

Sumitomo Dainippon
Pharma

Innovation today, healthier tomorrows



6th Congress of ASCNP

Program & Abstract Book

Fukuoka, Japan Oct. 11 - 13, 2019



6th Congress of ASCNP

Asian College of Neuropsychopharmacology

Neuropsychopharmacology to the next generation: New wave from Asia

October 11 - 13, 2019

Fukuoka, Japan

Fukuoka International Congress Center
Fukuoka Sunpalace Hotel & Hall

Chair: Kazutaka Ikeda (Tokyo Metropolitan Institute of Medical Science)

Vice Chairs: Kazutaka Shimoda (Dokkyo Medical University) Toshiyuki Someya (Niigata University)

Alliance Head: Hiroyuki Uchida (Keio University)

Secretary: Shinya Kasai (Tokyo Metropolitan Institute of Medical Science)

Program & Abstract Book

7th Congress of ASCNP



Asian College of Neuropsychopharmacology

**Advances in Neuropsychopharmacology:
Spotlights on progress and beacons to the future**

**October 22-24, 2021
Singapore**

Save the Date



2020 CINP World Congress
25-28 June 2020 | Taipei, Taiwan

Welcome Message from the President

On behalf of the Executive Committee of the International College of Neuropsychopharmacology (CINP), it is my pleasure to invite you to the 32nd CINP World Congress of Neuropharmacology in Taipei, Taiwan in June 2020. This upcoming World Congress welcomes delegates from all over the globe to the beautiful city of Taipei to carry on the momentum of the previous World Congresses in Seoul and Vienna. Building on our previous efforts, we will expand our core mission of linking the advances in brain sciences to the alleviation of the distress and disabilities associated with neuropsychiatric disorders. With advances in neuroscience, this is an exciting time for the understanding of psychiatric

pathophysiology and the 32nd World Congress will feature the most up-to-date research, diverse topics of interest, and educational sessions with leading experts.

We hope that you will be able to join us to advance the research and education of psychopharmacology.



Professor
Siegfried Kasper
President of CINP
(2018 – 2020)

Abstract Submissions

OPEN
1 November 2019

CLOSE
30 January 2020

For more information, please contact cinp2020@cinp.org www.cinp2020.org



6th Congress of AsCNP

Asian College of Neuropsychopharmacology

*Neuropsychopharmacology to the next generation:
New wave from Asia*

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Toshiyuki Someya (Niigata University)

Alliance Head: **Hiroyuki Uchida** (Keio University)

Secretary: **Shinya Kasai** (Tokyo Metropolitan Institute of Medical Science)

Joint Annual Meetings

JSCNP 
29th Annual Meeting of
Japanese Society of
Clinical Neuropsychopharmacology

Chair: **Reiji Yoshimura**
(University of Occupational and Environmental Health)

JSNP 
49th Annual Meeting of
Japanese Society of
Neuropsychopharmacology

Chair: **Hisatsugu Miyata**
(Jikei University School of Medicine)

Host

Asian College of Neuropsychopharmacology (AsCNP)

Supporting Organizations

Fukuoka City / The International College of Neuropsychopharmacology / Japan Epilepsy Society / Japan National Tourism Organization (JNTO) / Japan Neuroscience Society / Japan Pharmaceutical Association / Japan Pharmaceutical Manufacturers Association / Japan Psychiatric Hospitals Association / Japan Society of Pain Clinicians / Japan Tourism Agency / Japanese Association of Cardiovascular Pharmacology / Japanese Medical Society of Alcohol and Addiction Studies / The Japanese Neuropsychiatric Association / The Japanese Pharmacological Society / Japanese Society of Anesthesiologists / Japanese Society of Anxiety and Related Disorders / Japanese Society of Biological Psychiatry / The Japanese Society of Clinical Pharmacology and Therapeutics / Japanese Society of General Hospital Psychiatry / Japanese Society of Hospital Pharmacists / Japanese Society of Mood Disorders / The Japanese Society for Neurochemistry / Japanese Society of Neurology / Japanese Society for Psychiatric Diagnosis / The Japanese Society of Psychiatry and Neurology / Japanese Society of Schizophrenia Research / Japanese Society of Sleep Research / Kyushu Psychiatric Hospitals Association / The Molecular Biology Society of Japan / The Physiological Society of Japan / Union of Brain Science Associations in Japan

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Greetings

It is our great pleasure to organize the 6th Asian College of Neuropsychopharmacology (AsCNP) Congress that is held in Fukuoka, Japan, on October 11-13, 2019. The main theme of the congress is “Neuropsychopharmacology to the next generation: New wave from Asia.” Pharmacotherapy for the treatment of neuropsychiatric disorders should be developed further in Asia where robust economic expansion has occurred. Most medications for the treatment of central nervous system disorders have been developed for the European and American populations but are not always suitable for Asian populations. Medications should be developed specifically for Asians, including appropriate dosage and usage. The AsCNP2019 Congress seeks to advance neuropsychopharmacology to the next generation in Asia.

AsCNP was founded in 2008, based on the need to elucidate the mechanisms that underlie the effects of medications for the treatment of central nervous system disorders, develop new medications, and appropriately utilize such medications in Asia. The mission of AsCNP is to encourage research, facilitate the communication of ideas in converging disciplines of neuropsychopharmacology in Asia, develop pharmacotherapies for the treatment for psychiatric disorders, provide education and training opportunities, and empower patients and their families with scientific knowledge. The AsCNP Congress was convened in Kyoto in 2009, Seoul in 2011, Beijing in 2013, Taipei in 2015, and Bali in 2017. AsCNP currently has more than 3000 members.

The AsCNP2019 Congress will be held in conjunction with the annual meetings of the Japanese Society of Neuropsychopharmacology (JSNP) and Japanese Society of Clinical Neuropsychopharmacology (JSCNP). Other AsCNP member societies are also planning joint events at the AsCNP2019 Congress. Many scientists, clinicians, industry researchers, governmental officials, and invited world-renowned leaders will gather at the congress to advance neuropsychopharmacology in Asia.

We look forward to welcoming you in Fukuoka in 2019.



Kazutaka Ikeda
Chair, 2019 AsCNP Congress



Kazutaka Shimoda



Toshiyuki Someya

Vice Chairs, 2019 AsCNP Congress

Organizers

Organizers of 6th Congress of Asian College of Neuropsychopharmacology (AsCNP2019)

Chair: Kazutaka Ikeda (Tokyo Metropolitan Institute of Medical Science)

Vice Chairs: Kazutaka Shimoda (Dokkyo Medical University)
Toshiyuki Someya (Niigata University)

Alliance Head: Hiroyuki Uchida (Keio University)

Secretary: Shinya Kasai (Tokyo Metropolitan Institute of Medical Science)

Organizing Committee Chair: Shigenobu Kanba (Kyushu Univeristy)

Organizing Committee Members:

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Lih-Chu Chiou (National Taiwan University, Taiwan)	Jun Ishigooka (Yoyogi Mental Clinic / Institute of CNS Pharmacology)
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 Toshifumi Kishimoto (Nara Medical University)
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 Hiroki Ozawa (Nagasaki University)
 Yuji Ozeki (Dokkyo Medical University)
 Naren P. Rao (National Institute of Mental Health and Neurosciences, India)
 Tadashi Saigusa (Nihon University)
 Manabu Saito (Hirosaki University Hospital)
 Takuya Saito (Hokkaido University)
 Toshikazu Saito (Psychiatry Institute, Hokujuikai Medical Corporation)
 Akira Sano (Kagoshima University)
 Junji Saruwatari (Kumamoto University)
 Masashi Sasa (Nagisa Clinic)
 Masamichi Sato (Kyoto University)
 Mitsumoto Sato (Tohoku University / Takaoka Hospital)
 Yasushi Sato (Hirosaki University)
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Kohji Takada (Teikyo University)	Kiyofumi Yamada (Nagoya University)
Hiroyuki Takagi (Seimou Hospital)	Mitsuhiko Yamada (National Center of Neurology and Psychiatry)
Kazuo Takahama (Kumamoto Health Science University)	Norihito Yamada (Okayama University)
Hidehiko Takahashi (Kyoto University)	Shigeki Yamaguchi (Dokkyo Medical University)
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Yoshiteru Takekita (Kansai Medical University)	Kazuhiko Yanai (Tohoku University)
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Chay Hoon Tan (National University of Singapore, Singapore)	Setsuko Yasukawa (Yatsushiro Kosei Hospital)
Andi J. Tanra (Hasanuddin University, Indonesia)	Hiroshi Yoneda (Osaka Medical College)
Takeshi Terao (Oita University)	Yukio Yoneda (Kanazawa University)
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Hiroyuki Uchida (Keio University)	Mitsuhiro Yoshioka (Hokkaido University)
Naohisa Uchimura (Kurume University)	Xin Yu (Peking University, China)
Yosuke Uchitomi (National Cancer Center Hospital)	Kunio Yui (Fujita Health University)
Shu-ichi Ueno (Ehime University)	Gang Zhu (China Medical University, China)
Yasuhito Uezono (National Cancer Center)	
Koichiro Watanabe (Kyorin University)	

*in alphabetical order

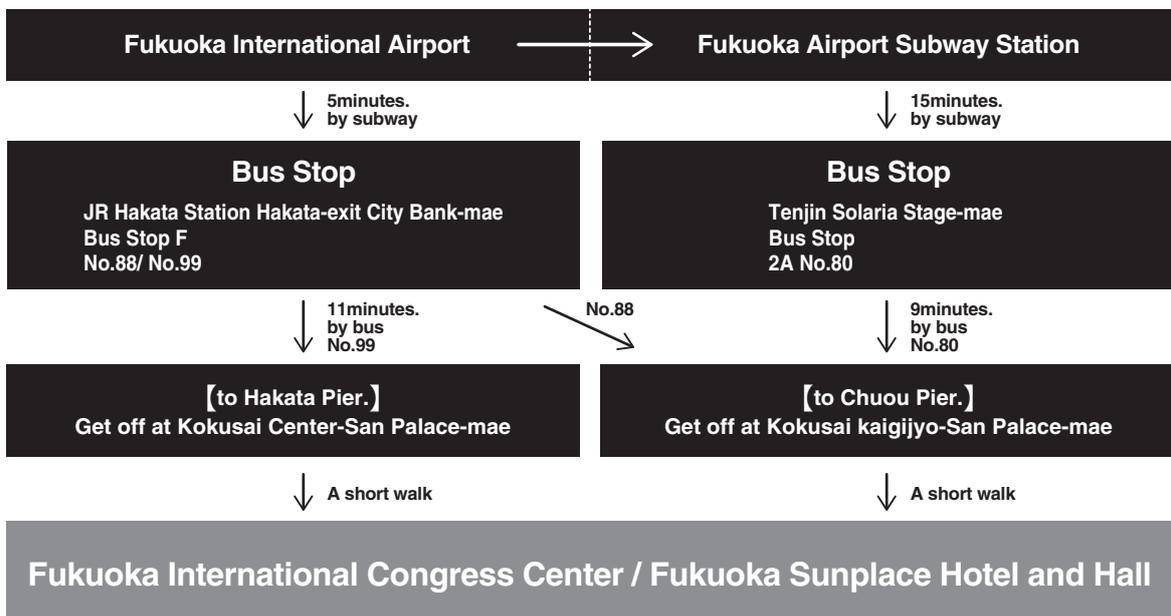
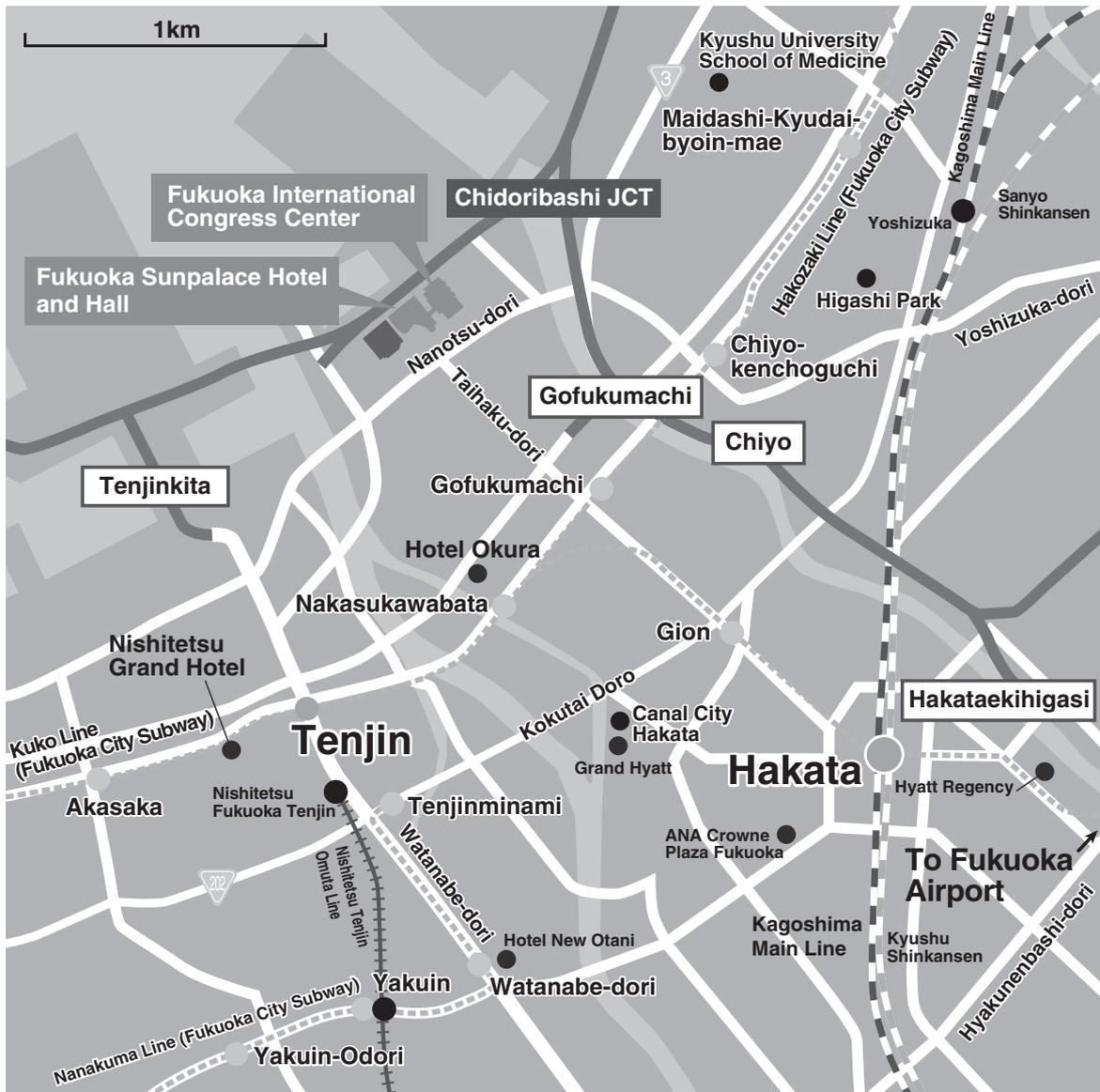
Program Committee Chair: Ryota Hashimoto (National Center of Neurology and Psychiatry)

Program Committee Members:

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Shinya Kasai (Tokyo Metropolitan Institute of Medical Science)	Toshiyuki Someya (Niigata University)
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Kazutaka Shimoda (Dokkyo Medical University)	

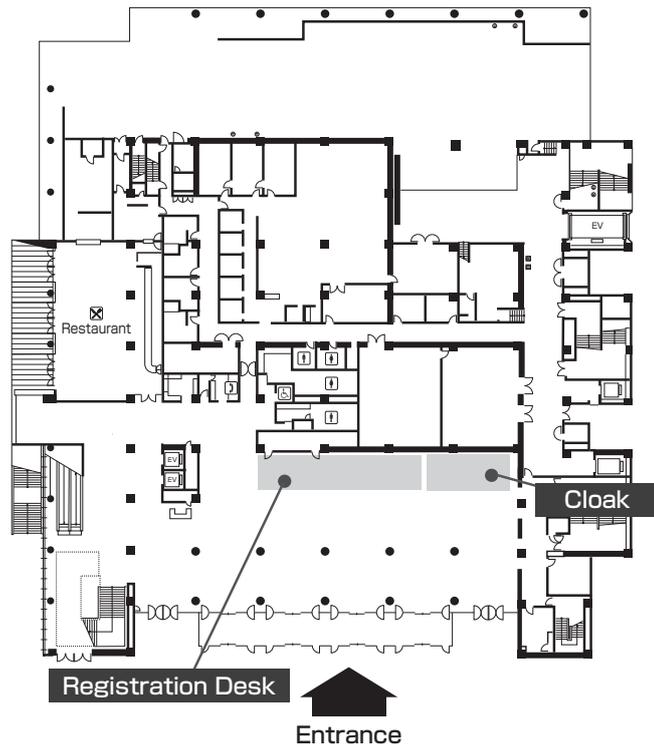
*in alphabetical order

Access

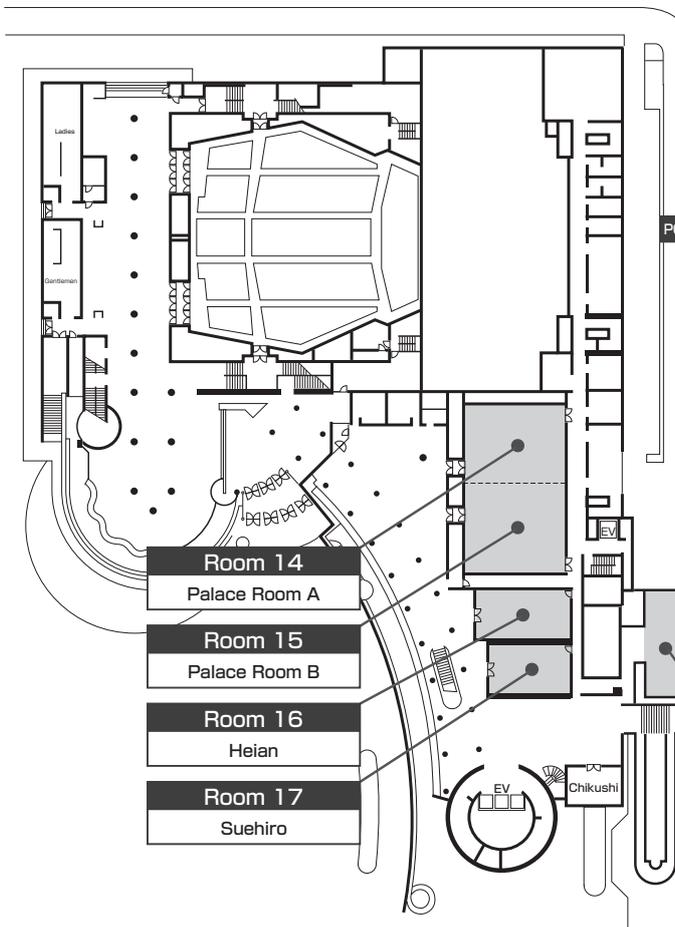


Floor Plan

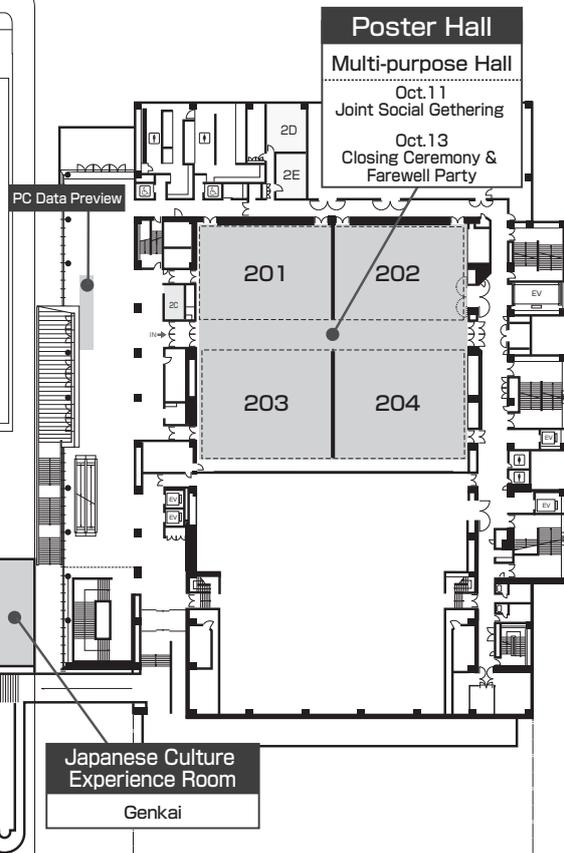
1F Fukuoka International Congress Center



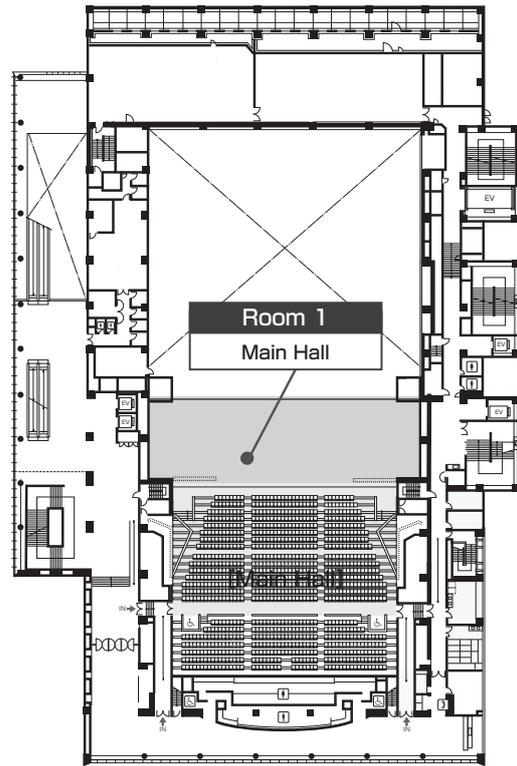
2F Fukuoka Sunpalace Hotel & Hall



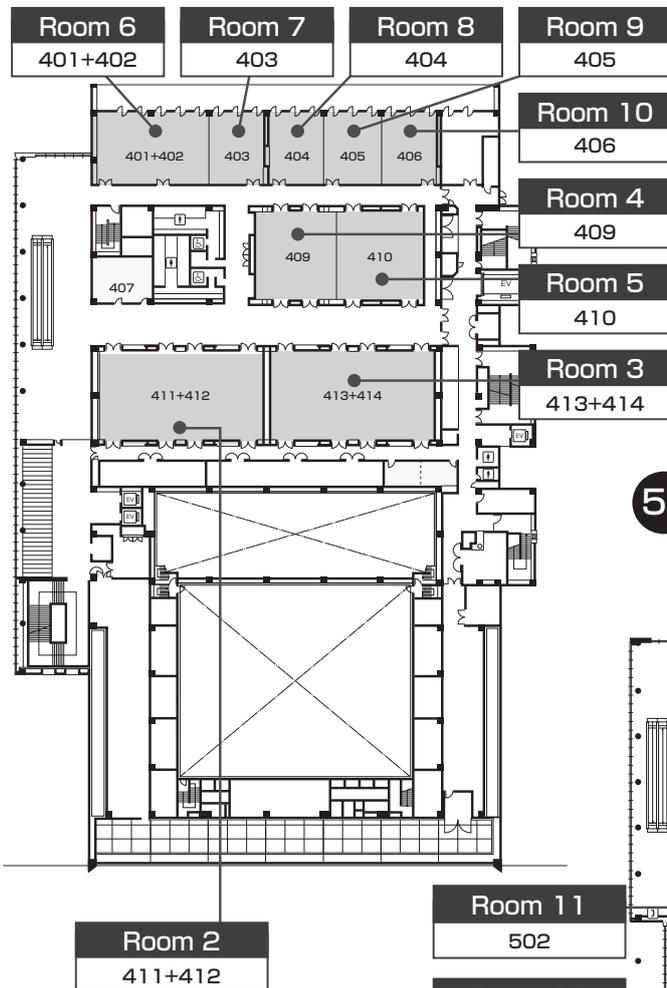
2F Fukuoka International Congress Center



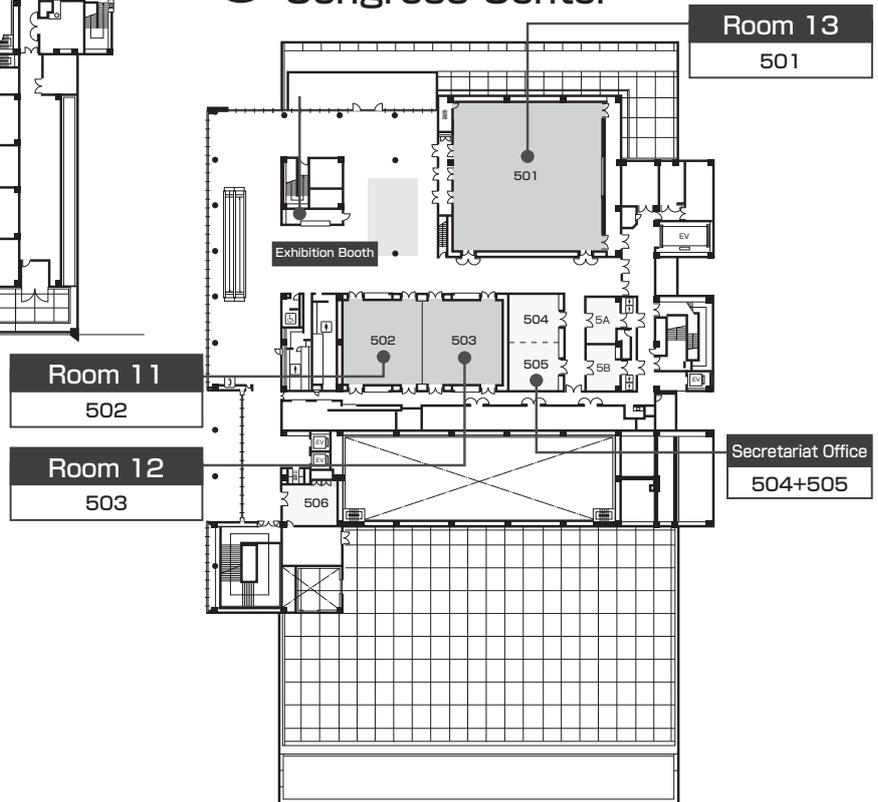
3F Fukuoka International Congress Center



4F Fukuoka International Congress Center



5F Fukuoka International Congress Center



Congress Center				Fukuoka Sunpalace Hotel and Hall				Congress Center	Building	
4F	5F			2F				2F	Floor	
Room10	Room11	Room12	Room13	Room14	Room15	Room16	Room17	Poster Hall	Venue	
406	502	503	501	Palace Room A	Palace Room B	Heian	Suehiro	Multipurpose Hall	Room	
									8:00	
J JSCNP Oral Session 2	E AsCNP-S3 A cutting-edge view on how to regulate the drug dependence related behaviors O: Tomohisa Mori C: Tadashi Saigusa P.50	E AsCNP-S4 Neurobiology of endocannabinoid system in psychiatric disorders O: Hiroki Ishiguro C: Taku Yamaguchi P.53	E AsCNP-S5 Recent Advances in Autism Research from Asia O: Atsushi Sato C: Nobumasa Kato P.56	E AsCNP-S6 Novel treatment strategies based on the advanced understanding of neurobiological mechanisms in obsessive-compulsive spectrum disorder O: Hisato Matsunaga C: Tomohiro Nakao P.59	E AsCNP-S7 What can we learn from brain imaging studies of schizophrenia? From its pathophysiology to actual treatment O: Hiroyuki Uchida C: Makoto Higuchi P.62	E AsCNP-S8 Cellular and molecular signatures of psychiatric disorders in postmortem human brain O: Shinya Kasai C: Shuji Iritani P.65	E AsCNP Oral Session 1 Dementia & Neurological Disorders C: Kyung-Joon Min Kiyoyuki Kitaichi P.285	Poster Set Up	9:00	
J JSCNP Oral Session 5	E AsCNP-S12 Community Care and Global Mental Health: innovative psychiatric pharmacotherapy strategies in Asia O: Chieko Kurihara C: Kazutaka Shimoda P.77	E AsCNP-S13 The Global Collection Initiative for psychiatric genetics from genetic variation to disease mechanisms O: Yasue Horiuchi C: Hiroshi Yoneda P.80	E AsCNP-S14 Novel strategy to treat hallucinations and delusions in schizophrenia: searching for new targets in neural circuits and brain networks O: Kazuyuki Nakagome C: Akira Monji P.83	E P.86	E SS1 Eisai Co., Ltd. C: Hiroyuki Uchida S: Shinichiro Nakajima Takuya Takahashi P.249	E AsCNP-S16 Stresses and psychiatric diseases ~ mechanisms, gender, treatment ~ O: Atsumi Nitta C: Hiroshi Ichinose P.89	E AsCNP Oral Session 2 Childhood & Adolescent Disorders C: Susana Shur-Fen Gau Zhong Chen P.286	Poster Exhibition	11:00	
	E AsCNP-S15 The different effects of ketamine and its enantiomers on chronic stress induced depressed animal models and clinical antidepressant and anti-suicidal effect studies in acute and maintenance therapy of patients with treatment resistant depression O: Tung-Ping T Su C: Hisashi Mori 12:30		E LS1-14 Mitsubishi Tanabe Pharma Corporation C: Hiroyuki Uchida S: Takashi Tsuboi P.237	J P.238	J P.238				13:00	
	E LS1-13 Medical Affairs, Sumitomo Dainippon Pharma Co., Ltd. C: Kazuyuki Nakagome S: Allan H. Young 13:30		J JSCNP Award Lecture 13:40			E LS1-15 Pfizer Japan Inc. / Sumitomo Dainippon Pharma Co., Ltd. C: Chiaki Kawanishi S: Nakao Iwata 13:40			14:00	
			J JSCNP General Assembly & Council Committee 14:30						15:00	
			J P.30 15:10	J JSCNP-SL C: Tsuyoshi Kondo S: Toshiyuki Someya 15:10					16:00	
	E SS4 Otsuka Pharmaceutical Co., Ltd. C: Toshikazu Saito S: Susumu Higuchi Toshikazu Saito Hisatsugu Miyata P.254 16:20	E AsCNP-S19 Future Development of Biomarker in Mental disorders O: Andi J. Tanra C: Minoru Takebayashi P.98	E AsCNP-S20 International neuroimaging big data collaborations: ENIGMA and COCORO O: Ryota Hashimoto C: Michio Suzuki P.101						17:00	
				E AsCNP-P1 P1-1~7 Hwei-Hsien Chen	E AsCNP-P4 P4-1~8 Po See Chen	E AsCNP-P7 P7-1~7 Cheng-Ta Li	E AsCNP-P10 P10-1~7 Hirokazu Mizoguchi	E AsCNP-P13 P13-1~7 Atsushi Sato		
				E AsCNP-P16 P16-1~7 Kazuki Nagayasu	E AsCNP-P19 P19-1~7 Takayuki Nakagawa	E AsCNP-P22 P22-1~7 Sangyeol Lee	E AsCNP-P25 P25-1~7 Hajime Baba	E AsCNP-P28 P28-1~7 Jimmy Lee		
				S: Speaker O: Organizer C: Chair  AsCNP Session  JSNP/JSCNP Session  JSNP Session  JSCNP Session  Sponsored Session J : Japanese E : English  Simultaneous interpretation available						18:00
									18:20	
								AsCNP/JSNP/JSCNP Joint Social Gathering	19:00	
									20:00	

Day2: October 12 (Sat)

Building	Congress Center								
Floor	3F	4F							
Venue	Room1	Room2	Room3	Room4	Room5	Room6	Room7	Room8	Room9
Room	Main Hall	411+412	413+414	409	410	401+402	403	404	405
8:00									
8:40									
9:00	AsCNP-SL2 E C: Chan-Hyung Kim Hiroaki Kawasaki S: Allan H. Young Lakshmi N. Yatham P.29	JSNP-JSCNP JW J Workshop focused on Clinical Trials Act	JSNP-JSCNP JS1 J Clinical practice guideline for anxiety and obsessive-compulsive disorders	JSNP-S1 J Diverse physiological and pathophysiological roles in noradrenergic neurons	JSCNP-S13 J The relationship between supersensitivity psychosis, treatment resistant schizophrenia, and tardive dyskinesia	AsCNP-S21 E Translational Research for New Drug Development in Neuropsychiatric Disorders O: Toshihiko Nabeshima C: Yukihiro Ohno P.104	JSCNP-S14 J Current status and future issues of TDM for clozapine	JSNP Oral Session 1 J	JSCNP-S15 J Sports and clinical psychopharmacology
10:00									
10:20									
11:00	AsCNP-S27 E Regulatory Collaboration to Accelerate Drug Development O: Junko Sato C: Shigeto Yamawaki P.122	JSCNP J CNS Seminar	JSNP-JSCNP JS2 J the cutting-edge and future direction of therapeutic intervention for treatment refractory OCD	JSNP-S2 J "Development of new drugs in pharmaceutical industry" you do not know	JSCNP-S16 J Up-to-Date on Pharmacotherapy for Psychiatric Disorders of the Elderly	SS6 J Otsuka Pharmaceutical Co., Ltd. C: Hisatsugu Miyata S: Jo Kuramochi Tadashi Tanaka Fukiko Okudaira P.260	JSNP-S3 J Neural mechanisms of emotion and its dysfunctions in psychiatric disorders	JSNP Oral Session 2 J	JSCNP Oral Session 7 J
12:00									
12:10									
13:00	LS2-1 J Sumitomo Dainippon Pharma Co., Ltd. C: Teruhiko Higuchi S: Jun Ishigooka P.238	LS2-2 E Otsuka Pharmaceutical Co., Ltd. C: Norio Ozaki S: Andrea Fagiolini P.238	LS2-3 J Eli Lilly Japan K.K. / SHIONOGI & CO., LTD C: Masaru Mimura S: Tempei Otsubo P.238		LS2-5 J TEIJIN PHARMA LIMITED C: Kazuyuki Nakagome S: Shinsuke Kito P.239	LS2-6 J Nippon Shinyaku Co., Ltd. C: Toshikazu Saito S: Naoyuki Hironaka P.239			
13:40									
14:00	AsCNP-SL3 E C: Koki Inoue S: George Koob P.29								
14:40									
14:50									
15:00	AsCNP-S33 E AsCNP-AMED Symposium C: Makoto Suematsu Shigeo Okabe P.141	JSCNP J CLETS Seminar	JSNP-JSCNP JS3 J Biotype of psychiatric disorders: past, present and future perspective	JSNP-S4 J To reconsider schizophrenia	JSNP-S5 J Development of therapeutics for early intervention in psychiatric disorders; Evidence from rodents, primates, and humans	AsCNP-S34 E Early Career Researchers Symposium Clinical research in progress on addictive medicine O: Toshikazu Saito P.145	JSNP-S6 J Study of treatment strategy on disruption of neuro-psycho-brain function by developmental stress	JSNP-S7 J Clinical applications and adverse effects of components of cannabis: current status of basic science researches	
16:00									
16:50									
17:00									
18:00									
19:00									
20:00									

Congress Center				Fukuoka Sunpalace Hotel and Hall				Congress Center	Building
4F	5F			2F				2F	Floor
Room10	Room11	Room12	Room13	Room14	Room15	Room16	Room17	Poster Hall	Venue
406	502	503	501	Palace Room A	Palace Room B	Heian	Suehiro	Multipurpose Hall	Room
									8:00
J JSCNP Oral Session 6	E AsCNP-S22 Molecular Pathology and Therapeutic Potentials in Schizophrenia O: Tetsuro Ohmori C: Yasunori Morio P.107	E AsCNP-S23 Perspectives on psychiatric research from an Asian-Pacific context O: Suresh Sundram C: Toshiya Murai P.110	E SS5 Philip Morris Japan Ltd. / Japan Tobacco Inc. / British American Tobacco Japan Ltd. C: Edward F. Domino Hisatsugu Miyata S: Edward F. Domino Manuel Peitsch Sarah Cooney Ian W. Jones P.257	E AsCNP-S24 Brain Stimulation on Neuropsychiatric Disorders: Basic Mechanisms and Clinical Efficacy O: Cheng-Ta Li C: Yasushi Ishida P.113	E AsCNP-S25 Early detection and new intervention in psychiatric disorders: from rare diseases, schizophrenia, to dementia O: Norio Ozaki C: Makoto Arai P.116	E AsCNP-S26 Imaging genetics of schizophrenia O: Jinsong Tang C: Hiroaki Tomita P.119	E AsCNP Oral Session 3 Bipolar Disorders & Depression C: Ya-Mei Bai Ming-Chyi Huang P.287	Poster Set Up	9:00
J JSCNP Oral Session 8	E SS7 Chugai Pharmaceutical Co., Ltd. C: Takuya Saito S: Motoko Maekawa Shabeesh Balan Kevin Sanders P.261	E AsCNP-S28 The habenular nuclei involved in emotional regulation O: Hitoshi Hashimoto C: Hirokazu Hirai P.126	E SS8 Medical Affairs, Sumitomo Dainippon Pharma Co., Ltd. C: Nakao Iwata S: Herbert Y. Meltzer John M. Kane P.264	E AsCNP-S29 Research on Asian Psychotropic prescription pattern (REAP) O: Shih-Ku Lin C: Norio Watanabe P.129	E AsCNP-S30 Network meta-analysis, individual participant (network) meta-analysis & Cumulative (network) meta-analysis O: Toshiaki A. Furukawa C: Hisateru Tachimori P.132	E AsCNP-S31 Gliar-Pathology: Findings from Rodent Models to Human Subjects O: Takahiro Kato C: Po-See Chen P.135	E AsCNP-S32 Neuropsychopharmacology of relaxin-3 O: Gavin Stewart Dawe C: Masabumi Minami P.138	Poster Exhibition	11:00
									12:30
	J P.239	E P.239	E LS2-13 Eisai Co., Ltd. C: Masatoshi Takeda S: Kenjiro Ono P.239		E LS2-15 H. Lundbeck A/S C: Nakao Iwata S: John M. KANE Christoph U. Correll P.240		E LS2-12 Philip Morris Japan Ltd. C: Soichiro Ide S: Patrick Picavet Serge Maeder	Poster Exhibition	13:00
									13:30
	E LS2-11 KYOWA Pharmaceutical Industry Co., Ltd. / Yoshitomiyakuhin Corporation C: Tsuyoshi Kondo S: Masaki Kato		J P.30	JSNP-JSCNP IIL C: Hisatsugu Miyata Reiji Yoshimura S: Shigenobu Kanba				Poster Exhibition	14:00
									14:30
	E AsCNP-S35 Obsessive-compulsive disorder: clinical heterogeneity and innovative treatment approaches O: Chan-Hyung Kim C: Toshihiko Kinoshita P.148	E AsCNP-S36 Unveiling the neuro-cognitive underpinnings of schizophrenia: From clinical application to conceptual analysis O: Yen Kuang Yang C: Toshiya Murai P.151	E AsCNP-S37 Ketamine: From Abused Drug to Rapid-Acting Antidepressant O: Kenji Hashimoto C: Edward Domino P.154	E AsCNP-S38 Emerging roles of DAMPs/alarmins and PRRs in neurological disorders O: Atsumi Kawabata C: Masako Iseki P.157		E AsCNP Featured Symposium The perspectives of psychiatry and neuropharmacology in the post-genomic era C: Akira Sawa Suresh Sundram P.41	E AsCNP Oral Session 4 Addiction C: Kazutaka Shimoda Tsuyoshi Miyakawa P.288	Poster Discussion	15:00
									16:00
									16:40
									17:00
									18:00
									18:10
									18:30
									19:00
									19:15
									20:00

AsCNP-P2 P2-1~7 Jin-Chung Chen	AsCNP-P5 P5-1~6 Shang-ying Tsai	AsCNP-P8 P8-1~7 Kazuhiro Takuma	AsCNP-P11 P11-1~6 Hiroki Ishiguro	AsCNP-P14 P14-1~6 Taku Yamaguchi
AsCNP-P17 P17-1~6 Takeshi Morihara	AsCNP-P20 P20-1~7 Makoto Tsuda	AsCNP-P23 P23-1~7 Chieh-Hsin Lin	AsCNP-P26 P26-1~7 Erllyn Limoa	AsCNP-P29 P29-1~7 Kazutaka Ohi

S : Speaker
O : Organizer
C : Chair

AsCNP Session
 JSNP/JSCNP Session
 JSNP Session
 JSCNP Session
 Sponsored Session

J : Japanese **E** : English
 : Simultaneous interpretation available

Day3: October 13 (Sun)

Building	Congress Center								
Floor	3F	4F							
Venue	Room1	Room2	Room3	Room4	Room5	Room6	Room7	Room8	Room9
Room	Main Hall	411+412	413+414	409	410	401+402	403	404	405
8:00									
8:40									
9:00	AsCNP-S40 Noteworthy drug discovery/ research and development - Aiming for innovation - O: Tetsuro Kikuchi C: George Koob <small>P.163</small>	JSNP-S8 Novel prevention and treatment of PTSD -from basic research to clinical trial- J	J	AsCNP-S41 Cognitive impairments, neuroimaging and genetics in chronic methamphetamine users and ketamine users O: Yanhui Liao C: Kenji Matsumoto <small>P.171</small>	AsCNP-S42 New development of Research in Asian Psychotropic Drug Prescription (REAP) O: Chay Hoon Tan C: Naotaka Shinfuku <small>P.174</small>	AsCNP-S43 The multidimensional approach to treatment response in major depression O: Po-Hsiu Kuo C: Osamu Shirakawa <small>P.178</small>	JSNP-S9 Gender differences involved in glutamate in the mice central nervous system J	JSNP-S10 Roles of damage-associated molecules for inflammatory conditions in mental illnesses J	JSNP-S11 Psychopharmacological strategies for various clinical issues in schizophrenia J
10:00									
10:20									
11:00	AsCNP-S46 CINP Symposium - Current and future management of major depressive disorder: challenges and perspectives - O: Siegfried Kasper C: Shigeto Yamawaki <small>P.187</small>	SS10 Janssen Pharmaceutical K.K. C: Takuya Saito S: Kazuya Ono Norio Ozaki Hirotaoka Kosaka <small>P.267</small>	JSNP-JSCNP EGUIDE workshop	AsCNP-S47 Psychostimulant Addiction and Psychosis: Human Brain Imaging and Rodent Studies O: Jin-Chung Chen C: Hidehiko Takahashi <small>P.190</small>	AsCNP-S48 Basic and Translational Research in Epilepsy O: Zhong Chen C: Kazuhiko Yanai <small>P.193</small>	AsCNP-S49 Neuroimmune Mechanisms of Mood Disorder: A Translational Perspective O: Po See Chen C: Yasushi Kajii <small>P.196</small>	JSNP-S13 Molecular mechanisms of emotional behaviors J	JSNP-S14 Symptomatic animal models by circuit manipulation and their application to drug development J	AsCNP Oral Session 5 Schizophrenia C: Tianmei Si Kristian Liaury <small>P.289</small>
12:00									
12:10									
13:00	AsCNP Lunch Session C: Chan Hyung Kim Kazutaka Ikeda <small>P.240</small>	LS3-2 Meiji Seika Pharma Co., Ltd. C: Toshihiko Matsumoto S: Toshiaki A. Furukawa <small>P.241</small>							
13:40									
14:00	AsCNP-SL4 C: Hitoshi Hashimoto S: Hailan Hu <small>P.29</small>								
14:40									
14:50									
15:00	AsCNP-SL5 C: Tianmei Si Jun Nakamura S: John M. Kane Herbert Y. Meltzer <small>P.29</small>	JSNP-S17 A Future Perspective on TMS as Neuromodulation for Psychiatric Disorders J		AsCNP-S53 New vistas on monoamine contributions to learning and memory O: Satoshi Kida C: Masamichi Sakagami <small>P.210</small>	AsCNP-S54 Rethinking of Effectiveness of Clozapine Treatment -Refractory Schizophrenia O: Hidehiro Oshibuchi C: Takefumi Suzuki <small>P.213</small>	AsCNP-S55 The aging effects on the brain, cognition, and cardiovascular system of pateints with severe mental illness O: Shang-ying Tsai C: Minoru Narita <small>P.216</small>	JSNP-S18 Visceral and interoceptive information shapes emotional experience J	JSNP-S19 Pathological possibilities in autism spectrum disorder; relation to therapy J	JSNP-S20 Approach to appropriate use of opioids by pharmacists J
16:00									
17:00									
18:00									
19:00									
20:00									

Congress Center				Fukuoka Sunpalace Hotel and Hall				Congress Center	Building
4F	5F			2F				2F	Floor
Room10	Room11	Room12	Room13	Room14	Room15	Room16	Room17	Poster Hall	Venue
406	502	503	501	Palace Room A	Palace Room B	Heian	Suehiro	Multipurpose Hall	Room
	Lundbeck Science Award Lectures C: Shih-Ku Lin, Kiyofumi Yamada S: Brian Dean, Toshi A. Furukawa								8:00
JSNP Oral Session 3 [J] 8:40 [E] 9:40 [P.271]		JSNP-S12 Treatments for persons with ADHD [J]	SS9 Japan Tabacco Inc. O: C: Naoyuki Hironaka C: Hisatsugu Miyata S: Midori Motoi Noriko Nishikawa Shigeki Moriguchi Kinji Ohno [P.266]	AsCNP-S44 Dementia-Inflammation and Propagation O: Tetsuaki Arai C: Zhou Wu [P.181]	JSNP General Assembly [J]	AsCNP-S45 Translational Research regarding pharmacological treatment of ADHD O: Masanori Isobe C: Masumi Inagaki [P.184]	AsCNP-AL1 Award Lecture1 C: Suresh Sundaram Lih-Chu Chiou [P.273]		9:00
AsCNP-AL2 Award Lecture2 C: Naren Rao Masabumi Minami [P.278]	JSNP-PS The role of Psychiatric Pharmacy Specialist in psychopharmacotherapy [J]	JSNP-S15 Drug discovery and neuroimaging [J]	SS11 Japan Tabacco Inc. O: Hisatsugu Miyata C: Naoyuki Hironaka Kohji Takada S: Naoyuki Hironaka Hirofumi Koda Kengo Yokomitsu Kenjiro Aoyama [P.268]	AsCNP-S50 New frontier of bio-markers and therapeutics in Dementia O: Kohji Fukunaga C: Masatoshi Takeda [P.200]	JSNP-S16 A virtual R&D meeting on a sigma antagonist [J]	AsCNP-S51 Multifaceted Roles of Orexins: Sleep, Pain and Reward Regulations O: Lih-Chu Chiou C: Hiroshi Nagase [P.203]			11:00
	LS3-11 MOCHIDA PHARMACEUTICAL CO., LTD. / Mitsubishi Tanabe Pharma Corporation / Yoshitomiyakuhin Corporation C: Tempei Otsubo S: Satoshi Asakura [P.241]			LS3-14 Astellas Pharma Inc. C: Norio Ozaki S: Yuichi Inoue [P.241]		AsCNP-S52 How should our journals be? ~ Clinical Psychopharmacology and Neuroscience & Neuropsychopharmacology Reports ~ O: Duk-In Jon Tsuyoshi Miyakawa [P.241]			13:00
			JSNP-SL C: Hisatsugu Miyata S: Edward F. Domino [P.30]		LS3-15 Japan Medical Office, Takeda Pharmaceutical Company Limited. / Medical Affairs, Lundbeck Japan K.K. C: Takeshi Inoue S: Koichiro Watanabe [P.241]				14:00
JSNP-S21 Kampo medicine other than yokukansan for behavioral and psychological symptoms of dementia (BPSD) [J]	JSNP-S22 Pathway from divergent etiologies to convergent endophenotypes in schizophrenia [J]	JSNP-S23 Update in molecular imaging of psychotropic drugs [J]		AsCNP-S57 Toward a new era of precision medicine for Parkinson's disease O: Nobutaka Hattori C: Yoshio Tsuboi [P.219]	AsCNP-S58 Asian Consortium on MRI studies in Psychosis project O: Kiyoto Kasai C: Jun Soo Kwon [P.225]	AsCNP-S59 Clinical Experience and Researches of Adult ADHD in Korea O: Duk-In Jon [P.228]	AsCNP-S60 Epigenetic mechanisms underlying psychiatric disorders O: Makoto Taniguchi C: Kazuya Iwamoto [P.231]		15:00
		AsCNP-S56 Planning and conducting large pragmatic trials in psychiatry: for effective discovery, dissemination and implementation of evidence-based practices O: Mitsuhiro Yamada C: Hisae Ono							17:00
									18:00
									18:10
									19:00
									20:00

S : Speaker
O : Organizer
C : Chair

AsCNP Session
 JSNP/JSCNP Session
 JSNP Session
 JSCNP Session
 Sponsored Session

J : Japanese E : English
🗣️ : Simultaneous interpretation available

AsCNP-P3 P3-1~6 Andrew Holmes	AsCNP-P6 P6-1~6 Yuji Odagaki	AsCNP-P9 P9-1~7 Gaku Okugawa	AsCNP-P12 P12-1~7 Yu Ohmura	AsCNP-P15 P15-1~6 Yukihiko Ohno
AsCNP-P18 P18-1~7 Masato Hosokawa	AsCNP-P21 P21-1~6 Satoshi Kida	AsCNP-P24 P24-2~7 Mitsuhiro Miyashita	AsCNP-P27 P27-1~6 Kazuya Toriumi	AsCNP-P30 P30-1~6 Masumi Yoshimura
Poster Session for S40 Tetsuro Kikuchi				

Information for Participants

1. Registration

(1) Registration Desk

Opening Hours		Location
October 11 (Fri)	7:30~18:30	Fukuoka International Congress Center 1F Entrance Hall
October 12 (Sat)	8:00~17:00	
October 13 (Sun)		

(2) Registration Fees

Registration Type	Rates (On-site Registration)
Members	JPY 45,000
Members (Developing Countries)	JPY 30,000
Student Members	JPY 15,000
Non-members	JPY 55,000
Non-members (Developing Countries)	JPY 40,000
Student Non-members	JPY 18,000
Accompanying Persons	JPY 5,000

*Payment by cash and credit card (VISA, MasterCard, JCB, American Express, Diners Club) is acceptable.

■ Registration Fee for Members, Non-members and Student Members Includes:

- Admission to all scientific sessions including Japanese sessions of JSNP/JSCNP2019
- Admission to poster exhibition and technical exhibition
- Admission to all social programs
- Admission to Japanese cultural experience programs
- Congress materials (abstract booklet, congress bag, etc.)

■ Registration Fee for Accompanying Persons Includes:

- Admission to all social programs
- Admission to Japanese cultural experience programs

2. For those who have completed pre-registration

Name badge and abstract booklet will be sent to pre-registrants living in Japan and early-bird registrants (who completed registration by July 31) living outside of Japan in late September. Please make sure to bring them to the congress site. You do not have to stop by at the registration desk.

3. Abstracts

The abstracts of AsCNP2019 will be published online and on app as well as in the abstract booklet.

The following password is required to browse / download the abstracts online and on app.

Password: **fukuoka2019**

■ Online Abstracts

Please access via the congress website at

<https://www2.aeplan.co.jp/ascnp/>

■ App

Free to download from App Store and Google Play.

Supported OS: iOS 8 or later, Android 4.1 or later

App name: AsCNP/JSNP/JSCNP 2019

Search word: ascnp



4. Social Events

The following social events are scheduled during the congress.

■ Pre-opening Gathering

October 10 (Thu) 17:00~19:30

Fukuoka International Congress Center, 1F, Raconter

■ AsCNP/JSNP/JSCNP Joint Social Gathering

October 11 (Fri) 18:20~20:00

Poster Hall (Fukuoka International Congress Center, 2F, Multi-purpose Hall)

*AsCNP Lundbeck Science Award Ceremony will be held during this social gathering.

■ Evening Mixer with Cheese & Wine

October 12 (Sat) 18:10~19:00

Poster Hall (Fukuoka International Congress Center, 2F, Multi-purpose Hall)

■ Closing Ceremony with Farewell Party

October 13 (Sun) 18:10~20:00

Poster Hall (Fukuoka International Congress Center, 2F, Multi-purpose Hall)

*Award Ceremony for the following awards will be held during the closing ceremony.

- AsCNP Outstanding Research Award for AsCNP2019
- Excellent Research Award for AsCNP2019
- Excellent Presentation Award for AsCNP2019
- JSNP Excellent Presentation Award for AsCNP2019
- JSCNP Excellent Presentation Award for AsCNP2019

5. Services & Facilities

Registration Desk	Fukuoka International Congress Center, 1F, Entrance Hall
Secretariat Office	Fukuoka International Congress Center, 5F, 504
Speakers' Data Preview	Fukuoka International Congress Center, 2F, Lobby
Exhibition	Fukuoka International Congress Center, 5F, Lobby
Cloak	Fukuoka International Congress Center, 1F, Entrance Hall Opening Hours: October 11 (Fri) 7:00~20:30 October 12 (Sat) 8:00~19:30 October 13 (Sun) 8:00~20:30
Drinks	Drink service will be available in poster hall (Fukuoka International Congress Center, 2F, Multi-purpose Hall).
Lunch	Lunch boxes will be provided by sponsoring companies at the lunch time sessions. Halal and vegetarian lunch boxes will be available on 2F lobby 11:00~13:00 each day. Please pick up a lunch box there and join the lunch time sessions.

Restaurants/cafes	There are restaurants and cafes in Fukuoka International Congress Center and Fukuoka Sunpalace Hotel & Hall.
Internet	Free Wi-Fi is available in Fukuoka International Congress Center.
Business Center	Copy, printer, fax and courier are available for a charge at the administration office of Fukuoka International Congress Center on 1F.
Japanese Cultural Experience	Fukuoka Sunpalace Hotel & Hall, 2F, Genkai
Smoking Area	Fukuoka International Congress Center, 2F & 4F, Deck Fukuoka Sunpalace Hotel & Hall, 6F, Smoking Booth
Convenience Store	SEVEN-ELEVEN and MINI STOP are located within a 5-minute walk from the venue.
Child Care Service	Childcare room operated by babysitting company is available by advance reservation only. Please refer to the AsCNP2019 website.
Paging Service	No paging service is available to call an individual except for an emergency. Please use a bulletin board in front of the registration desk in order to communicate with the other participants.
Lost & Found	Lost items will be kept at the General Information Desk on 1F, Fukuoka International Congress Center.
Photography/Recording	For the purpose of copyright protection, please refrain from taking pictures and recording audio/video without permission from the presenters or the secretariat in the session rooms and poster hall.

6. Japanese Cultural Experiences

AsCNP2019 will provide you a chance to experience Japanese cultural activities.

AsCNP2019 participants and accompanying persons who have registered for the congress can participate in the following activities for free.

IKEBANA (Flower Arrangement)

IKEBANA is one of the traditional cultures in Japan.

This tells us the importance which is having emotional leeway.

October 11 (Fri) 10:30~12:10 13:40~15:10

Place: Fukuoka Sunpalace Hotel & Hall, 2F, Genkai



KODO (Traditional Incense-smelling Ceremony)

KODO is the art of fragrance.

When feeling the fragrance, they often say hearing (not smelling) it.

October 11 (Fri) 10:30~12:10 13:40~15:10

Place: Fukuoka Sunpalace Hotel & Hall, 2F, Genkai



SADO (Tea Ceremony)

We can learn Japanese manner through SADO.

And also, enjoy “OMOTENASHI” that means Japanese service.

October 12 (Sat) 10:30~12:10 13:40~15:10

Place: Fukuoka Sunpalace Hotel & Hall, 2F, Genkai



SYODO (Calligraphy)

SYODO can express not only beauty of letter but individuality.

October 12 (Sat) 10:30~12:10 13:40~15:10

Place: Fukuoka Sunpalace Hotel & Hall, 2F, Genkai



ORIGAMI (Paper-folding)

ORIGAMI can be performed, as hobby, education, or effect of rehabilitation.

October 11 (Fri) 10:00~17:00

October 12 (Sat) 10:00~17:00

October 13 (Sun) 10:00~17:00

Place: Fukuoka Sunpalace Hotel & Hall, 2F, Genkai



KITSUKE TAIKEN (Kimono Wearing Experience)

* Advance reservation required

* Exclusively for non-Japanese participants

* Limited to 20 people per day

You can attend the social events of AsCNP2019 wearing a Kimono!

Please make a reservation via AsCNP2019 website.

October 11 (Fri) 16:00

~end of AsCNP/JSNP/JSCNP Joint Social Gathering

Place: Fukuoka Sunpalace Hotel & Hall, 2F, Genkai

October 13 (Sun) 16:00~end of Farewell Party

Place: Fukuoka Sunpalace Hotel & Hall, 2F, Chikushi



Information for Chairs and Presenters

1. Information for Chairs

A. Chairs of Oral Sessions (Special Lectures, Symposia, Award Lectures, Oral Sessions)

Please take the seats prepared for chairs at the front right in each session room no later than 10 minutes prior to the starting time of the session.

The chairs are expected to ensure the session starts and finishes punctually as scheduled.

Remaining time for each presentation will be notified with a time indicator with lights as follows;

- Yellow Light: end of presentation - start Q & A
- Red Light: end of Q & A - time for next presentation

B. Chairs of Poster Sessions

Please come to the reception desk for chairs of poster sessions located on the 2F lobby of International Congress Center no later than 30 minutes prior to the starting time of the session.

2. Information for Presenters

* All presenters should disclose relevant conflict of interest (COI) at their presentations.

A. Presenters of Oral Sessions (Special Lectures, Symposia, Award Lectures, Oral Sessions)

(1) Arrival

Please preview your presentation data no later than 30 minutes prior to the starting time of the session.

Take the seats prepared for speakers in each session room no later than 10 minutes prior to the starting time of the session.

(2) Time for Presentation

- Special Lectures / Symposia
Time allocation for presentations differs depending on each session.
- Award Lecture 1, 2
12 minutes (9 minutes for Presentation, 3 minutes for Q & A)
- Oral Sessions 1~5
9 minutes (7 minutes for Presentation, 2 minutes for Q & A)

(3) Presentation Data Preview

Please bring your laptop or presentation data saved in CD-R or USB flash memory (Windows only).

Opening Hours	Location
October 10 (Thu) 15:00 ~ 17:30	International Congress Center 2F Lobby
October 11 (Fri) 7:30 ~ 18:30	
October 12 (Sat) 8:00 ~ 17:00	
October 13 (Sun) 8:00 ~ 13:30	

*Data preview before the first sessions of the day will be very crowded.

Please preview your presentation data well in advance.

(4) Technical Information

- The equipment for PowerPoint presentations on site will be set to project presentations in the **16:9 widescreen aspect ratio**.
- Operating system on site is Windows 10, and it is not compatible with Macintosh.
Please bring your own laptop if you use Macintosh or a video is included in your presentation data
- A display, computer mouse, and keyboard will be prepared on the podium in each session room to be operated by presenters themselves.

■ For those bringing presentation data in CD-R or USB Flash Memory

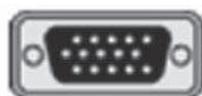
- Windows PowerPoint 2010/2013/2019 are acceptable.
- Please use standard fonts such as Arial, Century, Times New Roman, etc.
- Please name the presentation data with your presentation No. and your name.
(ex. O1-9_Taro Fukuoka)
- Please be sure to bring your back-up data with you.

■ For those bringing your own laptop

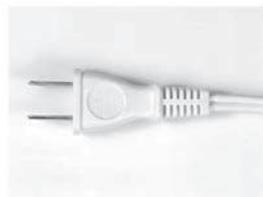
- Please ensure that your computer is equipped with the proper monitor connector (either HDMI or D-sub 15 pin) as shown below.
If your computer does not have one of these connections, please bring an appropriate converter with you.
- Be sure to bring an AC adaptor. Please note that voltage in Japan is 100V and the frequency ranges 50-60 Hz depending on the area (60Hz in Fukuoka).
- The socket is type A. If your laptop is not convertible, transformers and/or plug adaptors are necessary.
- **Please deactivate the screen-saver and power saving mode of your laptop.**



HDMI



D-sub 15 pin



Type A plug & outlet

B. Presenters of Poster Sessions

(1) Periods of Poster Display

Each poster will be displayed for one day during the meeting period (October 11 (Fri) - 13 (Sun)).
Please set up your poster in the morning of your presentation day.

(2) Presentation

Poster sessions will be moderated by the chairs.
Allotted time for each poster is 5 minutes. (3 minutes for presentation, 2 minutes for Q & A)
Please wear a yellow ribbon indicating a poster presenter on your chest.

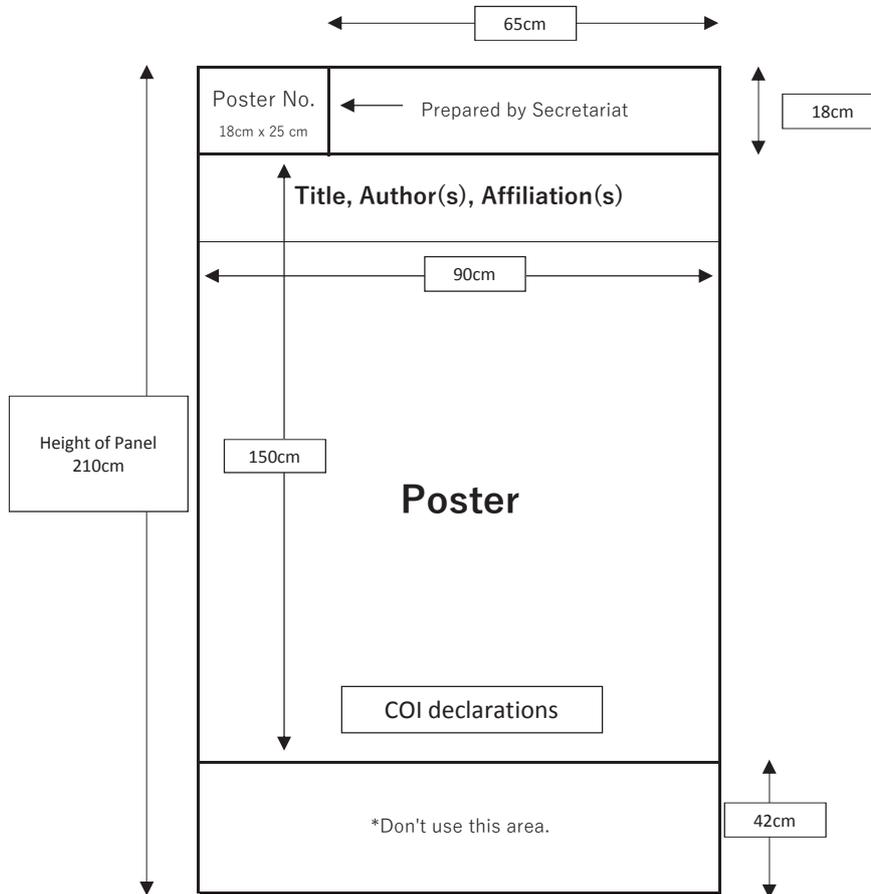
(3) Time for Set up, Presentation / Discussion, Removal

Location	Schedule	October 11 (Fri)	October 12 (Sat)	October 13 (Sun)
Poster Hall (International Congress Center, 2F, Multi-purpose Hall)	Set up	8:00 ~ 10:30	8:00 ~ 10:30	8:00 ~ 10:30
	Display	10:30 ~ 13:40	10:30 ~ 16:40	10:30 ~ 16:40
	Presentation/ Discussion	13:40 ~ 15:10	16:40 ~ 18:10	16:40 ~ 18:10
	Removal	15:10 ~ 16:00	18:10 ~ 19:15	18:10 ~ 20:00

(4) Posting

- Poster numbers and pushpins are prepared by the secretariat on each panel.
- Each panel space available is 90 cm wide x 150 cm high.
- Presentation title, author(s) and affiliation(s) should be indicated on top of the poster.
- Presenters must disclose applicable COI (Conflict of Interest) of their presentation.

<Example>



Pre-Congress Meetings

Korean Symposium

October 10 (Thu) 14:30 ~ 17:00 / Room 4 (Fukuoka International Congress Center, 4F, 409)

Organizer: Korean College of Neuropsychopharmacology (KCNP)

A. Brain- Gut- microbiota Axis in Psychiatric Disease

Chair: Sang-Yeol Lee (Wonkwang University School of Medicine and Hospital)

Young-Joon Kwon (Soonchunhyang University Chun-an Hospital)

1. Overview of Brain-Gut- Microbiota axis
Young-Hoon Ko (Korea University College of Medicine)
2. Brain-Gut-Microbiota axis in Anxiety disorder
Sae Heon Jang (Bongseng Memorial Hospital)
3. Brain-Gut- Microbiota axis in Depressive disorder
Jong-Hyun Jeong (The Catholic University of Korea)
4. Brain-Gut- Microbiota axis in Bipolar disorder
Jeongwan Hong (Iksan Hospital)

B. Korean Medication Algorithm Project (KMAP) for Major Psychiatric Diseases

Chair: Kyung Joon Min (Chung-ang University)

Bo-Hyun Yoon (Naju National Hospital)

1. Korean Medication Algorithm Project for Depressive Disorder (KMAP-DD)
Young-Min Park (Inje University College of Medicine)
2. Korean Medication Algorithm Project for Bipolar Disorder (KMAP-BPD)
Won Kim (Seoul Paik Hospital, Inje University)
3. Korean Medication Algorithm Project for Schizophrenia (KMAP-SPR)
Jung Suk Lee (NHIS Ilsan Hospital)

2019 TSBPN-AsCNP Joint Meeting -Taiwan Research Symposium-

October 10 (Thu) 15:00 ~ 17:10 / Room 5 (Fukuoka International Congress Center, 4F, 410)

Organizer: Taiwanese Society of Biological Psychiatry and Neuropsychopharmacology (TSBPN)

- 15:00 ~ 15:10 Opening Remarks
Yen-Kuang Yang (National Cheng Kung University)
- 15:10 ~ 15:45 Novel Drug Development
Lih-Chu Chiou (National Taiwan University)
- 15:45 ~ 16:20 Neuroimage Studies in Attention-Deficit Hyperactivity Disorder: Endophenotype,
Imaging Genetics and Treatment Effect
Susan Shur-Fen Gau (National Taiwan University)
- 16:20 ~ 16:40 Young Investigator
Yi-Ting Lin (National Taiwan University)
- 16:40 ~ 17:00 Student Member
En-Ju Lin (National Cheng Kung University)
- 17:00 ~ 17:10 Closing
Shih-Ku Lin (Taipei City Hospital and Psychiatric Center)

AsCNP-ASEAN Pre-Congress Meeting of Neuropsychopharmacology

Bridging Research Collaboration between AsCNP and ASEAN Region in Psychiatric Field

October 10 (Thu) 2019 15:00 ~ 16:40 / Room 3 (Fukuoka International Congress Center, 4F, 413+414)

Organizer: Indonesian Association of Biological Psychiatry and Psychopharmacology (IABPP)

*Open for all congress participants

- 15:00 ~ 15:10 Opening Remarks
Andi Jayalangkara Tanra (Indonesia)
- 15:10 ~ 15:30 Potential link between T102C polymorphism in the serotonin receptors (5-HT2A) gene and treatment response of risperidone on schizophrenia
Andi Jayalangkara Tanra (Indonesia)
- 15:30 ~ 15:50 Polypharmacy and Psychotropic Drug Load: Findings from REAP Studies
Shih-Ku Lin (Taiwan)
- 15:50 ~ 16:10 Let's Talk Malaysia (#LetsTalkMY): The need for more research collaboration in improving mental health care
Amer Siddiq (Malaysia)
- 16:10 ~ 16:30 Hikikomori in Japan and worldwide: Multidimensional Assessment and Intervention
Takahiro Kato (Japan)
- 16:30 ~ 16:40 Closing remarks

*Abstracts of this session are on P 385

Special Lecture

Special Lecture

Special Lecture 1 October 11 (Fri), 15:20 - 16:20 / Room 1 (Fukuoka International Congress Center, 3F, Main Hall)

Chair: Jun Soo KWON (*Department of Psychiatry, Seoul National University, Korea*)

SL1 “New Era” of the Pharmaceutical Industry

Masayo TADA
Sumitomo Dainippon Pharma Co., Ltd.

Special Lecture 2 October 12 (Sat), 8:40 - 10:20 / Room 1 (Fukuoka International Congress Center, 3F, Main Hall)

Chairs: Chan-Hyung KIM (*Department of Psychiatry, Yonsei University College of Medicine, Korea*)
Hiroaki KAWASAKI (*Department of Psychiatry, Faculty of Medicine, Fukuoka University, Japan*)

SL2-1 Cognitive Dysfunction in Bipolar Disorder

Allan H. YOUNG
King's College London, London, UK

SL2-2 Recent Advances in Treatment of Bipolar Depression

Lakshmi N. YATHAM
Department of Psychiatry, University of British Columbia, Canada

Special Lecture 3 October 12 (Sat), 13:40 - 14:40 / Room 1 (Fukuoka International Congress Center, 3F, Main Hall)

Chair: Koki INOUE (*Department of Neuropsychiatry, Osaka City University, Japan*)

SL3 The Gain in the Brain is in the Pain

George KOOB
National Institute on Alcohol Abuse and Alcoholism, USA

Special Lecture 4 October 13 (Sun), 13:40 - 14:40 / Room 1 (Fukuoka International Congress Center, 3F, Main Hall)

Chair: Hitoshi HASHIMOTO (*Graduate School of Pharmaceutical Sciences, Osaka University, Japan*)

SL4 From Pecking Order to Ketamine – Neural mechanisms of social and emotional behaviors

Hailan HU
Zhejiang University School of Medicine, China

Special Lecture 5 October 13 (Sun), 14:50 - 16:30 / Room 1 (Fukuoka International Congress Center, 3F, Main Hall)

Chairs: Tianmei SI (*Peking University Institute of Mental Health, China*)
Jun Nakamura (*Kitakyushu Koga Hospital / University of Occupational and Environmental Health, Japan*)

SL5-1 The Treatment of Early Phase Schizophrenia: Improving Outcomes

John M. KANE
Department of Psychiatry, The Zucker Hillside Hospital, USA

SL5-2 Novel Treatments Derived from Understanding Atypical Antipsychotic Drug Efficacy for Positive and Negative Symptoms and Cognitive Impairment in Schizophrenia and Preclinical Models

Herbert Y. MELTZER
Department of Psychiatry, Northwestern Feinberg School of Medicine, Chicago, IL, USA

JSNP / JSCNP Lecture

[JSNP / JSCNP] Invited Lecture October 12 (Sat), 13:40 - 14:40 / Room 13 (Fukuoka International Congress Center, 5F, 501)

*Japanese Session

Chairs: Hisatsugu MIYATA (*Department of Psychiatry, Jikei University School of Medicine, Japan*)
Reiji YOSHIMURA (*Department of Psychiatry, University of Occupational and Environmental Health, Japan*)

IL A view of psychiatric disorders as complex disorders

Shigenobu KANBA
Kyushu University / Japan Depression Center / Iida Hospital, Japan

[JSCNP] Special Lecture October 11 (Fri), 15:20 - 16:20 / Room 13 (Fukuoka International Congress Center, 5F, 501)

*Japanese Session

Chair: Tsuyoshi KONDO (*Department of Neuropsychiatry, Graduate School of Medicine, University of the Ryukyus, Japan*)

SL What have we achieved and what should we solve in psychiatric drug treatment?

Toshiyuki SOMEYA
Department of Psychiatry, Niigata University Graduate School of Medical and Dental Sciences, Japan

[JSCNP] Invited Lecture October 11 (Fri), 16:30 - 18:10 / Room 1 (Fukuoka International Congress Center, 3F, Main Hall)

Chair: Reiji YOSHIMURA (*Department of Psychiatry, University of Occupational and Environmental Health, Japan*)

IL-1 Dimensional Treatment of Bipolar Disorder

Andrea FAGIOLINI
Professor of Psychiatry and Chairman, Chief of Medical Services, and Residency Training Director of the Department of Mental Health and Division of Psychiatry, University of Siena School of Medicine, Italy

IL-2 *Brain-in-Flame*: effects of neuroinflammation on cognitive function across psychiatric disorders

Bernhard T. BAUNE^{1,2,3}
¹*Department of Psychiatry and Psychotherapy, University of Münster, Münster, Germany,*
²*Department of Psychiatry, Melbourne Medical School, The University of Melbourne, Melbourne, Australia,*
³*The Florey Institute of Neuroscience and Mental Health, The University of Melbourne, Australia*

[JSNP] Special Lecture October 13 (Sun), 13:40 - 14:40 / Room 13 (Fukuoka International Congress Center, 5F, 501)

Chair: Hisatsugu MIYATA (*Department of Psychiatry, Jikei University School of Medicine, Japan*)

SL Genetics of Tobacco Smoking

Edward F. Domino
Department of Pharmacology, University of Michigan, USA

Symposium

Featured Symposium

October 12 (Sat), 14:50-16:30 / Room 16 (Fukuoka Sunpalace Hotel & Hall, 2F, Heian)

The perspectives of psychiatry and neuropharmacology in the post-genomic era

Organizer / Chair: Akira SAWA (*Johns Hopkins Medicine, USA*)

Co-chair: Suresh SUNDRAM (*Monash University and Monash Health, Australia*)

Technological advances and collaborative efforts in psychiatric genetics have provided robust insights in molecular landscape of psychiatric disorders. How to interpret and fruitfully utilize genetic information in psychiatry and neuropharmacology is now becoming an opportunity but also a major challenge. In this symposium, three speakers will address this key question in this field from complementary viewpoints. The first speaker Steve Hyman will discuss a path from genetics to translational neuroscience. The second speaker Akira Sawa will introduce a strategy that focuses on deep phenotyping of patients, including molecular and cellular study. Finally, the third speaker Jun Soo Kwon will address this question from neuroimaging perspectives. Together, we hope that the symposium may be able to provide an intellectual framework in psychiatry and neuropharmacology in the coming decade.

FS-1 Toward psychiatric disease mechanisms and new therapeutics: from genetics to translational neuroscience

Steven E. HYMAN

Stanley Center, Broad Institute of Harvard and MIT, USA

FS-2 Looking for fruitful biology in the post-GWAS era: a global perspective

Akira SAWA

Johns Hopkins Medicine, USA

FS-3 Neuroimaging perspectives on the search for biomarkers in psychiatry: The case of thalamo-cortical system alterations in schizophrenia

Jun Soo KWON

Seoul National University Hospital, Korea

■ Discussants: Noboru HIROI (*University of Texas Health Science Center at San Antonio, USA*)
Naren P RAO (*National Institute of Mental Health and Neurosciences, India*)

Symposium-1

October 11 (Fri), 8:40-10:20 / Room 1 (Fukuoka International Congress Center, 3F, Main Hall)

Maintenance treatment following remitted first episode psychosis

Organizer / Chair: Eric YH CHEN (*Department of Psychiatry, University of Hong Kong*)

Co-chair: Ichiro KUSUMI (*Department of Psychiatry, Hokkaido University Graduate School of Medicine, Japan*)

Psychotic disorders (including schizophrenia and related disorders) involve complex brain dysfunctions affecting up to 3% of the population. They constitute one of the highest disease burdens globally and locally. The conditions inflict devastating consequences for youth and adults at the most productive years in their life. Relapse is a common problem in the treatment of patients with psychotic disorders. While maintenance treatment can help prevent relapse, the long-term use of antipsychotics carries substantial side effects. Empirical data are lacking on the long-term effects of medication discontinuation. The clinical decision to discontinue or continue medication in first-episode psychosis patients who have been free of positive symptoms for a period of time is therefore difficult. The first speaker will present long-term outcome data from a first episode psychosis cohort who were previously randomized into early maintenance treatment or discontinuation in Hong Kong. It was found that patients with early medication discontinuation is associated with poorer clinical outcome after 10 years. The second speaker will investigate an alternative approach to discontinuation, namely dose reduction in remitted psychosis. The speaker will discuss an observational study "Impact of guided antipsychotic dose reduction in patients with psychosis under remitted states: a randomized control trial and prospective follow-up study" which has been launched in Taiwan since 2017. The last speaker will present data from a survey towards clinicians' views on medication discontinuation in remitted first episode psychosis in Singapore. The data show the ambiguity in clinicians about stopping medication in remitted patients with first episode psychosis due to a lack of clear guidelines, as well as patients' desire to stop medication.

S1-1 The Long-term Consequence of Medication Discontinuation in First Episode Psychosis

Eric YH CHEN

Department of Psychiatry, University of Hong Kong

S1-2 Approaching the Lowest Effective Dose for Patients with Remitted Psychosis: A Proposed Guided Dose Reduction Algorithm

Chen-Chung LIU^{1,2}

¹*Department of Psychiatry, National Taiwan University Hospital,* ²*Department of Psychiatry, College of Medicine, National Taiwan University*

S1-3 Perception towards medication discontinuation in remitted first-episode psychosis

Swapna K VERMA¹, Chun Tin CHAN¹, Christy HUI²

¹*Department of Psychosis, Institute of Mental Health,* ²*University of Hong Kong, Hong Kong*

■ Discussants: Sung-Wan KIM (*Department of Psychiatry, Chonnam National University, Korea*)

Masafumi MIZUNO (*Department of Neuropsychiatry, Toho University School of Medicine, Japan*)

Symposium-2

October 11 (Fri), 8:40-10:20 / Room 6 (Fukuoka International Congress Center, 4F, 401+402)

Developing new pharmaceutical agents for unmet medical needs in schizophrenia - From preclinical to clinical studies

Organizer / Chair: Wen-Sung LAI (*Department of Psychology, National Taiwan University, Taiwan*)

Co-chair: Masanari ITOKAWA (*Tokyo Metropolitan Institute of Medical Science, Japan*)

Schizophrenia is a costly and devastating mental disorder that affects up to 1% of the population worldwide. This debilitating brain disorder typically emerges in late adolescence and early adulthood which characterized by three main symptoms: positive symptoms (e.g., hallucinations, thought disorder, motor problems, delusions, symptoms associated with psychosis etc.), negative symptoms (e.g., flat affect, social withdrawal, apathy, self-neglect, anxiety, lack of motivation, and decrease in IQ etc.), and cognitive deficits. Generally speaking, positive symptoms of schizophrenia often respond well to antipsychotic drugs. Negative symptoms of schizophrenia can often linger or worsen over time, accompanied by impaired cognitive function, such as working memory and executive function. Currently available antipsychotics have been mainly focused on positive and mood-related symptoms targeting the dopamine and serotonin receptor systems. The negative symptoms and cognitive impairments of schizophrenia, which cause a deteriorated quality of life in patients and their families, have become an unmet medical need for antipsychotic drug development. In addition to the conventional view of dopamine involvement in schizophrenia (i.e., dopamine hypothesis of schizophrenia), other neurotransmitter systems (e.g., glutamatergic neurotransmission) and therapeutic targets have gradually gained more and more attentions in the investigation of pathophysiology and treatment of schizophrenia in the recent decades. In response to the urgent needs in schizophrenia, it is imperative to perform functional assays for drug screening and evaluation, especially in preclinical studies. Preclinical animal studies are highly valuable and indispensable to the understanding of the underlying pathophysiological mechanisms of schizophrenia and the elucidation of the drug effects. In this symposium, 4 distinguished speakers from Japan, USA, and Taiwan were invited, including Dr. Kiyofumi Yamada at Nagoya University Graduate School of Medicine, Dr. Yijuang Chern at Academia Sinica, Dr. Takashi Kitamura at University of Texas Southwestern Medical Center, and Dr. Wen-Sung Lai at National Taiwan University. We will report recent intriguing data and discuss new pharmaceutical agents for unmet medical needs in schizophrenia from preclinical animal models to clinical studies. Our findings will shed light on developing new pharmaceutical agents for unmet medical needs in schizophrenia and other neuropsychiatric disorders.

S2-1 Reelin supplementation therapy in preclinical models of schizophrenia

Kiyofumi YAMADA¹, Masahito SAWAHATA¹, Taku NAGAI¹, Daisuke IBI², Masayuki HIRAMATSU²

¹*Dept. Neuropsychopharmacology & Hospital Pharmacy, Nagoya University Graduate School of Medicine, Nagoya, Japan,*

²*Dept. Chemical Pharmacology, Faculty of Pharmacy, Meijo University, Nagoya, Japan*

S2-2 The novel A2A adenosine receptor/ TRAX/ GSK3/ DISC1 complex as a potential therapeutic target of schizophrenia

Yijuang CHERN, Ting CHIEN, Yu-Ting WENG

Institute of Biomedical Science, Academia Sinica, Taiwan

S2-3 Neural circuit mechanisms for temporal association learning

Takashi KITAMURA

Department of Psychiatry, University of Texas Southwestern Medical Center, TX, USA

S2-4 The therapeutic potentials and underlying mechanism of sarcosine and RS-D7 in schizophrenia and other neuropsychiatric disorders

Wen-Sung LAI¹, Ming-Che KUO², Da-Zhong LUO¹, Ju-Chun PEI¹, Liang-Yin LU¹, Wei-Li HUNG¹

¹*Department of Psychology, National Taiwan University,* ²*National Taiwan University Cancer Center, Taiwan*

■ Discussants: Atsushi KAMIYA (*Johns Hopkins University School of Medicine, USA*)

Ming-Che KUO (*National Taiwan University Cancer Center, Taiwan*)

Symposium-3

October 11 (Fri), 8:40-10:20 / Room 11 (Fukuoka International Congress Center, 5F, 502)

A cutting-edge view on how to regulate the drug dependence related behaviors

Organizer / Chair: Tomohisa MORI (*Department of Pharmacology, Hoshi University, Japan*)

Co-chair: Tadashi SAIGUSA (*Department of Pharmacology, Nihon University School of Dentistry at Matsudo, Japan*)

Psychostimulants, such as amphetamine, methamphetamine and cocaine, have been widely abused worldwide, and exhibit strong potential for relapse. Most seriously, psychostimulants show a very high percentage of re-use. On the other hand, President Trump announced that U.S.A. is facing opioid crisis as a national public health emergency, and this social issue is not the social problem limited in the U.S.A. any more. A large and growing body of evidence has demonstrated that mesolimbic dopaminergic neurons, which project from the ventral tegmental area to the nucleus accumbens, play a key role in the reinforcing/rewarding effects of abuse drugs in humans/animals. Drug-dependence involves many factors, especially biological changes or adaptative responses in the brain as well as peripheral systems including organs. Furthermore, social, familial and environmental factors should be acknowledged. Thus, the treatment of drug abuse is complex; treatment strategies should include psychobiological, social, and pharmacological considerations based on the patient's background. So far agonist therapies are somewhat effective for the treatment of drugs abuse, there are currently no medications available to be completely satisfied for the treatment of drug abuse per se. To reach the goal of our research in the medication for drug-dependence, we need to know "where are we and/or where should we go?" In this symposium, 4 speakers are going to talk their cutting edge views to review these questions.

S3-1 Behavioral intervention on Nicotine Addiction and Withdrawal

Mahardian RAHMADI, Chrismawan ARDIANTO, Junaidi KHOTIB
Department of Clinical Pharmacy, Faculty of Pharmacy, Universitas Airlangga, Indonesia

S3-2 Selective regulation of methamphetamine-induced "on cell" to exert the addiction related behaviors

Tomohisa MORI¹, Minoru NARITA^{1,2}
¹*Department of Pharmacology, Hoshi University, Tokyo, Japan*, ²*Life Science Tokyo Advanced Research Center, Tokyo, Japan*

S3-3 Evaluation of 3,4,5-TMCA derivatives as potential antinarcotic agents

Seikwan OH
School of Medicine, Ewha Womans Univ, Korea

S3-4 Neuropeptide S and Orexins in Stress-Induced Cocaine Craving

Lih-Chu CHIOU^{1,2,3}, Yu-Hsien CHOU¹, Chia Chun HOR¹, Ming Tatt LEE^{1,3}
¹*Graduate Institute of Pharmacology, College of Medicine, National Taiwan University, Taiwan*,
²*Department of Pharmacology, College of Medicine, National Taiwan University, Taiwan*,
³*Graduate Institute of Brain and Mind Sciences, College of Medicine, National Taiwan University, Taiwan*

■ Discussants: Makoto TANIGUCHI (*Department of Neuroscience, Medical University of South Carolina, USA*)
Yuta OHGI (*Otsuka Pharmaceutical Co., Ltd., Japan*)

Symposium-4

October 11 (Fri), 8:40-10:20 / Room 12 (Fukuoka International Congress Center, 5F, 503)

Neurobiology of endocannabinoid system in psychiatric disorders

Organizer / Chair: Hiroki ISHIGURO (*Department of Neuropsychiatry and Clinical Ethics, University of Yamanashi, Japan*)

Co-chair: Taku YAMAGUCHI (*Department of Pharmacotherapeutics and Neuropsychopharmacology, Faculty of Pharmaceutical Sciences, Nagasaki International University, Japan*)

Advances in molecular biology techniques including genetic tools have provided new knowledge and deeper insights in understanding the biological roles of the endocannabinoid system in psychiatric disorders. The remarkable advances in genetics of endocannabinoid system (ECS) are unravelling the genetic bases in a number of neuropsychiatric disorders, including depression, schizophrenia, addiction, autism spectrum disorders and neurological conditions of neuro-immune disorders. The ECS consists of two major receptors (CB1Rs and CB2Rs), endocannabinoids (eCBs) and the synthesizing and degradation enzymes for eCBs. Although CB1Rs have been well characterized, the neuronal expression of CB2Rs and their role in neuropsychiatric have been subjects of long standing controversy and debate despite new knowledge and advances. The new molecular techniques and transgenic approaches are being used to explore and identify the involvement of the elements of ECS in models of CNS function and dysfunction underlying neuropsychiatric disorders. There is also increasing global awareness and interest in regulation of brain endocannabinoid system by elements of environmental stress and age. The recent study suggest that patients derived induced pluripotent stem cells (iPS cells) will be a one of the unique models for studying mental disorders. In this symposium, we provide data from our studies with a background on dysfunction of ECS genes in intermediate phenotypes of neuropsychiatric disorders, and the methods and approaches that were used to assess the neurobehavioral and molecular changes associated with the functions of specific neural networks. The age-dependent neural changes via ECS are analyzed in brains of animal models, human postmortern brains, and developmental stage of neural stem cells, neurons and glial cells from iPS cells. Furthermore, the mechanisms by which the neuro-immune crosstalk is likely to impact on risk factors contributing to neuropsychiatric disorders will be addressed. The selected speakers from Japan and USA will discuss the compelling evidence from their studies and current knowledge of CBR genetics and behavioral modifications – from mice to human subjects.

S4-1 Environmental stressors on Cannabinoid CB2 Receptor dysfunction induce various psychosis

Koichi TABATA^{1,2}, Emmanuel S ONAIVI³, Hiroki ISHIGURO¹

¹Department of Neuropsychiatry and Clinical Ethics, Univ. of Yamanashi, Chuo, Yamanashi, Japan,

²Ome Municipal General Hospital, Tokyo, Japan, ³Department of Biology, William Paterson Univ., Wayne, NJ, USA

S4-2 The utility of patients derived Neuron/glial cells for the schizophrenia disease model

Yasue HORIUCHI, Masatoshi EGOSHI, Kazuya TORIUMI, Mitsuhiro MIYASHITA, Masanari ITOKAWA, Makoto ARAI

Department of Psychiatry and Behavioral Sciences, Tokyo Metropolitan Institute of Medical Science, Japan

S4-3 Microglial and dopaminergic-neuron-specific deletion of CB2 cannabinoid receptors in stress induced neuroinflammation and behavior

Emmanuel S. ONAIVI¹, Hiroki ISHIGURO², Qing-Rong LIU³

¹Department of Biology, William Paterson University, USA, ²Department of Neuropsychiatry and Clinical Ethics, University of Yamanashi, Japan,

³National Institute of Aging-IRP-National Institutes of Health, USA

S4-4 Lysophosphatidylinositol, an endogenous agonist for novel cannabinoid receptor GPR55

Atsushi YAMASHITA, Saori OKA, Takashi TANIKAWA, Keisuke NAKAJIMA, Yoko NEMOTO-SASAKI, Yasuhiro HAYASHI, Naoki MATSUMOTO, Takanori KOIZUMI, Takayuki SUGIURA

Faculty of Pharma-Sciences, Teikyo University, Japan

■ Discussants: Akitoyo HISHIMOTO (*Department of Psychiatry, Kobe University Graduate School of Medicine, Japan*)

Hirokazu MIZOGUCHI (*Department of Physiology and Anatomy, Faculty of Pharmaceutical Sciences, Tohoku Medical and Pharmaceutical University, Japan*)

Symposium-5

October 11 (Fri), 8:40-10:20 / Room 13 (Fukuoka International Congress Center, 5F, 501)

Recent Advances in Autism Research from Asia

Organizer / Chair: Atsushi SATO (*Department of Pediatrics, The University of Tokyo Hospital, Japan*)

Co-chair: Nobumasa KATO (*Medical Institute of Developmental Disabilities Research, Showa University, Japan*)

Knowledge on molecular mechanism of autism has been rapidly expanding. Analysis of autism associated with specific genetic disorders reveals its mechanisms as well as mechanism-specific potential therapy such as mTOR inhibitors in tuberous sclerosis complex-associated autism. However, a recent increase in the prevalence of autism implicates the presence of non-genetic factors that cause autism. Epidemiological studies point out the tight link between maternal administration of valproic acid (VPA), one of the major drugs for epilepsy and migraine, and increase in the risk of autism and developmental delay in their children. Exposure to VPA in utero is replicated in rodents, and these models have been investigated to understand molecular changes relevant to autism. Epigenetic factors such as paternal aging are also considered as the background of increasing prevalence of autism. Research with rodents born to aged fathers finds the relationship between paternal aging and autism in their offspring. In this symposium, recent advance in autism research is presented by Asian researchers with relevance to genetic, non-genetic, and epigenetic factors, which will deepen our understanding of molecular mechanism of autism.

S5-1 Common, specific phenotypes and molecular determinants in animal models of ASD: Therapeutic implication

Chan Young SHIN

School of Medicine, Konkuk University, Korea

S5-2 mTOR signaling pathway plays a key role in non-syndromic autism spectrum disorder

Hiroko KOTAJIMA¹, Toshiyuki KOBAYASHI², Hirofumi KASHII¹, Atsushi SATO³, Yoko HAGINO¹, Miho TANAKA⁴, Yasumasa NISHITO⁵, Yukio TAKAMATSU⁵, Shigeo UCHINO⁶, Kazutaka IKEDA¹

¹Addictive Substance Project, Department of Psychiatry and Behavioral Sciences, Tokyo Metropolitan Institute of Medical Science, Japan,

²Department of Molecular Pathogenesis, Graduate School of Medicine, Juntendo University, Japan,

³Department of Pediatrics, The University of Tokyo Hospital, Japan, ⁴Department of Neuropsychiatry, The University of Tokyo Hospital, Japan,

⁵Center for Basic Technology Research, Tokyo Metropolitan Institute of Medical Science, Japan,

⁶Department of Biosciences, School of Science and Engineering, Teikyo University, Japan

S5-3 Hypomethylated DNA of the sperm genome: a possible risk for neurodevelopmental diseases

Noriko OSUMI

Dept. of Devel. Neurosci., Tohoku Univ. Sch.1 of Med., Sendai, Japan

S5-4 Altered functional and structural connectivity as imaging endophenotype for autism spectrum disorder

Susan Shur-Fen GAU

Department of Psychiatry, National Taiwan University Hospital and College of Medicine, Taipei, Taiwan

■ Discussant: Shiro SUDA (*Department of Psychiatry, Jichi Medical University, Japan*)

Symposium-6

October 11 (Fri), 8:40-10:20 / Room 14 (Fukuoka Sunpalace Hotel & Hall, 2F, Palace Room A)

Novel treatment strategies based on the advanced understanding of neurobiological mechanisms in obsessive-compulsive spectrum disorder

Organizer / Chair: Hisato MATSUNAGA (*Department of Neuropsychiatry, Hyogo College of Medicine, Japan*)

Co-chair: Tomohiro NAKAO (*Department of Neuropsychiatry, Graduate School of Medical Sciences, Kyushu University, Japan*)

Obsessive-compulsive disorder (OCD) is a relatively common and frequently debilitating neuropsychiatric disorder that affects approximately 2% of the general population. OCD is characterized by intrusive and unwanted obsessions and compulsions, and by a waxing and waning course of symptoms that rarely remit.

Standardized treatments for OCD, including drugs (e.g., selective serotonin reuptake inhibitors; (SSRIs)) and cognitive-behavioral therapy (CBT), are well established and used worldwide. However, the effectiveness of current OCD pharmacotherapy is limited. To optimize this type of therapy, cross-sectional or longitudinal evaluations of individuals with OCD are needed, which focus on comprehensive psychopathological features such as primary or secondary comorbid disorders (e.g., tic-related-OCD, major depression), antecedent traumatic events, and the brain mechanisms that mediate temporal transitions, according to the duration of untreated illness or the chronic course of OCD. These clinical factors should be taken into account in developing an adequate treatment regimen for OCD patients who show insufficient responses to the standardized pharmacotherapy for OCD.

DSM-5 categorizes OCD as an obsessive-compulsive and related disorder (OCRD), based on the concept of an obsessive-compulsive spectrum. Among OCRDs, hoarding disorder, which is frequently comorbid with OCD, has been characterized as a treatment refractory disorder; the neurobiological mechanism of the disorder still remains to be elucidated. Thus, comorbidity of hoarding disorder or hoarding symptoms may also be associated with treatment resistance in patients with OCD.

Therefore, it may be crucial to consider such cross-sectional heterogeneity of OCD or OCRDs to fully understand the biological mechanisms underlying these disorders, and to develop more effective treatment strategies (including novel treatment approaches such as adaptation to neuromodulation).

In our symposium, we will discuss tic-related and trauma-related OCD and hoarding disorder, focusing particularly on novel treatment strategies based on the advanced understanding of each condition's neurobiological mechanisms. We will also discuss neuromodulation as a possible treatment option for treatment-refractory patients with OCD or OCRD.

S6-1 A biological investigation of OCD and hoarding disorder by neuroimaging methods

Hirofumi TOMIYAMA, Tomohiro NAKAO, Keitaro MURAYAMA
Kyushu University Hospital, Japan

S6-2 Evaluations of hemodynamic changes using Near-Infrared Spectroscopy among patients with tic-related obsessive-compulsive disorder (OCD)

Keiichiro MUKAI¹, Akihiro NAKAJIMA¹, Yoshinobu YANAGISAWA¹, Kensei MAEBAYASHI¹, Yoshikazu YOSHIDA¹, Hayashida KAZUHISA¹, Naomi MATSUURA², Matsunaga HISATO¹
¹*Department of Neuropsychiatry, Hyogo College of Medicine, ²Faculty of Education, Mie University, Japan*

S6-3 Electroconvulsive Therapy as a Potential Treatment for Refractory OCD

Anri WATANABE, Takashi NAKAMAE
Department of Psychiatry, Graduate School of Medical Science, Kyoto Prefectural University of Medicine, Kyoto, Japan

S6-4 Developing novel treatment strategies for OCD by utilizing rodent models: a therapeutic potential of adenosine A_{2A} receptor antagonism

Nozomi ASAOKA^{1,2}, Chihiro YABE-NISHIMURA¹, Shuji KANEKO¹
¹*Department of Pharmacology, Kyoto Prefectural University of Medicine, Kyoto, Japan*
²*Department of Molecular Pharmacology, Graduate School of Pharmaceutical Sciences, Kyoto University, Kyoto, Japan*

■ Discussants: Takashi NAKAMAE (*Department of Psychiatry, Graduate School of Medical Science, Kyoto Prefectural University of Medicine, Japan*)
Eiji SHIMIZU (*Department of Cognitive Behavioral Physiology, Graduate School of Medicine, Chiba University, Japan*)

Symposium-7

October 11 (Fri), 8:40-10:20 / Room 15 (Fukuoka Sunpalace Hotel & Hall, 2F, Palace Room B)

What can we learn from brain imaging studies of schizophrenia? From its pathophysiology to actual treatment

Organizer / Chair: Hiroyuki UCHIDA (*Department of Neuropsychiatry, Keio University School of Medicine, Japan*)

Co-chair: Makoto HIGUCHI (*Department of Functional Brain Imaging Research, National Institute of Radiological Sciences, Japan*)

Advances in research of psychopharmacology have brought the hope for the treatment of psychiatric disorders. With the development of brain image techniques clinicians can learn more detailed information from the brain of psychiatric patients and devise more effective treatment strategies for them. The purpose of this symposium is to provide the state-of-art knowledge on treatment response, cognitions, and pathophysiology of the psychiatric illnesses that have been discovered with brain imaging. This symposium will provide the knowledge on, not only brain imaging itself, but also its application to clinical practice as well as research.

The first speaker will discuss predictors of antipsychotic responsiveness in first episode psychosis (FEP). It has been reported that dopaminergic activity in schizophrenia is related to responsiveness to antipsychotic drugs. For example, patients who respond well to first-line antipsychotic drugs show increased presynaptic dopamine synthesis, while treatment-refractory patients with schizophrenia exhibited a similar level of dopamine activity. The refractory schizophrenia is considered to be related with glutamatergic abnormality. Regarding antipsychotic responsiveness, different neurobiology may underlie schizophrenia between treatment responsive and treatment refractory patients. In this presentation, the speaker will review the evidence on presynaptic dopamine activity and glutamate level measured in drug-naïve FEP and their relationship with antipsychotic responsiveness.

The topic from second speaker will be “Neurobiology of cognitive deficits and treatment implications”. The evidence from several lines of research suggests the differential neurobiology for positive and cognitive symptoms of schizophrenia; while decreased dopamine release is considered to underlie the neurocognitive symptoms, neuropeptides play a critical role in the pathogenesis of social cognitive deficits typically seen in schizophrenia. This difference in neurobiology makes a strong case for rational use of add on interventions for the treatment of cognitive deficits in schizophrenia. Psychostimulants in the form of dopamine agonists and neuropeptides oxytocin - vasopressin are potential novel treatments for cognitive deficits in schizophrenia. This talk will focus on the neuroimaging studies examining the neurobiology of cognitive deficits and potential treatment for the same.

The third speaker will show the recent data on AMPA receptors (AMPA) in multiple psychiatric illnesses. With the development of a new ligand, we can visualize AMPAR in the living human brain. The results from our pilot study have already revealed distinct patterns of AMPAR distributions in major psychiatric illnesses, including schizophrenia. Clinical relevance of these findings will also be discussed.

The last speaker will present “glutamatergic dysfunction in treatment-resistant schizophrenia: a 3T proton MRS study”. In terms of antipsychotic treatment response, patients with schizophrenia can be classified into three groups: (1) responsive to first-line antipsychotics (non treatment-resistant schizophrenia [nTRS]), (2) treatment-resistant to non-clozapine (CLZ) antipsychotics but CLZ-responsive (non-URS), and (3) treatment-resistant to both non-CLZ antipsychotics as well as CLZ (ultra treatment-resistant schizophrenia [URS]). The glutamatergic hypothesis may account for this classification. Thus, the aim of this presentation is to systematically review proton magnetic resonance spectroscopy (1H-MRS) studies to compare glutamatergic neurometabolite levels among these three patient groups and healthy controls (HCs).

S7-1 Predictor of antipsychotic responsiveness in first episode psychosis

Euitae KIM^{1,2}

¹Department of Psychiatry, Seoul National University College of Medicine, Korea,

²Department of Neuropsychiatry, Seoul National University Bundang Hospital, Korea

S7-2 Neurobiology of cognitive deficits and treatment implications

Naren P RAO

Department of Psychiatry, National Institute of Mental Health and Neurosciences, India

S7-3 AMPA receptors and psychiatric illnesses: findings from pilot PET study

Hiroyuki UCHIDA

Department of Neuropsychiatry, Keio University School of Medicine, Tokyo, Japan

S7-4 Glutamatergic dysfunction in treatment-resistant schizophrenia: 3T proton MRS studies

Shinichiro NAKAJIMA

Department of Neuropsychiatry, Keio University School of Medicine, Tokyo, Japan

■ Discussants: Yuan-Hwa CHOU (*Taipei Veterans General Hospital, Taiwan*)

Mitsuyuki MATSUMOTO (*Virtual Venture Unit, Psychiatry, Astellas Research Institute of America, San Diego, USA*)

Symposium-8

October 11 (Fri), 8:40-10:20 / Room 16 (Fukuoka Sunpalace Hotel & Hall, 2F, Heian)

Cellular and molecular signatures of psychiatric disorders in postmortem human brain

Organizer / Chair: Shinya KASAI (*Addictive Substance Project, Tokyo Metropolitan Institute of Medical Science, Japan*)

Co-chair: Shuji IRITANI (*Department of Psychiatry, Graduate School of Medical Science, Nagoya University, Japan*)

Psychiatric disorders are largely multi-factorial conditions, and the identification of both genetic and environmental factors are important to better understand their pathophysiology and to develop improved treatment strategies. In particular, the impact of various environmental factors that influence the individual during early development, childhood, youth and adulthood, and their relative importance for the development and course of each specific psychiatric disorder is important to assess.

Animal experiments allow for studies of affected brain regions with many methods that cannot be applied on living human subjects. From such experiments, we can learn detailed pathophysiological pathways of disease, but it may be difficult to translate these findings to the clinical setting. In contrast to several somatic diseases, where biochemical tests can show the similarities with the corresponding human conditions, the animal models of psychiatric diseases such as depression suffer from gold standard markers of disease to prove the model's resemblance of the same condition in humans.

Non-invasive visualization approaches with e.g. magnetic resonance imaging techniques have contributed substantially to our understanding on the pathology of many psychiatric diseases, but these studies cannot provide cellular or molecular pathologies in the brain.

Postmortem human brain studies have been conducted for more than a century to elucidate the underlying pathologies of various psychiatric and neurologic diseases, but these have been dominated by studies of structural changes. In recent years, methodological improvements have allowed for the application of a variety of analyses of postmortem brain tissue, and today reliable information from genomics, transcriptomics and proteomics can be obtained and used to characterize specific psychiatric conditions. However, for postmortem human studies it is crucial that the regions studied are precisely neuroanatomically identified, that the postmortem condition of the tissue is good, and that the phenotyping is accurate and comprehensive.

At this symposium, four researchers present studies on postmortem human brain with different purposes and approaches. The attendee will learn the possibilities that such studies can offer, but also explain important pitfalls and shortcomings, and how to avoid these.

S8-1 Decreased brain pH as a shared endophenotype of psychiatric disorders

Hideo HAGIHARA, Tsuyoshi MIYAKAWA

Division of Systems Medical Science, Institute for Comprehensive Medical Science, Fujita Health University, Aichi, Japan

S8-2 Phenotyping and assessment of confounders in human postmortem brain studies

Henrik DRUID¹, Kanar ALKASS¹, Nenad BOGDANOVIC²

¹Dept of Oncology-pathology, Karolinska Institutet, ²Dept of NVS, Karolinska Institutet, Sweden

S8-3 Influence of alcohol on hippocampal neurogenesis

Kanar ALKASS^{1,2}, Gopalakrishnan DHANABALAN¹, Tara Wardi LE MAITRE¹, Samuel BERNAND⁴, Nenad BOGDANOVIC³, Henrik DRUID^{1,2}

¹Karolinska Institutet, ²Forensic Medicine Laboratory, Department of Oncology-Pathology,

³Neurogeriatric Clinic, Theme Aging, Karolinska University Hospital, ⁴Institutet Camille Jordan, CNRS UMR 5208, University of Lyon

S8-4 Transcriptional signatures of opioid misuse with human postmortem medulla

Shinya KASAI^{1,2}, Nenad BOGDANOVIC³, Kanar ALKASS², Henrik DRUID²

¹Addictive Substance Project, Tokyo Metropolitan Institute of Medical Science, JAPAN, ²Department of Oncology-Pathology, Karolinska Institutet, SWEDEN, ³Department of Neurobiology, Care Sciences and Society, Karolinska Institutet, SWEDEN

■ Discussants: Shigeki YAMAGUCHI (*Department of Anesthesia and Pain Medicine, Dokkyo Medical University, Japan*)
Hiroki TANAKA (*Department of Legal Medicine, Asahikawa Medical University, Japan*)

Symposium-9

October 11 (Fri), 10:30-12:10 / Room 1 (Fukuoka International Congress Center, 3F, Main Hall)

Translation of Research to Clinical Practice

Organizer / Chair: Roumen MILEV (*Department of Psychiatry, Queen's University, Canada*)

Co-chair: Tadafumi KATO (*Laboratory for Molecular Dynamics of Mental Disorders, RIKEN Center for Brain Science, Japan*)

Background: Mood disorders are highly prevalent, associated with significant personal and societal burden. Depression is one of the leading causes of disability world-wide. Bipolar Disorders are associated with high levels of recurrence and pose treatment challenges. Although there are numerous treatment modalities and compounds available, the outcome results are underwhelming. There are no biological tests or markers to predict therapeutic response to a treatment, we don't know how to predict severity of depression or our next treatment step. We don't have a good understanding of how to effectively implement evidence-based treatment guidelines, how to change physician prescribing behaviour, or how to use mobile health technology to inform our choices. There is an exponential growth in research endeavours, but their translation to clinical practice, and patient outcomes is severely lacking. This symposium sets a high standard of goals and objectives. Several primers of successful translation of research findings into clinical practice in mood disorders will be presented. Development of evidence-based and clinical practice informed treatment guidelines for management of patients with mood disorders is an example of improving our approach to treatments, but their implementation has not been satisfactory. In this symposium we will present how a point of care app can shift physician prescribing behaviour to become aligned with the guidelines. We will explore the use of mobile health technologies in the clinical decision making and influencing the treatment outcomes. A focus on utilization of machine learning paradigms will exemplify predicting depression severity. Preliminary results of predictors of treatment response in major depressive disorders, as discovered by the large Canadian Biomarkers Integrated Network in depression (CAN-BIND) series of studies will be presented as well. We will have ample opportunities for discussion and commentaries.

Learning Objectives: After attending this symposium the participant will be able:

1. To review CANMAT/ISBD treatment recommendations for management of bipolar disorder
2. To demonstrate the feasibility of using a point of care APP to change physician prescribing behaviour
3. To understand the various approaches to quantify psychiatric disorder severity utilizing information communication technologies.
4. To discuss the difficulty and potential benefit/risk of utilizing machine learning in the psychiatry field.
5. To understand the goals and results of the large CAN-BIND project and the importance of identification of biomarkers for treatment response
6. To understand the concept of digital phenotyping applied to mental health research.
7. To explore the use of mobile health technologies (M-Health) for patient engagement, measurement-based care and monitoring of wellness or relapse in mood disorders

S9-1 Evidence Based Guideline Concordance Care for Bipolar Disorder: Can Point of Care Applications Help?

Lakshmi N. YATHAM

Department of Psychiatry, University of British Columbia, Canada

S9-2 Project for Objective Measures Utilizing Computational Psychiatry Technology (PROMPT): The Prospect of New Approaches to Assess Depression Severity

Taishiro KISHIMOTO

Department of Neuropsychiatry, Keio University School of Medicine, Japan

S9-3 CAN-BIND: Identifying Biomarkers for Treatment Response in Depression

Roumen MILEV

Department of Psychiatry, Queen's University, Canada

S9-4 Hype or Revolution? How Digital Phenotyping and Mobile Health Technologies are Transforming Research on Mood Disorders

Claudio N SOARES, Elisa BRIETZKE

Department of Psychiatry, Queen's University School of Medicine, Canada

■ Discussant: Carlos A ZARATE (*NIH / NIMH, USA*)

Symposium-10

October 11 (Fri), 10:30-12:10 / Room 6 (Fukuoka International Congress Center, 4F, 401+402)

Novel antidepressant targets found from the central serotonergic and related systems

Organizer / Chair: Mitsuhiro YOSHIOKA (*Department of Neuropharmacology, Hokkaido University Faculty of Medicine, Japan*)

Co-chair: Masaki KAKEYAMA (*Lab. Environmental Brain Science, Faculty of Human Sciences, Waseda University, Japan*)

Selective serotonin reuptake inhibitors (SSRIs) ameliorates depressive symptoms in humans. However, the therapeutic effects are limited due to the delayed effects and side effects. There are two origins of serotonergic projections to the forebrain, the dorsal raphe nucleus (DRN) and median raphe nucleus (MRN), and each nucleus projects to different brain regions, with some overlapping. Moreover, seven families of serotonin 5-HT receptors comprising a total of 14 subtypes have been identified, and each subtype has distinct functions. Given the complexity of serotonergic system, to dissect the system might make it possible to avoid side effects and to exert rapid effects. In this symposium, Yu Ohmura will show the data indicating that distinct serotonergic pathways and specific type of 5-HT receptor regulate anxiety, impulse control, and depression. Emily Jutkiewicz will introduce the idea that a specific downstream mechanism of 5-HT_{1A} receptors is essential to exert antidepressant-like effects. Makoto Kondo will provide an insight into the antidepressant-like effects induced by the activation of a 5-HT₃ receptor-IGF1 mechanism. Takeshi Inoue will criticize these findings from the view of psychiatrists and suggest the direction of future research.

S10-1 Distinct serotonergic systems regulate anxiogenic, antidepressant-like, and anti-impulsive effects

Yu OHMURA

Department of Neuropharmacology, Faculty of Medicine and Graduate School of Medicine, Hokkaido University, Sapporo, Japan

S10-2 Novel mode of antidepressant action based on exercise-induced beneficial effects

Makoto KONDO, Shoichi SHIMADA

Department of Neuroscience and Cell Biology, Graduate School of Medicine, Osaka University, Osaka, Japan

S10-3 Neuropsychopharmacological effects of a repurposed lithium-like mimetic

Trevor SHARP

Department of Pharmacology, University of Oxford, UK

■ Discussants: Takeshi INOUE (*Department of Psychiatry, Tokyo Medical University, Japan*)
Koji YANO (*SHIONOGI & CO., LTD., Japan*)

Symposium-11

October 11 (Fri), 10:30-12:10 / Room 7 (Fukuoka International Congress Center, 4F, 403)

The multidimensional approach to metabolic disturbance in schizophrenia

Organizer / Chair: Mong-Liang LU (*Department of Psychiatry, Wan-Fang Hospital & School of Medicine, College of Medicine, Taipei Medical University, Taiwan*)

Co-chair: Takashi WATANABE (*Department of Psychiatry, Dokkyo Medical University School of Medicine, Japan*)

The metabolic syndrome is highly prevalent in patients with schizophrenia patients and represents an enormous source of cardiovascular risk and mortality. Appetite-regulating hormones, pharmacodynamics and alterations in glucose metabolism may underlie the negative effect of antipsychotic medications. In this symposium, we provide the multidimensional approach to metabolic disturbance in schizophrenia from the aspects of epidemiology, therapeutic drug monitoring, and potential biomarkers.

Prof. Lu ML: Acyl/Desacyl ghrelin ratio as a potential biomarker for metabolic syndrome in patients with schizophrenia

Circulating ghrelin is presented in two major forms, acyl ghrelin and desacyl ghrelin. Both ghrelin forms can mediate energy metabolism and may act antagonistically. This suggests a crucial role for the acyl/desacyl ghrelin ratio in the energy homeostasis. In this study, we found that acyl/desacyl ghrelin ratio was more strongly correlated with metabolic syndrome components than total ghrelin and desacyl ghrelin with them. And acyl/desacyl ghrelin ratio had a higher discriminative ability to differentiate patients with metabolic syndrome from those without metabolic syndrome than either total ghrelin or desacyl ghrelin. Our study results suggest that acyl/desacyl ghrelin ratio may be a preferential marker of metabolic syndrome in patients with schizophrenia

Prof. Wu TH: Therapeutic Drug Monitoring of olanzapine and its desmethylated metabolite in schizophrenic patients

Therapeutic drug monitoring of olanzapine (OLZ) and its desmethylated metabolite (DMO) were applied to identify the roles of the olanzapine methylation metabolite in metabolic and efficacy regulation of schizophrenic patients. In summary, our studies revealed that $COLZ \geq 22.77\text{ng/mL}$ was a positive predictor of therapeutic efficacy in patients with schizophrenia and it was proposed that the optimal OLZ treatment should maintain concentrations ratio of OLZ/DMO between 3 and 6 to maximize the clinical efficacy and minimize the metabolic side effects.

Dr. Chen BY: Orexin-A may play the role in regulating metabolic status in patient with schizophrenia taking antipsychotics

Orexin-A promotes thermogenesis and energy expenditure via increasing sympathetic tone and this effect is suppressed by antipsychotics treatment. We found that orexin-A is up-regulated in antipsychotics-treated patients with schizophrenia, especially for the group taking less obesogenic antipsychotics. Furthermore, higher orexin-A levels are associated with better metabolic outcomes. These observations suggest orexin-A may have a protective effect against the development of metabolic abnormalities in schizophrenia patients receiving long-term antipsychotic treatment.

Dr. Sugai T: Characteristics of physical risk in Japanese patients with schizophrenia

We investigated the risk of metabolic syndrome and underweight by questionnaire, and there were 7655 outpatients and 15461 inpatients with schizophrenia. The result revealed that metabolic syndrome prevalence in Japanese outpatients was approximately 3-fold higher than in inpatients. On the other hand, the prevalence of underweight and under-nutrition in Japanese inpatients with schizophrenia was higher than in outpatients and the general population. The results also suggest that the difference in physical health between outpatients and inpatients with schizophrenia may be related to the mental health system in Japan. We should pay more attention to the risk of physical disease in Japanese patients with schizophrenia, considering the difference in health characteristics between outpatients and inpatients in clinical practice.

S11-1 Characteristics of physical risk in Japanese patients with schizophrenia

Takuro SUGAI¹, Yutaro SUZUKI¹, Manabu YAMAZAKI², Kazutaka SHIMODA³, Takao MORI², Hiroshi MATSUDA², Norio SUGAWARA³, Norio Yasui FURUKORI³, Kurefu OKAMOTO², Yuji OZEKI⁴, Toyoaki SAGAE⁵, Toshiyuki SOMEYA¹

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⁴Department of Psychiatry, Shiga University of Medical Science, Otsu, Japan,

⁵Department of Health and Nutrition, Yamagata Prefectural Yonezawa University of Nutrition Sciences, Yonezawa, Japan

S11-2 Therapeutic Drug Monitoring of Olanzapine and its Desmethylated Metabolite in Schizophrenic Patients

Tzu-Hua WU

Department of Clinical Pharmacy, School of Pharmacy, College of Pharmacy, Taipei Medical University, Taiwan

S11-3 Relationship between acylated/desacylated ghrelin ratio and metabolic syndrome in patients with schizophrenia

Mong-Liang LU^{1,2}

¹Department of Psychiatry & Psychiatric Research Center, Wan Fang Hospital, Taipei Medical University, Taipei, Taiwan,

²Department of Psychiatry, School of Medicine, College of Medicine, Taipei Medical University, Taipei, Taiwan

S11-4 The metabolic protective effect of elevated Orexin-A levels in patients with schizophrenia taking antipsychotics

Po-Yu CHEN^{1,2}, Chin-Kuo CHANG³, Chun-Hsin CHEN^{4,5}, Mong-Liang LU^{4,5}, Chih-Chiang CHIU^{2,4}, Shih-Ku LIN^{2,4}, Ling-Ling HWANG^{1,6}, Ming-Chyi HUANG^{1,2,4}

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⁵Department of Psychiatry, Wan Fang Hospital, Taipei, Taiwan,

⁶Department of Physiology, School of Medicine, College of Medicine, Taipei Medical University, Taipei, Taiwan

■ Discussants: Catherine WEISS (*Otsuka Pharmaceutical Development & Commercialization Inc, USA*)

Michiko FUJIMOTO (*Department of Psychiatry, Osaka University Graduate School of Medicine, Japan*)

Symposium-12

October 11 (Fri), 10:30-12:10 / Room 11 (Fukuoka International Congress Center, 5F, 502)

Community Care and Global Mental Health: innovative psychiatric pharmacotherapy strategies in Asia

Organizer / Chair: Chieko KURIHARA (*National Institute for Quantum and Radiological Science and Technology, Japan*)

Co-chair: Kazutaka SHIMODA (*Department of Psychiatry, Dokkyo Medical University, Japan*)

Mental, neurological and substance use disorders have been revealed to contribute to the Global Burden of Disease. To overcome this situation and to achieve cost-effective community care improvement respecting for human rights in various cultural contexts, evidence-based interventions including psychiatric pharmacotherapy along with community engagement and capacity development are prerequisite. Especially in recent years, in the era of global drug development and worldwide big data analysis, both of medical professionals and patients are drastically moving around the world. This has been caused by rapid development of information technology facilitating global communications, as well as the growth of easy and inexpensive transportation means. Some are seeking for better working places or better healthcare services; others are evacuating from conflict area or traveling for disaster relief. Considering such situations, we have to seek for evolutionary change of drug development strategies, along with model change of community care, with enlightening perspective of psychiatric pharmacotherapy to achieve Global Mental Health.

In this symposium, speakers from Asian countries will introduce their experience in their activities to facilitate community care, including innovative psychiatric pharmacotherapy strategies, towards the achievement of Global Mental Health:

Chieko Kurihara, Senior Researcher, National Institute for Quantum and Radiological Sciences and Technology will present opening remarks of this symposium and provide a view of community care, along with global drug development and psychiatric pharmacotherapy strategies towards Global Mental Health.

Tae-Yeon Hwang, Director of Mental Health Services and Planning, National Center for Mental Health, South Korea, will introduce his activities in newly-built National Center, in their new era of revised Mental Health Act, as well as his international activities in collaborative partnership with Asian psychiatrists for facilitating community care, clinical research as well as improvement of psychiatric pharmacotherapy in each country.

Tiur Sihombing, Duren Sawit Narcotic and Mental Hospital, Indonesia, will introduce her hospital organization to provide mental health service collaborating with extensive specialists of comorbidities, such as internists, pediatricians, gynecologists, etc.(consultation liaison psychiatry). Also she will introduce their engagement in rational drug use, according to guidelines, as well as community empowerment in low resource settings.

Yang Yen-Kuang, Professor of the Department of Psychiatry, National Cheng Kung University will introduce his long-standing contribution to mental health in Tainan city sometimes collaborating with local government as well as facilitating clinical trial for implementing new medications. He will show some key strategies for successful evidence-based community care, along with innovative drug development and translational research, based on his expertise and experience.

Kazutaka Shimoda, Professor, Chairman of the Department of Psychiatry, Dokkyo Medical University, will present overviewing summary of this session and closing remarks.

S12-1 Integrating Psychopharmacology and Psychosocial Rehabilitation for Recovery of Person with Mental Illness

Tae-Yeon HWANG

National Center for Mental Health, Korea

S12-2 HOLISTIC APPROACH FOR TREATING SCHIZOPHRENIC PATIENTS IN DUREN SAWIT MENTAL HOSPITAL JAKARTA, INDONESIA

Tiur A SIHOMBING

Duren Sawit Mental Hospital Jakarta, Indonesia

S12-3 The Key Strategies for Treating Severe Mental Ill (SMI) Patient in Taiwanese Community

Yen Kuang YANG

Department of Psychiatry, National Cheng Kung University Hospital, College of Medicine, National Cheng Kung University, Taiwan

S12-4 Summary and closing remarks

Kazutaka SHIMODA

Department of Psychiatry, Dokkyo Medical University, Japan

■ Discussants: Lillian COMAS-DÍAZ (*The George Washington University School of Medicine, USA*)

Frederick M JACOBSEN (*The George Washington University School of Medicine, USA*)

Symposium-13

October 11 (Fri), 10:30-12:10 / Room 12 (Fukuoka International Congress Center, 5F, 503)

The Global Collection Initiative for psychiatric genetics From genetic variation to disease mechanisms

Organizer / Chair: Yasue HORIUCHI (*Department of Psychiatry and Behavioral Sciences, Tokyo Metropolitan Institute of Medical Science, Japan*)

Co-chair: Hiroshi YONEDA (*Department of Neuropsychiatry, Division of Comprehensive Medicine, Osaka Medical College, Japan*)

Schizophrenia is a highly inheritable disorder, human genetics and genomics is a natural and powerful tool to study this disorder. Large-scale genetics studies have identified hundreds of loci underlying schizophrenia and provided initial insights into their disease pathogenesis. However, most of these studies were restricted to samples of European ancestry, limiting both scientific knowledge and its application from most of the world's population. To address this important gap in scientific knowledge while advancing global mental health equity, the Stanley Center has launched a global initiative to increase sample sizes for psychiatric research within diverse populations across the world.

Our efforts in mapping the genetic variants that drive risk in the population have taken a more global view, with the coordination and completion of the pan-Asian genome-wide association study of schizophrenia.

In our first study, Asians showed highly consistent effect sizes to those in Europeans, suggesting that the genetic basis of schizophrenia and by extension its biology is broadly shared across major world populations. Integrating the pan-Asian results with the European schizophrenia meta-analysis identifies almost 90 new schizophrenia genetic loci.

These initial investigations into the genetics of schizophrenia in Asia have demonstrated the value of a global perspective on genetic risk. To fully capture genetic risk for schizophrenia and other psychiatric diseases, we have launched the SC Global Collection Initiative, which aims to collect ~100,000 samples over the next four years. These efforts focus on diverse populations, including multiple collection efforts in Ethiopia, Kenya, South Africa, Uganda Mexico, China, Japan, Australia, and Finland.

In this symposium, we will discuss the current status of our project from China, USA and Japan.

S13-1 Progress of the International Psychiatric genetics consortium in Japan

Yasue HORIUCHI¹, Makoto ARAI¹, Masanari ITOKAWA¹, Akira SAWA², Teruhiko HIGUCHI³

¹Department of Psychiatry and Behavioral Sciences, Tokyo Metropolitan Institute of Medical Science, Japan,

²Johns Hopkins University School of Medicine and Bloomberg School of Public Health, USA,

³The National Center of Neurology and Psychiatry, Japan

S13-2 Comparative genetic architectures of schizophrenia in East Asian and European populations

Hailiang HUANG^{1, 2, 3}

¹Stanley Center for Psychiatric Research, Broad Institute, ²Massachusetts General Hospital, ³Harvard Medical School, USA

S13-3 Pharmacogenomics and personalized medicine study of schizophrenia in Chinese population

Shengying QIN

Bio-X Institutes of Shanghai Jiaotong University, China

S13-4 Neuropsychiatric Genetics of African Populations-Psychosis (NeuroGAP Psychosis): A case-control GWAS in Sub-Saharan Africa

Bizu GELAYE^{1, 2}, Dickens AKENA³, Lukoye ATWOLI⁴, Symon M KARIUKI^{5, 6}, Charles R.J.C. NEWTON^{5, 6}, Solomon TEFERRA⁷, Dan J. STEIN⁸, Zukiswa ZINGELA⁹, Anne STEVENSON^{1, 2}, Rocky E. STROUD^{1, 2}, Kristianna POST^{1, 2}, Lori B CHIBNIK^{1, 2}, Karestan C. KOENEN^{1, 2}

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⁵KEMRI-Wellcome Trust Research Programme, Kilifi, Kenya, ⁶University of Oxford, Oxford, UK,

⁷College of Health Sciences, Addis Ababa University, Addis Ababa, Ethiopia, ⁸University of Cape Town, Cape Town, South Africa,

⁹Walter Sisulu University, Mthatha, South Africa

■ Discussants: Akira SAWA (*Johns Hopkins University School of Medicine and Bloomberg School of Public Health, USA*)
Daisuke NISHIZAWA (*Tokyo Metropolitan Institute of Medical Science, Japan*)

Symposium-14

October 11 (Fri), 10:30-12:10 / Room 13 (Fukuoka International Congress Center, 5F, 501)

Novel strategy to treat hallucinations and delusions in schizophrenia: searching for new targets in neural circuits and brain networks

Organizer / Chair: Kazuyuki NAKAGOME (*National Center of Neurology and Psychiatry, Japan*)

Co-chair: Akira MONJI (*Department of Psychiatry, Saga University Faculty of Medicine, Japan*)

Schizophrenia is a fairly common and devastating mental illness characterized by positive and negative symptoms, with cognitive dysfunction. Patients with schizophrenia are usually treated with antipsychotic medication. However, 10-30% of schizophrenic patients are treatment resistant, and the pharmaceutical industry still considers schizophrenia as an attractive target for drug design and there are many novel agents in early development. Recently, some abnormalities in neural circuits and brain networks are proposed as objective biomarkers for positive symptoms, such as hallucinations or delusions. These biomarkers could be used in different stages of clinical drug development (mechanism of action, target engagement, use as diagnostic test, enrichment of study populations, stratification for subgroups, safety and efficacy markers, etc.). In addition, these abnormalities can also be studied in animal models to facilitate the discovery of new targets and drug candidates. The purpose of this symposium is to discuss the novel strategy to treat hallucinations and delusions in schizophrenia, based on the findings obtained from translational researches using advanced techniques to study neural circuits and brain networks. Potential use of the biomarkers in drug development would also be discussed. The first speaker will review the recent advancement of connectivity studies of hallucinations and delusions in schizophrenia. The topic includes salience-associated networks underlying psychosis and structural and functional connectivity associated with abnormal conservatism bias and the jumping to conclusions bias in patients. It is reported that 60-90% of patients with schizophrenia suffer from auditory hallucinations. It is hypothesized that auditory-verbal hallucinations are caused by an inner-speech abnormality. The second speaker will introduce the project exploring the causes of auditory-verbal hallucinations with a novel electrophysiological marker of inner-speech. On the other hand, patients with schizophrenia have been hypothesized to have a functional impairment in filtering irrelevant sensory information, which may result in hallucinations and delusions. The third speaker will review possible association between the auditory gating deficits and positive symptoms, focusing on the abnormalities in spontaneous gamma activity in schizophrenia. Finally, the fourth speaker will review the abnormal thalamocortical networks in schizophrenia. The topic includes the translational research using a novel mouse model to study roles of parvalbumin-expressing GABAergic neurons in the pathophysiology of schizophrenia. We hope that this symposium will help the audience to understand the recent advancements of translational researches focusing on abnormalities in neural circuits and brain networks to treat hallucinations and delusions in schizophrenia.

S14-1 Static and dynamic connectivity and aberrant salience in schizophrenia

Jun MIYATA

Department of Psychiatry, Kyoto University, Japan

S14-2 Exploring the basis of auditory-verbal hallucinations: developing a biomarker of inner speech integrity

Thomas J. WHITFORD

School of Psychology, University of New South Wales (UNSW Sydney), Australia

S14-3 Language-related deficits and abnormal neural oscillation in schizophrenia

Yoji HIRANO^{1,2}

¹*Department of Neuropsychiatry, Graduate School of Medical Sciences, Kyushu University, Japan,*

²*Department of Psychiatry, Harvard Medical School, USA*

S14-4 An animal model based on GABA hypothesis of schizophrenia and its endophenotypes

Hideki MIWA

Department of Neuropsychopharmacology National Institute of Mental Health: National Center of Neurology and Psychiatry, Japan

■ Discussants: Mitsuhiro YAMADA (*Department of Neuropsychopharmacology, National Institute of Mental Health, National Center of Neurology and Psychiatry, Japan*)

Shinji TAKAHASHI (*Taisho Pharmaceutical Co., Ltd., Japan*)

Symposium-15

October 11 (Fri), 10:30-12:10 / Room 14 (Fukuoka Sunpalace Hotel & Hall, 2F, Palace Room A)

The different effects of ketamine and its enantiomers on chronic stress induced-depressed animal models and clinical antidepressant and anti-suicidal effect studies in acute and maintenance therapy of patients with treatment resistant depression

Organizer / Chair: Tung-Ping T SU (*Department of Psychiatry, Cheng-Hsin General Hospital, Taipei, National Yang-Ming University, Taiwan*)

Co-chair: Hisashi MORI (*Department of Molecular Neurosciences, Graduate School of Medicine and Pharmaceutical Sciences, University of Toyama, Japan*)

The N-methyl-D-aspartate (NMDA) receptor antagonist ketamine exerts rapid and sustained antidepressant effects in depressed patients. Ketamine is a racemic mixture of equal amounts of enantiomers, (R)-ketamine and (S)-ketamine. The neural mechanisms that underlie different effects of these enantiomers remain unclear. Recent animal studies has demonstrated that (R)-ketamine has greater potency and longer-lasting antidepressant effects than (S)-ketamine. However, neural mechanisms that underlie different effects of these enantiomers still remain unclear. Further, GluN2D is a subunit of NMDA receptor, which plays an important role for the fast antidepressant effect of ketamine. The first study, presented by Dr. Ide to investigate the rapid and sustained antidepressant cognitive impairment effects of these enantiomers on the mice with and without GluN2D (wildtype) using TST and Novel Object Recognition Test (NORT) respectively. The second speaker Ago using chronic corticosterone –induced (CORT) mouse model depression confirms that (R)-ketamine exerts higher potency in antidepressant effects than (S)-ketamine, also do the metabolites (2R, 6R, Hydroxynorketamine). He has tried to use the technique of microdialysis to analyze the concentration of neurotransmitters related to the different enantiomers in order to clarify the common and distinct neural mechanisms for antidepressant effects of ketamine and its enantiomers. Up to date, there has no clinical trial of (R)-ketamine in humans, the third speaker Chen conducted a double-blind, randomized ketamine vs. placebo study and tried to understand how the changes of brain connectivity using FcMRI technique to support the PFC-related circuit modulation associated with the rapid antidepressant effects of ketamine. The final speaker Su initiated a maintenance therapy for ketamine responder by a double blind, RCS, with D-cycloserine vs. placebo for 7 week study to see if the partial agonist of glycine site on NMDA receptor could continue to sustain the response of ketamine on treatment resistant depression.

S15-1 The role of NMDA receptor GluN2D subunit in the effects of ketamine and its enantiomers

Soichiro IDE, Kazukata IKEDA

Addictive Substance Project, Tokyo Metropolitan Institute of Medical Science, Tokyo, Japan

S15-2 Differential behavioral and neurochemical effects of ketamine enantiomers and their metabolites

Yukio AGO¹, Hitoshi HASHIMOTO^{2,3,4,5}

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⁴Division of Bioscience, Institute for Dataability Science, Osaka University, Osaka, Japan,

⁵Transdimensional Life Imaging Division, Institute for Open and Transdisciplinary Research Initiatives, Osaka University, Osaka, Japan

S15-3 Antisuicidal Effect, BDNF Val66Met Polymorphism, and Low-Dose Ketamine Infusion: Adjunctive Ketamine Study of Taiwanese Patients with Treatment-Resistant Depression

Mu Hong CHEN, Tung-Ping SU

Department of Psychiatry, Taipei Veterans General Hospital, Taiwan

S15-4 Maintenance of Antidepressant and Antisuicidal effects by D-cycloserine among low-dose ketamine responders of treatment-resistant depression: a randomized, double-blind study

Tung-Ping T SU^{1,2,3,4,5}, Mu-Hong CHEN^{2,3,4}, Chih-Ming CHEN^{2,3,4}, Cheng-Ta LI^{2,3,4}, Wei-Chen LIN^{2,3,4}, Ya-Mei BAI^{2,3,4}

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⁵Department of Medical Research, Taipei Veterans General Hospital, Taipei, Taiwan

■ Discussant: Nagahide TAKAHASHI (*Hamamatsu University School of Medicine, Japan*)

Symposium-16

October 11 (Fri), 10:30-12:10 / Room 16 (Fukuoka Sunpalace Hotel & Hall, 2F, Heian)

Stresses and psychiatric diseases ~ mechanisms, gender, treatment ~

Organizer / Chair: Atsumi NITTA (*Dept of Pharmaceutical Thera & Neuropharmacol, Fac of Pharmaceutical Sci. Grad Sch of Med and Pharm Sci. University of Toyama, Toyama, Japan*)

Co-chair: Hiroshi ICHINOSE (*School of Life Science and Technology, Tokyo Institute of Technology, Japan*)

We are always receiving many and various stresses. Stresses sometime induce depressive disorder and anxiety, fall to drug addiction. Many patients are not received efficient therapy, since mechanism of onset of depressive disorders anxiety is not completely clarified, especially induced by stresses. Further many factors could be involved for the onset depressive disorders and/or anxiety, cocaine or methamphetamine, abuse, neglect, gene, environment, trauma, gender and etc. However we do not perfect medical tools for the depression and/or anxiety.

Here, we will focus to gender differences in the depression, GluK3-containing kainate, genomic factor of Shati/Nat8L.

We would like to discuss the mechanism of depression and anxiety, in order to novel medical tools in near future.

S16-1 GluK3-containing kainate receptors influence the anxiolytic-like activities in mice

Miho TERUNUMA¹, Izumi IIDA¹, Masahiko WATANABE², Kenji SAKIMURA³

¹Division of Oral Biochemistry, Niigata University, Niigata, Japan, ²Department of Anatomy, Hokkaido University School of Medicine, Japan,

³Department of Animal Model Development, Brain Research Institute, Niigata University, Japan

S16-2 Sex difference in the glutamate-glutamine transfer in animal model of depression

Akiko SHIMAMOTO¹, Virginie RAPPENEAU¹, Havisha MUNJAL¹, Tonie FARRIS¹, Cindy MOORE³, Charles K MESHUL^{2,3}

¹Department of Neuroscience and Pharmacology, Meharry Medical College, USA,

²Department of Behavioral Neuroscience, Oregon Health and Science University, USA, ³Veterans Affairs Portland, USA

S16-3 Overexpression of striatal Shati/Nat8I induces vulnerability to depressive behavior

Atsumi NITTA¹, Miyanishi HAJIME¹, Kyosuke UNO²

¹Dept of Pharmaceutical Thera & Neuropharmacol, Fac of Pharmaceutical Sci. Grad Sch of Med and Pharm Sci. University of Toyama, Toyama, Japan,

²Laboratory of Molecular Pharmacology, Faculty of Pharmaceutical Sciences, Setsunan University, Japan

■ Discussants: Kazuto KOBAYASHI (*Department of Molecular Genetics, Fukushima Medical University, Japan*)

Kiyoyuki KITAICHI (*Department of Biomedical Pharmaceutics, Gifu Pharmaceutical University, Japan*)

Symposium-17

October 11 (Fri), 16:30-18:10 / Room 6 (Fukuoka International Congress Center, 4F, 401+402)

Clinical research of gut-microbiota-brain axis

Organizer / Chair: Chun-Hsin CHEN (*Department of Psychiatry, Municipal Wan-Fang Hospital, Taipei Medical University, Taiwan*)

Co-chair: Katsuji NISHIMURA (*Department of Psychiatry, Tokyo Women's Medical University, Japan*)

Background: Accumulating evidence indicates that the gut microbiota can communicate with central nerve system, and thereby influences brain function and behavior, including mood symptoms. Preclinical studies have shown that consumption of probiotics may alter brain functions and reduce anxiety- or depression-like behaviors. Objective: The symposium aims to demonstrate some evidence of relationships between mood symptoms and microbiota, which may be significantly affected by diet or probiotics, in diverse subjects. First, Dr Okubo will report the association of fear of cancer recurrence (FCR) with omega-3 PUFAs and gut microbiota among breast cancer survivors. FCR among breast cancer survivors especially with chemotherapy history could be controlled by prudent dietary modification considering PUFAs and gut microbiota. Nutritional intervention considering PUFAs and probiotics to alleviate FCR will be proposed in the symposium. Second, Dr Kuo will report the comparisons of consumption of nitrated cured meat and composition of microbiota between patients with mood disorder and healthy control. In addition, peripheral gene expression patterns in patients with bipolar disorder during acute versus remission status will be evaluated. Finally, potential relationships between microbiota targets, nitrated meat consumption, and gene expression in human samples will be explored. Third, Dr Chen will review consumptions of probiotic to alleviate depressive symptoms in different kinds of participants and report meta-analysis of these human studies. Finally, a pilot study augmenting *Lactobacillus plantarum* PS128 in patients with major depressive disorder and stabilized antidepressant treatment will be reported.

S17-1 Fear of cancer recurrence among breast cancer survivors could be controlled by prudent dietary modification considering polyunsaturated fatty acids and gut microbiota.

Ryo OKUBO, Matsuoka J YUTAKA

Div. Health Care Research, National Cancer Center Japan, Tokyo, Japan

S17-2 Diet and gut-microbiota in mood disorders

Po-Hsiu KUO^{1,2}

¹*Institute of Epidemiology and Preventive Medicine, NTU*, ²*Department of Public Health, National Taiwan University, Taiwan*

S17-3 Application of probiotics to alleviate depressive symptoms in human

Chun-Hsin CHEN^{1,2}

¹*Department of Psychiatry, Municipal Wan-Fang Hospital, Taipei Medical University, Taiwan*,

²*Department of Psychiatry, School of Medicine, College of Medicine, Taipei Medical University, Taiwan*

■ Discussant: Hiroaki TOMITA (*Department of Psychiatry, Graduate School of Medicine, Tohoku University, Japan*)

Symposium-18

October 11 (Fri), 16:30-18:10 / Room 7 (Fukuoka International Congress Center, 4F, 403)

Advances in animal models of drug addiction

Organizer / Chair: Soichiro IDE (*Addictive Substance Project, Tokyo Metropolitan Institute of Medical Science, Japan*)

Co-chair: Ichiro SORA (*Department of Psychiatry, Kobe University Graduate School of Medicine, Japan*)

Recently, various addiction problems have spread in Asian countries, and the situation is growing serious. Addiction is a condition that results when individuals ingest an addictive substance or perform a specific action that can be pleasurable but the continuous use or act of which becomes compulsive and interferes with ordinary life responsibilities. It is very important to clarify the mechanisms underlying addiction, but there are still many unclear points. Animal studies have been crucial in understanding the biology and pathophysiology of drug addiction. In this symposium, we would like to introduce the latest knowledge about addiction by the researchers who are working on elucidating the mechanisms of addiction by animal studies. We hope that not only those who are directly involved in the clinical situation, but also basic researchers who are interested in research about decision making, function and pathology of reward systems, and behavioral pharmacology will widely participate in the symposium and discuss perspectives in animal models of addiction.

S18-1 Usefulness of intracranial self-stimulation method in drug dependence research

Soichiro IDE, Kazukata IKEDA

Addictive Substance Project, Tokyo Metropolitan Institute of Medical Science, Tokyo, Japan

S18-2 NMDA receptor modulating agents reduce ketamine self-administration and reinstatement

Hwei-Hsien CHEN, Mei-Yi LEE, Yu-Ching HSIAO

Center for Neuropsychiatric Research, National Health Research Institute, Taiwan

S18-3 Shati/Nat8l overexpression in the medial prefrontal cortex in mice inhibits methamphetamine-induced conditioned place preference in mice

Atsumi NITTA

Dept of Pharmaceutical Thera & Neuropharmacol, Fac of Pharmaceutical Sci. Grad Sch of Med and Pharm Sci. University of Toyama, Toyama, Japan

S18-4 Neural mechanisms of acute stress-induced enhancement of cocaine craving

Katsuyuki KANEDA

Laboratory of Molecular Pharmacology, Kanazawa University, Kanazawa, Japan

■ Discussant: Masahiro SHIBASAKI (*Department of Pharmacology, Hoshi University, Japan*)

Symposium-19

October 11 (Fri), 16:30-18:10 / Room 12 (Fukuoka International Congress Center, 5F, 503)

Future Development of Biomarker in Mental disorders

Organizer / Chair: Andi Jayalangkara TANRA (*Department of Psychiatry, Faculty of Medicine, Universitas Hasanuddin, Makassar, Indonesia*)
Co-chair: Minoru TAKEBAYASHI (*Department of Neuropsychiatry, Faculty of Life Sciences, Kumamoto University, Japan*)

Currently, there is an increasing number of techniques developed for biomarker of mental disorders.

One of that is the sAA (Salivary Alpha Amylase) Enzyme, which is produced by parotid gland in oral cavity. This enzyme could predict the level of stress from patients such as Psychotic, Depression, Bipolar and Anxiety through SAM (Sympathetic Adreno Medullary) system. Measuring the level of this enzyme is easy, safe and non-invasive, nonetheless the result is still in controversy.

However, the trait marker represents the properties of biological processes on behavior which play antecedent and possibly the pathophysiology role of mental disorder such as schizophrenia.

Therefore, serotonin transporter (SERT) system is still challenging to be explored as a biological marker of major depression, focused in animal model. Dysregulation of immune system is also closely involved in the pathogenesis of depression.

Finally, the glutamate decarboxylase like protein 1 (GADL1) variant could be used as a biomarker to predict therapeutic response to lithium maintenance treatment in bipolar I patients.

The 4 speakers will give contribution for elaborating future development of Biomarker for mental disorders and will enhance interesting discussion in our symposium.

S19-1 Prediction of Response to TMS based on Neural Networks in Verbal Auditory Hallucinations of Schizophrenia Disorders using qEEG Cordance

Khamelia Malik PASITTAI¹, Mohammad SADIKIN¹, Nurmiati AMIR², Raldi Artono KOESTOER³

¹Biomedical Doctoral Programme, Faculty of Medicine, Universitas Indonesia,

²Department of Psychiatry, Faculty of Medicine, Universitas Indonesia, ³Faculty of Engineering, Universitas Indonesia

S19-2 Salient and silent markers in mood disorders and relevant treatments

Chau-Shoun LEE^{1,2}, Jung Chen CHANG³

¹Department of Psychiatry, Mackay Memorial Hospital, Taiwan, ²Department of Medicine, Mackay Medical College, Taiwan,

³School of Nursing, College of Medicine, National Taiwan University, Taiwan

S19-3 Development of animal models and biomarker for depression focused on serotonergic systems

Akihiro MOURI¹, Kazuo KUNISAWA^{1,2}, Hidetsugu FUJIGAKI³, Yasuko YAMAMOTO³, Kuniaki SAITO³, Toshitaka NABESHIMA²

¹Department of Regulatory Science for Evaluation & Development of Pharmaceuticals & Devices, Fujita Health University Graduate School of Health Science, Aichi, Japan,

²Advanced Diagnostic System Research Laboratory, Fujita Health University Graduate School of Health Science, Aichi, Japan,

³Department of Disease Control and Prevention, Fujita Health University Graduate School of Health Science, Aichi, Japan

S19-4 Salivary Alpha Amylase (SAA) Enzyme as A Biomarker of Mental Disorders

Andi Jayalangkara TANRA, Sonny Teddy LISAL, Andi Suheyra SYAUKI

Department of Psychiatry, Faculty of Medicine, Universitas Hasanuddin, Makassar, Indonesia

■ Discussant: Kristian LIAURY (*Department of Psychiatry, Hasanuddin University, Indonesia*)

Symposium-20

October 11 (Fri), 16:30-18:10 / Room 13 (Fukuoka International Congress Center, 5F, 501)

International neuroimaging big data collaborations: ENIGMA and COCORO

Organizer / Chair: Ryota HASHIMOTO (*Department of Pathology of Mental Diseases, National Institute of Mental Health, National Center of Neurology and Psychiatry, Japan*)

Co-chair: Michio SUZUKI (*Department of Neuropsychiatry, University of Toyama Graduate School of Medicine and Pharmaceutical Sciences, Japan*)

The ENIGMA (Enhancing NeuroImaging Genetics through Meta Analysis) Consortium is an international effort by leaders worldwide. The Network brings together researchers in imaging genomics, neurology and psychiatry, to understand brain structure and function, based on MRI, DTI, fMRI, genetic data and many patient populations. The ENIGMA Network has several goals: to create a network of like-minded individuals, interested in pushing forward the field of imaging genetics, to ensure promising findings are replicated via member collaborations, in order to satisfy the mandates of most journals, to share ideas, algorithms, data, and information on promising findings or methods, to facilitate training, including workshops and conferences on key methods and emerging directions in imaging genetics. ENIGMA consists of over 30 active working groups (WGs). WGs are organized into four major research cores, sixteen Disease Working groups, six Genomics Groups, four Algorithm Development Groups three Healthy Variation Groups and three Collaborations with Other Consortia. ENIGMA published fifty three papers including review articles and Editorial.

COCORO (Cognitive Genetics Collaborative Research Organization), is the largest collaborative effort in biological psychiatry in Japan. The purpose of COCORO is to elucidate mechanisms of psychiatric disorders and brain function. Researchers in various fields such as neuroscience, molecular biology, genome science, psychiatry, neuroimaging, cognitive science, neurophysiology, psychology, neuropsychopharmacology, gather and exchange pioneer and promote new research fields. The interaction between clinical and basic researchers also facilitate understanding and exchange for translation. COCORO consists of over 30 institutes in Japan and running several projects including neuroimaging, neurophysiology, neurocognition and genetics. COCORO participated more than ten projects of ENIGMA, and also COCORO independently replicated the results of ENIGMA in several projects.

In this symposium, the representative of ENIGMA, Prof. Paul Thompson introduce the outline of ENIGMA. Then, achievement of Disease Working Group in Psychiatric Disorders and Algorithm Development Groups in Diffusion Tensor Imaging will be presented. Lastly, the achievement of COCORO will be presented in conjunction with successful replication of ENIGMA studies and new results. Future collaboration between ENIGMA and COCORO for replication and harmonization each other will be discussed.

S20-1 ENIGMA and Global Neuroscience: A Decade of Large-Scale Studies of the Brain in Health and Disease across more than 40 Countries

Paul M. THOMPSON

Stevens Institute for Neuroimaging & Informatics, University of Southern California, USA

S20-2 The ENIGMA Consortium Disease Working Groups - Psychiatric Disorders

Theo G.M. VAN ERP^{1,2}

¹*Clinical Translational Neuroscience Laboratory, Department of Psychiatry and Human Behavior, University of California Irvine, Irvine, USA,*

²*Center for the Neurobiology of Learning and Memory, University of California Irvine, Irvine, USA*

S20-3 The ENIGMA Consortium: Algorithm Development Groups and Diffusion Tensor Imaging

Neda JAHANSHAD

Mark and Mary Stevens Neuroimaging and Informatics Institute, Keck School of Medicine, University of Southern California, USA

S20-4 The ENIGMA and COCORO: Replication and Harmonization

Ryota HASHIMOTO^{1,2}

¹*Department of Pathology of Mental Diseases, National Institute of Mental Health, National Center of Neurology and Psychiatry, Tokyo, Japan,*

²*Osaka University, Japan*

■ Discussants: Tetsuya MATSUDA (*Tamagawa University, Brain Science Institute, Japan*)

Masaki FUKUNAGA (*Division of Cerebral Integraton, National Institute for Physiological Sciences, Japan*)

Symposium-21

October 12 (Sat), 8:40-10:20 / Room 6 (Fukuoka International Congress Center, 4F, 401+402)

Translational Research for New Drug Development in Neuropsychiatric Disorders

Organizer / Chair: Toshitaka NABESHIMA (*Graduate School of Health Science, Fujita Health University, Japan*)

Co-chair: Yukihiro OHNO (*Department of Pharmacology, Osaka University of Pharmaceutical Sciences, Japan*)

Schizophrenia, bipolar disorder and major depressive disorder are major neuropsychiatric disorders in world-wide. The patients with neuropsychiatric disorders should continuously take drugs to control their mental condition. Because many of the currently used neuropsychiatric drugs are symptomatic treatments that suppress the receptors and transporters. There are also severely ill patients who show poor or partial response to the drugs even if they receive appropriate medication. The key to preventing and curing neuropsychiatric disorders is to elucidate the mechanisms at molecular level. In this symposium, we will invite four speakers from Korea and Japan, and discuss about translational research for new drug development in neuropsychiatric disorders.

Professor Kim is neuropsychopharmacologist and toxicologist. He found that indoleamine 2,3-dioxygenase 1 (IDO1) gene play a crucial role in the neuropsychotoic conditions. IDO1 is the first and rate-limiting enzyme in the L-kynurenine pathway and is induced by several pro-inflammatory cytokines, including IFNs, tumor necrosis factor, and interleukin 6. He will discuss novel drug target for bipolar disorder and serotonin syndrome.

Dr. Nagai is neuropsychopharmacologist in schizophrenia research field. His collaborators recently identified novel copy-number variation (CNV) of several gene associated with the disease, including ARHGAP10, a member of the RhoGAP superfamily. They also generated a mouse model of a patient with a CNV in the ARHGAP10 gene. He will provide exciting results regarding novel animal model of schizophrenia developed from reverse translational research.

Dr. Kunisawa is one of the excellent young investigators in the research field of major depressive disorder. The metabolism of L-tryptophan (TRP), an essential amino acid, in extrahepatic tissues proceeds through the L-kynurenine (KYN) and the serotonin (5-HT) pathways. His research group found that TRP metabolism plays a critical role in depression induced by IFN- α and physical stressor.

Professor Noda is a neuropsychopharmacologist in the basic fields of psychiatric disorders (neurodevelopmental disorders, schizophrenia, stress-related disorders etc). Abnormalities of glutamate transporters (GLTs) cause some neurodevelopmental disorders, such as ADHD and schizophrenia. He found that functional roles of glial GLT in neurodevelopment under the physiological and pathological conditions using the mice with varying expression of transporter. His model may provide one useful tool for elucidating the contribution of glutamate dysfunction to the pathophysiology of psychiatric disorders, and glial GLT will be a new target molecule for their therapeutics.

These findings suggest that IDO, ARHGAP10, TRP and GLT are novel target for the treatment of neuropsychiatric disorders.

S21-1 A novel animal model of schizophrenia based on copy-number variations

Taku NAGAI¹, Akira SOBUE¹, Daisuke MORI², Kazuhiro HADA¹, Jingzhu LIAO¹, Bolati WULAER¹, Toshitaka NABESHIMA^{3,4}, Norio OZAKI², Kiyofumi YAMADA¹

¹Department of Neuropsychopharmacology and Hospital Pharmacy, Nagoya University Graduate School of Medicine, Nagoya, Japan,

²Department of Psychiatry, Nagoya University Graduate School of Medicine, Nagoya, Japan,

³Advanced Diagnostic System Research Laboratory Fujita Health University, Graduate School of Health Sciences, Toyoake, Japan,

⁴Aino University, Ibaraki, Japan

S21-2 Involvement of glial dysregulation of glutamatergic neurotransmission in development of behavioral abnormalities

Yukihiro NODA, Mizuki UCHIDA

Division of Clinical Sciences and Neuropsychopharmacology, Faculty of Pharmacy, Meijo University, Nagoya, Japan

S21-3 Indoleamine-2,3-dioxygenase-1 is a molecular target for the protective activity of mood stabilizers against mania-like behavior induced by d-amphetamine

Hyoung-Chun KIM¹, Hai-Quyen TRAN¹, Eun-Joo SHIN¹, Kuniaki SAITO², The-Vinh TRAN¹, Naveen SHARMA¹, Dae-Won KIM³, Soo Young CHOI⁴, Ji Hoon JEONG⁵, Choon-Gon JANG⁶, Toshitaka NABESHIMA^{2,7,8}

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³Department of Biochemistry and Molecular Biology, Research Institute of Oral Sciences, College of Dentistry, Gangneung-Wonju National University, Gangneung, Korea.,

⁴Department of Biomedical Science and Research Institute of Bioscience and Biotechnology, Hallym University, Chunchon, Korea,

⁵Department of Pharmacology, College of Medicine, Chung-Ang University, Seoul, Korea,

⁶Department of Pharmacology, School of Pharmacy, Sungkyunkwan University Suwon, Korea, ⁷Aino University, Ibaraki, Japan,

⁸Japanese Drug Organization of Appropriate Use and Research, Nagoya, Japan

S21-4 The role of tryptophan metabolism in major depressive disorder

Kazuo KUNISAWA¹, Akihiro MOURI¹, Aika KOSUGE¹, Tsubasa IIDA¹, Wulaer BOLATI^{2,3}, Yasuko YAMAMOTO², Kuniaki SAITO^{2,3}, Toshitaka NABESHIMA³

¹Department of Regulatory Science for Evaluation & Development of Pharmaceuticals & Devices, Fujita Health University Graduate School of Health Sciences, Aichi, Japan,

²Department of Disease Control and Prevention, Fujita Health University Graduate School of Health Sciences, Aichi, Japan,

³Advanced Diagnostic System Research Laboratory, Fujita Health University Graduate School of Health Science, Aichi, Japan

■ Discussants: Wen-Sung LAI (*Department of Psychology, National Taiwan University, Taiwan*)

Ming-Huan CHAN (*Institute of Neuroscience, National Chengchi University, Taiwan*)

Symposium-22

October 12 (Sat), 8:40-10:20 / Room 11 (Fukuoka International Congress Center, 5F, 502)

Molecular Pathology and Therapeutic Potentials in Schizophrenia

Organizer / Chair: Tetsuro OHMORI (*Department of Psychiatry, Institute of Biomedical Sciences, Tokushima University Graduate School, Japan*)

Co-chair: Yasunori MORIO (*Translational Medical Center, National Center of Neurology and Psychiatry, Japan*)

Schizophrenia is a complex psychiatric disorder with a lifetime morbidity rate of 0.5 —1.0%. Despite the etiological complexities of schizophrenia, accumulating evidence suggests that glutamatergic disturbances, inflammation, and alterations in one-carbon metabolism might play key roles in the pathophysiologies of schizophrenia, which in turn helps us identify novel therapeutic targets. In this session, we will present our latest preclinical and human research findings to discuss novel therapeutic strategies for treatment of schizophrenia and associated psychiatric conditions.

S22-1 Inflamed brain: Targeting brain immune cells for treatment of psychiatric disorders

Atsushi KAMIYA

Department of Psychiatry and Behavioral Sciences, Johns Hopkins University School of Medicine, USA

S22-2 Glutamatergic system in schizophrenia and future perspective for the treatment

Akihito UEZATO

School of Health and Welfare, International University of Health and Welfare, Japan

S22-3 Altered one-carbon metabolism in schizophrenia and potential treatments

Shusuke NUMATA

Department of Psychiatry, Graduate School of Biomedical Science, Tokushima University, Japan

S22-4 Cognitive impairments in schizophrenia: Drug discovery strategy and potential targets

Kazutaka OHI^{1, 2}

¹*Department of Neuropsychiatry, Kanazawa Medical University, Japan, ²Medical Research Institute, Kanazawa Medical University, Japan*

■ Discussants: Kotaro HATTORI (*Medical Genome Center, National Center of Neurology and Psychiatry, Japan*)

Tetsurou KIKUCHI (*New Drug Research Division, Pharmaceutical Business Division, Otsuka Pharmaceutical Co., Ltd., Japan*)

Symposium-23

October 12 (Sat), 8:40-10:20 / Room 12 (Fukuoka International Congress Center, 5F, 503)

Perspectives on psychiatric research from an Asian-Pacific context

Organizer / Chair: Suresh SUNDRAM (*Department of Psychiatry, School of Clinical Sciences, Monash University and Monash Health, Australia*)

Co-chair: Toshiya MURAI (*Department of Psychiatry, Graduate School of Medicine, Kyoto University, Japan*)

The global increase in the awareness of mental health has coincided with the revolution of precision medicine and the possibility of personalised treatments. These advances have been absent in psychiatry due to the lack of biological markers and the imprecision of current nosologies. These shortcomings then have delayed the development of diagnostic tests and disease modifying treatments. The Asia-Pacific region is ideally placed to address these limitations due to access to large sample populations and the introduction of emergent technologies. This symposium presents varying approaches to these issues.

Sundram describes how work examining the mechanism of action of clozapine has identified epidermal growth factor system dysfunction that extends beyond treatment resistant schizophrenia to include a sub-group of mood disorder patients. Si presents research examining how multiple approaches can converge to assist understanding of the effects of antipsychotic drugs on neurodevelopment and the implications for adult behaviour. Srisurapanont presents clinical work demonstrating the differences in phenomenology based on cultural and ethnic factors that potentially influence the taxonomy of mood disorders.

Together, these presentations highlight the diversities of approaches across the region that can be brought to bear on developing new avenues in diagnosing and treating psychiatric disorders.

S23-1 Towards a biological classification of psychotic disorders

Suresh SUNDRAM^{1,2}

¹*Department of Psychiatry, School of Clinical Sciences, Monash University, ²Monash Health, Australia*

S23-2 Effects of antipsychotics used in pregnancy on neurodevelopment and cognition

Tianmei SI, Yun' Ai SU

Peking University Institute of Mental Health, Beijing, China

S23-3 Clinical Features of Depression in Asian Patients

Manit SRISURAPANONT

Department of Psychiatry, Chiang Mai University Faculty of Medicine, Thailand

■ Discussant: Kyung Joon MIN (*Department of Psychiatry, Chung-Ang University, Korea*)

Symposium-24

October 12 (Sat), 8:40-10:20 / Room 14 (Fukuoka Sunpalace Hotel & Hall, 2F, Palace Room A)

Brain Stimulation on Neuropsychiatric Disorders: Basic Mechanisms and Clinical Efficacy

Organizer / Chair: Cheng-Ta LI (*Department of Psychiatry, Taipei Veterans General Hospital, Taiwan*)

Co-chair: Yasushi ISHIDA (*Department of Psychiatry, Faculty of Medicine, University of Miyazaki, Japan*)

A growing number of evidence points out that abnormal brain function plays an critical role in many neuropsychiatric disorders (e.g., major depression, schizophrenia, Alzheimer's disease). In addition, many of these disease left unsatisfactorily treated even under the combination of medications and psychotherapy. In addition to electroconvulsive therapy (ECT) and traditional brain stimulation - repetitive transcranial magnetic stimulation (rTMS), a new form of brain stimulations, theta burst stimulation (TBS), is becoming more and more important in the treatment for these neuropsychiatric disorders. In 2008, US FDA cleared the rTMS system for treating antidepressant-resistant major depression; likewise, in 2018, Taiwan FDA also had rTMS approved for treating antidepressant-resistant major depression. However, what are the mechanisms underlying the brain stimulation techniques for neuropsychiatric disorders and whether TBS are more effective than traditional TMS for treating neuropsychiatric disorders (e.g., drug-resistant depression) remain not totally understood. In this symposium, experts from different countries would talk about the mechanisms and clinical efficacy of different brain stimulation techniques and the applications of brain stimulations.

S24-1 Brain Stimulation on Neuropsychiatric Disorders: Basic Mechanisms and Clinical Efficacy

Cheng-Ta LI¹, Masashi HAMADA², Takahashi SHUN³, Ming-Hsien HSIEH⁴

¹*Department of Psychiatry, Taipei Veterans General Hospital, Taiwan,*

²*Department of Neurology, The University of Tokyo, Graduate School of Medicine, Japan,*

³*Department of Neuropsychiatry, Wakayama Medical University, Japan,* ⁴*Department of Psychiatry, National Taiwan University, Taiwan*

S24-2 Mechanisms of Theta-burst stimulation and other new forms of brain stimulation

Masashi HAMADA

Department of Neurology, The University of Tokyo, Japan

S24-3 Assessment of cortical excitability using TMS techniques in neuropsychiatric disorders

Shun TAKAHASHI

Department of Neuropsychiatry, Wakayama Medical University, Japan

S24-4 The Effect of Repetitive Transcranial Magnetic Stimulation on Duration Mismatch Negativity

Ming H. HSIEH¹, Yi-Ting LIN¹, Sheng-Chang WANG², Yi-Ling CHIEN¹, Chih-Min LIU¹, Chen-Chung LIU¹, Tzung-Jeng HWANG¹

¹*Department of Psychiatry, National Taiwan University Hospital, Taiwan,*

²*Division of Mental Health and Substance Abuse Research, National Health Research Institute, Miaoli, Taiwan*

■ Discussants: Satoshi UKAI (*Department of Neuropsychiatry, Wakayama Medical University, Japan*)
Nagafumi DOI (*Ibaraki Prefectural Medical Center of Psychiatry, Japan*)

Symposium-25

October 12 (Sat), 8:40-10:20 / Room 15 (Fukuoka Sunpalace Hotel & Hall, 2F, Palace Room B)

Early detection and new intervention in psychiatric disorders: from rare diseases, schizophrenia, to dementia

Organizer / Chair: Norio OZAKI (*Department of Psychiatry, Nagoya University Graduate School of Medicine, Japan*)

Co-chair: Makoto ARAI (*Tokyo Metropolitan Institute of Medical Science, Japan*)

Early detection and new intervention are vital in psychiatric disorders. In this symposium, four speakers will discuss the recent findings of early detection and new intervention in psychiatric disorders, ranging from rare diseases, schizophrenia, to dementia. Dr. Norio Ozaki (Nagoya University, Japan) will discuss the recent findings on elucidation of pathogenesis and development of treatment from rare susceptibility variants of neurodevelopmental disorders such as schizophrenia and autism spectrum disorder. Dr. Yong-Chul Chung (Chonbuk National University, Korea) will review literatures on rumination in relation to psychosis and depression and its mediating role in the development of diverse psychiatric symptoms. In addition, results on the correlations between rumination and other psychiatric symptoms measured at baseline in patients with first episode psychosis (n=440), changes of rumination score at 6 and 12 ms, and its predicting role for outcome will be presented. Based on these findings, a new perspective on the efficacy of antipsychotics on rumination will be suggested.

Dr. Hsien-Yuan Lane (China Medical University, Taiwan) will report some novel N-methyl-D-aspartate receptor (NMDAR)-related biomarkers and enhancers for diagnosis and treatment of schizophrenia in this symposium. Glutamatergic system plays a key role in pathophysiology of a number of neuropsychiatric disorders including psychiatric disorders and neurodegenerative disorders. Therefore, glutamatergic system would be the novel target for these disorders. NMDAR dysfunction plays vital roles in pathogenesis of schizophrenia. However, there have been lack of suitable biomarkers and enhancers for schizophrenia. Dr. Chieh-Hsin Lin (Kaohsiung Chang Gung Memorial Hospital, Taiwan) will talk about the clinical efficacy and safety of a D-amino acid oxidase (DAAO) in the treatment of early-phase dementia. NMDAR hypofunction is found in early-phase dementia. Current treatments for dementia are unsatisfactory. Further, feasible biomarkers for detecting dementia are also lacking. DAAO inhibitor may enhance the NMDAR neurotransmission. She also found that the peripheral DAAO levels may increase with age-related cognitive decline. The findings will help to develop novel detection and intervention at early phase of dementia.

Dr. Tomiki Sumiyoshi (National Center of Neurology and Psychiatry, Japan) will conclude the session by summarizing the information presented by the speakers, and providing an insight into the development of effective ways to intervene into the early and prodromal stages of these psychiatric conditions.

S25-1 Drug development for schizophrenia based on the pathogenesis from rare disease-susceptibility variants

Norio OZAKI

Department of Psychiatry, Nagoya University Graduate School of Medicine, Japan

S25-2 Effect of antipsychotics on rumination in patients with first-episode psychosis: new perspective for efficacy

Yongchul CHUNG, Yan Hong PIAO, Woo-Sung KIM, Guang Fan SHEN, Young-Eun OH

Department of Psychiatry, Chonbuk National University Medical School, Korea

S25-3 Early detection and novel intervention of schizophrenia: NMDAR-related biomarkers and modulators

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S25-4 Early detection and intervention of dementia: approach from NMDA neurotransmission

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■ Discussant: Tomiki SUMIYOSHI (*National Center of Neurology and Psychiatry, Japan*)

Symposium-26

October 12 (Sat), 8:40-10:20 / Room 16 (Fukuoka Sunpalace Hotel & Hall, 2F, Heian)

Imaging genetics of schizophrenia

Organizer / Chair: Jinsong TANG (*Department of Psychiatry, The Second Xiangya Hospital of Central South University, China*)

Co-chair: Hiroaki TOMITA (*Department of Psychiatry, Graduate School of Medicine, Tohoku University, Japan*)

Schizophrenia is a severe, highly heritable, neuropsychiatric disorder. Previous studies on the relationship between interindividual variations in impulsivity and those in local brain structure in healthy subjects have yielded inconsistent findings. Our study aimed to clarify this issue using high-quality structural magnetic resonance imaging (MRI) data from 1105 healthy young adults to calculate gray matter volume (GMV). Delay discounting was used to assess impulsivity. We found significant positive correlations between area-under-the-curve (AUC) measures of delay discounting and GMV in the bilateral temporal pole, i.e., individuals with smaller GMV in the temporal pole exhibited greater delay discounting (greater impulsivity), which suggest that interindividual differences in impulsivity are associated with temporal pole morphology. These findings may provide insight into the mechanisms of impulsive behavior in clinical populations.

In addition to impulsivity, schizophrenia patients often experience auditory verbal hallucination (AVHs) and most of the AVHs usually associate with the negative evaluation of patients. AVHs can also be found in other subjects, from healthy individual to various psychiatric disorders (such as bipolar disorder, major depression disorder, post traumatic stress disorder etc). The commonality and specificity of AVHs among different subjects (including healthy individuals and patients with various mental disorders) diseases have not yet been fully described. These problems affecting the early precise diagnosis and treatment for this disease AVHs in different subjects. We suggest that using machine learning combined with neuro-imaging -genetics will be used to explore the commonality and specificity of neuro-imaging -genetics features in AVHs among patients subjects with schizophrenia, bipolar disorder, other disorders and healthy individuals with non-mental verbal hallucination. Understanding these features may reveal precise therapeutic targets, establish create the early diagnosis and precisely treatment predictive models for AVHs, establish objective index system for evaluating therapeutic outcomes, improve the early efficacy of diagnosis and treatment outcome of AVHs subjects, and to reduce the harmfulness of AVHs.

For the majority of schizophrenia patients, especially with AVHs, symptoms are treated with antipsychotic drugs such as risperidone, which has neurotransmitter receptor affinities of dopamine, serotonin and other transmitters and effective in treatment of acute psychosis and relapse prevention schizophrenia. There is a need to identify biomarkers for predicting, tracking and understanding psychopharmacological treatment outcomes. DNA methylation has been studied as a biomarker in schizophrenia risk. However, effects of antipsychotic medications on methylation have not been systematically examined. To estimate the effect of risperidone on DNA methylation, and investigate the relationship between DNA methylation changes and therapeutic effects on behavioral and neuroimaging phenotypes, this study conducted a longitudinal analysis of blood DNA methylation with 38 first-episode drug-naïve schizophrenia patients (FESPs) studied before and after risperidone monotherapy, and 38 demographically-matched healthy control individuals. We identified 8,204 FESPs associated CpG sites which enriched in brain related pathways. Risperidone treatment lead to methylation alterations of 6,143 CpG sites which are related to the calcium signaling pathway. Treatment normalized 659 CpG sites and these DNA methylation changes were related to alterations in symptoms severity, spontaneous brain physiological activity and cognitive function in FESPs.

S26-1 A comprehensive analysis of GSK3B rs3755557 polymorphism for schizophrenia in Han Chinese

Chen ZHANG¹, Yan CHEN¹, Shen HUA², Weiping WANG², Weixing FAN², Wei TANG³, Yi ZHANG¹

¹Shanghai Mental Health Center, China, ²Jinhua Second Hospital, China, ³Wenzhou Kangning Hospital, China

S26-2 The neuroimaging characteristics of negative symptoms in the patients with schizophrenia

Xiang Rong ZHANG¹, Teng XIE², Xiao Wei TANG^{1,3}, Miao YU¹, Hong Ying ZHANG⁴, Yong HE²

¹Department of Geriatric Psychiatry, Affiliated Nanjing Brain Hospital, Nanjing Medical University, China,

²National Key Laboratory of Cognitive Neuroscience and Learning, Beijing Normal University, Beijing, China,

³Department of Psychiatry, Wutaishan Hospital of Yangzhou, Yangzhou, China,

⁴Department of Radiology, Subei People's Hospital of Jiangsu Province, Yangzhou University, Yangzhou, China

S26-3 Risperidone-induced DNA methylation alterations in first-episode drug-naïve schizophrenia patients and their relationship with neuroimaging and cognitive phenotypes

Jinsong TANG^{1,2,4,5}, Maolin HU¹, Yan XIA³, Xiaofeng ZONG¹, Chao CHEN³, Chunyu LIU³, Xiaogang CHEN¹

¹Department of Psychiatry, the Second Xiangya Hospital of Central South University,

²The China National Clinical Research Center for Mental Health Disorders, the Second Xiangya Hospital of Central South University,

³Center for Medical Genetics, School of Life Sciences, Central South University, ⁴Key Laboratory of Psychiatry and Mental Health of Hunan Province,

⁵Institute of Mental Health of the Second Xiangya Hospital of Central South University

S26-4 Prospective memory performance in different phases of psychosis

Fuchun ZHOU¹, Iunan LIN¹, Chuanyue WANG¹, Yutao XIANG²

¹Beijing Anding Hospital, Capital Medical University, ²Faculty of Health Sciences, University of Macau

■ Discussants: Lulin DAI (*Department of Information Science and Biomedical Engineering of Kagoshima University, Japan*)
Yanhui LIAO (*Mental Health Institute, The Second Xiangya Hospital of Central South University, China*)

Symposium-27

October 12 (Sat), 10:30-12:10 / Room 1 (Fukuoka International Congress Center, 3F, Main Hall)

Regulatory Collaboration to Accelerate Drug Development

Chairs: Junko SATO (*Pharmaceuticals and Medical Devices Agency, Japan*)

Shigeto YAMAWAKI (*Center for Brain, Mind and KANSEI Sciences Research, Hiroshima University, Japan*)

Primary role of regulatory agency is to protect public health through scientific evaluation of drug and biologic products and also medical devices. To ensure the efficacy and safety of medical products based on substantial evidence, regulatory science has grown out of the need to integrate knowledge among basic research, clinical research and clinical medicine. Based on such enormous efforts and experiences on scientific evaluation, regulatory agencies can generate state-of-the-art strategies in the area of regulatory science to accelerate drug development process by making it more adequate and efficient. With greater knowledge about the direction favored by regulatory agencies, researchers and companies can design technologies. Regarding psychiatric fields, there have been many alterations in drug development programs in the past, including the mental disorders studied and complexity of clinical trial designs and data analysis. Such progress results from current advance of research for functional mechanism that underlies central nervous system (CNS) derangement in psychiatric illness. However, there is vast unmet medical need that treatment for patients with mental disorder does not result improvement sufficiently and they often disabled despite existing treatments. These situations can be accounted for in part by increasing diversity in the patients in clinical practice and existing medical products with a limited number of new mechanisms of action, and it is necessary to develop new drugs in the future. Innovative ways to quantify human and animal behavior provide increasing number of CNS targets which may contribute to psychiatric drug development, though it still remains unclear how they relate to symptoms which underlie clinical entities. From this point of view, building regulatory collaboration is strategic activity to foster potentially valuable pharmaceutical technologies and to address public health problems. The objectives of this symposium are discussion for ways of regulatory collaboration after consideration of challenges of regulatory advance for innovation.

S27-1 Challenges of Regulatory Advance for Innovation in Japan from the Viewpoint of Regulatory Science

Shinobu UZU

Pharmaceuticals and Medical Devices Agency, Japan

S27-2 Regulatory Perspectives of Current New Drug Development in Neuropsychopharmacology

Chi-Hsun CHEN

Division of New Drug, Center for Drug Evaluation, Taiwan

S27-3 Regulatory innovation to enhance new product development

Yvonne Siew Khoon KHOO

National Pharmaceutical Regulatory Division (NPRA), Ministry of Health Malaysia, Malaysia

S27-4 Drug development for Asia from the pharmaceutical company's perspective

Kazuto YAMADA

Otsuka Pharmaceutical Co., Ltd., Japan

S27-5 Introduction of Phase 2 clinical trial network and central evaluation system in Japan

Kazuyuki NAKAGOME

National Center of Neurology and Psychiatry, Japan

■ Discussant: Tetsuo NAKABAYASHI (*Pharmaceuticals and Medical Devices Agency, Japan*)

Symposium-28

October 12 (Sat), 10:30-12:10 / Room 12 (Fukuoka International Congress Center, 5F, 503)

The habenular nuclei involved in emotional regulation

Organizer / Chair: Hitoshi HASHIMOTO (*Laboratory of Molecular Neuropharmacology, Graduate School of Pharmaceutical Sciences, Osaka University, Japan*)

Co-chair: Hirokazu HIRAI (*Department of Neurophysiology & Neural Repair, Gunma University Graduate School of Medicine, Japan*)

The habenula is a small brain region located close to the midline and surrounded by the third ventricle and is well conserved across vertebrates. It has this name from Latin for "little rein" which was originally designated as pedunculus of pineal body and thought to be involved in regulation of the pineal gland. However, recently studies have demonstrated that the habenula connects various brain regions within, e.g., the forebrain and midbrain and is implicated in a variety of important brain functions. The habenula is divided into two main subregions, the medial and lateral habenula (in lower vertebrates, dorsal and ventral habenula). These two subregions have been shown to have distinct composition of neurotransmitters, neural connectivity, and gene expression profiles. More recently, a number of important findings have been reported that illustrate the critical roles of the habenula in emotional regulation, disturbance of which can cause psychiatric disorders such as depression, and thus provide insights into new treatment approach. In this symposium, three eminent guest speakers will present their recent research achievements concerning the roles of the habenula. Dr. Hitoshi Okamoto at RIKEN will present the findings showing that social conflict and aversive behavior are regulated by the habenula using zebrafish. Dr. Hidenori Aizawa at Hiroshima University will present the findings showing that aberrant glial function in the lateral habenula is involved in the increased susceptibility to the chronic stress. Dr. Yihui Cui at Zhejiang University will present the findings showing that ketamine blocks bursting in the lateral habenula providing a possible mechanism for rapid antidepressant actions.

(This symposium will be related with those organized by Dr. Kenji Hashimoto (S37) and Dr. Tung-Ping Su (S15).)

S28-1 Regulation of social conflict by the synaptic plasticity in the habenulo-interpeduncular pathway

Hitoshi OKAMOTO

RIKEN Center for Brain Science, Japan

S28-2 Glial mobilization in the murine lateral habenula increases susceptibility to the chronic stress

Hidenori AIZAWA

Dept. of Neurobiology, Graduate School of Biomedical and Health Sciences, Hiroshima University, Hiroshima, Japan

S28-3 Burst, ketamine and Depression

Yihui CUI

Center for Neuroscience, Zhejiang University, China

■ Discussants: Tomoyuki FURUYASHIKI (*Division of Pharmacology, Graduate School of Medicine, Kobe University, Japan*)
Tetsuya SUHARA (*National Institutes for Quantum and Radiological Science and Technology, Japan*)

Symposium-29

October 12 (Sat), 10:30-12:10 / Room 14 (Fukuoka Sunpalace Hotel & Hall, 2F, Palace Room A)

Research on Asian Psychotropic prescription pattern (REAP)

Organizer / Chair: Shih-Ku LIN (*Taipei City Hospital and Psychiatric Center, Taiwan*)

Co-chair: Norio WATANABE (*Department of Health Promotion and Human Behavior, Kyoto University Graduate School of Medicine / School of Public Health, Japan*)

REAP is the longest standing and the largest international collaborating research in the field of psychiatry in Asia. The study started in 1999 as a large scale collaborative research project in East Asia. The REAP studied the prescription of patients with schizophrenia in 2001, 2004, 2008 and 2016. Fifteen countries and areas in Asia participated in the REAP survey in 2016. More than seventy papers were published from this consortium.

The first survey of bipolar disorder is implemented in 2018. In this symposium, Prof Shinfuku will give an overview talk on REAP and its clinical implication and influence; Prof Inada will discuss the use of Dug-induced Extrapyramidal Symptoms Scale in REAP AP4; Prof Chong will discuss multiple versus single antipsychotic drug treatment of inpatients with schizophrenia; and Prof Lin will report the findings from REAP Bipolar disorder.

S29-1 High dose prescription and polypharmacy for persons with schizophrenia in Japan-Findings from 4 REAP surveys on the prescription of psychotropic drugs from 2001-to 2016

Naotaka SHINFUKU

Kobe University, Kobe, Japan

S29-2 Profiles of antipsychotic-induced extrapyramidal symptoms assessed using the DIEPSS in 5 Asian countries attending the REAP AP4 survey

Toshiya INADA¹, Chika KUBOTA², Ajit AVASTHI³, Kok-Yoon CHEE⁴, Andi Jayalangkara TANRA⁵, Shin-Ku LIN⁶, Naotaka SHINFUKU⁷

¹*Department of Psychiatry and Psychobiology, Nagoya University Graduate School of Medicine, Aichi, Japan,*

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³*Department of Psychiatry, Postgraduate Institute of Medical Education & Research, Chandigarh, India,*

⁴*Department of Psychiatry & Mental Health, Kuala Lumpur Hospital, Kuala Lumpur, Malaysia,*

⁵*Department of Psychiatry, Hasanuddin University, Makassar, Indonesia,*

⁶*Department of Psychiatry, Taipei City Hospital and Psychiatric Center, Taipei, Taiwan, ⁷Emeritus Professor, Kobe University, Kobe, Japan*

S29-3 Multiple versus single antipsychotic drug treatment of inpatients with schizophrenia in Asia

Mian-Yoon CHONG^{1,2}

¹*Chang Gung Memorial Hospital, ChiaYi, Taiwan, ²Chang Gung University School of Medicine, Taiwan*

S29-4 Polypharmacy in Bipolar disorder: Findings from REAP Bipolar Disorder

Shih-Ku LIN^{1,2}, Shu-Yu YANG¹, Naotaka SHINFUKU³

¹*Taipei City Hospital and Psychiatric Center, Taiwan, ²School of Medicine, Taipei Medical University, Taiwan,*

³*Kobe University School of Medicine, Japan*

■ Discussants: Chay Hoon TAN (*National University of Singapore, Singapore*)

Andi Jayalangkara TANRA (*Universitas Hasanuddin, Indonesia*)

Symposium-30

October 12 (Sat), 10:30-12:10 / Room 15 (Fukuoka Sunpalace Hotel & Hall, 2F, Palace Room B)

Network meta-analysis, Individual participant (network) meta-analysis & Cumulative (network) meta-analysis

Organizer / Chair: Toshiaki A. FURUKAWA (*Department of Health Promotion and Human Behavior, Kyoto University Graduate School of Medicine / School of Public Health, Japan*)

Co-chair: Hisateru TACHIMORI (*National Center of Psychiatry and Neurology, Japan*)

Medicine is making constant progress and for many diseases we currently have several or more treatment alternatives. Network meta-analysis (NMA) offers the strongest method for evidence synthesis in such circumstances by pooling both direct and indirect comparisons, thus enabling comparisons where direct ones are lacking, making effect estimates more precise than through direct comparisons only, and ultimately ranking all alternative treatments.

The methodology of NMA is making steady progress. We can now pool individual participant data (IPD) in NMA, which enables more consistent and more precise comparisons and also detection of effect modifiers and prognostic factors for alternative treatments. The results then can contribute to stratified or personalized medical care. NMA can also be conducted cumulatively or sequentially, which will enable up-to-date evidence synthesis.

This symposium will showcase the cutting edge examples of modern NMA and its developments.

S30-1 Pharmacological treatments in the maintenance treatment of bipolar disorder: a network meta-analysis

Tomofumi MIURA

Department of Psychiatry, NHO Kokura Medical Center, Japan

S30-2 Antidepressants: network meta-analysis and evidence-based decision making in clinical practice

Andrea CIPRIANI

Department of Psychiatry, University of Oxford, UK

S30-3 Personalizing the treatment choice using individual participant data network metaregression: CBASP, medication or their combination in the treatment of persistent depressive disorder

Toshiaki A. FURUKAWA

Department of Health Promotion and Human Behavior, Kyoto University Graduate School of Medicine / School of Public Health, Japan

S30-4 Evidence evolution indicated by cumulative network meta-analyses for new generation antidepressants in the treatment of depression in the past two decades

Yan LUO¹, Toshi A. FURUKAWA¹, Anna CHAIMANI², Andrea CIPRIANI³

¹*Department of Health Promotion and Human Behavior, Graduate School of Medicine, Kyoto University, Japan,*

²*Epidemiology and Statistics, Sorbonne Paris Cité Research Center, METHODS Team, Paris, France,*

³*Department of Psychiatry, University of Oxford, Oxford, UK*

■ Discussant: Fumihiko TAMURA (*Meiji Seika Pharma Co., Ltd., Japan*)

Symposium-31

October 12 (Sat), 10:30-12:10 / Room 16 (Fukuoka Sunpalace Hotel & Hall, 2F, Heian)

Glia-Psycho-Pathology: Findings from Rodent Models to Human Subjects

Organizer / Chair: Takahiro KATO (*Department of Neuropsychiatry, Graduate School of Medical Sciences, Kyushu University, Japan*)

Co-chair: Po-See CHEN (*Department of Psychiatry, College of Medicine, National Cheng Kung University, Taiwan*)

Glial cells including astrocytes and microglia have recently been highlighted in the field of neuropsychiatry. Human postmortem and PET studies have suggested that activation of glial cells contribute to developing psychopathology in a variety of psychiatric disorders such as delirium, epilepsy, schizophrenia, mood disorders and autism. However, deeper molecular mechanisms have not been well clarified. Traditionally, actions of psychotropic drugs had been believed to be limited to neurons and synapses, and glia-target drugs are warranted. On the other hand, underlying mechanisms of non-pharmacological treatments such as electroconvulsive therapy (ECT) and transcranial magnetic stimulation (TMS) have not been clarified, and we hypothesize that glial cells may strongly contribute to the action of these treatments. By the way, delirium has been suggested as a glia-oriented disease, and deeper understandings of delirium will clarify the roles of glia not only in delirium but also in many other psychiatric disorders.

In order to discuss/resolve the above highly-important topics in glia-psycho-pathology, four speakers will introduce the up-to-knowledge based on their own study from rodent in vitro and in vivo experiments to human epigenetic and blood molecular approaches.

Prof. Koizumi will introduce the novel pharmacological actions of antidepressants on glial cells using rodent models. Dr. Limoa will talk about the possible glia-modulating mechanisms of ECT based on a rat model. Dr. Shinozaki will introduce his novel translational research of delirium patients focusing on epigenetics of glia. Finally, Dr. Kato will introduce a novel translational research approach using human blood samples such as metabolomic analysis and also a human blood induced microglia-like (iMG) cells to clarify the dynamic interaction between molecular actions and severity of psychiatric symptoms.

We believe that our symposium will shed new light on the future development of glia-target therapy in psychiatry.

S31-1 Glial cells as a therapeutic target for anti-depressants

Schuichi KOIZUMI

Dept Neuropharmacol, Interdisciplinary Grad Sch Med, Univ Yamanashi, Japan

S31-2 The Effect of Electroconvulsive Shock in Microglia and Astrocyte, in Vivo Study

Erlin LIMO A¹, Sadayuki HASHIOKA², Sonny Teddy LISAL¹, Andi Jayalangkara TANRA¹, Jun HORIGUCHI³

¹*Department of Psychiatry, Faculty of Medicine, Universitas Hasanuddin, Makassar, Indonesia,*

²*Department of Psychiatry, Faculty of Medicine, Shimane University, Izumo, Japan,*

³*Department of Psychoneuroimmunology, Faculty of Medicine, Shimane University, Izumo, Japan*

S31-3 Epigenetics of delirium: potential role of aging on DNA methylation changes in cytokine genes

Gen SHINOZAKI

Department of Psychiatry, Carver College of Medicine, University of Iowa, USA

S31-4 Human blood-based microglia monitoring system as a novel translational research tool for psychiatric disorders

Takahiro A. KATO¹, Masahiro OHGIDANI¹, Daiki SETOYAMA², Dongchon KANG², Shigenobu KANBA¹

¹*Department of Neuropsychiatry, Graduate School of Medical Sciences, Kyushu University, Japan,*

²*Department of Clinical Chemistry and Laboratory Medicine, Graduate School of Medical Sciences, Kyushu University, Japan*

■ Discussants: Masahiro OHGIDANI (*Department of Neuropsychiatry, Graduate School of Medical Sciences, Kyushu University, Japan*)

Eiji SHIGETOMI (*Department of Neuropharmacology, University of Yamanashi, Japan*)

Symposium-32

October 12 (Sat), 10:30-12:10 / Room 17 (Fukuoka Sunpalace Hotel & Hall, 2F, Suehiro)

Neuropsychopharmacology of relaxin-3

Organizer / Chair: Gavin Stewart DAWE (*Department of Pharmacology, Yong Loo Lin School of Medicine, National University of Singapore, Singapore*)

Co-chair: Masabumi MINAMI (*Department of Pharmacology, Graduate School of Pharmaceutical Science, Hokkaido University, Japan*)

Relaxin-3, an relaxin/insulin-like family peptide, and its receptor RXFP3 have been proposed to modulate emotional-behavioural functions such as arousal and behavioural activation, appetite regulation, stress responses, anxiety, memory, sleep and circadian rhythm. Relaxin-3 is expressed primarily in the brain where it is found most prominently neurones of the nucleus incertus (NI). The NI in the midline tegmentum close to the fourth ventricle projects widely throughout the brain. Over recent years, a number of preclinical studies have explored the function of the NI and relaxin-3 signalling, including reports of mRNA or peptide expression changes in the NI in response to behavioural or pharmacological manipulations, effects of lesions or electrical or pharmacological manipulations of the NI, effects of central microinfusions of relaxin-3 or related agonist or antagonist ligands on physiology and behaviour, and the impact of relaxin-3 gene deletion or knockdown. Together the available evidence suggests that targeting the nucleus incertus network and relaxin-3/RXFP3 system may be novel therapeutic approach in neuropsychiatric disorders including anxiety disorders, depression, and eating disorders. This symposium will explore the most recent evidence indicating that the relaxin-3/RXFP3 system may be novel therapeutic target for neuropsychiatric disorders and advances in the development of ligands for the RXFP3 receptor.

S32-1 Relaxin3/RXFP3 modulation of emotional function, a putative target for mental illness

Francisco E OLUCHA-BORDONAU¹, Hector ALBERT-GASCÓ^{1,2}, Cristina GARCÍA-DÍAZ¹, Ángel Núñez², Esther CASTILLO-GÓMEZ¹, Francisco ROS-BERNAL¹

¹U.P. Medicina, Universitat Jaume I, ²Dep Anatomía, Histología y Neurociencias, Universidad Autónoma de Madrid, Spain

S32-2 Sex-specific effects of relaxin-3 on food intake and body weight in rats

Camila DE ÁVILA^{1,2}

¹Lab. of Stress and Feeding, Department of Psychiatry and Neuroscience, Laval University, Quebec, Canada,

²Centre de Recherche Institut Universitaire de Pneumologie et de Cardiologie de Québec, Quebec, Canada

S32-3 The relaxin-3/RXFP3 system as a novel target for neuropsychiatric disorders

Gavin Stewart DAWE

Department of Pharmacology, Yong Loo Lin School of Medicine, National University of Singapore, Singapore

S32-4 Recent advances in the neuropsychopharmacology of relaxin-3/RXFP3 systems: Actions of relaxin-3/RXFP3 signalling in circuits for sensory, emotional and cognitive integration

Andrew L. GUNDLACH

The Florey Institute of Neuroscience and Mental Health, Parkville, Victoria, Australia

■ Discussant: Toshihisa OTSUKA (*Department of Biochemistry, Graduate School of Medicine / Faculty of Medicine, University of Yamanashi, Japan*)

Symposium-33

October 12 (Sat), 14:50-16:30 / Room 1 (Fukuoka International Congress Center, 3F, Main Hall)

AsCNP-AMED Symposium

Chairs: Makoto SUEMATSU (*Japan Agency for Medical Research and Development, Japan*)

Shigeo OKABE (*Dept. of Neurobiology, Graduate School of Medicine, the University of Tokyo, Tokyo, Japan*)

Since Japan has now become a super-aged society, there is a strong demand for revealing the pathogenesis of neuropsychiatric disorders and developing the fundamental treatments for these conditions.

Based on the plan for the Promotion of Medical Research and Development prescribed by the government of Japan, the Medical Research and Development (AMED) promotes integrated R&D in the field of medicine, from basic research to clinical trials, focusing on interrelated areas including neuropsychiatric conditions. In addition to ensuring that outcomes are linked through practical application, it undertakes projects with the aim of comprehensively and effectively establishing and maintaining an environment for this R&D.

The Project for Psychiatric and Neurological Disorders accelerates endeavors aiming to overcome dementia, depression, and other brain disorders. The goal of this project is to establish innovative strategies for diagnosis, prevention, and treatment of brain disorders through the strong promotion of research on neural circuits and brain functions related to the pathophysiology of the brain.

In this symposium, four presenters will discuss the current issues and the future direction of basic and clinical brain science research in Japan.

S33-1 Great demographic transition faced on Asian countries and neuropsychiatry diseases

Makoto SUEMATSU

Japan Agency for Medical Research and Development, Japan

S33-2 Significance of basic research from the clinical point of view (Neurology)

Nobutaka HATTORI

Department of Neurology, Juntendo University, Tokyo, Japan

S33-3 Neuroscientific research aimed at explaining mental disorders; a psychiatrist-researcher's point of view

Shigenobu KANBA

Kyushu University / Japan Depression Center, Japan

S33-4 Promotion of Research and Development for Persons with Mental Illness

Teruhiko HIGUCHI^{1,2}

¹Japan Depression Center, Japan, ²National Center of Neurology and Psychiatry, Japan

S33-5 Brain/MINDS project - Understanding physiology and pathology of human brain

Shigeo OKABE

Dept. of Neurobiology, Graduate School of Medicine, The University of Tokyo, Tokyo, Japan

■ Discussant: George F. KOOB (*National Institute on Alcohol Abuse and Alcoholism, USA*)

Symposium-34

October 12 (Sat), 14:50-16:30 / Room 6 (Fukuoka International Congress Center, 4F, 401+402)

Early Career Researchers Symposium Clinical research in progress on addictive medicine

Organizer / Chair: Toshikazu SAITO (*Miki Mental Clinic / Department of Psychiatry, Sapporo Medical University, Japan*)

Alcohol and drug abuse is a serious public health problem among Asian countries that affects almost every community. The magnitude of problems and situations of alcohol and drug use as well as addictive disorders differ country by country, due to such region-specific aspects as the components of the community and cultural differences. Dealing with such problems in various countries is aimed to clarify the region-specific aspects of problems in addiction in countries' context, thereby contributing to delineate the issue and further to develop a better understanding of the problems and management. Addressing and solving these problems requires information from research that is specific to the context of the society.

As mentioned above, we plan to make a symposium titled "Early career researchers symposium: Clinical research in progress on addictive medicine". This symposium aims to highlight research projects in the addictive field that investigated by young international researchers. It will focus on different types of clinical research projects that young researchers are conducting them including observational studies, clinical trials, and data analyses. Each participant will share their research projects in development, describe their aims, methods, preliminary data, and future goals of the research projects. The presentations include some evidence supporting the biopsychosocial model of addiction, which focus on both in neurobiological and psychosocial findings on understanding the situations of the problems, the progression, and the outcome of addictive behaviors, including some parts of management among the different countries.

Furthermore, this symposium will show that initiating research projects is a challenging task for a young researcher, particularly the limited time and funding. It will also demonstrate some of the key elements of developing a successful research project including finding adequate mentorship, building a research team, and working through the obstacles during conducting the research projects. We hope that the symposium attendees will understand the problems of drug addiction in this region. This will lead to the more in-depth discussion of this issue and further collaboration for further researches in the future.

S34-1 Cognitive dysfunction and impediment to cerebral blood flow in alcoholics

Tomohiro SHIRASAKA^{1,2}, Miyuki TSUNETA¹, Kimura HISAKAZU^{1,2}, Saito TOSHIKAZU²

¹Department of Psychiatry, Teine Keijinkai Hospital, Japan., ²Psychiatric Institute, Hokujinkai Medical Corporation, Japan.

S34-2 Working Memory Impairment in Chronic Ketamine Abusers

Chia Chun HUNG^{1,2,3}, Yi Hsuan LIU³, Chu Chung HUANG³, Ray Chiang-Shan LI^{5,6}, Ching Po LIN^{2,3}, Szu Hsien LEE⁴

¹Bali Psychiatric Center, Ministry of Health and Welfare, Taiwan, ²Institute of Brain Science, National Yang Ming University, Taiwan,

³Brain Connectivity Lab, Institute of Neuroscience, National Yang Ming University, Taiwan,

⁴Department of Health Promotion and Education, National Taiwan Normal University, Taiwan,

⁵Department of Psychiatry Yale University School of Medicine, USA, ⁶Department of Neuroscience, Yale University School of Medicine, USA

S34-3 Methamphetamine use among pregnant women

Woraphat RATTAPHA, Vinn JINANARONG, Naratip SANGUANPANICH, Nantawat SITDHIRAKSA

Department of Psychiatry, Faculty of Medicine Siriraj Hospital, Mahidol University, Thailand

S34-4 Evaluating a Smoking Cessation Training Using PROCITE, a Newly Developed Evaluation Instrument

Amer Siddiq AMER NORDIN^{1,2}, Anne YEE^{1,2}, Farizah MOHD HAIRI^{1,3}, Siti Idayu HASSAN^{1,3}

¹University Malaya Centre of Addiction Sciences (UMCAS), University of Malaya, Malaysia,

²Department of Psychological Medicine, Faculty of Medicine, University of Malaya, Malaysia,

³Department of Social and Preventive Medicine, Faculty of Medicine, University of Malaya, Malaysia

■ Discussants: Sungwon ROH (*Department of Psychiatry, Hanyang University College of Medicine, Korea*)

Tony Szu-Hsien LEE (*Department of Health Promotion and Health Education, National Taiwan Normal University, Taiwan*)

Symposium-35

October 12 (Sat), 14:50-16:30 / Room 11 (Fukuoka International Congress Center, 5F, 502)

Obsessive-compulsive disorder: clinical heterogeneity and innovative treatment approaches

Organizer / Chair: Chan-Hyung KIM (*Department of Psychiatry, Yonsei University College of Medicine, Korea*)

Co-chair: Toshihiko KINOSHITA (*Department of Psychiatry, Kansai Medical University, Japan*)

Obsessive-compulsive (OC) symptoms are remarkably diverse, and the clinical presentations can vary both within and across patients over long period of time. This variability in the phenotypic expression has led to the hypothesis that obsessive-compulsive disorder (OCD) is a heterogeneous disorder and that this heterogeneity obscures the findings of clinical, natural history and treatment response studies. OCD is commonly considered as a heterogeneous condition with distinct neural correlates across symptom dimension. The precise causal factors for OCD are not known, however, decades of research have proposed abnormalities of cortico-striatal circuits that involve the orbitofrontal cortex, anterior cingulate cortex, thalamus and the striatum in the brain as a critical pathway involved in obsessions and the intimately linked compulsive-repetitive behaviors. A complete understanding of what comprises OCD will require a several different approaches. These approaches include (1) narrowing the phenotype to identify neurobiological basis of individual phenotypes in OCD (2) broadening the phenotype in OCD to include hoarding disorder (3) updating recent non-invasive treatment technique, such as neuromodulation for OCD and (4) challenging to manage OCD comorbid with schizophrenia and bipolar disorder, difficult-to-treat. It is hoped that the characterization of the pathophysiological mechanisms of OCD components and OC related conditions could contribute to the development of specific pharmacological and neuromodulatory therapies tailored to each of these conditions.

S35-1 Neurobiological basis of different clinical phenotypes in OCD

Tomohiro NAKAO

Department of Neuropsychiatry, Graduate School of Medical Sciences, Kyushu University, Fukuoka, Japan

S35-2 Hoarding symptoms: Current status of the understanding and prevalence in outpatient population

Jhingoo CHANG¹, Hoo Rim SONG¹, Chan-Hyung KIM²

¹*Department of Psychiatry, Myongji Hospital, Hanyang University, College of Medicine, Korea,*

²*Institute of Behavioral Science in Medicine, Yonsei University College of Medicine, Seoul, Korea*

S35-3 Neuromodulation for the patients with OCD – where, when and how?

Daeyoung ROH

Mind-neuromodulation Laboratory and Department of Psychiatry, Hallym University College of Medicine, Korea

S35-4 Challenges in Treating OCD comorbid with schizophrenia and bipolar affective disorder

Takashi NAKAMAE

Department of Psychiatry, Graduate School of Medical Science, Kyoto Prefectural University of Medicine, Japan

■ Discussants: Toshihide KUROKI (*Department of Clinical Psychology, Kyushu University Graduate School of Human-Environment Studies, Japan*)

Taro KATO (*Pharmacology Research Unit, Sumitomo Dainippon Pharma Co., Ltd., Japan*)

Symposium-36

October 12 (Sat), 14:50-16:30 / Room 12 (Fukuoka International Congress Center, 5F, 503)

Unveiling the neuro-cognitive underpinnings of schizophrenia: From clinical application to conceptual analysis

Organizer / Chair: Yen Kuang YANG (*Department of Psychiatry, National Cheng Kung University Hospital, College of Medicine, National Cheng Kung University, Taiwan*)

Co-chair: Toshiya MURAI (*Department of Psychiatry, Graduate School of Medicine, Kyoto University, Japan*)

In light of the advance of clinical neuro-imaging, several new techniques and constructs have been introduced to lift the veil of schizophrenia on varying levels (e.g., brain volumetric changes, resting-state connectivity, deep learning, and endophenotype). However, the results for guiding on improving clinical practice in treating patients with schizophrenia are still uncertain. There are several novelty efforts for this gap will be presented in this proposed symposium. Four proposed talks will be presented in this symposium. Firstly, fMRI data (T1, resting, task-based data) of first episode psychosis (n=140) with deep learning methods will be presented and its application for how to apply/improve clinical practice will be discussed. Secondly, although dopamine hypothesis for schizophrenia had been proposed for many decades, however the role of dopamine in prognosis of schizophrenia is still debated. Some of the studies to explore dopamine level based on drug naïve patients showed higher DA level could be, compared with their controls. However, does higher DA activity mean trait of schizophrenia in the early phase of illness? The meta-analysis showed controversy result. The possible explanation for the DA role in the pathogenesis in schizophrenia will be proposed in the report. Additionally, it was well known that the deficit/negative symptoms were caused by hypodopaminergic activities. Does DA activity of drug naïve patients with schizophrenia predict outcome? This second part of symposium will show higher dopaminergic activities in the drug naïve patient will show better prognosis in their 8-year follow-up study. Besides, the correlation of dopamine availability and volumetric changes in drug naïve patient will be presented and their clinical application will be discussed. Thirdly, a leading hypothesis regarding the etiology of schizophrenia emphasizes the pivotal role of dysfunctional self in its various manifest symptoms. In support of the hypothesis, a reliable link between atypical self-representation and psychosis has been documented in empirical studies in patients with schizophrenia, other patients with positive psychotic features, and subclinical individuals with psychotic-like experiences. Yet, it has been largely unknown about the specificity of this link. Atypical self-representation may fuel other psychiatric dysfunctions as well as psychosis. Failing to recognize the heterogeneous outcomes of dysfunctional self-representation hence increases the risk for an over-inclusive framework of psychosis, leading to the low predictive power of the dysfunctional self-representation endophenotype for psychotic disorders. It is crucial to systematically investigate self-representation in studying early phase psychosis. Finally, traumatic experience has been shown to be reliable environmental risk factor for schizophrenia, despite the lack of an account for its precise pathogenic mechanism. The final part of this symposium will focus on the relationship between traumatic experience and volumetric changes in patients with schizophrenia.

S36-1 Interpretable deep learning for fMRI data in patients with first episode psychosis

Youngchul CHUNG¹, Woo-Sung KIM², Guang Fan SHEN¹, Cong Cong LIU¹

¹*Department of Psychiatry, Chonbuk National University Medical School, Korea,*

²*Department of Medical Science, Chonbuk National University, Korea*

S36-2 The Possible Role of Dopamine in the Outcome of Treating Patients with Schizophrenia

Yen Kuang YANG

Department of Psychiatry, National Cheng Kung University Hospital, College of Medicine, National Cheng Kung University, Taiwan

S36-3 Dysfunctional self-representation: A socio-cognitive endophenotype specific to psychosis?

Chui-De CHIU

Department of Psychology, Chinese University of Hong Kong

S36-4 Altered association between gray-matter volume and dissociative symptoms in schizophrenia: A voxel-based morphometry study

Huai-Hsuan TSENG¹, Chui-De CHIU², Kao Chin CHEN¹, I Hui LEE¹, Po See CHEN¹, Yen Kuang YANG¹

¹*Department of Psychiatry, National Cheng Kung University, Taiwan,*

²*Clinical and Health Psychology Centre and Centre for Cognition and Brain Studies, Department of Psychology, The Chinese University of Hong Kong, Hong Kong Special Administrative Region*

■ Discussants: Fumitoshi KODAKA (*Department of Psychiatry, The Jikei University School of Medicine, Japan*)
Shinsuke KOIKE (*Center for Evolutionary Cognitive Science, The University of Tokyo, Japan*)

Symposium-37

October 12 (Sat), 14:50-16:30 / Room 13 (Fukuoka International Congress Center, 5F, 501)

Ketamine: From Abused Drug to Rapid-Acting Antidepressant

Organizer / Chair: Kenji HASHIMOTO (*Chiba University Center for Forensic Mental Health, Chiba, Japan*)

Co-chair: Edward DOMINO (*Department of Pharmacology, University of Michigan, USA*)

The N-methyl-D-aspartate receptor (NMDAR) antagonist ketamine is a popular abused drug in the world including Asia. In contrast, ketamine is one of the most attractive antidepressants since ketamine can produce rapid-onset and sustained antidepressant effects in treatment-resistant patients with major depression and bipolar disorder. A number of clinical studies make ketamine an attractive rapid-onset therapeutic drug for treatment-resistant depression, although its clinical application may be limited owing to its propensity of causing psychotomimetic effects and abuse liability. The four speakers of this symposium are ketamine research experts in Asia.

Substance addiction has long been associated with dysregulation in stress response systems. Dr. Ming-Chyl Huang (Taiwan) presents the alterations of orexin-A, oxytocin, ACTH, and cortisol levels in treatment-seeking ketamine-dependent patients before and after early abstinence. Chronic ketamine abuse is associated with an abnormal expression of stress-related neuropeptides, which do not normalize after ketamine discontinuation. Those with an anxious phenotype might have a more disrupted stress regulation. These results could provide insight into the development of potential therapeutic strategies to treat ketamine dependence.

Low-dose ketamine has rapid antidepressant effects and brings new hope for patients with treatment-resistant depression. However, while it looks promising, there are still some potential issues unsolved which need to be clarified. Dr. Cheng-Ta Li (Taiwan) would focus not only the positive findings on it but also some potential problems to see while using this compound clinically.

Ketamine ($K_i = 500$ nM for NMDAR) is a racemic mixture containing equal parts of (S)-ketamine ($K_i = 300$ nM) and (R)-ketamine ($K_i = 1400$ nM). Interestingly, (R)-ketamine showed greater potency and longer lasting antidepressant effects than (S)-ketamine in several animal models of depression. Accumulating evidence suggest that gut microbiota may play a role in depression and in the antidepressant effects of certain compounds. Dr. Chun Yang (China) will talk about the role of gut-microbiota in the antidepressant effects of ketamine and its two enantiomers (R)-ketamine and (S)-ketamine. (R)-ketamine is metabolized to (2R,6R)-hydroxynorketamine (HNK) in the liver. Finally, Dr. Kenji Hashimoto (Japan) will talk the recent findings of (R)-ketamine and its metabolite (2R,6R)-HNK in animal models of depression. In this symposium, we discuss the benefits and risks of ketamine and its enantiomers in the treatment of depression.

S37-1 The alterations of stress-related neuropeptides in ketamine-dependent patients after early abstinence

Ming-Chyi HUANG^{1,2}, Shih-Ku LIN^{1,2}, Chih-Ken CHEN^{3,4}

¹Department of Psychiatry, Taipei City Psychiatric Center, Taipei City Hospital, Taipei, Taiwan,

²Department of Psychiatry, School of Medicine, College of Medicine Taipei Medical University, Taipei, Taiwan,

³Department of Psychiatry, Keelung Chang Gung Memorial Hospital, Keelung Taiwan,

⁴Department of Psychiatry, School of Medicine, Chang Gung University, Taiwan

S37-2 Central mechanisms and BDNF genetic effects of Low-Dose Ketamine on Treatment-Resistant Major Depression

Cheng-Ta LI¹, Tung-Ping SU²

¹Department of Psychiatry, Taipei Veterans General Hospital, Taiwan, ²School of Medicine, National Yang-Ming University, Taipei, Taiwan

S37-3 Role of gut microbiota in the antidepressant effects of ketamine

Chun YANG

Department of Anesthesiology, Tongji Hospital, Tongji Medical College, Huazhong University of Science and Technology, China

S37-4 Recent topics on rapid-acting antidepressant (R)-ketamine

Kenji HASHIMOTO

Chiba University Center for Forensic Mental Health, Chiba, Japan

■ Discussants: Tung-Ping T SU (*Department of Psychiatry, Cheng-Hsin General Hospital, National Yang-Ming University, Taiwan*)

Shigeyuki CHAKI (*Research Headquarters, Taisho Pharmaceutical Co., Ltd., Japan*)

Symposium-38

October 12 (Sat), 14:50-16:30 / Room 14 (Fukuoka Sunpalace Hotel & Hall, 2F, Palace Room A)

Emerging roles of DAMPs/alarmins and PRRs in neurological disorders

Organizer / Chair: Atsufumi KAWABATA (*Laboratory of Pharmacology and Pathophysiology, Faculty of Pharmacy, Kindai University, Japan*)

Co-chair: Masako ISEKI (*Department of Anesthesiology and Pain Medicine, Juntendo University School of Medicine, Japan*)

Accumulating evidence has unveiled the critical roles of neuroinflammation, particularly related to innate immune responses, in diverse neurological disorders. A variety of damage-associated molecular patterns (DAMPs)/alarmins, released endogenously from host cells, interact with pattern recognition receptors (PRRs), thereby promoting inflammation throughout the mammalian body including the brain. High mobility group box 1 (HMGB1), one of the best known DAMPs/alarmins, is now considered to play a crucial role in the development of neuroinflammation, which is associated with stroke, dementia, epilepsy, neuropathic pain, etc. Prothymosin alpha regulates the neuroimmune systems as a unique member of DAMPs/alarmins. Toll-like receptors (TLRs), the best known PRRs, recognize a variety of DAMPs/alarmins, in addition to pathogen-associated molecular patterns (PAMPs), and participate in the pathogenesis of diverse neurological disorders. In this symposium, four speakers will focus on DAMPs/alarmins and PRRs in the neuronal systems, which are essential for the pathogenesis of neurological disorders, innovation of the therapeutic strategies and development of the biomarkers. Dr. Hsueh, one of the most active female researchers in Taiwan, will speak about the role of PRRs, particularly TLRs, in regulation of neuronal morphology and function in relation to neurodevelopmental disorders including autism spectrum disorders, schizophrenia, attention deficient hyperactivity disorder (ADHD), mental retardation, etc. Dr. Okazawa will focus on DAMPs/alarmins-mediated pathologies in dementia including Alzheimer's disease. Dr. Ueda will show the unique molecular mechanism for extracellular release of prothymosin alpha, one of neuroprotective DAMPs/alarmins. Finally, Dr. Kawabata will talk about the role of HMGB1 and PRRs including the receptor of advanced glycation end-products (RAGE), TLRs and chemokine receptors in the pathogenesis of neuropathic pain. In this symposium, we believe that basic researchers, clinical neuroscientists, physicians, employees of pharmaceutical companies, etc. will learn the cutting-edge information concerning the roles of DAMPs/alarmins and PRRs in diverse neurological disorders, which will contribute to the development of novel therapeutic strategies in future.

S38-1 Toll-Like Receptors Regulate Neuronal Morphology, Function, and Disorders

Yi-Ping HSUEH

Institute of Molecular Biology, Academia Sinica, Taiwan

S38-2 Targeting HMGB1-mediated expansion of neurodegeneration at the ultra-early phase pathology of Alzheimer's disease

Hitoshi OKAZAWA

Department of Neuropathology, Tokyo Medical and Dental University, Japan

S38-3 Non-classical and non-vesicular release of neuroprotective DAMPs/Alarmins prothymosin α following ischemic stress

Hiroshi UEDA

Department of Molecular Pharmacology, Graduate School of Pharmaceutical Sciences, Kyoto University, Kyoto, Japan

S38-4 Role of HMGB1 and PRRs in pain processing

Atsufumi KAWABATA

Lab. of Pharmacology & Pathophysiology, Faculty of Pharmacy, Kindai University, Higashi-Osaka, Japan

■ Discussants: Katsuo TOIDE (*Neuroscience Drug Discovery Consulting, Japan*)

Fumiko SEKIGUCHI (*Laboratory of Pharmacology and Pathophysiology, Faculty of Pharmacy, Kindai University, Japan*)

Symposium-39

October 12 (Sat), 14:50-16:30 / Room 15 (Fukuoka Sunpalace Hotel & Hall, 2F, Palace Room B)

Understanding the pathophysiology of psychiatric disorders: Japan / Australia collaborations using tissue from the Melbourne Brain Bank

Organizer / Chair: Brian DEAN (*Florey Institute for Neuroscience and Mental Health / Centre for Mental Health, Swinburne University, Australia*)

Co-chair: Takeo YOSHIKAWA (*RIKEN Center for Brain Science, Japan*)

Psychiatric disorders are complex and occur in individuals with a genetic predisposition following an encounter with deleterious environmental factors. The interaction between environment and the genome occurs through epigenetic mechanisms and the outcome is to cause changes in gene expression. This knowledge underpins the ongoing use of human postmortem CNS to understand the pathophysiologies of psychiatric disorders by identifying the changes in molecular cytoarchitecture brought about by changed gene expression. In Japan efforts are being made to create a Network of Brain Banks that will include tissue from subjects with psychiatric disorders. However, there is already collaborations between Japanese scientists and the Melbourne Psychiatric Brain Bank that are shedding light on the pathophysiology of psychiatric disorders. The objective of this symposium is to update delegates on outcomes from the study of brain tissue from the brain bank and how they are advancing knowledge on the molecular pathology of psychiatric disorders. The first speaker, Brian Dean, will provide a brief description of the Melbourne Psychiatric Brain Bank and will then review how recent studies of the cortical human transcriptome using tissue from the Brain Bank are providing new information on the underlying pathophysiologies of schizophrenia, major depressive disorders and bipolar disorders. Whilst such transcriptomics data are increasing knowledge of the potential causes of psychiatric disorders, the challenge remains as to how such “omics” data can be interpreted. Hence, the second presenter, Hirota Sekiguchi, will present new data on changes in levels of the cortical and sub-cortical dopamine transporter in schizophrenia and mood disorders. These data will be used to suggest mechanisms by which changes in dopamine homeostasis is involved in the pathophysiologies of schizophrenia and major depressive disorders. The final two speakers in the Symposium will focus on changes in lipid metabolism in the corpus callosum from subjects with schizophrenia. Neuroimaging studies have suggested changes in the corpus callosum are particularly prevalent in schizophrenia. The corpus callosum is the bridge between the brain hemispheres containing wide thick nerve tracks. Hence, changes in the functioning of lipids such as phospholipids and sphingolipids in this CNS region would have profound effects on CNS function. Hence, the third speaker, Chie Shimamoto-Mitsuyama, will review evidence that suggests changed lipid metabolism may be present in the corpus callosum from subjects with schizophrenia. The Symposium will close with the fourth speaker, Kayoko Esaki, who will argue there is changes in the regulation of sphingolipid-signaling pathway in the corpus callosum from schizophrenia. In conclusion, this symposium will provide an update to the delegates at AsCNP on new findings, predominantly by young Japanese scientists, on the molecular pathophysiologies of schizophrenia and mood disorders.

S39-1 Changes in cortical gene expression suggest altered interplay between neurotransmitter, developmental and inflammatory pathways in schizophrenia

Brian DEAN^{1,2,3}, Madhara UDAWELA^{1,2}, Elizabeth SCARR^{1,2,4}

¹Molecular Psychiatry Laboratory, Florey Institute for Neuroscience and Mental Health, Parkville, Victoria, Australia,

²CRC for Mental Health, Carlton, Victoria, Australia, ³Centre for Mental Health, Swinburne University, Hawthorne, Victoria, Australia,

⁴Melbourne Veterinary School, Faculty of Veterinary and Agricultural Sciences, The University of Melbourne, Victoria, Australia

S39-2 Altered lipid metabolism of the corpus callosum of patients with schizophrenia

Chie SHIMAMOTO MITSUYAMA¹, Kayoko ESAKI¹, Tetsuo OHNISHI¹, Motoko MAEKAWA¹, Yoshimi IWAYAMA¹, Shabeesh BALAN¹, Brian DEAN², Takeo YOSHIKAWA¹

¹Laboratory for Molecular Psychiatry, Center for Brain Science, RIKEN, Saitama, Japan,

²Molecular Psychiatry Laboratory, Florey Institute of Neuroscience and Mental Health, Australia

S39-3 Dysregulation of sphingolipid-signaling pathway in the corpus callosum from schizophrenia postmortem brain

Kayoko ESAKI¹, Akiko WATANABE¹, Yoshimi IWAYAMA¹, Chie SHIMAMOTO MITSUYAMA¹, Hisako OHBA¹, Yoshio HIRABAYASHI², Brian DEAN³, Takeo YOSHIKAWA¹

¹Lab. for Molecular Psychiatry, Center for Brain Science, RIKEN, Japan,

²Institute for Environmental and Gender-Specific Medicine, Univ. of Juntendo, Japan,

³The Florey Institute of Neuroscience and Mental Health, Australia

S39-4 Changed levels of the dopamine transporter in schizophrenia and major depressive disorders: Differences in cortex and striatum.

Hirota SEKIGUCHI¹, Geoff PAVEY², Brian DEAN²

¹Okehazama Hospital Fujita Mental Care Centre, Aichi, Japan, ²The Florey Institute of Neuroscience and Mental Health, Melbourne, Australia

■ Discussant: Akinori NISHI (*Department of Pharmacology, Kurume University School of Medicine, Japan*)

Symposium-40

October 13 (Sun), 8:40-10:20 / Room 1 (Fukuoka International Congress Center, 3F, Main Hall)

Noteworthy drug discovery/research and development - Aiming for innovation -

Organizer / Chair: Tetsuro KIKUCHI (*New Drug Research Division, Pharmaceutical Business Division, Otsuka Pharmaceutical Co., Ltd.*)
Co-chair: George KOOB (*National Institute on Alcohol Abuse and Alcoholism, USA*)

Sixty years have passed since the antipsychotic effects of chlorpromazine and the antidepressant effects of imipramine were discovered in the 1950s. Since then, many antipsychotics and antidepressants have been studied and developed, based on the excessive dopamine hypothesis of schizophrenia and monoamine hypothesis of depression. Regarding antipsychotic drugs, several studies have clarified that the action mechanism of typical antipsychotic drugs was dopamine D2 receptor antagonist. Subsequently, other agents were also developed, such as serotonin-dopamine antagonist (SDA) and dopamine D2 receptor partial agonist. These drugs succeeded in alleviating extrapyramidal symptoms and in overcoming excessive sedative actions and hyperprolactinemia among issues caused by the use of typical antipsychotic drugs. However, their clinical effects are insufficient, and the development of excellent antipsychotic drugs that can effectively alleviate the negative symptoms and cognitive dysfunctions are awaited. Regarding antidepressants, some studies have elucidated that the action mechanisms of imipramine are serotonin and noradrenalin reuptake inhibition. With imipramine as a starter, tricyclic and tetracyclic antidepressants were developed. After these, in the pursuit of drugs that ensure the efficacy of tricyclic antidepressants and eliminate adverse events, drugs were developed such as selective serotonin reuptake inhibitor (SSRI), which selectively inhibits the reuptake of serotonin, and serotonin-norepinephrine reuptake inhibitor (SNRI). In addition, tetracyclic antidepressant developments led to noradrenergic and specific serotonergic antidepressant (NaSSA), which does not inhibit monoamine reuptake. However, antidepressants with a fast onset of effect and a more powerful clinical effect remain awaited. Looking at the treatment of neurological diseases, particularly of Alzheimer-type dementia, successful developments were made in drugs that improve symptoms, such as cholinesterase inhibitor and NMDA receptor antagonist. However, all the other developments made in many chemical compounds with other action mechanisms have resulted in failure in clinical trials.

Under these circumstances, we planned this symposium to provide information about some noteworthy new drugs for treating psychiatric and neurological diseases that are based on new action mechanisms. We hope that this project will help global researchers to gain insights into drug development. We also strongly hope that these drugs with new action mechanisms will be approved and marketed to provide new therapeutic values for patients. We expect that the understanding of the basic pathology of relevant neuropsychiatric diseases can be deepened through research on the relationship between “new action mechanism” and “observed clinical effect” in the future.

*Presentations of this symposium are also presented as posters.

Poster No.: DDR-1 ~ DDR-11

Poster display: October 11 (Fri) – 13 (Sun)

Poster discussion: October 13 (Sun) 16:40 – 18:10

Venue: Poster Hall (Fukuoka International Congress Center, 2F, Multi-purpose Hall).

S40-1 Schizophrenia paradox - A material or an event –

Masanari ITOKAWA^{1,2}

¹Tokyo Metropolitan Institute of Medical Science, ²Tokyo Metropolitan Matsuzawa Hospital

S40-2 Balanced Activation of Striatal Output Pathways by Faster Off-Rate Phosphodiesterase 10A Inhibitors Potentially Leads to not only Antipsychotic-Like Effects but also Activation of the Prefrontal Cortex and Cognitive Improvement in Rodents

Haruhide KIMURA

Neuroscience Drug Discovery Unit, Research, Takeda Pharmaceutical Company Limited

S40-3 SEP-363856, a Candidate Antipsychotic Compound with a Novel Non-D2 Mechanism of Action

Kazuki YABUUCHI¹, Kenneth KOBLAN², Robert GOLDMAN², Justine KENT², Seth HOPKINS², Antony LOBEL²

¹Drug Development Division, Sumitomo Dainippon Pharma Co., Ltd., Tokyo, Japan, ²Sunovion Pharmaceutical Inc.

S40-4 Development of oxytocin as a novel therapeutic for autism spectrum core symptoms by utilizing multimodal outcome measures

Hidenori YAMASUE

Department of Psychiatry, Hamamatsu University School of Medicine

Cognitive impairments, neuroimaging and genetics in chronic methamphetamine users and ketamine users

Organizer / Chair: Yanhui LIAO (*Mental Health Institute, The Second Xiangya Hospital, Central South University, China*)

Co-chair: Kenji MATSUMOTO (*Tamagawa University, Brain Science Institute, Japan*)

Methamphetamine and ketamine are commonly used drugs. In this symposium, we will present the abnormalities of cognitive function, neuroimaging and genetics in chronic methamphetamine users and ketamine users.

Aerobic exercise may improve cognitive impairment in methamphetamine users. To verify whether 12-week moderate-intensity aerobic exercise has beneficial effects on oxidative stress markers in blood and on cognitive functions in patients who have methamphetamine dependence, Serum levels of oxidative stress markers (including total anti-oxidation capability, super oxide dismutase (SOD), catalase (CAT), and methane dicarboxylic aldehyde (MDA)) were measured at baseline (all participants) and the 12-week follow-up (methamphetamine-dependent patients). Serum levels of CAT and MDA in methamphetamine-dependent patients (n = 68) were higher than those in healthy controls (n = 35) at baseline. The international shopping list (ISL) task scores of methamphetamine-dependent patients were significantly lower than those of the controls. Aerobic exercise improved the processing speed in methamphetamine-dependent patients. Of interest, aerobic exercise significantly attenuated a spontaneous increase in serum MDA levels in methamphetamine-dependent patients after 12-weeks of abstinence.

Besides cognitive impairments, chronic methamphetamine use also associates with bad psychological wellbeing. To verify these consequences, 54 MA addicts and 58 healthy controls completed the cognitive assessment battery and functional magnetic resonance imaging (fMRI) scan at baseline and six-month follow-up. MA users exhibited cognitive impairments at baseline, but their performance was improved at the six-month abstinence. MA users showed less activation in left precuneus, cingulate cortex, and bilateral cerebellum anterior lobe during cognitive task.

Chronic use of methamphetamine also induces psychosis. In order to investigate epigenetic mechanism of methamphetamine induced psychosis (MIP), this study collected peripheral blood leukocytes from subjects. Illumina Infinium Human Methylation 450K was performed to discover DNA methylation sites related to MIP and non-MIP. After analyzing the functions and signaling pathways by using DAVID and GO database, candidate genes (n=7) were verified by Taqman probe qPCR (MethyLight) between patients with methamphetamine use disorder (MUD) with MIP (n=99, follow-up 15) compared to patients with MUD without MIP (n=150) and health controls (n=282). This study preliminary suggests that hypermethylation of APLO3, UBA6, KIF17, MILLT3 and GRM8 might be the epigenetic mechanism of MIP.

Previous neuroimaging studies have provided evidence of grey matter and white matter abnormalities in chronic ketamine users. However, little is known about whether or not these abnormalities cause disruption of the topological properties of brain structural networks and cortical gray matter loss. The aim of the study was to assess the disruption of small-world networks drug-induced cortical gray matter loss in 41 chronic ketamine users with 44 matched healthy controls. Chronic ketamine users showed decreased clustering coefficient (Cp), gamma, sigma and local efficiency, but the length path (Lp) and global efficiency remained unchanged. Small-world network properties were negative associated with quality of ketamine; clustering coefficient were negative associations psychiatric symptoms measured by PANSS in chronic ketamine users. Chronic ketamine users had gray matter thickness reduction in several brain regions, such as the lateral Superior Parietal Cortex, the lateral Superior Frontal Cortex, the lateral Fusiform Gyrus, and the right Cuneus.

S41-1 Impact of aerobic exercise on cognitive impairment and oxidative stress markers in methamphetamine-dependent patients

Kai ZHANG^{1, 2, 6}, Qiaoyang ZHANG^{1, 7}, Haifeng JIANG¹, Jiang DU¹, Chenglin ZHOU³, Shunying YU¹, Kenji HASHIMOTO⁶, Min ZHAO^{1, 4, 5}

¹Collaborative Innovation Center for Brain Science, Shanghai Mental Health Center, Shanghai Jiao Tong University School of Medicine, China,

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⁴Brain Science and Technology Research Center, Shanghai Jiao Tong University, China, ⁵Shanghai Key Laboratory of Psychotic Disorders, China,

⁶Division of Clinical Neuroscience, Chiba University Center for Forensic Mental Health, Japan,

⁷Changzhou No. 2 People's hospital, Nanjing Medical University, China

S41-2 Methamphetamine abuse and its consequences

Na ZHONG

Department of Substance Use Disorder, Shanghai Mental Health Center, Shanghai Jiaotong University, China

S41-3 Genome-wide DNA methylation analysis of methamphetamine-induced psychosis and schizophrenia

Huixi DONG¹, Wei HAO²

¹Mental Health Institute, The Xiangya Hospital of Central South University, China,

²Department of Psychiatry & Mental Health Institute of the Second Xiangya Hospital, Central South University, National Clinical Research Center on Mental Disorders & National Technology Institute on Mental Disorders, Hunan Key Laboratory of Psychiatry and Mental Health, Changsha, Hunan, China

S41-4 Disrupted small-world networks in chronic ketamine users

Yanhui LIAO

Mental Health Institute, The Second Xiangya Hospital, Central South University, China

■ Discussants: Tanay MAITI (*All India Institute of Medical Sciences, India*)

Mei YANG (*Shenzhen Mental Health Center, Shenzhen Kangning Hospital, China*)

Symposium-42

October 13 (Sun), 8:40-10:20 / Room 5 (Fukuoka International Congress Center, 4F, 410)

New development of Research in Asian Psychotropic Drug Prescription (REAP)

Organizer / Chair: Chay Hoon TAN (*National University of Singapore, Singapore*)

Co-chair: Naotaka SHINFUKU (*Kobe University, Japan*)

REAP started in 1999 and continued for 20 years. During the past 20 years, more than 75 papers have been published at peer reviewed journals. In addition, REAP has strengthened research collaboration among psychiatrists and pharmacologists in Asian countries. This symposium will report the recent findings and activities of REAP.

S42-1 REAP survey and recent development

Chay Hoon TAN

National University of Singapore, Singapore

S42-2 Antipsychotic prescribing trends in Asia

Mian-Yoon CHONG^{1,2}

¹*Chang Gung Memorial Hospital, ChiaYi, Taiwan, ²Chang Gung University School of Medicine, Taiwan*

S42-3 Clinical use of mood stabilizers in REAP study- beyond the treatment for bipolar disorder

Shu-Yu YANG¹, Shih-Ku LIN²

¹*Department of Pharmacy, Taipei City Hospital, Songde Branch, Taiwan, ²Department of Psychiatry, Taipei City Hospital, Songde Branch, Taiwan*

S42-4 Clinical Correlates of Cannabis Use in Asian Patients with Schizophrenia: The REAP-AP

Seon-Cheol PARK

Department of Psychiatry, Inje University College of Medicine, Korea

S42-5 REAP case-vignette survey (REAP-CV) for clarifying psychiatrists' decision-making process of therapeutic choice: International comparison analysis

Takahiro A. KATO¹, Naotaka SHINFUKU², Shigenobu KANBA¹

¹*Department of Neuropsychiatry, Graduate School of Medical Sciences, Kyushu University, Japan,*

²*International Center for Medical Research and Treatment, Kobe University, Japan*

■ Discussants: Mian-Yoon CHONG (*Chang Gung Memorial Hospital, Taiwan*)

Toshiya INADA (*Department of Psychiatry and Psychobiology, Nagoya University Graduate School of Medicine, Japan*)

Symposium-43

October 13 (Sun), 8:40-10:20 / Room 6 (Fukuoka International Congress Center, 4F, 401+402)

The multidimensional approach to treatment response in major depression

Organizer / Chair: Po-Hsiu KUO (*Institute of Epidemiology and Preventive Medicine, National Taiwan University, Taiwan*)

Co-chair: Osamu SHIRAKAWA (*Department of Neuropsychiatry, Kindai University, Faculty of Medicine, Japan*)

Treatment-resistant depression, a complex clinical problem caused by multiple risk factors, is targeted by integrated therapeutic strategies. Augmentation strategies are commonly applied when an individual is unresponsive to antidepressant monotherapy. But the efficacy and safety of lamotrigine augmentation in patients with treatment-resistant MDD remain inconclusive. Prof. Lu will present "Lamotrigine augmentation in treatment-resistant depression: A comprehensive meta-analysis of efficacy and safety." In this meta-analysis, the evidence for the therapeutic effects and safety profiles of lamotrigine augmentation in patients with treatment-resistant MDD are synthesized. Significant improvements in HAMD scores and response rate were shown in lamotrigine augmentation group compared with control group. Lamotrigine augmentation is well-tolerated in terms of all-cause discontinuation rate and reported adverse events.

Major depressive disorder (MDD) is heterogeneous in clinical presentation and etiology. To better subgrouping MDD patients may help the discovery of pathomechanism and enhance the practice of precision medicine. One way of assessing treatment response is to investigate the naturalistic pattern of psychotropic agents in the early phase of clinical course, and may intuitively reflect the underlying deficits of neurobiology and neurotransmitters in MDD patients. Dr. Chen will present "A Novel Approach to Subgroup First-Episode MDD by Dissecting Psychotropic Loads" to dissect empirical pattern of psychotropic agents use during the first 2 years of clinical course in drug-naïve MDD patients. In total, four groups of MDD patients were extracted, which were featured by short-term antidepressant use, long-term antidepressant use, long-term antidepressant and sedatives use and long-term antidepressant, sedative and antipsychotics use, respectively. The clinical implication of this novel approach will be discussed.

And we intend to study heterogeneous syndromal presentations of MDD patients during a common treatment regimen. Patients' response to commonly prescribed selective serotonin reuptake inhibitors (SSRIs) varies across individuals and symptoms. Certain genetic variants may modify the effects of SSRIs treatment on different symptom profiles. Prof. Kuo will present "A pharmacogenetics study for treatment responses of SSRI by syndromal features." We obtained six empirically derived syndromal factors, namely sleep, core, anxiety, somatization, psychomotor, and energy. The degree of syndromal improvement at week-4 was ranged from 33% (energy) to 70% (psychomotor). Using Genome-wide association study design, we found that several markers showed suggested signals with $p\text{-value} < 5 \times 10^{-6}$. These loci are potentially involved in modifying treatment response for different empirically defined syndromal factors among SSRIs treated MDD patients.

S43-1 Lamotrigine augmentation in treatment-resistant unipolar depression: A comprehensive meta-analysis of efficacy and safety

Mong-Liang LU^{1,2}, Kah Kheng GOH¹

¹Department of Psychiatry, Wan Fang Hospital, Taipei Medical University, Taipei, Taiwan,

²Department of Psychiatry, School of Medicine, College of Medicine, Taipei Medical University, Taipei, Taiwan

S43-2 A novel approach to subgroup first-episode MDD by dissecting psychotropic loads

Hsi-Chung CHEN¹, Mong-Liang LU², Ming-Chyi HUANG³, Chun-Hsin CHEN², Po-Hsiu KUO⁴

¹Department of Psychiatry, National Taiwan University Hospital, Taiwan, ²Department of Psychiatry, Taipei Municipal Wanfang Hospital, Taiwan,

³Department of Psychiatry, Taipei City Hospital, Songde Branch, Taiwan,

⁴Graduate Institute of Epidemiology and Preventive Medicine, College of Public Health, National Taiwan University, Taiwan

S43-3 A pharmacogenetics study treatment responses of SSRI for syndromal features in depressive patients

Po-Hsiu KUO^{1,2}, Yi-Ting CHEN¹, Mei-Hsin SU¹, Chung-Feng KAO¹, Albert C. YANG^{3,4}, Shih-Jen TSAI^{3,4}, Yu-Li LIU⁵

¹Institute of Epidemiology and Preventive Medicine, NTU, Taiwan, ²Department of Public Health, National Taiwan University, Taiwan,

³Department of Psychiatry, Taipei Veterans General Hospital, Taiwan, ⁴Division of Psychiatry, National Yang-Ming University, Taiwan,

⁵Center for Neuropsychiatric Research, National Health Research Institutes, Taiwan

S43-4 fMRI biomarker for major depressive disorder and the treatment response

Go OKADA¹, Masahiro TAKAMURA²

¹Department of Psychiatry and Neurosciences, Graduate School of Biomedical and Health Sciences, Hiroshima University, Japan,

²Brain, Mind and KANSEI Sciences Research Center, Hiroshima University, Japan

■ Discussants: Kristian LIAURY (*Department of Psychiatry, Hasanuddin University, Indonesia*)

Takeshi INOUE (*Department of Psychiatry, Tokyo Medical University, Japan*)

Symposium-44

October 13 (Sun), 8:40-10:20 / Room 14 (Fukuoka Sunpalace Hotel & Hall, 2F, Palace Room A)

Dementia-Inflammation and Propagation

Organizer / Chair: Tetsuaki ARAI (*Department of Psychiatry, Division of Clinical Medicine, University of Tsukuba, Japan*)

Co-chair: Zhou WU (*Department of Aging Science and Pharmacology Faculty of Dental Science, Kyushu University, Japan*)

The patients with neurodegenerative diseases including Alzheimer's disease or dementia with Lewy body are increasing in the developed countries. It is estimated that the number of patients with dementia will be 74,700,000 people in 2030 all over the world. In an Asian region, the patients with newly diagnosed of dementia are largely increasing in comparison with a prediction of 2012, which occupy 49% of whole new patients. The amount of social security for dementia patients continues rising. Currently, there are no effective treatment options for neurodegenerative diseases. To overcome these diseases, new approaches are necessary. It has been suggested that the involvement of neuroinflammation in neurodegenerative diseases, however, the precise mechanism of neuroinflammation remain to be elucidated. Recently, there have been reported that the pathologies of neurodegenerative diseases are spreading such as prion protein in prion disease. This cell to cell transmission of aggregated protein is called "prion-like propagation". Prion-like propagation is remarkable in new pathological mechanism of neurodegenerative diseases. Therefore, we are focusing on neuroinflammation by glial cells and propagation of aggregated protein in these diseases. In this symposium, we aim to introduce the recent findings of this field and would like to discuss about disease-modifying therapy for neurodegenerative diseases.

S44-1 Neuroinflammation as the link between modifiable risk factors and dementia

Andis KLEGERIS

Department of Biology, University of British Columbia Okanagan Campus, Canada

S44-2 Neurotoxicity of interferon-gamma-activated human astrocytes

Sadayuki HASHIOKA

Department of Psychiatry, Shimane University, Izumo, Japan

S44-3 Animal models of synucleinopathies: prion-like propagation of alpha-synuclein in non-transgenic animals

Masami MASUDA-SUZUKAKE, Masato HASEGAWA

Dementia Project, Tokyo Metropolitan Institute of Medical Science, Japan

S44-4 Development of tau propagation mice model

Masato HOSOKAWA, Masato HASEGAWA

Dementia Research Project, Department of Dementia and Higher Brain Function, Tokyo Metropolitan Institute of Medical Science, Japan

■ Discussant: Nobuhisa IWATA (*Department of Genome-based Drug Discovery, Graduate School of Biomedical Sciences, Nagasaki University, Japan*)

Symposium-45

October 13 (Sun), 8:40-10:20 / Room 16 (Fukuoka Sunpalace Hotel & Hall, 2F, Heian)

Translational Research regarding pharmacological treatment of ADHD

Organizer / Chair: Masanori ISOBE (*Department of Psychiatry, Kyoto University, Japan, / Department of Psychiatry, University of Cambridge, UK*)

Co-chair: Masumi INAGAKI (*National Institute of Mental Health, NCNP, Japan*)

Attention deficit and hyperactivity disorder (ADHD) is a well-known developmental disorder with manifestation of attention deficit, hyperactivity and impulsivity. Substantial progress of drug development has been achieved in ADHD, although many have been serendipitously discovered. Given that cognitive characteristics of ADHD are measurable in animal models and medications are highly effective in patients, ADHD represents a good disease model for translational research. Using a neuropsychopharmacological approach, researchers can gain a greater understanding of the neuronal mechanism of each cognitive symptom and potentially develop new drug treatments. For example, recent studies have shown the baseline-dependent effects of ADHD drugs on attention or impulsivity in animal models, and the difference could be explained at the neuronal and neurochemical levels.

This symposium will introduce recent progress of clinical and non-clinical ADHD researches, and aims to describe what has been achieved and what is to be achieved in translational research of ADHD.

The session will also enable a fruitful discussion regarding transparency and mutual exchange between clinical and non-clinical researchers. This should facilitate greater understanding of how translational methods can disentangle pathological physiology of psychiatric disorders with cognitive deficits, through shared pharmacological effects on cognitive behavior.

S45-1 The importance of baseline performance for examining ADHD treatment in rodents

Karly TURNER¹, James PEAK¹, Thomas BURNE²

¹*School of Psychology, University of New South Wales, Australia*, ²*Queensland Brain Institute, The University of Queensland, Australia*

S45-2 Rat behavioral model of impulsivity for understanding the pharmacological mechanism of action of ADHD drug

Koji YANO

SHIONOGI & CO., LTD., Japan

S45-3 Pharmacological effect on social cognition of potential candidate drug of ADHD

Masanori ISOBE^{1,2}, Samuel R CHAMBERLAIN²

¹*Department of Psychiatry, Kyoto University, Japan*, ²*Department of Psychiatry, University of Cambridge, UK*

S45-4 Dual pathway in ADHD and others

Jianfeng FENG

The institute of science and technology of Brain-inspired intelligence(ISTBI), Fudan University, China

■ Discussants: Yuta AOKI (*Medical Institute of Developmental Disabilities Research, Showa University, Japan*)
Atsushi SATO (*Department of Pediatrics, The University of Tokyo Hospital, Japan*)

Symposium-46

October 13 (Sun), 10:30-12:10 / Room 1 (Fukuoka International Congress Center, 3F, Main Hall)

CINP Symposium - Current and future management of major depressive disorder: challenges and perspectives -

Organizer / Chair: Siegfried KASPER (*Department of Psychiatry and Psychotherapy Medical University Vienna, Austria*)

Co-chair: Shigeto YAMAWAKI (*Center for Brain, Mind and KANSEI Sciences Research, Hiroshima University, Japan*)

The challenge for management of major depressive disorder (MDD) is currently focussed on treatment-resistant depression (TRD). This group presents many challenges for patients, physicians as well as in the research community. This symposium aims to evaluate the current status of the field of TRD and reflects the main findings available in the literature, mostly obtained by the colleagues presenting in this symposium. A staging model that distinguishes between “non-responders” (patients who failed to respond to one form of treatment, a condition which is now termed “insufficient response, “treatment resistant depression” (TRD patients that failed to respond to two or more adequate antidepressant trials), as well as “chronic resistant depression” (CRD, patients being treated with several antidepressants for more than 12 months) seems to be of validity for both researchers as well as for clinical practice. One potential way of improving treatment of TRD is through the use of predictive biomarkers, most likely including genetic parameters in combination with clinical variables. The advent of new treatments may also help by focusing on neurotransmitters other than serotonin, e.g. the glutamatergic system with ketamine demonstrating efficacy data in TRD as well as in depressed patients with suicidality. Furthermore, pharmacological strategies such as the use of a combination therapy with lithium, atypical antipsychotics and other pharmacological agents can improve outcomes, and techniques such as deep brain stimulation and vagus nerve stimulation have shown promising results. Despite consistent advances in the pharmacotherapy of mood disorders in the last decade, high rates of TRD are still a challenging aspect of overall management.

The information obtained in the proposed symposium will be helpful in trying to identify depressed patients who are likely to respond for antidepressant treatment as well as in finding potential drug targets for treatment resistant depression which are promising to develop the next generation of psychotherapeutic agents.

S46-1 Clinical and genetic findings in treatment response of depression

Siegfried KASPER

Department of Psychiatry and Psychotherapy, Medical University of Vienna, Austria

S46-2 Understanding mechanisms of antidepressant response

Pierre BLIER

The University of Ottawa, Canada

S46-3 The glutamatergic approach to depression: the changing landscape

Carlos A ZARATE

NIH/NIMH, USA

■ Discussant: Toshifumi KISHIMOTO (*Department of Psychiatry, Nara Medical University, Japan*)

Symposium-47

October 13 (Sun), 10:30-12:10 / Room 4 (Fukuoka International Congress Center, 4F, 409)

Psychostimulant Addiction and Psychosis: Human Brain Imaging and Rodent Studies

Organizer / Chair: Jin-Chung CHEN (*Department of Physiology and Pharmacology, Graduate Institute of Biomedical Sciences, Chang Gung University, Taiwan*)

Co-chair: Hidehiko TAKAHASHI (*Department of Psychiatry and Behavioral Sciences, Tokyo Medical and Dental University, Japan*)

Stimulant abuse and addiction represents one of the most significant issues in public health. Currently, no medications or replacement therapy can effectively reduce drug craving or prevent relapse. Integration from clinical and animal research would advance our understanding of the etiological processes and facilitate the development of better therapeutic strategies. In this symposium, we organized four oral reports covering novel findings in cocaine and methamphetamine (METH) addiction and animal models of extinction and relapse. First, the hypothalamus contains dopaminergic neuronal groups and has been widely implicated in motivated behavior. It is likely that the hypothalamic circuit plays an important role in the clinical manifestations and etiological processes of cocaine addiction. Dr. Li CS explores how the hypothalamus may be involved in cue induced craving in relation to addiction severity in abstinent chronic cocaine users. Second, METH can cause psychosis that closely resembles the symptoms observed in schizophrenia, making the differential diagnosis very challenging. Dr. Huang MC examines the distinct resting-state functional connectivity patterns characterizing individuals with METH-induced persistent psychosis in comparison to age-, gender-, and education-matched METH abusers with brief psychosis, those with no psychosis, schizophrenia patients and healthy controls. Next, prefrontal glutamate is known to deliver a powerful extinction signal to extinguish the aversive memory. To explore if prefrontal glutamate projection would play a similar role in appetitive extinction, Dr. Chen JC applies optogenetics on vGluT2-Cre and parvalbumin-Cre mice and tests if photo-manipulation of frontal glutamate or ventral tegmental area GABA neural activity could modulate extinction memory in a METH-conditioned place preference (CPP) mice model. Finally, acupuncture has been successfully used to treat drug addiction since the 1970s. However, the mechanism of acupuncture in drug addiction has not been clarified. MS graduate student, Nguyen Ai TM presents her recent study exploring the effect of electroacupuncture (EA) at acupoints LI4 and LI11 on the reinstatement of cocaine-induced CPP, as well as c-Fos and Δ FosB protein expression in the nucleus accumbens after EA treatment. The findings suggest that EA at LI4 and LI11 may help in preventing cocaine relapse and could be considered as a formula for acupuncture treatment in cocaine addiction.

S47-1 Hypothalamic response to cocaine cues and cocaine addiction severity

Chiang-Shan R. LI, Sheng ZHANG, Simon ZHORNITSKY, Gustavo ANGARITA
Yale University, USA

S47-2 The Distinct Patterns of Functional Dysconnectivity of Brain Between Methamphetamine Abusers with and without Persistent Psychosis in Comparison to Patients with Schizophrenia

Ming-Chyi HUANG¹, Chia-Wei LI²
¹*Department of Psychiatry, Taipei City Psychiatric Center, Taipei, Taiwan,*
²*Department of Radiology, Wan Fang Hospital, Taipei Medical University, Taipei, Taiwan*

S47-3 Significance of Neural Circuitry of Prefrontal Cortex to Ventral Tegmental Area in the Extinction of Methamphetamine Conditioned Place Preference

Jin-Chung CHEN¹, Ting-Yu WU¹, Hao-Cheng CHANG¹, Tsung HUANG², Ya-Tin LIN¹
¹*Department of Physiology and Pharmacology, Graduate Institute of Biomedical Sciences, Chang Gung University, Taiwan,*
²*Department of Medicine, School of Medicine, Chang Gung University, Taiwan*

S47-4 Electroacupuncture attenuates cocaine-induced conditioned place preference and modulates Δ Fos protein expression in mice

Ai T.M. NGUYEN¹, Hsin-Yi CHUNG², Sih-Ting LUO², Yu-Ting JHU², Yi-Hung CHEN^{2,4}, Hsien-Yuan LANE^{3,4}
¹*Graduate of Chinese Medicine, China Medical University, Taiwan,* ²*Graduate Institute of Acupuncture Science, China Medical University, Taiwan,*
³*Graduate Institute of Biomedical Sciences, China Medical University, Taiwan,*
⁴*Center for Drug Addiction and Mental Health, China Medical University, Taiwan*

■ Discussant: Tomohisa MORI (*Department of Pharmacology, Hoshi University, Japan*)

Symposium-48

October 13 (Sun), 10:30-12:10 / Room 5 (Fukuoka International Congress Center, 4F, 410)

Basic and Translational Research in Epilepsy

Organizer / Chair: Zhong CHEN (*Department of Pharmacology, College of Pharmaceutical Sciences, School of Medicine, Zhejiang University, China*)

Co-chair: Kazuhiko YANAI (*Department of Pharmacology, Tohoku University Graduate School of Medicine, Japan*)

Epilepsy is a disease characterized by recurrent seizures, which are transient symptoms of abnormal, excessive, or synchronous neuronal activity in the brain. It affects more than 50 million people worldwide. Antiepileptic drugs (AEDs) are the mainstay of the management of epilepsy for most patients. The majority of the AEDs used in the clinic work by either reducing brain excitability or by enhancing inhibition both of which disrupt normal functioning and lead to many side effects. Still, many patients are not able to achieve adequate control and they require lifelong medication, a situation rife with long-term disruptive side effects that even worsen the initial condition. Poor control of seizures and seizure-related serious injuries and complications are a heavy burden for patients and for society. Thus, the development of safe and effective new drugs or novel therapeutic approaches for controlling seizures in people with drug-resistant epilepsy represents a major clinical goal. Recent years saw substantial progress in the field of epilepsy relevant to preclinical and clinical epilepsy research, such as development of new AED targets, novel optogenetic or chemogenetic approaches control of epileptic seizure, finding of new epileptogenic genes, neural circuit mechanism of epilepsy based on multiple-channels EEG recording and imaging, the updated clinical epilepsy definition, and so on. All of these would be very important to improve management of the epilepsies in the future.

S48-1 Pivotal roles of Cl⁻ homeostasis in epileptogenesis of human and animal models

Atsuo FUKUDA

Department of Neurophysiology, Hamamatsu University School of Medicine, Hamamatsu, Japan

S48-2 Detecting/Predicting seizures with intracerebral EEG - therapeutic opportunities

Mark J. COOK

The Graeme Clark Institute, University of Melbourne, Australia

S48-3 Synapse pruning by microglia in epileptogenesis

Ryuta KOYAMA

Lab. of Chemical Pharmacology, Graduate School of Pharmaceutical Sciences, The University of Tokyo, Tokyo, Japan

S48-4 Subicular microcircuit in temporal lobe epilepsy

Zhong CHEN

Department of Pharmacology, College of Pharmaceutical Sciences, School of Medicine, Zhejiang University, China

■ Discussant: Motohiro OKADA (*Department of Neuropsychiatry, Mie University, Japan*)

Symposium-49

October 13 (Sun), 10:30-12:10 / Room 6 (Fukuoka International Congress Center, 4F, 401+402)

Neuroimmune Mechanisms of Mood Disorder: A Translational Perspective

Organizer / Chair: Po See CHEN (*Department of Psychiatry, College of Medicine and Hospital, National Cheng Kung University, Taiwan*)
Co-chair: Yasushi KAJII (*T-CiRA Discovery, Takeda Pharmaceutical Company Limited, Japan*)

Psychosocial adverse conditions involving interpersonal processes are among the strongest proximal risk factors for mood disorders. A biologically plausible, multilevel theory that link experiences of social adverse condition with internal neuroimmune mechanisms that drive pathogenesis for mood disorders has been proposed. Central to this neuroimmune mechanism hypothesis is a novel axis of immune-to-brain bidirectional communication that influences mood and behavior. Under social adverse conditions, sympathetic nervous system can up-regulate myelopoiesis, monocyte trafficking and the expression of pro-inflammatory genes encoding a conserved transcriptional response to adversity (CTRA). The elevated pro-inflammatory cytokines caused by central microglia activation and recruitment of monocytes to the brain contribute to development of mood symptoms such as anhedonia, aggression, psychomotor retardation and social-behavioral withdrawal. Previous studies had suggested that the serum CRP, TNF-alpha levels are to be used as a biomarker for mood status and a predictor of treatment response in mood disorders. Clinical trials that used anti-inflammatory medications as adjunct pharmacotherapy in treating mood disorders. Besides, the neuroimmune mechanisms might link mood disorders with multiple system co-morbidities and sequential dementing change. Insights from this theory may thus shed light on understanding of immune-to-brain bidirectional communications, the rôle of psychosocial adverse conditions, the neuroimmune mechanisms of co-morbidities and late life consequence in mood disorders.

S49-1 A comparison study of metabolic, immune and brain grey matter volume between patients with bipolar disorder and depressive disorder

Ya Mei BAI^{1,2,3}, Mu Hong CHEN^{1,2,3}, Ju Wei HSU^{1,2}, Kai Lin HUANG^{1,2}, Pei Chi TU^{1,2,4,5}, Tung-Ping SU^{3,6}, Cheng Ta LI^{1,2,3}, Wei Chen LIN^{1,2,3}, Shih Jen TSAI^{1,2,3}

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³Institute of Brain Science, National Yang-Ming University, Taipei, Taiwan,

⁴Department of Medical Research, Taipei Veterans General Hospital, Taipei, Taiwan,

⁵Institute of Philosophy of Mind and Cognition, National Yang-Ming University, Taipei, Taiwan,

⁶Department of Psychiatry, Cheng Hsin General Hospital, Taipei, Taiwan

S49-2 Omega-3 in mood disorder: Focus on neuroinflammation

Jane Pei-Chen CHANG^{1,2}

¹Department of Psychological Medicine, Institute of Psychiatry, Psychology and Neuroscience, King's College London, UK,

²Department of Psychiatry, China Medical University Hospital, Taichung, Taiwan

S49-3 Multiple target molecules in the treatment of inflammation-related mood disorders

Hiroshi KUNUGI

Department of Mental Disorder Research, National Institute of Neuroscience, National Center of Neurology and Psychiatry, Tokyo, Japan

S49-4 Neuroimmune Mechanisms of Mood Disorder: A Translational Perspective

Po See CHEN¹, Ya-Mei BAI², Jane Pei-Chen CHANG³, Masahiro OHGIDANI⁴, Hiroshi KUNUGI⁵

¹Department of Psychiatry, College of Medicine, National Cheng Kung University, Taiwan,

²Division of Psychiatry, Faculty of Medicine, National Yang-Ming University, Taiwan,

³Department of Psychological Medicine, Institute of Psychiatry, Psychology and Neuroscience, King's College London, London UK,

⁴Department of Neuropsychiatry, Graduate School of Medical Sciences, Kyushu University, Japan,

⁵Department of Mental Disorder Research, National Institute of Neuroscience, National Center of Neurology and Psychiatry, Tokyo, Japan

S49-5 Rescue of cytokines-induced reduction of human neurogenesis and increase in apoptosis by omega-3 fatty acids

Alessandra BORSINI¹, Anna NICOLAOU², Maria Dolores CAMACHO-MUNOZ², Kuan-Pin SU³, Patricia ZUNSZAIN¹, Carmine Maria PARIANTE¹

¹Section of Stress, Psychiatry and Immunology Laboratory, Institute of Psychiatry, Psychology and Neuroscience, Department of Psychological Medicine, King's College London, UK,

²Division of Pharmacy and Optometry, School of Health Sciences and Lydia Becker Institute of Immunology and Inflammation, Faculty of Biology, Medicine and Health, The University of Manchester, UK,

³Department of Psychiatry & Mind-Body Interface Laboratory (MBI-Lab), China Medical University Hospital; College of Medicine, China Medical University, Taichung, Taiwan

■ Discussants: Masaaki IWATA (*Division of Neuropsychiatry, Department of Brain and Neuroscience, Tottori University Faculty of Medicine, Japan*)

Masahiro OHGIDANI (*Department of Neuropsychiatry, Kyushu University, Japan*)

Symposium-50

October 13 (Sun), 10:30-12:10 / Room 14 (Fukuoka Sunpalace Hotel & Hall, 2F, Palace Room A)

New frontier of bio-markers and therapeutics in Dementia

Organizer / Chair: Kohji FUKUNAGA (*Department of Pharmacology, Tohoku University Graduate School of Pharmaceutical Sciences, Japan*)

Co-chair: Masatoshi TAKEDA (*Osaka Kawasaki Rehabilitation University, Japan*)

Novel therapeutic strategies are rapidly developing in the Asian countries including Japan and Taiwan. Dr Rita P-Y Chen is young reader in Taiwan Neuroscience Society and discovered intranasal delivered peptide as Alzheimer disease (AD) therapeutics. Dr Kohji Fukunaga also introduce novel disease-modifying therapeutics for Lewy body disease. Moreover, to clinical investigation for those novel therapeutics, the physician should recruit early MCI patients to prevent the disease progression. In this context, Dr Manabu Ikeda will give us the genetic background information for AD and DLB diagnosis. And Dr Yang form Taiwan introduce super sensitive immunoassay technology for AD and DLB. Taken together, in this symposium, we provide not only attractive candidate for AD and DLB therapy, but also new information of biomarker for neurodegenerative disease diagnosis. We also invite young investigators as discussants who are working on AD and DLB research. We take more time to discuss deeply in the biomarker and therapeutics with young investigators in the symposium.

S50-1 Two new strategies for preventing Alzheimer's Disease

Rita PY CHEN^{1,2}

¹*Institute of Biological Chemistry, Academia Sinica, Taiwan,* ²*Institute of Biochemical Sciences, National Taiwan University, Taiwan*

S50-2 Discovery of Disease-modifying Drug Inhibiting Alpha-synuclein Aggregation in Lewy Body Dementia

Kohji FUKUNAGA

Department of Pharmacology, Tohoku University Graduate School of Pharmaceutical Sciences, Japan

S50-3 Heading toward Precision Medicine for Alzheimer's Disease

Takashi MORIHARA¹, Kenichi NAGATA¹, Luc PAILLARD², Satoshi OBIKA³, Yuya KASAHARA⁴, Michael SILVERMAN⁶, Hiroyasu AKATSU⁵, Yoshio HASHIZUME⁵, Manabu IKEDA⁷

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³*Graduate School of Pharmaceutical Sciences, Osaka University, Japan,*

⁴*Center for Drug Design Research, National Institute of Biomedical Innovation, Japan,*

⁵*Choku Medical Institute, Fukushima Hospital, Japan,* ⁶*Simon Fraser University, Canada,*

⁷*Dept of Psychiatry, Osaka University Graduate School of Medicine, Japan*

S50-4 Differential screening among AD, PD and FTD using plasma-biomarker panel

Shieh-Yueh YANG¹, Ming-Jang CHIU², Chin-Hsien LIN², Wei-Che LIN³, Fu-Chi YANG⁴, Pai-Yi CHIU⁵, W.P. CHEN⁶, H.C. LIU¹

¹*MagQu Co., Ltd., Xindian District, New Taiwan City, Taiwan,*

²*Department of Neurology, National Taiwan University Hospital, Taipei, Taiwan,*

³*Department of Diagnostic Radiology, Kaohsiung Chang Gung Memorial Hospital and Chang Gung University, College of Medicine, Kaohsiung, Taiwan,*

⁴*Department of Neurology, Tri-Service General Hospital, National Defense Medical Center, Taipei, Taiwan,*

⁵*Department of Neurology, Show Chwan Memorial Hospital, Changhua City, Changhua County, Taiwan*

■ Discussants: Yasushi YABUKI (*Department of Pharmacology, Tohoku University Graduate School of Pharmaceutical Sciences, Japan*)

Ichiro KAWAHATA (*Department of Pharmacology, Tohoku University Graduate School of Pharmaceutical Sciences, Japan*)

Symposium-51

October 13 (Sun), 10:30-12:10 / Room 16 (Fukuoka Sunpalace Hotel & Hall, 2F, Heian)

Multifaceted Roles of Orexins: Sleep, Pain and Reward Regulations

Organizer / Chair: Lih-Chu CHIOU (*Graduate Institute of Brain and Mind Sciences, Department of Pharmacology, College of Medicine, National Taiwan University, Taiwan*)

Co-chair: Hiroshi NAGASE (*International Institute for Integrative Sleep Medicine, University of Tsukuba, Japan*)

Orexin A and orexin B, also named “hypocretin 1” and “hypocretin 2,” are a pair of neuropeptides derived from prepro-hypocretin. Orexin-expressing neurons are limited, mostly in the perifornical area and lateral hypothalamus, however project widely throughout the central nervous system. Orexins are found to mediate various neuro-cognitive functions, depending on the distributions of the receptors, namely OX1 and OX2 receptors. Interestingly, orexins often work hand-in-hand with other neuropeptides in the CNS to execute their regulatory roles. Complexed neuropeptide network, with orexins holding the pivotal role, were previously reported in sleep, pain and reward regulations. Pathological conditions related to these processes, including narcolepsy, chronic pain and substance abuse, are unmet medical needs. In this symposium, 4 speakers are going to present their extensive works on the roles of orexins in sleep, pain and reward regulations. The scope encompasses the basic sciences underlying these discoveries, and the translational potentials of the orexin system in clinical setting.

S51-1 Narcolepsy and orexin - Orexin deficiency and clinical symptoms of narcolepsy -

Makoto HONDA^{1,2}

¹Tokyo Metropolitan Institute of Medical Science, Japan, ²Seiwa Hospital, Institute of Neuropsychiatry, Japan

S51-2 Stress induces analgesia via an orexin-initiated endocannabinoid signaling

Ming Tatt LEE^{1,2,3}, Yu-Chun CHIU², Hsin-Jung LEE², Lih-Chu CHIOU^{2,3,4}

¹Faculty of Pharmaceutical Sciences, UCSI University, Kuala Lumpur, Malaysia,

²Graduate Institute of Pharmacology, National Taiwan University College of Medicine, Taiwan,

³Graduate Institute of Brain and Mind Sciences, National Taiwan University College of Medicine, Taiwan,

⁴Graduate Institute of Acupuncture Science, China Medical University, Taichung, Taiwan

S51-3 A novel opioid-independent mechanism for acupuncture analgesia: The orexin-endocannabinoid signaling

Yi-Hung CHEN¹, Hsin-Jung LEE², Ming Tatt LEE², Ya-Ting WU¹, Yen-Hsien LEE³, Ling-Ling HWANG³, Ming-Shiu HUNG⁴, Andreas ZIMMER⁵, Ken MACKIE⁶, Lih-Chu CHIOU²

¹Graduate Institute of Acupuncture Science, China Medical University, Taiwan,

²Department of Pharmacology, College of Medicine, National Taiwan University, Taipei, Taiwan,

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⁴Institute of Biotechnology and Pharmaceutical Research, National Health Research Institutes, Zhunan, Miaoli County, Taiwan,

⁵Institute for Molecular Psychiatry, University of Bonn, Bonn, Germany,

⁶Gill Center and the Department of Psychological and Brain Sciences, Indiana University, Bloomington, Indiana, USA

S51-4 Involvement of the orexin-endocannabinoid signaling in stress-induced cocaine seeking

Lih-Chu CHIOU^{1,2,3}, Li-Wei TUNG¹, Lu-Yang CHANG¹, Guan-Ling LU¹, Yen-Hsien LEE⁴, Lung YU⁶, Hsin-Jung LEE², Shu-Fang TENG², Ling-Ling HWANG^{4,5}, Ming-Shiu HUNG⁷, Ken MACKIE⁸, Andreas ZIMMER⁹

¹Graduate Institute of Pharmacology, College of Medicine, National Taiwan University, Taiwan,

²Department of Pharmacology, College of Medicine, National Taiwan University, Taiwan,

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⁴Graduate Institute of Biomedical Science, Taipei Medical University, Taipei, Taiwan,

⁵Department of Physiology, Taipei Medical University, Taipei, Taiwan,

⁶Institute of Behavioral Medicine, College of Medicine, National Cheng Kung University, Tainan, Taiwan,

⁷Institute of Biotechnology and Pharmaceutical Research, National Health Research Institutes, Zhunan, Miaoli County, Taiwan,

⁸Gill Center and the Department of Psychological and Brain Sciences, Indiana University, Bloomington, Indiana, USA,

⁹Institute for Molecular Psychiatry, University of Bonn, Bonn, Germany

■ Discussants: Akihiro YAMANAKA (*Research Institute of Environmental Medicine, Nagoya University, Japan*)

Makoto TSUDA (*Department of Life Innovation, Graduate School of Pharmaceutical Sciences, Kyushu University, Japan*)

Symposium-52

October 13 (Sun), 10:30-12:10 / Room 17 (Fukuoka Sunpalace Hotel & Hall, 2F, Suehiro)

How should our journals be? ~ Clinical Psychopharmacology and Neuroscience & Neuropsychopharmacology Reports ~

Organizer / Chair: Duk-In JON (*Department of Psychiatry, College of Medicine, Hallym University, Korea*)
Tsuyoshi MIYAKAWA (*Institute for Comprehensive Medical Science, Fujita Health University, Japan*)

The Asian College of Neuropsychopharmacology (AsCNP) has two associate journals: Clinical Psychopharmacology and Neuroscience (CPN), and Neuropsychopharmacology Reports (NPPR). CPN and NPPR are the official journals of the Korean College of Neuropsychopharmacology (KCNP) and the The Japanese Society of Neuropsychopharmacology (JSNP), respectively, and both of the journals are open-access. In this symposium, the editors in chief of CPN and NPPR will introduce these journals, and will discuss their future directions with authors published in the journals and audiences, including the aspect of Open Science.

S52-1 Game Change of Scholarly Publishing Driven by Open Science and its Policy

Kazuhiro HAYASHI
National Institute of Science and Technology Policy, Japan

S52-2 Neuropsychopharmacology Reports: An Ideal Journal for the Open Science Era

Tsuyoshi MIYAKAWA
Fujita Health University, Japan

S52-3 A Randomized Controlled Study on the Effect of Ifenprodil on Alcohol Use in Patients with Alcohol Dependence: Expectations of Neuropsychopharmacology Reports

Nagisa SUGAYA
Unit of Public Health and Preventive Medicine, School of Medicine, Yokohama City University, Japan

S52-4 Clinical Psychopharmacology and Neuroscience: Covering the results from basic research to clinical studies

Jung Goo LEE
Department of Psychiatry and Paik Institute for Clinical Research, Inje University, Korea

S52-5 The question of distinguishing paid- and open-access scientific journals

Winston W. SHEN
Departments of Psychiatry, Wan Fang Medical Center and College of Medicine, Taipei Medical University, Taiwan

■ Discussant: Hisatsugu KOSHIMIZU (*Institute for Comprehensive Medical Science, Fujita Health University, Japan*)

Symposium-53

October 13 (Sun), 14:50-16:30 / Room 4 (Fukuoka International Congress Center, 4F, 409)

New vistas on monoamine contributions to learning and memory

Organizer / Chair: Satoshi KIDA (*Graduate School of Agriculture and Life Sciences, The University of Tokyo, Tokyo, Japan*)

Co-chair: Masamichi SAKAGAMI (*Brain Science Institute, Tamagawa University, Japan*)

Recent technological breakthroughs for manipulating and recording the activity of specific cell populations in defined circuits have resulted in dramatic advances in our understanding of the brain mechanisms mediating learning and memory that is modulated by emotion, decision making and so on. In parallel, a large amount of work has demonstrated that monoamines such as serotonin and dopamine play key modulatory roles in the regulation of emotion and learning and memory. However, our understanding remains incomplete, and central questions remain as to how monoamines regulate various forms of learning and memory and how these effects may become disrupted in pathological states. In this symposium, we bring together investigators who have approached these questions from different directions. The objective of the symposium is to introduce cutting edge studies investigating mechanisms for regulation of learning and memory by monoamines at the molecular, cellular and circuits levels. Balleine will present experiments investigating the role of dopamine signaling in the dorsomedial striatum in the acquisition of goal-directed actions, particularly as it relates to learning-related plasticity in direct and indirect pathway medium spiny neurons. Holmes will discuss recent findings showing that discrete serotonin circuits differentially modulate the formation of aversive memories and risky decision-making, and discuss pharmacological data showing how these circuit-level effects require signaling through distinct 5-HT receptor subtypes. Kida will discuss roles of hippocampal dopamine signals in retrieval of memory – showing that hippocampal circadian clock regulates retrieval of hippocampus-dependent memory via signal transduction composed of Dopamine-D1/D5R-cAMP-PKA-AMPA receptor GluA1 phosphorylation at S845.

S53-1 Dopaminergic modulation of cholinergic function in the ventral striatum mediates the influence of predictive learning on decision-making.

Bernard Walter BALLEINE

UNSW Sydney, Australia

S53-2 Serotonergic modulation of emotional learning

Andrew HOLMES

NIAAA, USA

S53-3 Hippocampal circadian clock regulates memory retrieval via Dopamine and PKA-induced GluA1 phosphorylation

Satoshi KIDA

Graduate School of Agriculture and Life Sciences, The University of Tokyo, Tokyo, Japan

■ Discussants: Ayako WATABE (*Institute of Clinical Medicine and Research, Jikei University School of Medicine, Japan*)
Hotaka FUKUSHIMA (*Department of Bioscience, Faculty of Life Sciences, Tokyo University of Agriculture, Japan*)

Symposium-54

October 13 (Sun), 14:50-16:30 / Room 5 (Fukuoka International Congress Center, 4F, 410)

Rethinking of Effectiveness of Clozapine Treatment for Treatment-Refractory Schizophrenia

Organizer / Chair: Hidehiro OSHIBUCHI (*Department of Psychiatry, Tokyo Women's Medical University, Japan*)

Co-chair: Takefumi SUZUKI (*Department of Neuropsychiatry, University of Yamanashi, Japan*)

Clozapine is considered the gold standard treatment for patients with treatment-refractory schizophrenia (TRS), but a recent network meta-analysis raises questions about its relative superiority over other second-generation antipsychotics such as olanzapine and risperidone. In this symposium, we will discuss evidence for the superior efficacy of clozapine treatment not only for psychotic symptoms, but also for the negative symptoms and emotional symptoms of TRS, including our recent clinical findings of clozapine's efficacy for "treatment adherence", "re-hospitalization", and "seclusion", and the utility of plasma clozapine levels for assessing its efficacy. In addition, we will present basic research findings regarding the effects of clozapine on the amygdala dopamine system in fear-conditioned animals. The data suggest specific actions of clozapine on emotional cognitive-processing comparing with other antipsychotics. These presentations suggest future standards for more efficient clozapine treatment strategies for patients with TRS.

S54-1 Clinical, functional and cognitive difference of patients with treatment resistant schizophrenia on clozapine and those without clozapine

Sherry Kit Wa CHAN, Christy Lai Ming HUI, Edwin Ho Ming LEE, Wing Chung CHANG, Eric Yu Hai CHEN

Department of Psychiatry, The University of Hong Kong

S54-2 Treatment adherence in treatment-resistant schizophrenia

Hiroyoshi TAKEUCHI^{1,2}

¹*Department of Neuropsychiatry, Keio University School of Medicine, ²Schizophrenia Program, Centre for Addiction and Mental Health*

S54-3 Utility of Plasma Clozapine Levels in Treatment Resistant Schizophrenia

Jimmy LEE^{1,2}

¹*Institute of Mental Health, Singapore, ²Lee Kong Chian School of Medicine, Nanyang Technological University, Singapore*

S54-4 Effect of clozapine vs. other second-generation antipsychotics in real-world clinical practice

Fuminari MISAWA

Yamanashi Prefectural KITA Hospital

■ Discussant: Yasuhiro KANEDA (*Department of Psychiatry, Iiwaki Clinic, Japan*)

Symposium-55

October 13 (Sun), 14:50-16:30 / Room 6 (Fukuoka International Congress Center, 4F, 401+402)

The aging effects on the brain, cognition, and cardiovascular system of patients with severe mental illness

Organizer / Chair: Shang-ying TSAI (*Department of Psychiatry, Taipei Medical University and Hospital, Taiwan*)

Co-chair: Minoru NARITA (*Department of Pharmacology, Hoshi University, Japan*)

Background: Patients with severe mental illness (SMI) such as schizophrenia (SCZ) and bipolar disorder (BPD) are vulnerable to developing risk factors for cardiovascular diseases (CVDs), including obesity, smoking habit, hypertension, dyslipidemia, and type 2 diabetes mellitus, but they tend to receive low-quality medical care. Therefore, patients with SMI mainly die from CVDs and lose 1-2 decades of life compared to the general population. However, life expectancy has steadily increased globally; consequently, the numbers of older SMI patients in the general population are expected to increase. Thus, older patients with SMI, particularly those with illness onset at young age, constitute a survivor cohort with unique care needs. Aging is a progressively degenerative process tightly integrated with inflammation. Systemic inflammation probably plays an important role in the development of CVDs and pathophysiology of SCZ and BPD. Therefore, combination of aging and pathophysiology of SMI may accelerate the vascular atherosclerosis and brain alternation underlined by inflammatory mechanism in people with SMI after midlife. Medical burden may exert direct effect on cognition and indirect effects on social functioning. Because social functioning in older SMI patients is affected by symptom severity, cognitive impairment, and perceived physical health, patients with SMI after midlife may be considered as a more complex population than those in early life. Long-term care of older SMI patients becomes a new challenge to the mental health system. Planning for medical care that meets the health needs of this growing population of older SMI adults is critical. More than 80% of older SMI patients are community dwellers. Nonetheless, information of community-dwelling patients with SMI on the cognition, medical burden, and social functioning is scant. Therefore, the symposium will focus on these issues of community-dwelling older patients with SMI.

Objectives

The understanding of the aging effects on brain, cardiovascular system, medical burden, and overall outcome of patients with SMI is an indispensable step in building a long-term care models across the lifespan. Although there is still a significant deficit in data, the present symposium will bring some answers, innovative questions, and novel perspectives. There are four presentations in this symposium. The first presentation will discuss the aging effect on physical and cognitive function of the community-dwelling patients with SMI (SCZ and BPD). The second one will present the outcomes after 15-year community living following long-term hospitalization and the trajectory of cognitive function in older SCZ patients. The third one will focus on the cardiovascular system of SCZ in the aging process. To our knowledge, this presentation will be the first time to report the data about cardiac sonography of the geriatric patients with SCZ. The last presentation will focus on the clinical factors and inflammatory markers associated with brain change (including cortical volume reduction and stroke) of older BPD patients. At the conclusion of these presentations, participants will (1) understand better the interaction of aging process and bio-psycho-social functioning in SCZ and BPD; and (2) increase awareness of improving the general health of older patients with SMI.

S55-1 The aging effect on cardiovascular system of adult patients with schizophrenia

Pao-Huan CHEN^{1,2}, Shang-Ying TSAI^{1,2}, Shuo-Ju CHIANG³, Cheng-Yi HSIAO⁴, Kuo-Hsuan CHUNG^{1,2}, Shou-Hung HUANG^{1,2}

¹Department of Psychiatry, Taipei Medical University Hospital, Taiwan,

²Department of Psychiatry, School of Medicine, College of Medicine, Taipei Medical University, Taiwan,

³Division of Cardiology, Department of Internal Medicine, Taipei City Hospital, Taiwan,

⁴Division of Cardiology, Department of Internal Medicine, Taipei Medical University Hospital, Taiwan

S55-2 Outcomes of fifteen years of community living following long-term hospitalization and the trajectory of cognitive function in aged patients with schizophrenia

Hisashi KIDA

Department of Neuropsychiatry, Keio University School of Medicine, Tokyo, Japan

S55-3 Aging effects on the physical and cognitive functions, and subjective sense of well-being in elderly patients with severe mental illness living in the community

Hidehito NIIMURA^{1,2}

¹Department of Neuropsychiatry, Keio University School of Medicine, Japan, ²Asaka Hospital, Koriyama, Fukushima, Japan

S55-4 The clinical factors and inflammatory markers associated with brain change of older patients with bipolar disorder

Shang-ying TSAI^{1,2}, Kuo-Hsuan CHUNG^{1,2}, Pao-Huan CHEN^{1,2}

¹Department of Psychiatry, School of Medicine, College of Medicine, Taipei Medical University, Taipei, Taiwan,

²Department of Psychiatry, Taipei Medical University Hospital, Taipei, Taiwan

■ Discussants: Roger HO (*Department of Psychological Medicine, National University of Singapore, Singapore*)

Jin NARUMOTO (*Department of Psychiatry, Graduate School of Medical Science, Kyoto Prefectural University of Medicine, Japan*)

Symposium-56

October 13 (Sun), 14:50-16:30 / Room 13 (Fukuoka International Congress Center, 5F, 501)

Planning and conducting large pragmatic trials in psychiatry: for effective discovery, dissemination and implementation of evidence-based practices.

Organizer / Chair: Mitsuhiro YAMADA (*Department of Neuropsychopharmacology, National Institute of Mental Health, National Center of Neurology and Psychiatry, Japan*)

Co-chair: Hisae ONO (*Department of Integral Psychological Sciences, School of Humanities, Kwansei Gakuin University, Japan*)

There has been a dramatic increase in the evidence base to improve mental health. Clinical guidelines had been expected to translate such best evidence into best practice. However, the poor uptake of these evidence-based practices has led us to investigate factors related to their successful dissemination and implementation. For example, greater “consumer” involvement would be expected in setting priorities. The consumer includes not only patients, but also clinicians, payers, and others. When planning and conducting clinical trials in psychiatry, it is very important to take account of these factors. For better generalizability and feasibility, well-designed, larger, simpler and pragmatic trials would be expected. The purpose of this symposium is to discuss the needs and future challenges of large pragmatic trials in psychiatry for effective discovery, dissemination and implementation of evidence-based practices. The first speaker will discuss the first- and second-line treatment strategies for untreated unipolar major depressive episodes, based on the results obtained from the SUN[⊙]D study (Kato et al., *BMC Medicine*, 16, 103, 2018). SUN[⊙]D study is a pragmatic, multi-centre, assessor-blinded randomised controlled trial (n=2,011). The second speaker will introduce an outline of the multi-centre randomised controlled trial (n=496) included in the precision medicine project in UK. The primary objective of the trial is to determine whether using the treatment algorithm to identify a “personalised” antidepressant results in an increased proportion of patients who keep taking the allocated treatment at 8 weeks, in comparison to usual care. Complex interventions are widely used in the mental health service and the number of trials to examine the effect of complex interventions are increasing. Recently, a multi-centre, randomised controlled trial (ACTION-J study) was conducted to examine the effect of assertive case management for people with mental health problems who had attempted suicide and were admitted to hospital emergency departments (Kawanishi et al., *Lancet Psychiatry*, 1: 193-201, 2014). ACTION-J study is a multi-centre, randomised controlled trial (n=914). The third speaker will introduce the ongoing projects for dissemination of the assertive case management in Japan. We hope that this symposium will help the audience to understand the essential steps needed to plan and conduct large pragmatic trials in the field of psychiatry for effective discovery, dissemination and implementation of evidence-based practices.

S56-1 PRADA: Prescribing the Right Antidepressant for Depression in Adults

Andrea CIPRIANI

Department of Psychiatry, University of Oxford, UK

S56-2 The SUN(^_^)D study: a pragmatic, multi-centre, assessor-blinded randomised controlled trial examining first- and second-line treatments for patients with hitherto untreated major depression (n=2,011)

Toshiaki A. FURUKAWA

Department of Health Promotion and Human Behavior, Kyoto University Graduate School of Medicine / School of Public Health, Japan

S56-3 Dissemination and implementation of evidence-based interventions in psychiatry. Lessons learned from a large scale, multicentre, randomised controlled trial, ACTION-J study

Mitsuhiro YAMADA¹, Yoshitaka KAWASHIMA^{1,2}, Naohiro YONEMOTO¹, Masatoshi INAGAKI^{1,3}, Chiaki KAWANISHI⁴

¹*Department of Neuropsychopharmacology, National Institute of Mental Health, National Center of Neurology and Psychiatry, Tokyo, Japan,*

²*Department of Psycho-Social Studies, School of Arts and Letters, Meiji University, Tokyo, Japan,*

³*Department of Psychiatry, Faculty of Medicine, Shimane University, Izumo, Japan,*

⁴*Department of Neuropsychiatry, Sapporo Medical University Graduate School of Medicine, Sapporo, Japan*

■ Discussants: Shih-Ku LIN (*Taipei City Hospital and Psychiatric Center, School of Medicine, Taipei Medical University, Taiwan*)

Hiroyasu NARITA (*Lundbeck Japan K.K.*)

Symposium-57

October 13 (Sun), 14:50-16:30 / Room 14 (Fukuoka Sunpalace Hotel & Hall, 2F, Palace Room A)

Toward a new era of precision medicine for Parkinson's disease

Organizer / Chair: Nobutaka HATTORI (*Department of Neurology, Juntendo University School of Medicine, Japan*)

Co-chair: Yoshio TSUBOI (*Department of Neurology, Fukuoka University, Japan*)

Parkinson's disease (PD) is a syndrome rather than a disease. Indeed, based on the clustering analysis using artificial intelligence (AI), clinical phenotypes could be classified for three groups such as mild motor predominant, intermediate, and diffuse malignant forms. In addition, there are at least 23 loci or monogenic forms of familial PD. Thus, PD is highly heterogeneous. Based on the information from functions of causative genes, mitochondrial dysfunctions, lysosomal dysfunctions, neuroinflammation, and prion like propagation have been also proposed as pathomechanisms. However, more information has not translated into greater understanding of disease complexity to satisfy diagnostic and therapeutic needs. Challenges include the need for wide-scale and long-term deployment of sensor technology, and the gap between the "big data" acquired with sensitive measurement technologies and their limited clinical application. Major opportunities could be realized if new technologies are developed as part of open-source and/or open-hardware platforms enabling multi-channel data capture, sensitive to the broad range of motor and non-motor problems that characterize PD, and adaptable into self-adjusting, individualized treatment delivery systems. We would like to propose the patient's based managements for PD as precision medicine. This symposium is consisting of four speakers who will be talking about motor and non-motor symptoms for pharmacological treatments, respectively. In addition, this includes non-pharmacological treatment for PD such as DBS and precision medicine based on genetic studies.

S57-1 Optimal oral medications for patient's concerns on motor symptoms

Tetsuya MAEDA

Dev. of Neurology and Gerontology, Dep. of Internal Medicine, School of Medicine, Iwate Medical University, Japan

S57-2 Optimal oral medications for patient's concerns on non-motor symptoms

Hirohisa WATANABE

Department of Neurology, Fujita Health University, Japan

S57-3 Current non-oral strategies in advanced Parkinson's disease

Jongsam BAIK

Department of Neurology, Sanggye Paik Hospital, Inje University, Korea

S57-4 Precision Medicine for Parkinson's Disease: Lessons from Genetic Studies

Taku HATANO, Nobutaka HATTORI

Department of Neurology, Juntendo University School of Medicine, Japan

■ Discussant: Masato ASANUMA (*Department of Medical Neurobiology, Okayama University Graduate School of Medicine, Dentistry and Pharmaceutical Sciences, Japan*)

Symposium-58

October 13 (Sun), 14:50-16:30 / Room 15 (Fukuoka Sunpalace Hotel & Hall, 2F, Palace Room B)

Asian Consortium on MRI studies in Psychosis project

Organizer / Chair: Kiyoto KASAI (*Department of Neuropsychiatry, The University of Tokyo, Japan*)

Co-chair: Jun Soo KWON (*Department of Psychiatry, Seoul National University, Korea*)

Recently, international collaborations of studies and research data consortiums have been attracting much attention, not only in genetic research, but also in neuroimaging field in recent years. There are psychosis consortiums such as ENIGMA-SZ, which have been successful to suggest biomarkers for the disorder.

However, as the chronic patients are exposed to medications, reduced social activity and other secondary effects of the disorder for a long time, the consortiums of chronic patients have a critical limitation of not being able to attribute the findings solely to the effect of the disorder.

Therefore, the consortium for the first episode psychosis patients (FEP) is needed to resolve this issue. Asian Consortium on MRI studies in Psychosis (ACMP) is a FEP MRI consortium among the Asian countries. ACMP project plans to collect existing FEP MRI data along with the demographic and clinical information from each participating site to investigate the early changes attributed to the disorder not to the secondary effects such as medication. Longitudinal data collection of FEP is also planned for the investigation of changes along the disorder progression.

In this symposium, each presenter would briefly go through their own hypotheses, based on their previous results and present a preliminary data from ACMP highlighting the strength of ACMP in achieving a common goal of further investigating the core changes of psychosis.

S58-1 A neuroimaging mega study with clinical dataset shows a new insight into brain pathology of schizophrenia: The concept and framework of the Asian Consortium on MRI studies in Psychosis (ACMP)

Shinsuke KOIKE^{1,2,3,4}

¹Center for Evolutionary Cognitive Sciences, The University of Tokyo, Tokyo, Japan,

²University of Tokyo Institute for Diversity & Adaptation of Human Mind (UTIDAHM), Tokyo, Japan,

³The International Research Center for Neurointelligence (WPI-IRC/N), Institutes for Advanced Study (UTIAS), The University of Tokyo, Tokyo, Japan,

⁴University of Tokyo Center for Integrative Science of Human Behavior (CiShuB), Tokyo, Japan

S58-2 Functional Brain Networks in Never-Treated and Treated Long-Term Ill Schizophrenia Patients

Su LUI¹, Li YAO¹, Jieke LIU², Fei LI¹, Wei LIAO⁴, Wei DENG³, John A SWEENEY⁵, Qiyong GONG¹

¹Huaxi MR Research Center(HMRRCC), Department of Radiology, West China Hospital of Sichuan University, China,

²Department of Radiology, Sichuan Cancer Hospital & Institute, Sichuan Cancer Center, School of Medicine, University of Electronic Science and Technology of China, China,

³Department of Psychiatry, State Key Laboratory of Biotherapy, West China Hospital of Sichuan University, China,

⁴Center for Information in BioMedicine, Key Laboratory for Neuroinformation of Ministry of Education, School of Life Science and Technology, University of Electronic Science and Technology of China, China,

⁵Department of Psychiatry and Behavioral Neuroscience, University of Cincinnati, USA

S58-3 Brain functional connectome reveals heterogeneity in persons at-risk for psychosis

Juan Helen ZHOU¹, Jimmy LEE²

¹Duke-National University of Singapore Medical School, Singapore, ²Institute of Mental Health, Singapore

S58-4 Thalamo-cortical Network Investigations in Psychosis

Kang Ik Kevin CHO¹, Yoo Bin KWAK¹, Wu Jeong HWANG¹, Jun Soo KWON^{1,2}

¹Department of Brain and Cognitive Sciences, College of Natural Sciences, Seoul National University, Seoul, Korea,

²Department of Psychiatry, Seoul National University College of Medicine, Seoul, Korea.

■ Discussants: Yoshiya MORIGUCHI (*Medical Affairs, Development Center, Lundbeck Japan*)

Toshiaki KIKUCHI (*Department of Neuropsychiatry, Keio University School of Medicine, Japan*)

Symposium-59

October 13 (Sun), 14:50-16:30 / Room 16 (Fukuoka Sunpalace Hotel & Hall, 2F, Heian)

Clinical Experience and Researches of Adult ADHD in Korea

Organizer / Chair: Duk-In JON (*Department of Psychiatry, College of Medicine, Hallym University, Korea*)

For many years, attention deficit hyperactivity disorder(ADHD) has been thought to be a mental disorder that diagnosed in child or adolescent period. ADHD in childhood can persist into adulthood in at least 30 percent of patients and some researches present a possibility of 'late onset or adult onset ADHD'. According to most recent data from WHO, the global prevalence rate of ADHD in adult is about 3~4%. The rate of comorbidity in adult ADHD is estimated to be up to 85%, such comorbid illnesses include bipolar disorder, substance mood disorder, anxiety disorder etc. These mean that ADHD could be a lifelong disorder. These means that not only the symptoms and impairments of ADHD could affect the adult population, but functional impairments could be worse than the younger population. So proper diagnosis and treatment is very important, especially in adults, and can improve their daily functioning. As a result, interests in adult ADHD has rapidly increased and updated clinical practice has emerged across the world. Despite this progress, most countries in Asia have little data from basic researches, including epidemiologic studies, clinical research etc. Most of all researches and data have been coming from a few eastern developed countries and proper diagnostic, and treatment services are often restricted or unavailable in many other regions of the world, including most Asian countries. We don't know how many Asian people suffer from adult ADHD. We don't know which medications or treatment could be more effective in Asian people. We just know that 'we don't know'.

Clinical and social interests in adult ADHD have been growing rapidly in Korea since last 2 years. Academic and clinical meetings, researches have been continuing by Korean College of Neuropsychopharmacology(KCNP) and Korean Society for Affective Disorder(KSAD). In this symposium, we will present a status of adult ADHD and related recent clinical researches in Korea. We expect that clinical or academic interests of Asian psychiatrists will grow with our session. We also hope that our presentation could be a trigger for expansion of adult ADHD in each Asian country.

S59-1 Current status of Adult ADHD in Korea

Jeong Seok SEO

Department of Psychiatry, Konkuk University, Korea

S59-2 Epidemiologic data of adult ADHD in Korea: Using Android Application & symptom scale

Seung-Ho JANG¹, Won-Myong BAHK², Sang-Yeol LEE¹, Jung-Wan HONG³

¹*Department of Psychiatry, School of Medicine, Wonkwang University, Iksan, Korea,*

²*Department of Psychiatry, Yeouido St. Mary's Hospital, College of Medicine, The Catholic University of Korea, Seoul, Korea,*

³*Department of Psychiatry, Iksan Hospital, Iksan, Korea*

S59-3 Pharmacological treatment of adult ADHD- as the focus on south Korea

Se-Hoon SHIM¹, Won-Myong BAHK²

¹*Department of Psychiatry, Soonchunhyang University Hospital, Korea,*

²*Department of Psychiatry, College of Medicine, The Catholic University of Korea, Seoul, Korea*

■ Discussant: Hyung-Mo SUNG (*Department of Psychiatry, CHA University, Korea*)

Symposium-60

October 13 (Sun), 14:50-16:30 / Room 17 (Fukuoka Sunpalace Hotel & Hall, 2F, Suehiro)

Epigenetic mechanisms underlying psychiatric disorders

Organizer / Chair: Makoto TANIGUCHI (*Department of Neuroscience, Medical University of South Carolina, USA*)

Co-chair: Kazuya IWAMOTO (*Department of Molecular Brain Science, Kumamoto University, Japan*)

Psychiatric disorders cause the significant burden to the individual and worldwide, and have been increasing on current human society. Psychiatric disorders such as drug addiction and stress-related illnesses including major depressive disorder, post-traumatic stress disorder, and anxiety disorder are complex multifactorial illnesses involving chronic alternations in the neuronal circuit that contribute to their pathophysiology. The diverse array of behavioral symptoms in the individuals make it difficult to decrease morbidity with efficacy therapies and identify any specific genes linking to the underlying causal of these diseases. While genetic factors play crucial roles in the etiology of mental illnesses, identical twin studies demonstrated the relatively high rates of discordance indicate the importance of additional mechanisms. Environmental factors such as stress or abuse of drugs are known to play significant roles in the development of psychiatric disorders. Repeated exposure with stressors or drugs extended beyond the significant period of times and traumatic event induce persistent changes in gene expression and neuronal circuit function that lead to long-lasting maladaptive behaviors. Increasing evidence indicates that dysregulation of epigenetic mechanisms and its crucial contribution in the pathophysiology in the psychiatric disorders. In this symposium, we will discuss the epigenetic mechanisms underlying the development of psychiatric disorders.

Epigenetic mechanisms control gene transcription without alternations of the DNA sequence itself, rather change the chromatin state. In the nucleus, DNA is packed into chromatin which is comprised of DNA and histones. The N-terminal histone tails can undergo many types of post-translational modifications including acetylation which often observed in the genomic region of the active state for transcription. The acetylation is controlled by two classes of enzymes, histone acetyltransferases (HATs) and histone deacetylases (HDACs). HATs transfer an acetyl group to a histone lysine residue, whereas HDACs remove. Acetylation of histone tail relaxes chromatin structure and produces space for the transcriptional machinery resulting in transcriptional active states. HDACs are classified into subgroups: Class I HDAC (HDAC1, 2, 3, and 8) consists of a central deacetylase domain and are mostly localized within the cell nucleus. They have well-described histone deacetylase enzymatic activity and are found in large gene repressor complexes. Class IIa HDACs (HDAC4, 5, 7, and 9) can be shuttled between cytoplasm and the nucleus. Although their enzymatic activity is unclear, the neuronal activity-dependent subcellular redistribution of class IIa HDACs regulates their interaction with transcription factors and recruits repressor complexes. The crucial roles of epigenetics have been suggested from clinical genetic and postmortem brain studies and preclinical pharmacological studies, further understanding of epigenetics is important to improve the efficacy of therapy and to decrease mortality of psychiatric disorders.

In this symposium, Dr. Taniguchi will discuss the regulatory mechanisms of class IIa HDACs in response to exposure to drugs, cocaine and heroin, and its function in the drug addiction-related behaviors. Dr. Uchida will discuss the epigenetic mechanisms of class I HDACs underlying vulnerability to stress-related psychiatric disorders. Dr. Maddox will discuss the role of class IIa HDACs, HDAC4, in the contribution of development of PTSD in women.

S60-1 Epigenetic mechanisms of stress-induced depression

Shusaku UCHIDA

SK Project, Medical Innovation Center, Kyoto University, Japan

S60-2 Examination of a putative sex-specific epigenetic mechanism associated with amygdala-dependent traumatic memory formation

Stephanie A MADDOX^{1,2}, Michelle X. CHEN¹, Anya P. LEVENDUSKY¹, Brianpaul J. ROBERT¹, Rachel D. PENROD-MARTIN³, Christopher W. COWAN³, Alicia K. SMITH⁴, Kerry J. RESSLER^{1,2}

¹Division of Depression & Anxiety Disorders, McLean Hospital, Belmont, MA, USA,

²Department of Psychiatry, Harvard Medical School, Boston, MA, USA,

³Department of Neuroscience, Medical University of South Carolina, Charleston, SC, USA,

⁴Department of Gynecology and Obstetrics, Emory School of Medicine, Atlanta, Georgia, USA

S60-3 Epigenetic mechanisms underlying Drug addiction

Makoto TANIGUCHI

Department of Neuroscience, Medical University of South Carolina, USA

■ Discussants: Naoko KUZUMAKI (*Department of Pharmacology, Hoshi University, Japan*)

Akiyoshi SAITOH (*Laboratory of Pharmacology, Faculty of Pharmaceutical Science, Tokyo University of Science, Japan*)

Luncheon Seminar

Luncheon Seminar

Luncheon Seminar 1-1 October 11 (Fri), 12:30 - 14:00 / Room 1 (Fukuoka International Congress Center, 3F, Main Hall)

Sponsor: H. Lundbeck A/S

Chair: Stephen STAHL (*University of California San Diego, California, USA*)

LS1-1-1 Understanding Depression Treatment: from Mechanism to Clinical Profile

Stephen STAHL

University of California San Diego, California, USA

LS1-1-2 Do Patients Receive the Treatment They Really Need?

Bernhard T. BAUNE

University of Münster, Münster, Germany

LS1-1-3 Back to Normal?

Roger MCINTYRE

University of Toronto, Toronto, Ontario, Canada

Luncheon Seminar 1-4 October 11 (Fri), 12:30 - 13:30 / Room 4 (Fukuoka International Congress Center, 4F, 409)

Sponsor: Otsuka Pharmaceutical Co., Ltd.

*Japanese Session

Chair: Norio FURUKORI (*Department of Psychiatry, Dokkyo Medical University, Japan*)

LS1-4-1 Brain dysfunction in liver cirrhosis with carnitine deficiency, which evaluated by near-infrared spectroscopy

Hiroyuki NAKANISHI

Department of gastroenterology and hepatology, Musashino red cross hospital, Japan

LS1-4-2 Role of carnitine in psychiatric disorders

Akifumi NAKAMURA^{1,2}

¹Akari Clinic, Japan, ²Department of Neuropsychiatry, Graduate School of Medicine, University of the Ryukyus, Japan

Luncheon Seminar 1-6 October 11 (Fri), 12:30 - 13:30 / Room 6 (Fukuoka International Congress Center, 4F, 401+402)

Sponsors: Daiichi Sankyo Co., Ltd. / UCB Japan Co. Ltd.

*Japanese Session

Chair: Yutaka WATANABE (*Department of Psychiatry, Amekudai Hospital, Japan*)

LS1-6 Epilepsy in the elderly

Aihide YOSHINO

Department of Psychiatry, National Defense Medical College, Japan

Luncheon Seminar 1-13 October 11 (Fri), 12:30 - 13:30 / Room 13 (Fukuoka International Congress Center, 5F, 501)

Sponsor: Medical Affairs, Sumitomo Dainippon Pharma Co., Ltd.

*Simultaneous interpretation available for Japanese only

Chair: Kazuyuki NAKAGOME (*National Center of Neurology and Psychiatry, Japan*)

LS1-13 Cognitive Dysfunction in Bipolar Disorder

Allan H. YOUNG

King's College London, London, UK

Luncheon Seminar 1-14 October 11 (Fri), 12:30 - 13:30 / Room 14 (Fukuoka Sunpalace Hotel and Hall, 2F, Palace Room A)

Sponsor: Mitsubishi Tanabe Pharma Corporation
*Japanese Session

Chair: Hiroyuki UCHIDA (*Department of Neuropsychiatry, Keio University School of Medicine, Tokyo, Japan*)

LS1-14 The significance of focusing on the diagnosis and treatment of tardive dyskinesia

Takashi TSUBOI
Department of Neuropsychiatry, Kyorin University School of Medicine, Japan

Luncheon Seminar 1-15 October 11 (Fri), 12:30 - 13:30 / Room 15 (Fukuoka Sunpalace Hotel and Hall, 2F, Palace Room B)

Sponsor: Pfizer Japan Inc. / Sumitomo Dainippon Pharma Co., Ltd.
*Japanese Session

Chair: Chiaki KAWANISHI (*Department of Neuropsychiatry, Sapporo Medical University Graduate School of Medicine, Japan*)

LS1-15 Considering withdrawal of Depression Treatment

Nakao IWATA
Department of Psychiatry, Fujita Health University School of Medicine, Japan

Luncheon Seminar 2-1 October 12 (Sat), 12:30 - 13:30 / Room 1 (Fukuoka International Congress Center, 3F, Main Hall)

Sponsor: Sumitomo Dainippon Pharma Co., Ltd.
*Japanese Session

Chair: Teruhiko HIGUCHI (*Japan Depression Center, Japan*)

LS2-1 Possibility of third route of administration "Transdermal Patch" in pharmacological therapy of schizophrenia

Jun ISHIGOOKA
Institute of CNS Pharmacology, Japan

Luncheon Seminar 2-2 October 12 (Sat), 12:30 - 13:30 / Room 2 (Fukuoka International Congress Center, 4F, 411+412)

Sponsor: Otsuka Pharmaceutical Co., Ltd.

Chair: Norio OZAKI (*Department of Psychiatry, Nagoya University Graduate School of Medicine, Japan*)

LS2-2 Recent developments and future perspectives of long-acting injectable antipsychotics in schizophrenia

Andrea FAGIOLINI
Department of Mental Health and Division of Psychiatry, University of Siena School of Medicine, Italy

Luncheon Seminar 2-3 October 12 (Sat), 12:30 - 13:30 / Room 3 (Fukuoka International Congress Center, 4F, 413+414)

Sponsor: Eli Lilly Japan K.K. / SHIONOGI & CO., LTD.
*Japanese Session

Chair: Masaru MIMURA (*Department of Neuropsychiatry, Keio University School of Medicine, Japan*)

LS2-3 Aiming for optimization of depression treatment, how to perceive the heterogeneity of depression and how to treat it

Tempei OTSUBO
Department of Psychiatry, Tokyo Women's Medical University Medical Center East, Japan

Luncheon Seminar 2-5 October 12 (Sat), 12:30 - 13:30 / Room 5 (Fukuoka International Congress Center, 4F, 410)

Sponsor: TEIJIN PHARMA LIMITED

*Japanese Session

Chair: Kazuyuki NAKAGOME (*National Center of Neurology and Psychiatry, Japan*)

LS2-5 Neuromodulation for depression: rTMS

Shinsuke KITO

Department of Psychiatry, Jikei University School of Medicine, Japan

Luncheon Seminar 2-6 October 12 (Sat), 12:30 - 13:30 / Room 6 (Fukuoka International Congress Center, 4F, 401+402)

Sponsor: Nippon Shinyaku Co., Ltd.

*Japanese Session

Chair: Toshikazu SAITO (*Miki Mental Clinic / Department of Neuropsychiatry, Sapporo Medical University, Japan*)

LS2-6 New era of treatment of alcoholism: focusing on pharmacology of acamprosate

Naoyuki HIRONAKA

Department of Psychology, Faculty of Letters, Teikyo University, Japan

Luncheon Seminar 2-11 October 12 (Sat), 12:30 - 13:30 / Room 11 (Fukuoka International Congress Center, 5F, 502)

Sponsors: KYOWA Pharmaceutical Industry Co., Ltd. / Yoshitomiyakuin Corporation

*Japanese Session

Chair: Tsuyoshi KONDO (*Department of Neuropsychiatry, Graduate School of Medicine, University of the Ryukyus, Japan*)

LS2-11 Pharmacotherapy towards goals in mood disorders based not only on evidence but also on the context of the case

Masaki KATO

Department of Neuropsychiatry, Kansai Medical University, Japan

Luncheon Seminar 2-12 October 12 (Sat), 12:30 - 13:30 / Room 12 (Fukuoka International Congress Center, 5F, 503)

Sponsor: Philip Morris Japan Ltd.

*Simultaneous interpretation available

Chair: Soichiro IDE (*Addictive Substance Project, Tokyo Metropolitan Institute of Medical Science, Japan*)

LS2-12 The role of Heat-Not-Burn products in Tobacco Harm Reduction: approach based on the example of IQOS® in Japan

Patrick PICAVET, Serge MAEDER, Gizelle BAKER, Annie HEREMANS, Manuel PEITSCH

PMI R&D, Philip Morris Products S.A., Neuchâtel, Switzerland

Luncheon Seminar 2-13 October 12 (Sat), 12:30 - 13:30 / Room 13 (Fukuoka International Congress Center, 5F, 501)

Sponsor: Eisai Co., Ltd.

Chair: Masatoshi TAKEDA (*Osaka Kawasaki Rehabilitation University, Japan*)

LS2-13 Alzheimer's disease: The Approach for disease modification

Kenjiro ONO

Department of Neurology, Showa University School of Medicine, Tokyo, Japan

Chair: Nakao IWATA (*Department of Psychiatry, Fujita Health University School of Medicine, Japan*)

LS2-15-1 Opportunities in the treatment and prevention of positive symptoms: improving outcomes

John M. KANE^{1,2,3}

¹*Behavioral Health Services, Northwell Health, New York, USA,*

²*The Donald and Barbara Zucker School of Medicine, Hofstra/Northwell, New York, USA,*

³*The Zucker Hillside Hospital, Department of Psychiatry, New York, USA*

LS2-15-2 Challenges and progress in the treatment of negative, cognitive, and other symptom domains

Christoph U. CORRELL^{1,2,3}

¹*Department of Psychiatry and Molecular Medicine, Hofstra Northwell School of Medicine, New York, USA,*

²*Center for Psychiatric Neuroscience, Feinstein Institute for Medical Research, New York, USA,*

³*Recognition and Prevention (RAP) Program, The Zucker Hillside Hospital, Department of Psychiatry, New York, USA*

Chairs: Chan Hyung KIM (*Vice-president, AsCNP/ Department of Psychiatry, Yonsei University College of Medicine, Korea*)

Kazutaka IKEDA (*Chair, AsCNP2019/ President, AsCNP/ Addictive Substance Project, Department of Psychiatry and Behavioral Sciences, Japan*)

ALS-1 Introduction of AsCNP

Atsumi NITTA

Secretary of Central Office, AsCNP/ Dept of Pharmaceutical Thera & Neuropharmacol, Fac of Pharmaceutical Sci. Grad Sch of Med and Pharm Sci. University of Toyama, Japan

ALS-2 AsCNP2021 Singapore Congress

Chay Hoon TAN

President-elect, AsCNP/ National University of Singapore, Singapore

ALS-3 Award Committee

Shih-Ku LIN

Vice-president, AsCNP/ Taipei City Hospital and Psychiatric Center, Taiwan

ALS-4 Education Committee

Andi J. TANRA

Past-president, AsCNP/ University of Hasanuddin, Indonesia

ALS-5 AFPA & Asia alliance

Winston W. SHEN

Adviser, AsCNP/ Department of Psychiatry, Taipei Medical University, Taiwan

Naotaka SHINFUKU

Kobe University, Japan

ALS-6 Related Academic Societies

Kazutaka IKEDA

Chair, AsCNP2019/ President, AsCNP/ Addictive Substance Project, Department of Psychiatry and Behavioral Sciences, Japan

Luncheon Seminar 3-2 October 13 (Sun), 12:30 - 13:30 / Room 2 (Fukuoka International Congress Center, 4F, 411+412)

Sponsor: Meiji Seika Pharma Co., Ltd.

*Japanese Session

Chair: Toshihiko MATSUMOTO (*Department of Drug Dependence Research, National Institute of Mental Health, National Center of Neurology and Psychiatry, Japan*)

LS3-2 Truth about antidepressants for major depression, as revealed by >500 randomized controlled trials: some antidepressants are more efficacious than others, placebo response rates have remained constant for 25 years, and SSRIs should be prescribed towards the lower end of their licensed dose range

Toshiaki A. Furukawa

Department of Health Promotion and Human Behavior, Kyoto University Graduate School of Medicine / School of public Health, Japan

Luncheon Seminar 3-6 October 13 (Sun), 12:30 - 13:30 / Room 6 (Fukuoka International Congress Center, 4F, 401+402)

Sponsors: SHIONOGI & CO., LTD. / Takeda Pharmaceutical Company Limited

*Japanese Session

Chair: Shin NAKAGAWA (*Division of Neuropsychiatry, Department of Neuroscience, Yamaguchi University Graduate School of Medicine, Japan*)

LS3-6 Co-occurrence of ADHD and Bipolar Disorder

Takeshi TERAOKA

Department of Neuropsychiatry, Oita University Faculty of Medicine, Japan

Luncheon Seminar 3-11 October 13 (Sun), 12:30 - 13:30 / Room 11 (Fukuoka International Congress Center, 5F, 502)

Sponsors: MOCHIDA PHARMACEUTICAL CO., LTD. / Mitsubishi Tanabe Pharma Corporation / Yoshitomiya Corporation

*Japanese Session

Chair: Tempei OTSUBO (*Department of Psychiatry, Tokyo Women's Medical University Medical Center East, Japan*)

**LS3-11 The Link between anxiety disorders and depression
-focusing on social anxiety disorder-**

Satoshi ASAKURA^{1,2}

¹Health Care Center, Hokkaido University, Japan, ²Graduate School of Medicine, Department of Psychiatry, Hokkaido University, Japan

Luncheon Seminar 3-14 October 13 (Sun), 12:30 - 13:30 / Room 14 (Fukuoka Sunpalace Hotel and Hall, 2F, Palace Room A)

Sponsor: Astellas Pharma Inc.

*Japanese Session

Chair: Norio OZAKI (*Department of Psychiatry and Department of Child and Adolescent Psychiatry Nagoya University School of Medicine, Japan*)

LS3-14 Current topics on the diagnosis and treatment of sleep disorders

Yuichi INOUE^{1,2}

¹Department of Somnology, Tokyo Medical University, Japan, ²Yoyogi Sleep Disorder Center, Japan

Luncheon Seminar 3-15 October 13 (Sun), 12:30 - 13:30 / Room 15 (Fukuoka Sunpalace Hotel and Hall, 2F, Palace Room B)

Sponsors: Japan Medical Office, Takeda Pharmaceutical Company Limited. / Medical Affairs, Lundbeck Japan K.K.

*Japanese Session

Chair: Takeshi INOUE (*Department of Psychiatry, Tokyo Medical University, Japan*)

LS3-15 Addressing unmet needs in the treatment of depression

Koichiro WATANABE

Department of Neuropsychiatry, Kyorin University School of Medicine, Japan

Sponsored Symposium

Sponsored Symposium 1

October 11 (Fri), 10:30 - 12:10 / Room 15 (Fukuoka Sunpalace Hotel and Hall, 2F, Palace Room B)

Sponsor: Eisai Co., Ltd.

Towards precision psychiatry based on new modalities

Chair: Hiroyuki UCHIDA (*Department of Neuropsychiatry, Keio University School of Medicine, Tokyo, Japan*)

SS-1-1 Glutamatergic dysfunction in treatment-resistant schizophrenia: 3T proton MRS studies

Shinichiro NAKAJIMA

Department of Neuropsychiatry, School of Medicine, Keio University, Japan

SS-1-2 Synaptic Plasticity: from bench to bedside

Takuya TAKAHASHI

Department of Physiology, School of Medicine, Yokohama City University, Yokohama, Japan

Sponsored Symposium 2

October 11 (Fri), 16:30 - 18:10 / Room 2 (Fukuoka International Congress Center, 4F, 411+412)

Sponsor: Janssen Pharmaceutical K.K.

*Japanese Session

Treatment with long term prognosis in schizophrenia

Chairs: Nakao IWATA (*Department of Psychiatry, Fujita Health University School of Medicine, Japan*)

Koichiro WATANABE (*Department of Neuropsychiatry, Kyorin University School of Medicine, Japan*)

SS-2-1 Schizophrenia pharmacotherapy with a focus on life prognosis

Fuminari MISAWA

Yamanashi Prefectural KITA Hospital, Japan

SS-2-2 Treatment of schizophrenia focusing on cognitive impairment

Naoki HASHIMOTO

Department of Psychiatry, Hokkaido University Graduate School of Medicine, Japan

SS-2-3 Longitudinal neuroimaging findings of structural brain abnormalities in schizophrenia

Hidehiko TAKAHASHI

Tokyo Medical and Dental University, Japan

Sponsored Symposium 3

October 11 (Fri), 16:30 - 18:10 / Room 5 (Fukuoka International Congress Center, 4F, 410)

Sponsors: Medical Affairs Department, SHIONOGI & CO., LTD. / Japan Medical Office, Takeda Pharmaceutical Company Limited

*Japanese Session

*Simultaneous interpretation available

Diagnosis of Adult AD/HD -Overdiagnosis and Underdiagnosis-

Chair: Takuya SAITO (*Department of child and adolescent psychiatry, Graduate School of Medicine, Hokkaido University, Japan*)

SS-3-1 Diagnosis of adult ADHD - overdiagnosis and underdiagnosis

Kazuya ONO

Department of Neuropsychiatry St.Marianna University School of Medicine, Japan

SS-3-2 Diagnostic tool of Adult ADHD

Takuya SAITO

Hokkaido University Graduate School of Medicine Department of child and adolescent psychiatry, Japan

SS-3-3 Understanding ADHD in adulthood: focus on diagnosis

Josep Antoni RAMOS-QUIROGA^{1,2}

¹Vall d'Hebron University Hospital, Spain, ²Universitat Autònoma de Barcelona, Spain

Sponsored Symposium 4

October 11 (Fri), 16:30 - 18:10 / Room 11 (Fukuoka International Congress Center, 5F, 502)

Sponsor: Otsuka Pharmaceutical Co., Ltd.

New treatment, including harm reduction program, for the patients with alcohol dependence

Chair: Toshikazu SAITO (*Miki Mental Clinic, Japan / Department of Neuropsychiatry, Sapporo Medical University, Japan*)

The "Basic Act on Measures against Alcohol-Related Health Harm" was enacted in December 2013. It called out to enhance the training for medical staffs and the early diagnosis and treatment for patients with alcohol related problems to resolve the big treatment gap. In these situation, The Japanese Society of Alcohol-Related Problems and The Japanese Medical Society of Alcohol and Addicition Studies published New Diagnosis and Treatment Guidelines for Alcohol and Drug Use Disorders. This guidelined including the harm reduction concept as a treatment goal for alcohol dependence as well substance use disorder. Big alteration has been seen in outpatientns treatment by accepting the drinking reduction goal in Japan. Additionally, new pahrmacotherapy for alcohol dependece aiming to reduce in alcohol consmption was lanchd in Japan. These changes would be expected to play supportive role for continuing treatment for patients with alcohol dependence both with an/or without of medication.

SS-4-1 The new legislation on alcohol-related health harm and the new clinical guidelines for substance use disorders in Japan

Susumu HIGUCHI

National Hospital Organization Kurihama Medical and Addiction Center, Japan

SS-4-2 Alteration in Diagnosis, Treatment and Treatment Goal for Alcohol Dependence and Alcohol Use Disorders

Toshikazu SAITO

Miki Mental Clinic, Japan / Department of Neuropsychiatry, Sapporo Medical University, Japan

SS-4-3 The update of the pharmacological effects of nalmefene and the psychosocial support program: based on the outcomes of clinical trial of nalmefene in Japan (phase III trial)

Hisatsugu MIYATA

Department of Psychiatry, Jikei University School of Medicine, Japan

Sponsored Symposium 5

October 12 (Sat), 8:40 - 10:20 / Room 13 (Fukuoka International Congress Center, 5F, 501)

Sponsors: Philip Morris Japan Ltd. / Japan Tobacco Inc. / British American Tobacco Japan Ltd.

Motivation, Tobacco, Nicotine

Chairs: Edward F. DOMINO (*Department of Pharmacology, University of Michigan, USA*)

Hisatsugu MIYATA (*Department of Psychiatry, Jikei University School of Medicine, Japan*)

New types of tobacco products, which are said to be potentially less harmful than conventional cigarettes, e.g. heat-not-burn tobacco products and e-cigarettes, are getting popular. Toxicological evaluation of the use of these products are being vigorously examined, but research on “addictive” aspects of these products are less. This symposium would provide a good opportunity to examine various aspects of the new products, including their subjective effects.

SS-5-1 Motivation Measures of Tobacco Smoking vs E-Cigarettes (Nicotine Vaping)

Edward F. DOMINO

Department of Pharmacology, University of Michigan, USA

SS-5-2 HEAT-NOT-BURN PRODUCTS : WHAT DO WE KNOW TODAY? A RISK/BENEFIT ANALYSIS

Manuel PEITSCH

PMI R&D, Philip Morris Products S.A., Switzerland

SS-5-3 Measuring the potential reduced risk character of tobacco heating and vaping products

Sarah COONEY, Christopher PROCTOR, George HARDIE, Marianna GACA, Krishna PRASAD, Allen GRIFFITHS

Scientific R&D, British American Tobacco (Investments) Ltd, Southampton, UK

SS-5-4 Vapor-infused tobacco, a low-temperature intermediate between directly-heated tobacco and e-electronic cigarettes?

Ian W. JONES

JT International SA, Switzerland

■ Discussant: Kengo YOKOMITSU (*College of Comprehensive Psychology, Ritsumeikan University, Japan*)

Sponsored Symposium 6

October 12 (Sat), 10:30 - 12:10 / Room 6 (Fukuoka International Congress Center, 4F, 401+402)

Sponsor: Otsuka Pharmaceutical Co., Ltd.

*Japanese Session

The New Development in The Treatment for Patients with Alcohol Dependence -Clinical Practices of The Alcohol Reduction Therapy-

Chair: Hisatsugu MIYATA (*Department of Psychiatry, Jikei University School of Medicine, Japan*)

SS-6-1 Clinical practices of drinking-reduction approach (DRA) for patients with alcohol dependence at the psychiatric clinic in the metropolitan area

Jo KURAMOCHI

Akihabara Sakura Tree Clinic, Japan

SS-6-2 Individual Psychology based Pharmacotherapy for Patients with Alcohol Dependence in the General Psychiatric Clinic

Tadashi TANAKA

Tadashi Mental Clinic, Japan

SS-6-3 The Harm reduction program for patients with alcohol dependence at specialized hospital, Tohokukai Mental Hospital

Fukiko OKUDAIRA, Toshihiro SUZUKI, Kensuke SAITO, Toru ISHIKAWA

Tohokukai Mental Hospital, Japan

Sponsored Symposium 7

October 12 (Sat), 10:30 - 12:10 / Room 11 (Fukuoka International Congress Center, 5F, 502)

Sponsor: Chugai Pharmaceutical Co., Ltd.

Biological Aspect in Autism Spectrum Disorder

Chair: Takuya SAITO (*Department of Child and Adolescent Psychiatry, Graduate School of Medicine, Hokkaido University, Japan*)

SS-7-1 Serum fatty acid-binding protein 4 as an early diagnostic biomarker for autism spectrum disorder

Motoko MAEKAWA

RIKEN Center for Brain Science, Japan

SS-7-2 Genetic determinants of epigenetic modifications contributing to the ASD pathogenesis

Shabeesh BALAN

RIKEN Center for Brain Science, Japan

SS-7-3 Perspective treatment targets in Autism Spectrum Disorder

Kevin SANDERS

F.Hoffmann-La Roche Ltd, Switzerland

Sponsored Symposium 8

October 12 (Sat), 10:30 - 12:10 / Room 13 (Fukuoka International Congress Center, 5F, 501)

Sponsor: Medical Affairs, Sumitomo Dainippon Pharma Co., Ltd.

*Simultaneous interpretation available for Japanese only

New Developments in the Treatment of Psychotic Spectrum Disorders

Chair: Nakao IWATA (*Department of Psychiatry, Fujita Health University School of Medicine, Japan*)

SS-8-1 Beyond dopamine (DA) D₂ antagonism: Targeting other neurotransmitter receptors and neurotrophins to treat the *triad* of pathology of the schizophrenia phenotype

Herbert Y. MELTZER

Department of Psychiatry, Northwestern University Feinberg School of Medicine, USA

SS-8-2 The Role of Emerging Technology in Mental Health Care

John M. KANE

The Zucker Hillside Hospital, New York, USA

Sponsored Symposium 9

October 13 (Sun), 8:40 - 10:20 / Room 13 (Fukuoka International Congress Center, 5F, 501)

Sponsor: Japan Tobacco Inc.

*Japanese Session

Frontier of Nicotine Research: In search of novel psychopharmacological effects

Organizer / Chair: Naoyuki HIRONAKA (*Department of Pharmacology, LSI Medience, Corp., Tokyo, Japan*)

Chair: Hisatsugu MIYATA (*Department of Psychiatry, Jikei University School of Medicine, Japan*)

SS-9-1 Psychophysiological effects of cigarettes and heated tobacco products

Midori MOTOI, Shigeki WATANUKI

Department of Human Science, Faculty of Design, Kyushu University, Fukuoka, Japan

SS-9-2 Research on cognitive and motor function of nicotine using a driving simulator

Noriko NISHIKAWA

Department of Neurology, National Center of Neurology and Psychiatry, Tokyo, Japan

SS-9-3 Improvement of nicotinic acetylcholine receptor stimulation in refractory depressive-like model mice

Shigeki MORIGUCHI, Kohji FUKUNAGA

Dept. of Pharmacol., Grad. Sch. of Pharmaceut. Sci., Tohoku Univ., Sendai, Japan

SS-9-4 Association of intestinal microbiota with the reduced prevalence of Parkinson's disease in smokers

Kinji OHNO

Neurogenetics, Nagoya University, Graduate School of Medicine, Nagoya, Japan

Sponsored Symposium 10

October 13 (Sun), 10:30 - 12:10 / Room 2 (Fukuoka International Congress Center, 4F, 411+412)

Sponsor: Janssen Pharmaceutical K.K.

*Japanese Session

Proper diagnosis of ADHD

Chairs: Takuya SAITO (*Department of Child and Adolescent Psychiatry, Graduate School of Medicine, Hokkaido University, Japan*)

Tsuyoshi KONDO (*Department of Neuropsychiatry, Graduate School of Medicine, University of the Ryukyus, Japan*)

SS-10-1 Proper Diagnosis of Childhood ADHD

Kazuya ONO

St.Marianna University School of Medicine, Japan

SS-10-2 Consider the possibility of “distractibility or impulsivity due to general medical condition: when you diagnose patients as ADHD

Norio OZAKI

Department of Psychiatry and Department of Child and Adolescent Psychiatry Nagoya University School of Medicine, Japan

SS-10-3 The continuity of ADHD from childhood to adulthood

Hiroataka KOSAKA

Department of Neuropsychiatry, University of Fukui, Japan

Sponsored Symposium 11

October 13 (Sun), 10:30 - 12:10 / Room 13 (Fukuoka International Congress Center, 5F, 501)

Sponsor: Japan Tobacco Inc.

*Japanese Session

The present and the future of Shikohin (pleasure products) science: Clinical contribution of harm reduction

Organizer: Hisatsugu MIYATA (*Department of Psychiatry, Jikei University School of Medicine, Tokyo, Japan*)

Chairs: Naoyuki HIRONAKA (*Department of Pharmacology, LSI Medience, Corp., Tokyo, Japan / Department of Psychology, Teikyo University, Tokyo, Japan*)

Kohji TAKADA (*Department of Psychology, Teikyo University, Tokyo, Japan*)

SS-11-1 Tobacco harm reduction

Naoyuki HIRONAKA^{1,2}

¹Department of Pharmacology, LSI Medience, Corp., Tokyo, Japan, ²Department of Psychology, Teikyo University, Tokyo, Japan

SS-11-2 Mental benefits of the aroma of liquor

Hirofumi KODA

Suntory Global Innovation Center Ltd, Kyoto, Japan

SS-11-3 Could the low-funing pachinko reduce gambling-related harm ?

Kengo YOKOMITSU

College of Comprehensive Psychology, Ritsumeikan University, Osaka, Japan

SS-11-4 Harm reduction related to tempting sugary-foods consumption: Are artificial sweeteners a beneficial substitute for sugar?

Kenjiro AOYAMA

Department of Psychology, Doshisha University, Kyoto, Japan

Award Lecture

Lundbeck Science Award Lecture

October 13 (Sun) 8:40 - 9:40 / Room 11 (Fukuoka International Congress Center, 5F, 502)

Chairs: Shih-Ku LIN (*Taipei City Hospital and Psychiatric Center, Taiwan*)

Kiyofumi YAMADA (*Nagoya University Graduate School of Medicine, Japan*)

LSAL-1 From Omics Data to an Understandable Biology of Psychiatric Disorders: The Importance of *In Silico* Databases

Brian DEAN^{1, 2, 3}

¹*Molecular Psychiatry Laboratory, Florey Institute for Neuroscience and Mental Health, Parkville, Victoria, Australia,*

²*CRC for Mental Health, Carlton, Victoria, Australia,*

³*Centre for Mental Health, Swinburne University, Hawthorne, Victoria, Australia*

LSAL-2 Road to living EBM

Toshi A. FURUKAWA

Department of Health Promotion and Human Behavior, Kyoto University Graduate School of Medicine / School of Public Health, Japan

Award Lecture 1

October 13 (Sun), 8:40 - 10:20 / Room 17 (Fukuoka Sunpalace Hotel & Hall, 2F, Suehiro)

Chairs: Suresh SUNDRAM (*Monash University and Monash Health, Australia*)

Lih-Chu CHIOU (*National Taiwan University, Taiwan*)

AL1-1 Roles of orexin neurons in motivated behaviors in rats

Hiroyuki MIZOGUCHI¹, Ayumu INUTSUKA², Kentaro KATAHIRA³, Kiyofumi YAMADA⁴, Akihiro YAMANAKA⁵

¹Res. Ctr. Next-Generation Drug Dev., Res. Inst. Environmental Med., Nagoya Univ., Nagoya, Japan,

²Dept. Physiol., Jichi Med. Univ., Shimotsuke, Japan, ³Dept Psychol, Grad Sch Inform, Nagoya Univ., Nagoya, Japan,

⁴Dep. Neuropsychopharmacol. Hosp. Pharm., Nagoya Univ. Grad. Sch. Med., Nagoya, Japan,

⁵Dept. Neuroscience II, Res. Inst. Environmental Med., Nagoya Univ., Nagoya, Japan

AL1-2 Behavioral sensitization and relapse in mu-, delta- and kappa-opioid receptor knockout mice

Yuki MORIYA¹, Scott F. HALL², Yoshiyuki KASAHARA³, Yoko HAGINO¹, Brigitte L. KIEFFER⁴, George R. UHL⁵,
Ichiro SORA⁶, Kazutaka IKEDA¹

¹Addictive Substance Project, Tokyo Metropolitan Institute of Medical Science, Tokyo, Japan,

²Department of Pharmacology and Experimental Therapeutics, University of Toledo, USA,

³Advanced Interdisciplinary Biomedical Engineering, Tohoku University School of Medicine, Sendai, Miyagi, Japan,

⁴Department of Psychiatry, Douglas Mental Health Research Institute, McGill University, Montreal, Canada,

⁵Research Service, New Mexico VA Healthcare System, Albuquerque, NM, USA,

⁶Department of Psychiatry, Kobe University, Graduate School of Medicine, Kobe, Japan

AL1-3 Porphyromonas gingivalis infected Leptomeningeal Cells Reduce Synapses Proteins in Primary Cultured Neurons

Wanyi HUANG¹, Junjun NI¹, Fan ZENG¹, Muzhou JIANG¹, Yebo GU³, Zhou WU^{1,2}

¹Department of Aging Science and Pharmacology, Faculty of Dental Sciences, Kyushu University, Fukuoka, Japan,

²OBT Research Center, Faculty of Dental Science, Kyushu University,

³Section of Orthodontics and Dentofacial Orthopedics, Division of Oral Health, Growth and Development, Faculty of Dental Science, Kyushu University, Fukuoka, Japan

AL1-4 Porphyromonas gingivalis LPS induces Microglia-dependent Tau Hyperphosphorylation in Cultured Neurons

Zhou Mu JIANG¹, Jun Jun NI¹, Bo Ye GU³, Yi Wan HUANG¹, Zhou WU^{1,2}

¹Department of Aging Science and Pharmacology, Faculty of Dental Science, Kyushu University, Fukuoka, Japan,

²OBT Research Center, Faculty of Dental Science, Kyushu University, Fukuoka, Japan,

³Section of Orthodontics and Dentofacial Orthopedics, Division of Oral Health, Growth and Development, Faculty of Dental Science, Kyushu University, Fukuoka, Japan

AL1-5 Melatonin receptor agonist Ramelteon attenuates ischemic brain injury

Xiaoli WU, Xiangnan ZHANG, Zhong CHEN

College of Pharmaceutical Sciences, Zhejiang University

AL1-6 The involvement of OPRM1 A118G polymorphism in fentanyl-induced symptoms and postoperative nausea and vomiting in Japanese patients underwent laparoscopic colon resection

Midori SODA¹, Yoko SUGIYAMA², Saeri GOTO¹, Yuki IMAMURA¹, Hajime KOSEMOTO¹, Hiroki IIDA², Kiyoyuki KITAICHI¹

¹Lab. of Pharmaceutics, Department of Biomedical Pharmaceutics, Gifu Pharmaceutical University,

²Department of Anesthesiology and Pain Medicine, Gifu University Graduate School of Medicine

AL1-7 Association between the rs11726196 Single-Nucleotide Polymorphism within the Transient Receptor Subfamily C Member 3 (TRPC3) Gene and Chronic Pain

Yoshinori AOKI^{1,2}, Daisuke NISHIZAWA¹, Kaori YOSHIDA^{1,2}, Hideko ARITA³, Kazuo HANAOKA³, Choku YAJIMA³,
Masako ISEKI⁴, Jitsu KATO⁵, Setsuro OGAWA⁶, Ayako HIRANUMA^{1,7}, Junko HASEGAWA¹, Shinya KASAI¹, Kaori TAKAHASHI^{1,2},
Yoshihiko KOUKITA², Tatsuya ICHINOHE², Masakazu HAYASHIDA^{1,4,8}, Ken-ichi FUKUDA⁹, Kazutaka IKEDA¹

¹Addictive Substance Project, Tokyo Metropolitan Institute of Medical Science, Tokyo, Japan,

²Department of Dental Anesthesiology, Tokyo Dental College, Tokyo, Japan,

³Department of Anesthesiology and Pain Relief Center, JR Tokyo General Hospital, Tokyo, Japan,

⁴Department of Anesthesiology & Pain Medicine, Juntendo University School of Medicine, Tokyo, Japan,

⁵Department of Anesthesiology, Nihon University School of Medicine, Tokyo, Japan, ⁶Nihon University University Research Center, Tokyo, Japan,

⁷Department of Surgery, Toho University Sakura Medical Center, Chiba, Japan,

⁸Department of Anesthesiology, Saitama Medical University International Medical Center, Saitama, Japan,

⁹Department of Oral Health and clinical Science, Tokyo Dental College, Tokyo, Japan

AL1-8 Genome-wide Association Studies on Chronic Pain and Effects of Drugs for the Treatment of Pain

Daisuke NISHIZAWA¹, Hideko ARITA², Kazuo HANAOKA², Choku YAJIMA², Masako ISEKI³, Jitsu KATO⁴, Setsuro OGAWA⁵,
Ayako HIRANUMA^{1,6}, Shinya KASAI¹, Junko HASEGAWA¹, Yuko EBATA¹, Kyoko NAKAYAMA¹, Masakazu HAYASHIDA^{1,3,7},
Kazutaka IKEDA¹

¹Tokyo Metropolitan Institute of Medical Science, ²JR Tokyo General Hospital, ³Juntendo University School of Medicine,

⁴Nihon University School of Medicine, ⁵Nihon University University Research Center, ⁶Toho University Sakura Medical Center,

⁷Saitama Medical University International Medical Center

Award Lecture 2

October 13 (Sun), 10:30 - 12:10 / Room 10 (Fukuoka International Congress Center, 4F, 406)

Chairs: Naren RAO (*National Institute of Mental Health and Neurosciences, India*)
Masabumi MINAMI (*Department of Pharmacology, Hokkaido University, Japan*)

AL2-1 Similar but different resting state functional connectivities in individuals with attenuated psychosis syndrome compared to patients with first-episode schizophrenia spectrum disorders

Woo-Sung KIM¹, Guang Fan SHEN², Cong Cong LIU¹, Young-Chul CHUNG^{2,3}

¹Department of Medical Science, Chonbuk National University, Jeonju, Korea,

²Department of Psychiatry, Chonbuk National University Hospital, Jeonju, Korea,

³Research Institute of Clinical Medicine of Chonbuk National University-Biomedical Research Institute of Chonbuk National University Hospital, Jeonju, Korea

AL2-2 Resting-state functional connectivity of the striatum predicts improvement in negative symptoms and general functioning in patients with first-episode psychosis: A 1-year naturalistic follow-up study

Sanghoon OH^{1,2}, Minah KIM^{1,2}, Taekwan KIM³, Tae Young LEE², Jun Soo KWON^{1,2,3,4}

¹Department of Psychiatry, Seoul National University College of Medicine, Seoul, Republic of Korea,

²Department of Neuropsychiatry, Seoul National University Hospital, Seoul, Republic of Korea,

³Department of Brain and Cognitive Sciences, Seoul National University College of Natural Sciences, Seoul, Republic of Korea,

⁴Institute of Human Behavioral Medicine, SNU-MRC, Seoul, Republic of Korea

AL2-3 Neonatal Tbx1 in stem cells is a determinant of the development of social behavior in mice

Noboru HIROI^{1,2,3,4}, Takeshi HIRAMOTO¹, Shuken BOKU⁵, Gina KANG¹, Seiji ABE⁶, Masako NAGASHIMA⁷, Hiroko NOMARU^{7,8}

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⁴Department of Psychiatry, University of Texas Health Science Center at San Antonio, Texas, USA,

⁵Department of Psychiatry, Kobe University School of Medicine, Kobe, Japan,

⁶Department of Hospital Pharmaceutics, School of Pharmacy, Showa University, Tokyo, Japan,

⁷Department of Psychiatry and Behavioral Sciences, ⁸Department of Genetics, Albert Einstein College of Medicine, Bronx, NY, USA

AL2-4 Cognitive function of patients with treatment-resistant depression after a single low dose of ketamine infusion

MuHong CHEN^{1,2}, Hui-Ju WU¹, Tung-Ping SU^{1,2}, Cheng-Ta LI^{1,2}, Ya-Mei BAI^{1,2}, Wei-Chen LIN^{1,2}, Chih-Ming CHENG^{1,2}

¹Department of Psychiatry, Taipei Veterans General Hospital,

²Division of Psychiatry, School of Medicine, National Yang-Ming University, Taipei, Taiwan

AL2-5 Manic Episode-Related Methylome and Their Regulatory Function in Bipolar Disorder Patients

Ya-Chin LEE¹, Pao-Yang CHEN², Ming-Hsien HSIEH³, Hsi-Chung CHEN³, Mong-Liang LU^{4,5}, Chun-Hsin CHEN^{4,5}, Wen-Yin CHEN⁶, Tzu-Pin LU¹, Ming-Chyi HUANG^{5,6}, Po-Hsiu KUO^{1,7}

¹Institute of Epidemiology and Preventive Medicine, National Taiwan University, Taiwan,

²Institute of Plant and Microbial Biology, Academia Sinica, Taipei, Taiwan, ³Department of Psychiatry, National Taiwan University Hospital, Taiwan,

⁴Wan Fang Hospital, Taipei Medical University, Taiwan, ⁵School of Medicine, Taipei Medical University, Taiwan,

⁶Department of Psychiatry, Taipei City Psychiatric Center, Taipei City Hospital, Taipei, Taiwan,

⁷Research Center for Genes, Environment and Human Health, National Taiwan University, Taipei, Taiwan

AL2-6 Comparison of the effects of vortioxetine and fluoxetine on the Brain-Derived Neurotrophic Factors levels in the hippocampus of chronic unpredictable mild stress-induced depressive rats

Roger C. HO^{1,2}, Cyrus S. HO¹, Wei WANG³, Yanxia LU⁴

¹Department of Psychological Medicine, National University of Singapore,

²Biomedical Institute for Global Health Research and Technology, National University of Singapore,

³Department of Clinical Psychology and Psychiatry, School of Public Health, Zhejiang University College of Medicine, Hangzhou, China.,

⁴Biology of Aging Laboratory, Singapore Immunology Network (SIgN), Agency for Science Technology and Research (A*STAR), Immunos Building, Biopolis, Singapore

AL2-7 The nucleus accumbens dopaminergic systems involve in anti-depressant-like actions of a diet rich in ω -3 polyunsaturated fatty acid in mice

Eri TAKEUCHI¹, Daisuke YAMADA¹, Satoshi SUZUKI², Akiyoshi SAITOH², Masayuki ITOH³, Takashi HAYASHI³, Mitsuhiro YAMADA², Keiji WADA¹, Masayuki SEKIGUCHI¹

¹Department of Degenerative Neurological Diseases, National Institute of Neuroscience, National Center of Neurology and Psychiatry, Tokyo, Japan,

²Department of Neuropsychopharmacology, National Institute of Mental Health, National Center of Neurology and Psychiatry,

³Department of Biochemistry and Cellular Biology, National Institute of Neuroscience, National Center of Neurology and Psychiatry

AL2-8 Behavioural characterisation of the GluN2DR knock-out mouse model in response to S-ketamine and R-ketamine

Xin DU¹, Kazutaka IKEDA², Suresh SUNDRAM¹, Rachel Anne HILL¹

¹Department of Psychiatry, Monash University, Melbourne, Australia,

²Department of Drug Dependence Research, National Institute of Mental Health, National Center of Neurology and Psychiatry, Tokyo, Japan

Oral Session

Dementia & Neurological Disorders

Chairs: Kyung-Joon MIN (*Chung-Ang University Hospital, Korea*)
Kiyoyuki KITAICHI (*Gifu Pharmaceutical University, Japan*)

- O1-1 Tau accumulation and metabotropic glutamate receptor subtype 5 binding in patients with frontotemporal lobar degeneration: A PET study**
Manabu KUBOTA¹, Hitoshi SHIMADA¹, Keisuke TAKAHATA¹, Kenji TAGAI¹, Chie SEKI¹, Yasunori SANO¹, Yasuharu YAMAMOTO¹, Yuhei TAKADO¹, Hitoshi SHINOTOH¹, Hisaomi SUZUKI², Mitsumoto ONAYA², Kazunori KAWAMURA³, Ming-Rong ZHANG³, Makoto HIGUCHI¹
¹Department of Functional Brain Imaging, National Institute of Radiological Sciences, National Institutes for Quantum and Radiological Science and Technology, Chiba, Japan, ²Shimofusa Psychiatric Center, Chiba, Japan, ³Department of Radiopharmaceuticals Development, National Institute of Radiological Sciences, National Institutes for Quantum and Radiological Science and Technology, Chiba, Japan
- O1-2 Brain histamine re-establishes access to forgotten memories after passage of long time and neuronal degeneration**
Hiroshi NOMURA, Ayame KUBO, Kyoka NISHIMURA, Masabumi MINAMI
Department of Pharmacology, Graduate School of Pharmaceutical Sciences, Hokkaido University
- O1-3 Action of dual orexin receptor antagonist on amyloid β protein**
Shin HASEGAWA¹, Leo GOTO^{1,2}, Koji OGOMORI¹, Hiroaki KAWASAKI¹
¹Department of Psychiatry, Faculty of Medicine, Fukuoka University, Japan, ²Laboratory of Neuroscience, Department of Psychiatry, Faculty of Medicine, Fukuoka University, Japan
- O1-4 Porphyromonas gingivalis Infection increases RAGE Production in hCMEC/D3 Cell Line**
Fan ZENG¹, Junjun NI¹, Wanyi HUANG¹, Muzhou JIANG¹, Zhou WU^{1,2}
¹Department of Aging Science and Pharmacology, Faculty of Dental Sciences, Kyushu University, ²OBT Research Center, Faculty of Dental Sciences, Kyushu University
- O1-5 Development of novel strategies for genetic analysis and drug discovery for the familial and sporadic dopamine-related disorders**
Ichiro KAWAHATA¹, Kyoko HOSHINO², Kazuko HASEGAWA³, Hiroshi ICHINOSE⁴, Kazuto KOBAYASHI⁵, Kohji FUKUNAGA¹
¹Lab of Pharmacology, Grad Sch of Pharm Sci, Tohoku University, Sendai, Japan, ²Segawa Memorial Neurological Clinic for Children, Tokyo, Japan, ³Neurology, Sagami National Hospital, Kanagawa, Japan, ⁴Grad Sch of Biosci, Tokyo Institute of Technology, Kanagawa, Japan, ⁵Dept Mol Gen, Fukushima Medical University, Fukushima, Japan
- O1-6 Chronic systemic exposure of Lipopolysaccharide from Porphyromonas gingivalis induces memory decline and bone loss in middle-aged mice**
Yebo GU¹, Junjun NI², Muzhou JIANG², Wanyi HUANG², Zhou WU^{2,3}, Ichiro TAKAHASHI¹
¹Section of Orthodontics and Dentofacial Orthopedics, Division of Oral Health, Growth and Development, Faculty of Dental Science, Kyushu University, Fukuoka, Japan, ²Department of Aging Science and Pharmacology, Faculty of Dental Sciences, Kyushu University, Fukuoka, Japan, ³OBT Research Center, Faculty of Dental Sciences, Kyushu University, Fukuoka, Japan
- O1-7 Lipopolysaccharide injection triggers indoleamine-2,3-dioxygenase 1 and miR-874-3p interaction which leads to depression-like behavior in mice**
Willy Jaya SUENTO^{1,4}, Kazuo KUNISAWA², Bolati WULAER^{1,3}, Tsubasa IIDA², Aika KOSUGE², Akihiro MOURI², Kuniaki SAITO^{1,3}, Toshitaka NABESHIMA³
¹Department of Disease Control and Prevention, Fujita Health University Graduate School of Health Science, Aichi, Japan, ²Department of Regulatory Science for Evaluation & Development of Pharmaceuticals & Devices, Fujita Health University Graduate School of Health Science, Aichi, Japan, ³Advanced Diagnostic System Research Laboratory, Fujita Health University Graduate School of Health Science, Aichi, Japan, ⁴Department of Psychiatry, Hasanuddin University Faculty of Medicine, South Sulawesi, Indonesia
- O1-8 Restorative properties of the second-generation antipsychotic drug blonanserin on stress-induced oxidative derangements in the rat prefrontal cortex**
Marco Andrea RIVA¹, Maria Serena PALADINI², Vittoria SPERO², Veronica BEGNI¹, Alice GUIDI², Mariusz PAPP³, Raffaella MOLTENI²
¹Department of pharmacological and biomolecular sciences, University of Milan, ²Department of Medical Biotechnologies and Translational Medicine, University of Milan, ³Institute of Pharmacology, Polish Academy of Sciences, Krakow

O1-9 T-type calcium channels are critical for adult mouse hippocampal neurogenesis

Yasushi YABUKI, Kohji FUKUNAGA

*Department of Pharmacology, Graduate School of Pharmaceutical Sciences, Tohoku University***O1-10 Kynurenine 3-monooxygenase regulates expression of depression-like behavior via enhanced antagonism of $\alpha 7$ nicotinic acetylcholine receptor by kynurenic acid**Akihiro MOURI¹, Yuko MORI², Kazuo KUNISAWA^{1,3}, Mami HIRAKAWA¹, Tomoaki TESHIGAWARA², Hisayoshi KUBOTA¹, Moe NIJIMA¹, Hidetsugu FUJIGAKI², Yasuko YAMAMOTO², Toshitaka NABESHIMA³, Kuniaki SAITO²¹*Department of Regulatory Science for Evaluation & Development of Pharmaceuticals & Devices, Fujita Health University Graduate School of Health Science, Aichi, Japan,*²*Department of Disease Control and Prevention, Fujita Health University Graduate School of Health Science, Aichi, Japan,*³*Advanced Diagnostic System Research Laboratory, Fujita Health University Graduate School of Health Science, Aichi, Japan***Oral Session 2****October 11 (Fri), 10:30 - 12:10 / Room 17 (Fukuoka Sunpalace Hotel & Hall, 2F, Suehiro)****Childhood & Adolescent Disorders**Chairs: Susan Shur-Fen GAU (*National Taiwan University Hospital, Taiwan*)Zhong CHEN (*Zhejiang University, China*)**O2-1 Cortical Surface Architecture Endophenotype and Correlates of Clinical Diagnosis of Autism Spectrum Disorder**Yuta Y. AOKI¹, Bun YAMAGATA², Takashi ITAHASHI¹, Junya FUJINO¹, Haruhisa OHTA¹, Osamu TAKASHI¹, Motoaki NAKAMURA¹, Nobumasa KATO¹, Masaru MIMURA², Ryu-ichiro HASHIMOTO¹¹*Institute of Developmental Disabilities Research, Showa University, Tokyo, Japan,*²*Department of Neuropsychiatry, Keio University School of Medicine, Tokyo, Japan***O2-2 Proteomic approach reveals molecular basis underlying the comorbidity between autism spectrum disorder and epilepsy**Daisuke TSUBOI¹, Imrul Hassan MD CHOWDHURY¹, Rei YAMADA², Toshihisa OHTSUKA³, Kozo KAIBUCHI¹¹*Department of Cell Pharmacology, Nagoya University,* ²*Department of Cell Physiology, Nagoya University,*³*Department of Biochemistry, Yamanashi University***O2-3 Evidence of Brain Damage in Chronic Ketamine Users – a Brain Imaging Study**Wai Kwong TANG^{1,2}¹*Department of Psychiatry, the Chinese University of Hong Kong,* ²*Shenzhen Research Institute, the Chinese University of Hong Kong***O2-4 Role of cerebrospinal fluid ethanolamine in psychiatric disorders**Shintaro OGAWA¹, Kotaro HATTORI^{1,2}, Daimei SASAYAMA³, Tomoko MIYAKAWA², Megumi TATSUMI^{1,2}, Sumiko YOSHIDA⁴, Hiroshi KUNUGI¹¹*Department of Mental Disorder Research, National Institute of Neuroscience, National Center of Neurology and Psychiatry, Tokyo, Japan,*²*Medical Genome Center, National Center of Neurology and Psychiatry, Tokyo, Japan,*³*Department of Psychiatry, Shinshu University School of Medicine, Nagano, Japan,*⁴*Department of Psychiatry, National Center Hospital, National Center of Neurology and Psychiatry, Tokyo, Japan***O2-5 Subicular pyramidal neurons gate the drug resistance in temporal lobe epilepsy**

Cenglin XU, Yi WANG, Zhong CHEN

*Department of Pharmacology, College of Pharmaceutical Sciences, Zhejiang University***O2-6 The role of the cerebellum in fear-conditioned bradycardia**Hiroko KOTAJIMA¹, Sakae NARUMI², Kazuhisa SAKAI³, Tsutomu HASHIKAWA⁴, Michisuke YUZAKI⁵, Dai YANAGIHARA⁶¹*Addictive Substance Project, Department of Psychiatry and Behavioral Sciences, Tokyo Metropolitan Institute of Medical Science,*²*Department of Physiology, St. Marianna University School of Medicine,*³*Department of Ultrastructural Research, National Institute of Neuroscience, National Center of Neurology and Psychiatry,*⁴*Laboratory for Molecular Mechanisms of Thalamus Development, RIKEN Brain Science Institute,*⁵*Department of Neurophysiology, Keio University school of medicine,*⁶*Department of Life Sciences, Graduate School of Arts and Sciences, The University of Tokyo***O2-7 Personality features associated with side effects of combination pharmacotherapy of zolpidem and other sleeping pills**

Kyung Joon MIN, Hyunchan HWANG, Han Il RYOO, Sol I KIM, Doug Hyun HAN, Sun Mi KIM

Department of Psychiatry, Chung-Ang University Hospital, Seoul, Korea

- 02-8 The use of benzodiazepine receptor agonists and the risk of venous thromboembolism**
 Tien-Yu CHEN^{1,4}, Wei-Chung MAO², Nian-Sheng TZENG¹, John WINKELMAN³, Cheryl Ch YANG⁴, Terry Bj KUO⁴, Chi-Shin WU⁵
¹Department of Psychiatry, Tri-Service General Hospital; School of Medicine, National Defense Medical Center, Taipei, Taiwan,
²Department of Psychiatry, Cheng Hsin General Hospital, Taipei, Taiwan,
³Department of Psychiatry and Neurology, Massachusetts General Hospital, Harvard Medical School, Boston, USA,
⁴Institute of brain science, National Yang-Ming University, Taipei, Taiwan,
⁵Department of Psychiatry, National Taiwan University Hospital, Taipei, Taiwan

- 02-9 Real-world effectiveness of ramelteon and suvorexant on delirium prevention in 967 patients with delirium risk factors**
 Kotaro HATTA¹, Yasuhiro KISHI², Ken WADA³, Takashi TAKEUCHI⁴, Naoko HASHIMOTO⁵, Kiyoko SUDA⁶, Toshihiro TAIRA⁷, Kazuo TSUCHIDA⁸, Takashi OHMORI⁵, Nobuya AKIZUKI⁶, Yuko NISHIO⁶, Yukiko NAKANISHI⁶, Chie USUI¹, Akiko KURATA⁹, Naoki HORIKAWA¹⁰, Hiroshi EGUCHI¹⁰, Shigeo ITO², Hitoshi MUTO⁴, Hiroyuki NAKAMURA¹¹, Naohisa UCHIMURA¹⁰
¹Department of Psychiatry, Juntendo University Nerima Hospital, Tokyo, Japan,
²Department of Psychiatry, Nippon Medical School Musashikosugi Hospital, Kawasaki, Japan,
³Department of Psychiatry, Hiroshima City Hospital, Hiroshima, Japan,
⁴Department of Psychiatry, Tokyo Medical and Dental University, Tokyo, Japan,
⁵Department of Psychiatry, Tokushima Prefectural Central Hospital, Tokushima, Japan,
⁶Department of Psychooncology, Tokyo Metropolitan Cancer and Infectious diseases Center Komagome Hospital, Tokyo, Japan,
⁷Department of Psychiatry, Fukuyama City Hospital, Fukuyama, Japan, ⁸Department of Psychiatry, Kurashiki Central Hospital, Kurashiki, Japan,
⁹Department of Psychiatry and Neurosciences, Hiroshima University Hospital, Hiroshima, Japan,
¹⁰Department of Psychiatry, Kurume University School of Medicine, Kurume, Japan,
¹¹Department of Environmental and Preventive Medicine, Kanazawa University Graduate School of Medical Science, Kanazawa, Japan

- 02-10 REM sleep active MCH neurons are involved in forgetting hippocampus-dependent memories**
 Akihiro YAMANAKA^{1,2}
¹Department of Neuroscience II, Research Institute of Environmental Medicine, Nagoya University, ²CREST, JST, Japan

Oral Session 3 **October 12 (Sat), 8:40 - 10:20 / Room 17 (Fukuoka Sunpalace Hotel & Hall, 2F, Suehiro)**

Bipolar Disorders & Depression

Chairs: Ya-Mei BAI (Taipei Veterans General Hospital, Taiwan)
 Ming-Chyi HUANG (Taipei City Hospital, Taiwan)

- 03-1 Immunomodulatory properties between different antidepressants in patients with major depressive disorder**
 Chun-Yen CHEN^{1,2}, Yi-Wei YEH^{1,2}, Shin-Chang KUO^{1,2}, San-Yuan HUANG^{1,2}
¹Department of Psychiatry, Tri-Service General Hospital, Taipei, Taiwan., ²National Defense Medical Center, Taipei, Taiwan
- 03-2 The Efficacy of Vitamin D3 as Adjuvant Therapy in The Improvement of Depressive Symptoms**
 Ekachaeryanti ZAIN, Sonny Teddy LISAL, Saidah SYAMSUDDIN, Andi Jayalangkara TANRA
 Department of Psychiatry, Faculty of Medicine, Universitas Hasanuddin, Makassar, Indonesia
- 03-3 Augmentation with aripiprazole to reduce residual symptoms of depression: A multicenter, 2 months, retrospective, observational study**
 Cheolmin SHIN, Changsu HAN, Seung-Hoon LEE
 Korea University Ansan Hospital
- 03-4 Long-term Outcome in Outpatients with Depression Continuously Treated with Intranasal Ketamine: A Chart Review**
 Hitoshi SAKURAI^{1,2}, David MISCHOULON¹, Maurizio FAVA¹, Cristina CUSIN¹
¹Depression Clinical and Research Program, Department of Psychiatry, Massachusetts General Hospital, Boston, USA,
²Department of Neuropsychiatry, Keio University School of Medicine, Tokyo, Japan
- 03-5 All suicidal ideations are not created equal: two cases of suicide attempts during maintenance ketamine treatment**
 Hitoshi SAKURAI^{1,2}, Cristina CUSIN¹, Kate BENTLEY¹, Paola PEDRELLI¹, Simmie FOSTER¹, Maurizio FAVA¹, David MISCHOULON¹
¹Depression Clinical and Research Program, Department of Psychiatry, Massachusetts General Hospital, Boston, USA,
²Department of Neuropsychiatry, Keio University School of Medicine, Tokyo, Japan
- 03-6 Withdraw**

- O3-7 Brain-Gut-Microbiota axis in Bipolar disorder**
Jeongwan HONG
Iksan Hospital
- O3-8 Brain-Gut-Microbiota axis in Anxiety disorder**
Saeheon JANG
Department of psychiatry, Bongseng Memorial Hospital
- O3-9 Correlation Between Psychosocial Stressors, Inulin and Tryptophan with Cortisol and Serotonin Levels in Patients with Depression (at RSUP Dr. Kariadi, RS Nasional Universitas Diponegoro, RSUD Tugurejo, RSUD Permata Medika Semarang)**
Natalia Dewi WARDANI¹, Alifiati FITRIKASARI¹, Hang Gunawan ASIKIN¹, Tanjung Ayu SUMEKAR¹, Fanti SAKTINI¹, Moh SULCHAN²
¹Psychiatry Departemen, Medical Faculty Diponegoro University Semarang,
²Clinical Nutrition Study Program, Medical Faculty Diponegoro University
- O3-10 The Difference between Interleukin (IL-6) Serum in Depressed Patients Receiving Antidepressant Therapy of Ssri and Non Ssri Group (at RSUP Dr. Kariadi, RS National of Diponegoro University, RSUD Tugurejo, RSUD Permata Medika Semarang)**
Alifiati FITRIKASARI, Natalia Dewi WARDANI, Nurulita TUNJUNG SARI
Psychiatry Departemen Medical Faculty Diponegoro University

Oral Session 4

October 12 (Sat), 14:50 - 16:30 / Room 17 (Fukuoka Sunpalace Hotel & Hall, 2F, Suehiro)

Addiction

Chairs: Kazutaka SHIMODA (*Dokkyo Medical University School of Medicine, Japan*)

Tsuyoshi MIYAKAWA (*Fujita Health University, Japan*)

- O4-1 Omega-3 PUFAs improve social behaviour and cognitive function in children with ADHD and high inflammation**
Jane Pei-Chen CHANG^{1,2,3}, Kuan-Pin SU^{1,2,3}, Valeria MONDELLI¹, Carmine M. PARIANTE¹
¹Department of Psychological Medicine, Institute of Psychiatry, Psychology and Neuroscience, King's College London,
²Department of Psychiatry and Mind-Body Interface (MBI) Lab, China Medical University Hospital, Taichung, Taiwan,
³College of Medicine, China Medical University, Taichung, Taiwan
- O4-2 Chronic methamphetamine use induces more severe psychotic symptoms than chronic ketamine use**
Yanhui LIAO
Mental Health Institute, The Second Xiangya Hospital, Central South University
- O4-3 Lamotrigine therapy in ketamine use disorder**
Chih-Ken CHEN¹, Ming-Chyi HUANG², Yu-Chao HSU³, Shih-Ku LIN²
¹Department of Psychiatry, Chang Gung Memorial Hospital, Keelung, Chang Gung University School of Medicine, Taiwan,
²Taipei City Psychiatric Center, Taipei City Hospital, Taipei, Taiwan, ³Department of Urology, Chang Gung Memorial Hospital, Linko, Taiwan
- O4-4 Nerve growth factor gene polymorphisms and specific personality in patient with heroin use disorder**
San-Yuan HUANG¹, Chang-Chih TSOU², Chih-Yun HUANG³
¹Department of Psychiatry, Tri-Service General Hospital, National Defense Medical Center,
²Doctoral Degree Program in Translational Medicine, National Defense Medical Center and Academia Sinica, Taipei, Taiwan, R.O.C.,
³School of Public Health, National Defense Medical Center, Taipei, Republic of China
- O4-5 NGF polymorphisms may predict the risk of alcohol dependence in Han Chinese female population**
Chun-Long LIN^{1,3}, San-Yuan HUANG^{1,2}
¹Graduate Institute of Medical Sciences, National Defense Medical Center,
²Department of Psychiatry, Tri-Service General Hospital, National Defense Medical Center, Taipei, Taiwan, R.O.C.,
³Department of Psychiatry, Military Taoyuan General Hospital, Taoyuan, Taiwan, R.O.C.
- O4-6 Association VNTR polymorphism dopaminergic system genes with hostility in male population aged 25-64 years: WHO program MONICA-Psychosocial**
Dmitriy PANOV^{1,2}, Valery GAFAROV^{1,2}, Elena GROMOVA^{1,2}, Vladimir MAXIMOV¹, Igor GAGULIN^{1,2}, Almira GAFAROVA^{1,2}
¹Institute of Internal and Preventive Medicine - branch of Institute of Cytology and Genetics SB RAS,
²Collaborative laboratory epidemiology cardiovascular diseases

- O4-7 The distinction of plasma inflammatory markers and impulsivity in amphetamine-dependent women with and without a history of suicide attempt**
 Shin-Chang KUO^{1,2}, Yi-Wei YEH^{1,2}, Chun-Yen CHEN^{1,2}, Chang-Chih HUANG^{1,3}, Chun-Long LIN^{1,4}, San-Yuan HUANG^{1,2}
¹Graduate Institute of Medical Sciences, National Defense Medical Center, Taipei, Taiwan, R.O.C,
²Department of Psychiatry, Tri-Service General Hospital, National Defense Medical Center, Taipei, Taiwan, R.O.C.,
³Department of Psychiatry, Buddhist Tzu Chi General Hospital, Taipei Branch, Taipei, Taiwan, R.O.C,
⁴Department of Psychiatry, Hsinchu Branch, Taoyuan Armed Forces General Hospital, Hsinchu, Taiwan, R.O.C.
- O4-8 Noradrenaline Reuptake Inhibition Increases Control of Impulsive Action by Activating D1-like Receptors in the Infralimbic Cortex**
 Hitomi SASAMORI, Yu OHMURA, Mitsuhiro YOSHIOKA
 Department of Neuropsychology, Hokkaido University Faculty of Medicine and Graduate School of Medicine, Sapporo, Japan
- O4-9 Direct induction of microglia-like cells from human monocytes: A novel cellular tool for translational research of neuropsychiatric disorders**
 Masahiro OHGIDANI, Takahiro A. KATO
 Department of Neuropsychiatry, Kyushu University
- O4-10 Ethanol drinking behavior is regulated by RNA editing in the nucleus accumbens**
 Masaki TANAKA¹, Takahira SHIRAHASE¹, Yoshihisa WATANABE²
¹Department of Anatomy and Neurobiology, ²Basic Geriatrics

Oral Session 5 **October 13 (Sun), 10:30 - 12:10 / Room 9 (Fukuoka International Congress Center, 4F, 405)**

Schizophrenia

Chairs: Tianmei SI (*Peking University Institute of Mental Health, China*)
 Kristian LIAURY (*Hasanuddin University, Indonesia*)

- O5-1 Psychiatrists' perceptions of medication adherence among patients with schizophrenia: An international survey**
 Shunya KUROKAWA¹, Taishiro KISHIMOTO^{1,2}, Kuan-pin SU³, Jane Pei-Chen CHANG³, Hui-Chih CHANG³, Xin YU⁴, Nuno RODRIGUES-SILVA⁵, Jimmi NIELSEN⁶, Anish UNADKAT⁷, David CASTLE⁷, Peter M. HADDAD⁸, Deyvis ROCHA⁹, Ary GADELHA⁹, Styliani KALIORA², Georgios PETERIDES², Ofer AGID¹⁰, Yuki TAZAWA¹, Akihiro TAKAMIYA¹, Toshiro HORIGOME¹, John KANE²
¹Department of Psychiatry, Keio University School of Medicine, Tokyo, Japan, ²Department of Psychiatry, The Zucker Hillside Hospital, New York,
³Department of Psychiatry & Mind-Body Interface Laboratory (MBI-Lab), China Medical University Hospital, Taichung, Taiwan,
⁴Peking University Institute of Mental Health (Sixth Hospital), Beijing,
⁵Department of Psychiatry and Mental Health, Cova da Beira University Healthcare Center, Covilhã, Portugal,
⁶Mental health Centre Glostrup, Copenhagen University Hospital, Copenhagen, Denmark,
⁷The University of Melbourne and St Vincent's Hospital Melbourne, Australia,
⁸Department of Psychiatry, University of Manchester, Manchester, UK,
⁹Departamento de Psiquiatria, Universidade Federal de São Paulo (UNIFESP), São Paulo, Brazil,
¹⁰Schizophrenia Program, Centre for Addiction and Mental Health, Department of Psychiatry, Faculty of Medicine, University of Toronto, Canada
- O5-2 Withdraw**
- O5-3 Treatment effects on neurometabolite levels in schizophrenia: A systematic review and meta-analysis of proton magnetic resonance spectroscopy studies**
 Manabu KUBOTA^{1,2}, Sho MORIGUCHI^{1,3}, Keisuke TAKAHATA^{1,4}, Shinichiro NAKAJIMA^{3,4}, Nobuyuki HORITA⁵
¹Department of Functional Brain Imaging, National Institute of Radiological Sciences, National Institutes for Quantum and Radiological Science and Technology, Chiba, Japan, ²Department of Psychiatry, Kyoto University Graduate School of Medicine, Kyoto, Japan,
³Research Imaging Centre, Centre for Addiction and Mental Health, Toronto, Canada,
⁴Department of Neuropsychiatry, Keio University Graduate School of Medicine, Tokyo, Japan,
⁵Yokohama City University Graduate School of Medicine, Yokohama, Japan
- O5-4 Withdraw**
- O5-5 Clozapine-associated obsessive-compulsive symptoms and their management: a systematic review and analyses of 107 reported cases**
 David D. KIM^{1,2}, Alasdair M. BARR^{1,2}, Cynthia LU², S. Evelyn STEWART^{2,3}, William G. HONER^{2,3}, Ric M. PROCYSHYN^{2,3}
¹Department of Anesthesiology, Pharmacology and Therapeutics, University of British Columbia, Vancouver, Canada,
²British Columbia Mental Health & Substance Use Services, Vancouver, Canada,
³Department of Psychiatry, University of British Columbia, Vancouver, Canada

- O5-6 The effects of acute finasteride treatment in dopamine transporter knockout mice and MK-801-treated mice**
Nageiswari PARATHY, David GROENEWOUD, Hui Min MAK, Peiyan WONG, Gavin DAWE
National University of Singapore
- O5-7 Novel schizophrenia phenotype that is found in a created model mouse caused by nutritional environment**
Shinobu HIRAI¹, Hideki MIWA², Tomoko TANAKA¹, Yasuto KUNII^{4,5}, Makoto ARAI³, Haruo OKADO¹
¹*Lab. of Neural Development, Department of Brain Development and Neural Regeneration, Tokyo Metropolitan Institute of Medical Science, Tokyo, Japan,*
²*Molecular Neuropsychopharmacology Section, Department of Neuropsychopharmacology, National Institute of Mental Health: National Center of Neurology and Psychiatry, Tokyo, Japan,*
³*Lab. of Schizophrenia Research, Department of Psychiatry and Behavioral Sciences, Tokyo Metropolitan Institute of Medical Science, Tokyo, Japan,*
⁴*Department of Neuropsychiatry, School of Medicine, Fukushima Medical University, Fukushima, Japan,*
⁵*Department of Psychiatry, Aizu Medical Center, Fukushima Medical University, Fukushima, Japan*
- O5-8 Touchscreen cognitive performance following maternal immune activation targeting early and late prenatal neurodevelopmental windows**
Jay P. NAKAMURA¹, Anna SCHROEDER¹, Andrew GIBBONS¹, Xin DU¹, Maarten VAN DEN BUUSE³, Suresh SUNDRAM^{1,2}, Rachel Anne HILL¹
¹*Department of Psychiatry, Monash University, Clayton, Victoria, Australia,* ²*Monash Medical Centre, Monash Health, Clayton, Victoria, Australia,*
³*School of Psychology and Public Health, La Trobe University, Melbourne, Victoria, Australia*
- O5-9 Psychotropic drugs change rat cortical gene expression to affect protein ubiquitination, oxidative stress, neuroinflammation and xenobiotic metabolism**
Brian DEAN^{1,2,4}, Andrew GIBBONS¹, Madhara UDAWELA^{1,2}, Elizabeth SCARR^{1,2,3}
¹*Molecular Psychiatry Laboratory, Florey Institute for Neuroscience and Mental Health, Victoria, Australia.,*
²*CRC for Mental Health, Victoria, Australia.,*
³*Melbourne Veterinary School, Faculty of Veterinary and Agricultural Sciences, The University of Melbourne, Victoria, Australia.,*
⁴*Centre for Mental Health, the Faculty of Health, Arts and Design, Swinburne University, Victoria, Australia.*
- O5-10 "D-cell hypothesis of schizophrenia" predicts prospectiveness of TAAR1 medicinal chemistry**
Keiko IKEMOTO
Dep. Psychiatry, Iwaki City Medical Center

Poster Session

Addiction 1

Chair: Hwei-Hsien CHEN (*Center for Neuropsychiatric Research, National Health Research Institute, Taiwan*)

- P1-1 Ameliorating effects of monoacylglycerol lipase inhibitor via cannabinoid CB₁ receptors on the cue-induced reinstatement of methamphetamine-seeking and anxiety-like behaviors in methamphetamine self-administered rats**
 Yoko NAWATA¹, Taku YAMAGUCHI², Ryo FUKUMORI², Tsuyoshi NISHIOKU¹, Tsuneyuki YAMAMOTO²
¹*Department of Pharmacology, Faculty of Pharmaceutical Science, Nagasaki International University,*
²*Department of Pharmacotherapeutics and Neuropsychopharmacology, Faculty of Pharmaceutical Science, Nagasaki International University*
- P1-2 MicroRNA expression profiling in methamphetamine-induced rewarding effect**
 Keisuke MIZUO, Tomoka YAMAGUCHI, Satoshi WATANABE
Department of Legal Medicine, Sapporo Medical University, Sapporo, Japan
- P1-3 Effect of an osteopontin inducer on methamphetamine dependence**
 Takumi NAKAJIMA¹, Kequan FU^{1,2}, Yoshiaki MIYAMOTO¹, Atsumi NITTA¹
¹*Department of Pharmaceutical Therapy and Neuropharmacology, Faculty of Pharmaceutical Sciences, Graduate School of Medicine and Pharmaceutical Sciences, University of Toyama, Toyama, Japan,*
²*Jiangsu Key Laboratory of New Drug Research and Clinical Pharmacy, Xuzhou Medical University, Xuzhou, China*
- P1-4 Inhibitory effects of downregulation of the presynaptic protein Piccolo on the dependent formation of methamphetamine**
 Yuka KUSUI¹, Kyosuke UNO^{1,2}, Bin GE¹, Seiya MORISHITA¹, Shin-ichi MURAMATSU^{3,4}, Atsumi NITTA¹
¹*Lab. of Pharmaceutical Therapy and Neuropharmacology, Department of Pharmaceutical Sciences, University of Toyama, Toyama, Japan,*
²*Laboratory of Molecular Pharmacology, Faculty of Pharmaceutical Sciences, Setsunan University,*
³*Division of Neurological Gene Therapy, Open Innovation Center, Jichi Medical University,*
⁴*Center for Gene & Cell Therapy, Institute of Medical Science, The University of Tokyo*
- P1-5 Role of T-type calcium channels in methamphetamine-induced hyperlocomotion and neuronal excitation in mice**
 Nene KOIKE¹, Yasui HIROKI¹, Sekiguchi FUMIKO¹, Genzoh TANABE², Atsufumi KAWABATA¹
¹*Laboratory of Pharmacology Pathophysiology, Faculty of Pharmacy, Kindai University, Osaka, Japan,*
²*Laboratory of Organic Chemistry, Faculty of Pharmacy, Kindai University, Osaka, Japan*
- P1-6 Role of endogenous glutathione peroxidase-1 gene in the dopaminergic neurotoxicity induced by methamphetamine in mice**
 Naveen SHARMA, Min Ji KANG, Duc Toan PHAM, Quynh Dieu TRINH, Eun-Joo SHIN, Hyoung-Chun KIM
Neuropsychopharmacology and Toxicology Program, College of Pharmacy, Kangwon National University, Chunchon, Republic of Korea
- P1-7 Protein kinase C δ mediates methamphetamine-induced dopaminergic neurotoxicity in mice via activation of microsomal epoxide hydrolase**
 Naveen SHARMA, Min Ji KANG, Duc Toan PHAM, Quynh Dieu TRINH, Eun-Joo SHIN, Hyoung-Chun KIM
Neuropsychopharmacology and Toxicology Program, College of Pharmacy, Kangwon National University, Chunchon, Republic of Korea

Addiction 2

Chair: Jin-Chung CHEN (*Department of Physiology and Pharmacology, Graduate Institute of Biomedical Sciences, Chang Gung University, Taiwan*)

- P2-1 Experience in Treatment of Insomnia with Suvorexant in Patients with Alcohol Use Disorder in Senogawa Hospital**
 Ariyuki KAGAYA^{1,2}, Ryotaro TSUKUE², Takashi SHIMIZU², Hidenobu ZENSHO², Tatsuya FURUSHOU²
¹*KONUMA Memorial Institute of Addiction and Mental Health,* ²*Senogawa Hospital*
- P2-2 Comparisons of Drinking Motives According to Lesch's Typology**
 Saeheon JANG
Department of psychiatry, Bongseng Memorial Hospital

- P2-3 Comparisons of Psychological characteristics between Lesch type 2 (anxiety model) and 3 (depressive model) alcoholism**
 Saeheon JANG
 Department of psychiatry, Bongseng Memorial Hospital
- P2-4 Risks of psychosis in methamphetamine users: a retrospective, cohort study in Thailand**
 Warot LAMYAI¹, Kitkawe PONO¹, Apichart SAENGSI², Manit SRISURAPANONT³
¹Nakhon Phanom Rajanagarindra Psychiatric Hospital, Department of Mental Health, Ministry of Public Health, Thailand,
²Galyarajanagarindra Institute, Department of Mental Health, Ministry of Public Health, Thailand,
³Department of Psychiatry, Faculty of Medicine, Chiang Mai University, Chiang Mai, Thailand
- P2-5 Transcutaneous Electrical Acupoint Stimulation (TEAS) efficacy for craving and addiction severity in opioids use disorder patients within methadone maintenance treatment**
 Wenyu HSU^{1,2,3}, Tsung-Chieh LEE⁴, Hsien-Yuan LANE^{5,6}, Yun-Tai CHEN⁴
¹Department of Psychiatry, Changhua Christian Hospital, Changhua, Taiwan,
²Graduate Institute of Clinical Medical Science, China Medical University, Taichung, Taiwan,
³School of Medicine, Chung Shan Medical University, Taichung, Taiwan,
⁴Department of Chinese Medicine, Changhua Christian Hospital, Changhua, Taiwan,
⁵Department of Psychiatry & Brain Disease Research Center, China Medical University and Hospital, Taichung, Taiwan,
⁶Department of Psychology, College of Medical and Health Sciences, Asia University, Taichung, Taiwan
- P2-6 Neural mechanisms of decision-making under sunk costs and their association with clinical characteristics in gambling disorder**
 Junya FUJINO^{1,2}, Ryosaku KAWADA², Kosuke TSURUMI², Hideaki TAKEUCHI², Shisei TEI^{1,2,3,4}, Takuro MURAO², Ariyoshi TAKEMURA², Nobumasa KATO¹, Toshiya MURAI², Hidehiko TAKAHASHI^{1,2,5}
¹Medical Institute of Developmental Disabilities Research, Showa University, Tokyo, Japan,
²Department of Psychiatry, Graduate School of Medicine, Kyoto University, Kyoto, Japan,
³Institute of Applied Brain Sciences, Waseda University, Saitama, Japan,
⁴School of Human and Social Sciences, Tokyo International University, Saitama, Japan,
⁵Department of Psychiatry and Behavioral Sciences, Graduate School of Medical and Dental Sciences, Tokyo Medical and Dental University, Tokyo, Japan
- P2-7 Mediating effects of affect on associations between impulsivity or resilience and internet gaming disorder**
 Daun SHIN¹, Minkyung PARK², Jiyeon LEE², A Ruem CHOI², Sun Ju CHUNG², Bomi KIM², Myung Hun JUNG³, Dai Jin KIM⁴, Jung-Seok CHOI^{2,5}
¹Department of Neuropsychiatry, Seoul National University Hospital,
²Department of Psychiatry, SMG-SNU Boramae Medical Center, Seoul, Republic of Korea,
³Department of Psychiatry, Hallym University Sacred Heart Hospital, Hallym University College of Medicine, Anyang, Republic of Korea,
⁴Department of Psychiatry, Seoul St. Mary's Hospital, The Catholic University of Korea College of Medicine, Seoul, Republic of Korea,
⁵Department of Psychiatry and Behavioral Science, Seoul National University College of Medicine, Seoul, Republic of Korea

Poster Session 3 October 13 (Sun), 16:40 - 18:10, Poster Hall (Fukuoka International Congress Center, 2F, Multi-purpose Hall)

Addiction 3

Chair: Andrew HOLMES (NIAAA, NIH, USA)

- P3-1 OPRD1 Gene Affects Disease Vulnerability and Environmental Stress in Patients with Heroin Dependence**
 Chang-Chih HUANG¹, San-Yuan HUANG²
¹Department of psychiatry, Taipei Tzu-Chi Hospital, ²Tri-Service General Hospital
- P3-2 rs6738544 SNP of STAT4 and rs2298170 SNP of STAT6 are associated with nicotine dependence**
 Seii OHKA¹, Daisuke NISHIZAWA¹, Junko HASEGAWA¹, Naomi SATO^{2,3}, Hidetaka YAMADA³, Fumihiko TANIOKA⁴, Haruhiko SUGIMURA³, Kazutaka IKEDA¹
¹Addictive Substance Project, Tokyo Metropolitan Institute of Medical Science, Tokyo, Japan,
²Department of Clinical Nursing, Hamamatsu University School of Medicine, Hamamatsu, Japan,
³Department of Tumor Pathology, Hamamatsu University School of Medicine, Hamamatsu, Japan,
⁴Department of Pathology, Iwata City Hospital, Iwata, Japan
- P3-3 Blockade of locomotor sensitization by herbal extracts in nicotine-treated rats**
 Joungwook SEO¹, In Soo RYU¹, Minhan KA¹, Ji Sun KIM¹, Woo Hyun KIM¹, Eun Young JANG¹, Ri-Na LIM¹, Tae Wan KIM¹, Dae Young LEE²
¹Pharmacology & Drug Abuse Group, Korea Institute of Toxicology, Daejeon, South Korea,
²Department of Herbal Corp Research, National Institute of Horticultural and Herbal Science, Rural Development Administration, Eumseong, South Korea

P3-4 Involvement of free fatty acid receptor 1 (FFAR1) in the regulation of striatal monoamine releases and cocaine-induced locomotor activity in mice

Shanta THAPA^{1,2}, Yuko SADAMURA^{1,2}, Ryota MIZUNUMA¹, Yuki KAMBE¹, Akira HIRASAWA³, Kuzuo NAKAMOTO⁴, Shogo TOKUYAMA⁴, Kazunori ARITA², Koji YOSHIMOTO², Atsuro MIYATA¹, Tatsuki OYOSHI², Takashi KURIHARA¹

¹Department of Pharmacology, Graduate School of Medical and Dental Sciences, Kagoshima University, Kagoshima, Japan,

²Department of Neurosurgery, Graduate School of Medical and Dental Sciences, Kagoshima University, Kagoshima, Japan,

³Department of Genomic Drug Discovery Science, Graduate School of Pharmaceutical Sciences, Kyoto University, Kyoto, Japan,

⁴Department of Clinical Pharmacy, School of Pharmaceutical Sciences, Kobe Gakuin University, Hyogo, Japan

P3-5 Cocaine Increases Endocannabinoids-Containing Extracellular Vesicles Release from Dopaminergic Neurons via Sigma-1 Receptor and ADP-Ribosylation Factor 6 Pathway

Yoki NAKAMURA^{1,2}, Dilyan I. DRYANOVSKI³, Carl R. LUPICA³, Tsung-Ping SU²

¹Department of Pharmacology, Graduate School of Biomedical & Health Sciences, Hiroshima University,

²Cellular Pathobiology Section, Integrative Neuroscience Research Branch, Intramural Research Program, National Institute on Drug Abuse,

³Electrophysiology Research Section, Cellular Neurobiology Research Branch, Intramural Research Program, National Institute on Drug Abuse

P3-6 Yokukansan, a traditional Japanese kampo medicine, suppresses the ethanol-withdrawal signs in ethanol-dependent mice

Hideaki KATO, Minoru TSUJI, Kazuya MIYAGAWA, Hiroshi TAKEDA

Dept. Pharmacol., Sch. Pharm., Int. Univ. Health and Welfare, Tochigi, Japan

P3-7 Withdraw**Poster Session 4**

October 11 (Fri), 13:40 - 15:10, Poster Hall (Fukuoka International Congress Center, 2F, Multi-purpose Hall)

Bipolar Disorders 1

Chair: Po See CHEN (Department of Psychiatry, College of Medicine, National Cheng Kung University, Taiwan)

P4-1 Efficacy of Lurasidone Monotherapy in the Treatment of Bipolar I Depression: A Randomized, Double-Blind, Placebo-Controlled 6-week Study (ELEVATE study)

Takahiro MASUDA¹, Tadafumi KATO², Jun ISHIGOOKA³, Kei WATABE¹, Mari MIYAJIMA¹, Teruhiko HIGUCHI^{4,5}

¹Sumitomo Dainippon Pharma Co., Ltd., Japan, ²RIKEN Brain Science Institute, Japan, ³Institute of CNS Pharmacology, Japan,

⁴Japan Depression Center, Japan, ⁵The National Center of Neurology and Psychiatry, Japan

P4-2 Safety and Tolerability of Lurasidone Monotherapy in the Treatment of Bipolar I Depression: A Randomized, Double-Blind, Placebo-Controlled 6-week Study (ELEVATE study)

Takahiro MASUDA¹, Jun ISHIGOOKA², Tadafumi KATO³, Kei WATABE¹, Mari MIYAJIMA¹, Teruhiko HIGUCHI^{4,5}

¹Sumitomo Dainippon Pharma Co., Ltd., Japan, ²Institute of CNS Pharmacology, Japan, ³RIKEN Brain Science Institute, Japan,

⁴Japan Depression Center, Japan, ⁵The National Center of Neurology and Psychiatry, Japan

P4-3 Lurasidone in the Long-Term Treatment of Bipolar I Depression: A 28-week Open Label Extension Study (ELEVATE extension study)

Jun ISHIGOOKA¹, Tadafumi KATO², Mari MIYAJIMA³, Kei WATABE³, Takahiro MASUDA³, Teruhiko HIGUCHI^{4,5}

¹Institute of CNS Pharmacology, Japan, ²RIKEN Brain Science Institute, Japan, ³Sumitomo Dainippon Pharma Co., Ltd., Japan,

⁴Japan Depression Center, Japan, ⁵The National Center of Neurology and Psychiatry, Japan

P4-4 Prediction of Plasma Levels of Quetiapine and its Metabolites in Taiwanese Psychiatric Patients

Yen-Feng LIN¹, Shih-Ku LIN^{2,3}

¹Balance Psychiatric Clinic, Hsinchu City, Taiwan, ²Department of Psychiatry, Taipei City Hospital and Psychiatric Center, Taipei City, Taiwan,

³Department of Psychiatry, School of Medicine, Taipei Medical University, Taipei City, Taiwan

P4-5 Clinical correlates associated with the long-term response of bipolar disorder patients to lithium, valproate, or lamotrigine: a retrospective study

Nak-Young KIM, Young Sup WOO, Won-Myong BAHK

Department of Psychiatry, The Catholic University of Korea

P4-6 Driving performance of outpatients with bipolar disorder undergoing real-world pharmacotherapy

Kunihiro IWAMOTO¹, Akiko YAMAGUCHI¹, Masahiko ANDO², Kiyoshi FUJITA³, Motonori YOKOYAMA⁴,

Tsuyoshi AKIYAMA⁵, Yoshio IGARASHI⁶, Reiji YOSHIMURA⁷, Norio OZAKI¹

¹Department of Psychiatry, Nagoya University Graduate School of Medicine, Aichi, Japan,

²Center for Advanced Medicine and Clinical Research, Nagoya University Hospital, Aichi, Japan,

³Department of Psychiatry, Okehazama Hospital, Aichi, Japan, ⁴Sapporo Ekimae Clinic, Sapporo, Japan,

⁵Department of Psychiatry, NTT Medical Center Tokyo, Tokyo, Japan, ⁶Medical Care Toranomon, Tokyo, Japan,

⁷Department of Psychiatry, University of Occupational and Environmental Health, Fukuoka, Japan

P4-7 Study of Teneurin-4 function to elucidate the pathological mechanism of bipolar disorder

Fumitaka NAKANO¹, Kyosuke UNO^{2,3}, Kazuki TOKORO², Hiroki TAKEMOTO¹, Atsumi NITTA^{1,2}

¹Department of Pharmaceutical Therapy and Neuropharmacology, Faculty of Pharmaceutical Sciences, University of Toyama, Toyama, Japan,

²Department of Pharmaceutical Therapy and Neuropharmacology, Graduate School of Medicine and Pharmaceutical Science, University of Toyama, Toyama, Japan,

³Laboratory of molecular pharmacology faculty of pharmaceutical sciences, University of Setsunan, Osaka, Japan

P4-8 Concurrent and Discriminant Validity of Functioning Assessment Short Test (FAST) in Chinese Patients with Bipolar Disorder

Cynthia SIU¹, Mary Miu Yee WAYE², Shitao RAO^{2,3,4}, Marco Ho Bun LAM⁴, Ji-hui ZHANG⁴, Stephen Kwok Wing TSUI³, Yun Kwok WING⁴

¹COS and Associates Ltd., Hong Kong SAR, China,

²The Nethersole School of Nursing, The Chinese University of Hong Kong, Hong Kong SAR, China,

³School of Biomedical Sciences, Faculty of Medicine, The Chinese University of Hong Kong, Hong Kong SAR, China,

⁴Department of Psychiatry, The Chinese University of Hong Kong, Hong Kong SAR, China

Poster Session 5

October 12 (Sat), 16:40 - 18:10, Poster Hall (Fukuoka International Congress Center, 2F, Multi-purpose Hall)

Bipolar Disorders 2

Chair: Shang-ying TSAI (Department of Psychiatry, Taipei Medical University and Hospital, Taiwan)

P5-1 Risk and Coaggregation of Major Psychiatric Disorders among First-Degree Relatives of Patients with Bipolar Disorder: A Nationwide Population-Based Study

MuHong CHEN^{1,2}, Ya-Mei BAI^{1,2}, Tung-Ping SU^{1,2}

¹Department of Psychiatry, Taipei Veterans General Hospital,

²Division of Psychiatry, School of Medicine, National Yang-Ming University, Taipei, Taiwan

P5-2 Psychometric properties of the Clinically Useful Depression Outcome Scale supplemented with questions for the DSM-5 Mixed subtype (CUDOS-M) in Chinese patients with mood disorders

Yanli DU¹, Jianbo HU², Tingting HUANG¹, Jianbo LAI², Weihua ZHANG¹, Chao LI¹, Zhongya XU³, Hetong ZHOU², Shaohua HU², Liemin RUAN⁴

¹Zhejiang University School of Medicine, Hangzhou, China,

²Department of Psychiatry, First Affiliated Hospital, Zhejiang University School of Medicine, Hangzhou, China,

³Department of Psychiatry, Jiaying Kangci Hospital, Jiaying, China, ⁴Department of Psychosomatics, Ningbo First Hospital, Ningbo, China

P5-3 Withdraw

P5-4 Withdraw

P5-5 Reduced plasma orexin-A levels in patients with bipolar disorder

Shoko TSUCHIMINE¹, Kotaro HATTORI¹, Miho OTA¹, Shinsuke HIDESE¹, Toshiya TERAISHI¹, Daimei SASAYAMA¹, Hiroaki HORI¹, Takamasa NODA², Sumiko YOSHIDA², Fuyuko YOSHIDA¹, Hiroshi KUNUGI¹

¹Department of Mental Disorder Research, National Institute of Neuroscience, National Center of Neurology and Psychiatry,

²Department of Psychiatry, National Center Hospital, National Center of Neurology and Psychiatry

P5-6 No evidence for association between mood stabilizer and plasma FGF21 level in bipolar disorder

Sayuri ISHIWATA¹, Hisayoshi TAKAI², Favour OMILEKE¹, Kotaro HATTORI^{1,3}, Fuyuko YOSHIDA¹, Shinsuke HIDESE¹, Junko MATSUO¹, Ikki ISHIDA¹, Moeko HIRAISHI¹, Hiroshi KUNUGI¹

¹Department of Mental Disorder Research, National Center of Neurology and Psychiatry, Tokyo, Japan,

²Kawasaki City Institute for Public Health, Kawasaki, Japan, ³Medical Genom Center, National Center of Neurology and Psychiatry, Tokyo, Japan

Poster Session 6

October 13 (Sun), 16:40 - 18:10, Poster Hall (Fukuoka International Congress Center, 2F, Multi-purpose Hall)

Obsessive Compulsive Disorders

Chair: Yuji ODAGAKI (Saitama Medical University, Japan)

P6-1 Resting-state functional connectivity of the raphe nucleus as a predictor of the response to selective serotonin reuptake inhibitors in patients with obsessive-compulsive disorder

Minah KIM^{1,2}, Seoyeon KWAK³, Youngwoo Bryan YOON⁴, Yoo Bin KWAK³, Taekwan KIM³, Kang Ik K. CHO³, Tae Young LEE³, Jun Soo KWON^{1,2,3,5}

¹Department of Neuropsychiatry, Seoul National University Hospital, ²Department of Psychiatry, Seoul National University College of Medicine,

³Department of Brain and Cognitive Sciences, Seoul National University College of Natural Science,

⁴Department of Psychiatry, Washington University in St. Louis, ⁵Institute of Human Behavioral Medicine, SNU-MRC

- P6-2 An examination of the possible effect of the olfactory function on the treatment responses in patients with Obsessive Compulsive Disorder (OCD)**
Takuya HASHIMOTO¹, Hirokazu KUMAZAKI², Keiichiro MUKAI¹, Masahiro MIYAUCHI¹, Kyouusuke YAMANISHI¹, Naomi MATSUURA³, Hisato MATSUNAGA¹
¹Department of Neuropsychiatry Hyogo college of Medicine, Hyogo, Japan, ²Department of Preventive intervention for Psychiatric Disorders, National Institute of Mental Health, National Center of Neurology and Psychiatry, ³Special Education Course, Faculty of Education, Mie University, Tsu, Japan
- P6-3 Withdraw**
- P6-4 Combined Repetitive Transcranial Magnetic Stimulation and Psychotherapy in Treatment Resistant Obsessive-Compulsive Disorder Comorbid with Major Depressive Disorder: a Case Report**
Po-Han CHOU^{1,2}, Jui-Cheng CHEN³
¹Department of Psychiatry, China Medical Hsinchu Hospital, Taiwan., ²Department of Psychiatry, China Medical Hospital, Taichung, Taiwan., ³Department of Neurology, China Medical Hsinchu Hospital, Taiwan.
- P6-5 Efficacy of electroconvulsive therapy in treatment-refractory obsessive-compulsive symptoms: two case reports**
Anri WATANABE, Takashi NAKAMAE, Nobutaka John AYANI, Junko ONO, Nozomu OYA, Jin NARUMOTO
Department of Psychiatry, Graduate School of Medical Science, Kyoto Prefectural University of Medicine, Kyoto, Japan
- P6-6 An adenosine A_{2A} receptor antagonist, istradefylline, improves multiple symptoms reflecting obsessive-compulsive disorder in mice**
Nozomi ASAOKA^{1,2}, Naoya NISHITANI¹, Haruko KINOSHITA¹, Yuma NAGAI¹, Hikari HATAKAMA¹, Kazuki NAGAYASU¹, Hisashi SHIRAKAWA¹, Takayuki NAKAGAWA³, Chihiro YABE-NISHIMURA², Shuji KANEKO¹
¹Department of Molecular Pharmacology, Graduate School of Pharmaceutical Sciences, Kyoto University, Kyoto, Japan, ²Department of Pharmacology, Kyoto Prefectural University of Medicine, Kyoto, Japan, ³Department of Clinical Pharmacology and Therapeutics, Kyoto University Hospital, Kyoto, Japan

Poster Session 7

October 11 (Fri), 13:40 - 15:10, Poster Hall (Fukuoka International Congress Center, 2F, Multi-purpose Hall)

Depression 1

Chair: Cheng-Ta LI (1Department of Psychiatry, Taipei Veterans General Hospital, Taiwan)

- P7-1 Shared Genetic Etiology between Anxiety Disorders and Psychiatric and Related Intermediate Phenotypes**
Kazutaka OHI^{1,2}, Takeshi OTOWA³, Mihoko SHIMADA^{4,5}, Tsukasa SASAKI⁶, Hisashi TANII^{7,8}
¹Medical Research Institute, Kanazawa Medical University, Ishikawa, Japan, ²Department of Neuropsychiatry, Kanazawa Medical University, Ishikawa, Japan, ³Graduate School of Clinical Psychology, Professional Degree Program in Clinical Psychology, Teikyo Heisei University, Tokyo, Japan, ⁴Department of Psychiatry and Behavioral Sciences, Tokyo Metropolitan Institute of Medical Science, Tokyo, Japan, ⁵Department of Human Genetics, Graduate School of Medicine, The University of Tokyo, Tokyo, Japan, ⁶Department of Physical and Health Education, Graduate School of Education, The University of Tokyo, Japan, ⁷Center for Physical and Mental Health, Mie University, Mie, Japan, ⁸Graduate School of Medicine, Department of Health Promotion and Disease Prevention, Mie University, Mie, Japan
- P7-2 Effects of CYP2D6 polymorphism on enlameric metabolism of venlafaxine and O-desmethylvenlafaxine in Japanese patients**
Taro SASAKI¹, Takashi WATANABE^{1,4}, Yoshimasa INOUE¹, Hazuki SASAKI¹, Masataka SHINOZAKI¹, Akiko AOKI¹, Yuki HAYASHI¹, Kazuko KATO³, Zinichi KURODA², Norio FURUKORI¹, Kazutaka SHIMODA¹
¹Department of Psychiatry Dokkyo Medical University, Tochigi, Japan, ²Tochigi Prefectural Okamoto Hospital, ³Sakurara Psychosomatic Medicine, ⁴Keijikai Kikuchi Hospital
- P7-3 Transcriptome analysis of major depressive patients and stress model mice showing depressive-like behaviors**
Akira YOSHIMI^{1,2,3}, Iyo MURAKAWA¹, Hirotake HIDA^{1,2}, Sho HASEGAWA¹, Takahiro ITO¹, Mizuki UCHIDA¹, Itaru KUSHIMA^{3,4}, Norio OZAKI³, Yukihiko NODA^{1,2,3}
¹Division of Clinical Sciences and Neuropsychopharmacology, Faculty and Graduate School of Pharmacy, Meijo University, Nagoya, Japan, ²Department of Neuropsychopharmacology and Hospital Pharmacy, Nagoya University Graduate School of Medicine, Nagoya, Japan, ³Department of Psychiatry, Nagoya University Graduate School of Medicine, Nagoya, Japan, ⁴Institute for Advanced Research, Nagoya University, Nagoya, Japan

P7-4 p11 in cholinergic interneurons of the nucleus accumbens is essential for dopamine responses to rewarding stimuli

Yukie KAWAHARA¹, Yuuki HANADA¹, Yosinori OHNISHI¹, Takahide SHUTO¹, Mahomi KUROIWA¹, Naoki SOTOGAKU¹, Hiroshi KAWAHARA², Akinori NISHI¹

¹Dept. of Pharmacology, Kurume University School of Medicine, Fukuoka, Japan,

²Dept. of Dental Anesthesiology, School of Dental Medicine, Tsurumi University, Kanagawa, Japan

P7-5 Activation of neural projection from the medial prefrontal cortex to the periaqueductal gray promotes reward-seeking behavior in a conflict context

Yuki HONSHUKU, Ryoki SAITO, Takuji SOGA, Natsuko HITORA-IMAMURA, Masabumi MINAMI

Lab. of Pharmacology, Department of Pharmacy, Hokkaido University, Hokkaido, Japan

P7-6 Relationship between Lymphocyte Levels and Degrees of Depression in Patients with Pulmonary Tuberculosis

Yuliana AZIS, Muhammad Faisal IDRUS, Saidah SYAMSUDDIN, Andi Jayalangkara TANRA

Department of Psychiatry, Faculty of Medicine, Universitas Hasanuddin, Makassar, Indonesia

P7-7 Comparison of Effect of Two-Hour Exposure to Forest and Urban Environments on Cytokine, Anti-Oxidant, and Stress Levels in Young Adults

Won KIM

Department of Psychiatry, Seoul Paik Hospital, Inje University

Poster Session 8

October 12 (Sat), 16:40 - 18:10, Poster Hall (Fukuoka International Congress Center, 2F, Multi-purpose Hall)

Depression 2

Chair: Kazuhiro TAKUMA (Department of Pharmacology, Graduate School of Dentistry, Osaka University, Japan)

P8-1 A new animal model for "shaken baby syndrome": Neuropathological, behavioral, hormonal and neurochemical analyses

Shuichi UEDA¹, Yasushi KAWAMATA², Ayuka EHARA¹, Tsuyoshi YAMAGUCHI¹, Yoshiteru SEO³, Kazutaka SHIMODA²

¹Department of Histology and Neurobiology, Dokkyo Medical University School of Medicine, Tochigi, Japan,

²Department of Psychiatry, Dokkyo Medical University School of Medicine, Mibu, Tochigi, Japan,

³Department of Regulatory Physiology, Dokkyo Medical University School of Medicine, Tochigi, Japan

P8-2 The role of cytokines in fear memory shown in tumor-bearing mice

Hiroko IKEDA¹, Aimi YAMAGISHI¹, Naomi YONEMOCHI¹, Takatsune SHIMIZU², Akihiro MUTO², Junzo KAMEI³

¹Department of Pathophysiology and Therapeutics, Hoshi University School of Pharmacy and Pharmaceutical Sciences, Tokyo, Japan,

²Department of Pathophysiology, Hoshi University School of Pharmacy and Pharmaceutical Sciences, Tokyo, Japan,

³Department of Biomolecular Pharmacology, Hoshi University School of Pharmacy and Pharmaceutical Sciences, Tokyo, Japan

P8-3 Anxiety-like behaviors are enhanced by lactate dehydrogenase inhibitor in a mouse model of chronic social defeat stress

Hideo HAGIHARA, Hirota SHOJI, Yoshihiro TAKAMIYA, Tsuyoshi MIYAKAWA

Division of Systems Medical Science, Institute for Comprehensive Medical Science, Fujita Health University, Aichi, Japan

P8-4 Chronic stress-induced alteration of synaptic transmission in the dorsolateral bed nucleus of the stria terminalis

Ryuto HARA, Tatsuhiro TAKEHARA, Daiki TAKAHASHI, Saki MINAMI, Taiju AMANO, Masabumi MINAMI

Department of Pharmacology, Graduate School of Pharmaceutical Sciences, Hokkaido University, Sapporo, Japan

P8-5 Inactivation of orbitofrontal cortex prevents stress-induced behavioral change in mice

Shuhei KAYASHIMA^{1,2}, Hiroshi KUNIISHI¹, Kazumi YOSHIKAWA², Masayuki SEKIGUCHI³, Mitsuhiko YAMADA¹

¹Department of Neuropsychopharmacology, National Institute of Mental Health, National Center of Neurology and Psychiatry, Tokyo, Japan,

²Laboratory of Pharmacology and Therapeutics, Faculty of Pharmaceutical Sciences, Tokyo University of Science, Chiba, Japan,

³Department of Degenerative Neurological Diseases, National Institute of Neuroscience, National Center of Neurology and Psychiatry, Tokyo, Japan

P8-6 Involvement of glutamate receptors in the impairment of social behaviors induced by social defeat stress exposure as juveniles

Mikio YOSHIDA¹, Sho HASEGAWA¹, Mizuki UCHIDA¹, Yoji UCHIDA¹, Akihiro MOURI^{2,6}, Akira YOSHIMI^{1,3}, Masayoshi MISHINA⁴, Norio OZAKI³, Toshitaka NABESHIMA^{5,6}, Yukihiko NODA^{1,3,6}

¹Division of Clinical Sciences and Neuropsychopharmacology, Faculty and Graduate School of Pharmacy, Meijo University, Nagoya, Japan,

²Department of Regulatory Science for Evaluation and Development of Pharmaceuticals and Devices, Graduate School of Health Sciences, Fujita Health University, Aichi, Japan,

³Department of Psychiatry, Graduate School of Medicine, Nagoya University, Nagoya, Japan,

⁴Brain Science Laboratory, The Research Organization of Science and Technology, Ritsumeikan University, Shiga, Japan,

⁵Advanced Diagnostic System Research Laboratory, Fujita Health University Graduate School of Health Sciences, Aichi, Japan,

⁶Japanese Drug Organization of Appropriate Use and Research, Nagoya, Japan

P8-7 Inducible effects of decreased Teneurin-4 in the prefrontal cortex of mice on the depressive behavior

Kazuki TOKORO¹, Kyosuke UNO^{1,2}, Shin-ichi MURAMATSU^{3,4}, Atsumi NITTA¹

¹Department of Pharmaceutical Therapy and Neuropharmacology, Faculty of Pharmaceutical Sciences, Graduate School of Medicine and Pharmaceutical Sciences, University of Toyama, Toyama, Japan.,

²Laboratory of molecular pharmacology faculty of pharmaceutical science, University of Setsunan, Osaka, Japan,

³Division of Neurology, Department of Medicine, Jichi Medical University, Shimotsuke, JAPAN,

⁴Center for Gene and Cell Therapy, Institute of Medical Science, The University of Tokyo, Tokyo, JAPAN

Poster Session 9

October 13 (Sun), 16:40 - 18:10, Poster Hall (Fukuoka International Congress Center, 2F, Multi-purpose Hall)

Depression 3

Chair: Gaku OKUGAWA (Kansai Kinen Hospital, Japan)

P9-1 Persistent antidepressant effect of low-dose ketamine and activation in the supplementary motor area and anterior cingulate cortex in treatment-resistant depression

MuHong CHEN^{1,2}, Hui-Ju WU¹, Tung-Ping SU^{1,2}, Cheng-Ta LI^{1,2}, Ya-Mei BAI^{1,2}, Wei-Chen LIN^{1,2}, Chih-Ming CHENG^{1,2}

¹Department of Psychiatry, Taipei Veterans General Hospital,

²Division of Psychiatry, School of Medicine, National Yang-Ming University, Taipei, Taiwan

P9-2 Rapid inflammation modulation and antidepressant efficacy of a low-dose ketamine infusion in treatment-resistant depression

MuHong CHEN^{1,2}, Hui-Ju WU¹, Tung-Ping SU^{1,2}, Cheng-Ta LI^{1,2}, Ya-Mei BAI^{1,2}, Wei-Chen LIN^{1,2}, Chih-Ming CHENG^{1,2}

¹Department of Psychiatry, Taipei Veterans General Hospital,

²Division of Psychiatry, School of Medicine, National Yang-Ming University, Taipei, Taiwan

P9-3 Combined treatment with dimethylglycine attenuates the behavioral deficits induced by repeated ketamine exposure

Ming-Huan CHAN¹, Mei-Yi LEE², Shao Tsu CHEN³, Chung-Pin HSIEH², Hwei-Hsien CHEN²

¹Institute of Neuroscience, National Chengchi University, ²Center for Neuropsychiatric Research, National Health Research Institutes,

³Department of Psychiatry, Tzu Chi University

P9-4 Dopamine D1 receptors in the dentate gyrus amplify therapeutic action of SSRI

Takahide SHUTO, Mahomi KUROIWA, Naoki SOTOGAKU, Yukie KAWAHARA, Yoshinori OHNISHI, Yuuki HANADA, Akinori NISHI

Department of Pharmacology, Kurume University School of Medicine, Fukuoka, Japan

P9-5 Salivary Alpha Amylase Enzyme and Salivary Cortisol Level in Depression after Treatment with Fluoxetine

Andi Jayalangkara TANRA, Hawaidah MADEALI, Mayamariska SANUSI, Dwiwahyu Ningsih SUNARTO,

Saidah SYAMSUDDIN, Sonny Teddy LISAL

University of Hasanuddin

P9-6 Guidelines for the Treatment of Girls and Women: applications to clinical psychopharmacology

Frederick M. JACOBSEN^{1,2}, Lillian COMAS-DIAZ^{1,2}

¹The George Washington University School of Medicine, ²Transcultural Mental Health Institute

P9-7 Evaluation of Autonomic Nervous System by Salivary Alpha-Amylase Activity Levels and Heart Rate Variability in anxiety disorder with pregnancy after administration of Japanese Herbal Medicine-Nyoshinsan/TJ-67

Maiko HAYASHIDA¹, Tsuyoshi MIYAOKA¹, Tomoko ARAKI¹, Toshiko MINAMOTO², Sadayuki HASHIOKA¹, Rei WAKE¹, Masatoshi INAGAKI¹

¹Department of Psychiatry, Faculty of Medicine, Shimane University, ²Department of Obstetrics, Faculty of Medicine, Shimane University

Depression 4

Chair: Hirokazu MIZOGUCHI (*Department of Psysiology and Anatomy, Faculty of Pharmaceutical Sciences, Tohoku Medical and Pharmaceutical University, Japan*)

P10-1 Possible involvement of histone acetylation in the stress responses associated with central 5-HT neuronal regulation in mice

Kazuya MIYAGAWA, Atsumi MOCHIDA-SAITO, Kazuhiro KUROKAWA, Hidenao KIMIJIMA, Minoru TSUJI, Hiroshi TAKEDA

Department of Pharmacology, School of Pharmacy, International University of Health and Welfare, Tochigi, Japan

P10-2 BDNF/VEGF release and mTORC1 activation in the medial prefrontal cortex are required for the antidepressant actions of resolvin E1 in lipopolysaccharide-induced depression model mice

Satoshi DEYAMA¹, Kohei ISHIMURA², Hayato FUKUDA^{2,3}, Satoshi SHUTO², Masabumi MINAMI⁴, Katsuyuki KANEDA¹

¹Lab. of Molecular Pharmacology, Institute of Medical, Pharmaceutical and Health Sciences, Kanazawa University, Kanazawa, Japan,

²Lab. of Organic Chemistry for Drug Development, Graduate School of Pharmaceutical Sciences, Hokkaido University, Sapporo, Japan,

³Pharmaceutical Organic Chemistry Lab., Graduate School of Biomedical Sciences, Nagasaki University, Nagasaki, Japan,

⁴Department of Pharmacology, Graduate School of Pharmaceutical Sciences, Hokkaido University, Sapporo, Japan

P10-3 The glutamate release inhibition from presynaptic site in mice medial prefrontal cortex via a delta opioid receptor

Akiyoshi SAITOH¹, Daisuke YAMADA¹, Jun-Ichiro OKA¹, Hiroshi NAGASE²

¹Lab Pharmacol, Fac Pharm Sci, Tokyo Univ of Science, Chiba, Japan, ²IIS, University of Tsukuba, Ibaraki, Japan

P10-4 Repeated social defeat stress induces microglial activation and myelin abnormality in the corpus callosum: a potential link to depression-like behavior

Tsubasa IIDA¹, Kazuo KUNISAWA¹, Sei SAITOH², Aika KOSUGE¹, Wulaer BOLATI^{3,4}, Willy Jaya SUENTO^{4,5}, Yasuko YAMAMOTO⁴, Akihiro MOURI¹, Kuniaki SAITO^{3,4}, Toshitaka NABESHIMA³

¹Department of Regulatory Science for Evaluation & Development of Pharmaceuticals & Devices, Fujita Health University Graduate School of Health Sciences, Aichi, Japan, ²Department of Anatomy II and Cell Biology, Fujita Health University School of Medicine, Aichi, Japan,.

³Advanced Diagnostic System Research Laboratory, Fujita Health University Graduate School of Health Science, Aichi, Japan,

⁴Department of Disease Control and Prevention, Fujita Health University Graduate School of Health Sciences, Aichi, Japan,

⁵Department of Psychiatry, Hasanuddin University, South Sulawesi, Indonesia

P10-5 Repeated social defeat stress induces depression-like behavior through the decrease of GLT-1 ubiquitination in the prefrontal cortex of mice

Aika KOSUGE¹, Kazuo KUNISAWA¹, Tsubasa IIDA¹, Wulaer BOLATI^{2,3}, Willy Jaya SUENTO^{3,4}, Yasuko YAMAMOTO³, Akihiro MOURI¹, Kuniaki SAITO^{2,3}, Toshitaka NABESHIMA²

¹Department of Regulatory Science for Evaluation & Development of Pharmaceuticals & Devices, Fujita Health University Graduate School of Health Sciences, Aichi, Japan,

²Advanced Diagnostic System Research Laboratory, Fujita Health University Graduate School of Health Science, Aichi, Japan,

³Department of Disease Control and Prevention, Fujita Health University Graduate School of Health Sciences, Aichi, Japan,

⁴Department of Psychiatry, Hasanuddin University, South Sulawesi, Indonesia.

P10-6 Activation of 5-HT_{1A} receptor protects the myelin loss in a mouse model of stress-maladaptation

Kazuhiro KUROKAWA, Minoru TSUJI, Kazuya MIYAGAWA, Atsumi MOCHIDA-SAITO, Hiroshi TAKEDA

Department of Pharmacology, School of Pharmacy, International University of Health and Welfare, Tochigi, Japan

P10-7 Dysfunction of protein kinase C-beta I (PKCβI) - serotonin transporter (SERT) systems is involved in depression-like behaviors in stressed mice

Takahiro ITO¹, Yuka HIRAMATSU¹, Mizuki UCHIDA¹, Akira YOSHIMI¹, Norio OZAKI², Yukihiro NODA^{1,2}

¹Division of Clinical Sciences and Neuropsychopharmacology, Meijo University Faculty and Graduate School of Pharmacy, Nagoya, Japan,

²Department of Psychiatry, Nagoya University Graduate School of Medicine, Nagoya, Japan

Depression 5

Chair: Hiroki ISHIGURO (*Department of Psychiatry and Clinical Ethics, University of Yamanashi, Japan*)

P11-1 Neural Basis of Aesthetic Emotion: Origin of Prosocial Behavior and Aggression

Ryota TAKANO^{1,2}, Michio NOMURA¹

¹Division of Cognitive Psychology, Graduate School of Education, Kyoto University, ²Japan Society for the Promotion of Science

P11-2 Validation of the Korean Version of the Generalized Anxiety Disorder -7 Self-rating Scale

Seung-Hoon LEE, Changsu HAN, Cheolmin SHIN, Hyounwook KIM
Department of Psychiatry, College of Medicine, Korea University

P11-3 Association study for the relationship between response inhibitory event-related potentials (Go/Nogo) and symptoms of attention-deficit/Hyperactivity disorder in adult patient with major depressive disorder

EunJee KIM, JiSun KIM, WanJoon KWON, SeHoon SHIM
Department of Psychiatry, Soonchunhyang University Cheonan Hospital

P11-4 Medication Integration Workforce by Community Pharmaceutical Home Care in Taiwan

Hsuan CHANG^{1,2}, Kai-Jen CHENG^{1,2}, Wan-Fu TSAI¹, Tzu-Hua WU¹
¹*Division of Clinical Pharmacy, School of Pharmacy, College of Pharmacy, Taipei Medical University, Taipei, Taiwan,*
²*New Taipei City Pharmacists Association, New Taipei City, Taiwan*

P11-5 Withdraw**P11-6 Circulating T lymphocyte subsets, cytokines, and immune checkpoint inhibitors in patients with bipolar II**

Jing LU, Chao Bo HUANG, Ting Ting MOU, Mei Hai LI, Hua Shao HU
Department of Neurobiology; Zhejiang Province Key Laboratory of Mental Disorder's Management, Zhejiang University School of Medicine

Poster Session 12 October 13 (Sun), 16:40 - 18:10, Poster Hall (Fukuoka International Congress Center, 2F, Multi-purpose Hall)

Depression 6

Chair: Yu OHMURA (*Department of Neuropharmacology, Faculty of Medicine and Graduate School of Medicine, Hokkaido University, Japan*)

P12-1 Decrease in striatal Shati/Nat8l induces resilience of depression via regulation of acetylation of histone in the Bdnf gene

Hajime MIYANISHI¹, Kyosuke UNO^{1,2}, Shin-ichi MURAMATSU^{3,4}, Atsumi NITTA¹
¹*Department of Pharmaceutical Therapy and Neuropharmacology, Faculty of Pharmaceutical Sciences, Graduate School of Medicine and Pharmaceutical Sciences, Toyama university, Toyama,*
²*Laboratory of Molecular Pharmacology, Faculty of Pharmaceutical Sciences, Setsunan University, Hirakata, Japan,*
³*Division of Neurological Gene Therapy, Open Innovation Center, Jichi Medical University, Shimotsuke, Japan,*
⁴*Center for Gene & Cell Therapy, The Institute of Medical Science, The University of Tokyo, Tokyo, Japan*

P12-2 Antidepressant induces glial cell line-derived neurotrophic factor production through Gai/o-coupled lysophosphatidic acid receptor 1/Src tyrosine kinase/matrix metalloproteinase-9 cascade in rat astroglial cells

Hiroimi ABE^{1,2}, Naoto KAJITANI¹, Mami OKADA-TSUCHIOKA¹, Wataru OMORI¹, Masahide YATSUMOTO², Minoru TAKEBAYASHI^{1,3}
¹*Division of Psychiatry and Neuroscience, Institute for Clinical Research, National Hospital Organization (NHO) Kure Medical Center and Chugoku Cancer Center,*
²*Department of Pharmacy, National Hospital Organization (NHO) Kure Medical Center and Chugoku Cancer Center, Kure, Japan,*
³*Department of Neuropsychiatry, Faculty of Life Sciences, Kumamoto University, Kumamoto, Japan*

P12-3 Generation of serotonergic neurons from human induced pluripotent stem cells through forced expression of serotonin neuron-specific transcription factors

Yuma NAGAI¹, Kazuki NAGAYASU¹, Konomi MASUNAKA², Yukio AGO^{2,3}, Atsushi KASAI², Hisashi SHIRAKAWA¹, Takanoobu NAKAZAWA^{2,4}, Hitoshi HASHIMOTO^{2,5,6,7}, Shuji KANEKO¹
¹*Department of Molecular Pharmacology Graduate School of Pharmaceutical Sciences, Kyoto University, Kyoto, Japan,*
²*Laboratory of Molecular Neuropharmacology, Graduate School of Pharmaceutical Sciences, Osaka University, Osaka, Japan,*
³*Laboratory of Molecular Biopharmaceutics, Graduate School of Pharmaceutical Sciences, Osaka University, Osaka, Japan,*
⁴*Department of Pharmacology, Graduate School of Dentistry, Osaka University, Osaka, Japan,*
⁵*Molecular Research Center of Children's Mental Development, United Graduate School of Child Development, Osaka University, Osaka, Japan,*
⁶*Division of Bioscience, Institute for Dataability Science, Osaka University, Osaka, Japan,*
⁷*Open and Transdisciplinary Research Initiatives, Osaka University, Osaka, Japan*

P12-4 Possible involvement of AKT-GSK3 β signal-upregulated MEF2D protein in imipramine-enhanced the expression of astrocytic interleukin-10 under inflammatory state

Yosuke YAMAWAKI^{1,2}, Satomi SHIRAWACHI², Munechika TAKAISHI², Shigeto YAMAWAKI³, Takashi KANEMATSU^{2,4}
¹*Department of Advanced Pharmacology, Daiichi University of Pharmacy, Fukuoka, Japan,*
²*Department of Cellular and Molecular Pharmacology Institute of Biomedical and Health Sciences Hiroshima University, Hiroshima, Japan,*
³*Office of Industry-Academia-Government and Community Collaboration Institute of Biomedical and Health Sciences Hiroshima University, Hiroshima, Japan,*
⁴*Department of Cell Biology and Pharmacology, Faculty of Dental Science, Kyushu University, Fukuoka, Japan*

P12-5 Histological analyses of neuropeptide mRNA expression in the central amygdala neurons projecting to the dorsolateral bed nucleus of the stria terminalis

Saya ARAKAKI, Keisuke SAKASAI, Natsuko HITORA-IMAMURA, Masabumi MINAMI
Department of Pharmacology, Graduate School of Pharmaceutical Sciences, Hokkaido University, Hokkaido, Japan

P12-6 Possible involvement of hippocampal leukemia inhibitory factor in the formation of stress adaptation in mice

Minoru TSUJI, Kazuhiro KUROKAWA, Kazuya MIYAGAWA, Atsumi MOCHIDA-SAITO, Hiroshi TAKEDA
Department of Pharmacology, School of Pharmacy, International University of Health and Welfare

P12-7 The increase in neuropeptide Y impairs social interaction through glutamate neurons in streptozotocin-induced diabetic mice

Daiki UEDA¹, Aimi YAMAGISHI¹, Naomi YONEMOCHI¹, Junzo KAMEI², Hiroko IKEDA¹
¹*Department of Pathophysiology and Therapeutics, Hoshi University, Tokyo, Japan,*
²*Department of Biomolecular Pharmacology, Hoshi University, Tokyo, Japan*

Poster Session 13 **October 11 (Fri), 13:40 - 15:10, Poster Hall (Fukuoka International Congress Center, 2F, Multi-purpose Hall)**

Childhood & Adolescent Disorders 1

Chair: Atsushi SATO (*Dept. of Pediatrics, The University of Tokyo Hospital, Japan*)

P13-1 Withdraw**P13-2 Expert consensus for the pharmacotherapy of adult attention deficit hyperactivity disorder (ADHD) in Korea**

Kyung Joon MIN, Hyunchan HWANG, Sol I. KIM, Han Il. RYOO, Doug Hyun HAN, Sun Mi KIM
Department of Psychiatry, Chung-Ang University Hospital, Seoul, Korea

P13-3 Effects of Antidepressant Treatment on Clinical Measures of Attention in Adolescents with Depression

Chi-Hyun CHOI¹, Jung LEE², Kyung Hwa LEE³, Soon-Beom HONG³, Seong-Hae KIM³, Ji-Youn HAN³, Jun Won KIM⁴,
 Soo Churl CHO⁵, Jae-Won KIM³
¹*Department of psychiatry, SMG - SNU Boramae Medical Center,*
²*Pediatric Palliative Care Team, Integrative Care Hub, Seoul National University Children's Hospital,*
³*Division of Child and Adolescent Psychiatry, Department of Psychiatry, Seoul National University Hospital,*
⁴*Department of Psychiatry, Catholic University of Daegu School of Medicine, ⁵Department of Psychiatry, Armed Forces Capital Hospital*

P13-4 The effect of Habit reversal treatment in children and adolescent with Tourette Disorder

Young Sook KWACK
Department of Psychiatry, Jeju National University

P13-5 The Risk of Hospitalization for Motor Vehicle Accident Injury in Narcolepsy and the Benefits of Stimulants Use

Tien-Yu CHEN^{1,3}, Wei-Chung MAO², Nian-Sheng TZENG¹, Cheryl Ch YANG³, Terry Bj KUO³, Chi-Hsiang CHUNG⁴,
 Wu-Chien CHIEN⁴
¹*Department of Psychiatry, Tri-Service General Hospital; School of Medicine, National Defense Medical Center, Taipei, Taiwan,*
²*Department of Psychiatry, Cheng Hsin General Hospital, Taipei, Taiwan, ³Institute of brain science, National Yang-Ming University, Taipei, Taiwan,*
⁴*Department of Medical Research, Tri-Service General Hospital, National Defense Medical Center, Taipei, Taiwan*

P13-6 Comparative study on suvorexant and antipsychotic drugs for delirium

Kazumaro OKINO^{1,2}, Hirohisa SUZUKI^{1,2}, Hiroto TOMIOKA^{1,2}, Hiroki YAMADA^{1,2}, Shinji NOZAKI^{1,2}, Akira IWANAMI²,
 Astuko INAMOTO^{1,2}
¹*Mental Care Center, Showa University Northern Yokohama Hospital, Kanagawa, Japan,*
²*Department of Neuropsychiatry, Showa University School of Medicine*

P13-7 Discontinuation rate of doxepin in insomnia disorder patients

Jong-Hyun JEONG, Ji-Hyeon LEE, Sung-Min KIM, Seung-Chul HONG, Ho-Jun SEO, Tae-Won KIM
Department of Psychiatry, St. Vincent's Hospital, College of Medicine, The Catholic University of Korea

Childhood & Adolescent Disorders 2

Chair: Taku YAMAGUCHI (*Department of Pharmacotherapeutics and Neuropsychopharmacology, Faculty of Pharmaceutical Sciences, Nagasaki International University, Japan*)

P14-1 Impaired neurogenesis in the dentate gyrus of adult ShatiKO mice

Bolati WULAER^{1,2}, Kazuo KUNISAWA³, Willy Jaya SUENTO^{2,4}, Tsubasa IIDA³, Aika KOSUGE³, Atsumi NITTA⁵, Akihiro MOURI³, Kuniaki SAITO^{1,2}, Toshitaka NABESHIMA¹

¹Advanced Diagnostic System Research Laboratory, Fujita Health University Graduate School of Health Science, Aichi, Japan,

²Department of Disease Control and Prevention, Fujita Health University Graduate School of Health Science, Aichi, Japan,

³Department of Regulatory Science for Evaluation & Development of Pharmaceuticals & Devices, Fujita Health University Graduate School of Health Science, Aichi, Japan,

⁴Department of Psychiatry, Hasanuddin University Faculty of Medicine, South Sulawesi, Indonesia,

⁵Department of Pharmaceutical Therapy and Neuropharmacology, Graduate School of Medicine and Pharmaceutical Sciences, University of Toyama, Toyama, Japan

P14-2 The effects of valproic acid for abnormal sleep rhythm in mice with partial defect of Srrm4

Miho TANAKA^{1,2,3}, Yoshimi KAGA², Yuka SHIRAKAWA², Masumi INAGAKI²

¹Department of Neuropsychiatry, The University of Tokyo Hospital,

²Department of Developmental Disorders, National Institute of Mental Health, NCNP,

³Addictive Substance Project, Tokyo Metropolitan Institute of Medical Science

P14-3 Involvement of catecholaminergic and GABAergic mediations in the anxiety-related behavior induced by long-term powdered food feeding

Fukie YAOITA¹, Masahiro TSUCHIYA², Yuichiro ARAI³, Takeshi TADANO⁴, Koichi TAN-NO¹

¹Department of Pharmacology, Faculty of Pharmaceutical Sciences, Tohoku Medical and Pharmaceutical University, Miyagi, Japan,

²Department of Nursing, Tohoku Fukushi University, Miyagi, Japan, ³Tokyo Ariake University of Medical and Health Science, Tokyo, Japan,

⁴Complementary and Alternative Medicine Clinical Research and Development, Graduate School of Medicine Sciences, Kanazawa University, Ishikawa, Japan

P14-4 Correlations between behavioral phenotype and biochemical data in developmental disorder model mice

Ikuko YAMADA, Tomoko KUSHIDA, Ikuo MIURA, Tamio FURUSE, Masaru TAMURA

Technology and Development Team for Mouse Phenotype Analysis, RIKEN BioResource Research Center, Tsukuba, Japan

P14-5 Phenotypic characterization of developmental disorder models by using comprehensive behavioral phenotyping pipeline in the Japan Mouse Clinic

Tamio FURUSE¹, Ikuko YAMADA¹, Tomoko KUSHIDA¹, Ikuo MIURA¹, Shinya AYABE¹, Atsushi YOSHIKI¹, Hidenori YAMASUE², Shigeharu WAKANA³, Masaru TAMURA¹

¹RIKEN BioResource Research Center, ²Department of Psychiatry, Hamamatsu University School of Medicine,

³Foundation for Biomedical Research and Innovation at Kobe

P14-6 Prevalence of Homosexual and Bisexual Adolescents in Bandung, Indonesia

Ervana Ikha YUSNITA¹, Lucky Saputra TAN², Veranita - PANDIA²

¹RSUD dr. H.M Rabain Muara Enim, Padjadjaran University, ²Padjadjaran Univeristy

Epilepsy

Chair: Yukihiko OHNO (*Department of Pharmacology, Osaka University of Pharmaceutical Sciences, Japan*)

P15-1 A disinhibitory nigra-parafascicular pathway amplifies seizure in temporal lobe epilepsy

Wenkai LIN¹, Bin CHEN¹, Yi WANG¹, Cenglin XU¹, Ying WANG¹, Liying CHEN¹, Heming CHENG¹, Lingyu XU¹, Tingting HU¹, Junli ZHAO¹, Ping DONG¹, Yi GUO², Shihong ZHANG¹, Shuang WANG², Yudong ZHOU¹, Weiwei HU¹, Zhong CHEN^{1,2}

¹Department of Pharmacology, Key Laboratory of Medical Neurobiology of the Ministry of Health of China, School of Basic Medical Sciences, College of Pharmaceutical Sciences, Zhejiang University, Hangzhou, China,

²Epilepsy Center, Department of Neurology, Second Affiliated Hospital, School of Medicine, Zhejiang University, Hangzhou, China

P15-2 Nonconvulsive Status Epilepticus Manifesting as Catatonia or Stupor: A Systematic Review

Kamiyu OGYU^{1,2}, Shin KUROSE¹, Masaru MIMURA¹, Hiroyoshi TAKEUCHI¹

¹Department of Neuropsychiatry, School of Medicine, Keio University, ²National Hospital Organization Shimofusa Psychiatric Medical Center

- P15-3 Dentate gyrus newly-generated neurons prolong seizure maintenance in temporal lobe epilepsy**
 Liying CHEN¹, Yi WANG¹, Cenglin XU¹, Yingwei XU¹, Ying WANG¹, Heming CHENG¹, Fan FEI¹, Zhong CHEN^{1,2}
¹Department of Pharmacology, Key laboratory of Medical Neurobiology of the Ministry of Health of China, College of Pharmaceutical Sciences, Zhejiang University, Hangzhou, China, ²Epilepsy Center, Second Affiliated Hospital, School of Medicine, Zhejiang University, Hangzhou, China
- P15-4 PHD finger protein 24 (Phf24)-null rats exhibit increased seizure sensitivity, emotional defects and cognitive impairment**
 Naofumi KUNISAWA¹, Tadao SERIKAWA^{1,2}, Saki SHIMIZU¹, Masaki KATO¹, Higor A IHA¹, Masato KINBOSHI¹, Hisao NISHIKAWA³, Yu SHIRAKAWA³, Masashi SASA⁴, Yukihiko OHNO¹
¹Department of Pharmacology, Osaka University of Pharmaceutical Sciences, Osaka, Japan, ²Institute of Laboratory Animals, Graduate School of Medicine, Kyoto University, Kyoto, Japan, ³KAC Co. Ltd, Kyoto, Japan, ⁴Nagisa Clinic, Osaka, Japan
- P15-5 Effects of deep brain stimulation at the dorsal raphe on hippocampal kindling and kindled model of seizure in mice**
 Heming CHENG, Yi WANG, Zhong CHEN
 Department of Pharmacology, Zhejiang University
- P15-6 Establishment of a high-throughput drebrin immunocytochemical assay for NMDA receptor inhibition of new psychoactive substances**
 Toshinari MITSUOKA^{1,3}, Kenji HANAMURA¹, Noriko KOGANEZAWA¹, Ruri KIKURA-HNAJIRI², Tomoaki SHIRAO¹, Yuko SEKINO³
¹Department of Neurobiology and Behavior, Gunma University Graduate School of Medicine, ²Division of Pharmacognosy, Phytochemistry and Narcotics, National Institute of Health Sciences, ³Endowed Laboratory of Human Cell-Based Drug Discovery, Graduate School of Pharmaceutical Sciences, The University of Tokyo

Poster Session 16 October 11 (Fri), 13:40 - 15:10, Poster Hall (Fukuoka International Congress Center, 2F, Multi-purpose Hall)

Neurological Disorders

Chair: Kazuki NAGAYASU (Department of Molecular Pharmacology, Graduate School of Pharmaceutical Sciences, Kyoto University, Japan)

- P16-1 Hippocampal neuronal excitability in dopamine deficient mice during hyperlocomotor activity caused by novel environment exposure**
 Masayo FUJITA¹, Yukiko OCHIAI^{1,2}, Taishi Clark TAKEDA¹, Yoko HAGINO¹, Kazuto KOBAYASHI³, Kazutaka IKEDA¹
¹Addictive Substance Project, Tokyo Metropolitan Institute of Medical Science, ²Department of Neurology, Tokyo Metropolitan Neurological Hospital, ³Department of Molecular Genetics, Institute of Biomedical Sciences, Fukushima Medical University
- P16-2 KCC2, a K⁺-Cl⁻ co-transporter, is a possible target to attenuate the neuronal dysfunction that is associated with radiation therapy for brain tumor**
 Kento IGARASHI^{1,2}, Kazuo TOMITA^{1,2}, Koh-ichi TANAKA^{1,2}, Yoshikazu KUWAHARA^{1,3}, Nobuyoshi NISHIYAMA², Akihiro KURIMASA³, Tomoaki SATO¹
¹Lab. of applied phapharmacology, Graduate school of medical and dental sciences, Kagoshima University, Kagoshima, Japan, ²Department of Pharmacy, School of Pharmacy, Hyogo University of Health Sciences, Kobe, Japan, ³Department of Radiation Biology and Medicine, Faculty of Medicine, Tohoku Medical and Pharmaceutical University, Sendai, Japan
- P16-3 Analysis of the effects of serotonin related drugs on hyperlocomotion in dopamine-deficient mice**
 Yukiko OCHIAI^{1,2}, Masayo FUJITA¹, Yoko HAGINO¹, Kazuto KOBAYASHI³, Ryoichi OKIYAMA², Kazutaka IKEDA¹
¹Addictive Substance Project, Tokyo Metropolitan Institute of Medical Science, ²Department of Neurology, Tokyo Metropolitan Neurological Hospital, ³Department of Molecular Genetics, Institute of Biomedical Sciences, Fukushima Medical University
- P16-4 Functional roles of glutamate transporter in neurodevelopmental processes**
 Mizuki UCHIDA¹, Erika OTA¹, Akira YOSHIMI¹, Shinji KITAGAKI², Norio OZAKI³, Tomomi AIDA⁴, Kohichi TANAKA⁴, Yukihiko NODA¹
¹Division of Clinical Sciences and Neuropsychopharmacology, Faculty of Pharmacy, Meijo University, Nagoya, Japan, ²Medicinal Chemistry, Meijo University Faculty of Pharmacy, Nagoya, Japan, ³Department of Psychiatry, Nagoya University Graduate School of Medicine, Nagoya, Japan, ⁴Laboratory of Molecular Neuroscience, Medical Research Institute, Tokyo Medical and Dental University (TMD), Tokyo, Japan

- P16-5 The deficit of quinolinic acid phosphoribosyltransferase induces hypolocomotion and cognitive impairment through impairment of dopaminergic neuronal function**
 Moe NIIJIMA¹, Akihiro MOURI^{1,4}, Tomoaki TESHIGAWARA², Kazuo KUNISAWA¹, Hisayoshi KUBOTA¹, Mami HIRAKAWA¹, Yuko MORI², Masato HOSHI², Yasuko YAMAMOTO², Toshitaka NABESHIMA^{3,4}, Kuniaki SAITO^{2,4}
¹Department of Regulatory Science for Evaluation & Development of Pharmaceuticals & Devices, Fujita Health University Graduate School of Health Science, ²Department of Disease Control and Prevention, Fujita Health University Graduate School of Health Sciences, ³Advanced Diagnostic System Research Laboratory, Fujita Health University Graduate School of Health Sciences, ⁴Japanese Drug Organization of Appropriate Use and Research
- P16-6 Dopaminergic modulation of $\alpha 7$ nicotinic acetylcholine receptor-mediated tremor in mice**
 Masaki KATO, Naofumi KUNISAWA, Saki SHIMIZU, Yuika ISHIKURA, Natsuki HIRATA, Mizuki YASUNAGA, Yukihiko OHNO
 Dept. Pharmacol., Osaka Univ. Pharm. Sci., Osaka, Japan
- P16-7 Involvement of region-specific glial dysfunction in rotenone neurotoxicity**
 Ikuko MIYAZAKI¹, Masato ASANUMA¹, Shinki MURAKAMI¹, Ryo KIKUOKA^{1,2}, Nami ISOOKA¹, Chiharu SOGAWA³, Norio SOGAWA⁴, Yoshihisa KITAMURA²
¹Dept. of Med. Neurobiol., Okayama Univ. Grad. Sch. of Med., Dent. & Pharmaceut. Sci., ²Dept. of Clin. Pharm., Okayama Univ. Grad. Sch. of Med., Dent. & Pharmaceut. Sci., ³Dept. of Dent. Pharmacol., Okayama Univ. Grad. Sch. of Med., Dent. & Pharmaceut. Sci., ⁴Dept. of Dent. Pharmacol., Matsumoto Dent. Univ.

Poster Session 17 October 12 (Sat), 16:40 - 18:10, Poster Hall (Fukuoka International Congress Center, 2F, Multi-purpose Hall)

Dementia 1

Chair: Takeshi MORIHARA (Department of Precision Medicine for Dementia, Osaka University Graduate School of Medicine, Japan)

- P17-1 Effects of Dementia-Friendly Environment Project on Dementia Recognition and Changes in Attitude**
 Eunjeong LEE¹, KwangHun LEE¹, Kyung-Phil KWAK^{1,2}
¹Department of Psychiatry, college of medicine, Deongguk university, Korea, ²Provincial Dementia Center, Kyungsangbuk-do
- P17-2 5-HT_{1A} partial agonist tandospirone for behavioral and psychological symptoms in oldest-old patients with dementia in a specialized elderly nursing home**
 Shinichiro OCHI¹, Aya SANTA², Takaaki MORI¹, Jun-ichi IGA¹, Shu-ichi UENO¹
¹Department of Neuropsychiatry, Ehime University Graduate School of Medicine, Ehime, Japan, ²Nursing home Galilee
- P17-3 Withdraw**
- P17-4 Systemic inflammation-induced memory dysfunction is prevented by blockade either microglia activation or histone deacetylase**
 Naoki TAKADA, Yoki NAKAMURA, Kazue NAKASHIMA, Norimitsu MORIOKA
 Department of Pharmacology, Graduate school of Biomedical & Health Sciences, Hiroshima University
- P17-5 Ghrelin cascade changes in the peripheral blood of Japanese patients with Alzheimer's disease**
 Junichi IGA, Yuta YOSHINO, Yu FUNAHASHI, Shunsuke NAKATA, Yuki OZAKI, Kiyohiro YAMAZAKI, Taku YOSHIDA, Takaaki MORI, Yoko MORI, Shinichiro OCHI, Shu-ichi UENO
 Department of Neuropsychiatry, Molecules and Function, Ehime University Graduate School of Medicine
- P17-6 Touchscreen-based tests detect cognitive impairment at an early stage in APP knock-in mice model**
 Md. Ali Bin SAIFULLAH¹, Okiru KOMINE², Akira SOBUE², Koji YAMANAKA², Hiroyuki MIZOGUCHI¹
¹Research Center for Next-Generation Drug Development, Research Institute of Environmental Medicine, Nagoya University, ²Department of Neuroscience and Pathology, Research Institute of Environmental Medicine, Nagoya University

Poster Session 18 October 13 (Sun), 16:40 - 18:10, Poster Hall (Fukuoka International Congress Center, 2F, Multi-purpose Hall)

Dementia 2

Chair: Masato HOSOKAWA (Department of Dementia and Higher Brain Function, Tokyo Metropolitan Institute of Medical Science, Japan)

- P18-1 Amyloid- β plaque formation and reactive gliosis are required for induction of cognitive deficits in App knock-in mouse models of Alzheimer's disease**
 Yasufumi SAKAKIBARA¹, Michiko SEKIYA¹, Takashi SAITO², Takaomi C. SAIDO², Koichi M. IJIMA¹
¹Department of Alzheimer's Disease Research, National Center for Geriatrics and Gerontology, Aichi, Japan, ²Laboratory of Proteolytic Neuroscience, RIKEN CBS, Saitama, Japan

P18-2 Induction of Alzheimer's disease pathology by early life stress

Tomoko TANAKA¹, Shinobu HIRAI¹, Masato HOSOKAWA², Takashi SAITO³, Takaomi SAIDO³, Masato HASEGAWA², Haruo OKADO¹

¹Department of Brain Development and Neural Regeneration, Tokyo Metropolitan Institute of Medical Science,

²Department of Dementia and Higher brain Function, Tokyo Metropolitan Institute of Medical Science,

³Laboratory for Proteolytic Neuroscience, RIKEN Center for Brain Science

P18-3 The assessment of temporal changes in cognitive functions in App knock-in mouse models

Daisuke JOHO¹, Takeru SUZUKI¹, Masaya FUJIWARA², Takashi SAITO³, Takaomi SAIDO³, Masaki KAKEYAMA^{1,2,4}

¹Lab. of Environmental Brain Science, Graduate School of Human Sciences, Waseda University, Saitama, Japan,

²Research Institute for Environmental Medical Sciences, Waseda University, Saitama, Japan,

³Lab. for Proteolytic Neuroscience, RIKEN Center for Brain Science, Saitama, Japan,

⁴Lab. of Environmental Brain Science, Faculty of Human Sciences, Waseda University, Saitama, Japan

P18-4 Learning impairment of double transgenic mice Foxo3a deficit and α-synuclein overexpressed mice

Wang FAN¹, Kyohei YAMADA¹, Kyosuke UNO^{1,2}, Hiroshi MARUYAMA¹, Noboru MOTOYAMA², Wakako MARUYAMA³, Atsumi NITTA¹

¹Department of pharmaceutical Therapy and Neuropharmacology, Faculty of Pharmaceutical Sciences, Graduate School and Pharmaceutical Sciences, University of Toyama, Toyama, Japan,

²Department of Health and Nutrition Faculty of Psychological & Physical Science Aichi Gakuin University, Aichi, Japan,

³Laboratory of Biochemistry, Department of Human Nutrition, Sugiyama Jogakuen University, Aichi, Japan

P18-5 Establishment of a decision-making task in mice

Takeru SUZUKI¹, Daisuke JOHO¹, Masaki KAKEYAMA^{1,2,3}

¹Lab. of Environmental Brain Science, Graduate School of Human Sciences, Waseda University, Saitama, Japan,

²Research Institute for Environmental Medical Sciences, Waseda University, Saitama, Japan,

³Lab. of Environmental Brain Science, Faculty of Human Sciences, Waseda University, Saitama, Japan

P18-6 Pharmacokinetic properties and brain penetration of ferulic acid in rats

Tomoka HATTORI¹, Haruka SAHASHI¹, Kouki HARA¹, Haruka SHIMODA¹, Yuuna SADAHA¹, Midori SODA¹, Hironao NAKAYAMA², Hiroaki MURASE³, Kiyoyuki KITAICHI¹

¹Lab. of Pharmaceutics, Department of Biomedical Pharmaceutics, Gifu Pharmaceutical University, Gifu, Japan,

²Department of Medical Science and Technology, Faculty of Health Sciences, Hiroshima International University, Higashihiroshima, Japan,

³Glavia Co., Ltd, Tokyo, Japan

P18-7 A role of Shati/Nat8l in the medial prefrontal cortex on cognitive function in mice

Katsunori AZUMA¹, Meriem HADDAR¹, Kyosuke UNO², Shin-ichi MURAMATSU^{3,4}, Atsumi NITTA¹

¹Department of Pharmaceutical Therapy and Neuropharmacology, Faculty of Pharmaceutical Sciences, Graduate School of Medicine and Pharmaceutical Sciences, University of Toyama, Toyama, Japan,

²Laboratory of molecular pharmacology faculty of pharmaceutical sciences, University of Setsunan, Osaka, Japan,

³Division of Neurology, Department of Medicine, Jichi Medical University, Shimotsuke, Japan,

⁴Center for Gene and Cell Therapy, The Institute of Medical Science, The University of Tokyo, Tokyo, Japan

Poster Session 19

October 11 (Fri), 13:40 - 15:10, Poster Hall (Fukuoka International Congress Center, 2F, Multi-purpose Hall)

Pain 1

Chair: Takayuki NAKAGAWA (Department of Clinical Pharmacology and Therapeutics, Kyoto University, Japan)

P19-1 OX₂ receptors mediate orexin-A-induced inhibition of KCl-induced increase in intracellular calcium ion levels in neurons derived from dorsal root ganglion of rats with sciatic nerve ligation

Tadashi SAIGUSA¹, Yuri AONO¹, Manabu ISHIKAWA², Masataka KIMURA³

¹Department of Pharmacology, Nihon University School of Dentistry at Matsudo, Chiba, Japan,

²Department of Anesthesiology, Nihon University School of Dentistry at Matsudo, Chiba, Japan,

³Department of Removal Prosthodontics, Nihon University School of Dentistry at Matsudo, Chiba, Japan

P19-2 Investigation of neuropathic allodynia with sensory and emotional components using an optogenetic approach

Makoto TSUDA¹, Ryoichi TASHIMA¹, Keisuke KOGA¹, Hiromu YAWO², Hidemasa FURUE³

¹Department of Life Innovation, Graduate School of Pharmaceutical Sciences, Kyushu University, Fukuoka, Japan,

²Department of Developmental Biology and Neuroscience, Tohoku University Graduate School of Life Sciences, Miyagi, Japan,

³Department of Neurophysiology, Hyogo College of Medicine, Hyogo, Japan

P19-3 Role of noradrenaline and serotonin in mice with acute or chronic pruritus

Yu MIYAHARA, Hideki FUNAHASHI, Ayaka HARUTA-TSUKAMOTO, Kosuke EBIHARA, Toshikazu NISHIMORI, Yasushi ISHIDA

Department of Psychiatry, Faculty of Medicine, University of Miyazaki, Miyazaki, Japan

P19-4 Chronic pain-induced plastic change in the extended amygdala neural circuit causes maladaptive anxiety

Naoki YAMAUCHI, Hiroshi NOMURA, Taiju AMANO, Masabumi MINAMI
 Department of Pharmacology, Graduate School of Pharmaceutical Sciences, Hokkaido University

P19-5 Antidepressant effects of resolvin D1 and resolvin D2 in chronic pain model mice

Hiroe SUZUKI, Natsuko HITORA-IMAMURA, Masabumi MINAMI
 Department of Pharmacology, Graduate School of Pharmaceutical Sciences, Hokkaido University

P19-6 Paeonol inhibits pruritogen-induced scratching behavior in mice

Yu-Ting CHU¹, Sih-Ting LUO¹, Hsin-Yi CHUNG¹, Iona MACDONALD¹, Jaung-Geng LIN², Tsung-Jung HO^{3,4},
 Pei-Hsuan SHEN⁵, Yi-Hung CHEN¹

¹Graduate Institute of Acupuncture Science, China Medical University, Taichung, Taiwan,

²School of Chinese Medicine, China Medical University, Taichung, Taiwan.,

³Department of Chinese Medicine, Hualien Tzu Chi Hospital, Hualien, Taiwan.,

⁴School of Post-Baccalaureate Chinese Medicine, Tzu Chi University, Hualien, Taiwan,

⁵Division of Chinese Medicine, An Nan Hospital, China Medical University, Tainan, Taiwan

P19-7 Activation of δ_1 and δ_2 receptors enhance dopamine efflux in the nucleus accumbens of freely moving rats through neural mechanisms involving different combinations of GABA receptor subtypes

Yuri AONO¹, Yuriko WATANABE², Tadashi SAIGUSA¹

¹Department of Pharmacology, Nihon University School of Dentistry at Matsudo, Chiba, Japan,

²Department of Oral Surgery, Nihon University School of Dentistry at Matsudo, Chiba, Japan

Poster Session 20

October 12 (Sat), 16:40 - 18:10, Poster Hall (Fukuoka International Congress Center, 2F, Multi-purpose Hall)

Pain 2

Chair: Makoto TSUDA (Department of Life Innovation, Graduate School of Pharmaceutical Sciences, Kyushu University, Japan)

P20-1 Associations between genetic polymorphisms on chromosome 14q32 and effects of opioid analgesics and chronic pain

Yoshihiko KOSAKI^{1,2}, Daisuke NISHIZAWA¹, Hideko ARITA³, Kazuo HANAOKA³, Choku YAJIMA³, Masako ISEKI⁴,
 Jitsu KATO⁵, Setsuro OGAWA⁶, Ayako HIRANUMA^{1,7}, Shinya KASAI¹, Junko HASEGAWA¹, Kyoko NAKAYAMA¹,
 Yuko EBATA¹, Yoshihiko KOUKITA², Tatsuya ICHINOHE², Masakazu HAYASHIDA^{1,4,8}, Ken-ichi FUKUDA⁹, Kazutaka IKEDA¹

¹Addictive Substance Project, Tokyo Metropolitan Institute of Medical Science, Tokyo, Japan,

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³Department of Anesthesiology and Pain Relief Center, JR Tokyo General Hospital, Tokyo, Japan,

⁴Department of Anesthesiology & Pain Medicine, Juntendo University School of Medicine, Tokyo, Japan,

⁵Department of Anesthesiology, Nihon University School of Medicine, Tokyo, Japan, ⁶Nihon University University Research Center, Tokyo, Japan,

⁷Department of Surgery, Toho University Sakura Medical Center, Sakura, Japan,

⁸Department of Anesthesiology, Saitama Medical University International Medical Center, Hidaka, Japan,

⁹Department of Oral Health and Clinical Science, Tokyo Dental College, Tokyo, Japan

P20-2 Association of a candidate locus for human opioid sensitivity identified in a genome-wide association study in patients undergoing laparoscopic-assisted colectomy with postoperative opioid requirements in patients undergoing painful cosmetic surgery

Rie INOUE^{1,2}, Daisuke NISHIZAWA¹, Junko HASEGAWA¹, Kyoko NAKAYAMA¹, Ken-ichi FUKUDA³, Hiroyuki SUMIKURA²,
 Masakazu HAYASHIDA^{1,2,4}, Kazutaka IKEDA¹

¹Addictive Substance Project, Tokyo Metropolitan Institute of Medical Science, Tokyo, Japan,

²Department of Anesthesiology & Pain Medicine, Graduate School of Medicine, Juntendo University, Tokyo, Japan,

³Department of Oral Health & Clinical Science, Tokyo Dental College, Tokyo, Japan,

⁴Department of Anesthesiology, Saitama Medical University International Medical Center, Hidaka, Japan

P20-3 Association between a protease-activated receptor 2 gene polymorphism and cold water immersion-induced pain sensitivity

Moe SOEDA^{1,2}, Seii OHKA¹, Daisuke NISHIZAWA¹, Manabu SUNO³, Ken-ichi FUKUDA², Tatsuya ICHINOHE⁴,
 Kazutaka IKEDA⁴

¹Tokyo Metropolitan Institute of Medical Science, Tokyo, Japan,

²Department of Oral Health and Clinical Science, Tokyo Dental College, Tokyo, Japan,

³Graduate School of Medicine Dentistry and Pharmaceutical science, Okayama University, Okayama, Japan,

⁴Department of Dental Anesthesiology, Tokyo Dental College, Tokyo, Japan

P20-4 The development of a percutaneously absorbable preparation of oxycodone

Hidetoshi TAGE, Haruka SHIMODA, Aoi GOSHIMA, Suguru ITO, Midori SODA, Kiyoyuki KITAICHI
 Lab. of Pharmaceutics, Department of Biomedical Pharmaceutics, Gifu Pharmaceutical University, Gifu, Japan

P20-5 Paclitaxel, an anti-cancer drug, causes extracellular release of HMGB1, a pro-inflammatory and pro-nociceptive mediator, in Schwann cells derived from neonatal rat sciatic nerves

Fumiko SEKIGUCHI, Rika YAMASHITA, Hiroki YASUI, Atsufumi KAWABATA
Laboratory of Pharmacology and Pathophysiology, Faculty of Pharmacy, Kindai University

P20-6 Endogenous thrombin plays a preventive role against oxaliplatin-induced peripheral neuropathy: involvement of thrombomodulin-dependent inactivation of HMGB1 by thrombin

Maho TSUBOTA¹, Ryotaro FUKUDA¹, Yusuke HAYASHI¹, Takaya MIYAZAKI¹, Shin UEDA¹, Masahiro NISHIBORI², Atsufumi KAWABATA¹

¹Laboratory of Pharmacology and Pathophysiology Faculty of Pharmacy, Kindai University, Osaka, Japan,

²Department of Pharmacology, Okayama University Graduate School of Medicine, Okayama, Japan

P20-7 Involvement of HMGB1 in bortezomib-induced peripheral neuropathy in mice

Yuya IKEDA¹, Takaya MIYAZAKI¹, Maho TSUBOTA¹, Shiori TOMITA¹, Fumiko SEKIGUCHI¹, Masahiro NISHIBORI², Atsufumi KAWABATA¹

¹Laboratory of Pharmacology and Pathophysiology, Faculty of Pharmacy, Kindai University, Osaka, Japan,

²Department of Pharmacology, Okayama University Graduate School of Medicine, Okayama, Japan

Poster Session 21 October 13 (Sun), 16:40 - 18:10, Poster Hall (Fukuoka International Congress Center, 2F, Multi-purpose Hall)

Post-traumatic Stress Disorders

Chair: Satoshi KIDA (*Graduate School of Agriculture and Life Sciences, The University of Tokyo, Japan*)

P21-1 Reduced Awareness of Surroundings Is the Most Central Domain in the Network Structure of Posttraumatic Stress Disorder Symptoms

Seon-Cheol PARK¹, Jinseon KIM², Daeho KIM³

¹Department of Psychiatry, Inje University College of Medicine,

²Department of Epidemiology, Graduate School of Public Health, Seoul National University, South Korea,

³Department of Psychiatry, Hanyang University Guri Hospital, Guri, Republic of Korea

P21-2 Ifenprodil tartrate treatment of adolescents with Post-Traumatic Stress Disorder: a double-blind, placebo-controlled trial

Tsuyoshi SASAKI^{1,2}, Kenji HASHIMOTO³, Yutaka HOSODA^{1,2}, Yasunori ODA², Tomihisa NIITSU², Yuko FUJITA³, Youhei KAWASAKI⁴, Nobuhisa KANAHARA³, Akihiro SHIINA³, Tasuku HASHIMOTO², Masaomi IYO^{1,2,3}

¹Department of Child Psychiatry, Chiba-University Hospital, ²Department of Psychiatry, Graduate School of Medicine, Chiba University,

³Chiba University Center for Forensic Mental Health, ⁴Biostatistics Section, Clinical Research Center, Chiba University Hospital

P21-3 Improvement of PTSD-like Behavior by the Forgetting Effect of Hippocampal Neurogenesis Enhancer Memantine in a Social Defeat Stress Paradigm

Rie ISHIKAWA¹, Chiaki UCHIDA¹, Shiho KITAOKA², Tomoyuki FURUYASHIKI², Satoshi KIDA^{1,3}

¹Department of bioscience, Tokyo University of Agriculture, Tokyo, Japan,

²Division of Pharmacology, Kobe University Graduate School of Medicine, Hyogo, Japan,

³Graduate School of Agriculture and Life Sciences, The University of Tokyo, Tokyo, Japan

P21-4 Mechanisms through the anticholinergic drug trihexylphenidyl reduces PTSD flashbacks and nightmares; The third report

Katsumasa SOGO, Masanobu SOGO, Yoshie OKAWA

SOGO PTSD INSTITUTE in sogo clinic, Hiroshima, Japan

P21-5 Social support moderates association between posttraumatic growth and trauma-related psychopathologies among victims of the Sewol Ferry Disaster

Young-Hoon KO¹, Kyu-Man HAN²

¹Department of Psychiatry, Korea University Ansan Hospital, Korea University College of Medicine, Ansan, Korea,

²Department of Psychiatry, Korea University Anam Hospital, Korea University College of Medicine, Seoul, Korea

P21-6 Effects of processing conditions on plasma L-glutamate levels in non-psychiatric healthy subjects

Shinya WATANABE, Hidehiro UMEHARA, Yukiko TOMIOKA, Makoto KINOSHITA, Masahito NAKATAKI, Shusuke NUMATA, Tetsuro OHMORI

Department of Psychiatry, Institute of Biomedical Science, Tokushima University Graduate School

Schizophrenia 1

Chair: Sangyeol LEE (*Wonkwang University School of Medicine and Hospital, Korea*)

- P22-1 Real-world effectiveness of antipsychotic monotherapy and polytherapy in 1543 patients with acute-phase schizophrenia**
 Kotaro HATTA¹, Hana HASEGAWA², Atsushi IMAI³, Yasuhiko SUDO⁴, Fumiyoshi MORIKAWA⁵, Shigemasa KATAYAMA⁶, Haruo WATANABE⁷, Takuya ISHIZUKA⁸, Mitsuru NAKAMURA⁹, Fuminari MISAWA¹⁰, Kiyoshi FUJITA¹¹, Shigeru OZAKI¹², Kentaro UMEDA³, Hiroyuki NAKAMURA¹³, Yutaka SAWA⁷, Naoya SUGIYAMA²
¹Department of Psychiatry, Juntendo University Nerima Hospital, Tokyo, Japan, ²Department of Psychiatry, Numazu Chuo Hospital, Tokyo, Japan, ³Department of Psychiatry, Tokyo Metropolitan Matsuzawa Hospital, Tokyo, Japan, ⁴Department of Psychiatry, Tosa Hospital, Tokyo, Japan, ⁵Department of Psychiatry, Asahikawa Keisenkai Hospital, Tokyo, Japan, ⁶Department of Psychiatry, Seijin Hospital, Tokyo, Japan, ⁷Department of Psychiatry, Sawa Hospital, Tokyo, Japan, ⁸Department of Psychiatry, Hasegawa Hospital, Tokyo, Japan, ⁹Department of Psychiatry, Narimasu Kosei Hospital, Tokyo, Japan, ¹⁰Department of Psychiatry, Yamanashi Prefectural Kita Hospital, Tokyo, Japan, ¹¹Department of Psychiatry, The Okehazama Hospital, Tokyo, Japan, ¹²Department of Psychiatry, Toshima Hospital, Tokyo, Japan, ¹³Department of Environmental and Preventive Medicine, Kanazawa University Graduate School of Medical Science, Tokyo, Japan
- P22-2 Replacement with the optimal antipsychotics for dopamine supersensitivity (ROADS) study: A multicenter, randomized, assessor-blinded, active-control trial of blonanserin in patients with dopamine supersensitivity psychosis**
 Tomihisa NIITSU¹, Tatsuki HATA^{1,2}, Masahiko NISHIMOTO³, Yutaka HOSODA^{2,4}, Ryota SEKI^{1,5}, Atsushi KIMURA¹, Yasunori ODA¹, Yohei KAWASAKI⁶, Tasuku HASHIMOTO^{1,7}, Masatomo ISHIKAWA¹, Nobuhisa KANAHARA^{1,8}, Masaomi IYO^{1,4,8}, - THE ROADS STUDY GROUP¹
¹Department of Psychiatry, Chiba University Graduate School of Medicine, Chiba, Japan, ²Fujita Hospital, Sosa, Chiba, Japan, ³Soshu Hospital, Atsugi, Kanagawa, Japan, ⁴Child Psychiatry, Chiba University Hospital, Chiba, Japan, ⁵Chiba Hospital, Funabashi, Chiba, Japan, ⁶Clinical Research Center, Chiba University Hospital, Chiba, Japan, ⁷Sodegaura-Satsukidai Hospital, Sodegaura, Chiba, Japan, ⁸Division of Medical Treatment and Rehabilitation, Center for Forensic Mental Health, Chiba University, Chiba, Japan
- P22-3 Potential Link between T102C Polymorphism in the Serotonin Receptors (5-HT2A) Gene and Treatment Response of Risperidone on Schizophrenia**
 Saidah SYAMSUDDIN, Faisal IDRUS, Andi Fatimah YUNIASARI, Andi Jayalangkara TANRA, Sonny Teddy LISAL
University of Hasanuddin
- P22-4 Comparison of maintenance rate of two long-acting injectable antipsychotics (paliperidone palmitate and aripiprazole once-monthly) in schizophrenia**
Saeheon JANG
Department of psychiatry, Bongseng Memorial Hospital
- P22-5 Switching antipsychotics to blonanserin in patients with schizophrenia: an open-label, prospective, multicenter study**
 Won-Myong BAHK¹, Young Sup WOO¹, Bo-Hyun YOON², Bong-Hee JEON², Jeong Seok SEO³, Beomwoo NAM³, Sang-Yeol LEE⁴, Young-Myo JAE⁵, Sae-Heon JANG⁵, Hun Jeong EUN⁶, Seung-Hee WON⁷, Kwanghun LEE⁸, Jonghun LEE⁹, Moon-Doo KIM¹⁰
¹Department of Psychiatry, College of Medicine, The Catholic University of Korea, Seoul, ²Department of Psychiatry, Naju National Hospital, Naju, ³Department of Psychiatry, Konkuk University School of Medicine, Chungju, ⁴Department of Psychiatry, School of Medicine, Wonkwang University, Iksan, ⁵Department of Psychiatry, Bongseng Memorial Hospital, Busan, ⁶Department of Neuropsychiatry, Presbyterian Medical Center-Jesus Hospital, Jeonju, ⁷Department of Psychiatry, School of Medicine, Kyungpook National University, Daegu, ⁸Department of Psychiatry, College of Medicine, Dongguk University, Gyeongju, ⁹Department of Psychiatry, School of Medicine, Catholic University of Daegu, Daegu, ¹⁰Department of Psychiatry, Jeju National University Hospital, Jeju
- P22-6 Clinical Global Impression of Severity after aripiprazole once-monthly versus paliperidone palmitate once-monthly and the effects observed in patients with schizophrenia stratified by disease severity: a post-hoc analysis of QUALIFY**
 Ross BAKER¹, Simon Nitschky SCHMIDT², Pedro SUCH², Peter HERTEL², Jessica MADERA¹
¹Otsuka Pharmaceutical Development & Commercialization, Inc., Princeton, USA, ²H. Lundbeck A/S, Valby, Denmark
- P22-7 Effects of Aripiprazole Once-Monthly on Patient Reported Outcomes in Patients With Schizophrenia: A Mirror Study**
 Ross BAKER¹, Cathy ZHAO¹, Anna ERAMO², Timothy PETERS-STRICKLAND¹, Robert MCQUADE¹
¹Otsuka Pharmaceutical Development & Commercialization, Inc., Princeton, USA, ²H. Lundbeck A/S, Valby, Denmark

Schizophrenia 2

Chair: Chieh-Hsin LIN (*Kaohsiung Chang Gung Memorial Hospital, Taiwan*)

- P23-1 Early improvement of PANSS items in patients with schizophrenia treated with brexpiprazole: a post hoc analysis of three randomized studies**
 Catherine WEISS¹, Stine Rasmussen MEEHAN², John OUYANG³, Mary HOBART¹
¹Department of Medical Affairs, Otsuka Pharmaceutical Development & Commercialization Inc.,
²Department of Medical Affairs Psychiatry, H. Lundbeck A/S,
³Department of Biostatistics, Otsuka Pharmaceutical Development & Commercialization Inc.
- P23-2 Symptomatic and functional response to brexpiprazole treatment in patients with acute schizophrenia by age**
 Catherine WEISS¹, Erin MACKENZIE², Francois THERRIEN³, Peter ZHANG⁴, Stine Rasmussen MEEHAN⁵
¹Department of Medical Affairs, Otsuka Pharmaceutical Development & Commercialization Inc.,
²Department of Medical Affairs, Lundbeck Canada Inc., ³Department of Medical Affairs, Otsuka Canada Pharmaceutical Inc.,
⁴Department of Biostatistics, Otsuka Pharmaceutical Development & Commercialization Inc.,
⁵Department of Medical Affairs Psychiatry, H. Lundbeck A/S
- P23-3 Efficacy and Safety of Lurasidone in Acutely Psychotic Patients with Schizophrenia: A 6-Week, Randomized, Double-Blind, Placebo-Controlled Phase 3 Study (JEWEL Study)**
 Kentaro TAKAI¹, Masaomi IYO², Jun ISHIGOOKA³, Masatoshi NAKAMURA¹, Reiko SAKAGUCHI¹, Keisuke OKAMOTO¹, Teruhiko HIGUCHI^{4,5}
¹Sumitomo Dainippon Pharma Co., Ltd., Japan, ²Chiba University Graduate School of Medicine, Japan,
³Institute of CNS Pharmacology, Japan, ⁴Japan Depression Center, Japan, ⁵The National Center of Neurology and Psychiatry, Japan
- P23-4 The Attitude of Schizophrenic Patients Towards Antipsychotic Long-Acting Injections**
 Nan-Ying CHIU^{1,2}, Cheng-Ju CHANG¹, Jeng-Fang LIN¹, Lin-Chi CHIU¹, Wen-Yu HSU², Ting-Gang CHANG², Tzu-Yun YANG²
¹Department of Psychiatry, Evergreen Campus, Lugang Christian Hospital,
²Department of Psychiatry, Changhua Christian Hospital, Changhua, Taiwan
- P23-5 Gabapentin enacarbil for antipsychotic induced akathisia in schizophrenia patients: A pilot open-labeled study**
 Masahiro TAKEISHIMA, Kazuo MISHIMA
 Department of Neuropsychiatry, Akita University Graduate School of Medicine
- P23-6 Efficacy and side effect of Pyridoxamine for patients with schizophrenia**
 Mitsuhiro MIYASHITA, Kazuya TORIUMI, Kazuhiro SUZUKI, Yasue HORIUCHI, Akane YOSHIKAWA, Akiko KOBORI, Masanari ITOKAWA, Makoto ARAI
 Project for Schizophrenia Research, Tokyo Metropolitan Institute of Medical Science, Tokyo, Japan
- P23-7 Are "ALL" of neurological symptoms with schizophrenia induced by antipsychotics? –Possibility of Niemann–Pick disease type C–**
 Kumiko FUJII¹, Masamitsu MAEKAWA², Yuji OZEKI³, Yoshikatsu ETO⁴, Takahiro SAITO⁵, Masataka SHINOZAKI¹, Yosefu ARIME⁶, Takahide NAGASHIMA^{7,8}, Hiroaki OKAYASU¹, Kazutaka SHIMODA¹
¹Department of Psychiatry, Dokkyo Medical University School of Medicine, ²Pharmaceutical Sciences, Tohoku University Hospital,
³Department of Psychiatry, Shiga University of Medical Science, ⁴Advanced Clinical Research Center, Institute for Neurological Disorders,
⁵Yokohama Camellia Hospital, ⁶Center for Research Support, Dokkyo Medical University School of Medicine,
⁷Department of Neurology, Japanese Red Cross Ashikaga Hospital, ⁸Department of Neurology, Dokkyo Medical University School of Medicine

Schizophrenia 3

Chair: Mitsuhiro MIYASHITA (*Project for Schizophrenia Research, Tokyo Metropolitan Institute of Medical Science, Japan*)

- P24-1 Withdraw**

- P24-2 Dissociation in Pharmacokinetic Attenuation between Central Dopamine D₂ Receptor Occupancy and Peripheral Blood Concentration of Antipsychotics: A Systematic Review**
 Shin KUROSE¹, Yu MIMURA¹, Hiroyuki UCHIDA¹, Keisuke TAKAHATA², Euitae KIM³, Takefumi SUZUKI⁴, Masaru MIMURA¹, Hiroyoshi TAKEUCHI¹
¹Department of Neuropsychiatry, Keio University School of Medicine, Tokyo, Japan,
²Department of Functional Brain Imaging Research, National Institute of Radiological Sciences, Chiba, Japan,
³Department of Psychiatry, Seoul National University College of Medicine, Seoul, Korea,
⁴Department of Neuropsychiatry, Faculty of Medicine, University of Yamanashi, Yamanashi, Japan
- P24-3 Antipsychotic Treatment for Schizophrenia in the Maintenance Phase: An Updated Systematic Review of the Guidelines and Algorithms**
 Yutaro SHIMOMURA¹, Yuhei KIKUCHI¹, Takefumi SUZUKI³, Hiroyuki UCHIDA^{1,2}, Masaru MIMURA¹, Hiroyoshi TAKEUCHI^{1,4}
¹Keio University, School of Medicine, Department of Neuropsychiatry, Tokyo, Japan,
²Centre for Addiction and Mental Health, Geriatric Mental Health Program, Toronto, Canada,
³Department of Neuropsychiatry, Faculty of Medicine, University of Yamanashi, Yamanashi, Japan,
⁴Centre for Addiction and Mental Health, Toronto, Canada
- P24-4 Withdraw**
- P24-5 Paliperidone Induced Dose-Dependent Sialorrhea with Biperiden Treatment**
 Ji-Yu LIN, Pei-Chuan WU
 Department of Psychiatry, Far Eastern Memorial Hospital, Taiwan
- P24-6 Dystonia After Use Drug Atypical Antipsychotic**
 Innawati JUSUP¹, Irena Aryani PUSPOWARDJO²
¹Psychiatric Department, Faculty of Medicine, Diponegoro University, ²Faculty of Medicine, Diponegoro University
- P24-7 The Medication Satisfaction of Schizophrenic Patients**
 Nan-Ying CHIU^{1,2}, Shu-Hui HU¹, Cheng-Ju CHANG¹, Ting-Gang CHANG², Wen-Yu HSU²
¹Department of Psychiatry, Evergreen Campus, Lugang Christian Hospital,
²Department of Psychiatry, Changhua Christian Hospital, Changhua City, Taiwan

Poster Session 25

October 11 (Fri), 13:40 - 15:10, Poster Hall (Fukuoka International Congress Center, 2F, Multi-purpose Hall)

Schizophrenia 4

Chair: Hajime BABA (Department of Psychiatry & Behavioral Science, Juntendo Graduate School of Medicine, Japan)

- P25-1 Sleep Quality Is Poorly Associated with Metabolic Syndrome in Chronic Schizophrenic Inpatients**
 Ha-Ran JEONG, Yu-Ran JEONG, Su-Hee PARK, Hyun-Ju YUN, Young-Hwa SEA, Hangoenbi KANG
 Department of Psychiatry, Naju National Hospital
- P25-2 Prescription trend of benzodiazepines in schizophrenia patients**
 Junji UNO
 Okehazama Hospital Fujita Kokoro Care Center
- P25-3 Comparative Study of Heart Rate Variability and Emotional Response to Positive and Negative Audiovisual Stimulation in Patients with Chronic Schizophrenia and Healthy Control**
 Jeongwan HONG¹, Sang-Yeol LEE²
¹Iksan Hospital, ²Wonkwang University School of Medicine and Hospital
- P25-4 Korean Medication Algorithm for Schizophrenia 2019: Third Revision**
 Jungsuk LEE¹, Beomwoo NAM², Chan-Hyung KIM³
¹Department of Psychiatry, National Health Insurance Service Ilsan Hospital, Goyang, Korea,
²Department of Psychiatry, Konkuk University School of Medicine, Chungju, Korea,
³Institute of Behavioral Science in Medicine and Department of Psychiatry, Yonsei University College of Medicine, Seoul, Korea
- P25-5 Difference in executive function among with patients with schizophrenia, their first-degree relatives and healthy subjects**
 Yuzuru KATAOKA¹, Kazutaka OHI^{1,2}, Takamitsu SHIMADA¹, Hiroaki OKUBO¹, Takashi UEHARA¹, Yasuhiro KAWASAKI¹
¹Department of Neuropsychiatry, Kanazawa Medical University, Ishikawa, Japan,
²Medical Research Institute, Kanazawa Medical University, Ishikawa, Japan

- P25-6 Impaired social functions in patients with schizophrenia and their first-degree relatives**
Takamitsu SHIMADA^{1,2}, Kazutaka OHI^{1,3}, Yuzuru KATAOKA¹, Yoko KOIDE¹, Hiroaki OKUBO¹, Takashi UEHARA¹, Yasuhiro KAWASAKI¹
¹Department of Neuropsychiatry, Kanazawa Medical University, Ishikawa, Japan, ²Okabe Hospital, Ishikawa, Japan, ³Medical Research Institute, Kanazawa Medical University, Ishikawa, Japan

- P25-7 Atypical antipsychotic-induced metabolic adverse effects in psychiatric patients: cross-sectional study**
Young-Min PARK
Department of Psychiatry, Inje University College of Medicine

Poster Session 26 October 12 (Sat), 16:40 - 18:10, Poster Hall (Fukuoka International Congress Center, 2F, Multi-purpose Hall)

Schizophrenia 5

Chair: Erlyn LIMOA (Department of Psychiatry, Faculty of Medicine, Universitas Hasanuddin, Indonesia)

- P26-1 Impact of social defeat stress on DNA methylation of DRD2, NR3C1 and STMN-1 genes in STMN1-wild type and -knock-out mice**

Young-Eun OH^{1,2}, Vishwanath Vasudev PRABHU^{1,2}, Thong Ba NGUYEN^{1,2}, Fatimazahra RAMI^{1,2}, Young-Chul CHUNG^{1,2}
¹Department of Psychiatry, Chonbuk National University Medical School, Jeonju, South Korea, ²Research Institute of Clinical Medicine of Chonbuk National University-Biomedical Research Institute of Chonbuk National University Hospital, Jeonju, South Korea.

- P26-2 Chronic mild exercise at juvenile stage attenuates abnormal behavior in prenatal phencyclidine-treatment induced schizophrenia mice model**

Hikaru KOIZUMI^{1,3}, Kaoruko AICHI¹, Akihiro MOURI^{4,5}, Toshitaka NABESHIMA^{5,6}, Hideaki SOYA^{1,2}
¹Laboratory of Exercise Biochemistry and Neuroendocrinology, Faculty of Health and Sport Sciences, University of Tsukuba, Japan, ²Department of Sports Neuroscience, Advanced Research Initiative for Human High Performance (ARIHHP), Faculty of Health and Sport Sciences, University of Tsukuba, ³The Japan Society for the Promotion of Science, ⁴Department of Regulatory Science for Evaluation and Development of Pharmaceuticals and Devices, Graduate School of Health Sciences, Fujita Health University, Aichi, Japan, ⁵Japanese Drug Organization of Appropriate Use and Research, Nagoya, Japan, ⁶Advanced Diagnostic System Research Laboratory, Graduate School of Health Sciences, Fujita Health University, Aichi, Japan

- P26-3 Multimodal neuroplastic mechanisms of lurasidone treatment in the chronic mild stress model**

Marco Andrea RIVA¹, Paola BRIVIO¹, Giulia SBRINI¹, Maria Serena PALADINI², Vittoria SPERO², Mariusz PAPP³, Raffaella MOLTENI², Francesca CALABRESE¹
¹Department of pharmacological and biomolecular sciences, University of Milan, ²Department of Medical Biotechnologies and Translational Medicine, University of Milan, ³Institute of Pharmacology, Polish Academy of Sciences, Krakow

- P26-4 Deficiency of kynurenine 3-monooxygenase increases vulnerability to the PCP-induced behavioral abnormalities**

Hisayoshi KUBOTA¹, Akihiro MOURI¹, Kazuo KUNISAWA¹, Moe NIJIMA¹, Mami HIRAKAWA¹, Yuko MORI², Yasuko YAMAMOTO², Toshitaka NABESHIMA³, Kuniaki SAITO^{2,3}
¹Department of Regulatory Science for Evaluation & Development of Pharmaceuticals & Devices, Fujita Health University Graduate School of Health Science, Aichi, Japan., ²Department of Disease Control and Prevention, Fujita Health University Graduate School of Health Science, Aichi, Japan., ³Advanced Diagnostic System Research Laboratory, Fujita Health University Graduate School of Health Science, Aichi, Japan.

- P26-5 Schizophrenia-like symptoms in the offspring of methylazoxymethanol-treated mice**

Kohei TAKAHASHI^{1,2}, Osamu NAKAGAWASAI¹, Wakana SAKUMA¹, Wataru NEMOTO¹, Takayo ODAIRA¹, Jia-Rong LIN¹, Hiroshi ONOGI³, Lalit K. SRIVASTAVA⁴, Minoru TSUJI², Hiroshi TAKEDA², Koichi TAN-NO¹
¹Department of Pharmacology, Faculty of Pharmaceutical Sciences, Tohoku Medical and Pharmaceutical University, Miyagi, Japan, ²Department of Pharmacology, School of Pharmacy, International University of Health and Welfare, Tochigi, Japan., ³Faculty of Health Science, Tohoku Fukushi University, Miyagi, Japan., ⁴Department of Psychiatry, Douglas Mental Health Institute, McGill University, Montreal, Canada

- P26-6 Vitamin B6-deficient animal model for schizophrenia with carbonyl stress**

Kazuya TORIUMI¹, Kazuhiro SUZUKI^{1,2}, Mai ASAKURA¹, Mitsuhiro MIYASHITA¹, Yasue HORIUCHI¹, Akiko KOBORI¹, Masanari ITOKAWA¹, Makoto ARAI¹
¹Schizophrenia Research Project, Department of Psychiatry and Behavioral Sciences, Tokyo Metropolitan Institute of Medical Science, Tokyo, Japan, ²Department of Psychiatry, Shinshu University School of Medicine

P26-7 PACAP Increases Functional Synapses In The Primary Hippocampal Neurons

Atsuko HAYATA^{1,2}, Harui KIJIMA², Yusuke SHINTANI², Takanobu NAKAZAWA^{2,3}, Hitoshi HASHIMOTO^{1,2,4,5}

¹Molecular Research Center for Children's Mental Development, United Graduate School of Child Development, Osaka University, Kanazawa University, Hamamatsu University School of Medicine, Chiba University and University of Fukui,

²Laboratory of Molecular Neuropharmacology, Graduate School of Pharmaceutical Sciences, Osaka University,

³Department of Pharmacology, Graduate School of Dentistry, Osaka University, ⁴Institute for Dataability Science, Osaka University,

⁵Transdimensional Life Imaging Division, Institute for Open and Transdisciplinary Research Initiatives, Osaka University

Poster Session 27

October 13 (Sun), 16:40 - 18:10, Poster Hall (Fukuoka International Congress Center, 2F, Multi-purpose Hall)

Schizophrenia 6

Chair: Kazuya TORIUMI (Department of Psychiatry and Behavioral Sciences, Tokyo Metropolitan Institute of Medical Science, Japan)

P27-1 A novel schizophrenia animal model-down regulation of a Piccolo in the medial prefrontal cortex -

Atsumi NITTA¹, Kohei HAMATANI¹, Ryo INAGAKI¹, Kequan FU¹, Yuki OKETANI², Kenji SATO², Youta TORII²,

Chikako HABUCHI², Sekiguchi HIROTAKA², Shuji IRITANI², Norio OZAKI², Shin-ichi MURAMATSU^{3,4}, Yoshiaki MIYAMOTO¹

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³Division of Neurological Gene Therapy, Open Innovation Center, Jichi Medical University, Shimotsuke, Japan,

⁴Center for Gene and Cell Therapy, Institute of Medical Science, The University of Tokyo, Tokyo, Japan

P27-2 Transcriptomic immaturity inducible by neural hyperexcitation is shared by multiple neuropsychiatric disorders

Tomoyuki MURANO, Hideo HAGIHARA, Tsuyoshi MIYAKAWA

Division of Systems Medical Science, Institute for Comprehensive Medical Science, Fujita Health University

P27-3 Neuroplastic Changes Following Chronic Treatment with The Antipsychotic Blonanserin in Rats: Implications for Schizophrenia

Marco Andrea RIVA¹, Francesca MARCHISELLA¹, Maria Serena PALADINI², Veronica BEGNI¹, Paola BRIVIO¹, Vittoria SPERO², Francesca CALABRESE¹, Raffaella MOLTENI²

¹Department of pharmacological and biomolecular sciences, University of Milan,

²Department of Medical Biotechnologies and Translational Medicine, University of Milan

P27-4 Recovery of social behavior and GABAergic interneuron density change induced by interneuron genetic antipsychotic in the maternal immune activation model of schizophrenia

Wataru UKAI¹, Yoshiyasu KIGAWA¹, Eri HASHIMOTO¹, Kenta DERIHA¹, Hanako HASHIGUCHI¹, Emi NISHIMURA¹,

Masaya TAYAMA^{1,2}, Kengo FURUSE¹, Takao ISHII¹, Marco A. RIVA³, Chiaki KAWANISHI¹

¹Department of Neuropsychiatry, School of Medicine, Sapporo Medical University, Sapporo, Japan,

²Psychiatry Institute, Hokujinkai Medical Corporation, Sapporo Japan, ³Department of Pharmacological Sciences, University of Milano, Milan, Italy

P27-5 Altered DNA methylation signatures in patients with first episode psychosis

Yanhong PIAO¹, Young-Eun OH², Fatima Zahra RAMI², Chul Chung YOUNG^{1,3}

¹Department of Psychiatry, Chonbuk National University Hospital, Jeonju, Korea,

²Department of Medical Science, Chonbuk National University, Jeonju, Korea,

³Research Institute of Clinical Medicine of Chonbuk National University-Biomedical Research Institute of Chonbuk National University Hospital, Jeonju, Korea

P27-6 An Overview Of The Genetic Influence Of Schizophrenic Patients Treated At The Lakipadada Hospital

Kristanty Randa ARUNG¹, Andi Jayalangkara TANRA², Syafari Daniel MANGOPO¹

¹RSUD Lakipadada, ²Hasanuddin University

P27-7 Withdraw

Schizophrenia 7

Chair: Jimmy LEE (*Institute of Mental Health, Singapore*)

- P28-1 Correlation between in vivo GABA-A/benzodiazepine receptor availability and genetic liability in unaffected relatives of people with schizophrenia: A [11C]flumazenil PET study**
 Junhee LEE¹, Youngwoo Bryan YOON², Kang Ik Kevin CHO³, Seongho SEO⁴, Jae Sung LEE⁵, Jae Min JEONG⁵, Minah KIM¹, Tae Young LEE¹, Jun Soo KWON^{1,6}
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- P28-2 Glutamatergic Neurometabolite Levels in Patients with Severe Treatment-Resistant Schizophrenia: A Cross-Sectional 3T Proton Magnetic Resonance Spectroscopy Study**
 Ryosuke TARUMI^{1,2}, Sakiko TSUGAWA¹, Yoshihiro NODA¹, Plitman ERIC^{3,4}, Shiori HONDA⁵, Karin MATSUSHITA⁶, Sofia CHAVEZ⁷, Kyosuke SAWADA¹, Masataka WADA¹, Mie MATSUI⁸, Shinya FUJII⁶, Takahiro MIYAZAKI¹, Mallar CHAKRAVARTY^{3,4,9}, Hiroyuki UCHIDA^{1,7}, Gary REMINGTON^{7,10}, Ariel GRAFF-GUERRERO^{7,10}, Masaru MIMURA¹, Shinichiro NAKAJIMA^{1,7}
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- P28-3 Causal relationship between salience network dysfunction, depressed mood, and subjective quality of life in schizophrenia**
 Masashi OHTA¹, Masahito NAKATAKI¹, Tomoya TAKEDA¹, Shusuke NUMATA¹, Takeo TOMINAGA¹, Naomi KAMEOKA², Hiroko KUBO¹, Makoto KINOSHITA¹, Kanae MATSUURA², Maki OHTOMO³, Naoya TAKEICHI⁴, Masafumi HARADA³, Tetsuro OHMORI¹
¹Department of Psychiatry, Graduate School of Biomedical Sciences, Tokushima University, Tokushima, Japan, ²Department of Psychiatry, Tokushima University Hospital, Tokushima, Japan, ³Department of Radiology and Radiation Oncology, Graduate School of Biomedical Sciences, Tokushima University, Tokushima, Japan, ⁴Department of Radiology, Tokushima University Hospital, Tokushima, Japan
- P28-4 Analyses of metabolites related to polyunsaturated fatty acids in serum of antipsychotic-naïve individuals with an 'at-risk mental state' (ARMS)**
 Naohisa TSUJINO^{1,2}, Hiromi TAGATA¹, Mayu ONOZATO³, Tatsuya SAKAMOTO³, Tomoyuki FUNATOGAWA¹, Itsuki KIMURA⁴, Naoyuki KATAGIRI¹, Taiju YAMAGUCHI¹, Takahiro NEMOTO¹, Takeshi FUKUSHIMA³, Masafumi MIZUNO¹
¹Department of Neuropsychiatry, Toho University School of Medicine, Tokyo, Japan, ²Department of Psychiatry, Saiseikai Yokohamashi Tobu Hospital, Kanagawa, Japan, ³Faculty of Pharmaceutical Sciences, Toho University, Chiba, Japan, ⁴Department of Pharmacy, Toho University Omori Medical Center, Tokyo, Japan
- P28-5 Improvement of Mismatch negativity correlates with symptomatic and functional outcome of patients with first episode psychosis**
 Silvia Kyungjin LHO^{1,2}, Minah KIM^{1,2}, Tak Hyung LEE³, Yoo Bin KWAK³, Jun Soo KWON^{1,2,3}
¹Department of Psychiatry, Seoul National University College of Medicine, ²Department of Neuropsychiatry, Seoul National University Hospital, ³Department of Brain and Cognitive Sciences, Seoul National University College of Natural Sciences
- P28-6 Functional neuroanatomy of schema in patients with first episode schizophrenia spectrum disorders**
 Guangfan SHEN¹, Woo-Sung KIM², Congcong LIU³, Young-Chul CHUNG⁴
¹Department of Psychiatry, Chonbuk National University Hospital, Jeonju, Korea, ²Department of Medical Science, Chonbuk National University, Jeonju, Korea, ³Department of Medical Science, Chonbuk National University, Jeonju, Korea, ⁴Research Institute of Clinical Medicine of Chonbuk National University-Biomedical Research Institute of Chonbuk National University Hospital, Jeonju, Korea

P28-7 Neural mechanisms of decision-making under risk and ambiguity in schizophrenia: A neuroeconomics investigation

Junya FUJINO^{1,2}, Shisei TEI^{1,2,3,4}, Kimito HIROSE², Ryosaku KAWADA², Kosuke TSURUMI², Noriko MATSUKAWA², Jun MIYATA², Genichi SUGIHARA^{2,5}, Yujiro YOSHIHARA², Nobumasa KATO¹, Toshiya MURAI², Hidehiko TAKAHASHI^{1,2,5}
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²Department of Psychiatry, Graduate School of Medicine, Kyoto University, Kyoto, Japan,
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⁴School of Human and Social Sciences, Tokyo International University, Saitama, Japan,
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Poster Session 29

October 12 (Sat), 16:40 - 18:10, Poster Hall (Fukuoka International Congress Center, 2F, Multi-purpose Hall)

Schizophrenia 8

Chair: Kazutaka OHI (*Department of Psychiatry and Psychotherapy, Gifu University Graduate School of Medicine, Japan*)

P29-1 Usefulness of a psychomotor function test as a cognitive function scale in schizophrenia

Hiroyuki KAMEI¹, Ippei TAKEUCHI², Yui YAMADA¹, Yuichiro HORII¹, Manako HANYA¹, Junji UNO², Kiyoshi FUJITA²
¹Lab. of Clinical Pharmacy Practice and Health Care Management, Faculty of Pharmacy, Meijo University, Nagoya, Japan,
²Department of Psychiatry, Okeazama Hospital, Toyoake, Aichi, Japan

P29-2 Excess Mortality and Risk Factors for Mortality Among Patients with Severe Mental Disorders Receiving Home Care Case Management

Wen Yin CHEN^{1,2}, Sheng Jean HUANG^{3,4}, Chun Hung PAN¹, Tien Wey YANG^{1,5,6}, Chian Jue KUO^{1,5,6,7}
¹Department of psychiatry, Songde branch, Taipei City Hospital,
²Graduate Institute of Epidemiology and Preventive Medicine, National Taiwan University College of Public Health, Taipei, Taiwan,
³Taipei City Hospital, Taipei, Taiwan, ⁴Department of Surgery, College of Medicine, National Taiwan University, Taipei, Taiwan,
⁵Department of Psychiatry, School of Medicine, College of Medicine, Taipei Medical University, Taipei, Taiwan,
⁶Psychiatric Research Center, Taipei Medical University Hospital, Taipei, Taiwan,
⁷Department and Graduate Institute of Forensic Medicine, College of Medicine, National Taiwan University, Taipei, Taiwan

P29-3 Development of Diagnostic Criteria and Severity Scale of Polydipsia: A Systematic Literature Review and Expert Consensus

Mutsuki SAKUMA^{1,2,3}
¹National Hospital Organization, Kurihama Medical and Addiction Center, Kanagawa, Japan,
²Department of Neuropsychiatry, Yamanashi Prefectural Kita Hospital, Yamanashi, Japan,
³Department of Neuropsychiatry, Keio University School of Medicine, Tokyo, Japan

P29-4 Structural and functional brain changes following electroconvulsive therapy (ECT) in schizophrenia patients: A systematic review

Sun-Young MOON^{1,2}, Minah KIM^{1,2}, Tae Young LEE^{1,2}, Jun Soo KWON^{1,2,3}
¹Department of Psychiatry, Seoul National University College of Medicine, Seoul, Republic of Korea,
²Department of Neuropsychiatry, Seoul National University Hospital, Seoul, Republic of Korea,
³Department of Brain and Cognitive Sciences, Seoul National University College of Natural Sciences, Seoul, Republic of Korea

P29-5 Methylglyoxal in plasma associate with anxiety in healthy individual

Kazuhiro SUZUKI^{1,2}, Kazuya TORIUMI¹, Mitsuhiro MIYASHITA¹, Akane YOSHIKAWA¹, Yasue HORIUCHI¹, Shin KOIKE³, Yuki OGASAWARA³, Masahiro ITOKAWA¹, Shinsuke WASHIZUKA², Makoto ARAI¹
¹Project for Schizophrenia Research, Tokyo Metropolitan Institute of Medical Science, Tokyo, Japan,
²Department of psychiatry, Shinshu University, Nagano, Japan,
³Department of Analytical Biochemistry, Meiji Pharmaceutical University, Tokyo, Japan

P29-6 Holy water bathing versus antipsychotics in the treatment of schizophrenia: a scenario-based survey on clinical decision-making among Thai medical students

Pornjira PARIWATCHARAKUL¹, Theenida WANNAKOWAT²
¹Department of Psychiatry, Faculty of Medicine Siriraj Hospital, Mahidol University, Bangkok, Thailand, ²Hatyai Hospital, Songkhla, Thailand

P29-7 The trend of long-acting injectable antipsychotics use in Asian six countries: findings from REAP studies

An-Nie CHUNG, Shih-Ku LIN
Taipei City Psychiatric Center, Taipei City Hospital, Taipei, Taiwan

Others

Chair: Masafumi YOSHIMURA (*Department of Neuropsychiatry, Kansai Medical University, Japan*)

P30-1 Discharge Against Medical Advice of psychiatric patients

Nan-Ying CHIU^{1,2}, Shu-Hui HU¹, Pei-Ju TSAI²

¹*Department of Psychiatry, Evergreen Campus, Lugang Christian Hospital,*

²*Department of Psychiatry, Changhua Christian Hospital, Changhua City, Taiwan*

P30-2 Single vs. multiple daily dosing regimens of psychotropic drugs for psychiatric disorders: A systematic review and meta-analysis

Yuhei KIKUCHI^{1,2}, Yutaro SHIMOMURA^{1,3}, Hiroyuki UCHIDA¹, Takefumi SUZUKI⁴, Masaru MIMURA¹, Hiroyoshi TAKEUCHI¹

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³*Department of Psychiatry, Yokohama Municipal Citizen's Hospital, Kanagawa, Japan,*

⁴*Department of Neuropsychiatry, Faculty of Medicine, University of Yamanashi, Yamanashi, Japan*

P30-3 A Study of utility of mental health assessment using hand-held-sensor based on nano-technology : Pilot Study

Sangyeol LEE¹, Seung-Ho JANG¹, Jeong-Wan HONG²

¹*Department of Psychiatry, Wonkwang University School of Medicine and Hospital,* ²*Department of Psychiatry, Iksan General Hospital*

P30-4 The Incidence of a Chemotherapy-Induced Stroke: a Five-Year Nationwide Population-Based Cohort Study

Chien-Chen Jean HUANG^{1,2}, Yu-Cih YANG³, Yi-Hung CHEN⁴

¹*Graduate Institute of Chinese Medicine, China Medical University,*

²*Department of Traditional Chinese Medicine, An Nan Hospital, China Medical University, Tainan, Taiwan,*

³*Management office for Health Data, China Medical University Hospital, Taichung, Taiwan,*

⁴*Graduate Institute of Acupuncture Science, China Medical University, Taichung, Taiwan*

P30-5 A study on the psychosocial characteristics and quality of life in functional gastrointestinal disorders

Dong Ho LEE¹, So-Won KIM¹, Sang-Yeol LEE¹, Han-Seung RYU², Suck-Cheol CHOI², Seung-Ho RHO¹, Seung-Ho JANG¹

¹*Departments of Psychiatry, School of Medicine, Wonkwang University, Iksan, Korea,*

²*Departments of Internal Medicine, Wonkwang University, Iksan, Korea*

P30-6 National Center of Neurology and Psychiatry Biobank: Infrastructure for Neuropsychiatric Research

Kotaro HATTORI^{1,2}, Yuuki YOKOTA^{1,2}, Ryo MATSUMURA¹, Sumiko YOSHIDA¹, Yu-ichi GOTO¹, Hiroshi KUNUGI²

¹*Medical Genome Center, National Center of Neurology and Psychiatry,*

²*Department of Mental Disorder Research, National Institute of Neuroscience, National Center of Neurology and Psychiatry*

Poster Session for Symposium-40

October 13 (Sun), 16:40 - 18:10, Poster Hall (Fukuoka International Congress Center, 2F, Multi-purpose Hall)

Noteworthy drug discovery/research and development - Aiming for innovation -

*Posters of this session will be displayed for three days from October 11 (Fri) to October 13 (Sun).

Abstracts of this session are on P. 165 - 170.

Chair: Tetsuro KIKUCHI (*New Drug Research Division, Pharmaceutical Business Division, Otsuka Pharmaceutical Co., Ltd.*)

DDR-1 Schizophrenia paradox - A material or an event -

Masanari ITOKAWA^{1,2}

¹*Tokyo Metropolitan Institute of Medical Science,* ²*Tokyo Metropolitan Matsuzawa Hospital*

DDR-2 Balanced Activation of Striatal Output Pathways by Faster Off-Rate Phosphodiesterase 10A Inhibitors Potentially Leads to not only Antipsychotic-Like Effects but also Activation of the Prefrontal Cortex and Cognitive Improvement in Rodents

Haruhide KIMURA

Neuroscience Drug Discovery Unit, Research, Takeda Pharmaceutical Company Limited

DDR-3 SEP-363856, a Candidate Antipsychotic Compound with a Novel Non-D2 Mechanism of Action

Kazuki YABUUCHI¹, Kenneth KOBLAN², Robert GOLDMAN², Justine KENT², Seth HOPKINS², Antony LOBEL²

¹*Drug Development Division, Sumitomo Dainippon Pharma Co., Ltd., Tokyo, Japan,* ²*Sunovion Pharmaceutical Inc.*

- DDR-4 Development of oxytocin as a novel therapeutic for autism spectrum core symptoms by utilizing multimodal outcome measures**
Hidenori YAMASUE
Department of Psychiatry, Hamamatsu University School of Medicine
- DDR-5 Study of ifenprodil effects on patients with methamphetamine dependence: study protocol for an exploratory randomized double-blind placebo-controlled trial**
Toshihiko MATSUMOTO¹, Hiroko KOTAJIMA-MURAKAMI^{1,2}, Ayumi TAKANO³, Yasukazu OGAI⁴, Daisuke FUNADA^{1,5}, Yuko TANIBUCHI^{1,6}, Hisateru TACHIMORI⁷, Kazushi MARUO⁸, Kazutaka IKEDA^{1,2}
¹*Department of Drug Dependence Research, National Institute of Mental Health, National Center of Neurology and Psychiatry,*
²*Addictive Substance Project, Tokyo Metropolitan Institute of Medical Science,*
³*Department of Mental Health and Psychiatric Nursing Tokyo Medical and Dental University,*
⁴*Social Psychiatry and Mental Health, Faculty of Medicine, University of Tsukuba,*
⁵*Department of Psychiatry, Center Hospital, National Center of Neurology and Psychiatry,* ⁶*Department of Psychiatry, Chiba Hospital,*
⁷*Department of Clinical Research Promotion, Transrational Medical Center, National Center of Neurology and Psychiatry,*
⁸*Department of Biostatistics, Faculty of Medicine, University of Tsukuba*
- DDR-6 BPN14770, an allosteric inhibitor of Phosphodiesterase 4D (PDE4D) developed for the treatment of Fragile X syndrome and other brain disorders such as Alzheimer's disease**
Hiroko ONO¹, Chong ZHANG², Ying XU³, James M O'DONNELL^{2,3}, Hidekuni YAMAKAWA¹, Naotaka HORIGUCHI¹, Toshiyuki ASAKI¹, Mark E GURNEY⁴
¹*Drug Discovery & Disease Research Laboratory, Shionogi & Co., Ltd. ,*
²*Department of Pharmacology and Toxicology, Jacobs School of Medicine and Biomedical Sciences, University at Buffalo,*
³*Department of Pharmaceutical Sciences, School of Pharmacy and Pharmaceutical Sciences, University at Buffalo,* ⁴*Tetra Discovery Partners Inc.*
- DDR-7 Novel delta opioid receptor agonist NC-2800: a promising therapeutic agent for emotional modulation**
Eriko NAKATA
Nippon Chemiphar Co., Ltd.
- DDR-8 The pharmacological and clinical profile of vortioxetine, an antidepressant with multimodal activity**
Bjarke EBERT
H. Lundbeck A/S
- DDR-9 AV-101 (4-CI-KYN): A New Generation Oral NMDA Receptor Glycine Site Antagonist for Treatment of Major Depressive Disorder**
Shawn K SINGH
VistaGen Therapeutics, Inc.
- DDR-10 Esketamine Intranasal Spray, Its Development for TRD in Japan**
Yushin TOMINAGA¹, Nagahide TAKAHASHI², Ayako SHIRAISHI¹, Yuka NAMIKAWA¹, Aya YAMADA¹, Yuya YAMADA¹, Toshifusa SHU¹, Hiroko SHIMIZU¹, Peter ZANNIKOS³, Jaskaran SINGH³, David HOUGH³
¹*Janssen Japan R&D,* ²*Hamamatsu University School of Medicine,* ³*Janssen Research and Development, LLC*
- DDR-11 R-Ketamine (or Arketamine) as a rapid-acting antidepressant**
Kenji HASHIMOTO
Chiba University Center for Forensic Mental Health, Chiba, Japan

ASEAN Pre-Congress Meeting

Acknowledgements

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Union of Brain Science Associations in Japan

The Organizing Committee of 6th Congress of Asian College of Neuropsychopharmacology gratefully acknowledges support from the above companies and organizations.

Kazutaka Ikeda
Chair, 6th Congress of Asian College of Neuropsychopharmacology (AsCNP 2019)

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AsCNP2019 Poster Sessions (Late Breaking Abstracts)

Session No.	Session Title	Poster No.	Presenter	Title	Chair	Date
LBA Session 1	Childhood & Adolescent Disorders 3	LBA-1-1	Sri Wahyuni Anak Ayu	SEROTONIN TRANSPORTER GENE POLYMORPHISM (5-HTT), MONOAMINE OXIDASE A (MAOA), AND PARENTING STYLES ARE ANTISOCIAL BEHAVIOR RISK FAKTORS IN CHILDREN	Koji YANO (SHIONOGI & CO.,LTD., Japan)	October 11 (Fri) 13:40-15:10
		LBA-1-2	Eri Segi-Nishida	The influences of early life stress in emotional behaviors and hippocampal differentiation in adolescence		
		LBA-1-3	Yukiori Goto	Influence of Social Relationships on Visual Attention to Faces in Autism Spectrum Disorder		
		LBA-1-4	Soyeon Park	Aripiprazole Long-Acting Injections for the Treatment of Irritability and Aggression in the patient with Autism Spectrum Disorders: A case report		
		LBA-1-5	Toshihiro Endo	Automated social dominance assay in mice: A case of mixed-strain colony of male C57BL/6J and BTBR τ^+ <i>Itpr3^{fl}/J</i> mice in IntelliCage		
		LBA-1-6	Toshihiro Endo	A novel, miniature, automated drug administration device for small animals using electro-osmotic pump: A prototype and validation studies		
		LBA-1-7	Toshihiro Endo	Automated cognitive assay for juvenile mice: An application to mixed-sex colony of C57BL/6N strain in IntelliCage		
LBA Session 2	Addiction & Pain	LBA-2-1	Shangchien Huang	BDNF Gene is a Determinant of Methadone Dose on Heroin Dependence in Han Chinese	Naoko KUZUMAKI (Hoshi University, Japan)	October 12 (Sat) 16:40-18:10
		LBA-2-2	Kristian Liaury	Evaluation of Salivary Alpha-amylase (sAA) in Methamphetamine Abusers		
		LBA-2-3	Amer Siddiq Amer Nordin	Smartphone Addiction and Depression: Prevalence, Sociodemographic Factors and its Association with Severity of Depression		
		LBA-2-4	Yui Asaoka	Altered affective function, personality trait, and decision making style characterizing behavioral addiction		
		LBA-2-6	Takeo Yoshikawa	Histamine H3 Receptor Antagonist Enhances Histamine Levels in Periaqueductal Grey Matter and Ameliorates Mechanical Allodynia via Histamine H1 and H2 Receptors		
		LBA-2-7	Kaori Takahashi	Refractory burning mouth syndrome with ADHD responds to aripiprazole: Two cases report.		
		LBA Session 3	Dementia & Epilepsy	LBA-3-4		
LBA-3-5	Kohei Oyabu			Excitatory synaptic transmission in hippocampal neurons is reduced by direct contact with astrocytes exposed to amyloid β 25-35		
LBA Session 4	Depression 7	LBA-4-1	Jung Goo Lee	Effects of early life stress on the development of depression and epigenetic mechanisms of p11 gene	Yukihiko SHIRAYAMA (Teikyo University, Japan)	October 11 (Fri) 13:40-15:10
		LBA-4-2	Jung Goo Lee	Early environmental enrichment affects behavioral vulnerability to adulthood stress through epigenetic mechanism of p11 promoter in the hippocampus of mice		
		LBA-4-3	Jung Goo Lee	Effects of LY341495 on the dendritic outgrowth and spine formation in the rat hippocampal neuron under toxic condition		
		LBA-4-4	Jung Goo Lee	Effects of LY341495 on mTORC1 signaling in the rat hippocampal neuron under the dexamethasone-induced toxic condition		

AsCNP2019 Poster Sessions (Late Breaking Abstracts)

Session No.	Session Title	Poster No.	Presenter	Title	Chair	Date
LBA Session 4	Depression 7	LBA-4-5	Yu-Cheng Ho	Functional plasticity in the midbrain periaqueductal gray contributes to comorbidity of chronic pain and depression	Yukihiko SHIRAYAMA (Teikyo University, Japan)	October 11 (Fri) 13:40-15:10
		LBA-4-6	Yuko Nakatake	A ROCK inhibitor, Fasudil, suppressed behavioral changes induced by physical stress, but not by emotional stress in mice social defeat stress model.		
		LBA-4-7	Hiroshi Kuniishi	Stress induced postsynaptic plasticity in the orbitofrontal-amygdala pathway in mice		
LBA Session 5	Depression 8	LBA-5-1	Enju Lin	Differentiated relation of striatal connectivity to task flexibility and insulin sensitivity in patients with bipolar disorder	Woraphat RATTAPHA (Mahidol University, Thailand)	October 12 (Sat) 16:40-18:10
		LBA-5-2	Min Ji Kim	The epidemiology of antidepressant prescription of South Korea in the viewpoint of medical provider: a nationwide register-based study		
		LBA-5-3	In Mok Oh	Effectiveness of a village-based intervention for depression in community-dwelling older adults: A randomized controlled pilot study		
		LBA-5-4	Hideo Kato	Effects of discontinuation of drugs used for augmentation on treatment outcomes in depression: a systematic review and meta-analysis		
		LBA-5-5	Taisuke Yatomi	Prescription patterns of psychotropic drugs in patients who were receiving steroidal anti-inflammatory drugs: analysis of Japanese national prescription data		
		LBA-5-6	Annamaria Cattaneo	Alterations in inflammatory and metabolism related biomarkers in adolescence as early biological predictors of altered behaviors and depression vulnerability and novel targets for prevention.		
		LBA-5-7	Hitoshi Inada	Screening of functional fatty acids affecting proliferation of the mouse cultured astrocytes		
LBA-5-8	Tzung-Jeng Hwang	Efficacy of a N-Methyl-D-Aspartate Receptor (NMDAR) Modulator for the Treatment of Early Phase Alzheimer Disease				
LBA Session 6	Schizophrenia 9	LBA-6-1	Yu-Chih Shen	Risk of hyperglycaemic crisis episode in diabetic patients with schizophrenia: A nationwide population-based cohort study.	Masanori ISOBE (Kyoto University, Japan)	October 13 (Sun) 16:40-18:10
		LBA-6-2	Li-Chung Huang	The cognition differences between treatment responding and treatment resistant schizophrenia patients.		
		LBA-6-3	Mai Ohkubo	Investigation of swallowing function and chlorpromazine equivalent dose of antipsychotic drugs in patients with psychiatric disorders Effects of Antipsychotic Drugs on Swallowing Function in Neuropsychiatry Hospital Inpatients		
		LBA-6-4	Siwei Liu	Cognitive Network Segregation Reflects Divergent Clinical Trajectories of Individuals at Ultra High Risk for Psychosis		
		LBA-6-5	Naohiro Okada	Neurometabolic basis of subclinical psychotic experiences in early adolescents		
		LBA-6-6	Michiko Fujimoto	Clozapine-induced seizure complicated with vertebral fracture, leg paralysis and pulmonary embolism in a patient with treatment-resistant schizophrenia		
LBA-6-7	Yuki Mashima	Camptocormia secondary to antipsychotic-induced dystonia of the rectus abdominis muscles: a case report				

List of winners

● AsCNP Outstanding Research Award for AsCNP2019

Session	No.	Name	Country	Title
Award Lecture 1	AL1-1	Hiroyuki Mizoguchi	Japan	Roles of orexin neurons in motivated behaviors in rats
Award Lecture 1	AL1-2	Yuki Moriya	Japan	Behavioral sensitization and relapse in mu-, delta- and kappa-opioid receptor knockout mice
Award Lecture 1	AL1-3	Wanyi Huang	Japan	Porphyromonas gingivalis infected Leptomeningeal Cells Reduce Synapses Proteins in Primary Cultured Neurons
Award Lecture 1	AL1-4	Zhou Mu Jiang	Japan	Porphyromonas gingivalis LPS induces Microglia-dependent Tau Hyperphosphorylation in Cultured Neurons
Award Lecture 1	AL1-5	Xiaoli Wu	China	Melatonin receptor agonist Ramelteon attenuates ischemic brain injury
Award Lecture 1	AL1-6	Midori Soda	Japan	The involvement of OPRM1 A118G polymorphism in fentanyl-induced symptoms and postoperative nausea and vomiting in Japanese patients underwent laparoscopic colon resection
Award Lecture 1	AL1-7	Yoshinori Aoki	Japan	Association between the rs11726196 Single-Nucleotide Polymorphism within the Transient Receptor Subfamily C Member 3 (TRPC3) Gene and Chronic Pain
Award Lecture 1	AL1-8	Daisuke Nishizawa	Japan	Genome-wide Association Studies on Chronic Pain and Effects of Drugs for the Treatment of Pain
Award Lecture 2	AL2-1	Woo-Sung Kim	Korea	Similar but different resting state functional connectivities in individuals with attenuated psychosis syndrome compared to patients with first-episode schizophrenia spectrum disorders
Award Lecture 2	AL2-2	Sanghoon Oh	Korea	Resting-state functional connectivity of the striatum predicts improvement in negative symptoms and general functioning in patients with first-episode psychosis: A 1-year naturalistic follow-up study
Award Lecture 2	AL2-3	Noboru Hiroi	USA	Neonatal Tbx1 in stem cells is a determinant of the development of social behavior in mice
Award Lecture 2	AL2-4	MuHong Chen	Taiwan	Cognitive function of patients with treatment-resistant depression after a single low dose of ketamine infusion
Award Lecture 2	AL2-5	Ya-Chin Lee	Taiwan	Manic Episode-Related Methylome and Their Regulatory Function in Bipolar Disorder Patients
Award Lecture 2	AL2-6	Roger C. Ho	Singapore	Comparison of the effects of vortioxetine and fluoxetine on the Brain-Derived Neurotrophic Factors levels in the hippocampus of chronic unpredictable mild stress-induced depressive rats
Award Lecture 2	AL2-7	Eri Takeuchi	Japan	The nucleus accumbens dopaminergic systems involve in anti-depressant-like actions of a diet rich in ω -3 polyunsaturated fatty acid in mice
Award Lecture 2	AL2-8	Xin Du	Australia	Behavioural characterisation of the GluN2DR knock-out mouse model in response to S-ketamine and R-ketamine

● **Excellent Research Award for AsCNP2019**

Topic: Preclinical

Session	No.	Name	Country	Title
Oral Session 1	O1-4	Fan Zeng	Japan	Porphyromonas gingivalis Infection increases RAGE Production in hCMEC/D3 Cell Line
Oral Session 1	O1-6	Yebo Gu	Japan	Chronic systemic exposure of Lipopolysaccharide from Porphyromonas gingivalis induces memory decline and bone loss in middle-aged mice
Oral Session 1	O1-8	Marco Andrea Riva	Italy	Restorative properties of the second-generation antipsychotic drug blonanserin on stress-induced oxidative derangements in the rat prefrontal cortex
Oral Session 1	O1-9	Yasushi Yabuki	Japan	T-type calcium channels are critical for adult mouse hippocampal neurogenesis
Oral Session 5	O5-6	Nageiswari Parathy	Singapore	The effects of acute finasteride treatment in dopamine transporter knockout mice and MK-801-treated mice
Poster Session 14	P14-6	Ervana Ikha Yusnita	Indonesia	Prevalence of Homosexual and Bisexual Adolescents in Bandung, Indonesia

Topic: Translational

Session	No.	Name	Country	Title
Poster Session 1	P1-5	Nene Koike	Japan	Role of T-type calcium channels in methamphetamine-induced hyperlocomotion and neuronal excitation in mice
Poster Session 17	P17-6	Md. Ali Bin Saifullah	Japan	Touchscreen-based tests detect cognitive impairment at an early stage in APP knock-in mice model

Topic: Clinical

Session	No.	Name	Country	Title
Oral Session 4	O4-1	Jane Pei-Chen Chang	UK	Omega-3 PUFAs improve social behaviour and cognitive function in children with ADHD and high inflammation
Oral Session 5	O5-1	Shunya Kurokawa	Japan	Psychiatrists' perceptions of medication adherence among patients with schizophrenia: An international survey
Poster Session 9	P9-1	MuHong Chen	Taiwan	Persistent antidepressant effect of low-dose ketamine and activation in the supplementary motor area and anterior cingulate cortex in treatment-resistant depression
Poster Session 20	P20-1	Yoshihiko Kosaki	Japan	Associations between genetic polymorphisms on chromosome 14q32 and effects of opioid analgesics and chronic pain
Poster Session 21	P21-1	Seon-Cheol Park	Korea	Reduced Awareness of Surroundings Is the Most Central Domain in the Network Structure of Posttraumatic Stress Disorder Symptoms
Poster Session 23	P23-2	Catherine Weiss	USA	Symptomatic and functional response to brexpiprazole treatment in patients with acute schizophrenia by age
Poster Session 23	P23-3	Kentaro Takai	Japan	Efficacy and Safety of Lurasidone in Acutely Psychotic Patients with Schizophrenia: A 6-Week, Randomized, Double-Blind, Placebo-Controlled Phase 3 Study (JEWEL Study)

Topic: Case Report

Session	No.	Name	Country	Title
Poster Session 24	P24-5	Ji-Yu Lin	Taiwan	Paliperidone Induced Dose-Dependent Sialorrhea with Biperiden Treatment

● **Excellent Presentation Award for AsCNP2019**

Category: Resident/Researcher

Session	No.	Name	Country	Title
Oral Session 3	O3-2	Ekachaeryanti Zain	Indonesia	The Efficacy of Vitamin D3 as Adjuvant Therapy in The Improvement of Depressive Symptoms
Poster Session 3	P3-4	Shanta Thapa	Japan	Involvement of free fatty acid receptor 1 (FFAR1) in the regulation of striatal monoamine releases and cocaine-induced locomotor activity in mice
Poster Session 4	P4-5	Nak-Young Kim	Korea	Clinical correlates associated with the long-term response of bipolar disorder patients to lithium, valproate, or lamotrigine: a retrospective study
Poster Session 10	P10-2	Satoshi Deyama	Japan	BDNF/VEGF release and mTORC1 activation in the medial prefrontal cortex are required for the antidepressant actions of resolvin E1 in lipopolysaccharide-induced depression model mice
Poster Session 20	P20-2	Rie Inoue	Japan	Association of a candidate locus for human opioid sensitivity identified in a genome-wide association study in patients undergoing laparoscopic-assisted colectomy with postoperative opioid requirements in patients undergoing painful cosmetic surgery
Poster Session 28	P28-5	Silvia Kyungjin Lho	Korea	Improvement of Mismatch negativity correlates with symptomatic and functional outcome of patients with first episode psychosis
Poster Session 29	P29-6	Pornjira Pariwatcharakul	Thailand	Holy water bathing versus antipsychotics in the treatment of schizophrenia: a scenario-based survey on clinical decision-making among Thai medical students

Category: Senior Researcher

Session	No.	Name	Country	Title
Oral Session 2	O2-3	Wai Kwong Tang	Hong Kong	Evidence of Brain Damage in Chronic Ketamine Users a Brain Imaging Study
Oral Session 2	O2-9	Kotaro Hatta	Japan	Real-world effectiveness of ramelteon and suvorexant on delirium prevention in 967 patients with delirium risk factors
Poster Session 6	P6-1	Minah Kim	Korea	Resting-state functional connectivity of the raphe nucleus as a predictor of the response to selective serotonin reuptake inhibitors in patients with obsessive-compulsive disorder
Poster Session 9	P9-3	Ming-Huan Chan	Taiwan	Combined treatment with dimethylglycine attenuates the behavioral deficits induced by repeated ketamine exposure
Poster Session 19	P19-2	Makoto Tsuda	Japan	Investigation of neuropathic allodynia with sensory and emotional components using an optogenetic approach
Poster Session 20	P20-5	Fumiko Sekiguchi	Japan	Paclitaxel, an anti-cancer drug, causes extracellular release of HMGB1, a pro-inflammatory and pro-nociceptive mediator, in Schwann cells derived from neonatal rat sciatic nerves

Category: Student/Graduate Student

Session	No.	Name	Country	Title
Oral Session 1	O1-7	Willy Jaya Suento	Indonesia	Lipopolysaccharide injection triggers indoleamine-2,3-dioxygenase 1 and miR-874-3p interaction which leads to depression-like behavior in mice
Oral Session 2	O2-8	Tien-Yu Chen	Taiwan	The use of benzodiazepine receptor agonists and the risk of venous thromboembolism
Oral Session 5	O5-5	David D. Kim	Canada	Clozapine-associated obsessive-compulsive symptoms and their management: a systematic review and analyses of 107 reported cases
Oral Session 5	O5-8	Jay P. Nakamura	Australia	Touchscreen cognitive performance following maternal immune activation targeting early and late prenatal neurodevelopmental windows
Poster Session 12	P12-1	Hajime Miyanishi	Japan	Decrease in striatal Shati/Nat8l induces resilience of depression via regulation of acetylation of histone in the Bdnf gene
Poster Session 14	P14-2	Miho Tanaka	Japan	The effects of valproic acid for abnormal sleep rhythm in mice with partial defect of Srrm4
Poster Session 29	P29-3	Mutsuki Sakuma	Japan	Development of Diagnostic Criteria and Severity Scale of Polydipsia: A Systematic Literature Review and Expert Consensus
Poster Session 30	P30-2	Yuhei Kikuchi	Japan	Single vs. multiple daily dosing regimens of psychotropic drugs for psychiatric disorders: A systematic review and meta-analysis

Category: Principle Investigator(last author)

The number of Abstracts	Name	Country
4 Abstracts	Teruhiko Higuchi	Japan
4 Abstracts	San-Yuan Huang	Taiwan
4 Abstracts	Atsufumi Kawabata	Japan
4 Abstracts	Hiroshi Kunugi	Japan
4 Abstracts	Jun Soo Kwon	Korea
4 Abstracts	Toshitaka Nabeshima	Japan
4 Abstracts	Yukihiro Noda	Japan
4 Abstracts	Sung Woo Park	Korea
4 Abstracts	Hiroshi Takeda	Japan
4 Abstracts	Hiroyoshi Takeuchi	Japan
6 Abstracts	Masabumi Minami	Japan
7 Abstracts	Zhong Chen	China
7 Abstracts	Atsumi Nitta	Japan

●LBA Award for AsCNP2019

Session	No.	Name	Country	Title
Late-Breaking Abstracts	LBA-4-5	Yu-Cheng Ho	Taiwan	Functional plasticity in the midbrain periaqueductal gray contributes to comorbidity of chronic pain and depression
Late-Breaking Abstracts	LBA-4-6	Yuko Nakatake	Japan	A ROCK inhibitor, Fasudil, suppressed behavioral changes induced by physical stress, but not by emotional stress in mice social defeat stress model