



第12届国际脑能量代谢大会

尊敬的_____先生/女士，您好！

第12届国际脑能量代谢大会将于2016年05月在香港召开。

会议通知

2016年，香港生物科技协会将在香港首次主办第12届国际脑能量代谢大会。这次盛会定于5月25日至28日在香港科技园召开。一如既往，大会旨在提供平台让参会者与来自于脑能量代谢的相关研究领域的专家讲者积极互动及就最新资讯进行讨论。是次大会的主题是：“能量代谢和神经元、胶质细胞在大脑中的互动：从分子机制到创新疗法”。

我们邀请了世界各地对此领域感兴趣的专家、学者和研究人员齐聚香港，分享脑功能和能量代谢方面的最新相关资讯。大会提供独特的四天议程、不但富教育性和启发性，而且为赴会者带来同行交流互动的机会，相信此次大会定会使您站在行业的最前端。

Due to the increase in response and demand from our earlier announcement of the International Conference on Brain Energy Metabolism, May 25-28 in Hong Kong, we are happy to learn the Hong Kong Government along with many key local community organizations are immensely supportive of our Hong Kong Biotech Horizon events on "Ageing Brain in Health" this year. We are grateful to the Hong Kong Government for supporting this year's focal event on Ageing Brain in Health that is enabling us to provide additional value to conference registrants.

Hong Kong Biotech Horizon is an event series run by Hong Kong Biotechnology Organization whose objective is bringing together community of scientific researchers, technology developers and entrepreneurs towards progress in translational science. The first series of Hong Kong Biotech Horizons was "Translational Medicine: Promising Researches in Cancer Therapies and Diagnostics". The event comprised of conference symposium and public talk engaging the public community on raising awareness of importance of science in society.

This year's Hong Kong Biotech Horizon event on Ageing Brain in Health will follow suit, consisting of a three-and-a-half day International Conference on Brain Energy Metabolism with focus on **"Energy Metabolism and Neuron-Glia Interactions in Brain: from Molecular Mechanisms to Novel Therapeutic Approaches"** and a public talk on "Ageing Brain in Health". Our primary goal for this event is to address an important health topic that concerns everyone, ageing brain. We aim to bring comprehensive knowledge to the research and health service community for progress and advancement in translating findings in brain research to effective solutions in brain diseases. We have received support and endorsement for our Ageing Brain in Health project from Science and Science Translational Medicine, two of the world's top respected peer-reviewed scientific journal publications of the American Association for the Advancement of Science (AAAS).

With this great news, the organizing secretariat of the International Conference on

Brain Energy Metabolism has decided to extend early bird registration deadline to March 25 inclusive. Hong Kong Biotechnology Organization is able to continue offering this 25% discount rate off standard fees during the period from February 18 to March 25 inclusive:

- Regular - \$400 USD
- Student - \$350 USD
- Accompanying Person - \$200 USD

Take advantage of this early-bird extension by heading straight to <http://www.hkbio.org.hk/icbem/registration.html>. Fill in the registration form either online or download PDF, select payment method and send us copy of the transaction statement/receipt for us to complete registration process.

Abstracts for consideration as poster presentation are also open for submission. Whilst the brain energy metabolism conference deals with an important field of brain research and the nervous system, we welcome poster abstract submission on broader fields of neuroscience in the field of brain and related diseases that are current and relevant to our theme of Ageing Brain in Health. We look forward to receiving poster abstracts. Please note registration is required when submitting poster abstract. For full details and instructions, go to <http://www.hkbio.org.hk/icbem/abstract.html>

Deadline for poster abstract submission is extended to March 18, 2016.

The International Conference on Brain Energy Metabolism seeks to bring the latest research findings and breakthroughs from aspects in brain chemistry and the ageing brain to open up channels and explore new directions for local and international community of leading biotechnologists, neuroscience researchers and academic experts. We also hope for large attendance of medical doctors, neurosurgeons and neurologists from Hong Kong and around the world will engage in networking, exchange of knowledge and ideas, share their expertise, and foster new friendships and renew old ties. This serves fundamental foundation of working together to help manage people with neurological diseases, now and into the future.

All registered participants will be entitled to the following:

- a) Three and a half stimulating days of education, inspiration and peer networking among world's leading investigators in brain energy metabolism
- b) Lunches during the conference and daily refreshments
- c) Gala dinner (special event put together by the local organizing committee for our guests visiting Hong Kong)

All interested participants should proceed with registration and payment at the earliest. For accommodation, the Courtyard by Marriot Hong Kong Shatin, a four-star hotel has been selected as the Conference hotel for all delegates, with special reduced rates offered to participants of the International Conference on Brain Energy Metabolism. Accommodation booking form has already been made available on our conference website. You can visit <http://www.hkbio.org.hk/icbem/accommodation.html> for more details.

For further details or to register, please visit <http://www.hkbio.org.hk/icbem/> or email us at icbem@hkbio.org.hk.

We look forward to your participation in this important conference in Hong Kong.

会议日程

DAY 1 Wednesday, May 25, 2016	
14:00	

14:00-18:00	Registration
18:00-19:30	Evening Reception
19:30-20:30	Keynote Lecture
	Session Chair: Arne Schousboe Speaker: Ursula Sonnewald
	Where do all the carbons go? Balancing glutamate synthesis and degradation in brain
DAY 2 Thursday, May 26, 2016	
09:00	Session I Neuron-astrocyte Interactions and the Neurovascular Coupling
	Session Chair: Joao Duarte
09:00-09:30	João Laranjinha - NO and ascorbate regulating the neurovascular coupling
09:30-10:00	Martin Lauritzen - Capillary pericytes regulate cerebral blood flow in health and disease
10:00-10:30	Andrea Volterra - Towards deciphering the Ca ²⁺ code of astrocyte communication
10:30-10:45	Coffee Break
10:45	Session II Shining Light on Metabolism
	Session Chair: Johannes Hirrlinger
10:45-11:15	Michael Duchen - Separating NADH and NADPH fluorescence in live cells and tissues using FLIM: new insights in redox biology of the brain
11:15-11:45	Felipe Barros - Novel molecular mechanisms of neurometabolic coupling revealed by FRET sensors for glucose, lactate and pyruvate
11:45-12:15	Bruno Weber - In vivo characterization of brain glucose and lactate dynamics with cellular resolution using FRET sensors
12:15-12:45	Sergey Kasparov - Optogenetic analysis of lactate-mediated glia-neuronal signaling in the mammalian brain
12:45-14:00	Poster Session and Lunch

14:00	Session III Glycogen as a dynamic molecule in CNS and PNS function
	Session Chair: To be confirmed
14:00-14:30	Brian MacVicar - Mobilization of glycogen by intracellular signaling
14:30-15:00	Bruce Ransom - Schwann cell glycogen and PNS function
15:00-15:30	Lasse Kristoffer Bak - Brain energy metabolism: How do brain cells couple energy consumption to energy production?
15:30-17:00	Poster Session and Coffee Break
17:00	Session IV Regulation of Mitochondrial Metabolism: New Insights and Mechanisms
	Session Chair: Mary McKenna
17:00-17:30	Gary Gibson - Role of KGDH in modulating brain metabolism by succinylation of proteins: a newly identified mechanism of metabolic regulation
17:30-18:00	Arieh Moussaieff - Glycolysis mediated changes in acetyl CoA and histone acetylation control early differentiation of embryonic stem cells
18:00-18:30	Susanna Scafidi - Compartmentation of Lipid Metabolism in Brain
18:30-19:00	Elizabeth Jonas - An uncoupling channel within the c-subunit ring of the F1FO ATP synthase is the mitochondrial permeability transition pore
DAY 3 Friday, May 27, 2016	
09:00	Session V Compartmentation of Bioenergetic Processes to Support Brain Function
	Session Chair: Michael Robinson
09:00-09:30	Daniel Colon-Ramos - C. elegans as a tool for studying compartmentalization of glycolytic enzymes in synaptic function
09:30-10:00	Joshua Jackson - Association of glutamate transporters, glycolytic enzymes and mitochondria in astrocytes
10:00-10:30	Albert C.H. Yu - Role of an astrocytic nuclear glutamate transporter system

10:30-11:00	Amin Derouiche - Anatomy of peripheral astrocyte processes: Potential for oxidative capability and transmitter release
11:00-11:15	Coffee Break
11:15	Student Bliz chaired by: Caroline Rae
11:15-12:55	Student Bliz
12:55-14:00	Poster Session and Lunch
14:00	Session VI Ionic Signalling and Integrative Function of Astroglia
	Session Chair: Alexei Verkhratsky
14:00-14:30	Alexei Verkhratsky - Sodium signaling controls homeostatic cascades in astrocytes
14:30-15:00	Dmitri Rusakov - Signal integration in neural networks with astroglia
15:00-15:30	Stephane Oliet - Membrane trafficking of GLT1 glutamate transporter in astrocytes
15:30-16:00	Christine R. Rose - Astrocyte sodium signaling and neuro-metabolic coupling in the brain
16:00-16:15	Coffee Break
16:15	Session VII Astrocyte Gliotransmission and Metabolism
	Session Chair: To be confirmed
16:15-16:45	Vedrana Montana - Metabolic regulation of vesicular glutamate release from cultured astrocytes
16:45-17:15	Robert Zorec - Astrocytic vesicle dynamics, glucose availability and regulated exocytosis in health and disease
17:15-17:45	Helle S. Waagepetersen - Glucose replaces glutamate as energy substrate to fuel glutamate uptake in glutamate dehydrogenase-deficient astrocytes
17:45-18:15	Sandra J. Hewett - Influence of the astrocyte system xc- transporter on hypoglycemic neuronal cell death

18:30	Departure from Science Park to Yuen Long for Gala Dinner
DAY 4 Saturday, May 28, 2016	
09:00	Session VIII Use of Anaplerotic Substrates for Brain Metabolic Disorders
	Session Chair: Gerald Dienel
09:00-09:30	Fanny Mochel - A 13 years experience with triheptanoin: pyruvate carboxylase deficiency, GLUT1 deficiency and Huntington disease
09:30-10:00	Karin Borges - Triheptanoin partially restores levels of tricarboxylic acid cycle intermediates in the mouse pilocarpine model of epilepsy
10:00-10:30	Pierre-Gilles Henry - Potential of metabolic MR approaches for the assessment of anaplerotic therapies in the brain in vivo
10:30-11:00	Susan Aja - Anaplerotic triheptanoin diet enhances mitochondrial substrate use to remodel the metabolome and improve lifespan, motor function, and sociability in MeCP2-null mice
11:00-11:15	Coffee Break
11:15	Session IX Brain Metabolism in Ageing and Neurodegenerative Disorders
	Session Chair: Helle S. Waagepetersen
11:15-11:45	Selva Baltan - Mitochondrial dynamics in white matter stroke
11:45-12:15	Jian-Zhi Wang - Mechanisms Underlying The Mitochondrial Dysfunction in Alzheimer's Disease
12:15-12:45	Tailoi Chan-Ling - Nanoparticle uptake by human neural precursor cells leads to changes in cell bioenergetics
12:45-13:15	Closing Ceremony

会议嘉宾

会议门票

