PNIRSAsia-Pacific Annual Committee Report

June 1, 2023—July 1, 2024

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2023-2024

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PNIRSAsia-Pacific came roaring back in 2023-2024 after most countries dropped entry restrictions due to COVID19. Our committee symposia proposals were accepted in five countries: Thailand, Japan, Taiwan, Canada and China. In addition, we were honored to present a virtual PNIRSAsia-Pacific symposium to the PNIRS membership. It was a good year, and we thank the PNIRS leadership for their continuing support.



Our PNIRSAsia-Pacific committee leadership is growing. We welcome Andrew (Drew) Steelman from the University of Illinois as our newest committee member. Professor Steelman's research program seeks to identify detrimental and repair-promoting signaling pathways resulting from neuroinflammation and glial activation in neurological diseases. He hopes to work with Professor Shimada and Hasegawa-Ishii to focus on meetings in Japan.

A condensed summary of invited speakers, countries and dates of **PNIRSAsia-Pacific** symposia is presented below:

Prof. Ning Quan as our Featured Speaker at the PNIRSAsia-Pacific Annual Gathering in Boulder, Colorado

12:00 - 1:00 pm



PNIRS Asia-Pacific and PNIRS there-America Meeting - there will be time to get lunch after the meeting Juniper Room

Chair: Keith W. Kelley, PhD, Professor Emeritus of Immunophysiology, University of Illinois Speaker: Ning Quan, PhD, Professor, Biomedical Science, Florida Atlantic University Professor Quan was born in Wuhan China. He will highlight his experiences growing up in China, the challenges and approaches he used to develop a very successful career in the USA and his continuing commitment to maintaining and growing collaboration with biomedical scientists in China. Ning earned his B.S. in biomedical engineering at Huazhong Univ. of Science & Technology. In 1991, he completed his Ph.D. at the University of Tennessee. Ning remained in the USA, completing post-doctoral training at Duke and NIMH. From 1998-2019, he rose through the ranks at Ohio State University to become a Full Professor. In 2019, he accepted a new position as Full Professor at the FAU Brain Institute. His mother was an immunologist of the Wuhan Institute of Biological Products, contributing to development of Chinese vaccines against meningitis. His father was a professor of Biochemistry in Tongji University. His grandfather was a Chinese historian. He was influenced by both Western style science from his parents and traditional Chinese philosophy from his grandfather. While the systematic logical scientific approach of the Western methodology is rigorous and penetrating, the Chinese way of thinking tends to be more encompassing and relational. For example, ancient Chinese philosophy typically sees body and mind as one, all the bodily systems as integrally connected with each other and with the outside world, and opposite processes such as Ying and Yang are not only antagonistic but engenders each other's existence. This could be why he loves to study PNI which emphasizes the connectivity of different physiological systems and the mind. He also strives to discover the seeds of beneficial effects in the processes generally considered detrimental. Harnessing the positive functions of inflammation could be just as important as taming its negative effects. In these efforts, he finds the joy and balance of his life.

PNIRSAsia-Pacific Welcomed in Thailand: When Neuropsychiatry Meets Immunology

Professors Michael Maes and Keith W. Kelley worked together to organize the first psychoneuroimmunology symposium in Thailand. Chulalongkorn University is widely recognized as the leading medical school in the country. Thanks to the outstanding leadership and organization of Prof. Buranee Kanchanatawa, Assoc. Dean for Academic Affairs and her team, this symposium was held on August 15, 2023. PNIRSAsia-Pacific was represented by six scholars from five different countries, all of whom spoke of the importance of brain-immune communication in human health. Approximately two hundred medical scientists attended this one-day meeting at the King Chulalongkorn Memorial Hospital in Bangkok.



Japanese Society for Neuroimmunology (JSNI) in Tokyo, Japan

PNIRSAsia-Pacific was represented by Professors Long-Jun Wu from the Mayo Clinic in Rochester, Minnesota and Bill Banks at the University of Washington in Seattle. Our partnership, which began in 2019, continued with the 35th Annual Meeting of the Japanese Society for Neuroimmunology (JSNI) that was held in the Tokyo International Forum in Tokyo from September 13-15, 2023. More than seven hundred people were in attendance and most of them were neurology clinicians with a strong interest in neuroimmunology. PNIRSAsia-Pacific and JSNI collaborated to have a joint symposium and two special lectures by Professors Long-Jun Wu and Bill Banks. In all three sessions, 150 to 200 people were in attendance. In the Joint Symposium, Long-Jun Wu highlighted how microglia interact with astrocytes in neuromyelitis optica pathology. Bill Banks presented data showing that the S1 protein of SARS-CoV-2 crosses the blood-brain-barrier (BBB) to induce COVID-19associated neuroinflammation. Prof. Izumi Kawachi, a Japanese leading neurologist, discussed neuroimmune crosstalk in multiple sclerosis, NMO and Alzheimer disease. Prof. Takashi Kanda is also a Japanese leading neurologist with a long history of basic scientific discoveries. He talked about an in vitro model of the BBB composed of human endothelial cells, pericytes and astrocytes from cadavers.









PNIRS Presents a Virtual Symposium for the Membership

PNIRSAsia-Pacific had the honor of presenting their first virtual PNIRS PRESENTS session on Thursday, October 12, 2023, in a symposium entitled "Advancing Psychoneuroimmunology Through PNIRSAsia-Pacific Global Research Connections." The symposium was chaired by Keith W. Kelley, PhD at the University of Illinois at Urbana-Champaign and Kuan-Pin Su, MD, PhD at the China Medical University Hospital in Taiwan. The justification was that Brain, Behavior, and Immunity and its sister journals have witnessed a dramatic rise in publications and citations from the Asia-Pacific region. Yet Western scientists are generally not familiar with the high-quality psychoneuroimmunology contributions of scientists throughout many of the Asia-Pacific countries. This symposium featured three senior scientists from Australia and China who have made significant contributions to advancing the entire field of psychoneuroimmunology throughout the world. These invited speakers were Quentin Liu, MD, PhD, Dalian Medical University, Erica Sloan, PhD, Monash University and Peijing Rong, PhD, Beijing University of Chinese Medicine.

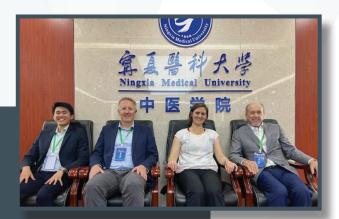
Our PNI Home Away from Home: The Mind-Body-Interface (MBI) Meeting in Taichung, Taiwan



We are achieving tremendous momentum after six years of joint PNIRSAsia-Pacific/ MBI meetings. This year, around 225 scientists were at the meeting. Professor Quentin Liu (Dalian, China) was honored with a plenary lecture. Professors Melissa Rosenkranz (U. Wisconsin, USA), Nicolas Rohleder (Friedrich-Alexander University, Germany and Ilia Karatsoreos (U. Mass. Amherst) represented PNIRSAsia-Pacific with outstanding lectures. The committee thanks these experts for "spreading the word" about PNI in Taiwan.

Chinese Association of Physiological Sciences (CAPS), Yinchuan, China





In 2023, PNIRS and the Chinese Association for Physiological Sciences Committee of Traditional Chinese Medicine and Brain Homeostasis Regulation (CAPS-TCMBHR) signed a formal contract to have permanent annual PNIRSAsia-Pacific symposia in China. Professor Gang Chen at the Jinan University School of Traditional Chinese Medicine was key for establishing this agreement. The first CAPS meeting was held in Shanghai in 2023. The second was held on May 11 and 12, 2024 in Yinchuan, a city in northwestern China. There were over 350 scientists in attendance. The PNIRSAsia-Pacific speakers were Professors Leah Pyter (Ohio State University), Aeson Chang (Monash University), Chris Lowry (University of Colorado Boulder) and Keith W. Kelley (University of Illinois).

| 时间 | 主持人 | 报告人 | 单位 | 报告题目 |
|-------------|---------------------------------|-------------------------|---------------------------------|---|
| 10:10-10:20 | Keith Wayne Kelley 陈 刚 | Keith Wayne Kelley | 美国 伊利诺伊大学香槟分校 | Psychoneuroimmunology: Connecting the Brain and Body |
| 10:20-10:43 | | Christopher A. Lowry | 美国 科罗拉多大学 | Microbiome-gut-brain axis and Mental Health: Role of Co-Evolved Micro-Organism in the promotion of Stress Resilience |
| 10:43-11:06 | | Aeson Chang | 澳大利亚 莫纳什大学 | Triple negative breast cancer hijacks the sympathetic nervous system to resist chemotherapy |
| 11:06-11:29 | | Leah M. Pyter | 美国 俄亥俄州立大学 | The role of the gut bacteriome and inflammation in cancer treatment-induced behavioral side effects |
| 09 | | 付 4 | 发济人 驾学者 / 中国医学科学院 系统医学研究院 | Stress reshapes immune microenv ironment and macroenvironment |
| 11:52-12:15 | | 陈家旭 | 暨南大学 | Chinese herbal formula Xiaoyaosan (XYS) modulates synaptic pruning in depressed mice via the gut microbiota —complement—microolia axis |

2024-2025 Planning

Our committee must begin planning a year in advance of potential meetings throughout Asia so we can get on the travel schedules of leading PNI speakers to represent PNI in Asia. As of this writing, we are planning five symposia proposal submissions for 2024 and 2025.

- The first will be held at the annual PNIRS meeting in Halifax from June 24-27, 2024, because our first **PNIRSAsia-Pacific** symposium was accepted for oral presentation.
- As for the second meeting, Keith is working with Professor Huong Ha in the in the Department of Tissue Engineering and Regenerative Medicine, School of Biomedical Engineering at the National University Ho Chi Minh City. Jointly, their PNIRSAsia-Pacific symposium proposal that was submitted to the biennial conference of bioengineering was accepted. It will be held at a beach resort near Ho Chi Minh City from July 26-28, 2024.
- Third, the PNIRSAsia-Pacific committee recently submitted a symposium proposal to the Mind-Body-Interface organizers in Taiwan for their 2024 annual meeting that will be held from October 19-21 in Taichung.
- Fourth, Professor Weiwen Wang has successfully submitted an inperson PNIRSAsia-Pacific symposium proposal to the largest gathering of neuroscientists in China. This meeting will be held in Suzhou, a beautiful city near Shanghai, from September 26-29, 2024.
- Fifth, we will collaborate with the Chinese Association for Physiological Sciences Committee (CAPS-TCMBHR) to organize a joint symposium somewhere on the mainland, probably in May 2025.

We also hope to return to the annual meeting of the Japanese Society of Neuroimmunology in 2025. Finally, with the help of Peter Grace at MD Anderson, our committee will try to reach out to colleagues in India with the hope of submitting a **PNIRSAsia-Pacific** symposium at one of their major meetings. All PNIRS members are welcome to attend any of these meetings. Please contact Keith W. Kelley for updated information.

Archived PNIRSAsia-Pacific Annual Reports

All annual reports of PNIRSAsia-Pacific that began in 2013 are archived at www.pnirs.org/pnirs-asia-pacific-annual-reports