

ISSUE 5 August 2025

Department of Biology Hong Kong Baptist University

Academic Staff 2024-25





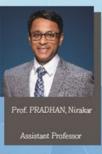














































Research Achievements

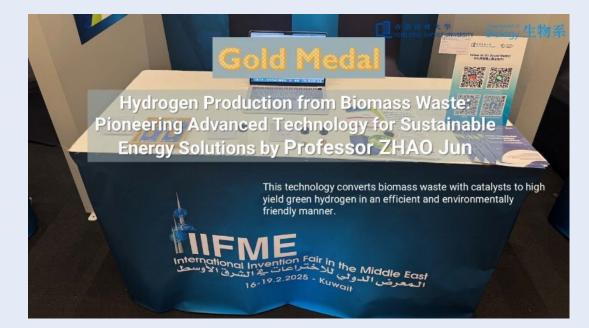
Prof, Zhang Jianhua Rank Among World's Top 100 Scientists in Mathematics, and Plant Science and Agronomy by Research.com (more)



Prof. Zhao Jun Awarded IAAM Scientist Medal 2025 (more)



Prof. Zhao Jun has received the Gold Medal at the 15th International Invention Fair in the Middle East (more)



Research Achievements

The First in Hong Kong: HKBU's Professor Qiu Jianwen Ventures into the Depths with the Jiaolong Submersible (more)



Our Department was honored to join the Guangdong-Hong Kong-Macao University Alliance for Biodiversity as a founding member, under the framework of the Guangdong-Hong Kong-Macao University Alliance (more)





50th International Exhibition of Inventions Geneva

Research Achievements

Prof. Chiu, Jill Man Ying, Prof. Zhao Jun and Prof. Liao Pan has garnered awards including the two Gold Medal and one Gold Medal with Congratulations of the Jury at the 50th International Exhibition of Inventions in Geneva (more)

Gold Medal with Congratulations of the Jury

A method to produce an unusual monoterpenoid

Professor Liao Pan

This invention provides a cost-effective method for producing an unusual monoterpene compound commonly used in the perfume and fragrance industry. The method is expected to be less expensive than traditional approaches and more environmental-friendly.

Gold Medal

Advanced catalysts and catalytic systems for green hydrogen production from biomass waste

Professor Zhao Jun

An advanced catalytic system that converts wet and dry waste such as food waste, wastepaper and yard waste into hydrogen, offering high efficiency, low operating costs and energy savings. It can operate in conditions with low temperature and pressure. Theoretically it is capable of achieving up to a maximum of 88% hydrogen output from biomass waste, which offers a sustainable yet economical alternative to traditional hydrogen production.

Gold Medal

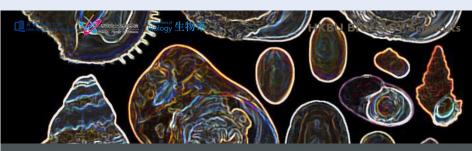
Broad absorption spectrum for sunscreen compounds and its applications

Professor Jill Chiu

This advanced sunscreen technology utilises patented, FDA-approved compounds to provide broad-spectrum protection covering UVA, UVB, near-UV, and visible light spectra, which is a wider coverage than traditional sunscreens. By immobilising UV filters, these compounds eliminate the endocrine-disrupting and carcinogenic risks associated with chemical sunscreens while preventing skin absorption.

Research Achievements

General Research Fund 2025-26

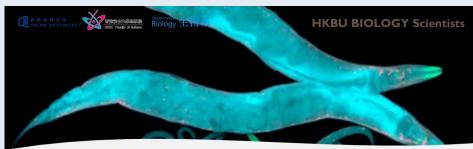


SEVEN PROJECTS HAVE BEEN AWARDED GENERAL RESEARCH FUND 2025/26

Prof. Qiu Jianwen

Revealing Temporal and Spatial Patterns of Genetic Diversity in Humanharvested Molluscs through High-throughput Sequencing Ancient and Contemporary DNA

HK&1,303,368



SEVEN PROJECTS HAVE BEEN AWARDED GENERAL RESEARCH FUND 2025/26

Dr Xie, Jeffrey, Dongying

Deciphering the molecular basis of incompatibility between a novel speciation gene pair in nematode species hybrids

HK\$1,278,338



SEVEN PROJECTS HAVE BEEN AWARDED GENERAL RESEARCH FUND 2025/26

Prof. Lee Chi Wai

Mechanobiological regulation of the assembly and topological maturation of postsynaptic apparatus at developing neuromuscular synapses

HK\$1,381,520



SEVEN PROJECTS HAVE BEEN AWARDED GENERAL RESEARCH FUND 2025/26

Dr Zhang, Hailei

Understanding the Role of NAD-asGlpF in Regulating Glycerol Utilization Genes in E. coli

HK\$1,286,040

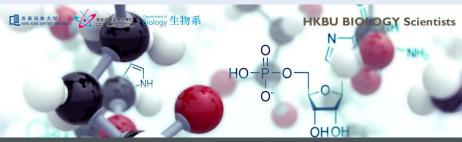


SEVEN PROJECTS HAVE BEEN AWARDED GENERAL RESEARCH FUND 2025/26

Prof. Bi Yang

Dissect O-fucosylation- and O-GlcNAcylation-mediated modulation of EIN2 processing and activities in mediating ethylene signaling and sugar responses

HK\$1,554,211



SEVEN PROJECTS HAVE BEEN AWARDED GENERAL RESEARCH FUND 2025/26

Prof ZHAO, Jun

Aqueous Photocatalytic Oxidation of Biomass-Derived 5-Hydroxymethylfurfural for Customizable Product Synthesis

HK\$1,124,471



SEVEN PROJECTS HAVE BEEN AWARDED GENERAL RESEARCH FUND 2025/26

Prof. Zhao Zhongying

Molecular characterization of a maternal effect hybrid lethality locus on the chromosome II between Caenorhabditis briggsae and C. nigoni

HK\$1,554,211

Student Achievements









FIRST PRIZE AWARD FOR PRESENTATION AT THE FORUM ON INTERNATIONAL DAY FOR **BIODIVERSITY 2025 CUM** NATURE EDUCATION FORUM IN HENGQIN

PHD STUDENT, MS. DAI QI







The research team, led by Prof. Qiu Jianwen, has named the new species Placuna aestuaria and Placuna vitream (more)

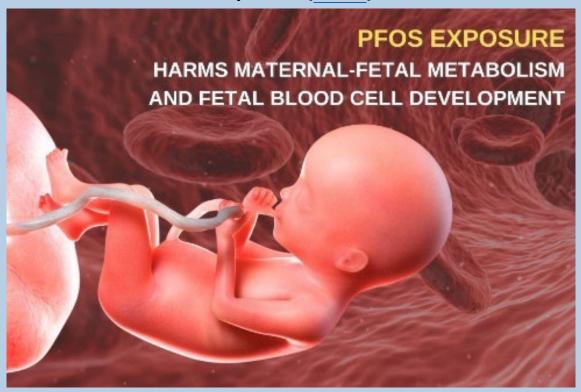


Prof. Zhao Zhongying and Dr Jeffrey XIE Dongying have made a remarkable discovery that could change our understanding of how species survive in the face of disease, shedding light on the complex interactions between hosts and pathogens (more)

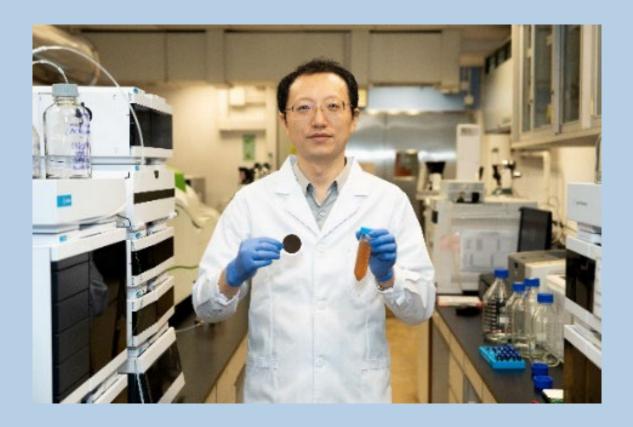


Research Spotlight

Prof. Chris Wong and his research team revealed that PFOS exposure harms maternal-fetal metabolism and fetal blood cell development (more)

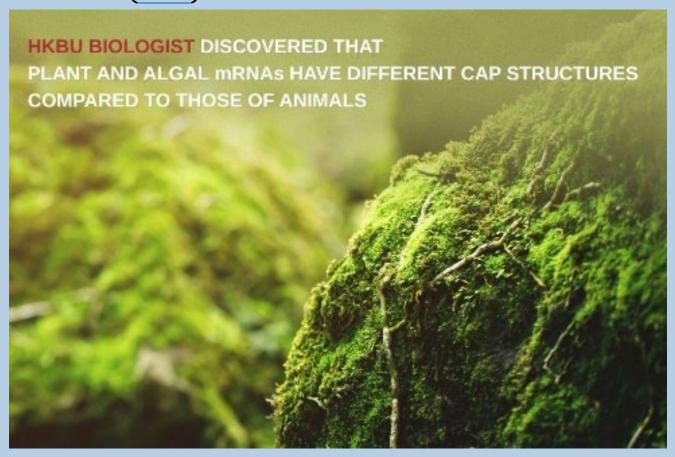


Led by Prof. Zhao Jun, the research team develops New Catalytic Membrane that Boosts Efficiency of Cleaning Wastewater Using Oxygen (more)

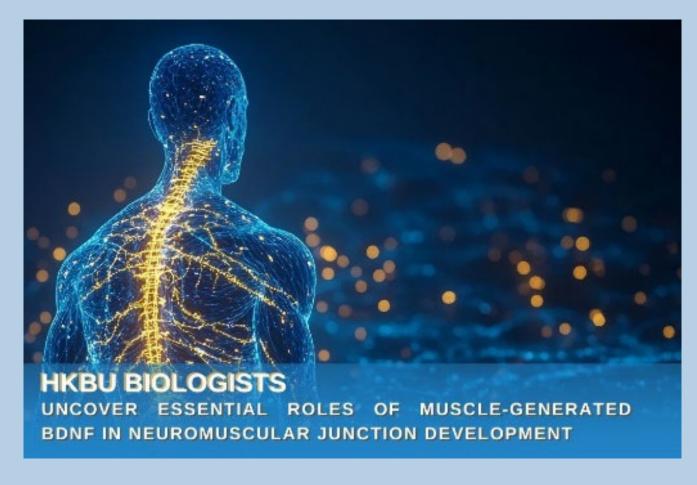


Research Spotlight

Prof. Xia Yiji and his research team discovered that plant and algal mRNAs have different cap structures compared to those of animals (more)



Prof. Lee Chi Wai with his research team reveals significant insights into muscle-generated BDNF's role in muscle biology and NMJ development (more)



Research Spotlight

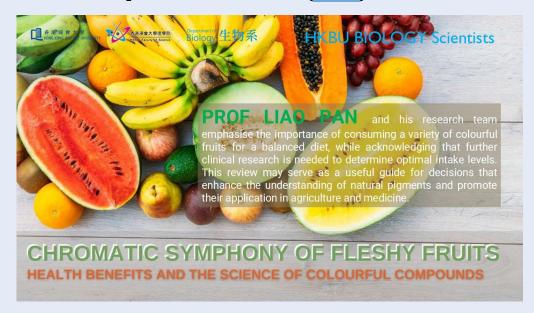
Prof. Nirakar Pradhan and his research team uncovers how Zeovalent Iron Nanoparticles boost Hydrogen Production from kitchen waste (more)



Prof. CHEUNG Ka Loon Allen collaborates with the Center for Medical Innovation, Nagasaki University to establish a tumour mouse model that mimics the real-life scenario of mesothelioma in humans (more)



Prof. Liao Pan and his research team emphasise the importance of consuming a variety of colourful fruits for a balanced diet, while acknowledging that further clinical research is needed to determine optimal intake levels (more)





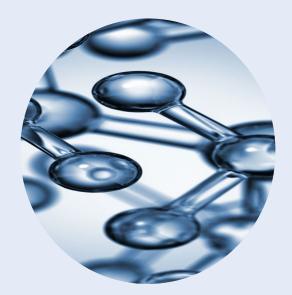
Programme Highlight

PhD Candidate Recruitment





Ecology, Environment and Health



Molecular, cell and developmental biology



Bioresource and Agriculture

Our department are recruiting PhD students to join our research team. PhD research degrees are an integral part of our academic ethos, where students are required to conduct independent research projects under the supervision of one or more of the department's faculty members, with the relevant expertise. (more)

Programme Highlight

Student Internship Programme

This year, more than 60 internship opportunities were offered students majoring in Bioresource and **Agricultural** Science, **Environmental** Science Biotechnology. This and provides students with programme valuable opportunities to experience different working environments and career prospects in related fields and most important is to acquire different essential techniques and professional skills.

Target Students:

Year 2 & Year 3

BSc (Hons) in Applied Biology & BSc (Hons) in Bioresource and Agricultural Science



Programme Highlight

BSC in Applied Biology Environmental Sciences Concentration



FULL Accreditation In FIVE AREAS





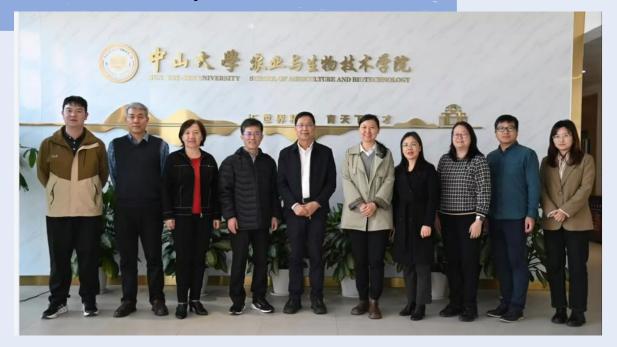
Accredited for DIRECT APPLICATION

Past Events

Henan University - Hong Kong Baptist University Biological Agriculture Collaboration Forum (河南 大学一香港浸会大学生物农业合作论坛)



Exchange Symposium at the School of Agriculture and Biotechnology, Sun Yat-sen University



Academic Tour to the Department by the Government of Tamilnadu



Past Events

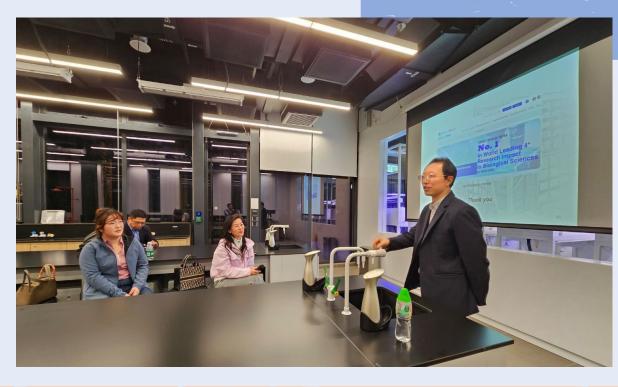
Sun Yat-Sen University, School of Agriculture and

Biotechnology Visit



Visit from Federation of Hong Kong Jiangsu Youth

(香港江蘇青年總會)



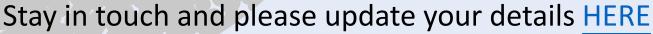
Guangdong Academy of Agricultural Sciences Exchange Tour

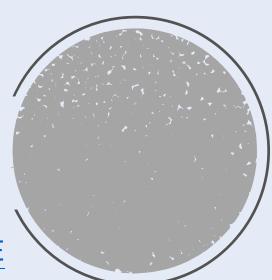




Update Your Information

By signing up to our alumni network, you will receive alumni relations email communications, news and event invitations from the Department.





Share Your News

Share Your Precious Moments of Life and Send Us a Class Note...

You will receive a gift by filling in an <u>ONLINE FORM</u> to update us about your stories of success, happy moments (from engagement, marriage or new baby, to a new business or career move), or recent activities.













