2020 International Summit Forum on Psychosomatic Benefits
and Physiological Mechanisms of Exercise Intervention

Call for Abstracts

June 5th-8th, 2020
Shanghai, China
The conference

2020 International Summit Forum on Psychosomatic Benefits and Physiological Mechanisms of Exercise Intervention, which is organized by the “Key Laboratory of Adolescent Health Assessment and Exercise Intervention, Ministry of Education of China”, will be held in Shanghai from June 5th to 8th, 2020. The conference this year is themed around “Psychosomatic Benefits and Physiological Mechanisms of Exercise Intervention”. The conference offers a wide range of presentations reflecting recent achievements and advancements regarding health promotion by exercise, as well as its underlying mechanisms. Faculties, researchers and students are all welcome to attend.

The presentation forms of the conference include keynote speak, thematic speak, oral presentation and poster presentation. Chinese and English are official communication languages. More details can be found below.

Dates and Locations

Conference start and on-site registration: June 5th, 2020
Conference end: June 8th, 2020
Location: College of Physical Education & Health
Address: No 500, Dongchuan Road, Shanghai

Organizing Group

Director: Liu Ji
Executive Director: Weina Liu

Abstract Submission

1. Topic category: Abstracts in the range of topics outlined below are invited.
   (1) Exercise Intervention for Chronic Diseases
   (2) Exercise Intervention for Neuropsychiatric Disorders
   (3) Exercise and Cognition
   (4) Physical Fitness and Health
   (5) Sports Nutrition and Health
   (6) Physiological and Biochemical Monitoring of Sports Training
2. Requirements

(1) Works that have not been openly published in official journals are invited, either in English or Chinese.

(2) Each person is welcome to submit up to two abstracts as the first author. The name, affiliation, email address and cell number of the first author are needed. Names, affiliations and email addresses of other co-authors are also needed.

(3) Presenters should submit an abstract in the length of 500-1000 words, with 3-5 keywords. The abstract comprises of the following four parts: objective, method, result and conclusion. For specific format, please see appendix.

(4) Please send the abstract to the official email address of the conference: PBPMEI2020@163.com. Format of email subject line: name of first author + affiliation + topic category (e.g. Sen Zhang + East China Normal University + Exercise Intervention for Neuropsychiatric Disorders).


## Registration

### 1. Fees

<table>
<thead>
<tr>
<th>Currency</th>
<th>Early Registration (before May 25th)</th>
<th>Late Registration (after May 25th)</th>
<th>Early Registration (before May 25th)</th>
<th>Late Registration (after May 25th)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regular</td>
<td>1200</td>
<td>1500</td>
<td>170</td>
<td>210</td>
</tr>
<tr>
<td>Students</td>
<td>600</td>
<td>800</td>
<td>85</td>
<td>115</td>
</tr>
</tbody>
</table>

The registration fee for regular participants and students include the conference program, participation in all sessions, food (lunch, dinner and coffee breaks).

### 2. Contacts

**College of Physical Education & Health**

**Email:** PBPMEI2020@163.com

**Contact person:**

- Jieli Sun: +86-21-54342612
- Sen Zhang: +86-18171089870

**Conference website:** http://www.ahaei.ecnu.edu.cn/main.htm
Appendix: Abstract sample

Possible role of GLP-1 in antidepressant effects of metformin and exercise in CUMS mice (14pt Times New Roman, bold, centered)

Jiatong Liu\textsuperscript{a,b}, Zhengtang Qi\textsuperscript{a,b}, Weina Liu\textsuperscript{a,b,*} (10pt Times New Roman, centered)

\textsuperscript{a} Key Laboratory of Adolescent Health Assessment and Exercise Intervention of Ministry of Education, East China Normal University, Shanghai 200241, China
\textsuperscript{b} College of Physical Education & Health, East China Normal University, Shanghai 200241, China

Objectives: Both depression itself and antidepressant medication have been reported to be significantly related to the risk of type 2 diabetes mellitus (T2DM). Glucagon-like peptide-1 (GLP-1), a treatment target for T2DM, has a neuroprotective effect. As an enhancer and sensitiser of GLP-1, metformin has been reported to be safe for the neurodevelopment. The present study aimed to determine whether and how GLP-1 mediates antidepressant effects of metformin and exercise in mice.

Methods: Male C57BL/6 mice were exposed to chronic unpredictable mild stress (CUMS) for 8 weeks. From the 4th week, CUMS mice were subjected to oral metformin treatment and/or treadmill running. A videocomputerized tracking system was used to record behaviors of mice for a 5-min session. ELISA, western blotting and immunohistochemistry were used to examine serum protein concentrations, protein levels in whole hippocampus, protein distribution and expression in the dorsal and ventral hippocampus, respectively.

Results: Our results supported the validity of metformin as a useful antidepressant; moreover, treadmill running favored metformin effects on exploratory behaviors and serum corticosterone levels. CUMS reduced GLP-1 protein levels and phosphorylation levels of extracellular signal-regulated kinase 1/2 (ERK1/2), but increased protein levels of B-cell lymphoma 2-associated X-protein (BAX) in mice hippocampus. All these changes were restored by both single and combined treatment with metformin and exercise.

Conclusions: Our findings have demonstrated that protein levels of pERK and BAX may be relevant to the role of GLP-1 in antidepressant effects of metformin and exercise, which may provide a novel topic for future clinical research.

Keywords: glucagon-like peptide-1; CUMS; depression; metformin; exercise (10pt Times New Roman, left aligned)