



**Tsukuba Conference 2025 [session C-10]**

# **Frontiers of Medical & Life Sciences ~International Student Presentations of Medical and Life Sciences~**

## **Program**

Date: October 2 (Thu) and 3 (Fri), 2025

Venue: Tsukuba International Congress Center, Room 405/406

URL: <https://tsukuba-conference.com/sessions/c-10-01>

**Co-organized by** Institute of Medicine, Doctoral Program in Medical Sciences, PhD Program in Human Biology, PhD Program in Humanics and Master's/Doctoral Programs in Neuroscience.

**With assistances by** Master's Program in Medical Science, Nursing Science, Biology, and Doctoral Program in Human Care Science / Public Health, TARA, IIIS.

**Program**  
**Day 1 (Oct 2)**

9:30 - 10:00	<b>Poster set up</b>
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10:00 - 10:10	<b>Opening Remarks / Prof. Takeshi Sakurai</b>
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★... Award candidates

<b>Oral session 1</b>		<b>Chair: Patricia Rika Ariani &amp; Toshiki Obokata</b>	
★	<b>01-1</b>	Targeted deletion of cystathionine $\gamma$ -lyase impairs endogenous H <sub>2</sub> S production required for zebrafish development	
10:10 - 10:25	QUANLI	University of Tsukuba Master's program in Medical Science	
★	<b>01-2</b>	The Relationship Between the Circadian Rhythms of Body Temperature and Locomotor Activity	
10:25 - 10:40	Ryusuke Yoshimoto	University of Tsukuba PhD Program in Humanics	
★	<b>01-3</b>	Exploring Regorafenib-Induced Ferroptosis Using Hepatocellular Carcinoma Cells	
10:40 - 10:55	Chia-Chen Hsieh	National Taiwan University Department of Biochemical Science & Technology	
★	<b>01-4</b>	Mesenchymal stem cell-derived extracellular vesicles reduce cellular inflammatory responses to respiratory viral proteins	
10:55 - 11:10	Neni Anggraeni	University of Tsukuba Doctoral program in Medical Science	

<b>Oral session 2</b>		<b>Chair: Yan Xu &amp; Allona Eunice Apache Florece</b>	
★	<b>02-1</b>	Impact of aging on therapeutic potential of mesenchymal stem cell-derived extracellular vesicles in protecting skin against UVA irradiation	
11:10 - 11:25	Ngo Nhat Hoang	University of Tsukuba PhD Program in Human Biology	
★	<b>02-2</b>	Q Neuron-Induced Hypothermia Promotes Functional Recovery and Suppresses Neuroinflammation After Brain Injury	
11:25 - 11:40	Lisa Sakurai	University of Tsukuba Master's program in Medical Science	
★	<b>02-3</b>	Refining Acute Toxicity Endpoints: Behavioral Indicators of Moribund State in Zebrafish ( <i>Danio rerio</i> )	
11:40 - 11:55	Sui Aiyi	University of Tsukuba Doctoral program in Medical Science	

11:55 - 13:00	<b>Lunch Break</b>
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**Program**  
**Day 1 (Oct 2)**

★... Award candidates

Oral session 3			Chair: QUANLI & Neni Anggraeni
★	03-1	Contribution of the Puf5-mediated post-transcriptional regulation to the replication stress responses in yeast <i>Saccharomyces cerevisiae</i> .	
13:00 - 13:15	Megumi Sato	University of Tsukuba Doctoral program in Medical Science	
★	03-2	In Vivo Neuronal Activity Study of Suprachiasmatic Nucleus Neurons Under Varying Light Intensities Using Gradient-Index Lenses	
13:15 - 13:30	Wang Cheng-Han	National Taiwan University Doctoral program in Life Science Innovation	
★	03-3	Extracellular Vesicles Derived from Mesenchymal Stem Cells Impairs the Ability of Breast Cancer Cells in Regulating the Polarization of M2 Macrophage	
13:30 - 13:45	Patricia Rika Ariani	University of Tsukuba Doctoral program in Medical Science	
★	03-4	Nrf2 activation induced by genetic or pharmacological lysosomal dysfunction	
13:45 - 14:00	Toshiki Obokata	University of Tsukuba PhD Program in Human Biology	
★	03-5	Roles of Ventrolateral Periaqueductal Gray in inducing Cataplexy in Mice	
14:00 - 14:15	DAI QIONGJU	University of Tsukuba Doctoral program in Medical Science	
★	03-6	Antibacterial properties of the human adipose mesenchymal stem cells-derived secretome and its protective effects at the cellular and tissue levels	
14:15 - 14:30	Adeline Castro Ramos	University of Tsukuba Doctoral program in Medical Science	

14:30 - 15:30	Poster Session 1
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Oral session 4			Chair: Ngo Nhat Hoang & Megumi Sato
★	04-1	Role of CD300a in Ischemic Enteritis	
15:30 - 15:45	Bao Duy Tran Duc	University of Tsukuba PhD Program in Human Biology	
★	04-2	The Role of Inhibitory Immunoreceptor CD300a in Renal Fibrosis	
15:45 - 16:00	LI JINAO	University of Tsukuba Doctoral program in Medical Science	
★	04-3	Development of a bioinformatics tool for engineering exon skipping with Base Editor	
16:00 - 16:15	Kinari Matsumoto	University of Tsukuba PhD Program in Human Biology	
★	04-4	Function of Dopamine Receptor D2-Expressing Neurons in the Central Nucleus of Amygdala in Sleep/Wake Regulation	
16:15 - 16:30	Allona Eunice Apache Florece	University of Tsukuba PhD Program in Human Biology	
★	04-5	The influence of work-family conflict on depressive tendency among Japanese fathers with 3-4 months old infants	
16:30 - 16:45	Eri Usami	University of Tsukuba Doctoral program in Nursing Science	
★	04-6	The role of immune-inhibitory receptor in pulmonary fibrosis	
16:45 - 17:00	Yan Xu	University of Tsukuba Doctoral program in Medical Science	

17:00 -	Group photo
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**Program**  
**Day 2 (Oct 3)**

★... Award candidates

Oral session 5		Chair: Megane Kayamare & MD AL AMIN SHEIKH	
★ Online	O5-1	CANNABIDIOL REDUCES BLOOD PRESSURE AND IMPROVES AORTIC STIFFNESS IN AN EXPERIMENTAL MODEL OF RENOVASCULAR HYPERTENSION	
10:00 - 10:15	Rayanelle Tissiane Gomes Da Silva	Federal University of Paraiba, Brazil Postgraduate Program in Physiological Sciences	
★ Online	O5-2	Controlling all and everything: The role of protein O-GlcNAcylation (O-GlcNAc) in aldosterone-induced vascular dysfunction	
10:15 - 10:30	Daniel Rodrigues	University of São Paulo Department of Pharmacology	
★ Online	O5-3	Estradiol replacement and central injection of losartan on water and 0.3 M NaCl intake induced by water deprivation in female rats with renovascular hypertension and ovariectomy	
10:30 - 10:45	Sarah Antunes da Silva	UNESP (Brazil) PhD program in Physiology	

10:45 - 11:00	Tea Break
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Oral session 6		Chair: Meng Zezhen & Dinh Xuan Tuan Anh	
	O6-1	(Withdrawal)	
★	O6-2	Development of Supine-Used Wearable Cyborg for Treatment of Neurogenic Bowel Dysfunction	
11:00 - 11:15	Hayato Tamai	University of Tsukuba PhD Program in Humanics	
★	O6-3	Mechanistic Analysis of Pluripotency Acquisition by Using Paused iPSCs	
11:15 - 11:30	JIANG ZIWEI	University of Tsukuba Doctoral program in Medical Science	
★	O6-4	Circuit mechanism encoding high sleep need	
11:30 - 11:45	Kuikui Fan	University of Tsukuba PhD Program in Humanics	

11:45 - 13:00	Lunch Break
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**Program**  
**Day 2 (Oct 3)**

★... Award candidates

Oral session 7			Chair: JIANG ZIWEI & Kuikui Fan
★	07-1	Role of ELOVL6 in hepatocellular carcinoma	
13:00 - 13:15	HE JIAQI	University of Tsukuba Doctoral program in Medical Science	
★	07-2	Splicing Factor DHX8 Is Essential for R-Loop Homeostasis	
13:15 - 13:30	Yun Chen	National Taiwan University/ Institute of Molecular and Cellular Biology Doctoral program in Biology	
★	07-3	Molecular functions of E2f4 on iPS cell generation	
13:30 - 13:45	Meng Zezhen	University of Tsukuba Doctoral program in Medical Science	
★	07-4	Comprehensive Single-Cell Glycomic and Transcriptomic Profiling in Pancreatic Cancer	
13:45 - 14:00	Dinh Xuan Tuan Anh	University of Tsukuba PhD Program in Human Biology	
★	07-5	Investigating neural mechanism underlying weight gain in Sleepy mouse	
14:00 - 14:15	Megane Kayamare	University of Tsukuba PhD Program in Humanics	
★	07-6	Synchrotron Imaging and Transcriptomics Reveal 3D Remodeling and Molecular Pathogenesis of Aortic Dissection in Fbn1 <sup>G234D/G234D</sup> Novel Mutant Mice	
14:15 - 14:30	MD AL AMIN SHEIKH	University of Tsukuba PhD Program in Humanics	

14:30 - 15:30	Poster Session 2
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Oral session 8			Chair: Salina Neupane & HE JIAQI
★ Online	08-1	Microbiome-derived Short Chain Fatty Acids Promote Motivation of Mate Searching via A Gut-to-Brain Signaling through Octopamine in C. elegans Males	
15:30 - 15:45	翁甄澐 / Jen-Wei Weng	National Taiwan University Institute of Molecular and Cellular Biology	
★ Online	08-2	Sensory Integration Across Development Drives Behavioral Sensitization in Male C. elegans	
15:45 - 16:00	Yu-Chen Lin	National Taiwan University Institute of Molecular and Cellular Biology, Master's program	
- Online	08-3	Mechanical anchoring of SYG-1/Neph1 and SAX-3/Robo directs neurite branching in C. elegans	
16:00 - 16:15	Yun-Hsien Lin	National Taiwan University Doctoral program in Neuroscience	
- Online	08-4	Identification of Sensory Cues that Evoke Contact Response in Mating Behaviors of Male Caenorhabditis elegans	
16:15 - 16:30	Jaye Wang 王婕	National Taiwan University Master's program in Molecular and Cellular Biology	
-	08-5	Investigation of the Role of Transcription Factor Otp in Stress Response in the Zebrafish	
16:30 - 16:45	HOU-JUN WANG	University of TAIWAN Doctoral program in Biology	

16:45 - 17:00	Awards Ceremony & Closing Remarks / Prof. Kazuya Morikawa
	Group photo
17:00 - 17:30	Poster Removal

\*Any posters left behind after 5:30 PM will be disposed of.

## Poster Session 1

Day 1 (Oct 2) 14:30 - 15:30

### ★... Award candidates

★	P-1	Bidirectional Association Between Comprehensive Social Interaction and Ikigai Among Japanese Community-Dwelling Older Adults: A Cross-Lagged Panel Model Analysis	University of Tsukuba
		Yu Pei	Doctoral program in Medical Science
★	P-3	Investigation of the relationship between N-glycosylation and methylation modifications of secreted proteins in hepatocytes	University of Tsukuba
		Ryuhei Tsukamoto	Master's program in Agro-Bioresources Science and Technology
★	P-5	Analysis of antioxidant activity of broccoli sprout extract in zebrafish	University of Tsukuba
		Kobayasshi Honoka	undergraduate program in Biology
★	P-7	Exploring lactic acid bacteria components with indirect antioxidant effects in zebrafish	University of Tsukuba
		Ken Naito	Master's program in Medical Science
★	P-9	Disruption of pancreatic $\beta$ cell glucose sensitivity in mice lacking core 1-derived O-glycans	University of Tsukuba
		Yuka MURAKAMI	PhD Program in Human Biology
★	P-11	Elucidation of the role of a C-type lectin receptor CLEC12B in the therapeutic target for skin allergy	University of Tsukuba
		Kim Taehyeong	Doctoral program in Medical Science
★	P-13	The relationship between empathic behavior toward conspecifics in distress and the stress response system in rats	University of Tsukuba
		Akane Chiba	Master's program in Neuroscience
★	P-15	Roles of the central noradrenergic system in social motivation in briefly isolated rats	University of Tsukuba
		Matsumoto Yuga	Master's program in Neuroscience
★	P-17	Benzodiazepines reduce REM sleep via the ventral tegmental area in mice	University of Tsukuba
		Akiho Osawa	Master's program in Medical Science
★	P-19	Type-2 Diabetes Mellitus Induced Endothelial Dysfunction via Elevated Reactive Oxygen Species	University of Tsukuba
		Precella Silvia	Master's program in Medical Science
★	P-21	Studying the role of type 2 diabetic mesenchymal stem cell in gastric cancer	University of Tsukuba
		Somi Park	Master's program in Medical Science
★	P-23	Studying the role of adipocytes in the progression of breast cancer	University of Tsukuba
		Momoko Usuda	Master's program in Medical Science
★	P-25	KOzoo: automation tool for designing knockouts using CRISPR-Cas9	University of Tsukuba
		Taito Taki	PhD Program in Human Biology

## Poster Session 1

Day 1 (Oct 2) 14:30 - 15:30

### ★... Award candidates

★	P-27	Roles of Ccr4-Not, Pan2-Pan3 Deadenylation Complexes, and Ahr1 Transcription Factor in Budding Yeast Metabolism	Tuan-Ngan Tang	University of Tsukuba PhD Program in Human Biology
★	P-29	Septin-Mediated de novo Membrane Formation Revealed by Quantitative Analysis using Deep Learning	Shodai Taguchi	University of Tsukuba PhD Program in Humanics
★	P-31	Functional analysis of a novel RNA-binding protein essential for mouse spermatogenesis	Aoki Madoka	University of Tsukuba PhD Program in Human Biology
★	P-33	Functional investigation of a novel essential gene in mouse embryonic development.	Nguyen Tam Ho	University of Tsukuba Master's program in Medical Science
★	P-35	Sleep: The Brain Charging Station for Daily Learning	Nadin Mohamed Ebrahim Elgzzar	University of Tsukuba PhD Program in Humanics
★	P-37	Splicing Factor DHX8 Is Essential for R-Loop Homeostasis	Yun Chen	National Taiwan University/ Institute of Molecular and Cellular Biology Doctoral program in Biology
-	P-39	Investigation of the Role of Transcription Factor Otp in Stress Response in the Zebrafish	HOU-JUN WANG	University of TAIWAN Doctoral program in Biology
-	P-41	Establishment of a novel method for generating ultra multiple gene KO mouse using base editing technology	Mizuki Nishimura	University of Tsukuba Master's program in Medical Science
-	P-43	Optimization of BioID Conditions for Revealing the Cardiac RBP Interactome.	Saki Nagai	University of Tsukuba Master's program in Medical Science
-	P-45	Development of in vivo base editing method	Momoka Masuda	University of Tsukuba Master's program in Medical Science
-	P-47	Elucidation of the Regulatory Mechanism of Translation Under ER Stress Mediated by RNA-Binding Proteins	Miyabi Endo	University of Tsukuba PhD Program in Human Biology
-	P-49	RNA-binding protein Whi3 regulates G2/M cyclin expression in <i>Saccharomyces cerevisiae</i>	Varsha Rana	University of Tsukuba PhD Program in Human Biology

## Poster Session 2

Day 2 (Oct 3) 14:30 - 15:30

### ★... Award candidates

★	P-2	Involvement of language-related areas in voluntary control of respiration in non-human primates	University of Tsukuba
		Akua Kamata	Master's program in Neuroscience
★	P-4	The role of hypothalamus in thermoregulation and response inhibition in non-human primates	University of Tsukuba
		Suzu Nakanishi	Master's program in Medical Science
★	P-6	Motivation affects respiration control and enhances the performance of voluntary motor movement	University of Tsukuba
		Haruna Miwa	Master's program in Neuroscience
★	P-8	Multi-site Recording of Neural Activity Underlying Cardiorespiratory Coupling	University of Tsukuba
		Rio Notomo	Master's program in Medical Science
★	P-10	The functional roles of hydrogen sulfide in the nucleus tractus solitarius in autonomic reflexes	University of Tsukuba
		Chikako KOTANI	Master's program in Medical Science
★	P-12	Exploring the Role of NIND Gene Expression in Sleep-Wake Regulation Mechanism	University of Tsukuba
		Song Wanrong	Master's program in Medical Science
★	P-14	Solving the Mystery of Liquid-Liquid Phase Separation (LLPS) in Peripheral Blood Mononuclear Cells (PBMCs) by Sleep	University of Tsukuba
		Ziruo Chen	Master's program in Medical Science
★	P-16	Positive allosteric modulator of adenosine A2A receptors (A2AR PAM) ameliorates pentylenetetrazol (PTZ)-induced generalized seizures	University of Tsukuba
		Yakut Asude Bilge	PhD Program in Humanics
★	P-18	Dissecting the Mechanism of Translational and Post-translational Regulation of Fibrillin-1 in Connective Tissue Disorder Marfan Syndrome	University of Tsukuba
		Narenmandula	Doctoral program in Medical Science
★	P-20	Uncovering the Influence of cGAS on Perivascular Macrophages during Development	University of Tsukuba
		Subaru Ueda	Master's program in Biology
★	P-22	The effect of increased b2m expression in microglia on neuroinflammation	University of Tsukuba
		Keisuke Yoshida	Undergraduate Program of Biology
★	P-24	Neuroanatomical Localization of the Inflammatory Cytokine Receptor IL-17RA and Its Implication in Autism Spectrum Disorder	University of Tsukuba
		Itagaki Kentaro	Undergraduate Program in Medical Sciences



## Poster Session 2

Day 2 (Oct 3)

14:30 - 15:30

★... Award candidates

★	P-26	(Withdrawal)	
★	P-28	miRNA profiling in mice induced into a hibernation-like state	
		Kareem Hassan	University of Tsukuba Master's program in Medical Science
★	P-30	Elucidation of physiological defects in familial advanced sleep phase syndrome model mice	
		Gauthamadasage D Nimali Gunathilaka	University of Tsukuba Master's program in Medical Science
★	P-32	In Vivo Neuronal Activity Study of Suprachiasmatic Nucleus Neurons Under Varying Light Intensities Using Gradient-Index Lenses	
		Wang Cheng-Han	National Taiwan University Doctoral program in Life Science Innovation
★	P-34	Exploring Regorafenib-Induced Ferroptosis Using Hepatocellular Carcinoma Cells	
		Chia-Chen Hsieh	National Taiwan University Department of Biochemical Science & Technology
★	P-36	IL-17RA/RC as a Neuroimmune Interface in Cortical Maturation and Autism Pathophysiology	
		Asumi Kubo	University of Tsukuba Master's program in Medical Science
-	P-38	Higher-Level Functional Capacity and Risk of Incident Functional Disability in Older Adults: An Age-Stratified Competing Risks Analysis	
		QIAN MEILING	University of Tsukuba Doctoral program in Medical Science
-	P-40	From Interaction to Intervention: Exploring Typologies of Older Adults to Inform Community Health Strategies	
		ZHANG Zhizhen	University of Tsukuba Doctoral program in Medical Science
-	P-42	Comprehensive care for infants and toddlers in the community Temporary care in an infant care center and approach from foster parents	
		Takami INOTANI	University of Tsukuba Doctoral program in Medical Science
-	P-44	Stressor felt by mothers in the Neonatal Intensive Care Unit	
		Mitsuki Nojima	University of Tsukuba Doctoral program in Nursing Science
-	P-46	Literature review of the experiences of adolescents whose siblings have been hospitalized	
		Marise Kasai	University of Tsukuba Master's program in Nursing Science
-	P-48	Subcutaneous cancer model in immunocompromised pig as a potential model for human cancer studies	
		Isa Mahendra	University of Tsukuba Doctoral program in Medical Science
★	P-50	Effect of Artepillin C and its derivatives in mice	
		Salina Neupane	University of Tsukuba PhD Program in Humanics