

Health and Well-Being

Tohoku University Tohoku Forum for Creativity, Thematic Program 2024
Designing For Future Foods, Workshop on “Health and Well-Being”

The 1st Asian International Conference on Psychology

The Kickoff Symposium of the Advanced Institute for So-Go-Chi (Convergence
Knowledge) Informatics

Program & Abstracts

Date: September 17th (Tue) ~ 19th (Thu)

Venue: Main Building of the Research Institute of Electrical
Communication, Katahira Campus, Tohoku University

Secretariat

Nobuyuki SAKAI

Department of Psychology, Tohoku
University

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Welcome!

On the behalf of the all the members of the Organizing Committee, it is my pleasure to welcome professors, scientists and students from all over the Asian countries to our event in Tohoku University.

This event contains of three subevents. The first one is a “Workshop on Health and Well-Being”, mainly organized by the Tohoku Forum of Creativity collaborated with the Thai Network of the Sensory Science for Better Well-Being (SSBW). The main aim of the SSBW is the application of the knowledge about sensory science into the food industry, the quality of life (QoL), and well-being. The sensory science itself is the multi-disciplinary or integrated science including food science, food chemistry, psychophysics, consumer science, marketing, etc. The main approach of the SSBW is the human-centered science. This is our uniqueness in the sensory science. This event is the 6th event of SSBW after it was settled in 2022. This event consists of three sessions, an Input Session, a Roundtable Discussion, and a Tasting Workshop of Tom Yum Goong.

The second one is the first Asian International Conference on Psychology (AICP) jointly organized by the Department of Psychology, Tohoku University and the Faculty of Psychology, Chulalongkorn University. We are organizing joint international symposiums annually from the Academic year of 2016. In this year, we welcome the collaborators from the College of Humanities and Social Sciences, Taipei Medical University and the Faculty of Psychology, Padjadjaran University to organize three symposiums on “Mind and Brain”, “Leisure time and well-being across lifespan”, and “Eastern perspective of well-being”.

The third one is the kickoff symposium of the Advanced Institute of So-Go-Chi Informatics (AI So-Go-Chi). The So-Go-Chi (総合知) is a Japanese word that means convergence knowledge. The AI So-Go-Chi aims to develop an academic approach of the informatics based on the human centered knowledge. The AI So-Go-Chi consists of six divisions, the human data science, the social data science, the mathematical data science, the AI software, the AI hardware and the support center for data analysis of the So-Go-Chi informatics. We invited Mr. Takeshi Nagawasa, the Director for Integrated Strategy, Secretariat of Science, Technology and Innovation from the Policy Cabinet Office, Government of Japan for celebrating the settlement of the AI So-Go-Chi.

Have an enjoyable and scientifically valuable time in our event.

Best Wishes,
Nobuyuki SAKAI

The Organizing Committee,
Tsuneyuki Abe, Masanori Hariyama, Zahrotur Rusyda Hinduan, Naofumi Homma,
Tzu-Yu Hsu, Suwimon Keeratipibul, Masatoshi Koizumi, Yasumasa Matsuda,
Shinichiro Omachi, Mika Omori, Satoshi Shioiri, Shuichi Sakamoto, Nattasuda
Taephant

Program at a glance

	9月17日	9月18日	9月19日
	Tohoku Forum of Creativity with SSBW	AICP/Kick Off Symposium of AI-So-Go-CHI	Kick Off Symposium of AI-So-Go-CHI
9:00	Registration	Mind and Brain (Tzu-Yu Hsu, Taipei Medical University)	Students' poster session
10:00	Opening Remark		
11:00	Input session Knowledge Acquisition..Yui Kawasaki Attitude Change.....Nobuyuki Sakai Behavior Change.....Mika Omori	Leisure time and well-being across life-span (Zahrotur Rusyda Hinduan, Padjadjaran University)	Main Event of Tohoku Forum @ Sakura Hall
12:00	Lunch	Lunch	
13:00		Eastern Perspective of well-being (Nattasuda Taephant, Culalongkorn University)	Students' poster session
14:00	Round Table Discussion (Moderator Nobuyuki Sakai, Tohoku University)		
15:00	Workshop Tasting of Tom Yum Goong	Greetings (Takeshi Nagasawa, Government of Japan) Introduction of So-Go-CHI (Satoshi Shioiri, TU)	Amplifying Ancestral Voices: Collaborative AI-Powered Language Revival (So Miyagawa, University of Tsukuba)
16:00	(Suwimon Keeratipbul, Chulalongkorn University & Peake Supsin, Suan Dusit University)	Auditory mechanisms that emerge through optimization to natural sounds and tasks (Shigeo Furukawa, Shizuoka Graduate University of Public Health)	Reading of "Reading" for "Actuating": Augmenting Human Reading and Learning by Sensing and Actuating Technologies. (Koichi Kise, Osaka Metropolitan University)
17:00		Probabilistic Modeling Approach using Bayesian Networks for Digital Transformation of Our Society (Yoichi Motomura, AIST)	Seminar on AI Hardware (Hiroki Nakahara, Tohoku University)
18:00		Robust Reproducible Network Exploration. (Yoshimasa Uematsu, Hitotsubashi University)	Closing Remark
		Social Networking @ AIMR	

Tuesday, September 17, Workshop on “Health and Well-Being”

09:00 – Registration

10:00 – 10:15 **Opening Remark** *Nobuyuki Sakai (Tohoku University)*

10:15 – 11:45

Input Session

MC: Mika Omori (Ochanomizu University / Tohoku University)

10:15 – 10:45 **A behavioral science approach to nutrition education:**

Implications for a change in dietary habits *Yui Kawasaki (Ochanomizu University)*

10:45 – 11:15 **Attitude toward salt reduction in Japanese University students:**

Approach from the survey and neuro-behavioral experiments. *Nobuyuki Sakai (Tohoku University)*

11:15 – 11:45 **Healthy Eating and Behavior Change** *Mika Omori (Ochanomizu University / Tohoku University)*

13:30-14:45

Roundtable Discussion on Eating and Well-Being

MC: Nobuyuki Sakai (Tohoku University)

Discussants:

Zahrotur Rusyda Hinduan (Padjadjaran University)

Suwimon Keeratipibul (Chulalongkorn University)

Chung-Hsi Lee (Taipei Medical University)

Yui Kawasaki (Ochanomizu University)

Mika Omori (Ochanomizu University)

Nobuyuki Sakai (Tohoku University)

Nattasuda Taephant (Chulalongkorn University)

Suh-Ching Yang (Taipei Medical University)

15:00 – 18:00

Tasting Workshop of Tom Yum Goong with some lectures on Umami and Koku

Organizer: *Suwimon Keeratipibul (Chulalongkorn University)*

Chef: *Peake Supsin (Suan Dusit University)*

**Wednesday, September 18, The 1st Asian International Conference on
Psychology**

09:00 – 09:05 **Opening Remark** *Tsuneyuki Abe (Tohoku University)*

09:05 – 10:15

Mind and Brain

MC: Tzu-Yu Hsu (Taipei Medical University)

09:05 – 09:25 **Mind across species.** *Christoph D Dahl (Taipei Medical University)*

09:25 – 09:45 **Investigating the GABAergic system in disorders of
consciousness.** *Niall Duncan (Taipei Medical University)*

09:45 – 10:05 **Self-related neural circuit and rumination.** *Tzu-Yu Hsu (Taipei
Medical University)*

10:05 – 10:15 **Group Discussion**

10:20 – 12:00

Leisure time and well-being across life-span

MC: Zahrotur Rusyda Hinduan (Padjadjaran University)

10:20 – 10:40 **Doing leisure time in social media: Adolescents perspective.** *Eka
Riyanti Purboningsih (Padjadjaran University)*

10:40 – 11:00 **Movies as Leisure Education: A Psychology & Movie Course.**
Yuliana Hanami (Padjadjaran University)

11:00 – 11:20 **The role of hope in employee burnout: Evidence in Thailand.**
Jennifer Chavanovanich (Chulalongkorn University)

11:20 – 11:40 **Well-being of centenarians and longitivities in Urban and Rural
Thailand.** *Juthatip Wiwattanapantuwong, (Chulalongkorn University)*

11:40 – 12:00 **Group Discussion**

13:00 – 14:40

Eastern Perspective of well-being

MC: Nattasuda Taephant (Chulalongkorn University)

13:00 – 13:20 **Enhancing Health Care Professionals' Eudaimonic Well-Being:
The Roles of Understanding of Suffering, Impermanence, and**

Interconnectedness. *Kullaya Pisitsungkagarn and Somboon Jarukasemthawee (Chulalongkorn University)*

13:20 – 13:40 **Holistic Care Training System.** *Faith Ruofan Liao (Taipei Medical University)*

13:40 – 14:00 **The meaning of leisure activities on subjective well-being (SWB) in Indonesian and Japanese urban older adults.** *Witriani (Padjadjaran University)*

14:00 – 14:20 **Measuring Inner Happiness and Psychological Well-Being from Eastern Perspectives: Replicating the Measure in the West.** *Somboon Jarukasemthawee (Chulalongkorn University)*

14:20 – 14:40 **Group Discussion**

14:40 – 14:45 **Closing Remarks** *Nattasuda Taephant (Chulalongkorn University)*

Thursday, September 19, The 1st Asian International Conference on Psychology

09:00 – **Putting Posters on the board**

09:15 - **Brief introduction of the Students' Poster Session.**

MC: Yousuke Kawachi (Tohoku University)

13:00 – **Students' Poster Session**

**Wednesday, September 18, Kick Off Symposium of the Advanced Institute
of So-Go-Chi Informatics**

15:00 – 15:15 **“Convergence Knowledge” (So-Go-Chi) Basic Concepts and
Promotion Measures.** *Takeshi Nagasawa (Director for Integrated Strategy,
Secretariat of Science, Technology and Innovation Policy, Cabinet Office,
Government of Japan)*

15:15 – 15:45 **Introduction of the So-Go-Chi (Convergence Knowledge) and its
application to the informatics.** *Satoshi Shioiri (Tohoku University)*

15:45 – 16:45 **Auditory mechanisms that emerge through optimization to
natural sounds and tasks.** *Shigeto Furukawa (Shizuoka Graduate University of
Public Health)*

16:45 – 17:45 **Probabilistic Modeling Approach using Bayesian Networks for
Digital Transformation of Our Society.** *Yoichi Motomura (National Institute of
Advanced Industrial Science and Technology, Artificial Intelligence Research
Center)*

17:45 – 18:45 **Robust Reproducible Network Exploration.** *Yoshimasa Uematsu
(Hitotsubashi University)*

**Thursday, September 19, Kick Off Symposium of the Advanced Institute of
So-Go-Chi Informatics,**

15:00 – 16:00 **Amplifying Ancestral Voices: Collaborative AI-Powered
Language Revival.** *So Miyagawa (University of Tsukuba)*

16:00 – 17:00 **Reading of "Reading" for "Actuating": Augmenting Human
Reading and Learning by Sensing and Actuating Technologies.** *Koichi Kise
(Osaka Metropolitan University)*

17:15 – 18:15 **Seminar on AI Hardware** *Hiroki Nakahara (Tokyo Artisan
Intelligence Co., Ltd./ Tohoku University)*

18:15 – 18:30 **Closing Remark** *Nobuyuki Sakai (Tohoku University)*

Abstracts of the Workshop on “Health and Well-Being”



Tohoku Forum for Creativity
Thematic Program 2024
Designing Foods for the Future

International Workshop on Health and Well-Being

Date

September 17[Tue] – 19 [Thu]
2024

Venue

Main Building of Research Institute of Electric
Communication, Katahira Campus,
Tohoku University 1F



Speakers

Jennifer Chavanovanich (Chulalongkorn University)
Christoph Dahl (Taipei Medical University)
Niall W. Duncan (Taipei Medical University)
Yuliana Hanami (Padjadjaran University)
Zahrotur Rusyda Hinduan (Padjadjaran University)
Tzuyu Hsu (Taipei Medical University)
Somboon Jarukasemthawee (Chulalongkorn University)
Yui Kawasaki (Ochanomizu University)
Suwimon Keeratipibul (Chulalongkorn University)
Hsin-Chien Lee (Taipei Medical University)
Mika Omori (Ochanomizu University)
Peake Supsin (Suan Dusit University)
Nattasuda Taephant (Chulalongkorn University)
Juthatip Wiwattanapantuwong (Chulalongkorn University)
Suh-Ching Yang (Taipei Medical University) ...and more

Registration

www.tfc.tohoku.ac.jp/event/4303.html
Registration deadline:
Saturday, August, 31, 2024
Contact: nobuyuki.sakai.b7@tohoku.ac.jp



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In cooperation with

Graduate School of Arts and Letters, Tohoku University
Advanced Institute for SO-GO-CHI Informatics, Tohoku University
Faculty of Psychology, Chulalongkorn University

Graduate Institute of Mind, Brain and Consciousness, Taipei Medical University
Faculty of Psychology, Padjadjaran University



TOHOKU FORUM for CREATIVITY

www.tfc.tohoku.ac.jp

This workshop is jointly organized by the Tohoku Forum of Creativity with the Thai Sensory Network for Sensory Science for Better Well-Being (SSBW).

Input Session -Nutritional Knowledge-

10:15 – 10:45

A behavioral science approach to nutrition education: Implications for a change in dietary habits

Yui Kawasaki

*Institute for SDGs Promotion, Organization for Social Implementation of Sustainability,
Ochanomizu University, Tokyo, Japan.*

A common complaint is, “I know that diet is very important for my health, but it’s hard to change my dietary habits.” Although many studies have been conducted on healthy dietary habits, food, and nutrition, this problem is endless. One possible explanation is the lack of attention to studies on improving people’s health based on behavioral science, rather than on food functionality.

In nutrition education using behavioral science, educators do not only focus on “what foods should we eat” but also “how to change our dietary behaviors.” Knowledge of food and nutrients alone is insufficient for changing the behavior of many people. For example, even if the results of nutritional epidemiology show that a lack of vegetable intake is a risk factor for cancer, the only information provided is “eat vegetables.” Providing information on *how* to improve dietary habits and increase self-efficacy is also essential for changing one’s behavior. In Japan, many registered dietitians engage in nutrition education using behavioral science theories and models in hospitals, schools, and local governments to improve national health.

This presentation provides a concise overview of the behavioral science approach to nutrition education and the role of registered dietitians as nutritional educators. In addition, the presenter will introduce nutrition education using behavioral science approaches, drawing on interventions for children and persons at their worksites.

Attitude toward salt reduction in Japanese University students: Approach from the survey and neuro-behavioral experiments.

Nobuyuki Sakai^{1,2}

¹ *Department of Psychology, Tohoku University*

² *Advanced Institute of So-Go-Chi (Convergence Knowledge) Informatics, Tohoku University*

We have Japanese traditional cuisine, called as WASHOKU, which is regarded as healthy foods from foreign people. However, we Japanese face health problems evoked by excessive salt intake. The average of daily salt-intake of Japanese people is over 10g/day for each person. Thus, there are many kinds of low-salt foods in the supermarket. However, salt intake of Japanese people has remained higher. This study aimed to reveal the reason for difficulties on salt reduction in Japanese people.

This study consists of two studies, an attitude survey and a neuro-behavioral experiment with NIRS. In the attitude survey, the university students participated, and were asked to answer KAB (Knowledge, Attitude and Behavior) to salt reduction. The results showed that the Japanese people have a distorted knowledge about salt in Japanese foods, have a positive attitude to salt in cuisine, and do nothing for salt reduction in our daily lives.

In the neuro-behavioral experiment, the participants were asked to taste the standard soup or the salt-reduced soup, and to evaluate its palatability and its saltiness. During tasting and evaluations, the brain responses of the participants were measured with NIRS. The results showed that Japanese can detect the “low-salt” food with flavor perception, which cannot be distorted by the packages or other marketing tools. The brain responses to the salt-reduced soups were higher in the lateral frontal cortex than those to the standard soups.

Based on these results, I will discuss the better way to reduce salt intake in Japanese people with the sensory nudge techniques.

Input Session -Behavioral Change-

11:15 – 11:45

Healthy Eating and Behavior Change

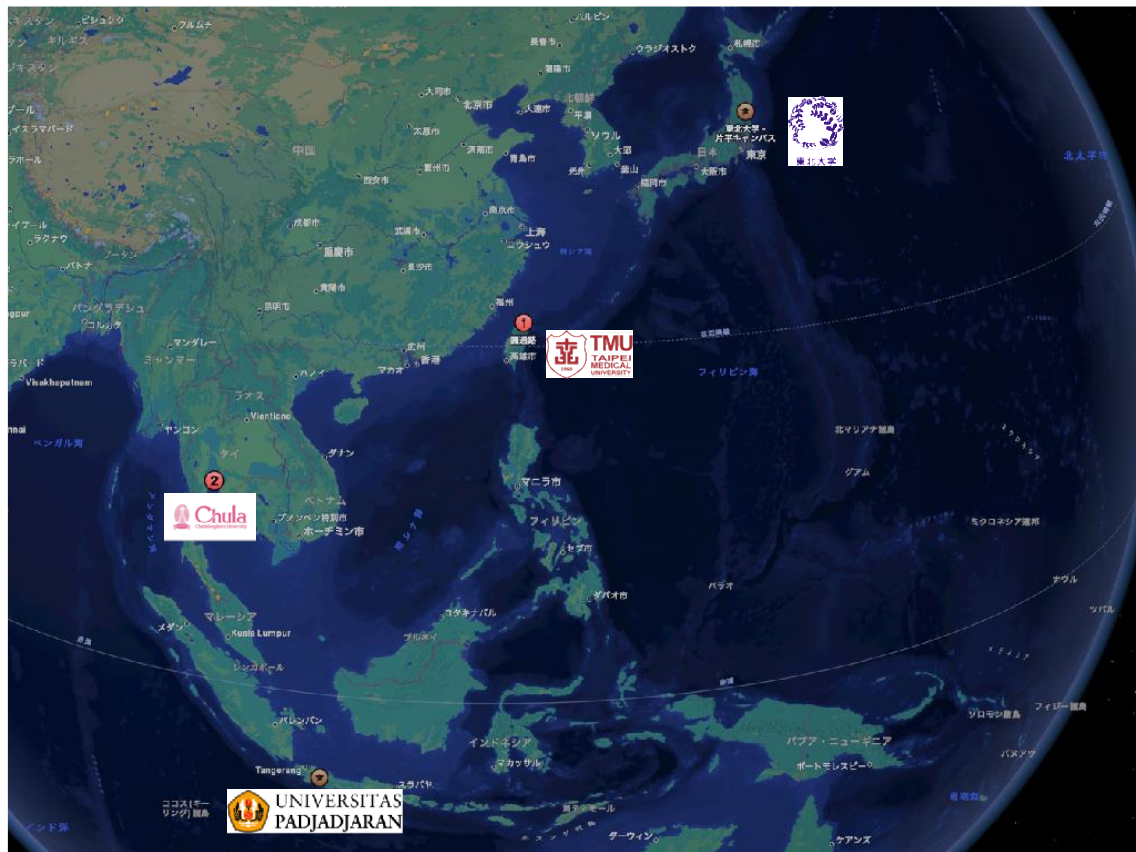
Mika Omori^{1,2}

¹ *Department of Human Developmental Sciences, Ochanomizu University*

² *Department of Psychology, Tohoku University*

We all enjoy foods, home-style foods at home, casual snacks at parties with friends, local foods while traveling, and culinary delights at Michelin starred restaurants. Many people, however, struggle with foods and eating, i.e. overeating, obsession with foods, and extreme dieting. According to the Wansink et al. study (2007), people make more than 200 food-related decisions in a day and most of these decisions are highly habitual and ‘conditioned.’ This means that people do not necessarily make wise decisions (unfortunately). Another psychological construct affecting eating behaviors is emotion experienced moment-to-moment every day. Emotional eating pertains to eating in response to negative emotions, quite likely to result in the consumption of an unusual large amount of food in a short time and in the increase in weight and body fat. This talk will focus on psychosocial factors involved in eating behaviors and introduce programs to facilitate healthy eating from a perspective of health psychology. Behavioral changes are presumed to maximize public health efforts to promote healthy eating. Mindful eating is the application of mindfulness to eating behaviors. As an example of behavior change programs, mindful eating will be explained.

Abstracts of the 1st Asian International Conference on Psychology



Symposiums:	18th September (Wed)	9:00 ~ 14:45
Poster Session:	19th September (Thu)	9:00 ~ 15:00

This symposium is jointly organized by the Faculty of Psychology, Chulalongkorn University and the Department of Psychology, Tohoku University, with cooperation of the Faculty of Psychology, Padjadjaran University and the College of Humanities and Social Sciences, Taipei Medical University

Mind across species

Christoph D Dahl

Graduate Institute of Mind, Brain and Consciousness, Taipei Medical University

Understanding the mind across different species provides insights into the nature of consciousness, perception, social awareness, and communication. In this talk, we have a glance into the scientific domain of comparative cognition, which analyses how different species perceive their surroundings and interact with one another. We will explore some aspects of animal consciousness by studying the proxies, such as higher-level perception, social awareness, and communication. Using examples from ongoing research, we will discuss how individual recognition, learning capabilities, and memory play a role in the cognitive processes of miniature-brained animals, and illustrating how little of a brain sophisticated cognition demands. In mammals and fish, we will focus on understanding social awareness and interaction patterns within groups, addressing the adaptive value of social interactions across species. This research enhances our understanding of the cognitive and social capacities of diverse species, shedding light on the evolutionary roots of complex behaviours. By integrating behavioural analysis and computational modeling, we aim to provide a comprehensive understanding of the unity and diversity of minds across the animal kingdom, which can inform conservation efforts, improve animal welfare, and deepen our appreciation of the cognitive lives of animals.

Keywords: Comparative cognition, consciousness, social awareness, communication, perception, animal behaviour, computational modelling

AICP Symposium 1 “Mind and Brain”

09:25 – 09:45

Investigating the GABAergic system in disorders of consciousness

Niall Duncan

Taipei Medical University

Disorders of consciousness are conditions where a person is in a state of chronic loss of consciousness. Understanding such disorders is important from a clinical point of view and may also provide more fundamental insights into the nature of consciousness itself. Numerous studies have looked at brain activity patterns, identifying potentially important features of these for consciousness. Less work has looked at the neurobiological level. In my talk I will introduce the GABAergic neurotransmission system and its relevance to brain activity dynamics. I will then describe some of our work linking this system to disorders of consciousness. This work may provide insight into potential treatment targets. It may also provide some development of our understanding of the biological features underlying consciousness.

Self-related neural circuit and rumination

Tzu-Yu Hsu

Taipei Medical University

Self-related brain networks have been mapped to cortical midline structures through different self-oriented paradigms. Rumination is one of the pronounced symptoms of Major Depressive Disorder (MDD), characterised by repetitive, self-centred and negative thoughts. Numerous studies have demonstrated that rumination can alter and disturb the functional and anatomical cortical midline structures in the MDD population. In our study, we explored whether people with different levels of rumination are associated with the self-related brain networks differently. From our 60 participants' fMRI study, it shows that when people accessed self-related information, the anterior cingulate cortex (ACC) and posterior cingulate cortex (PCC) showed higher activities than non-self-related information. Furthermore, we found that the left inferior and orbital frontal cortex also played a role in self-related responses. However, we did not observe that these brain regions are correlated with rumination. Future studies are needed to clarify the underlying mechanism.

Doing leisure time in social media: Adolescents perspective

Eka Riyanti Purboningsih

Universitas Padjadjaran

Social media are popular among all age groups, including adolescents. This online environment is very significant and can provide various experiences to fulfil their developmental tasks. In Indonesia, most adolescents use social media. The most popular social media applications among adolescents were Instagram, WhatsApp, YouTube, Line, and Facebook. They use social media for (1) social activities (e.g., communicating with others but also maintaining, rekindling, or seeking friendships), (2) practical activities (commerce activities, information-seeking activities, and school or work activities), and (3) pleasure activities (e.g., watching YouTube and playing online games). Pleasure activities are closely related to the concept of leisure. Although leisure remains the underappreciated aspect of meaning in life, in our study we found that when adolescents use social media to do pleasure activities, they can gain a lot of benefits - specifically emotional benefits such as mood enhancement as it can provide them consolation and happiness and provides an outlet to simply express emotions - which is closely related to their well-being. However, it should be noted that social media use also carries risks for adolescents, such as displacement, social and emotional, and informational risks.

AICP Symposium 2 “Leisure time and well-being across life-span”

10:40 – 11:00

Movies as Leisure Education: A Psychology & Movie Course

Yuliana Hanami

Padjadjaran University

This course explores the integration of movie watching into a psychology course to enhance student well-being, learning, and personal growth. By analysing films through a psychological lens, students engaged with psychology course material in a more engaging and enjoyable manner. Students also have opportunities to reflect upon their understanding of themselves and psychological concepts. This course plays a role in reducing students' stress through movie watching as part of leisure activity while fostering a positive learning environment. Preliminary results from student evaluations demonstrate the effectiveness of using film as a pedagogical tool in higher education.

AICP Symposium 2 “Leisure time and well-being across life-span”

11:00 – 11:20

The role of hope in employee burnout: Evidence in Thailand

Jennifer Chavanovanich

Faculty of Psychology, Chulalongkorn University

The present research examines the role of hope on the relationships between two antecedents and employee burnout in Thailand. The two antecedents are work intensification, or an increased amount and pace of work, and hostile work climate. It is proposed that state of hope mediates the relationships between the two antecedents and employee burnout. The presentation will discuss preliminary findings and implications for organizations in enhancing employee well-being.

Qualitative findings of health and well-being of longevity and centenarian in Thailand.

Juthatip Wiwattanapantuwong^{1,2}, Arunya Tuicomepee^{1,2}, Somnuke Gulsatitporn³, Praew Chantarasinlapin⁴, Kitti-on Sirisuk⁵ and Wilairuk Santikul⁶

¹ *Faculty of Psychology, Chulalongkorn University*

² *Research Unit on Disaster Psychology and Well-being, Chulalongkorn University*

³ *Department of Physical Therapy, Faculty of Allied Health Sciences, Chulalongkorn University*

⁴ *Department of Nutrition and Dietetics, Faculty of Allied Health Sciences, Chulalongkorn University*

⁵ *Department of Interior Architecture, Faculty of Architecture, Chulalongkorn University*

⁶ *Chulalongkorn University Universal Design Center*

The integrated model to promote a healthy aging society has become popular in Thailand. Our study aimed to explore past experiences, current living environments and habits, and household environments in relation to well-being among older adults aged 80-90, 90-100, and over 100 years old. Participants were selected from four provinces with a higher proportion of people aged 80 and above: Bangkok, Nonthaburi, Nakhon Sawan, and Nakhon Si Thammarat. The researchers conducted home visits, questionnaire interviews, and physical tests to obtain integrated information. Preliminary qualitative results revealed 4 main themes: past work experience, relationships with family and neighbors, access to information and public health services, and food and physical functioning.

Keywords: Centenarian, longevity, well-being, and health

Enhancing Health Care Professionals’ Eudaimonic Well-Being: The Roles of Understanding of Suffering, Impermanence, and Interconnectedness

Kullaya Pisitsungkagarn and Somboon Jarukasemthawee

Faculty of Psychology, Chulalongkorn University, Thailand

Healthcare professionals play a crucial role in maintaining wellness of the public. To fulfill this role, these professionals’ own well-being is essential. To enhance the well-being by cultivating mindfulness has been shown beneficial. To further these benefits, the current study investigated the relationship that mindfulness had with eudaimonic well-being in Thai health care professionals and examined if the relationship was mediated by the understanding of suffering, impermanence and interconnectedness. Data were collected in 235 Thai health professionals from a community setting. Participants responded to the Questionnaire for Eudaimonic Well-Being ($\alpha = .85$), Freiburg Mindfulness Inventory ($\alpha = .79$), and the three- subscales of the Mindfulness Insight Scale (i.e., the Understanding of Suffering ($\alpha = .84$), Impermanence ($\alpha = .82$), and Interconnectedness ($\alpha = .80$)). Findings revealed the roles of suffering, impermanence, and interconnectedness in partially mediating the relationships between mindfulness and eudaimonic well-being. Implications of these findings in cultivating eudaimonic well-being in health care professionals were discussed.

Keywords: Mindfulness, Eudaimonic Well-being, Understanding of Suffering, Impermanence, Interconnectedness

Windows to Resilient Performance in Holistic Care Training System

Faith Ruofan Liao

Graduate Institute of Humanities in Medicine, Taipei Medical University

Purpose: The concept of health demonstrates itself not only in the absence of disease or infirmity but also in the fulfilment of well-being which strongly advocates providing comprehensive and integrated care in healthcare systems. In such a progression, medical education perceives as an organic agency that evolves with human beings and expects health professionals to sharpen the specific potential for resilient performance in daily practices. This study aims, in a systematic aspect, to conduct a thorough inspection and design aligned with the resilient perspective in the current medical education curriculum at Taipei Medical University, Taiwan.

Methodology: This study used interview techniques to categorise and break down the patient care process into the domains of medical competencies suggested by the Accreditation Council for Graduate Medical Education (ACGME). It then conducted the SIPOC method to identify, characterise and design the processes that enable the four basic potentials and develop medical students' resilient performance and communication steps of the Four Habits Model in clinical encounters. By filling up the matrix, the suppliers, input and output resources, process and customers are defined, and each aspect's sufficiency and insufficiency will be detected and inspected. Finally, it would expect the trainees' output behaviours in patient care satisfying customer needs and requirements.

Findings: Firstly, the interviews discovered a clinical encounter in which medical students found it hard to interact with patients after getting bad news broken. Secondly, in the current medical education curriculum, eight out of 162 courses throughout the six training years are identified to cultivate medical students' resilient performance: potential for learning, monitoring, anticipating and responding in visiting the patients after receiving bad news. Those input courses, supplied by the medical school at the university and the training hospitals, are mainly categorized in the ACGME core competencies of patient care, professionalism, interpersonal and communication skills, and practice-based learning and improvement.

Discussion: This study has brought medical education in Taiwan to a new era: finding the windows to cultivate medical students' potential for resilient performance in future daily practice. It also brought the medical educators in Taiwan a fresh understanding of resilience, which is not only “an ability to bounce back from the crisis”, but also “an ability to learn, monitor, anticipate and respond in healthcare”. Hence, as the suppliers of medical education, it could be a wakening survey to re-inspect the current curriculums to re-design one and make the medical education system resilient with time.

AICP Symposium 3 “Eastern Perspective of well-being”

13:40 – 14:00

The meaning of leisure activities on subjective well-being (SWB) in Indonesian and Japanese urban older adults

Witriani

Faculty of Psychology Universitas Padjadjaran

This study intends to investigate the meaning of leisure activities on the subjective well-being of older adults in Indonesia and Japan. While Japan has established a strong foundation in promoting leisure for well-being, Indonesia is still in its early stages. Given the stark socioeconomic differences between the two countries, this research aims to understand how cultural and contextual factors shape the relationship between leisure and well-being. By employing interpretative phenomenological analysis, the study will explore the perceptions and experiences of older adults in both countries, aiming to inform the development of leisure-based interventions to enhance the quality of life for Indonesia's ageing population.

AICP Symposium 3 “Eastern Perspective of well-being”

14:00 – 14:20


Measuring Inner Happiness and Psychological Well-Being from Eastern Perspectives: Replicating the Measure in the West.

Somboon Jarukasemthawee

Faculty of Psychology, Chulalongkorn University

Recently, the Mindfulness Insight Scale (MIS) was developed to assess inner happiness from Eastern perspectives. The MIS captures three key insights: understanding of suffering, impermanence, and interconnectedness, which contribute to inner happiness. Initially, the scale was tested with Thais who are familiar with these insights, and its psychometric properties confirmed that the MIS is a valid measure for this group. Recent findings suggest that the MIS is also applicable to Westerners who may not be familiar with the concept of inner happiness from Eastern perspectives. This indicates that studying inner happiness from Eastern perspectives could be valuable in Western contexts as well.

Abstracts of the **Kickoff symposium of the Advanced Institute of So-Go-Chi
(Convergence Knowledge) Informatics**



Tohoku University
Advanced Institute of So-Go-Chi (Convergence Knowledge) Informatics
東北大学 総合知インフォマティクス研究センター

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キックオフシンポジウム
**Kick of Symposium of the Advance Institute of
So- Go- Chi (Convergence Knowledge) Informatics**

DATE: September 18th (Wed) ~ 19th (Thu), 2024
Venue: Main Building of Research Institute of Electric Communication,
Katahira Campus, Tohoku University

Topics and Speakers,
Greetings: Takeshi Nagasawa (Director for Integrated Strategy, Secretariat
of Science, Technology and Innovation Policy Cabinet Office, Government of
Japan)
Introduction: Satoshi Shioiri (Tohoku University)
Multimodal Perception: Shigeto Furukawa (Shizuoka Graduate University of
Public Health)
Big Data: Yoichi Motomura (The National Institute of Advance Industrial
Science and Technology)
Data in Social Sciences: Yoshimasa Uematsu (Hitotsubashi University)
Data in Humanities: So Miyagawa (University of Tsukuba)
AI Software: Koichi Kise (Osaka Metropolitan University)
AI Hardware: Hiroki Nakahara (Tohoku University)

Registration: <https://forms.gle/ySZZCDa8vTQUTUSb9>

**Collaboratively organized with Tohoku Forum for Creativity Thematic Program 2024
(Designing Food for the Future) and The Asian International Conference on Psychology.**

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Tohoku University Advanced Institute of So-Go-Chi (Convergence Knowledge) Informatics
東北大学 総合知インフォマティクス研究センター

This symposium is organized by the Advanced Institute of So-Go-Chi (Convergence Knowledge) Informatics.

Kick off Symposium of AI So-Go-Chi 1

15:45 – 16:45, 18th Sept.

Auditory mechanisms that emerge through optimization to natural sounds and tasks

Shigeto Furukawa

Shizuoka Graduate University of Public Health

The auditory system processes various acoustic cues to provide sensations necessary for our survival and to enrich our perceptual experiences. Neurophysiological and psychophysical studies have asked **how** the auditory system processes such acoustic information. A typical approach to this question is to hypothesize the selectivity of auditory neurons for certain parameters of a given acoustic cue. As an example, consider the pattern of amplitude fluctuation (or amplitude modulation, AM), which is one of the essential sound dimensions for auditory perception. Auditory neurons at different stages of the ascending pathways have been found to be indeed selective for AM frequencies (or to have AM tunings), and a hypothetical array of modulation-frequency-tuned filters (i.e., the modulation filter bank model) has been used by psychophysicists to explain a number of perceptual phenomena. Here is another fundamental question: **Why** did the auditory system design its current AM processing mechanisms with the observed properties? To answer this question, we focused on a deep neural network (DNN) trained for natural sound recognition based on input waveforms. Despite the fact that the DNN was not constructed to reproduce any anatomical or physiological properties of the auditory system other than the cascaded architecture, the "neurons" in the optimized DNN exhibited tunings to modulation frequencies, and the systematic change in the distribution of best frequencies from lower to higher layers was similar to that in the hierarchy of auditory processes (or brain regions) in the central nervous system. Better DNN models showed greater similarity to the auditory system. We also found that the layers corresponding to the auditory midbrain and higher regions exhibited human-like psychophysical AM sensitivity. These results suggest that human and mammalian AM processing mechanisms may have evolved as a result of optimization for natural sound recognition during our evolution.

Kick off Symposium of AI So-Go-Chi 2

16:45 – 17:45, 18th Sept.

Probabilistic Modeling Approach using Bayesian Networks for Digital Transformation of Our Society

Yoichi Motomura

National Institute of Advanced Industrial Science and Technology, Artificial Intelligence Research Center

In this talk, we will show a probabilistic modeling approach that uses Bayesian networks and probabilistic latent semantic analysis to record and accumulate real-world behavior data and then utilize that data to advance the digital transformation of our society. Bayesian networks are white-box computational models whose internal structure is easy for people to understand, and are well suited to a co-creation approach in which all parties involved have a common understanding of real-world phenomena and work together.

Probabilistic modeling technology is also attracting attention for its applications in marketing and internet services to understand consumers, and for this reason there are examples of big data analysis and utilization of data such as consumer purchasing behavior history data and internet browsing behavior history data. In this presentation, we will introduce the practice of probabilistic modeling through such examples. By creating probabilistic models of various phenomena using real-world big data and utilizing these models in the real world through a variety of support tools, many people will be able to understand real-world phenomena better than ever before and take appropriate action. We will also introduce examples of applications to understanding the behavior of local residents and urban development.

Keywords: Bayesian networks, probabilistic inference, probabilistic modeling, Society 5.0 and Digital transformation (DX), Cyber-Physical System(CPS), Real world Big Data

Kick off Symposium of AI So-Go-Chi 3

17:45 – 18:45, 18th Sept.

Robust Reproducible Network Exploration

Yoshimasa Uematsu

Hitotsubashi University

Given a large dataset of multivariate time series, it is essential to first explore whether there is any relationship between each pair of variables in modern data science. For variable pairs where a relationship is identified through such exploratory data analysis, we then proceed to more sophisticated modeling, rigorous causal inference, or qualitative analysis. In this article, we denote the existence of a relationship between two variables by an occurrence of edge and a set of edges by a network, and propose a robust methodology for discovering such networks that is resilient to complex dependence structures and worth investigating in detail. To ensure the reproducibility of network detection, we aim for high power while controlling the false discovery rate (FDR) to be at most a pre-specified level. Specifically, we formalize the problem as multiple testing for the presence of edges, and propose two sets of p-values for use in the well-known Benjamini-Hochberg procedure: one is based on skillfully designed e-values, and the other is grounded in model misspecification. Here, an e-variable is defined as a nonnegative random variable whose expectation is less than or equal to one under the null hypothesis, and its reciprocal is known to become a p-value. We demonstrate that the proposed p-values work well in the BH procedure to control the FDR under arbitrary dependence structures of the networks and achieve asymptotic power of one, even in high-dimensional settings. The empirical validity of the approach is confirmed through numerical simulations and a real data example using SNS data.

Kick off Symposium of AI So-Go-Chi 4

15:00 – 16:00, 19th Sept.

Amplifying Ancestral Voices: Collaborative AI-Powered Language Revival

So Miyagawa^{1,2}

¹ *University of Tsukuba*

² *National Institute for Japanese Language and Linguistics*

In a world where linguistic diversity faces unprecedented challenges, communities are joining forces with artificial intelligence (AI) to preserve and revitalize their ancestral languages. This presentation explores the synergy between grassroots language revival movements and cutting-edge AI technologies, focusing on machine translation, speech recognition, and text-to-speech synthesis. We will examine two compelling case studies: the Coptic language, primarily used in liturgical contexts in Egypt but experiencing a resurgence through community-led initiatives, and the Seediq language's Taroko dialect, where speakers are leveraging technology to combat the dominance of major languages like Chinese. Through these examples, we demonstrate how AI can amplify community efforts in language documentation, enhance educational resources, and foster intergenerational transmission. The session will also address the ethical considerations and challenges of integrating AI into language revival, emphasizing the crucial balance between technological innovation and cultural authenticity. Join us as we showcase practical AI tools and collaborative strategies that empower communities to reclaim and revitalize their linguistic heritage, ensuring that ancestral voices resonate with renewed strength in the modern world.

Kick off Symposium of AI So-Go-Chi 5

15:00 – 16:00, 19th Sept.

Reading of “Reading” for “Actuating”: Augmenting Human Learning by Sensing and Actuating Technologies

Koichi Kise^{1,2}

¹ *Graduate School of Informatics, Osaka Metropolitan University*

² *Japan Lab., German Research Center for AI (DFKI)*

Reading serves as a fundamental component in the framework of knowledge acquisition. Just as the saying "You are what you eat" emphasizes the influence of diet on physical health, it is equally relevant to assert that our intellectual development is shaped by the material we read; a significant portion of our knowledge emerges from this essential activity. This presentation explores the concept of "meta-reading," which involves the systematic analysis of reading behavior as a means to gain insights into the reader's interests, cognitive abilities, and psychological state.

The presentation will reveal the findings from our recent research, which traverses the complex terrain of reading and learning behaviors. It specifically examines the implementation of various feedback mechanisms, or 'actuators,' designed to enhance reader engagement and comprehension. The effectiveness of these actuators is dependent on their congruence with the unique characteristics of each reader.

In addition to presenting these findings, the discussion will demonstrate practical applications, illustrating how a nuanced understanding of reading behavior can be harnessed to optimize learning processes. The presentation will feature case studies and examples of successful actuation strategies rooted in our behavioral analysis.

Moreover, the presentation will begin with an overview of the German Research Center for Artificial Intelligence (DFKI) and its Japan Laboratory, providing context, as much of the research discussed is associated with the pioneering efforts of DFKI.

Kick off Symposium of AI So-Go-Chi 6

16:00 – 17:00, 19th Sept.

Seminar on AI Hardware

Hiroki Nakahara^{1,2}

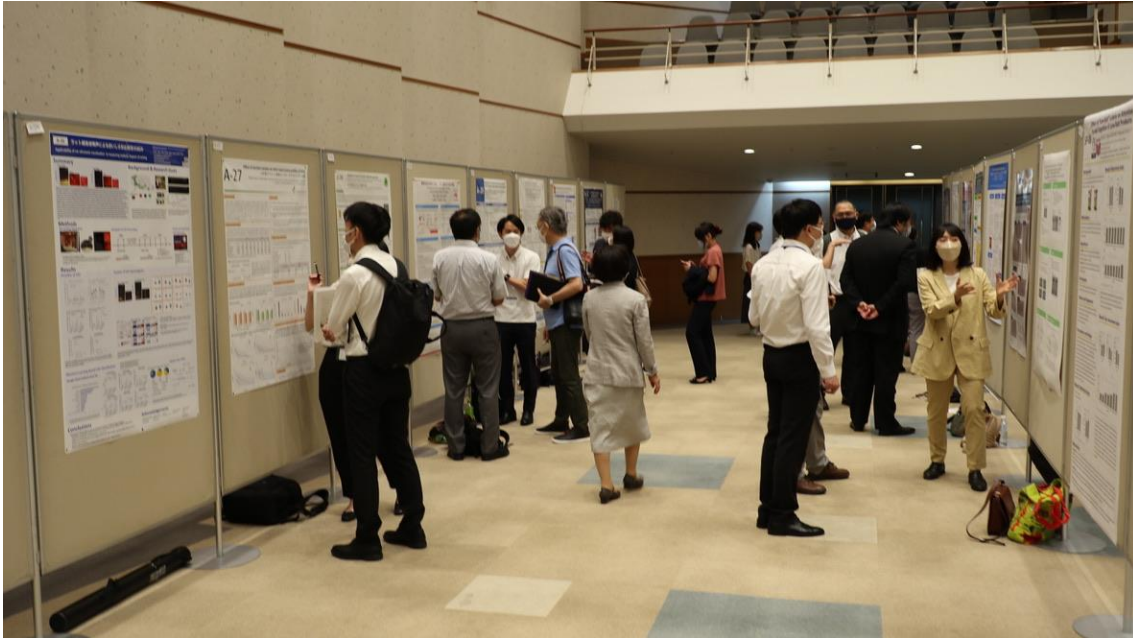
¹ *Tokyo Artisan Intelligence Co., Ltd.*

² *Tohoku University*

With the development of deep learning, the "edge AI" market, including embedded systems, tends to expand. Since edge AI requires large operations under limited computational resources, data structures and architectures are being researched and developed.

We will introduce an example of an edge AI business worked on by Tokyo Artisan Intelligence Co., Ltd., of which the presenter is the founder. Next, we will discuss implementing Vision Transformer, a more accurate image recognition AI model, on an FPGA.

Abstract of the Students' Poster Session
the 1st Asian International Conference on Psychology (AICP)



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Poster Session: 19th September (Thu) 9:00 ~ 15:00

This symposium is jointly organized by the Faculty of Psychology, Chulalongkorn University and the Department of Psychology, Tohoku University, with cooperation of the Faculty of Psychology, Padjadjaran University and the College of Humanities and Social Sciences, Taipei Medical University

Effects of the combination of pine bark extract and fish oil on cognitive decline in middle-aged adults.

Yi-Hsiu Chen¹, Tse-Chia Hsiao¹, Cheng-Dien Hsu², and Suh-Ching Yang¹

¹*School of Nutrition and Health Sciences, College of Nutrition, Taipei Medical University, Taipei, Taiwan*

²*Department of Psychiatry, Taiwan Adventist Hospital, Taipei, Taiwan.*

Mild cognitive impairment (MCI) is an early symptom of cognitive impairment that can gradually develop into dementia. Therefore, how to delay the progression of MCI to is an important research topic for preventing dementia. The aim of this study was to investigate the beneficial effects of the combination of pine bark and fish oil on delaying cognitive function decline and reducing oxidative stress in middle-aged adults. This was a double-blinded, parallel, controlled study. The participants were randomly assigned to fish oil group (F group) and fish oil combined with pine bark extract (PBE) group (F+P group). F group received one capsule fish oil and one capsule placebo, whereas F+P group received one capsule fish oil and one capsule PBE. Body composition, blood biochemical parameters, dietary record, cognitive assessments, oxidative stress were analyzed. The results showed that the F group had significant improvements in Clinical Dementia Rating (CDR) and Mini-Mental State Examination (MMSE), while the F+O group showed significant improvement in short-term memory and maintained stable antioxidative status. In conclusion, the combination of fish oil and PBE was beneficial in improving short-term memory and maintaining a well-balanced antioxidative status.

Poster session 02

Retracted.

On the Legal Implication of Nudge/Boost Theory for National Nutrition and Healthy Diet Enhancement

Yu-Yoh Chen

Department of Psychology, Tohoku University

Following the rise of nutrition science, health and nutrition policies have become increasingly important. Countries have begun to pay attention to nutrition problems caused not only by individual or social factors. For instance, in 2010, the US introduced Healthy People 2020, Japan enacted the Basic Law on Food Education, and Taiwan proposed the Draft National Nutrition and Healthy Diet Enhancement Law. When it comes to nutrition and health policy, the most commonly used method in Western countries is nudge theory, which is based on the premise of human irrationality and uses patterns of human thinking and behavior as the basis for regulation. However, what is the appropriate response when private domain behaviors are transformed into public domain regulations? Will nudge theory be equally effective in Asian countries, given its growing application in dietary policies? This study will conduct a comparison and compilation of literature to explore what nudge theory is, its limitations, and the importance of nutrition and health across four different spectrums: scientific, individual, social, and legal. In addition to reviewing existing health nutrition policy cases, this study will discuss the role of neuroscience in this issue and its impact on future health policies. It will also consider the current health status of Taiwan's population, the dilemmas and challenges facing Taiwan's health policies, and strategies to effectively promote national health in Taiwan.

Painting with Scents: Exploring the Impact of Olfactory Stimuli on Emotional Responses and Artistic Expression.

Zahra Davoudi and Nobuyuki Sakai

Tohoku University

This study investigates the physiological and emotional responses to olfactory stimuli and their impact on artistic expression. Twenty participants were exposed to three different conditions: a "calm" odor intended to induce relaxation, a "positive" odor designed to enhance energy, and a control group with no odor. Each participant's EEG, heart rate variability (HRV), and salivary amylase levels were measured before and after exposure to each condition. Following these physiological measurements, participants painted their perceptions using 24 gouache colors on canvas. Additionally, the Emotion and Arousal Checklist (EACL) was administered before and after each odor exposure to assess changes in emotional state. The findings are expected to contribute to our understanding of how olfactory stimuli influence both emotional responses and creative processes, with potential applications in art therapy, product design, and sensory marketing.

Effects of sesamin on sleep quality and antioxidative status in low arousal threshold obstructive sleep apnea syndrome patients and patients with risk of obstructive sleep apnea syndrome.

Lu-Chi Fu, Wen-Te Liu, Hitoshi Shirakawa, Yi-Hsiu Chen, Qian Xiao, and Suh-Ching Yang

School of Nutrition and Health Sciences, College of Nutrition, Taipei Medical University, Taipei, Taiwan

Chronic intermittent hypoxia induces oxidative stress in obstructive sleep apnea syndrome (OSAS) patients. Sesamin has been confirmed to improve antioxidative capacity after liver metabolism. However, current research has not reached a consistent conclusion regarding the effect of sesamin on improving sleep quality. Therefore, we evaluated whether sesamin (94.0 mg/day) supplement could improve subjective sleep quality and antioxidative status. A double-blind, self-controlled, crossover study was conducted with OSAS risk or low arousal threshold OSAS subjects. The total experimental period was 18 weeks, divided into two stages (8 weeks for each stage) with a 2-week washout period in between. Assessment items were conducted at the 0th and 8th week in every stage. After sesamin supplementation, the Pittsburgh Sleep Quality Index (PSQI) and the Epworth Sleepiness Scale (ESS) scores significantly decreased, indicating improved sleep quality and reduced daytime sleepiness symptoms. Furthermore, antioxidant status was significantly enhanced, including the elevation of glutathione peroxidase (GPX) and glutathione reductase (GR) activities, and glutathione content, whereas the reduction of plasma malondialdehyde (MDA) content. The correlation analysis results show that plasma GPX activity negatively correlates with PSQI and ESS scores, indicating that oxidative stress status might be related to improving subjective sleep quality.

Personal Resource as Determinant Factor of Work Happiness among white collar in the retail industry in Indonesia.

Azhar Hami

Universitas Padjadjaran Indonesia

Studies on work happiness remain an important topic up to now, considering that the issue of mental health has been an intensively discussed topic when it comes to productive generation. A great number of studies on work happiness mainly associate it with the work environment factor. However, there is limited study that emphasizes personal resources as the other significant determinants of work happiness. The job Demand-Resources (JDR) concept emphasizes the importance of resources as a support for work happiness. The purpose of this research is to explore the personal resources that influence work happiness. This research is an exploratory study involving 190 white-collar workers at one of the retail industries in Indonesia. One question was asked to the respondents related to personal resources that can lead to work happiness along with the explanation. The respondents were grouped with 7-8 members each for the group interview. Theme analysis was used to identify personal resources that determine work happiness. The result found the personal resources that influenced work happiness are Positive Personal Qualities, Positive Work Attitude, Social Skills Mastery, Work Competence, and Physical Health. The result has implications for human resource management to improve employee well-being since personal resources can be developed.

Key Word: Work Happiness, Personal Resources, Job Demand-Resources.

Investigation of the influence of the container shape on the taste and deliciousness of beverages.

Mayu Honda¹ and Nobuyuki Sakai^{1,2}

¹*Grad. Sch. Arts & Letters, Tohoku University*

²*AI So-Go-Chi, Tohoku University*

This study aimed to investigate whether the shape of a cup's spout (square or rounded) affects the perceived taste of coffee. Carvalho et al. (2020) found that coffee experts perceived a sourer taste from rough cups, while amateurs perceived a sweeter taste from smooth cups. Spence (2018) explained the relationship between foods or beverages and Bouba/Kiki effect, stating that round shapes are associated with sweetness, while sharp shapes are associated to bitterness and sourness. This led to the hypothesis that coffee would be perceived as more bitter or sour when the spout was square, and sweeter when the spout was rounded.

Twenty university students participated, tasting two types of coffee (slightly sweetened and unsweetened) from cups with different spouts. They rated sweetness, bitterness, sourness, and palatability.

Results showed that the square spout cup was rated significantly sweeter than the rounded spout cup, and the sweetened coffee was rated significantly sweeter than the unsweetened one. No significant differences were found in bitterness, sourness, or palatability.

The study concluded that the cup's spout shape didn't significantly affect taste perception in a way like Bouba/Kiki effect, possibly due to insufficient differences between the spout designs or participants' familiarity with square spout cups.

Emotional and Sensory Profiles of odors on the Two Olfactory Routes **-The cognition of odors will influence the distribution of profiles-**

Yinan Jiang¹ and Nobuyuki Sakai^{1,2}

¹*Department of Psychology, Graduate School Arts and Letters, Tohoku University*

²*Advanced Institute for So-Go-Chi (convergence knowledge) Informatics, Tohoku University*

Although odors inhaled through the nasal and oral pathways ultimately reach the olfactory epithelium and are perceived by olfactory receptors, differences in olfactory perception arise due to the distinct environments within the two routes and their interactions with other senses. To explore these differences, we employed a lexicon of emotional and sensory dimensions to evaluate the olfactory profiles perceived in both routes. Furthermore, we investigated the impact of cognition on these profiles. Our findings revealed that introducing a cognitive task shifted the distribution of odor evaluations across perception dimensions. Without a cognitive task, the distribution of evaluations was primarily explained by characteristics of sensory dimension. However, when a cognitive task was present, stressing of the emotional dimension became more explanatory for this distribution, though this effect was only observed in judgments of edibility and not in significant differences between the routes. Notably, while Intensity is a critical characteristic for odors, it showed low correlation with other aspects within these two dimensions.

What does interpersonal decision-making change in perceptual tasks?

Tatsuru Kawachi and Yousuke Kawachi

Tohoku University

People naturally share their information and make decisions in every situation. Recent studies have revealed that collective decision-making can change decision outcomes not only in social domains but also in perceptual domains. Many experimental studies have focused on visual sensitivity in perceptual tasks. For example, Bahrami et al. (2010) showed that two-person with similar sensitivity made more accurate judgments than individuals in the perceptual task (contrast discrimination of Gabor patches). On the other hand, although response criterion biases naturally occur in collective perceptual decision-making, the effects of biases have been eliminated to measure only sensitivity. Therefore, we investigated what changes in two-person perceptual decision-making mainly focusing on perceptual sensitivity and decision criterion. We revealed that two-person improved the visual sensitivity and fluctuated the decision criterion in a liberal direction in the perceptual task (Kawachi & Kawachi, in prep.). We introduce our research on two-person decision-making to suggest a new possibility that two-person can change their sensitivity and decision criterion in perceptual/cognitive tasks. We also discuss what would cause the fluctuation of sensitivity and decision criterion in two-person perceptual/cognitive decision-making. Lastly, we provide the future implications for the field of two-person decision-making.

Poster session 10

Retracted.

Psychological Meaning of Eating in Different Food Cultures.

Masayo Morofushi

Department of Psychology, Tohoku University

Food preferences are fostered by geographical, cultural and religious factors. One of the famous food preferences is Muslims' eating habit. The number of immigrants is increasing in Japan. However, they are facing some difficulties when eating together with Japanese people. There are small number of research about Muslims living in Japan, and there are no studies about "perception of eating", that lies in intercultural and inter-religioned communication. The purpose of this study is to make clear if the perception gap of "eating" come from culture or religion.

This study is done by the original questionnaire. I referred to "Meaning of Food and Life Questionnaire", "The Eating Motivation Survey" and some questionnaires regarding animism. The original questionnaire is consisting of 47 questions. Two types of randomly arranged question items were prepared. The answers were given on a 5-point rating scale from applicable to not applicable. Preliminary study was done through the Google Form. Almost all participants were university and graduate school students in Japan.

Number of valid respondents is 107. After factor analysis of the original questionnaire, there are five factors: Meaning of Eating, Religious & Animism, Social & Culture, Reason of Eating, Meaning of Foods. The number of subjects who believe a religion is very limited in Japan. However, it is common that even Japanese who does not believe a special religion has very religious mind. Hence, it is required to make definition to understand the results in Japan at first before comparing the foreign subjects who believe a religion. I'd like to discuss the results and research process to move on to the next survey in overseas countries.

Financial Strain among West-Javanese Parents: Its Association with Marital Satisfaction and Quality of Life, and the Role of Dyadic Coping.

Langgersari Elsari Novianti^{1,2}, Fredrick Dermawan Purba¹, Johan C. Karremans³, and Hendriati Agustiani^{1,2}

¹*Faculty of Psychology, Universitas Padjadjaran, Sumedang, Indonesia*

²*Center for Relationship, Family Life, and Parenting Studies, Faculty of Psychology, Universitas Padjadjaran, Sumedang, Indonesia*

³*Behavioural Science Institute, Radboud University, Nijmegen, Netherlands*

In the past decade, the concept of dyadic coping as a buffer against stress in romantic relationships has received much attention in Western countries, but it has rarely been studied in non-Western countries and among parents with school-aged children. The aim of the present study was to investigate the moderating effect of dyadic coping on the link between financial strain and marital satisfaction, as well as the mediating effect of marital satisfaction on the relationship between financial strain and quality of life. There were 751 heterosexual couples whose eldest child aged 7–12 years in West Java, Indonesia (mean age husband = 37.53 SD = 5.09; mean age wife = 34.42 SD = 4.85) fulfilled the paper and pencil questionnaires in the study. The moderated mediated model illustrated that (1) greater levels of dyadic coping weakened the negative association between financial strain and marital satisfaction for husbands and for wives (2) for both husbands and wives, there were no mediation effect (3) for both husbands and wives, financial strain was negatively associated with quality of life; and marital satisfaction was positively associated with quality of life. We discuss both the theoretical and practical implications of these findings.

Keywords: dyadic coping, financial strain, marital satisfaction, quality of life, family with school children.

Effects of fish oil on alcohol-induced brain damage and behavioral changes in rats via Nrf2-HO1 signaling.

Xiao Qian, Jing Huei Lai, and Suh Ching Yang

School of Nutrition and Health Sciences, College of Nutrition, Taipei Medical University, Taipei, Taiwan

Alcohol abuse causes widespread systemic damage. The liver, as the frontline organ metabolizing alcohol, generates excess reactive oxygen species (ROS) during ethanol degradation, which may contribute to impairments in other organs, particularly alcohol-related brain damage (ARBD). Nuclear factor erythroid 2-related factor 2 (Nrf2), a transcriptional factor, regulates cellular redox balance. Forming complex with Kelch-like ECH-associated protein 1 (Keap1), Nrf2 is maintained in cytoplasm in normal condition. However, during oxidative stress, Nrf2 dislocates with Keap1 and translocate to nuclear, activating antioxidant genes, such as NAD(P)H-quinone oxidoreductase 1 (NQO1) and heme oxygenase-1 (HMOX1). Consequently, anti-oxidative enzymes systems are suppressed. Fish oil is well proven for its anti-inflammatory and oxidative stress-modulating effects. This study aims to investigate the protective effects of fish oil on ARBD using Lieber-Decarli alcohol diet model and substitution with 25% and 57% fish oil. Wistar male rats fed with 6 kinds of liquid diets for 8 weeks, including control diet with different portions of fish oil (C, CF25 and CF57) and ethanol-containing isocaloric diets (E, EF25 and EF57). H&E staining revealed more condensed pyramidal cells in the hippocampus in the E group, whereas the fish oil substitution groups showed less damage. Behavioral changes, related to spatial memory loss, were also observed in the E group using the Y-maze test. Antioxidant enzyme levels, such as glutathione and glutathione peroxidase, were altered in the E group. These findings suggest that fish oil may provide protection against alcohol-induced brain damage in rats.

The Mediating Role of Impermanence in the Relationship Between Mindfulness and Depression, Anxiety, and Stress Among Thai Undergraduate Students

Supaluk Settawacharawanich

Chulalongkorn University

Psychological distress, including depression, anxiety, and stress, significantly impacts individual well-being. Recent research has sought to identify factors that might help prevent such distress. This article examines the role of mindfulness and impermanence in predicting depression, anxiety, and stress among undergraduate students in Thailand. In Buddhist practices, mindfulness serves as a foundation for cultivating impermanence, fostering a profound understanding of life's transient and unpredictable nature of existence. Data on mindfulness, impermanence, depression, anxiety, and stress were collected from 250 Thai undergraduate students using online self-report questionnaires. The present study illustrated that depression, anxiety, and stress had significant negative correlations with mindfulness and impermanence. Hierarchical regression and mediation analyses revealed that mindfulness, impermanence, and gender collectively explained 18% of the total variance in depression, while mindfulness, impermanence, and age together explained 18% of the overall variance in stress. Besides, further analyses indicated that only impermanence accounted for 8% of the total variance in anxiety. Furthermore, impermanence partially mediated the relationship between mindfulness and both depression and stress, while fully mediated the relationship between mindfulness and anxiety. Given the significance of these findings, implementing mindfulness programs and acknowledging impermanence could mitigate depression, stress, and particularly anxiety, thereby enhancing well-being

Keywords: Mindfulness, Impermanence, Depression, Anxiety, Stress, Mediator.

Self-Defining Activities: A Pathway to Well-Being for Indonesian High School Students.

Hery Susanto

Universitas Padjadjaran

This research proposal aims to explore how self-defining activities might affect the well-being of high school students in Indonesia. Self-defining activities are experiences that reflect a person's identity and are thought to improve well-being by helping students express their identity and meet essential psychological needs, such as feeling autonomous, competent, and connected to others. The study will test the hypotheses that self-defining activities predict subjective well-being through the sequential mediation of expressive identity and the satisfaction of the needs for autonomy, competence, and relatedness. To assess these relationships, the study plans to use several self-report scales, including the Satisfaction With Life Scale (SWLS), the Positive Affect Negative Affect Schedule (PANAS), the Basic Psychological Need Satisfaction and Frustration Scale (BPNSFS), and the Personally Expressive Activity Questionnaire-Standard (PEAQ-S). Structural equation modeling will be employed to test the hypotheses, with data gathered from at least 818 students. The research hopes to show the value of including self-defining activities in school programs to support students' mental health and overall happiness. The findings are expected to offer useful guidance for educators and policymakers on how to improve student well-being through activities that focus on personal identity.

Relationship among fatigue, risk perception, and risk taking

Kaho Suzuki and Takashi Arai

Department of Psychology, Tohoku University

Risk-taking often threatens our lives by leading to injuries, traffic accidents, or industrial accidents. It is important to reduce risk-taking to ensure people's safety. Although some findings revealed that fatigued people were prone to make riskier decisions, it is unclear how fatigue increases risk-taking. In addition, few studies examined the effects of individual fatigue on group decision-making. To fill these research gaps, we will conduct four experiments. In Experiment 1, we will determine whether the subjective probability or subjective severity mediated the relationship between fatigue and risk-taking. In Experiment 2, we will test how group decision-making will change as the number of fatigued group members increases. In Experiment 3, we will investigate the effect of fatigue on the perception of the possibility and severity of natural disasters. In Experiment 4, we will consider how fatigue affects group decision-making in natural disaster situations.

Effectiveness of Mindfulness-Based Self-Help Training for Depressive Symptoms Among Chinese Parents Who Lost Their Only Child.

Xiaofeng Wang¹ and Mika Omori^{1,2}

¹ *Department of Human Developmental Sciences, Ochanomizu University*

² *Department of Psychology, Tohoku University*

Background: In China, Shidu parents (parents over the age of 49 who have lost their only child) are increasing with 94.7% of them reported to have depressive symptoms (Zhang & Jia, 2019). The present study examined the effectiveness of Mindfulness-Based Self-Help (MBSH) training, including 10-minute daily mindfulness meditation and weekly mindfulness essay readings, for Shidu parents with depressive symptoms.

Methods: A randomized controlled trial was conducted with 45 Shidu parents (M age = 63.3, SD = 6.4) in Shaanxi Province, China. Participants were randomly assigned to MBSH group (n = 25) and waitlist control group (n = 20). MBSH group received 22 weeks of MBSH training, whereas control group received MBSH training between weeks 16 and 22. Depressive symptoms were measured using Self-Rating Depression Scale at weeks 0, 6, and 22.

Results: Generalized Estimating Equations analysis demonstrated significant time effect (Wald χ^2 = 9.34, p = .025), but non-significant group effect (Wald χ^2 = 0.16, p = .690). While interaction between time and group was not statistically significant (Wald χ^2 = 5.91, p = .052), it revealed a trend toward significance. Post hoc analysis showed significant reduction in depressive symptoms in MBSH group from week 6 to week 22 (mean difference = -9.29, SE = 2.80, 95% CI [-14.86, -3.76], p = .001). In control group, there was no statistically significant change.

Conclusion: The findings suggest that long-term (22-week) MBSH reduces depressive symptoms in Shidu parents, despite a non-significant short-term (6-weeks) effect.

Emotional Eating “Profiles” and their Impacts on Physical and Psychological Outcomes.

Yanyuan Wang¹, Noriko Aizawa¹ and Mika Omori^{1,2}

¹ *Department of Human Developmental Sciences, Ochanomizu University*

² *Department of Psychology, Tohoku University*

Background: Emotional eating research in Japan focuses merely on negative emotion-induced overeating, whereas positive emotions and decreased food intake remain under-discovered. The present study aimed to use cluster analysis to determine the different “eating profiles” in Japanese adult participants based on their changes in eating patterns elicited by negative and positive emotions and examine the relationships between these profiles and physical and psychosocial outcomes.

Method: The final sample size yielded 653 Japanese adults. Non-hierarchical cluster analysis was applied to the Japanese version of the Salzburg Emotional Eating Scale (J-SEES). Subsequently, ANOVAs were performed to examine the difference in BMI, emotional intelligence, eating patterns, and risk of eating disorders between clusters.

Results: Three clusters were considered appropriate: the “overeating” group, characterized by increased eating in response to all emotions; the “undereating” group, with increased eating in happiness and decreased eating in three negative emotions; and the “no change” group, which had no significant change in eating patterns after experiencing emotions. The “overeating” group showed a stronger tendency to stress eating, external eating, and negative emotional overeating in both male and female participants and more frequent dieting behaviors and general eating pathology in only female participants than the other two groups. BMI did not differ between the three clusters.

Discussion: The results indicate that emotional overeating, particularly in females, is related to more substantial eating pathology. This highlights the importance of considering emotional triggers and gender in addressing disordered eating behaviors in Japan.

How Undergraduate Students Navigate through Academic Stress? An Exploration using Multisystem Resilience Framework.

Miryam Wedyaswari

Universitas Padjadjaran

The study fills the gap in resilience research in higher education, which is a multisystemic understanding of resilience, especially in Indonesian undergraduate students' context. We explore how multiple protective factors (biological, psychological, social-ecological, and institutional factors) improve student engagement despite many academic stressors and whether the resilience process is influenced by cultural aspects (i.e., religiosity and cultural identity). A preliminary study was conducted in third-year undergraduate students ($n=578$ students). The path analysis was administered to find the mediation model between academic stressors, healthy lifestyles, psychological resilience, social-ecological resilience, institutional support, and student engagement. Meanwhile, moderator analysis was conducted to find the effect of religiosity and cultural identity on protective mechanisms. A multiple mediation model analysis was conducted using Hayes PROCESS v.4.2. We found that healthy lifestyle, psychological resilience, and social ecological resilience are fully mediate a relationship between perceive academic stressors and student engagement. Meanwhile, cultural identity and religious commitment are not significant as moderators for protective mechanisms. Instead, we found that both cultural identity and religious commitment, serial with significant protective factors (i.e., healthy lifestyle, psychological resilience, and social ecological resilience), become mediators for relationships between academic stressors and student engagement. The findings describe the dynamic of resilience process in Indonesian undergraduate students, particularly in a prominent public university. Further qualitative investigation will be conducted to explain the resilience process.

Scent of Emotions: The Role of Body Odor in Chemical Communication of Human Emotions.

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Abstract: This study explores the chemical composition of human skin gases during different emotional states to understand the transmission of emotions through body odor. We aim to identify specific chemical compounds in skin gases associated with different emotion states of fear, neutrality, and relaxation in a controlled setting. At the present stage, four students from Tohoku University participated in the experiment. Each participants provided skin gas samples as well as armpit sweat samples in three conditions. Volatile compounds in skin gases and armpit sweat were collected using Solid Phase Micro Extraction (SPME) while they were watching emotionally-valenced videos. Straight after sample collection, chemical components of skin gases samples as well as armpit sweat samples, were analyzed by GC-MS device. There were 122 varieties of compounds collected from 4 participants. After screening out those were from plasticbags, there were more than 30 varieties of compounds are confirmed to be from human body by previous study. Also, the hypothesis of this study was supported, that human body odor varies from different emotional states. Future experiment will be launched to confirm the effect of emotional transmission when sniffing the odor of specific compounds that were emitted in relaxing condition. The study's findings will contribute to the understanding of how emotional states are chemically represented in skin gases and potentially influence emotional contagion among individuals.

The temporal segregation of self and non-self-related processes.

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The activities of cortical midline structures are strongly associated with different self-related paradigms. The self-related process involves probing or accessing self-relevant information. Naturally, the cortical midline structures are also considered as self-related brain networks. In contrast, non-self-related brain regions mostly overlap with those brain regions where process external stimuli. The segregation of self-related and non-self-related processes in the brain has been shown in fMRI studies. In this study, we are curious whether such difference could be observed in high temporal resolution electroencephalogram (EEG) and when the processes are different. Therefore, thirty-five participants were recruited in this EEG study. Participants were required do a colour-switching task where they have to make responses either based on their own preference (i.e. self-related) or based on colour similarity (i.e. non-self-related). We observed that event-related potentials (ERPs) showed the condition difference. The P3a peak component in the self-condition is lower than in the non-self-related condition between 200 ms and 350 ms after the stimulus onset. More importantly, when participant switch from the self-related condition to non-self-related condition, their P3b component between 350 ms to 550 ms showed higher amplitude than staying the same condition, supporting different brain processes involved in two conditions. The similar findings were also found in pattern classification. Therefore, our current study supports that the self-related and non-self-related processes may involve different brain networks around 300 ms and 500 ms after the stimulus onset.

Keyword: self, non-self, processes, EEG, ERPs, MVPA

Circadian rhythms under non-standard light schedules.

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Circadian rhythms, the natural cycles regulating physiological processes, enable organisms to adapt their behaviors to the 24-hour changes in the environment due to the Earth's rotation. Early observations of circadian rhythms date back to the 18th century, but it took 200 years to recognize these rhythms were controlled by endogenous clocks. The interaction between behavior and circadian rhythms has been a prominent yet debated topic in chronobiology. Circadian rhythms are centrally maintained by the suprachiasmatic nucleus (SCN) in mammals, which can be modulated by altering light conditions—by extending or shortening light durations (photoperiod), simulating seasonal changes, or by creating days shorter or longer than 24 hours (T-cycle), similar to Martian days. Previous studies have established that behavioral (locomotor activity) periods align with those of the SCN under photoperiodic and physiological conditions. However, the intricate relationship between behavioral periods and circadian clock periods remains not fully understood under non-physiological conditions such as T-cycles. To further investigate this relationship, we extended the T-cycle paradigm in mice across a broader spectrum of day lengths, ranging from 20 to 28 hours. Our findings reveal a negative correlation between mice's behavioral and circadian periods (in the SCN and the choroid plexus) within the entrainable range. Conversely, outside this range, correlations diverge into positive and negative values. Notably, shorter T-cycles exhibit a larger absolute phase of entrainment compared to longer T-cycles, indicating a potential dissociation between circadian and sleep rhythms. Additionally, we included experiments where the intrinsic circadian clock was weakened (using Vip-Cre;Bmal1-flox/flox mice) and observed that these mice adapted more readily to short T-cycles, exhibiting a wider entrainable range. This study advances our understanding of the complex dynamics governing behavioral and circadian rhythms under non-standard light schedules, providing a promising paradigm for investigating sleep and circadian rhythm disorders.

Keywords: circadian rhythms, locomotor activity, suprachiasmatic nucleus, choroid plexus, T-cycle

MY MOTHER TONGUE IS YOUR OTHER TONGUE: EXPERIENCES OF THERAPEUTIC WORK BY THAI THERAPISTS WHO DO NOT SHARE THE SAME MOTHER TONGUE WITH CLIENTS.

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Language is central to counseling, yet research exploring its role in therapy, particularly in Asia, remains limited. This pioneering study, the first of its kind in Thailand, employed Interpretative Phenomenological Analysis (IPA) to address this gap by exploring the lived experiences of professional Thai practitioners working with clients who do not share the same mother tongue. Six practitioners were selected through purposive sampling with an in-depth interview to capture their unique perspectives.

The findings reveal four main themes: (1) **Perceived Challenges:** This theme uncovers linguistic difficulties such as accents, pronunciation, word choice, and language nuances, alongside internal struggles like self-doubt, anxiety, and fears of being perceived as incompetent; (2) **Comparative Experiences:** Participants explore the differences in working with non-mother tongue compared to mother tongue, reflecting on how they experience themselves differently across languages, the contrast in communication styles, and perceived power dynamics; (3) **Essence of Making Non-Mother Tongue Therapy Work:** This theme examines the strategies participants use, focusing on both individual preparation—body and mind, linguistic, and knowledge—and relational levels within the therapeutic alliance, emphasizing empathy, cultural sensitivity, and the importance of transparency; and (4) **Lessons Learned:** Participants reflect on the deeper insights gained, including the recognition of common humanity, embracing limitations and imperfections, shifts in self-narrative prompted by client feedback, and a commitment to ongoing personal and professional development.

These findings contribute to the field by raising awareness, informing practice, and guiding the development of training and supervision for Thai therapists working in a foreign language.

Invited Speakers

Jennifer Chavanovanich (Chulalongkorn University)
Shigeto Furukawa (Shizuoka Graduate University of Public Health)
Yuliana Hanami (Padjadjaran University)
Zahrotur Rusyda Hinduan (Padjadjaran University)
Tzu-Yu Hsu (Taipei Medical University)
Koichi Kise (Osaka Metropolitan University)
Somboon Jarukasemthawee (Chulalongkorn University)
Yui Kawasaki (Ochanomizu University)
Suwimon Keeratipibul (Chulalongkorn University)
Chung-Hsi Lee (Taipei Medical University)
Hsin-Chien Lee (Taipei Medical University)
So Miyagawa (University of Tsukuba)
Yoichi Motomura (AIST)
Takeshi Nagasawa (Cabinet Office, Government of Japan)
Hiroki Nakahara (Tohoku University)
Mika Omori (Ochanomizu University)
Kullaya Pisitsungkagarn (Chulalongkorn University)
Peake Supsin (Suan Dusit University)
Nattasuda Taephant (Chulalongkorn University)
Yoshimasa Uematsu (Hitotsubashi University)
Suh-Ching Yang (Taipei Medical University)

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