



Your CEPAMS Newsletter - February 2024

Introduction

We are pleased to announce that the "2024 CEPAMS annual symposium" will be held in Sanya, Hainan Province, from March 18 to 20, 2024. This symposium is organized by the CEPAMS, hosted by the Institute of Genetic and Developmental Biology of the Chinese Academy of Sciences (IGDB), and chaired by the CEPAMS directors Caroline Dean and Xiao-Feng Cao. The symposium's topic will focus on the frontiers of plant and microbial sciences boosted by Sino-UK scientific collaboration.

The "2024 CEPAMS annual symposium" will invite scientists from the three institutes (IGDB, CEMPS, JIC), the CEPAMS International Science Advisory Committee members, and renowned scientists from other institutions of China, including the Chinese Academy of Agricultural Sciences and Yazhou Bay Seed National Laboratory.

Since its establishment, CEPAMS has recruited 16 outstanding young talents with diverse backgrounds and nationalities as research group leaders and made a series of significant achievements in areas such as plant-microbe interactions, plant domestication, natural products, and secondary metabolism. The CEPAMS China-UK Annual Academic Symposium has become an important platform for scientists from both sides to enhance understanding, discuss collaboration, and exchange scientific ideas. It is hoped that through the

annual symposium, substantial cooperation will be further promoted, and constructive suggestions will be provided for the future development of the joint center.

Professor Bin Han, Director CEMPS

Events Coming Up

February 2024	Seminars at CEMPS (Shanghai)
February 2024	Seminars at IGDB (Beijing)
March 2024	Friday Seminars at JIC (Norwich)
18-20 March 2024	CEPAMS Symposium (Hainan, China)

CEPAMS Publications



[Ahmad et al. 2024](#). The evolutionary trajectories of specialized metabolites towards antiviral defense system in plants.

[Gao et al. 2024](#). Unraveling the rhizobial infection thread.

[Hu et al. 2023](#). A sweet story from Phytophthora-soybean interaction.

[Jiang et al. 2023](#). Ethylene signaling modulates air humidity responses in plants.

[Minguillón et al. 2023](#). Dynamics of hemoglobins during nodule development, nitrate response, and dark stress in *Lotus japonicus*.

[Niu et al. 2023](#). Whole-genome sequencing of diverse wheat accessions uncovers genetic changes during modern breeding in China and the United States.

[Shen et al. 2023](#). The wheat sucrose synthase gene *TaSus1* is a determinant of grain number per spike.

[Shen & Feng, 2024](#). NIN—at the heart of Nitrogen-fixing Nodule symbiosis.

[Zhang et al. 2023](#). Epigenetic modifications regulate cultivar-specific root development and metabolic adaptation to nitrogen availability in wheat.

[Zhang et al. 2023](#). Structural variation discovery in wheat using PacBio high-fidelity sequencing.

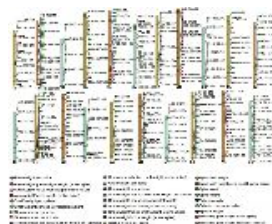
[Zhang et al. 2024](#). Unveiling the regulatory role of GRP7 in ABA signal-mediated mRNA translation efficiency regulation.

[Zhao et al. 2024](#). Unraveling wheat endosperm development: epigenetic regulation and novel regulators for enhanced yield and quality.

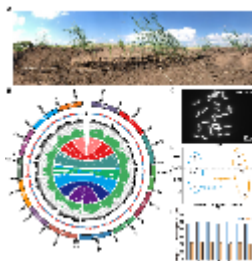
CEPAMS News



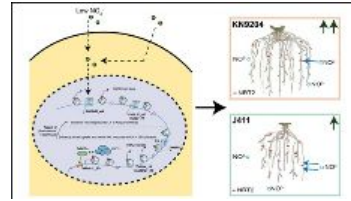
[Yang Bai Receives the 2023 “Scientific Exploration Award”](#)



[Scientists Find New Mechanisms Regulating Spike Traits of Wheat through High-resolution Genetic Mapping](#)



[Chinese Scientists Use Custom Genome Assembly and Editing Method to Improve Sheepgrass](#)



[Epigenetic Decisions: Unraveling Low-Nitrogen Adaptation Strategies in Wheat Cultivars](#)



Conferences, Seminars and Projects

Several of you have been presenting at conferences and seminars.

- Jeremy Murray presented his lab's research at the Australian Legume Symposium in Canberra, "Flavonoids as Specific Small Molecule Host-to-Microbe Signals".
- Jeremy also presented at [Nitrogen 2023](#) in Sydney, Australia, "NRT1.1s Mediate Nitrate Suppression of Nodulation".
- Hao Zhang also attended the Nitrogen 2023 international conference and gave an oral presentation on "Epigenetic regulation of low nitrogen adaptation in wheat cultivars".
- Jun Xiao, Xuemei Liu and Xiuxiu Zhang attended the 1st National Conference on Plant Stem Cell Biology in Wuhan. Jun Xiao gave an oral presentation.
- Jun Xiao, Xuemei Liu and other 12 graduate students from IGDB attended the ISW in Davis, US and gave oral presentations.

Xiaofeng Cao visits Shanghai Campus



Prof. Xiaofeng Cao, co-director of CEPAMS, visited the Shanghai CEPAMS groups in January and discussed the research progress with individual group leaders.

Pictured are Qihua Ling, Weibing Yang, Evangelos Tatsis, Jeremy Murray, Xiaofeng Cao, Yu Zhang, Xiufang Xin, Dapeng Li, Hiromu Kameoka and Xiaofei Yang.

Happy Chinese New Year!



John Innes Centre has a long history of collaborations with China, dating back to the 1970s. Visiting researchers worked in each other's labs; partnerships were formed.

These collaborations accelerated when CEPAMS was formalised in 2011. This has resulted in ground-breaking discoveries in fundamental plant processes that has stimulated advances in key food crops affecting global food security.

Today, joint grants continue to be won and new collaborations fostered. It is an exciting time for China-UK science.

JIC is blessed with a thriving Chinese community. This week, at JIC, we have been celebrating Chinese New Year - the year of the dragon! - and wish all our friends and collaborators a Happy New Year!

Prof. Dale Sanders Elected International Member of CAS



Former Director of the John Innes Centre, Professor Dale Sanders FRS has been elected an international member of the Chinese Academy of Sciences in recognition of his distinguished and continuing achievements in original research.

Professor Sanders is a leading authority on the mechanisms for the transport of chemical elements across cell membranes in plants. These mechanisms have key roles in the control of crucial crop traits such as nutritional value of foods, seed germination, the response to drought conditions and how plants cope with toxic compounds in the soil. He was elected a Fellow of the Royal Society in 2001.

Dale Sanders FRS was Director and Chief Executive of the John Innes Centre from 2010-2022. And he played a key driving role in the establishment of CAS-JIC Centre of Excellence for Plant and Microbial Science (CEPAMS). In recognition of his outstanding contributions to promoting scientific collaborations in China, Prof. Sanders won the China International Science and Technology Cooperation Award and the CAS International Scientific Cooperation Award in 2020.



CEPAMS Group Leader Positions

In the wake of travel restrictions arising from the COVID-19 pandemic, CEPAMS paused its recruitment of Group Leaders in 2022. That is all set to change in 2024 with the creation of four new Group Leader positions in Shanghai and Beijing. Save [this link](#) to keep up to date on the positions as they are advertised.

Awards and Funding

- Congratulations to Jun Xiao who has been awarded tenure at IGDB achieving a final evaluation level of "excellent"! The evaluation panel concluded that Jun Xiao is an excellent researcher who has used multi-omic approaches successfully to study the genetic control of key wheat traits.
 - Jeremy Murray (CEMPS) has recently applied for funding from the Ministry of Science and Technology (MOST), for an ongoing collaboration with Myriam Charpentier (JIC) and Tony Miller (JIC), to study nitrate transport and signaling. We wish them the best of luck.
 - Congratulations to Xuemei Liu and Dr. Hao Zhang on receiving the "Yi-Hai-Jia-Li Excellent Graduate Student" award, and to Dr. Jun Xiao for the "Yi-Hai-Jia-Li Excellent Mentor" award.
 - Xuemei Liu was awarded a poster prize at the 1st National Conference on Plant Stem Cell Biology.
-

Apply for PIFI Funding



The Chinese Academy of Sciences (CAS) President's International Fellowship Initiative, PIFI, is a funding program designed to establish scientific cooperation and promote research communication around the globe. It is open to all scientific research personnel worldwide.

To find out how your visit to China could be funded, [click here](#).

For more information, [contact](#) Lei Qi (CEPAMS, Beijing campus) or Nan Lin (CEPAMS Shanghai campus).

Share your science

We'd love to celebrate your science in the CEPAMS newsletter. Please [email us](#) with any information on activities or achievements you've had, including:

- Recent events you've been involved in.
 - Awards that you or colleagues have received.
 - Podcasts or seminars you have given.
 - Virtual events you have attended or would like to be advertised.
 - Interactions with external people on your science and projects.
 - Industry interactions and collaborations.
 - Articles you have published.
-