**「動物科學研究與永續發展國際研討會」**

「**International Symposium on Animal Science Research and Sustainable Development**」

面對全球人口持續成長、環境挑戰日益嚴峻之際，動物科學於確保糧食安全、提升農業生產力以及降低環境衝擊尚，扮演著至關重要之角色。聯合國在2015年發佈了《2030年永續發展議程》，提出17項**永續發展目標（Sustainable Development, outlining 17 Sustainable Development Goals, SDGs）**，以推動包容性且永續之經濟成長，以及自然資源之合理使用，這些目標強調環境保護、社會福祉與經濟發展之間的平衡。

為了因應全球不斷演變之需求，動物科學必須在**動物福利**、**遺傳改進**、**永續農業**、**營養以及疾病控制**等領域提供創新之解決方案，而這些領域的進展亦是農業未來永續發展的關鍵。這場國際研討會的舉辦旨在**加強學術界、政府及產業間的合作**，不僅具有重要之學術價值，亦具有實際應用之意義，期望在動物科學領域**促進全球合作**，以實現永續發展之核心目標。

As the global population grows and environmental challenges intensify, animal science plays a vital role in ensuring food security, improving agricultural productivity, and reducing environmental impact. In 2015, the United Nations launched the 2030 Agenda for **Sustainable Development**, outlining 17 **Sustainable Development Goals** (**SDGs**) to promote inclusive, sustainable economic growth and responsible use of natural resources. These goals emphasize a balance between environmental protection, social well-being, and economic development.

To meet evolving global needs, animal science must offer innovative solutions in areas such as **animal welfare**, **genetic improvement,** **sustainable farming**, **nutrition**, and **disease control**. Advances in these fields are key to the future sustainability of agriculture. **This International Symposium is initiated to strengthen cooperation among academia, government, and industry.** It holds significant academic value and practical importance, aiming to enhance and advance **global cooperation in the field of animal science** in pursuit of achieving the core goals of sustainable development.

**International Symposium on Animal Science Research and Sustainable Development**

4-6 August, 2025

National Chung Hsing University, Taichung, Taiwan

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| **Day 1: 4th August, 2025** | | |
| **Time** | **Content** | |
| 08:30-09:00 | Registration | |
| **09:00**-09:05 | Opening Ceremony   * Dr. CHEN, Chuan-Mu, Vice President of National Chung Hsing University | |
| 09:05-09:10 | Group photo | |
| **Keynote speech I&II** | | **Host** |
| 09:10-09:50 | Speaker: **Dr. BUNCHASAK, Chaiyaphoom (Department of Animal Sciences, Kasetsart University, Thailand)**  Topic: From Gut to Growth: Sustainable Nutrition Strategies in Pig Farming | **Dr. CHEN, Chuan-Mu, Vice President**  **(NCHU, Taiwan)** |
| 09:50-10:30 | Speaker: **Dr. CALDWELL, David (Center of Excellence for Poultry Science, University of Arkansas, USA) \*Online**  Topic: TBD |
| **Short Break** | | |
| **10:50**-11:00 | **Student Oral Presentation Competition (I-1 ~ I-6)** | **Evaluation Committee** |
| 11:00-11:10 |
| 11:10-11:20 |
| 11:20-11:30 |
| 11:30-11:40 |
| 11:40-11:50 |
| 11:50-13:00 | **Lunch Break & Poster Presentation I** | |
| **Symposium Session I: Sustainable Animal Nutrition: Innovations in Feed and Feeding Systems** | | |
| **13:00**-13:25 | #1 Speaker: **Dr. LIU, Je-Ruei (Institute of Biotechnology, National Taiwan University, Taiwan)**  Topic:Probiotics with Antiviral Functions-Enhancing Animal Health for a Sustainable Future | **Dr. LUMSANGKUL (Eve), Chompunut**  **(NCHU, Taiwan)** |
| 13:25-13:50 | #2 Speaker: **Dr. CHERDTHONG, Anusorn (Department of Animal Science, Khon Kaen University, Thailand)**  Topic: Innovative Use of Local Feed Resources for Sustainable Ruminant Nutrition in the Tropics |
| 13:50-14:15 | #3 Speaker: **Dr. CHEN, Shuen-Ei (Department of Animal Science, National Chung Hsing University, Taiwan)**  Topic: Vitamin D Prevents Cardiomyopathy and Sudden Death in Broiler Breeder Hens |
| **Short Break** | | |
| **Keynote speech III&IV** | | **Host** |
| **14:40**-15:20 | Speaker: **Dr. WANG, Shu-Yin, Vice President and Vice Dean (Graduate Institute of biotechnology, College of Environmental Planning & Bioresources, Chinese Culture University, Taiwan)**  Topic: The Development and Future Trends of Farm Animal Welfare in Taiwan | **Dr. LEE, Tzu-Tai**  **(NCHU, Taiwan)** |
| 15:20-16:00 | Speaker: **Dr. GUNTORO, Budi (Faculty of Animal Science, Universitas Gadjah Mada, Indonesia)**  Topic: Strategic Policy for the Development of the Dairy and Milk Industry to Promote Sustainable Food Systems in Indonesia |
| **Symposium Session II: Animal Welfare, Ethical Farming Practices, and Social Sustainability** | | |
| **16:00**-16:25 | #1 Speaker: **Dr. LIN, Yi-Chun (Department of Animal Science, National Chung Hsing University, Taiwan)**  Topic: Toward Humane Slaughter for Native Chickens: Optimizing Electrical Stunning Protocols for Red-Feathered Taiwanese Breeds | **Dr. WANG, Chien-Kai**  **(NCHU, Taiwan)** |
| 16:25-16:50 | #2 Speaker: **Dr. WATTANACHANT, Chaiyawan (Faculty of Natural Resources, Prince of Songkla University, Thailand)**  Topic: Sustainable Integration of Meat Goats in Oil Palm Agroecosystems for Enhanced Social and Environmental Benefits |
| 16:50-17:15 | #3 Speaker: **Dr. LIAO, Chen-Yuan (Agricultural Technology Research Institute, Taiwan)**  Topic: Localizing Farm Animal Welfare Standards: A Sustainable Development Strategy Based on National Resources and Societal Conditions |
| **17:30**- | The first day of public activities is done. Dinner for guests is invited. | |

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| **Day 2: 5th August, 2025** | | | |
| **Time** | **Content** | |
| 08:30-09:00 | Registration | |
| **Keynote speech V&VI** | | **Host** |
| **09:00**-09:40 | Keynote speech V  Speaker: **Dr. HUANG, Jeng-Fang, Director General (Taiwan Livestock Research Institute, Taiwan)**  Topic: Circular Agriculture for Sustainable Livestock Production | **Dr. CHEN, Chih-Feng, Dean of the Agriculture and Natural Resources College**  **(NCHU, Taiwan)** |
| 09:40-10:20 | Keynote speech VI  Speaker: **Dr. SUN, Xiaolun (Center of Excellence for Poultry Science, University of Arkansas, USA)**  Topic: Control Chicken Necrotic Enteritis Targeting *Clostridium perfringens* Pathogenesis |
| **Short Break** | | |
| **10:40**-10:50 | **Student Oral Presentation Competition (II-1 ~ II-8)** | **Evaluation Committee** |
| 10:50-11:00 |
| 11:00-11:10 |
| 11:10-11:20 |
| 11:20-11:30 |
| 11:30-11:40 |
| 11:40-11:50 |
| 11:50-12:00 |
| 12:00-13:00 | **Lunch Break& Poster Presentation II** | |
| **Symposium Session III: Animal Health, Disease Control, and the Role of One Health** | | |
| **13:00**-13:25 | #1 Speaker: **Dr. CHAO,** **Yu-Chan (Department of** **Entomology, National Chung Hsing University, Taiwan)**  Topic: Display of a Comprehensive Hemagglutinin Set from Influenza Viruses to Facilitate Disease Detection | **Dr. INYAWILERT, Wilasinee**  **(NU, Thailand)** |
| 13:25-13:50 | #2 Speaker: **Dr. ANUSORN, Pornsinthusate (Department of Physiology, Chiang Mai University, Thailand)**  Topic: The Role of Functional Foods in Obesity, Diabetes, and Kidney Function: Friend or Foe? |
| 13:50-14:15 | #3 Speaker: **Dr. RUANGSURIYA, Jetsada (Department of Biochemistry, Chiang Mai University, Thailand)**  Topic: In Vitro, Ex Vivo, In Vivo, and Silico Disease Models for Research in Biochemistry upon Preventions and Therapies in an Aging Society |
| 14:15-14:40 | #4 Speaker: **Dr. CHANG, Ai-Mei (Department of Veterinary Medicine, National Pingtung University of Science and Technology, Taiwan)**  Topic:Can Vaccines Control Fertility? Evaluating Immunocontraception in Mammals |
| **Short Break** | | |
| **Symposium Session IV: Advancements in Animal Genetics and Breeding for Sustainable Livestock Production** | | |
| **15:10**-15:35 | #1 Speaker: **Dr. MOLEE, Amonrat (Institute of Agricultural Technology, Suranaree University of Technology, Thailand)**  Topic: Our Path to Sustainable Genetic Improvement: Balancing Human Well-Being, Animal Welfare, and Environmental Health | **Dr. CHEN, Shuen-Ei**  **(NCHU, Taiwan)** |
| 15:35-16:00 | #2 Speaker: **Dr. NGUYEN, Ngoc Tan (Faculty of Biological Sciences, Nong Lam University of Ho Chi Minh City, Vietnam)**  Topic: Polymorphism of prolactin and dopamine receptor genes and their effect on some reproductive traits in color dual-purpose VLV hens in Southern Vietnam |
| 16:00-16:25 | #3 Speaker: **Dr. KHIEOKHAJONKHET, Anurak (Department of Agricultural Science, Naresuan University, Thailand)**  Topic: A Practical and Innovative Approach to Sustainable and Resilient Aquaculture for the Future |
| 16:25-16:50 | #4 Speaker: **Dr. Inyawilert, Wilasinee (Department of Agricultural Science, Naresuan University, Thailand)**  Topic: Cryopreservation of Swamp Buffalo Semen as a Tool for Genetic Resource Conservation in Thailand |
| **17:00**- | The second day of public activities is done. | |

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| **Day 3: 6th August, 2025** | | |
| **Time** | **Content** | |
| 08:30-09:00 | Registration | |
| **Keynote speech VII&VIII** | | **Host** |
| **09:00**-09:40 | Keynote speech VII  Speaker: **Dr. DRIDI, Sami** **(Department of Poultry Science & The Center of Excellence for Poultry Science, University of Arkansas, USA)**  Topic:Metabolic disorders in broilers: underlying molecular mechanisms and potential solutions | **Dr. CHENG, Hsu-Chen**  **(NCHU, Taiwan)** |
| 09:40-10:20 | Keynote speech VIII  Speaker: **Dr. WANG, Chien-Kai (Department of Animal Science, National Chung Hsing University, Taiwan)**  Topic: Controlling Greenhouse Gas Emissions from Livestock Manure Composting |
| **Short Break** | | |
| **Symposium Session V: Climate Change, Environmental Impacts, and Strategies for Sustainable Livestock Systems** | | |
| **10:40**-11:05 | #1 Speaker: **Dr. Khempaka, Sutisa (School of Animal Production Technology, Suranaree University of Technology, Thailand)**  Topic: Nutritional Strategies Using Probiotics and Postbiotics to Alleviate Heat Stress in Broilers: Implications for Sustainable and Climate-Resilient Poultry Production | **Dr. CHEN, Yen-Po**  **(NCHU, Taiwan)** |
| 11:05-11:30 | #2 Speaker: **Dr.** **DUONG NGUYEN, Khang (Faculty of Animal Science and Veterinary Medicine, Nong Lam University of Ho Chi Minh City, Vietnam)**  Topic: Waste-to-Energy: Transforming Livestock Waste into Sustainable Productivity and Pollution Reduction in Vietnam |
| 11:30-11:55 | #3 Speaker: **Dr. CHEN, Yi-Chen (Department of Animal Science and Technology, National Taiwan University, Taiwan)**  Topic: Low Value, High Impact: Unlocking the Health Benefits of Chicken-liver Hydrolysates |
| 11:55-12:20 | #4 Speaker: **Dr. WANGTUEAI, Sutee (Faculty of Agro−Industry, Chiang Mai University, Thailand)**  Topic: Sustainable Bioactive Compounds Derived from Seafoods and Byproducts |
| **Closing Ceremony** | | |
| 12:20-12:50 | Awarding Ceremony for Student Oral Presentation Competition | **The Organizing Committee** |
| 12:50-13:00 | Closing Speech   * Dr. CHEN, Chuan-Mu, Vice President of National Chung Hsing University | |
| **13:00**- | The last day of public activities is done, and we have **Lunch** | |
| 14:00- | Farm visit for guests invited | |