



Your CEPAMS Newsletter - February 2025

Introduction

In this newsletter we celebrate the research collaborations between our four institutes:

CEMPS in Shanghai

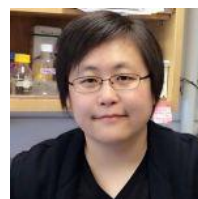
IGDB in Beijing

JIC in Norwich

TSL in Norwich

You will read about the funding and scientific opportunities for you to collaborate on new research with others across our institutes. I encourage you to explore those opportunities today!

We are happy to put you in touch with people who would complement your research.



Prof. Yiliang Ding
Deputy Director of CEPAMS

Upcoming Grants & Awards



Grant: **PIFI**
Status: **Open**

LEVERHULME
TRUST

Grant: **Visiting Proessorships**
Status: **Closes 01 May 2025**



Biotechnology and
Biological Sciences
Research Council

Grant: **International Travel Award**
Status: **Closes 30 September 2025**

THE ROYAL SOCIETY

Grant: **Newton International
Fellowships**
Status: **Closes 18 March 2025**

THE ROYAL SOCIETY

Grant: **International Exchanges**
Status: **Closes 12 March 2025**

THE ROYAL SOCIETY

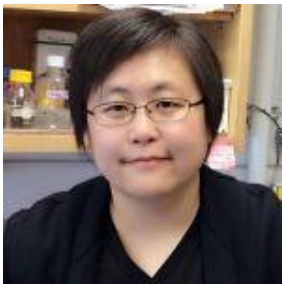
Grant: **Wolfson Fellowship**
Status: **Closes 19 March 2025**

THE ROYAL SOCIETY

Grant: **Wolfson Visiting Fellowship**

Status: **Closes 19 March 2025**

Collaboration Testimonial



“My group has forged some strong collaborations with CEPAMS group leaders, such as Dr Jun Xiao and Dr Xiaofei Yang.

In collaboration with Dr Xiaofei Yang, we recently developed the first RNA AI foundation model, PlantRNA-FM, to explore RNA sequence and structure languages (RNA codes) critical for biological processes (Yu et al., 2024). This model can be extended to study functional RNA motifs across other species. This model will revolutionize RNA biology by revealing the regulatory landscape of RNA functions throughout the transcriptome.

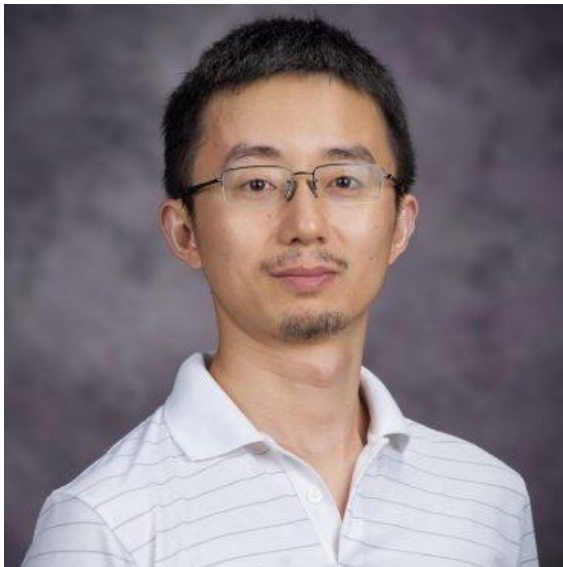
In collaboration with my group, Dr Jun Xiao’s group has recently unveiled the regulatory role of glycine-rich RNA binding protein 7 (GRP7) in Absciscic acid signal-

mediated mRNA translation efficiency regulation ([Jing et al., biorxiv](#)).

These active two-way collaborations have significantly promoted creativity, strategic insight and commitment to excellence across three world-leading institutes. We are looking forward to many more successful collaborations in the future.”

Yiliang Ding, Group Leader, JIC

Spotlight on...



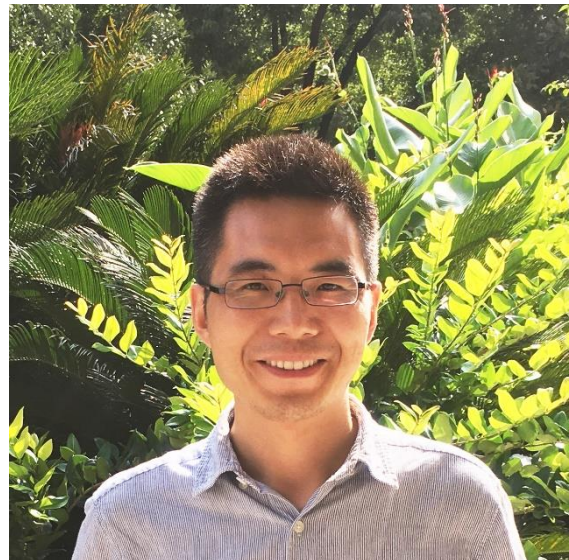
Fei He

Group Leader, IGDB

Interested in:

Wheat genomics

Bioinformatics



Weibing Yang

Group Leader, CEMPS

Interested in:

Plant stem cell biology



Events Coming Up

Autumn 2024	<u>Seminars at CEMPS</u> (Shanghai)
Autumn 2024	<u>Seminars at IGDB</u> (Beijing)
Autumn 2024	<u>Friday Seminars at JIC</u> (Norwich)
23-25 April 2025	CEPAMS Symposium, Shanghai

Happy Chinese New Year!



It is the year of the snake!

The JIC and TSL community celebrated Chinese New Year together in the Rec Centre.

We wish all our friends and collaborators a Happy New Year!

CEPAMS Publications



Chen et al. 2024. Nuclear factor-Y–polycomb repressive complex2 dynamically orchestrates starch and seed storage protein biosynthesis in wheat.

Gao et al. 2024. Applying conventional and cell-type-specific CRISPR/Cas9 genome editing in legume plants.

Luo et al. 2025. The location and genome origin of alien chromatin in wheat founder parent Xiaoyan 6.

Ma et al. 2024. A comprehensive map of DNA-segment copy number variation in 491 genomes of common wheat uncovers genes associated with multiple agronomic traits.

Wang et al. 2024. AtPRMT3-RPS2B promotes ribosome biogenesis and coordinates growth and cold adaptation trade-off.

Xue et al. 2025. Epigenetics in the modern era of crop improvements.

Yu et al. 2024. An interpretable RNA foundation model for exploring functional RNA motifs in plants.

Zhang et al. 2024. Transcriptome and translome profiling of Col-0 and *grp7grp8* under ABA treatment in *Arabidopsis*.



Plant Knowledge Chatbot



The Ding lab has developed a plant knowledge chatbot. It has completed its training and is now in a broad internal testing phase. You can login at <https://plantscience.ai> using your JIC or TSL email to register.

This chatbot utilises knowledge graph technology to ensure accurate, well-founded, and reasoning responses. It has been trained on approximately 20,000 plant biology-related publications under a CC-BY licence. You are welcome to ask any interesting plant science-related questions.

All chat data from the plantscience.ai chatbot is stored only on your own computer, and no information is collected on the server side.

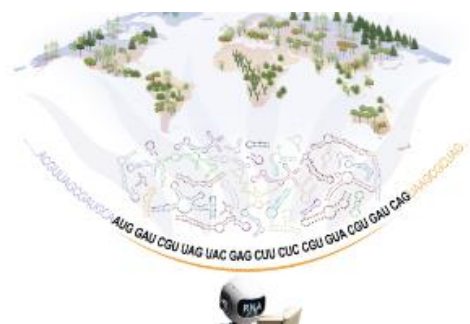
A feedback button is available after each conversation, and we would greatly appreciate it if you could vote “like” or “dislike” and provide further suggestions.

For any inquiries, please contact haopeng.yu@jic.ac.uk.

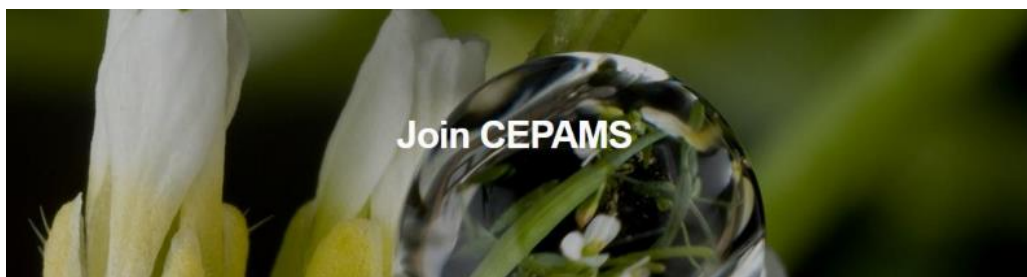
CEPAMS News



Scientists Innovate Breeding Strategies to Create Climate-smart Crops



Breakthrough AI model can translate the language of plant life



CEPAMS Group Leader Positions

CEPAMS is recruiting for Group Leaders in Shanghai and Beijing.

This important role will give you the financial support and freedom to advance your own original research programmes in a collaborative and supportive environment.

Our research makes use of a wide range of disciplines in the biological and chemical sciences including cell biology, biochemistry, chemistry, genetics and molecular biology.

If you wish to apply, please send your CV, research proposal, and three letters of recommendation to cepams@genetics.ac.cn and nlin@cemps.ac.cn.

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.

