

# FRONTIERS IN EXERCISE PHYSIOLOGY

Summer School  
at Hungarian University of Sports Science  
from Leading Experts around the globe



**Scott Powers**

Renowned for his extensive  
research in exercise physiology



**Li Li Ji**

A leading expert in muscle  
physiology



**David Hood**

Professor at York University, UK  
and Director of the Muscle Health  
Research Centre



**Zsolt Radak**

Leading expert on oxidative stress,  
hormesis, DNA-methylation-  
associated aging

# Program for the Day

June 22nd	Seminar Topic	Lecturer
9:00–9:45	Regulation of Skeletal Muscle Protein Degradation	Li Li Ji
10:00–10:45	Mitochondrial morphology, function and phenotypes in health, disease and exercise adaptations	David Hood
11:00–11:45	Lactate threshold – 50+ years of controversy	Scott Powers
12:00–12:45	Exercising brain	Zsolt Radák
Recommended Program: Individual Pest Tour – Explore the Hungarian Parliament, Liberty Square and St. Stephen's Basilica with our written guidelines in your own pace.		

**Please note:** A 15-minute coffee break is scheduled between each lecture. After the sessions, reasonably priced menu options will be available at the university canteen.

# Program for the Day

June 23rd	Seminar Topic	Lecturer
9:00–9:45	Control of Skeletal Muscle Protein Synthesis	Li Li Ji
10:00–10:45	The mitochondrial life cycle (Part I): Evidence for exercise signaling to mitochondrial biogenesis, including PGC-1: effects of age	David Hood
11:00–11:45	What limits VO2 max?	Scott Powers
12:00–12:45	Exercise and epigenetics I	Zsolt Radák
14:00 Meeting at HUSS Reception. <b>Buda Sightseeing Tour</b> – Included in the participation fee.		

**Please note:** A 15-minute coffee break is scheduled between each lecture. After the sessions, reasonably priced menu options will be available at the university canteen.

# Program for the Day

June 24th	Seminar Topic	Lecturer
9:00–9:45	Skeletal Muscle Aging: How much we know and do not know	Li Li Ji
10:00–10:45	The mitochondrial life cycle (Part II): Mitochondrial assembly, including fission, fusion and protein import regulation by exercise, aging and muscle disuse	David Hood
11:00–11:45	Exercise-induced oxidative stress – Friend or foe?	Scott Powers
12:00–12:45	Exercise and epigenetics II	Zsolt Radák
Recommended Program: Explore the Baths of Budapest: Choose from the various available options: Széchenyi Thermal Bath, Rudas Bath or Gellért Bath.		



# Program for the Day

June 25th	Seminar Topic	Lecturer
9:00–9:45	Protective Roles of Phytochemicals in Skeletal Muscle	Li Li Ji
10:00–10:45	The mitochondrial life cycle (Part III): Turnover and the regulation of mitophagy signaling during exercise, aging and muscle disuse	David Hood
11:00–11:45	Health benefits of exercise: muscle–organ crosstalk	Scott Powers
12:00–12:45	Exercise and microbiome	Zsolt Radák
14:00 – <b>Q&amp;A session with the four professors</b>		
15:00 – <b>Graduation Ceremony</b>		
Optional Program: Budapest Boat Tour – Only for registered participants.		

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