

果蠅暨媒介生物學與人類健康

Tzu Chi University × NHRI Joint Symposium:

Drosophila and Vector Biology for Human Health



Organizers

National Health Research Institutes (NHRI)

Tzu Chi University



Co-organizers

Academia Sinica

National Taiwan University

Chang Gung University



Theme: Tzu Chi University × NHRI Joint

Symposium: Drosophila and Vector Biology for Human Health

Date: December 4 (Thursday) –December 6 (Saturday), 2025



Venue: Room L1303 Tzu Chi University, Hualien

(慈濟大學中央校區大愛樓 13 樓國際會議廳

L1303 室)



Program

Pre-Symposium Evening Session: December 4 (Thursday)

19:00–22:00	Theme: Think and Drink Venue: Bar Shepherd – 牧羊人 https://www.facebook.com/BarShepherd/
19:00–19:10	Welcome Remarks Chun-Hong Chen (NHRI) 陳俊宏研究員(國家衛生研究員)
19:10–22:00	Think and Drink Talks Speakers: <ul style="list-style-type: none">• Shih-Cheng Wu (NTU) – Remote Humoral Immune Regulation Driven by Local Enteric Infection• Shih-Che Weng (NTU) – Engineering Biological Solutions for Mosquito Management• Kuei Ching Hsiung (Academia Sinica) –Integrated Virome Surveillance and Functional Preparedness for Vector-Borne Zoonotic Threats• Sam Sing Sin (UM) – Emerging Threats from Neglected Mosquito-Borne Zoonotic Viruses in Malaysia• Wei-Liang Liu (NHRI) – Impact of Wingbeat Frequency on Mating Competition between Aedes albopictus and Aedes aegypti

Day 1: December 5 (Friday)

09:00–20:00	Theme: Fundamental Biology and Drosophila Research for Human Health Venue: Tzu Chi University
09:00–09:10	Opening Remarks Li-Ming Yiin (TCU) 尹立銘副院長 (慈濟大學) Y. Henry Sun (NHRI/Sinica) 孫以瀚名譽研究員 (國衛院/中央研究院)
09:10–10:10	Chair: Henry Sun (NHRI/Sinica) 孫以瀚名譽研究員(國衛院/中央研究院) 09:10–09:40 Keynote I – <i>Nanofabricating insect cuticle into a sensory interface</i> Speaker: Shigeo Hayashi (Kobe / RIKEN) 09:40–10:10 Keynote II – <i>Mechanisms that determine cellular fitness</i> Speaker: Tatsushi Igaki (Kyoto University)
10:10–10:30	Kun-Yang Lin (NYCU) 林坤陽助理教授 (陽明交通大學)- Astrocyte-mediated GPCR Signaling regulates Quiescent Neural Stem Cell Activation.
10:30–10:45	Coffee Break and Group Photo
	Chair: Peng-Yeong Woon (TCU) 溫秉祥主任 (慈濟大學) Session 1 – 10:45–11:05 Shizue Ohsawa (Nagoya University) –Phagocytic macrophages promote tumor growth in Drosophila

	<p>11:05–11:25 Chih-Ying Su (UC San Diego) – <i>Day/night cycles regulate pheromone acuity to gate rhythmic courtship behavior</i></p> <p>11:25–11:45 Guang-Chao Chen (Academia Sinica) 陳光超研究員 (中央研究院) – <i>Molecular Regulation of Ubiquitin-Mediated Autophagy Control</i></p>
12:00–13:20	Lunch and Collaboration Discussion
13:20–14:50	<p>Chair: Jui-Hung Yen, Tzu Chi University 顏瑞鴻教授 (慈濟大學)</p> <p>Session 2 –</p> <p>13:20–13:50 Jing Wang (UCSD / SZBL) – Keynote III – The Thrifty Fly: Energy-Efficient Neural Computation in <i>Drosophila</i></p> <p>13:50–14:10 Hwei-Jan Hsu (Academia Sinica) 許惠真研究員(中央研究院)– <i>Lipid Metabolic Balance in Oogenesis and Beyond</i></p> <p>14:10–14:30 Yanyan (HKTU) – <i>Molecular links between systemic metabolism and growth control</i></p> <p>14:30–14:50 Hung-Hsiang Yu (Academia Sinica) 游宏祥副研究員 (中央研究院) – <i>Genetic Network Shaping Kenyon Cell Identity and Function in <i>Drosophila</i> Mushroom Bodies</i></p>
15:00–15:20	Coffee Break
15:20–16:40	<p>Chair: Meiyeh Lu (Sinica) 呂美曄博士 (中央研究院)</p> <p>Session 3 –</p> <p>15:20–15:40 Takahiro Chihara (Hiroshima University) – Chemosensory input suppresses cannibalism in <i>Drosophila</i> larvae</p> <p>15:40–16:00 Wu-Min Deng (Tulane University, USA) – <i>Tumor-host</i></p>

	<p><i>interactions in the Drosophila model</i></p> <p>16:00–16:20 Shu Kondo (Tokyo University of Science) –Genetic mosaics in Drosophila: applications and mechanisms</p> <p>16:20–16:40 Pan Lei (Chinese Academy of Sciences, Shanghai) – <i>Brain-gut axis-mediated immuno-behavioral response protects Drosophila from intestinal infection</i></p>
18:00–20:00	<p>Welcome Dinner (by invitation) – Hosted by Tzu Chi University</p> <p>秧悦美地度假酒店 Gaeavilla Resort</p>

Day 2: December 6 (Saturday)

09:30–12:30	<p>Theme: Vector Biology and Human Health Applications</p> <p>Venue: Tzu Chi University</p>
09:30–10:30	<p>Chair: Kun-Hsien Tsai (NTU) 蔡坤憲教授 (台灣大學)</p> <p>09:30–09:50 Hsin-Hou Chang (TCU) 張新侯教授 (慈濟大學)</p> <p>A Two-Hit Mouse Model for Studying Dengue Hemorrhagic Fever: Translational Insights and Implications</p> <p>09:50–10:10 Ming Der Lin (TCU) 林明德教授 (慈濟大學)</p> <p>Genomic Insights into Forcipomyia taiwana: Odorant Receptor Expression across Physiological States</p> <p>10:10–10:30 Boon-Teong Teoh (UM)</p> <p>Investigation of the 2019–2020 Chikungunya Outbreak in Perak, Malaysia</p>
10:30–10:50	Coffee Break

10:50–11:50	<p>Chair: Ming-Jiun Yu NTU 余明俊教授 (台灣大學)</p> <p>10:50–11:10 Guann-Yi Yu (NHRI) 余冠儀副研究員(國家衛生研究院) -Pathogenesis of Dengue Virus Infection: Cross-Talk Among Virus, Host, and Mosquito</p> <p>11:10–11:30 Shin-Hong Shiao (NTU) 蕭信宏教授 (台灣大學) Uncovering Dengue Virus Host Factors: Paving the Way for Innovative Antiviral Strategies</p> <p>11:30–11:50 Kun-Hsien Tsai (NTU) 蔡坤憲教授 (台灣大學) -TBD</p>
11:50–12:10	Day-Yu Chao (NCHU) 趙黛瑜教授 (中興大學)- VLP biobank as one health solution for emerging orthoflavivirus infections
12:10-12:30	<p>Cai Yu (TLL)-</p> <p>A conserved role of Tra2 during insect spermatogenesis</p>
12:30–12:50	<p>Closing Remarks Tzu Chi University and NHRI</p> <p>Ingrid Y Liu (TCU) 劉怡均校長(慈濟大學)</p> <p>Chun-Hong Chen (NHRI) 陳俊宏研究員(國家衛生研究員)</p>
13:00-20:00	Local tour trip from 13:00 departure -20:00 Haulien train station (by invitation)