drosophila melanogaster
14:15	Chair Dott.ssa Valentina Masola	Giacchin Giacomo	A high-content in vitro screening identifies new mitophagy-activating compounds
14:45		Morbidelli Maria	The importance of nanoparticle coating structural design in the development of nanovaccines
15:15		Moro Nicola	Investigation of novel molecular targets to counteract myocardial remodeling upon pathophysiological stressors
15:45		Ribecco Carmela	Dissecting cell-type specific nascent proteome contribution in human neurodevelopment of Fragile X Syndrome patients using brain organoids
16:15		End of session	

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### Thursday, September 12th 2024

9:00	Chair	Tommasin Ludovica	Assessing the relative role of adenine nucleotide translocator and F-ATP synthase in the permeability transition
9:30	Dott.ssa Giorgia Pallafacchina	Tonellato Marika	CXCR4 in neurophysiology and neurodegeneration
10:00		Sonda Sonia	Dissecting the mechanism of action and neuroplastic potential of molecules targeting 5-HT2A receptor
10:30		Speggiorin Michele	Exploring the role of astrocytes in dopaminergic circuits
11.00	Break		
11:15		Ruth Jepchirchir Arusei	The role of MAO in DMD-associated cardiomyopathy
11:35	Chair Dott.ssa Ionica Masgras	Martina Bedetta	Extracellular ATP and neuroinflammation in the pathogenesis of Alzheimer's Disease
11:55		Lavinia Cigalotto	Inter-organelle communication in cancer: the role of ER mitochondria contacts in Glioblastoma multiforme
12:15		Viola Donati	A potential therapeutic treatment for glioblastoma targeting Cx hemichannels
12:35	-	Annachiara Marin	Exploring macrophage mitochondrial (dys)function in tissue-specific and systemic aging
12:55	Break		
14:00		Ilaria Piazza	Altered intracellular Ca2+ homeostasis underlies castration-induced skeletal muscle atrophy
14:20		Karim Rahhali	Mitochondrial ATP-sensitive potassium channel (mitoKATP) in cardiac pathophysiology
14:40	Chair Dott. Leonardo Nogara	Miriana Sbrissa	The role of mitochondrial Ca2+ signaling in the control of the crosstalk between inflammatory cells and adipose tissue
15:00		Francesca Spinelli	The role of mitochondrial cations homeostasis in the control of the inflammatory response – The structural and functional role of the A-kinase anchoring protein Myospryn in striated muscle
15:20		Eleonora Zanre'	Multi cellular integrated models on-a-chip: applications for cancer studies
15:40		Alessandro Zuppardo	Mitochondrial diseases: pathogenesis and therapy
16:00	Break		
16:15		Evgeniia Motanova	Impact of exercise and inactivity on neuromuscular
			junction integrity, mitochondrial function and muscle performance in aging humans.
16:35	Chair – Dott. Francesco Ciscato	Marica Zainotto	Investigating how Excitation-Contraction Coupling Inhibitors potentiate Botulinum Neurotoxin therapy
16:55		Francesca Righetto	Creation of new Saccharomyces yeast hybrids useful to agro-industrial purposes, through innovative genetic engineering strategies
17:15		End of session	

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### Friday, September 13th 2024

9:00		Al Saidi Aya	Role of MCU in Melanogenesis
9:15	-	Baldisseri Elena	Novel targets for ovarian cancer immunotherapy
9:30	Chair	Beretta Emanuela	The role of microglia in the neuroinflammatory response following perinatal stroke
9:45	Cnair Dott.ssa Giorgia Pallafacchina	Bincoletto Giacomo	Premature aging of skeletal muscle in Kennedy disease mouse models
10:00		Boscolo Nata Federica	Defining the mechanism of channel formation by the F-ATP synthase.
10:15	]	Brancher Roeder	Degradome characterization of SARS-CoV-2 NSP5 and NSP3 degradome
10:30		Caputo Ornella	The impact of physical activity on the trajectory of neuromuscular ageing in humans
10:45		Darban Hanieh	Characterization of the effect of T cell killing ability on the efficiency of CAR-T cell Immunotherapy
11:00	Break		
11:15		De Napoli Cosimo	Reduced ATP turnover during hibernation in relaxed skeletal muscle
11:30		D'ercole Martina	New 3D human neurodevelopment model to study FMR1 gene methylation in Fragile X Syndrome
11:45	Chair Dott.ssa Agnese De Mario	Di Palma Michele	Structural investigation of the bacterial resistance protein AlbA by X-ray crystallography and cryo-EM and synthesis of novel pyrrolobenzodiazepine (PBD) antibiotics
12:00		Esposito Martina	Characterization of the ubiquitin ligase MUSA1 in protein breakdown and organs function
12:15		Frison Roberta	Exploiting nascent naïve pluripotency for the generation of patient-specific neural organoids
12:30		Guazzo Anna	"Identification and characterization of pathological interactions between myocardial cells in Arrhythmogenic Cardiomyopathy
12:45		Noventa Francesca	Casein Kinases in Health and Diseases: a Proximity Interactome Mapping Analysis
13:00	Break		
14:00		Quagliata Martina	Production and characterization of lipid nanoparticles for mRNA delivery in macrophages and skeletal muscle fibers.
14:15	Chair	Rocca Giulia	Analysis of global turnover rates and protein abundances in a Parkinson's Disease mouse model
14:30	Dott.ssa Roberta Sartori	Turco Eloisa	Role of peroxisomes in skeletal muscle in basal conditions and in cancer cachexia
14:45		Vogrig Enea	Investigating the molecular pathogenesis of mitochondrial diseases

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15:00	Zorzato Sabrina	Dissecting the regulation of the translatome during cancer cachexia
15:15	End of session	
15:30	Faculty	