「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

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,**	**Dr. WANG, Chien-**

	National Chung Hsing University, Taiwan) Topic: Toward Humane Slaughter for Native Chickens: Optimizing Electrical Stunning Protocols for Red-Feathered Taiwanese Breeds	**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.	

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.	

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	