

Scientific Program

Wednesday, 24th May

17:00-17:15	L. Dei	Greetings from The Rector of Università degli Studi di Firenze
17:15-17:45	C.T. Supuran	Welcome and opening lecture: A tribute to Andrea Scozzafava's career and scientific achievements
17:45-18:15	S. Parkkila	Update on CA research, 2015-2017
19:30		Welcome drink and dinner

Thursday, 25th May

SESSION I

Comparative aspects of new CA families, isozymes and their structural investigations

Chairman: C.T. Supuran

9:00-9:30	M. Barboiu	Dynamic constitutional screening of CA Inhibitors and activators
9:30-9:45	R. Mckenna	Structural insight towards CA isoform specific Inhibitors: cautions and hopes
9:45-10:00	T.S. Peat	The structural side of different Carbonic Anhydrases
10:00-10:30	G. De Simone	Interaction of Carbonic Anhydrase IX with CAND1: structural and functional features
10:30-11:00	<i>Coffee Break</i>	
		<i>Chairman: A. Scozzafava</i>
11:00-11:30	A. Akdemir	Molecular modelling studies of CAIs: understanding binding and suggesting new ligands
11:30-11:45	M. Krasavin	Direct Sulfochlorination of heterocycles as a speedy entry into isoform-selective Carbonic Anhydrase Inhibitors
11:45-12:00	P. Guglielmi	New strategies for Carbonic Anhydrases inhibition: probenecid-amino acid derivatives as atypical and selective Inhibitors of hCA tumor-related isoforms IX and XII
12:00-12:30	R. Cimaz	Pathogenesis of juvenile idiopathic arthritis
12:30-13:30	<i>Lunch</i>	

SESSION II

Regulation/expression of CA isoforms in cancer

Chairman: S. Pastorekova

15:00-15:30	R.J. Gillies	CA IX and Warburg's Paradox
15:30-16:00	S. Fais	Association between the proton pump inhibitor lansoprazole and Carbonic Anhydrase IX Inhibitors a future combined therapy against cancer
16:00-16:30	<i>Coffee break</i>	
16:30-17:00	S. Dedhar	The Interactome of metabolic enzyme Carbonic Anhydrase IX reveals novel roles in tumor cell migration and invadopodia/MMP-14-mediated invasion

Chairman: S. Parkkila

17:00-17:30	S. Pastorekova	CA IX regulates metabolic responses of cancer cells to tumor microenvironment
17:30-17:45	S.C. Frost	Does Carbonic Anhydrase IX expression drive metastatic disease?
17:45-18:00	H.M. Said	Modulation of Carbonic Anhydrase 9 expression by the regulative effect of hypoxia and cytokines in human hepatocellular carcinoma disease
18:00-19:30	<i>Poster Session</i>	
19:30	<i>Dinner</i>	
20:30-21:45	<i>Poster Session</i>	

Friday 26th May

SESSION III

CAs as drug and diagnostic targets

Chairman: D. Vullo

9:00-9:30	J.Y. Winum	Multivalent Carbonic Anhydrase Inhibitors
9:30-10:00	F. Carta	Carbonic Anhydrase Inhibitors: discovery of new chemical entities and novel applications for the inhibitors for the management of

neuropathic pain, cerebral ischemia and arthritis

10:00-10:15	S. Thibaudau	Superacid chemistry for Carbonic Anhydrases Inhibitors discovery
10:15-10:45	<i>Coffee Break</i>	
		<i>Chairman: F. Carta</i>
10:45-11:00	R. Gitto	Selective inhibitors of hCA VII based on isoquinoline scaffold for the treatment of CNS pathologies
11:00-11:30	W.A. Donald	Rapid, ultrasensitive protein structure determination by mass spectrometry
11:30-11:45	S. Akocak	Synthesis and biological evaluation of aromatic and heterocyclic Bis-Sulfonamide Schiff bases as Carbonic Anhydrase I, II, VII and IX Inhibitors
11:45-12:10	D. Vullo	Carbonic Anhydrase Activators: Mechanism of action, possible applications in the therapy of Alzheimer's Disease and implications on CAs in bacteria
12:10-12:30	Z. Fisher	Neutron crystallographic studies of cancer-related human Carbonic Anhydrase IX reveal details of water displacement and hydrogen bonding in inhibitor binding
12.30-12:45	S.M. Monti	Insights into the proteoglycan-like domain of Carbonic Anhydrase IX
12.45-13.00	G.J. Atkins	Novel roles for carbonic anhydrases in osteocyte-regulated bone homeostasis
13.00-14.00	<i>Lunch</i>	

SESSION IV

Roles of CAs in human diseases

Chairman: C. Capasso

15:00-15:30	M.A. Illies	Theranostic CA IX Inhibitors engineered from a delivery perspective
15:30-15:45	M. Mori	Computationally-driven design of CA Inhibitors
15:45-16:00	L. Di Cesare Mannelli	Pain relieving effects of new Non Steroidal Anti-Inflammatory Drugs and Carbonic Anhydrase Inhibitors hybrids (NSAIDs-CAIs): systemic and intrarticular treatments against rheumatoid arthritis
16:00-16:30	<i>Coffee Break</i>	

Chairman: G. De Simone

16:30-16:45	E. Masini/L. Lucarini	CA IX/COX-2 inhibitors as a new class of anti-inflammatory drugs
16:45-17:00	M. Ferraroni	X-RAY structure of a tetrameric type II β -Carbonic Anhydrase from the pathogenic bacterium vibrio cholera
17:00-18:30		Journal of Enzyme Inhibition and Medicinal Chemistry Editorial Board meeting
17:00-19:00	<i>Poster Session</i>	(Parallel sessions)
20:00-23:00	<i>Banquet</i>	<i>Stabilimento Termale Tettuccio, Viale Verdi 71-Montecatini Terme</i>

Saturday, 27th May

SESSION V

CAs in microorganisms

Chairman: S. Carradori

9:00-9:30	G. Costantino	Computer-Aided identification of potential Anti-infective compounds as selective Carbonic Anhydrase Inhibitors
9:30-9:45	C. Capasso	New light on bacterial Carbonic Anhydrases
9:45-10:00	A.B. Vermelho	Carbonic Anhydrases from Trypanosoma and Leishmania as anti-protozoan drug targets
10:00-10:15	A. Karioti	New natural product Carbonic Anhydrase Inhibitors incorporating phenol moieties
10:15-10:30	B.V. Alvarez	Carbonic Anhydrase Inhibitors in chronic and acute myocardial infarction
10:30-11:00	<i>Coffee Break</i>	

SESSION VI

Young researchers

Chairman: G. Costantino

11:00-11:15	M. Bozdog	Novel tumor associated Carbonic Anhydrase Inhibitors: derivatives of SLC-0111
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11:15-11:30	A. Angeli	Intramolecular oxidative deselenization of acylselenoureas: a facile synthesis of benzoxazole amides and Carbonic Anhydrase Inhibitors
11:30-11:45	S. Del Prete	Inhibition studies of Carbonic Anhydrases from pathogenic microorganisms
11:45-12:00	A. Nocentini	Design, synthesis and spectroscopic evaluation of novel fluorescent styryl pyridinium Carbonic Anhydrase Inhibitors
12:00	A. Scozzafava, S. Parkkila, C.T. Supuran: Closing remarks: Announcements regarding the next International CA conference, Bucharest, Romania (24-27 June 2018)	