

**APSN  
2017**

# **The 3rd Asia-Pacific International Symposium of Neuroblastoma**

**第3回 アジア-パシフィック神経芽腫シンポジウム  
(第24回神経芽腫研究会)**

**October 6th (Fri) 2017**

**2017年10月6日(金)**

国立国際医療研究センター 国際医療協力研修センター棟 5階 大会議室  
Lecture Hall (5th floor), International Medical Cooperation Training Center, National Center  
for Global Health and Medicine

**共催: 神経芽腫研究会**

事務局

2017 Asia-Pacific Symposium of Neuroblastoma(APSN2017)事務局

〒362-0806 埼玉県北足立郡伊奈町小室 818 埼玉県立がんセンター臨床腫瘍研究所内

TEL : 048-722-1111 FAX : 048-722-1739 E-mail : asia\_pacific\_3rd@cancer-c.pref.saitama.jp

# 2017 Asia-Pacific Symposium of Neuroblastoma

アジア-パシフィック神経芽腫シンポジウム 2017

(第 24 回神経芽腫研究会)

**APSN2017**

October 6 (Fri) 2017

Lecture Hall, International Medical Cooperation Training Center,  
National Center for Global Health and Medicine (NCGM)  
Tokyo, Japan

## Contents

2	<b>Welcome Message</b>
3	<b>Organizing Committee</b>
	Organizers
	Sponsors
5	<b>Venue Map</b>
6	<b>Information for Participants</b>
6	Registration
6	Conference Dinner
7	Oral Presentation
7	Poster Presentation
10	<b>Scientific Program</b>
15	<b>Abstracts</b>
15	Special Lecture (S-01)
16	Keynote Speeches (K-01-04)
20	Luncheon Seminar (L-01-02)
21	Oral Presentation (O-01-11)
32	Poster Display (P-001-018)

## President's Welcome Message

Dear colleagues:

Welcome to Japan!

In neuroblastoma research, Advances in Neuroblastoma Research (ANR) has been the most important scientific meeting. ANR was founded in 1975 in Philadelphia and has been held in every two years.

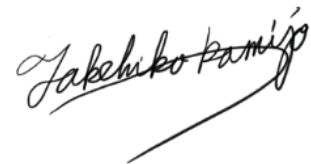
In Japan, Dr. Akira Nakagawara et al. started Neuroblastoma Research Meeting in 2002 and the meeting has played important roles for not only basic research but also translational and clinical researches in neuroblastoma. In 2013, Prof. Kadomatsu held the 20<sup>th</sup> Neuroblastoma Research Meeting in Yokohama as the 2013 Asia-Pacific Symposium of Neuroblastoma (APSN2013) and researchers from Taiwan and Australia had a fruitful meeting. In 2015, Prof. Weng-Ming Hsue held the APSN2015 in Taipei and it was a really meaningful and enjoyable meeting.

The rapid progress of next generation sequencing/gene editing technologies in recent years has enabled us to study the neuroblastoma genomics and epigenomics deeply. Furthermore, advances in tumor immunology, especially anti-GD2 antibody therapies are increasingly being applied in the treatment of unfavorable neuroblastoma patients; the antitumor antibody therapies are expected to improvement by the combination with immune checkpoint inhibitors cancer therapy.

APSN2017 will be held on October 6th (Fri) in Tokyo. This meeting is to exchange and share our scientific/clinical knowledge for neuroblastoma. We are expecting a special lecture by Dr. Toshikazu Ushijima about epigenomics in neuroblastoma in addition to oral papers and poster presentations.

I truly hope that all of us have a wonderful and fruitful time together at the APSN2017 for the future development of better cures for patients suffering from neuroblastoma.

Best wishes,

A handwritten signature in black ink that reads "Takehiko Kamijo". The signature is written in a cursive style and is positioned above the printed name and title.

Takehiko Kamijo, MD, PhD  
President, APSN2017  
Director

Research Institute for Clinical Oncology  
Saitama Cancer Center, Saitama, Japan

## Organizing Committee

### Chairs :

Takehiko Kamijo	(Organizing chair, Research Institute for Clinical Oncology, Saitama Cancer Center)
Kenji Kadomatsu	(Co-chair, Nagoya University Graduate School of Medicine)
Ryuichi Sakai	(Co-chair, Kitasato University Graduate School of Medicine)
Hiroyuki Shichino	(Co-chair, National Center for Global Health and Medicine)

### Committee members (A-Z) :

Tomoro Hishiki	(National Center for Child Health and Development)
Tomoko Iehara	(Kyoto Prefectural University of Medicine)
Kimikazu Matsumoto	(National Center for Child Health and Development)
Akira Nakagawara	(Saga Medical Center Koseikan)
Atsuko Nakazawa	(Saitama Children's Medical Center)
Miki Ohira	(Research Institute for Clinical Oncology, Saitama Cancer Center)
Noriko Sato	(National Center for Global Health and Medicine)
Yuta Suenaga	(National Center for Global Health and Medicine)
Tatsuro Tajiri	(Kyoto Prefectural University of Medicine)
Yoshiyuki Takahashi	(Nagoya University Graduate School of Medicine)
Hisanori Takenobu	(Research Institute for Clinical Oncology, Saitama Cancer Center)
Arata Tomiyama	(National Defense Medical College)
Akihiro Yoneda	(Children's Medical Center, Osaka City General Hospital)
Yuri Yoshimoto	(National Center for Global Health and Medicine)

### Staffs of secretariat

Kyosuke Mukae, Shunpei Satoh, Yoshitaka Shinno, Yuki Endo, Mariko Hasegawa  
Jesmin Akter, Zhenghao Li, Ryu Okada, Yutaka Katai, Sultana Parvin  
Yumiko Denta, Kaoru Takahashi

### Organizers

Neuroblastoma Research Meeting  
Japan Children's Cancer Group-Japan Neuroblastoma Study Group (JCCG-JNBSG)  
Taiwan Neuroblastoma Study Group

## Sponsors

Japan Agency for Medical Research and Development (AMED)

Agilent Technologies Japan, Ltd.

MiltenyiBiotec K.K.

AZ Science Co., Ltd.

YAKUKENSHA Co., Ltd.

TOWA SCIENTIFIC Co., Ltd.

KOMATSUYA Co., Ltd.



## Conference Secretariat

2017 Asia-Pacific Symposium of Neuroblastoma (APSN2017)

Miki Ohira, Hisanori Takenobu, Kyosuke Mukae, Shunpei Satoh, Yumiko Denta

Research Institute for Clinical Oncology, Saitama Cancer Center

818 Komuro, Ina-machi, Kita-adachi-gun, Saitama 362-0806, Japan

TEL: 048-722-1111 (From overseas: +81-48-722-1111)

FAX: 048-722-1739 (From overseas: +81-48-722-1739)

E-mail: [asia\\_pacific\\_3rd@cancer-c.pref.saitama.jp](mailto:asia_pacific_3rd@cancer-c.pref.saitama.jp)

## Venue

2017年10月6日(金)

於：国立国際医療研究センター 国際医療協力研修センター棟 5F 大会議室

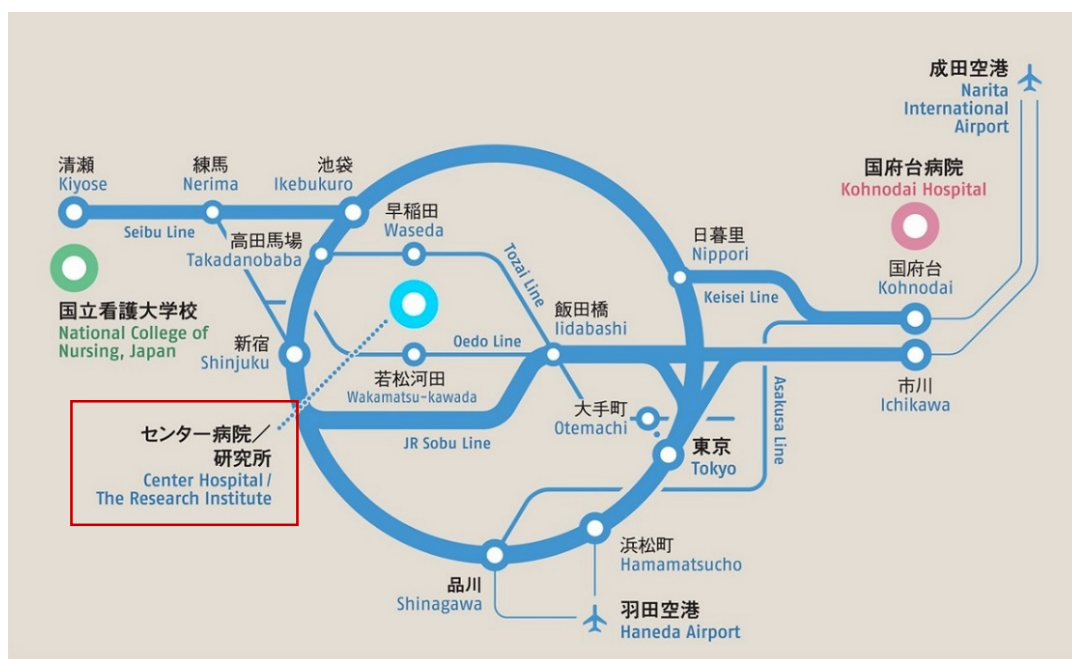
〒162-8655 東京都新宿区戸山 1-21-1

Tel: 03-3202-7181 (代表)

Date: October 6, 2017 (Friday)

Place: Lecture Hall (5th floor), International Medical Cooperation Training Center,  
National Center for Global Health and Medicine (NCGM)

1-21-1 Toyama, Shinjuku, Tokyo 162-8655, Japan Tel: +81- 3-3202-7181



## Information for participants

### Registration

Registration is open from 8:30 at 5th floor, International Medical Cooperation Training Center, National Center for Global Health and Medicine (NCGM).

Conference Registration; 5,000 JPY.

Conference Dinner (October 6th); 5,000 JPY.

*\*Please pay in Japanese yen at registration desk. Payment by credit card is not possible. Pre-registration is not available.*

Lunch box (Japanese style “obento”) will be served at the luncheon seminar (3<sup>rd</sup> floor).

Smoking is prohibited in all areas of the venue.

Wireless internet access is available during the meeting. Please contact registration desk for ID and password.

## **Oral presentation:**

(1) Time limit of the presentation

General presentation (O-01-11): 12-minute presentation and 3-minute discussion

Keynote (K-01, 02): 25-minute presentation and 5-minute discussion

Selected (K-03, 04): 15-minute presentation and 5-minute discussion

(2) All presentations and discussion should be held in English. All those who make presentations at the meeting are obliged to disclose conflicts of interest (COI). The 2<sup>nd</sup> slide should be the COI disclosure in your presentation.

(3) Windows is the only operating system available for the presentations. We encourage all presenters to make their slides by Windows PC. PC used in the conference is installed with Windows 7 OS with Microsoft PowerPoint 2010. Your PowerPoint version should be 2003-2013.

(4) Please be seated at the “next speaker” in the conference room as soon as prior presentation is started.

(5) Please operate your slides by yourself.

(6) As a timekeeper, bell rings once at the end of presentation time and twice at the end of the allocated discussion time. Please keep to the time limit of the presentation.

(7) To avoid garbled character display, Arial, Arial Black, Arial Narrow, Century, Century Gothic, Courier New, Georgia, Times New Roman are recommended.

## **PC preview & registration**

(1) Please put your presentation file (Microsoft Powerpoint file) in the PC at the main conference room prior to the beginning of your session. All data saved into the presentation PC will be completely deleted upon the completion of APSN2017.

(2) Presentation data can only be accepted by USB flash memory.

In order to avoid virus infection, please scan your data with updated anti-virus software beforehand.

(3) If you create your data including movies or with Macintosh, please contact the secretariat in advance.

## **Poster presentation:**

(1) Please prepare posters in English. The poster should contain the COI disclosure statement.



(2) Presentation style: free discussion style

All poster presenters are requested to stand in front of their poster panel during the designated poster viewing time (each session break).

(3) Poster No. (P-001~018) is prepared by the secretariat. Please check your poster No. in the program to find the location of your assigned poster board.

(4) Maximum poster size is **100cm wide X 160cm high**. Please use large-sized characters for easy reading.

(5) Please remove your poster immediately when the symposium is closed.

(6) Any posters remaining on the panels after the removal time will be discarded by the secretariat. (Poster removal: 17:00-17:30)

**COI disclosure at presentation:**

(1) Oral presentation

If there is any COI, the oral presenter should use the disclosure slide to present COI after the title slide, in order to clarify the names of companies and/or associations in question. If there is no COI, the presenter should indicate 'I have no financial relationships to disclose.' as such on the sample slide.

(2) Poster presentation

If there is any COI, the poster presenter should use the disclosure format for the last of the presentation page, in order to clarify the names of companies and/or associations in question. If there is no COI, the presenter should indicate 'I have no financial relationships to disclose.' as such on the sample slide.

# Scientific Program

# Scientific Program

## Oral Presentation

Time	Topic	No.	Speaker
09:00-09:30	Registration, poster mounting and slide upload		
<b>Opening</b>			
09:30-09:45	Opening remarks		<b>Takehiko Kamijo</b> <b>Akira Nakagawara</b>
<b>Oral session 1 Moderator: Prof. Ryuichi Sakai</b>			
09:45-10:00	Neurocan, an extracellular chondroitin sulfate proteoglycan, stimulates neuroblastoma cells to promote malignant phenotypes	O-01	<b>Satoshi Kishida</b>
10:00-10:15	Immunohistochemical analysis of pre- and post-chemotherapeutic ERK phosphorylation in clinical neuroblastoma samples	O-02	<b>Tomoko Tanaka</b>
10:15-10:30	EZH2 regulates neuroblastoma cell differentiation via NTRK1 promoter epigenetic modifications	O-03	<b>Hisanori Takenobu</b>
10:30-10:50	Break, poster viewing		
<b>Keynote (1) Moderator: Prof. Kenji Kadomatsu</b>			
10:50-11:20	The roles of endogenous ligand for aryl hydrocarbon receptor in neural development and tumorigenesis of neuroblastoma	K-01	<b>Hsinyu Lee</b>
<b>Oral session 2 Moderator: Prof. Hsinyu Lee</b>			
11:20-11:35	The signaling complex of tyrosine phosphatase SHP2 and docking protein ShcC regulates oncogenicity of neuroblastoma cells in a tyrosine phosphorylation-dependent manner	O-04	<b>Arata Tomiyama</b>
11:35-11:50	Systems biology data science discovers reprogramming serine metabolism for neuroblastoma therapy	O-05	<b>Hsueh-Fen Juan</b>
11:50-12:05	The roles of innate immune sensors in diagnosis and treatment of neuroblastoma	O-06	<b>Li-Ling Lin</b>
12:05-12:15	move to the 3rd floor (pick up "obento"-lunch box)		
12:15-12:50	Luncheon (3rd floor) sponsored by <b>Agilent Technologies Japan, Ltd.</b>	L-01 L-02	<b>Miki Ohira</b> <b>Fumiko Yoshizaki</b>
	Poster viewing (return to the 5th floor)		

## Oral Presentation

Time	Topic	No.	Speaker
------	-------	-----	---------

### Special lecture Moderator: Prof. Takehiko Kamijo

13:00-14:00	The CpG Island Methylator Phenotype in Neuroblastoma	S-01	<b>Toshikazu Ushijima</b>
-------------	--	------	---------------------------

14:00-14:15 Group photo

### Oral session 3 Moderator: Prof. Hsueh-Fen Juan

14:15-14:30	Preclinical study of novel MEK inhibitors on neuroblastoma and the biomarker for their therapeutic effects in neuroblastoma xenograft mice	O-07	<b>Yuki Takeuchi</b>
-------------	--	------	----------------------

14:30-14:45	Calreticulin regulates MYCN expression to control neuronal differentiation and stemness of neuroblastoma	O-08	<b>Pei-Yi Wu</b>
-------------	--	------	------------------

14:45-15:00	Combinational therapy of BET bromodomain inhibitor and cytotoxic chemotherapy in Th-MYCN transgenic mice with neuroblastoma	O-09	<b>Yen-Lin Liu</b>
-------------	---	------	--------------------

15:00-15:25 Break, poster viewing

### Keynote (2) Moderator: Prof. Tatsuro Tajiri

15:25-15:55	The concept evolution in the surgical treatment of neuroblastoma	K-02	<b>Wen-Ming Hsu</b>
-------------	--	------	---------------------

### Oral session 4 Moderator: Prof. Wen-Ming Hsu and Prof. Yoshiyuki Takahashi

15:55-16:15	Selected (1): Treatment strategies for neuroblastoma patients in JCCG neuroblastoma committee (JNBSG)	K-03	<b>Tomoko Iehara</b>
-------------	---	------	----------------------

16:15-16:35	Selected (2): Surgical strategy in the JCCG neuroblastoma committee (JNBSG) clinical trials	K-04	<b>Akihiro Yoneda</b>
-------------	---	------	-----------------------

16:35-16:50	Killer cell immunoglobulin-like receptor ligand-mismatched allogeneic cord blood transplantation reduces relapse and improves survival in young patients with high risk stage 4 neuroblastoma	O-10	<b>Nobuhiro Nishio</b>
-------------	---	------	------------------------

16:50-17:05	Phase I study of anti-GD2 antibody ch14.18/CHO long term infusion in recurrent or refractory neuroblastoma patients in Japan	O-11	<b>Atsushi Narita</b>
-------------	--	------	-----------------------

### Closing

17:05-17:15	Closing remarks		<b>Kenji Kadomatsu</b> <b>Hiroyuki Shichino</b> <b>Wen-Ming Hsu</b>
-------------	-----------------	--	---

## Program

### Poster Presentation

Topic	No.	Presenter
<b>Basic research</b>		
Homogenic mouse-derived mesenchymal stem cells have tumor-homing effect on the TH- <i>MYCN</i> mouse model of neuroblastoma	P-001	<b>Junnosuke Maniwa</b>
Integrin $\beta 1$ activation peptide TNIIIA2 Enhances All-trans Retinoic Acid-induced Neural Differentiation of Neuroblastoma Cells through Proteasomal Degradation of N-Myc	P-002	<b>Manabu Sasada</b>
MCL-1 Expression correlates with tumor differentiation and predicts favorable outcomes in neuroblastoma	P-003	<b>Hsiu-Hao Chang</b>
Transcriptomic alterations involving polycomb repressive complex 2 at the embryonic stage govern tumorigenesis and clinical outcome in MYCN-driven neuroblastoma	P-004	<b>Shoma Tsubota</b>
The potential of <i>Antrodia cinnamomea</i> for targeting on neuroblastoma cancer stem cells and restoring chemo- and radio-sensitivity	P-005	<b>Ping-Hsiao Shih</b>
High-risk, expression-based prognostic long noncoding RNA signatures in neuroblastoma	P-006	<b>Hsuan-Cheng Huang</b>
Reactive oxygen species is a regulator and effector of KIF1B $\beta$ -mediated apoptosis in neuroblastoma	P-007	<b>Zhi Xiong Chen</b>
Involvement of DENND2A and Rab9B in the progression of neuroblastoma	P-008	<b>Nobuyuki Yamamoto</b>

Poster program continued on next page

## Program

### Poster Presentation

Topic	No.	Presenter
-------	-----	-----------

#### Translational Research

Targeting the amplified MYCN gene using PI polyamide alkylating agent in neuroblastoma	P-010	<b>Atsushi Takatori</b>
--	-------	-------------------------

New synthetic lethal interactions in MYCN-amplified neuroblastoma cells	P-011	<b>Shinichi Kiyonari</b>
---	-------	--------------------------

Exploratory research for novel therapeutic drug for neuroblastoma; anti-tumor effect of burchellin derivatives.	P-012	<b>Masahiro Kurita</b>
---	-------	------------------------

A irreversible EGFR/ErbB2 dual inhibitor can induce neuronal differentiation and suppress the progression of neuroblastoma	P-013	<b>Yung-Feng Liao</b>
--	-------	-----------------------

Establishment of an early-phase patient-derived cell culture system for neuroblastoma	P-014	<b>Amos Loh</b>
---	-------	-----------------

The novel histone deacetylase inhibitor OBP-801 induces apoptosis in neuroblastoma tumor cells	P-015	<b>Daisuke Kaneda</b>
--	-------	-----------------------

Bruton's Tyrosine Kinase (BTK), a potential targeted therapy in neuroblastoma	P-016	<b>Narpati Wesa Pikatan</b>
---	-------	---------------------------------

#### Clinical Research

Feasibility and radiation safety of high dose <sup>131</sup> I-mIBG (metaiodobenzylguanidine) therapy in paediatric patients with high risk chemotherapy refractory neuroblastoma : Initial experience from a South East Asian hospital	P-017	<b>Kelvin Loke Siu Hoong</b>
---	-------	----------------------------------

Nephrectomy is not beneficial for stage 4 neuroblastoma patients with renal involvement	P-018	<b>Yi-Ping Lee</b>
---	-------	--------------------

