

International Congress on Carnosine and Anserine

Louisville, KY

September 12-14, 2017

Contacts:

Shahid Baba

Phone: 502-296-7713

Email: spbaba01@louisville.edu

Kristina Arnold

502.852.4883

kristina.arnold@louisville.edu

Virginia Schmidtke

502.852.5999

virginia.schmidtke@louisville.edu

Tuesday, September 12, 2017

Location: Brown Hotel

Address: 335 West Broadway
Louisville, KY 40202

4:00 PM – 6:00 PM Registration
Gallery Ballroom, 16th Floor

7:00 PM – 9:00 PM Welcome Reception and Dinner

Wednesday, September 13, 2017

Location: Cardiovascular Innovation Institute (CII)

Address: 302 E. Muhammad Ali Blvd.
Louisville, KY 40202

8:00 AM – 8:30 AM Breakfast (CII)

8:30 AM – 8:35 AM Organizational Announcements
Shahid P Baba, University of Louisville, USA

8:35 AM – 9:05 AM Alexander Boldyrev Memorial Lecture:
'Exercise and Cardiovascular Diseases'
Speaker: Aruni Bhatnagar, University of Louisville, USA

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Oral session I: Beta-alanine and carnosine in exercise and sports

Moderator: Craig Sale

- 9:05 AM – 9:35 AM 'An updated meta-analysis of exercise performance studies'
Speaker: Craig Sale, Nottingham Trent University, UK
- 9:35 AM- 10:05 AM 'A review of application of β -alanine'
Speaker: Jay R Hoffman, University of Florida, USA
- 10:05 AM- 10:35 AM Uses and Applications of β -alanine in sport nutrition
Speaker: Richard Kreider Texas A&M University
- 10:35 AM – 10:50 AM Break
- 10:50 AM – 11:20 AM 'Novel insights in carnosine homeostasis in skeletal muscle'
Speaker: Wim Derave, Ghent University, Belgium
- 11:20 AM – 11:35 AM 'Chronic effects of beta-alanine supplementation on muscle carnosine levels'
Speaker: Bryan Saunders, University of Sao Paulo, Brazil
- 11:35 AM – 12:05 AM 'Estimation of endogenous β -alanine synthesis from a kinetic model of carnosine in human muscle'
Speaker: Roger Harris, Junipa Ltd, UK

Poster Session I: Categories: Exercise, Diabetes and Food

Moderator: Luca Regazzoni

12:00AM – 1:10 PM Oral bullet presentations from posters (5 min segments)

Stautemas J	Ghent University	Acute exercise leads to an increased urinary excretion of carnosine and carnosine-acrolein products in humans.
De Brandt, J Kai, Shinichi	University of Hasselt Niigata University	Carnosine concentrations in m. vastus lateralis of patients with COPD Effect of dietary lysine on the levels of imidazole dipeptides and mRNA expression of the metabolizing enzymes in muscles of broiler chicks.
Lesiów, Tomasz Playford, RJ	University of Poland Plymouth University	Quality of wheat bread enriched with carnosine Zinc carnosine, a health food supplement that stabilises small bowel integrity and stimulates gut repair
Yinghui Bao	China Agricultural University, Beijing	Effects of Dietary L-carnosine and Alpha-lipoid Acid on Growth Performance, Blood Thyroid Hormones and Lipid Profiles in Finishing Pigs
Shinobu, Fujimura	Niigata University	Do dietary histidine, lysine or arginine affect the levels of carnosine and anserine in chicken muscle?

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O'Toole, Tim	University of Louisville	Carnosine Supplementation Mitigates the Adverse Effects of Particulate Matter (PM2.5) Air Pollution Exposure
Thanutchaporn Kumrungsee	Hiroshima University	Histidine-related compounds as possible key mediators underlying a heart-protective effect of vitamin B6
Harris, R	Junipa Ltd	Estimation of the relative rates of decay ('washout') of carnosine in human types I and II muscle fibres, from a kinetic model of carnosine in muscle.
Spelnikov, D	Petersburg Nuclear Physics Institute, RUSSIA	On the kinetics of carnosine synthesis and decay in human muscle with β -alanine supplementation.
Miao Liu	University of Kentucky	Concentration of aggregated amylin in RBCs mediates amylin deposition in cardiac myocytes in patients with heart failure and type-2 diabetes
Blancquaert L	University of Ghent	Necessity of serum carnosinase inhibition in biochemical analysis of tissue carnosine
1:10 PM – 2:45 PM Lunch & Poster Presentations		

Oral Session II: Carnosine in chronic metabolic disease

Moderator: Shahid P Baba

2:45 PM – 3:15 PM	'The effects of carnosine supplementation in overweight and obese adults' <i>Speaker: Barbora de Courten, Monash Health, Australia</i>
3:15 PM – 3:45 PM	'The role of carnosine and carnosinases in diabetic complications' <i>Speaker: Benito Yard, Universitätsklinikum Mannheim, Germany</i>
3:45 PM – 4:05 PM	Break
4:05 PM – 4:35 PM	'Beta-alanine supplementation and ageing: current evidence and future directions' <i>Speaker: Bruno Gualano University of Sao Paulo, Brazil</i>
4:35-4:50 PM	'CN-1 overexpression aggravates disease progression and mitigates the beneficial effect of carnosine in type 2 diabetic mice' <i>Speaker: Jiedong Qiu Universitätsklinikum Mannheim, Germany</i>
4:50 PM – 5:05 PM	'Carnosine supplementation maintains trihexosylceramide and phosphatidylserine lipid classes in non-diabetic overweight and obese adults' <i>Speaker: Estifanos Baye, Monash Health, Melbourne, Australia</i>
5:05 PM – 5:20 PM	'The protective effect of exercise on diabetic nephropathy: the role of

histidyl dipeptides'

Speaker: Maxime Hanssens, Ghent University, Belgium

5:20 PM – 5:35 PM

'Risk assessment for the use of β -alanine as an ergogenic aid: A systematic review protocol and results from the initial search strategy.'

Speaker: Eimear Dolan University of Sao Paulo, Brazil

Thursday, September 14, 2017

Location: Cardiovascular Innovation Institute (CII)

**Address: 302 E. Muhammad Ali Blvd.
Louisville, KY 40202**

8:00 AM – 8:30 AM

Breakfast (CII)

8:30 AM – 8:35 AM

Organizational Announcements

Shahid P Baba, University of Louisville

Oral Session III: Carnosine in cardiovascular disease

Moderator: Junzo Kamei

8:35 AM – 9:05 AM

'Role of Carnosine Synthase in Cardiovascular diseases'

Speaker: Shahid P Baba, University of Louisville

9:05 AM – 9:20 AM

'Carnosine and mitochondrial energetics in myocardium of diabetic patients'

Speakers: Margaret AM Nelson, East Carolina University

9:20 AM – 9:50 AM

'Prevention of Atherosclerosis by Carnosine'

Speaker: Sanjay Srivastava University of Louisville

9:50 AM – 10:10 AM

Break

Oral session IV: Carnosine in Cancer and the Nervous system

Moderator: Barbora De Courten

10:10 AM – 10:40 AM

'Carnosine and cancer: Mechanisms, physiology and treatment'

Speaker: Frank Gaunitz, Medical Faculty Leipzig, Germany

10:40 AM – 11:10 AM

'The impact of 3-month aerobic strength training on motor & metabolic functions and muscle carnosine in patients with Parkinson's disease'

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Speaker: Barbora Ukropcova, Comenius University, Slovakia

11:10 AM – 11:40 AM 'Dose-dependent effects on muscle sympathetic nerve and blood flow and their mechanism'

Speaker: Katsuya Nagai, Anbas, Japan

11:40 AM – 12:10 AM 'TBD'

Speaker: Junzo Kamei, Hoshi University, Japan

Poster Session II: Categories: Cancer, Neuroprotection, Renal disease, Physiology and Biochemistry

Moderator: Benito Yard

12:10 AM – 1:10 PM Oral bullet presentations from posters (5 min segments)

Purcz, Katharina	University of Leipzig	Carnosine's effect on tumor cells is independent from its degradation and the release of L-histidine
Dietterle, Johannes	University of Leipzig	Carnosine inhibits the infiltrative growth of glioblastoma cells
Oppermann, Henry	University of Leipzig	A Phosphoproteomic Analysis of Carnosine's action on Signaling in Glioblastoma
Oppermann, Henry	University of Leipzig	Analyzing Carnosine's Influence on Tumor Cell Metabolism by GC-MS
Banerjee, Soumyabrata	University of Calcutta	Role of carnosine on aging-induced changes in brain and blood platelet mitochondrial monoamine oxidase-a activity in relation to motor activity
Keytsman, Charly	University of Hasselt	Muscle carnosine in Experimental Autoimmune Encephalomyelitis and Multiple Sclerosis
Berezhnoy, D.S.	Moscow state university	Carnosine as an effective neuroprotector in ischemic stroke and potential neuromodulator in normal conditions: new mechanisms of action in brain.
Prokopiev, V.D.	Russian Academy of Sciences, Tomsk	Effects of carnosine on dynamics of spontaneous and ethanol-induced oxidation of blood plasma proteins and lipids
Jarzebska, Natalia	Dresden, Germany	Alanine: glyoxylate aminotransferase 2 (AGXT2) is involved in skeletal muscle carnosine and anserine homeostatic regulation
Dolan, Eimear	University of Sao Paulo	The histidine containing dipeptide content of physiologically distinct muscle: Preliminary results from a comparative study of hummingbirds and chickens
Rodriguez, Angelica	Mannheim	Carnosinasuria inversely correlates with renal function deterioration in CKD patients
Kumar, A	University of Colorado	Chemical Synthesis of L and D-Carnosine analogs
Ruili Cao	Tsinghua University	Molecular Basis for Histidine N1-position specific methylation by CARNMT1
Ettore Gilardoni	University of Milan	Reactivity of histidine peptides with HNE in biological matrices and metabolic stability of corresponding Michael adducts
Margaret Nelson	East Carolona University	Carnosine ameliorates reactivity of catechol-aldehydes on mitochondria energetics in myocardium of diabetic patients

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1:10 PM – 2:45 PM Lunch & Poster Presentations

Oral Session V: Biochemical pathways of carnosine and derivatives

Moderator: Wim Derave

- 2:45 PM – 3:15 PM 'Carbonyl sequestering activity and ADME profile of histidine dipeptides: from in vitro to ex vivo studies'
Speakers: Luca Regazzoni & Giancarlo Aldini, University of Milan, Italy
- 3:15 AM – 3:45 PM New metabolic fates of beta-alanine: carboxylation to 2-(aminomethyl)-malonate, a neurotransmitter-like molecule'
Speaker: Henri Brunengraber, Case Western Reserve University
- 3:45 AM – 4:15 PM 'Ageing, formaldehyde and carnosine'
Speaker: Alan Hipkiss, Birmingham, UK
- 4:15 PM – 4:35 PM Break
- 4:35 PM – 4:50 PM 'Theoretical study of carnosine and its derivatives by methods of quantum chemistry and molecular docking'
Speaker: S Demukhamedova, Baku State University, Azerbaijan
- 4:50 PM– 5:05 PM 'Carnosine level in the porcine longissimus dorsi muscle and genetic correlates of meat quality traits'
Speaker: Marie-France Palin, Agriculture and Agrifood, Canada
- 5:05 PM– 5:20 PM 'Life without carnosine: development of a novel CARNS1 rat knockout model to explore the biological roles of histidine-containing dipeptides'
Speaker: Livia Gonçalves, University of Sao Paolo, Brazil
- 5:20 PM– 5:30 PM Travel award ceremony and congress closing
Shahid Baba & Wim Derave

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