



**Expanding Histamine Research
Towards novel therapeutics for histamine-related diseases**

PROGRAM

Dear colleagues, friends, ladies and gentlemen,

It is a great honor for me to welcome you all in Kobe! On behalf of the organizing committee, I would like to express my most sincere greetings to you for your presence in World Histamine Symposium 2018, WHS2018, at Kobe Chamber of Commerce and Industry Hall from July 7 to 9. The meeting is also organized as a satellite symposium of the 18th World Congress of Basic and Clinical Pharmacology in Kyoto, and the second Joint Symposium of European and Japanese Histamine Research Societies.

Histamine research in Japan began in Okayama University, and those in Osaka University, Tohoku University and other universities have given a lot of contribution. International meeting of histamine research was held first in 1981 in Okayama, and the second meeting was in 2000 in Sendai by prof. Kenji Tasaka and prof. Takehiko Watanabe, respectively. The present meeting is the third one.

WHS2018 meeting will be held by attending forefront researches in histamine field from various countries. Mainly, the present meeting will be focused on “Expanding Histamine Research” towards “Novel therapeutics for histamine-related diseases”. The meeting begins with special lecture, followed by intensive deliberation of seven symposiums and closing remarks. I am sure you will have fruitful and rewarding exchanges in the next few days. I sincerely hope researchers will enjoy the meeting by discussion hot topics and by the excursion to Himeji Castle.

Thank you very much for your attention.

My best wishes,



Himeji Castle



Hiroyuki Fukui

*President of
World Histamine Symposium 2018*

Committees

President: Hiroyuki Fukui, Tokushima University

Secretary: Mitsunobu Mio, Shujitsu University

Organizing committee

(alphabetical order):

Paul Chazot, Durham University

Yutaka Gomita, Okayama University

Yuichi Hattori, Toyama University

Michihiro Hide, Hiroshima University

Noriyasu Hirasawa, Tohoku University

Shigeru Hishinuma, Meiji

Pharmaceutical University

Chiaki Kamei, Yasuda Women's

University

Mitsuko Kanamaru, Showa University

Hideyuki Kawauchi, Shimane University

Rob Leurs, Vrije Universiteit Amsterdam

Steve Liu

Kazutaka Maeyama, Ehime University

Hiroyuki Mizuguchi, Osaka Otani

University

Masaho Nakamura, Tohoku Medical

Pharmaceutical University

Masato Ogasawara, Iwate Medical

University

Kenji Onodera, Epilepsy Centre

BETHEL

Koichiro Ozawa, Hiroshima University

Pertti Panula, University of Helsinki

Beatrice Passani, University of Florence

Eiichi Sakurai, Tokushima Bunri
University

Eiko Sakurai, Iwaki Meisei University

Noriaki Takeda, Tokushima University

Satoshi Tanaka, Kyoto Pharmaceutical
University

Manabu Tashiro, Tohoku University

Robin Thurmond, Janssen Research and
Development

Takehiko Watanabe, Medical
Corporation Kinshukai

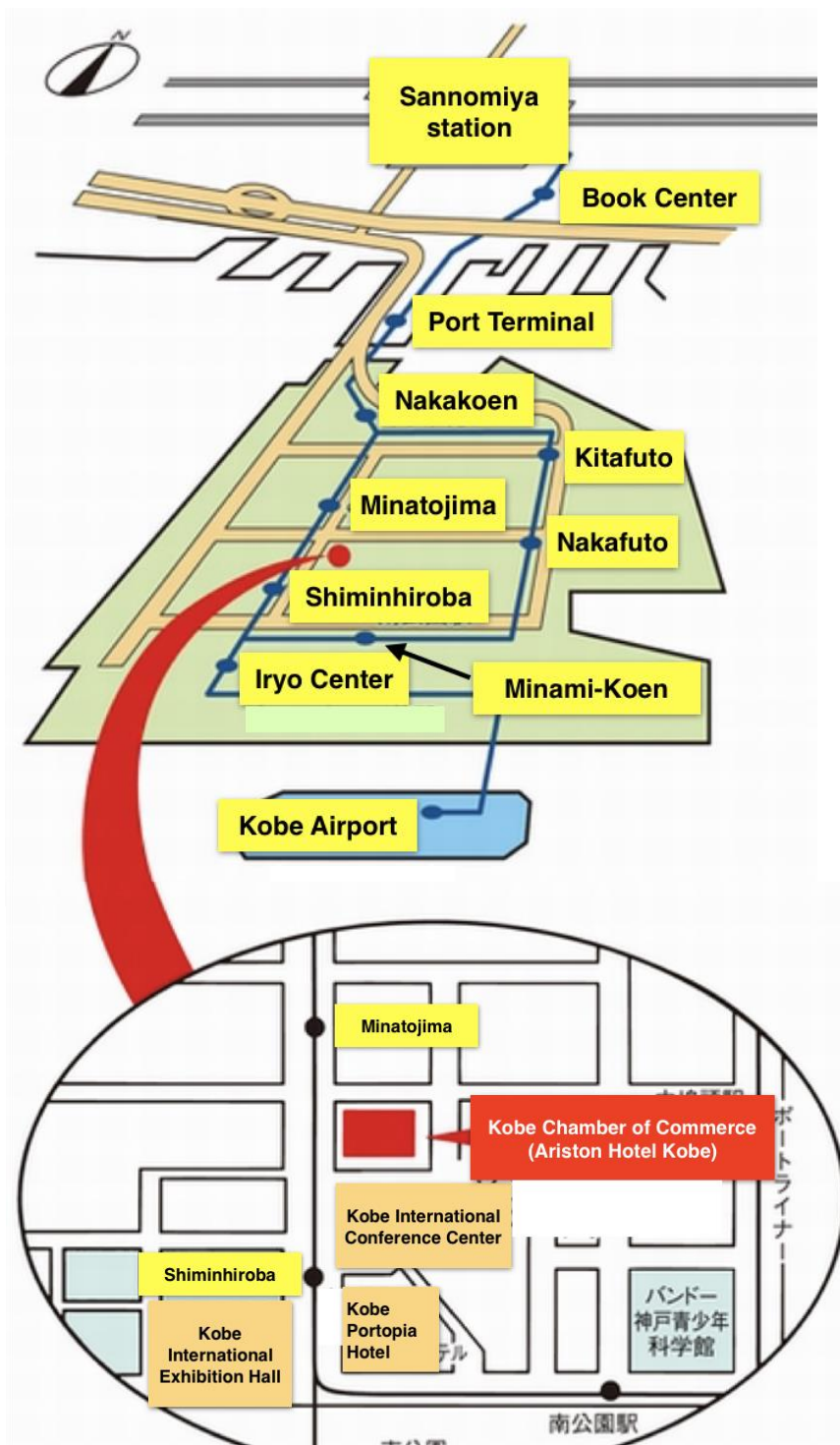
Masami Yabumoto, Medical Corporation
Kinshukai

Atsushi Yamatodani, Osaka University

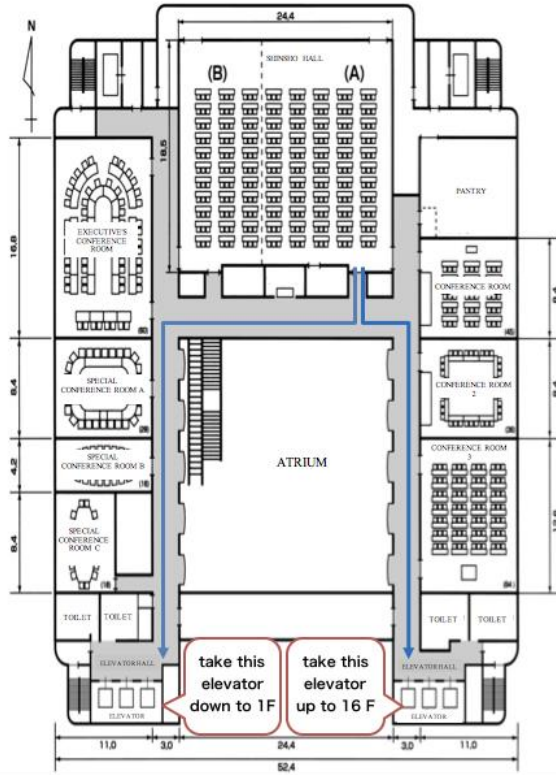
Kazuhiko Yanai, Tohoku University

Venue

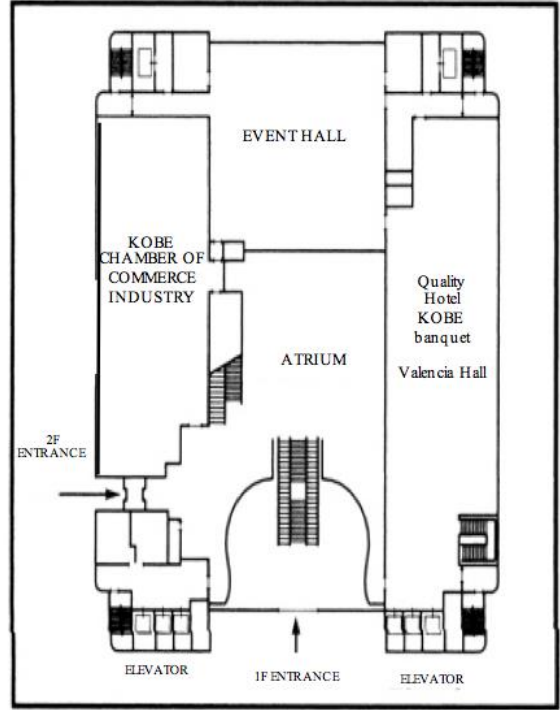
The venue of WHS2018 Kobe is Kobe Chamber of Commerce and Industry Hall (Shinsho Hall). The Hall is located south to San-no-miya Station, the center of Kobe. It takes 10 minutes by Port-liner train to reach “Shimin-hiroba” station from “San-no miya” station. The venue is 5 minutes walking distance form “Shimin-hiroba” station. The address of venue is 6-1 Minatojima-Nakamachi, Chuo-ku, Kobe, 650-8543 Japan.



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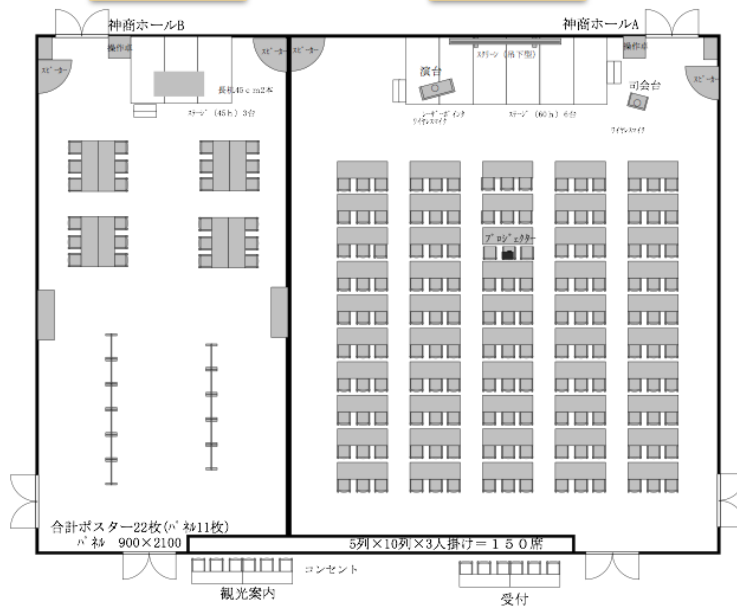
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SHINSHO HALL

HALL B
POSTER

HALL A
SYMPOSIUM



Registration Desk Opening hours

The registration desk is located in the concourse of the.

June 7 th	(Saturday)	11:00 ~ 17:00
June 8 th	(Sunday)	8:30 ~ 17:00
June 9 th	(Monday)	8:30 ~ 17:00

Guidelines for symposium speakers

1. The presentation time is 30 minutes per person including discussion time.
2. Only computer presentations will be available. No slides or OHP shall be used.
3. Please prepare your presentation in English.
4. Please save your data either in CD-R or USB memory device and deliver it to the registration desk.
5. Microsoft Windows with PowerPoint is the only operating system available for the presentation.
6. If you want to use your own computer, please let us know at the registration desk.
7. Please come to the registration desk at least 30 min before your session starts.

Guidelines for poster presentation

1. There is no registration desk for speakers of poster presentation.
2. Please find your poster panel with your poster number and put up your poster in Hall B of Shinsho Hall at 13:00 of July 7th.
3. Posters must be prepared in English.
4. The size of poster panel is 900 mm wide x 2,000 mm high from the floor, so that A0 size poster of portrait (= vertical) orientation is recommended.
5. Remove your poster in the evening of July 9th.

Social Program

Excursion to Himeji Castle, the most beautiful national treasure castle of Japan is scheduled in the afternoon of July 8th, Sunday.

The farewell party will be planned in the evening of July 9th, Monday at the Banquet room "BARCELONA" at 16th floor of the ARISTON HOTEL KOBE.



Himeji Castle: The site of excursion in the middle day of this symposium is the largest and most beautiful castle in Japan. It was registered in 1993 as one of the first UNESCO World Heritage Sites in Japan.

(http://www.city.himeji.lg.jp/guide/castle_en.html)

Japan Railway's ticket information for foreigners: Japan Railways Group (JR Group), is the most economical means of travelling throughout Japan by rail.

(<http://www.japanrailpass.net/en/index.html>)

Urasenke: The main school of Japanese tea ceremony.

<http://www.urasenke.or.jp/texte/index.html>

TANABATA: Evening of July 7th

Evening of July 7th is also known as **TANABATA** in Japan. The literal meaning of TANABATA is “Evening of the seventh”, also known as the Star Festival, which is originated from Chinese Star Festival. Following is short explanation from Wikipedia. Please find full explanation at <https://en.wikipedia.org/wiki/Tanabata>

“It celebrates the meeting of the deities Orihime and Hikoboshi (represented by the stars Vega and Altair respectively). According to legend, the Milky Way separates these lovers, and they are allowed to meet only once a year on the seventh day of the seventh lunar month of the lunisolar calendar. The date of Tanabata varies by region of the country, but the first festivities begin on 7 July of the Gregorian calendar.

Program at a Glance

July 7th (Saturday)

	0 min	10 min	20 min	30 min	40 min	50 min
9	Registration Starts at 11:00, Poster Mounting and Viewing					
10						
11						
12						
13	Opening Remark: Hiroyuki Fukui	Special Lecture: History of histamine research in EHRS. Madeleine Ennis (U.K.) Chair: Mitsunobu Mio (Japan)			Short Break	
14	Symposium 1: The roles of histamine in brain functions Chair: Pertti Panula (Finland) Zhong Chen (China), Beatrice Passani (Italy), Pertti Panula (Finland)					
15				Japanese Tea Ceremony Break Poster Viewing		
16	Japanese Tea Ceremony Break Poster Viewing			Symposium 2: Clinical aspect of histamine research		
17	Chair: Hideyuki Kawauchi (Japan) Michihiro Hide (Japan), Kohei Yamauchi (Japan), Atsuki Fukusihma (Japan), Hideyuki Kawauchi (Japan)					
18						

July 8th (Sunday)

	0 min	10 min	20 min	30 min	40 min	50 min
9	Symposium 3: Behavioral pharmacology of histamine, especially pain and histamine Chair: Kenji Onodera (Japan) and Shinobu Sakurada (Japan)					
10	Hiroshi Nomura (Japan), Hirokazu Mizoguchi (Japan), Ilona Obara (U.K.)			Coffee Break		
11	Symposium 4: New Insights into the Role of Histamine in Inflammatory Disorders Chair: Yuichi Hattori (Japan)					
12	Masahiro Nishibori (Japan), Naoyuki Matsuda (Japan), Akiyoshi Fukamizu (Japan), Arianna Carolina Rosa (Italy)					Short break
13	Excursion to Himeji Castle with Lunch Box					
14						
15						
16						
17						
18						

July 9th (Monday)

	0 min	10 min	20 min	30 min	40 min	50 min
9	Symposium 5: Molecular aspects of histamine receptors and their ligands Chair: Rob Leurs (Netherlands)					
10	Roland Seifert (Germany), Holger Stark (Germany), Rob Leurs (Netherlands)			Coffee Break		
11	Symposium 6: Histamine and CNS Chair: Kazuhiko Yanai (Japan)					
12	Christopher Pittenger (USA), Patrizio Blandina (Italy), Tadahiko Nakamura (Japan)			Lunch Time		
13	Lunch time			Poster Viewing		
14	Poster Viewing with Coffee					
15	Symposium 7 Inflammation and Allergy Chair: Satoshi Tanaka (Japan)					
16	Satoshi Tanaka (Japan), Yoshimichi Okayama (Japan), Noriyasu Hirasawa (Japan), W. Agnieszka Fogel (Poland), Detlef Neumann (Germany)					
17				Short Break	Concluding remarks: Chair: Madeleine Ennis (U.K.) Hiroyuki Fukui (WHS2018 president)	
18	Break, Change Dress Poster unmountng					
19	Fairwell Party					
20						

Program

Saturday, 7th July 2018

11:00 ~ 18:30 **Registration & Poster Mounting and Viewing**

13:00 **Opening Remarks**
Hiroyuki Fukui (WHS2018 President)

13:10 ~ 13:40 **Special Lecture**
Chair: Mitsunobu Mio

O1 Madeline Ennis (UK)
The history of histamine research in the EHRS

13:40 ~ 14:00 **Short Break**

14:00 ~ 15:30 **Symposium 1 The Role of Histamine in Brain Functions**
Chair: Pertti Panula

14:00 Weiwei HU, Zhong Chen (China)

O2 Dissection of the role of cell type specific histamine receptors in central nervous system disorders

14:30 Alessia Costa, Barbara Rani, Scheila Daiane Schmidt, Patrizio Blandina, Gustavo Provensi, M. Beatrice Passani (Italy)

O3 Histamine neurotransmission as a cognitive gateway integrating peripheral signals

15:00 Pertti Panula, Svetlana Semenova, Maria Sundvik, Henri Puttonen, Diego Baronio, Yu-Chia Chen (Finland)

O4 The role of histamine in alertness and neuronal plasticity – Lessons from the zebrafish

15:30 ~ 16:30 **Japanese Tea Ceremony Break & Poster Viewing**

16:30 ~ 18:30 **Symposium 2 – Clinical Aspect of Histamine Research**
Chair: Hideyuki Kawauchi

16:30 Michihiro Hide, Yuhki Yanase, Shunsuke Takahagi, Satoshi Morioke, Kazumasa Iwamoto, Kaori Ishii (Japan)

O5 Dual effects of histamine on vascular endothelial cells in synergy with LPS via blood coagulation pathway

- 17:00 Kohei Yamauchi, Masahito Ogasawara (Japan)
O6 A role of histamine in asthma pathogenesis and clinical efficacy of anti-histamine for asthma therapy
- 17:30 Atsuki Fukushima, Tsuyoshi Yoneda, Tamaki Sumi, Yasuhiro Hoshikawa, Masahiko Kobayashi (Japan)
O7 Problems of current therapeutic approaches against allergic conjunctival diseases (ACD)
- 18:00 Hideyuki Kawauchi, Noriaki Aoi, Ichiro Morikura, Kanako Shimizu (Japan)
O8 Updated informations on important role of antihistamines in treatment of patients with allergic disorders and future direction in Japan and worldwide

Sunday, 8th July 2018

9:00 ~ 10:30 **Symposium 3 Behavioral Pharmacology of Histamine, Especially Pain and Histamine**

Chair: Kenji Onodera/Shinobu Sakurada

9:00 Hiroshi Nomura (Japan)

O9 Central histamine promotes retrieval of forgotten memories

9:30 Hirokazu Mizoguchi, Chizuko Watanabe, Takafumi Hayashi, Yoko Namioka, Hiroyuki Watanabe, Toru Orito, Masaru Yoshizumi, Kenji Onodera, Shinobu Sakurada (Japan)

O10 Involvement of spinal release of histamine on nociceptive behaviors induced by spermine

10:00 Emma Battell, Amal Alsubaiyel, Ibrahim Alrashdi, Arianna Carolina Rosa, Paul Chazot, Alessandro Pini, Wai L. S. Liu, Miles Nunn, Wynne Weston-Davies, Iлона Obara (UK)

O11 Histamine system and neuropathic pain relief: Novel strategies

10:30 ~ 10: 50 **Coffee Break**

10:50 ~ 12:50 **Symposium 4 New Insights Into the Role of Histamine in Inflammatory Disorders**

Chair: Yuichi Hattori

10:50 Masahiro Nishibori, Shangze Gao, Yuan Gao, Hidenori Wake, Keyue Liu, Kiyoshi Teshigawara, Shuji Mori (Japan)

O12 HMGB1 translocation induced by histamine in vascular endothelial cells in vitro

11:20 Naoyuki Matsuda, Yuichi Hattori (Japan)

O13 The role of histamine in septic organ injury

11:50 Akiyoshi Fukamizu (Japan)

O14 Anti-inflammatory programming of gene expression induced by histamine agonist in cardiorenal pathology

12:20 Arianna Carolina Rosa (Italy)

O15 Exploring the role of histamine in diabetic nephropathy

12:50 ~ 13:00 **Short Break**

13:00 ~ 19:00 **Excursion to Himeji Castle with Lunch Box**

Monday, 9th July 2018

9:00 ~ 10:30 **Symposium 5 Molecular Aspects of Histamine Receptors and Their Ligands**

Chair: Rob Leurs

9:00 Roland Seifert (Germany)

O16 Histamine receptors from a global and molecular perspective

9:30 Mohammad A. Khanfar, David Reiner, Stefanie Hagenow, Holger Stark (Germany)

O17 Novel oxadiazole- and thiazole-based histamine H3R ligands

10:00 Rob Leurs (Netherlands)

O18 Chemical biology of histamine receptors: the development of new tools to study new pharmacology of the histaminergic system

10:30 ~ 11:00 **Coffee Break**

11:00 ~ 12:30 **Symposium 6 –Histamine and CNS**

Chair: Kazuhiko Yanai

11:00 Christopher Pittenger, Maximiliano Rapanelli, Jian Xu (USA)

O19 Histamine dysregulation in Tic disorders: New data from a mouse model

11:30 Patrizio Blandina, Gustavo Provensi, Andrea Santangelo, Maria Beatrice Passani (Italy)

O20 Histamine regulates emotional memory

12:00 Tadaho Nakamura, Takeo Yoshikawa, Kazuhiko Yanai (Japan)

O21 Histamine clearance through polyspecific transporters and histamine N-methyltransferase in the brain

12:30 ~ 13:30 **Lunch**

13:30 ~ 15:00 **Poster Viewing**

15:00 ~ 17:30 **Symposium 7 – Inflammation and Allergy**

Chair: Satoshi Tanaka

15:00 Satoshi Tanaka

Opening remarks

O22 IgE-independent degranulation of murine mast cells.

15:30 Yoshimichi Okayama, Daisuke Fujisawa, Takahiro Endo, Jun-ichi Kashiwakura, Kazuko Kanegae, Tomomi Sakamoto, Shota Toyoshima, Koremasa Hayama, Chisei R, Tadashi Terui (Japan)

O23 Expression of Mas-related gene X2 on mast cells in skin of patients with severe chronic spontaneous urticaria

16:00 Noriyasu Hirasawa (Japan)

O24 Induction of histidine decarboxylase in inflammation and roles of histamine.

16:30 W. Agnieszka Fogel, Anna Stasiak, Jolanta Gola, Katarzyna Kraszewska, M. Mussur, Jozef Kobos, Urszula Mazurek, Holger Stark (Germany)

O25 Therapeutic potentials of histamine signaling inhibition in myocarditis

17:00 Bastian Schirmer, Kaya Bittkau, Luisa Bringmann, Daniela Bösche, Rukijat Isaev, Roland Seifert, Detlef Neumann (Germany)

O26 Experimental colitis in mice is affected by histamine H₄-receptors expressed on colonic epithelial cells

17:30 ~ 17:40 **Short Break**

17:40 ~ 18:00 **Concluding Remarks**

Chair: Madeleine Ennis

Hiroyuki Fukui (WHS2018 President)

18:00 ~ 18:30 **Break & Poster Removing**

18:30 ~ 21:00 **Farewell Party**

Poster session

- P1 Hayato Umehara (Japan)
Neuropeptide Y regulates activities of the wake-promoting neurons in the hypothalamus to control food-anticipatory behavior in mice
- P2 Toru Tamii, Tadahiko Nakamura, Fumito Naganuma, Takeo Yoshikawa, Nobuyuki Okamura and Kazuhiko Yanai (Japan)
H1 receptor deletion facilitates loss of consciousness induced inhaled general anesthetics
- P3 Asuka Kikuchi, Fairuz Binti Mohammadi Nasir, Akie Inami, Attayeb Mohsen, Shoichi Watanuki, Masayasu Miyake, Kazuko Takeda, Daigo Koike, Takayasu Ito, Junpei Sasakawa, Rin Matsuda, Kotaro Hiraoka, Marcus Maurer, Kazuhiko Yanai, Hiroshi Watabe, Manabu Tashiro (Japan)
Effect of antihistamines on regional glucose metabolism and hemodynamic responses in human brain during cognitive task: Dual PET and NIRS measurement
- P4 Li Cheng, Rujia Liao, Weiwei HU, Zhong Chen (China)
Histamine H1 receptors in neural stem cells are required for the promotion of neurogenesis conferred by H3 receptor antagonism following traumatic brain injury
- P5 Lei Jiang, Zhong Chen, Weiwei HU (China)
Histamine H2 receptor in oligodendrocyte inhibits its differentiation in neonatal hypoxic-ischemic encephalopathy
- P6 Takuro Matsuzawa, Takeo Yoshikawa, Maria Mogilevskaya and Kazuhiko Yanai (Japan)
Importance of H1 and H2 receptors in periaqueductal gray matter for JNJ10181457-induced pain relief
- P7 T.A.M.Mocking¹, H.F. Vischer, R. Leurs (Netherlands)
Homogeneous nanobret binding assays for the histamine H3 receptor on living cells
- P8 Tamara Mocking, Niels Hauwert, Yara Huppelschoten, Albert Kooistra, Chris de Graaf, Maikel Wijtmans, Henry Vischer, Rob Leurs (Netherlands)
Characterization of photoswitchable histamine H3 receptor antagonists VUF14738 and VUF14862

- P9 N. J. Hauwert, T.A.M. Mocking, D. Da Costa Pereira, A.J. Kooistra, L.M. Wijnen, G.C.M. Vreeker, E.W.E. Verweij, A.H. de Boer, M.J. Smit, C. De Graaf, H.F. Vischer, M. Wijtmans, I.J.P. de Esch, R. Leurs (Netherlands)
Synthesis and characterization of a bidirectional photoswitchable antagonist toolbox for H3R photopharmacology
- P10 N. J. Hauwert, T.A.M. Mocking, D. Da Costa Pereira, K. Lion, H.F. Vischer, M. Wijtmans, I.J.P. de Esch, R. Leurs (Netherlands)
VUF15000: A photoswitchable agonist for H3R photopharmacology
- P11 Dorota Łażewska, Paula Zaręba, Szczepan Mogilski, Małgorzata Więcek, Barbara Filipek, Barbara Malawska, and Katarzyna Kieć-Kononowicz (Poland)
Biphenyl derivatives – Histamine H3 receptor ligands and cholinesterase inhibitors
- P12 Seiichiro Kamimura, Yoshiaki Kitamura, Nanae Sanada, Kentaro Okamoto, Tatsuya Fujii, Hiroyuki Mizuguchi, Hiroyuki Fukui, Noriaki Takeda (Japan)
Irradiation with narrow-band-ultraviolet B suppresses up-regulation of histamine H1 receptor mRNA in the nasal mucosa of rat model of allergic rhinitis
- P13 Nanae Sanada, Hiroyuki Mizuguchi, Seiichiro Kamimura, Tatyua Fujii, Takuya Yamada, Yoshiaki Kitamura, Hiromichi Fujino, Noriaki Takeda, Hiroyuki Fukui (Japan)
Effect of narrow-band UVB on up-regulation of histamine H1 receptor gene expression in HeLa cells
- P14 Ayumi Kyuta, Hiroyuki Mizuguchi, Makiko Kawai, Hiromichi Fujino, Yoshiaki Kitamura, Noriaki Takeda, Hiroyuki Fukui (Japan)
Effect of anti-allergic compound (–)-maackiain isolated from kujin on steroid signaling
- P15 Yuki Konishi, Hiroyuki Mizuguchi, Yoshiaki Kitamura, Hiromichi Fujino, Noriaki Takeda, Hiroyuki Fukui (Japan)
Effect of Sho-seiryu-to on histamine H1 receptor and interleukin-33 gene expression
- P16 Aurpita Shaha, Hiroyuki Mizuguchi, Rezwanul Islam, Tomoharu Wakugawa, Hiromichi Fujino, Masami Yabumoto, Noriaki Takeda, Hiroyuki Fukui (Japan)
Effect of Royal jerry and Brazilian green propolis on the signaling for histamine H1 receptor and interleukin-9 gene expressions responsible for the pathogenesis of the allergic rhinitis

- P17 Rezwanul Islam, Aурpita Shaha, Kentaro Okamoto, Tomoharu Wakugawa, Kohei Nishida, Masami Yabumoto, Hisashi Ikeda, Hiromichi Fujino, Hiroyuki Fukui, Noriaki Takeda, Hiroyuki Mizuguchi (Japan)
Nasal symptoms in allergic model rats markedly alleviated by the combination therapy with wild grapes and Awa-tea
- P18 Miharu Hiramatsu, Hiroyuki Mizuguchi, Tomoharu Wakugawa, Kenichi Nagamine, Hideya Tanabe, Keiko Shinohara, Eiji Sawada, Hiromichi Fujino, Yoshiaki Kitamura, Noriaki Takeda, Hiroyuki Fukui (Japan)
Isolation of anti-allergic compound from lotus roots
- P19 Kohei Nishida, Hiroyuki Mizuguchi, Tomohiro Nakano, Noriko Kitamura, Osamu Kaminuma, Masayuki Uchida, Seiichiro Kamimura, Yoshiaki Kitamura, Hiromichi Fujino, Noriaki Takeda, Hiroyuki Fukui (Japan)
Anti-allergic compound pyrogallol extracted from Awa bancha suppresses calcineurin (CN)/nuclear factor of activated T-cells (NFAT) signaling
- P20 Baoluo Zhang, Natsumi Mizuno, Riyousuke Segawa and Noriyasu Hirasawa (Japan)
Significant roles of mast cells in imiquimod-induced psoriasis-like inflammation in mice
- P21 Yoshihiro Inami, Tsugunobu Andoh, Yasushi Kuraishi (Japan)
Involvement of keratinocyte-derived histamine in surfactant-induced itch in mice