### 5th Annual Meeting of the International Society of Cancer Metabolism Bratislava, October 17 - 20, 2018

#### METABOLIC ADAPTATIONS AND TARGETS IN CANCER

#### SCIENTIFIC PROGRAM

Wednesday, Oo	tober 17, 2018	
15:00 - 17:15	Registration	
17:15 - 17:30	Opening session	
17:30 - 18:30	KEYNOTE LECTURE	
	Adrian L. HARRIS (University of Oxford, UK)	
	New targetable aspects of cancer metabolism	
19:00 - 22:00	Welcome reception with Slovak food specialties and folklore music/dancing	
	exhibition	
Thursday, Octo		
08:30 - 10:15	Session 1	
	METABOLIC DISORDERS AND CANCER	
	Chairs: Silvia PASTOREKOVA (Biomedical Research Center SAS, Slovakia)	
	Zuzana KOVANICOVA (Comenius University, Slovakia)	
08:30 - 09:00	<b>Stephan HERZIG,</b> Institute for Diabetes and Cancer, Helmholtz Center Munich, Germany	
	Lipid metabolism: Linking metabolic dysfunction and cancer	
09:00 - 09:30	Jozef UKROPEC, Biomedical Research Center SAS, Slovakia	
05.00 05.50	Regular exercise as a powerful tool to improve metabolism and modulate	
	trajectories of chronic diseases including cancer	
09:30 - 09:45	Paolo Ettore PORPORATO, University of Torino, Italy	
05.50 05.45	Altered iron metabolism promotes cancer cachexia	
09:45 – 10:00	Sofia AVNET, Rizzoli Orthopedic Institute, Bologna, Italy	
09.45 - 10.00	The effects of systemic and local acidosis on insulin resistance and signaling	
10:00 - 10:15	Eduardo N. MALDONADO, Medical University of South Carolina, USA	
10.00 10.15	Modulation of mitochondrial metabolism by statins in cancer cells is not	
	mediated by changes in cholesterol content	
10:15 - 10:45	Coffee break	
10:45 - 12:00	Session 2	
10.43 12.00	GENETIC, EPIGENETIC AND TRANSCRIPTIONAL ELEMENTS OF CANCER	
	METABOLISM	
	Chairs: Pierre SONVEAUX (University of Louvain, Belgium)	
	Michala Gylling ROLVER (University of Copenhage, Denmark)	
10:45 - 11:15	Georgy SZABADKAI, University College London, The Francis Crick Institute, UK	
	Metabolic adaptation of tumours via transcriptional regulation of mitochondrial	
	biogenesis	
11:15 - 11:45	Carlos SEBASTIAN, Candiolo Cancer Institute-IRCC, Italy	
	SIRT6-dependent metabolic reprogramming as a driver of stemness and	
	tumorigenesis	
11:45 - 12:00	Thomas W. GRUNT, Medical University of Vienna, Austria	
	Basic cellular regulatory systems: cell signalling, lipid metabolism and epigenetics	
	– how do they cooperate in cancer?	
12:00 - 12:15	Slot for General sponsor	
12:15 - 14:15	Lunch, poster viewing & meet Professor Adrian L. HARRIS	
14:15 – 16:15	Session 3	
	METABOLIC PLASTICITY IN METASTATIC CASCADE	

	Chairs: Lucie BRISSON (University of Tours, France)
	Cesare SALA (University of Florence, Italy)
14:15 - 14:45	Pierre SONVEAUX, University of Louvain, Belgium
	Monocarboxylate transporter 1 (MCT1) promotes tumor metastasis
	independently of its activity as a transporter of lactate
14:45 – 15:15	Elena RAINERO, The University of Sheffield, UK
	Crosstalk between the remodelling of the extracellular matrix and metabolism in
	tumour cell invasion and growth
15:15 – 15:45	Paolo CEPPI, Uniklinikum Erlangen, Nikolaus-Fiebiger-Zentrum, Germany
	Polyol pathway connects glucose metabolism with cancer differentiation and
	EMT
15:45 – 16:00	Bárbara SOUSA, University of Porto, Portugal
	P-cadherin promotes anoikis resistance in breast cancer stem cells by stimulating
	the glycolytic behavior and lowering the oxidative stress
16:00 - 16:15	Yoonseok KAM, Agilent Technologies, USA
	Real time ATP production rate measurement distinguishing glycolytic and
	mitochondrial metabolism in EGFR-mutated NSCLC cells
16:15 - 16:45	Coffee break
16:45 – 18:45	Session 4
	TUMOR HETEROGENEITY AND METABOLIC CROSS-TALKS
	Chairs: Paolo Ettore PORPORATO (University of Torino, Italy)
	Jessica IORIO (University of Florence, Italy)
16:45 – 17:15	Mariia YUNEVA, The Francis Crick Institute, UK
	Understanding metabolic vulnerabilities and flexibilities of tumours
17:15 – 17:45	Maria SHOSHAN, Karolinska Institute, Stockholm, Sweden
	Any roles of mitochondria and PGC1 in the chemoresistance and stemness of
17.45 10.00	SKOV-3-R cells?
17:45 – 18:00	Federica GAUDINO, University of Torino, Italy
	Subcellular NAD+ biosensors to dynamically monitor NAD+ variations in cancer cells
18:00 - 18:15	
18:00 - 18:15	Angela OTTO, Technical University of Munich, Germany
	What happens to the "Warburg effect" in limiting glucose and glutamine
10.15 10.20	conditions? - The roles of pyruvate.
18:15 – 18:30	Valery V. KHRAMTSOV, West Virginia University, USA
	In vivo molecular EPR-based spectroscopy and imaging of metabolic tumor microenvironment and redox: new roles for inorganic phosphate
18:30 - 18:45	Giuseppe TAURINO, University of Parma, Italy
10.50 - 10.45	Nutritional support of asparaginase-treated acute lymphoblastic leukemia blasts
	by bone marrow mesenchymal stromal cells
19:00 -	On your own for dinner
19:00 - 21:00	Meeting and dinner of the Board members
19.00 - 21.00	Meeting and diffiel of the board members
Eriday Octobor	10 2019
Friday, October	Session 5
-08.50 - 11.00	TUMOR ACIDOSIS AND METABOLIC ADAPTATIONS
	Chairs: Sofia AVNET (Instituto Ortopedico Rizzoli, italy)
	Joao SANTIAGO (University of Louvain, Belgium)
08:30 - 09:00	Dario LONGO, University of Torino, Italy
	MRI-based approaches for imaging tumour acidosis
09:00 - 09:30	<b>Cyril CORBET,</b> University of Louvain, Belgium
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	Blocking the mitochondrial pyruvate carrier to inhibit lactate uptake by cancer
	cells and induce tumor radiosensitization
09:30 - 10:00	Fatima BALTAZAR, University of Minho, Portugal
	Monocarboxylate transporters (MCTs) as markers of metabolic adaptations in

	malignant tumors
10:00 - 10:15	Ivana NOVAK, University of Copenhagen, Denmark
	Role of proton/potassium pumps in pancreas – from physiology to pancreatic
10:15 – 10:30	cancer Karin BARTEL, Ludwig-Maximilians-University of Munich, Germany
10.15 - 10.50	From lysosomes to mitochondria - V-ATPase inhibition influences lipid regulation
	and disturbs mitochondrial function cancer cells
10:30 - 10:45	Holger BECKER, University of Veterinary Medicine Hannover, Germany
	The proteoglycan-like domain of carbonic anhydrase IX mediates non-catalytic
	facilitation of lactate transport in cancer cells
10:45 – 11:00	Stine Helene Falsig PEDERSEN, University of Copenhagen, Denmark
	The acid-base transport proteins NHE1 and NBCn1 regulate cell cycle progression
	in MCF-7 human luminal breast cancer cells
11:00 - 11:30	Coffee break
11:30 – 13:00	Session 6
	CANCER METABOLISM AND IMMUNE RESPONSES
	Chairs: Georgy SZABADKAI (University College London, The Francis CrickInstitute, UK)
11:30 – 12:00	Preeta ANANTHANARAYANAN (University of Torino, Italy Massimiliano MAZZONE, University of Leuven, Belgium
11.50 - 12.00	Genetic deletion and pharmacological targeting of GLUD1 breaks glutamine
	competition between macrophage and satellite cells improving muscle
	regeneration
12:00 - 12:30	Stefano BIFFO, University of Milano, Italy
	Translational control of lipid synthesis by eIF6 and eIF4E
12:30 - 12:45	Maša ŽDRALEVIĆ, IRCAN Nice, France
	"Warburg" phenotype of tumor cells depends on both lactate dehydrogenases A
	and B and its ablation maintains growth by re-activating OXPHOS
12:45 – 13:00	Mikhail M. DIKOV, Ohio State University Medical Center, USA
	Metabolic tumor and lymph node microenvironment as mediators of
13:00 - 15:00	immunosuppression in cancer: characterization and modulation Lunch, poster viewing & meet Professor Robert J. GILLIES
15:00 - 16:00	ISCaM General Assembly
16:00 - 16:30	Coffee break
16:30 - 19:30	Visit Bratislava:
10.50 19.50	<ul> <li>Danubiana modern art gallery</li> </ul>
	Guided tour to city center
	Free program in the city
20:00 - 23:00	Dinner on boat at the Danube river
Saturday, Octol	
08:30 – 10:30	Session 7
	METABOLIC TARGETS IN CANCER THERAPY
	Chairs: Stine Helene Falsig PEDERSEN (University of Copenhagen, Denmark)
08:30 - 09:00	Giovanni Monaco (University of Louvain, Belgium) Rodrigue ROSSIGNOL, Bordeaux University and INSERM Bordeaux, France
00.30 - 09.00	Targeting the mitochondrial trifunctional protein in oxidative lung carcinomas
09:00 - 09:30	<b>Miguel QUINTELA-FANDINO</b> , CNIO-Spanish National Cancer Research Center,

Madrid, Spain Breast cancer metabolic rewiring acconts for acquired resistance against antiangiogenics

09:30 - 09:45	Stephen D. HURSTING, University of North Carolina, USA
	Starving cancer cells from the outside and inside: separate and combined effects
	of calorie restriction mimetics and autophagy inhibition on KRAS-driven
	pancreatic adenocarcinoma

09:45 - 10:00	Angelo de MILITO, Sprint BioScience, Sweden
	Anticancer therapy with a novel and selective Vps34 inhibitor targeting
	autophagy and metabolism
10:00 - 10:15	Léopold THABAULT, University of Leuven, Belgium
	Synthesis and evaluation of inhibitory peptides targeting lactate dehydrogenase
	(LDH) tetramerization
10:15 – 10:30	Margherita CORTINI, Rizzoli Orthopedic Institute, Bologna, Italy
	Targeting lipid metabolism as a novel osteosarcoma treatment
10:30 - 11:00	Coffee break
11:00 - 12:00	CLOSING LECTURE
	Robert J. GILLIES (H.Lee Moffitt Cancer Center, Tampa, FL, USA)
	Selection of glycolytic phenotype
12:00 - 12:30	Awards and closing remarks
12:30 - 14:00	Lunch
14:00 -	Departure

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