



**SPIRITS**  
SUPPORTING PROGRAM FOR INTERACTION-BASED  
INITIATIVE TEAM STUDIES



**京都大学**  
KYOTO UNIVERSITY

## Workshop on

# ‘Genetic diversity and molecular breeding in cultivated mushrooms’

We are pleased to invite you to join the satellite workshop of the 9th International Conference on Mushroom Biology and Mushroom Products (9ICMBMP) in Shanghai, China. This workshop is held by an international consortium for “Genetic diversity and molecular breeding in cultivated mushrooms”, which is supported by a program called ‘SPIRITS’ from Kyoto University, Japan. The workshop is also supported by WSMBMP (World Society for Mushroom Biology and Mushroom Products) and SAAS (Shanghai Academy of Agricultural Sciences).

Please feel free to join the workshop to talk each other either on the latest research progress or on future collaboration in friendly atmosphere.

### Core members of the consortium

Yoichi Honda (chair, Japan)	Dapeng Bao (vice chair, China)
Yitzhak Hadar (Israel)	Won-Sik Kong (Korea)
Ursula Kües (Germany)	Saisamorn Lumyong (Thailand)
László Nagy (Hungary)	Anton Sonnenberg (Netherlands)

### Date and place

Date: 12th Nov. 2018

Place: Holiday Inn Shanghai Hongqiao, Shanghai, China

### Program

13:00 **Opening remarks** Yoichi Honda (Kyoto Univ., Japan)

#### **Strain collection and genetic diversity (1)**

13:10 The fungal culture collection of Plant Breeding Wageningen: A source for many projects

Anton Sonnenberg (Wageningen Univ. & Res., Netherlands)

13:30 Analysis on geographical distribution and genetic diversity of Xianggu (Shiitake) mushroom in China

Ruiheng Yang (Inst. of Edible Fungi, SAAS, China)

13:50 Study on collection and diversity of wild germplasm of *Auricularia heimuer*

Fangjie Yao (Jilin Agricultural Univ., China)

14:10 Culture collection and diversity in Korea

Won-Sik Kong (Nat. Inst. of Horticult. and Herb. Sci., RDA, Korea)

Coffee break (14:30-14:50)

### **Strain collection and genetic diversity (2)**

- 14:50 Thai mushroom culture collection and case study in black bolete: *Phlebopus portentosus* culture development  
Saisamorn Lumyong (Chiang Mai Univ., Thailand)
- 15:10 A transcriptomic atlas of mushroom formation reveals conserved developmental genes of fruiting body forming fungi  
László Nagy (Inst. of Biochem., Biol. Res. Cent., Hungary)
- 15:30 Diversity and preference of mating types in the cultivated strains of *Lentinula edodes*  
Hyeon-Su Ro (Gyeongsang Nat. Univ., Korea)

Coffee break (15:50-16:10)

### **Spore formation and molecular genetics**

- 16:10 Dissecting the process fruiting body and spore formation in *Coprinopsis cinerea*  
Ursula Kües (Univ. of Göttingen, Germany)
- 16:30 Development of sporeless strains of *Pleurotus ostreatus*  
Johan Baars (Wageningen Univ. & Res., Netherlands)
- 16:50 Molecular breeding of *Pleurotus ostreatus*: effects on growth and development  
Yitzhak Hadar (Hebrew Univ. of Jerusalem, Israel)
- 17:10 Genome editing with CRISPR/Cas9 system in *Pleurotus ostreatus*: toward non-GM molecular breeding  
Takehito Nakazawa (Kyoto Univ., Japan)
- 17:30 **Closing remarks & announcement of the next workshop in 2019 (group photo)**

### **Registration**

This workshop is opened to the participants in 9ICMBMP for free of charge.

Someone who wants to join, please send a message with a title as 'SPIRITS workshop' and provide your name, position and affiliation in the text to [honda@kais.kyoto-u.ac.jp](mailto:honda@kais.kyoto-u.ac.jp)

\*For registration to 9ICMBMP, please visit the website at  
<http://9th-wsmbmp.csp.escience.cn/>

### **Organizer**



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