

# 4<sup>th</sup> INWC & 27<sup>th</sup> Hakuba Seminar & KBTS w.m.

The 4<sup>th</sup> International Neurosurgical Winter Congress  
joint convention with 27<sup>th</sup> Hakuba Neurosurgical Seminar  
and Korean Brain Tumor Society Winter Meeting

Venue

Rusutsu Resort  
Hokkaido, Japan

Date

February 7-11, 2011

2011 • JAPAN

Department of Neurosurgery, Osaka Medical College

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## The 4<sup>th</sup> International Neurosurgical Winter Congress (INWC)

We are greatly honored to host the 4th INWC in Hokkaido, Japan. This congress has been held in the world-famous ski areas such as Sestriere (the 1st INWC), Zermatt (the 2nd INWC), Snowbird (the 3rd INWC), and this time, Rusutsu. The winter congress is a unique opportunity for neurosurgeons who love skiing to gather in the world's leading ski areas, learn the latest opinions, and share ideas in all areas of neurosurgery and deepen mutual relations. The congress will be held as a joint convention with the Korean Neurosurgical Brain Tumor Society and Hakuba Seminar, making it even more significant.

Rusutsu Resort is one of Japan's top ski resorts and is only 90 minutes away from the New Chitose International Airport. There are 37 diverse courses that offer something for everyone from beginners to experts, which makes this ski area the most popular ski area in Hokkaido. A spectacular scenery from the trails of East Mt., West Mt. and Mt. Isola and plenty of fresh deep powder snow is waiting for you. Additionally, at the time of the Hokkaido Toyako Summit held in July, 2008, Rusutsu Resort took part in the International Media Center hosting 4000 guests from home and abroad. Incorporating access to summit services, Rusutsu Resort has been aiming to provide Conference services at a global standard and has completely renovated its guest rooms to become a facility that is truly satisfying for all guests.

The 4th INWC will have a balanced scientific programs composed of stimulating talks and useful information for all attendees. We welcome your presentation on neurosurgical activities from throughout the world.

I hope that everyone will learn a great deal, enjoy lots of skiing, deepen international relations and have a chance to relax and create many good memories at this congress. The next congress will be held in Sochi, Russia, the venue of the 2014 Winter Olympic Games. We look forward to seeing you again in Sochi.

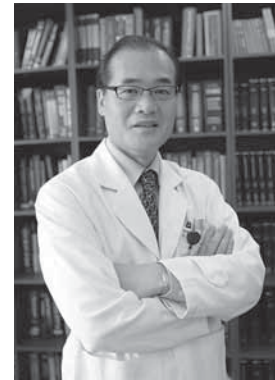


A handwritten signature in black ink that reads "Toshihiko Kuroiwa".

Toshihiko KUROIWA, M.D., Ph.D.  
Professor & Chair, Dept. of Neurosurgery,  
Osaka Medical College

## Korean Brain Tumor Society (KBTS) Winter Meeting

As the president of Korean Brain Tumor Society, the 4<sup>th</sup> International Neurosurgical Winter Congress in Hokkaido will be one of the memorable occasions especially to the KBTS members. The reason is that we are able to participate and enjoy not only the academic meeting but also natural beauty in the winter-city of Hokkaido. The KBTS have been organized winter meeting as a sort of winter educational course over the last several years around the winter ski resort areas in Korea. We found that this kind of meeting is especially wonderful not only for the active KBTS members but also the young neurosurgeons and nurses in the field of neurooncology. INWC was known as the must-go meeting especially for ski-mania in the field of neurosurgery over the last several years. The KBTS is eager to have joint meeting in Hokkaido this year under strong support from professor Kuroiwa from Osaka, Japan and professor Chang-Jin Kim from Seoul, Korea. I believe that this kind of meeting will have a positive effect to all the participants' brain and body. I wish that this meeting will be marked as the start-up for the communication between KBTS and Japanese colleagues. Finally I would like to appreciate the Dr. Kuroiwa's strong commitment to organize the 4<sup>th</sup> INWC in beautiful city of Hokkaido. Happy New Year all the participants!



Yong-Gu Chung, M.D., Ph.D.  
President of KBTS  
Seoul, Korea

## 27<sup>th</sup> Hakuba Neurosurgical Seminar (joint session)

Dear our friends, neurosurgeons, colleagues and their families.

Welcome to Hakuba Winter Seminar to be held in Snow Wonderland Rusutsu Resort. In addition, it is our great pleasure to have this renowned meeting with a long history with the 4th International Neurosurgical Winter Congress and Korean Brain Tumor Society Winter meeting.

Hakuba seminar has been launched 27 years ago by our respected late Professor Ken-ichirou Sugita. As you know, he was a distinguished neurosurgeon but he was also an expert to enjoy sports and off-duty life. He used to be not good at skiing. However, in couple years, he had become a wonderful skier. His attitude to ski and sports was exactly same to his superb work in Neurosurgery.

I believe that this Hakuba seminar is a good time to enjoy skiing and inspire the passion to on and off-duty life as a neurosurgeons. In addition, this special joint meeting can absolutely offer us an international communication between busy and active neurosurgeons, their colleagues and families.

Best Regards,



Kiyohiro Houkin, M.D.  
Professor and Chair  
Hokkaido University Graduate  
School of Medicine  
Sapporo, Japan

## Organization Committee

### Congress President

Toshihiko Kuroiwa

### Vice Presidents

Kazuhiro Hongo

Masakazu Takayasu

### Honorary Presidents

Peter Black

Takanori Fukushima

### Past Presidents

1st INWS Alessandro Ducati

2nd INWS Helmut Bertalanffy

3rd INWS Takanori Fukushima

### 2013 President Elect

Uwe Spetzger

### Scientific Committee

Motohiro Arai, Atsushi Doi, Motomasa Furuse, Naokado Ikeda, Yoshinaga Kajimoto, Shinji Kawabata, Masahiro Kawanishi, Hitoshi Kobata, Terumasa Kuroiwa, Toshihiko Kuroiwa, Shin-Ichi Miyatake, Ryusuke Ogawa, Takehisa Ohmura, Hideyuki Ohnishi, Yoji Tamura, Hirokatsu Taniguchi, Yukihiro Yoshikawa

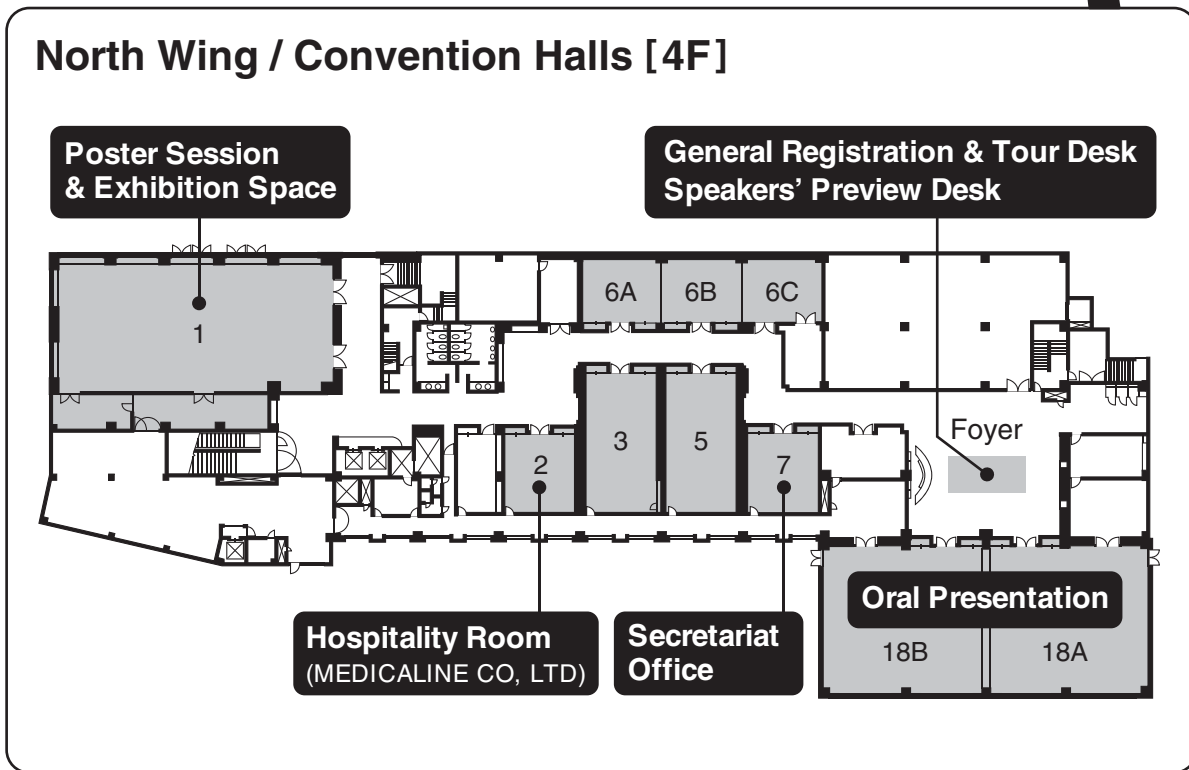
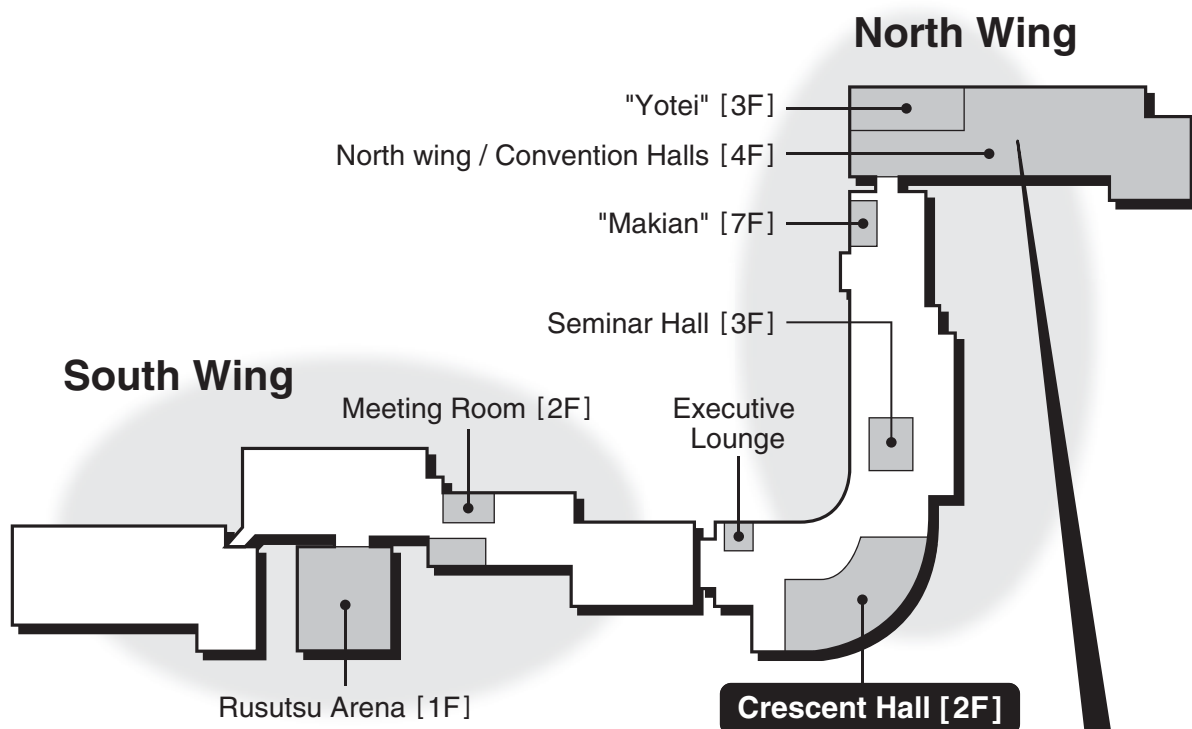
### Local Organizing Committee

Hajime Arai (Tokyo), Isao Date (Okayama), Tomokatsu Hori (Tokyo), Kiyohiro Houkin (Sapporo), Yoshiyasu Iwai (Osaka), Hiroyasu Kamiyama (Asahikawa), Sadao Kaneko (Sapporo), Takashi Kawase (Tokyo), Jun-Ichi Kuratsu (Kumamoto), Kaoru Kurisu (Hiroshima), Tohru Matsui (Kawagoe), Kohki Matsumae (Isehara), Kenji Ohata (Osaka), Hiroki Ohkuma (Hirosaki), Hirotohi Sano (Toyoake), Michiyasu Suzuki (Ube)

### International Organizing Committee

Helmut Bertalanffy (Switzerland), Oliver Bozinov (Switzerland), Ketan Bulsara (USA), Yongku Chung (Korea), Alessandro Ducati (Italy), Dominique Fournier (France), Allan Friedman (USA), Roar Juul (Norway), Chang Jin Kim (Korea), Gaetano Liberti (Italy), Weidong Liu (China), Luciano Mastronardi (Italy), Tiit Mathiesen (Sweden), Jacques Morcos (USA), Christo Rangelov (Bulgaria), Pierre Roche (France), Martin Sames (Czech Republic), Uwe Spetzger (Germany), Ulrich Sure (Germany), Alexandre Voznyak (Ukraine), Luc De Waele (Belgium), Michael Walsh (USA), Grigore Zapulih (Moldova)

# Floor Map





## Meeting Information

### Meeting Information

Date	February 7 ~ 11, 2011
Venue	Rusutsu Resort Hotel & Convention, Rusutsu, Hokkaido, Japan
Official Language	English
Official Website	<a href="https://apollon.nta.co.jp/inwc2011/index.html">https://apollon.nta.co.jp/inwc2011/index.html</a>

### Registration and Information Desk

The Registration Desk will be located at the “Foyer” in front of the main meeting room # 18 on the 4th floor of the North Wing/Convention Halls, Rusutsu Resort Hotel & Convention.

The Registration Desk will open at the following times:

February 6 (Sun)	16:00 ~ 18:00
February 7 (Mon)	7:30 ~ 11:00, 15:30 ~ 18:00
February 8 (Tue)	7:30 ~ 11:00, 15:30 ~ 18:00
February 9 (Wed)	7:30 ~ 11:00, 15:30 ~ 18:00
February 10 (Thu)	7:30 ~ 11:00, 15:30 ~ 18:00
February 11 (Fri)	8:00 ~ 9:30

The Registration Desk will be moved and opened in front of the Crescent Hall on the 2nd floor of the North wing, Rusutsu Resort Hotel during the meeting dinner.

For participants already registered on-line, please make sure to bring printout of the conformation of your registration.

### On-site Registration

#### 35,000 JPY (On-site Registration)

All payments must be made in Japanese yen by cash. No other type of payment (e.g. credit card) will be accepted.

### Name Tags

Upon your register at the Desk, you will be handled the “Name Tag” (Including Certificate of Attendance, Receipt).

The congress Name Tag must be worn at all times during the conference. Access to the congress venue or social program, meeting dinner will be strictly controlled; therefore, please wear your congress Name Tags at all times. Accompanying persons will not be allowed in the Scientific Sessions.

Invited Chairperson, speaker, committee and the council members will be also required to pick-up your Name Tag at the Registration Desk.

## Secretariat Office

Secretariat Office will be located at the room #7 on the 4th floor, same as the main meeting area, of the North Wing/Convention Halls, Rusutsu Resort Hotel & Convention. Opening hours will be same as the hours of the Registration Desk.

## Filming, Audio Recording, and Photographing

Filming, audio recording, or photographing scientific sessions will be prohibited (except with specific permission of the INWC). The INWC will reserve the right to video all presentations of the 4th INWC 2011.

## Cellular Phones

Using cellular phones while in the lecture halls will be prohibited, and cellular phones must be turned off or set to manner (silent) mode at all times while in the venue.

## Message Forwarding

Any calls and messages received during the congress will not be forwarded directly to you. For messages, both to and from, please use the message boards situated at the “Foyer” outside of the main meeting room #18 next to the Registration Desk.

## Hotel Check-In/Out

Check-In/Out process of the Rusutsu Resort Hotel is separated from meeting registration. If you have any questions, require additional information or assistance, please ask to the Nippon Travel Agency.

### Before the congress;

West Event and Convention Branch, Nippon Travel Agency Co., Ltd.

2-4-24 Shibata, Kita-Ku, Osaka 530-8341, JAPAN

Phone: +81-6-6376-6450, Fax: +81-6-6376-6465

E-mail: kansai\_gakkai@nta.co.jp

In charge: Yoshitaka Nakatani (Mr.) / Nanae Imada (Ms.)

Office Hours: Mon-Fri 9:30-17:30 Japan Time

\*Closed on Japan public holidays.

### During the congress;

Tour Desk (Nippon Travel Agency Co., Ltd.)

Tour Desk will be located next to the Registration Desk at the “Foyer” outside of the main meeting room #18 on the 4th floor of the North Wing/Convention Halls, Rusutsu Resort Hotel & Convention.

## Safety, Security, and Insurance

Please do NOT leave bags unattended at any time, whether inside or outside session. Hotels strongly recommended that you use their safety deposit boxes for your valuables.

The congress secretariat and organizers cannot accept liability for personal accidents or loss of or damage to private property of participants, students and accompanying persons, either during or indirectly arising from the 4<sup>th</sup> INWC. Participants should make their own arrangements with respect to health and travel insurance.

### Meeting Secretariat:

Shin-Ichi Miyatake, Yoshinaga Kajimoto, Yoji Tamura, Motomasa Furuse, Naokado Ikeda, Yoko Takekita, Taro Yamashita, Kenkichi Takahashi, Ryo Hiramatsu, Ryokichi Yagi, Yuki Hirota, Takashi Yoneda, Erina Yoritsune

### Meeting Assistant:

Mai Kinoshita, Yasuko Oide, Eriko Sugane

### Secretary General:

Shinji Kawabata

Department of Neurosurgery, Osaka Medical College  
2-7 Diagaku-machi, Takatsuki, Osaka, 569-8686 JAPAN  
Phone: +81-72-683-1221 (Ext:2383), Fax: +81-72-683-4064  
E-mail: neu-omc@art.osaka-med.ac.jp

### Supported by

International Neurosurgery Education & Research Foundation (INERF) and  
International Microneurosurgery Education Group (IMEG)

4030 Wake Forest Road, Suite 115  
Raleigh, NC 27609, USA  
Phone: +01-919-239-0264, Fax: +01-919-239-0266  
E-meil: inerf@carolinaneuroscience.com  
HP: www.carolinaneuroscience.com

## Instructions for presentation

### Instructions for Oral Presentation

All speakers are kindly requested to strictly observe the allotted presentation time.

**Keynote Lecture: 18 min (15 min presentation and 3 min discussion)**

**Oral presentation: 10 min (8 min presentation and 2 min discussion)**

### For Chairpersons

Chairpersons are asked to remain within the time allotted for the session and each presentation. Please take the next chairperson's seat before the beginning of your session.

### For Oral Presenters

Oral presentations can only be made with Windows PCs (single screen only). Slide projectors are not available.

**Macintosh format** is NOT applicable for USB flash memory or CD-ROM users. **Please bring your own laptop PC and suitable connector (D-sub 15 pin (mini))** to the monitor, AC adapter (connectable in Japan, 100V / A2 type connection). If your presentation includes **movies** or sounds, we also recommend bring your own laptop PC.

Please visit the Speakers' Preview Desk, no later than 30min prior to your presentation in order to preview and submit your presentation file.

### Speakers' Preview Desk

Please register your presentation data only at the Speakers' Preview Desk will be located at the "Foyer" in front of the main meeting room #18.

#### Preview & Registration:

February 7 (Mon)	7:30 ~ 10:30, 15:30 ~ 18:00
February 8 (Tue)	7:30 ~ 10:30, 15:30 ~ 18:00
February 9 (Wed)	7:30 ~ 10:30, 15:30 ~ 18:00
February 10 (Thu)	7:30 ~ 10:30, 15:30 ~ 18:00
February 11 (Fri)	8:00 ~ 9:30

Please note you will be unable to modify your data in the presentation room.

**There are two types of presenters; (1) using self-owned laptop and (2) using USB or CD-R. Please read the instructions carefully that applies to you.**

#### (1) For presenters using your own laptop PC

Please confirm that your own PC is connected to the preview monitor properly. Please provide your own **AC adapter (connectable in Japan, 100V / A2 type connection)** and connector to the monitor. Only **D-sub 15 pin (mini)** connector is provided at the Speakers' Preview Desk. If your presentation includes movies or sounds, please notify the staff. The operator will keep your computer and check the connection. After your presentation is over, please come to the Operation Desk to pick up your computer. Please turn off your screen-saver, power saving function and **unset the password**.

### (2) For presenters using USB flash memory or CD-ROM

Presentations can only be given, using data stored on a USB flash memory drive or CD-ROM. In case of writing onto a CD-R, please use only the hybrid format (ISO9660) due to using special functions such as "Packet Write" may cause your data to be illegible.

#### Instructions for Saving Your Data

**File format:** Files must be in Windows PowerPoint 2003 or 2007.

**Fonts (Typefaces):** To avoid display problems with your presentation, use only standard OS fonts.

**File Management:** Maximum 512 MB is allowed for oral presentations. All data files should be in one folder, including any reference files such as video images. To avoid the possible spread of computer viruses, always scan your presentation files beforehand with updated anti-virus software. After saving your presentation file on the appropriate medium, run a test on another PC to make sure it works normally.

Your data will be copied into our network server at Speakers' Preview Desk and the PC at the Operation Desk of conference room, however your copied data will be erased after the congress is finished.

**Please have a backup copy of your data ready in case there is any problem with your presentation data.**

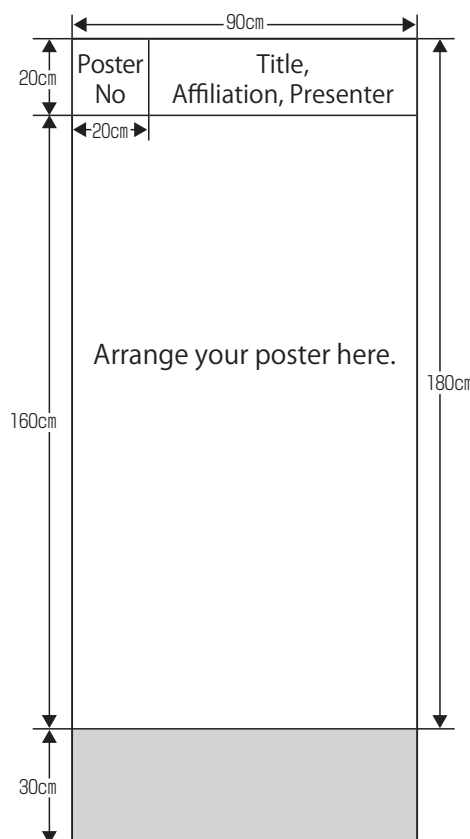
**Please take the next speaker's seat during the presentation up to 20 minutes prior to your own presentation.**

### Instructions for Poster Presentation

Poster presentation will be exhibited in the Poster Session Area will be located at the Poster & Exhibition Space, room # 1, on the 4th floor of the North Wing/Convention Halls, Rusutsu Resort Hotel & Convention.

#### For Poster Presenters

Posters will be shown and discuss during the congress. Posting and removal times are scheduled from 7th 7:50am to 11th 10:00am. Note that any posters remaining over the removal time will be disposed of by the secretariat. The size of the panel is 160 × 90 cm. The Presentation number will be provided in advance. The presenter must prepare the title for the panel.



## Social program

### February 6-11, 2011

Please ask about the details to the Tour Desk will be located next to the Registration Desk at the "Foyer" outside of the main meeting room # 18 on the 4th floor of the North Wing/Convention Halls, Rusutsu Resort Hotel & Convention.

### Daily Breakfast

It is NOT included in expense of meeting Registration fee. The breakfast charge is sure to be included in the room charge in those who stay the Rusutsu Resort hotel.

(North & South wing)

"Oktober Fest" (Buffet, 7:00-9:00), "Costa Terrazza" (Western, 8:00-10:00),

"SekKatei" (Japanese, 7:00-10:00)

(Rusutsu Tower)

"Atrium" (Buffet, 7:00-10:00), "Kazahana" (Buffet, 7:00-10:00)

### Nightly Dinner

Crescent Hall on the 2nd floor of the North wing, Rusutsu Resort Hotel

### Daily Social Events

Sunday, February 6, 2011

Welcome drink and snack	19:30 ~ 21:30	Crescent Hall
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Monday, February 7, 2011

Opening reception dinner	18:30 ~ 21:00	Crescent Hall
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Tuesday, February 8, 2011

Buffet dinner	18:30 ~ 20:30	Crescent Hall
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Wednesday, February 9, 2011

Buffet dinner	18:30 ~ 20:30	Crescent Hall
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Thursday, February 10, 2011

Farewell party	18:30 ~ 21:30	Crescent Hall
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## Schedule

	Feb. 6 <b>SUN</b>	Feb. 7 <b>MON</b>	Feb. 8 <b>TUE</b>	Feb. 9 <b>WED</b>	Feb. 10 <b>THU</b>	Feb. 11 <b>FRI</b>
Morning		<b>INWC</b>	<b>INWC</b>	<b>INWC</b>	<b>INWC</b>	<b>INWC</b> with <b>KBTS</b>
Daytime		Poster viewing Free (Ski)	Poster viewing Free (Ski)	Poster viewing Free (Ski)	Poster viewing Free <b>(Ski Race)</b>	Free (Ski)
Evening		<b>INWC</b>	<b>INWC</b>	<b>INWC</b>	<b>INWC</b> with <b>Hakuba seminar</b>	Hakuba seminar

Night	Welcome drink and snack	Opening reception	Dinner (buffet)	Dinner (buffet)	Farewell party	
Rgistration	Evening~	~	~	~	~	~Morning
Exhibitor		Morning~	~	~	~	~Morning

**INWC:** International Neurosurgical Winter Congress,  
**KBTS:** Korean Brain Tumor Society

## Program

### 7th (Mon.) a.m.

- 8:00 **Welcome message**  
Toshihiko Kuroiwa  
President, the 4th International Neurosurgical Winter Congress  
Professor & Chair, Dept. of Neurosurgery, Osaka Medical College, Osaka, Japan
- 
- Chairpersons; Alessandro Ducati, Kaoru Kurisu, Grigore Zapuhlih
- 8:05 **KL-07-01** **Surgical based treatment for brain metastases: An interdisciplinary experience at the University of Torino**  
Alessandro Ducati  
University of Torino, Torino, Italy
- 8:23 **KL-07-02** **Microscopic and endoscopic removal of pituitary adenoma and craniopharyngioma via transnasal or transcranial route – their tactics in the maneuver –**  
Kaoru Kurisu  
Department of Neurosurgery, Hiroshima University Hospital, Hiroshima, Japan
- 8:41 **KL-07-03** **Surgical treatment of pituitary macroadenomas by transnazal and supraorbital approaches**  
Grigore Zapuhlih  
Department of Neurosurgery, Institute of Neurology and Neurosurgery, Chisinau, Republic of Moldova
- 8:59 **O-07-01** **Recent advancement of extended endoscopic endonasal transsphenoidal approach for skull base lesion**  
Shigetoshi Yano  
Department of Neurosurgery, Kumamoto University Graduate School, Kumamoto, Japan
- 9:09 **O-07-02** **Epidural lateral approach through the C1-C2 interval space to a lower clival chordoma**  
Naoshi Hagihara  
Department of Neurosurgery, Saga University, Saga, Japan
- 9:19 **O-07-03** **Brain metastasis from urothelial carcinoma of the bladder(micropapillary variant): A case report**  
Aya Kanno  
Department of Neurosurgery, Sapporo Medical University, Sapporo, Japan
- 9:29 **O-07-04** **The functional diffusion map (fDM) analysis of glioblastoma patients treated with boron neutron capture therapy**  
Ryo Hiramatsu  
Department of Neurosurgery, Osaka Medical College, Takatsuki, Osaka, Japan
- 9:39 **O-07-05** **A case of epidermoid enlarged repeatedly in a short period**  
Atsushi Doi  
Department of Neurosurgery, Tesseikai Neurosurgical Hospital, Osaka, Japan
- 9:49 **O-07-06** **The advantage of the layer by layer muscular dissection during the lateral suboccipital approach**  
Kosumo Noda  
Dohtoh Nerurosurgical Hospital, Hokkaido, Japan
- 9:59 **O-07-07** **Pineal cyst – patient selection and results**  
Tiit Mathiesen  
Department of Neurosurgery, Karolinska Hospital, 171 76 Stockholm, Sweden



**7th (Mon.) p.m.**

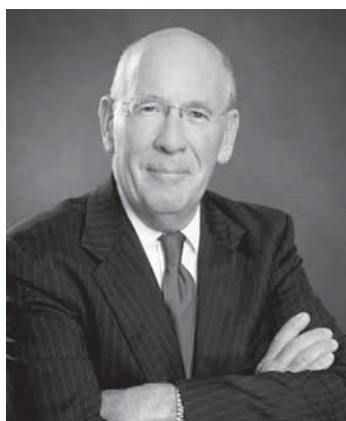
Chairpersons; Michiyasu Suzuki, Masakazu Takayasu, Hideyuki Ohnishi

- 16:00 **KL-07-04** Continuing education revisit  
Michiyasu Suzuki  
Department of Neurosurgery, Yamaguchi University Graduate School of Medicine, Yamaguchi, Japan
- 16:18 **KL-07-05** Surgery for the aneurysm of the internal carotid artery: How to preserve arterial branches and perforating arteries  
Kazuhiro Hongo  
Department of Neurosurgery, Shinshu University School of Medicine, Matsumoto, Japan
- 16:36 **KL-07-06** Surgical management of the anterior choroidal artery aneurysms: Classification and surgical techniques based on morphological features  
Hideyuki Ohnishi  
Department of Neurosurgery, Ohnishi Neurological Center, Akashi, Japan
- 16:54 **O-07-08** High flow bypass with superficial temporal artery-middle cerebral artery bypass for unclippable internal carotid artery aneurysms  
Makoto Katsuno  
Abashiri Neurosurgical and Rehabilitation Hospital, Abashiri, Hokkaido, Japan
- 17:04 **O-07-09** A case of ruptured aneurysm of fenestrated vertebral artery union  
Atsushi Doi  
Department of Neurosurgery, Tesseikai Neurosurgical Hospital, Osaka, Japan
- 17:14 **O-07-10** Transient adenosine-induced asystole during the surgical treatment of anterior circulation cerebral aneurysms  
Ali Zomorodi  
Department of Neurosurgery, Duke University Medical Center, Durham, NC, USA
- 17:24 **O-07-11** Obstructive hydrocephalus due to an unruptured pineal atrovinous malformation treated by endoscopic third ventriculostomy  
Adam Tucker  
Department of Neurosurgery, Nishinomiya Kyoritsu Neurosurgical Hospital, Nishinomiya, Japan
- 17:34 **O-07-12** Progress of surgical simulation for AVM using multidetector row CT  
Takeshi Mikami  
Department of Neurosurgery, Sapporo Medical University, Sapporo, Japan
- 17:44 **O-07-13** Role, usefulness and limitation of intraoperative MEP monitoring and mapping in vascular surgeries in and around eloquent areas  
Kunihiko Kodama  
Department of Neurosurgery, Shinshu University School of Medicine, Matsumoto, Japan
- 17:54 **O-07-14** Neurological outcome following anatomically eloquent area resection: Evaluation by resection frequency map of non-lesional neocortical epilepsy  
Chun Kee Chung  
Department of Neurosurgery, Seoul National University College of Medicine, Seoul National University Hospital, Seoul, Republic of Korea

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18:30 Opening reception

# **SPECIAL LECTURE**



**Name:** Peter McLaren Black, M.D., Ph.D.

**Office Address:**

Department of Neurosurgery Brigham & Women's Hospital 75 Francis Street Boston, MA 02115

**Place of Birth:** Canada

**Citizenship:** USA

**Academic Appointments:**

- 1980-1984 Assistant Professor of Surgery, Harvard Medical School
- 1984-1987 Associate Professor of Surgery, Harvard Medical School
- 1987- Franc D. Ingraham Professor of Neurosurgery, Harvard Medical School

**Hospital and Health Care Organization Responsibilities and Other Major Professional Positions and Major Visiting Appointments:**

- 1972-1973 Lieutenant, Medical Corps, United States Naval Reserve, assigned to the Regional Naval Medical Center, Washington DC
- 1973-1974 Lieutenant, Medical Corps, United States Naval Reserve, assigned to the Attending Physician's Office, United States Capitol, Washington DC. Honorable Discharge as Lieutenant Commander in 1974
- 1980-1981 Assistant in Neurosurgery, Massachusetts General Hospital
- 1981-1984 Assistant Visiting Neurosurgeon, Massachusetts General Hospital
- 1984-1987 Associate Visiting Neurosurgeon, Massachusetts General Hospital
- 1986- Consultant in Neurosurgery, Youville Hospital, Cambridge MA
- 1987-2007 Neurosurgeon-in-Chief, Brigham & Women's Hospital
- 1987-2004 Neurosurgeon-in-Chief, Children's Hospital:
- 1987-2007 Chair, Department of Neurosurgery, Children's Hospital
- 1987-2007 Chief of Neurosurgical Oncology, Dana-Farber Cancer Institute

- 1987-1992 Visiting Neurosurgeon, Massachusetts General Hospital
- 1992-2005 Consultant in Neurosurgery, Massachusetts General Hospital
- 1994-1998 Chair, Department of Surgery, Children's Hospital
- 1998- Senior Surgeon to the Active Staff, Brigham and Women's Hospital
- 2000-2007 Chair, Department of Neurosurgery, Brigham and Women's Hospital
- 2007- Founding Chair, Department of Neurosurgery, Brigham and Women's Hospital

**Major Committee Assignments:**

*International, National and Regional:*

- 1981 Consultant to the President's Commission for the Study of Ethical Problems in Medicine and Biomedical and Behavioral Research
- 1986, 1991 Special Reviewer, National Institutes of Mental Health and National Institute of Neurological Disorder and Stroke Study Sections
- 1988-1991 Neurosurgical Subcommittee, Radiation Therapy Oncology Group
- 1989- Medical Advisory Board, Brain Tumor Society
- 1991-2001 Chairman of the Executive Board, Brain Tumor Center, Brigham & Women's Hospital, Children's Hospital, Dana-Farber Cancer Institute and Harvard University
- 1995 Co-Director, Ninth Annual Symposium on Tumor Research and Therapy, Tokyo, Japan
- 1996- Education Committee, World Federation of Neurosurgical Societies
- 1997 Co-Director, AACR Special Conference in Cancer Research, Cancer of the Nervous System San Diego
- 1997- Neuro-Oncology Committee, World Federation of Neurosurgical Societies
- 1997- Federation News Committee, World Federation of Neurosurgical Societies
- 1999- Medical Advisory Board, McDonnell Foundation
- 2001 International Advisory Committee, American Association of Neurological Surgeons
- 2001- Chair, Bylaws Committee, World Federation of Neurosurgical Societies
- 2005- Executive Board, Brain Science Foundation
- 2007- AACR Grants Committee-sub committee for Brain Tumor Research
- 2009- President, World Federation of Neurosurgical Societies
- 2008 President, 6<sup>th</sup> International Congress on Meningioma and Cerebral Venous System, Boston, MA

2008 President, International Meningioma Society

**Editorial Boards:**

1987-1990 Editor-in-Chief, *Clinical Neurosurgery*  
 1987- Ad Hoc Reviewer, *The New England Journal of Medicine*  
 1993- Editorial Board, *Critical Reviews of Neurosurgery*  
 1993- Associate Editor, *Journal of Neuro-Oncology*  
 1994- Chairman, Editorial Board, *Neurosurgery*  
 1994- Editorial Board, *Techniques in Neurosurgery*  
 1994-1998 Editorial Committee, *Journal of Neurology, Neurosurgery, and Psychiatry*  
 1994-1998 Editorial Board, *Child's Nervous System*  
 1997 International Advisory Board, *Brain Tumor Pathology, Japan*  
 1998 Topic Editor, Neurosurgical Focus Ad Hoc Reviewer, *Annals of Neurology*  
 1999- Editorial Board, *Journal of Clinical Neuroscience*  
 2000- Ad Hoc Reviewer, *Cancer*  
 2000- Ad Hoc Reviewer, *Journal of Gene Medicine*  
 2001- Editorial Board, *Türk Nöroşirürji Dergisi*  
 2007- International reviewer, *Turkish Neurosurgery*  
 2008- Editorial Board, *Journal of Oncology*  
 2008- Editorial Board, *Journal of Clinical Neuroscience*  
 2008- Editorial Board, *Journal of Hydrocephalus*  
 2009- Board of Trustees, *Egyptian Journal of Neurosurgery*  
 2009- Advisory Board, *World Neurosurgery*

**Awards:**

1960 Associate of the Royal Conservatory of Toronto, Solo Performer, Piano  
 1964-1966 University Scholarship, Harvard College  
 1968-1970 University Scholarship, McGill University  
 1970 J. Francis Williams Prize in Medicine, McGill University  
 1973-1978 Teacher-Investigator Award, NINDS  
 1988 Fellowship of the American College of Surgeons  
 1993- Best Doctors in America  
 1995 Distinguished Service Award, Joint Section on Tumors, American Association of Neurological Surgeons and Congress of Neurological Surgeons  
 1998 Dennis Thomson Compassionate Care Scholar, Brigham and Women's Hospital  
 2000- Top Doctors  
 2004 Pioneer Award, Children's Brain Tumor Foundation  
 2005 ROFEH International Humanitarian Award  
 2006 Bucy Award  
 2007 Charles Wilson Award, AANS/CNS Section on Tumors

2008 Partners in Excellence Award, Partners HealthCare

2008 Patient's Choice Award

2009 Patient's Choice Award

**Report of Research:***Major Research Interests:*

1. Brain tumor biology and treatment
2. Brain imaging and image-guided surgery
3. Cerebrospinal fluid physiology and hydrocephalus

*Narrative Description of Research*

I co-direct a molecular biology brain tumor laboratory that has 6-10 members and attempts to use anti-angiogenic therapy, blockade of receptor mechanisms and better understanding of the cell cycle to stop tumor growth. It is committed to using human brain tumor tissue to try to find new treatments for brain and pituitary tumors. I also have an extensive clinical research program in brain tumors and in hydrocephalus: through improved imaging, 3D-reconstruction, intraoperative MRI, and cortical mapping I try to understand brain function better and do less invasive, more effective surgery.

**Principal Clinical and Hospital Service Responsibilities:**

1980-1987 Neurosurgical attending, Massachusetts General Hospital  
 July 1987- Director, Brain Tumor Clinic, Brigham & Women's Hospital  
 July 1987-2007 Neurosurgeon-In-Chief, Brigham & Women's Hospital  
 July 1987-2004 Neurosurgeon-In-Chief, Children's Hospital  
 July 1987-2007 Chief of Neurosurgical Oncology, Dana-Farber Cancer Institute

**Major Administrative Responsibilities:**

1987-2002 Director, Residency Program in Neurosurgery, Children's Hospital and Brigham & Women's Hospital  
 1987-2004 Chair, Department of Neurosurgery, Children's Hospital  
 1991- Co-Director Annual Harvard Post-Graduate Course, "Tumors of the Central Nervous System"  
 1992-1995 Co-Director, Annual International Symposium, "Growth Control in Central Nervous System Tumor"  
 1992-1998 Chair, Executive Board, Brain Tumor Center, Dana-Farber Cancer Institute, Children's Hospital, Brigham & Women's Hospital, Joint Center for Radiation Therapy.  
 1994-1998 Chair, Dept. of Surgery, Children's Hospital  
 2000-2007 Chair, Department of Neurosurgery, Brigham and Women's Hospital

## **New developments in brain tumor surgery**

Peter M. Black

President, World Federation of Neurosurgical Societies

Franc D. Ingraham Professor of Neurosurgery, Harvard Medical School, Boston, MA, USA

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Thirty years ago the capacity of microsurgery changed our approach to many neurosurgical lesions, especially at the skull base. We are now in an imaging revolution that is changing neurosurgery yet again. We are now able to assess clearly the margins and volume of a tumor, its metabolic activities through PET scanning and its nature through such MR sequences as DWI and perfusion imaging. We can apply these techniques for pre-surgical planning. We are able to do segmentation of the tumor, functional MR to test for areas around the tumors that are active and MR diffusion tensor imaging to establish the fiber tracks that surround the tumor. This information can be taken into a navigational system using several of the presently available systems to use in the operating room. Navigation systems are important to localize meningiomas or metastases of the convexity, to help with skull base meningioma surgery and to do biopsies of larger lesions. The most advanced application of these imaging techniques is to use them during surgery itself and intraoperative imaging now has become a very important aspect of tumor management, especially for intrinsic tumors. For low-grade gliomas, pituitary adenomas, deep metastases, or biopsies of small lesions and lesions in small areas, intraoperative imaging is particularly useful. The instruments used to do this vary from those which the MR is brought into the operative field (IMRIS system or ODIN system) to those in which the table is brought into the magnet, the SIEMENS system or the Phillips system; or finally those in which the surgery is done within the magnet, the GE Signa system. Our own experience with the GE Signa system includes over 900 tumor craniotomies, primarily low-grade gliomas: metastases, pituitary tumors, higher grade gliomas and recurrent gliomas are important entities as well. We have found that it has been extremely useful in resecting these and that in turn has changed the natural history in patients in whom such resection can be done safely. Finally there are new systems for using intraoperative imaging for glioma resection - laser hyperthermia and focused ultrasound are examples.

# **ABSTRACTS**

**KEYNOTE LECTURE (KL)**

**ORAL PRESENTATION (O)**

**POSTER PRESENTATION (P)**

## **KL-07-01 Surgical based treatment for brain metastases: An interdisciplinary experience at the University of Torino**

Alessandro Ducati

University of Torino, Torino, Italy

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The increased number of brain metastases is due to several factors (length of survival of cancer patients, controversial effects of chemotherapy). Surgery has proven to be the most effective treatment, when possible, particularly if associated with radio and chemotherapy. Factors favorable for metastases surgical resection are young age of patients (<65y), KPS > 70, symptomatic large tumour, surgical accessibility and absence of leptomeningeal diffuse involvement. The main advantages of surgical treatment are immediate and long lasting relief of symptoms and the possibility of local chemotherapy (carmustine). Even though one third only of patients present with a single metastasis, surgical removal is possible for oligometastases as well (up to 3), in selected patients, provided that KPS >70.

The examen of Torino Cancer Registry (around one million inhabitants) demonstrate an increasing length of survival for cancer patients, and confirm that the largest number of observed brain metastases comes from lung cancer, followed by breast, melanoma, colon and renal cell cancer. However, the percentage of patients with brain met of the single primary tumour is different: 25% for lung, 5.1 for breast, 6.9 for melanoma, 1.8 for colon, 6.5 for renal K.

As for surgical treatment, navigation is recommended, as well as en bloc removal, when possible, to avoid leptomeningeal seeding. The implant of BCNU wafers is a useful adjunct to resection. A good cooperation with oncologists led us to increase the number of observed metastases, and to increase the percentage of operated ones, obtaining a significant increase of survival.

**KL-07-02 Microscopic and endoscopic removal of pituitary adenoma and craniopharyngioma via transnasal or transcranial route – their tactics in the maneuver –**

Kaoru Kurisu, Atsushi Tominaga, Yasuyuki Kinoshita, Satoshi Usui,  
Tetsuhiko Sakoguchi, Kazuhiko Sugiyama

Department of Neurosurgery, Hiroshima University Hospital, Hiroshima, Japan

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We have no objection to the doctrine that micro-neurosurgery under operating microscope is crucial to the basis of neurosurgery. But in recent years, endoscopic micro-neurosurgery has been spreading dramatically and very speedily. Especially in the field of skull base surgery, transnasal endoscopic approach could be applied from anterior frontal base to craniocervical junction in the most advanced state. We also have steadily expanded the indication of endoscopic approach with microscope in safe and accurate fashion. In this presentation, we will show our present status of microscopic and endoscopic removal of pituitary adenoma and craniopharyngioma via transnasal and/or transcranial route. And also we would like to emphasize the benefit of combined use.





# Rusutsu Resort 2010-2011 Winter



## Lift Passes

Items	Valid	Adult	Child	Senior
1 day	09:00-21:00	5,100 yen	2,550 yen	4,300 yen
4 Hour Ticket		3,800 yen	1,900 yen	3,300 yen
6 Hour Ticket		4,300 yen	2,150 yen	3,800 yen
Night	Open-28Feb10 / 16:00-21:00	2,000 yen	1,000 yen	1,700 yen
	01Mar10-31Mar10 / 16:00-20:00	1,800 yen	900 yen	1,400 yen
2 days	Day 1 09:00-21:00   Day 2 09:00-17:00	9,400 yen	4,700 yen	7,600 yen
3 days	Day 1-2 09:00-21:00   Day 3 09:00-17:00	13,800 yen	6,900 yen	11,200 yen
4 days	Day 1-3 09:00-21:00   Day 4 09:00-17:00	18,000 yen	9,000 yen	14,400 yen
5 days	Day 1-4 09:00-21:00   Day 5 09:00-17:00	22,000 yen	11,000 yen	17,400 yen
6 days	Day 1-5 09:00-21:00   Day 6 09:00-17:00	26,000 yen	13,000 yen	20,800 yen
7 days	Day 1-6 09:00-21:00   Day 7 09:00-17:00	30,000 yen	15,000 yen	24,000 yen

- Child 4-12 years old, Senior 60 years and over
- Once issued, non refundable.
- The operation of gondolas and lifts are subject to weather conditions.

## Ski/Snowboard Rentals



Items	Equipment		Wear		Full Set	
	A choice of Skis, Boots and Poles or Snowboard and Boots or Snow Scoot		Parka and Pants		A choice of Skis, Boots and Poles or Snowboard and Boots or Snow Scoot & Parka and Pants & Goggles, Gloves and Cap	
Rental Period	Adult	Child/Senior	Adult	Child/Senior	Adult	Child/Senior
Half day	3,700 yen	2,600 yen	2,600 yen	2,100 yen	8,800 yen	6,300 yen
Full day	4,700 yen	3,700 yen	3,200 yen	2,600 yen	11,000 yen	8,800 yen
2 days	8,500 yen	6,600 yen	5,700 yen	4,700 yen	17,600 yen	14,100 yen
3 days	12,100 yen	9,300 yen	8,100 yen	6,700 yen	24,900 yen	19,800 yen
4 days	15,200 yen	11,800 yen	10,100 yen	8,400 yen	31,600 yen	25,400 yen
5 days	17,900 yen	13,800 yen	11,900 yen	9,900 yen	36,900 yen	29,500 yen
6 days	20,000 yen	15,400 yen	13,500 yen	11,000 yen	41,100 yen	33,200 yen
7 days	22,100 yen	17,000 yen	15,100 yen	12,100 yen	45,300 yen	36,900 yen

- Half day (08:15-13:00, 12:00-17:00, 16:00-21:00); Full day (08:15-21:00)
- Child 4-12 years old, Senior 60 years and over

## Learn to Ski with English Speaking Instructors

Private Ski/Snowboard Lesson Prices are per instructor. AM 10:00-12:00; PM 13:30-15:30	No. of Participants		2 hours	4 hours
	1		16,800 yen	28,400 yen
	2-5		21,000 yen	31,500 yen
	6-8		23,100 yen	34,700 yen

- 2 hours, AM 2 hours or PM 2 hours; 4 hours, AM 2 hours & PM 2 hours
- Reservation required, subject to availability. Parents are required to pick up their kids after the lesson.

Kid's Private Ski Lesson Eligibility 4-6 years old AM 10:00-12:00 PM 13:30-15:30	No. of Participants		2 hours	4 hours
	1		9,500 yen	16,800 yen

- 2 hours, AM 2 hours or PM 2 hours; 4 hours, AM 2 hours & PM 2 hours
- Prices are per person. Reservation required, subject to availability. Parents are required to pick up their kids after the lesson.

Kid's Private Snowboard Lesson Eligibility 4-6 years old AM 10:00-12:00 PM 13:30-15:30	No. of Participants		2 hours	4 hours
	1		9,500 yen	16,800 yen

- 2 hours, AM 2 hours or PM 2 hours; 4 hours, AM 2 hours & PM 2 hours
- Prices are per person. Reservation required, subject to availability. Parents are required to pick up their kids after the lesson.

## Outdoor

### Nature Tour

Enjoy beautiful nature in the surrounding national parks with an experienced local guide to show you the way!

- A Rusutsu Area Course** [Adult] ¥3,675 [ages 11+] 2-2.5 hrs
- 1 Snowshoes Tour** Rusutsu Area [ages 11+] ¥3,675 2-2.5 hrs
- 2 Cross-Country Ski Tour** Rusutsu Area [ages 11+] ¥5,775 2-2.5 hrs
- 3 Snowmobile Tour** Rusutsu Area [ages 7+] ¥7,350 2-2.5 hrs

### Lake Toya Area Course

Winter Toya Tour Around 3 hrs [Adult] ¥5,250 [ages 7-12] ¥3,675  
 Time [A] Tour ① 9:30~ ② 13:30~ [B] Tour ① 8:30~ ② 12:45~

- Participants: 2 or more ● B Tour is subject to change for without snowshoes
- Reservation required (until 5pm the day before)

### Snow Adventure

Work together with your family to create a giant igloo! [Mid Dec to late Mar] Rusutsu Resort

- A Kamakura Course** Around 1.5 hrs [Adult] ¥3,150 [ages 4-12] ¥2,100
- B Igloo Course** Around 3 hrs ¥20,000 per igloo
- Time [A] course ① 9:30~ ② 10:30~ ③ 13:30~ ④ 14:30~ [B] course ① 9:00~ ② 13:30~

- Participants: 2 or more ● Reservations required (until 5pm the day before)

### Snowfield Orienteering

Enjoy orienteering at Rusutsu, a place for the first time where World championship is held outside Europe! [Mid Dec to mid Mar] Rusutsu Tower grounds

Around 2-2.5 hrs [Snowshoes] ¥3,150 [Includes equipment/rental] [Cross-country ski] ¥5,250 [Includes equipment/rental]

- Time ① 9:30~ ② 10:30~ ③ 13:30~ ④ 14:30~
- Participants: 2 or more ● Ages 11 or older ● Reservations required (until 5pm the day before)

## Indoor

### Leatherworking

Make your own original creations. [Year round] Rusutsu Resort

- Phone Strap ¥1,575 ; Bracelet ¥2,100 ; Key Chain ¥2,100
- Key case ¥2,625 ; Coin case ¥3,150~
- Duration: 0.5-1 hr (depends on items)

### Fusing Glass

Create an original work by fusing together glass chips at high temperatures. [Year round] Rusutsu Resort

- Magnet ¥1,575 ; Original accessory ¥2,100
- Millifiori accessory ¥3,150
- Duration: 1-2 hrs (depends on items)
- Delivery charge required (not able to pick up on the day)

### Handy Crafts

Make your own unique hand-made crafts. [Year round] Rusutsu Resort

- Woolen Felt Art ¥2,625 ; Candle Craft ¥2,100 ; Wooden Nameplate ¥2,100
- My Chopsticks ¥2,100
- Duration: 1.5-2 hrs

## Outdoor

### Dog Sledding

Experience life in the 'Northern Land' by riding in a Husky pulled sled. [Mid Dec to late Mar] Location: LumpiPuisto

- 15-20 mins including lecture [Adult] ¥3,675 [ages 4-12] ¥2,625 Time 9:30~15:00
- The program may be delayed or canceled due to bad weather, condition of dogs or other reasons.
- Closed every Wednesday
- Reservation required (until 5pm the day before)

### Cross-country Skiing

These light-weight, easy to use skis give you a fun, full-body workout on snow covered field or weaving through the woods. [Mid Dec to mid March] Rusutsu Tower grounds

Fitness Ski Lesson 2-2.5 hrs ¥5,250

- Time ① 9:30~ ② 10:30~ ③ 13:30~ ④ 14:30~
- Participants: 2 or more
- Price includes equipment rental
- Child must be accompanied by a guardian
- Reservation required (until 5pm the day before)

### Snowshoes

Feel the fresh powder snow by touring around in snowshoes! [Mid Dec to late Mar]

- A Snowshoes downhill** 2-2.5 hrs. ¥5,250 Rusutsu Tower grounds etc.
- B Trekking in the morning** 1 hr. ¥2,100 Rusutsu Tower grounds etc.
- Time [A] Course ① 9:30~ ② 13:30~ [B] Course ① 7:00~
- Participants: 2 or more ● Ages 13 or older for A Tour ● Price includes equipment rental
- Reservation required (until 5pm the day before)

### Snow Rafting

Have a thrilling winter ride on a rubber raft. [Mid Dec to late Mar] Location: LumpiPuisto

5-10 mins [Adult] ¥2,100 [ages 4-12] ¥1,575 Time 9:00~16:00

- Price includes equipment rental ● Reservation possible ● Closed every Wednesday

## Indoor

### Cheese Making

Make homemade cheese using fresh milk from the farm. [Year round] Rusutsu Resort

- 1-1.5 hrs ¥3,150
- Participants: 2 or more ● Reservations required (until 5pm the day before)

### Fresh Caramel Making

Make Fresh Caramel by using Hokkaido's fresh milk and fresh cream. [Year round] Rusutsu Resort

- 1.5-2 hrs ¥1,575
- Participants: 2 or more ● Reservations required (until 5pm the day before)

### Ice Cream Making

Ice cream making with Hokkaido's fresh milk. [Year round] Rusutsu Resort

- Around 40 min ¥1,575
- Participants: 2 or more ● Reservations required (until 5pm the day before)

### Potato Cake Making

Make Hokkaido's traditional dish using potatoes harvested this fall. [Year round] Rusutsu Resort

- 1-1.5 hrs ¥2,625
- Participants: 2 or more ● Reservations required (until 5pm the day before)

For operating times of indoor activities, please contact General Reservation Center

### Snowmobile

An instructor will help beginners. [Mid Dec to late Mar] Location: LumpiPuisto

- A Beginner Course** Around 5 mins [ages 7+] ¥2,100
- B Touring Course** Around 20 mins [ages 13+] ¥4,200
- C Long Touring Course** Around 50 mins [ages 16+] ¥8,400
- D Adventure Course** Around 50 mins [ages 16+] ¥8,400

- Time 9:00~16:00
- Reservation required for B-D courses. ● Prices are per snowmobile.

### Snow Train

Travel in a rubber raft for an exciting ride in the snow. Small children can also enjoy slower paced rides. [Mid Dec to late Mar] Location: LumpiPuisto

Sightseeing Course 20 min [Adult] ¥2,100 [ages 4-12] ¥1,050

- Time 9:00~16:00
- Reservation required

### Horseback Riding

Enjoy a beautiful wintertime view of Lake Toya while trekking on horseback. [Mid Dec to mid Mar] Lake Toya Ranch (Free transport)

Around 30 mins (including traveling time around 2 hrs)

- [Winter Course] ¥5,250 Time ① 9:45~ ② 13:45~
- Participants: 2 or more ● Reservations required (until 5pm the day before)
- There is a height requirement of 140 cm or above ● Closed every Tuesday
- Bridled riding for small children at the same time is available at a cost of ¥1,050

### Long Boots Rental

Rent for 3 hours ¥525 [Year round] Location: LumpiPuisto

Rent for 1 day ¥1,050

- Return the boots to LumpiPuisto by 21:00.



Snowmobile Land Snow Train Dog Sledding Leather working Fresh Caramel Making Snow Adventure

### [Notes on all activities]

- Programs may be changed or canceled due to bad weather. ● Instructor or Guide is subject to availability. Please contact Activity Desk for booking schedule.
- Cancellations due to customer will be charged a cancellation fee of 50% the day before and 100% on the day.

### Inquiries

Activity Desk (Reply in English) TEL: +81-136-46-3332 EMAIL: activity@rusutsu.co.jp

All prices include tax. Prices shown on this tariff apply until the end of winter season 2011.

RUSUTSU RESORT

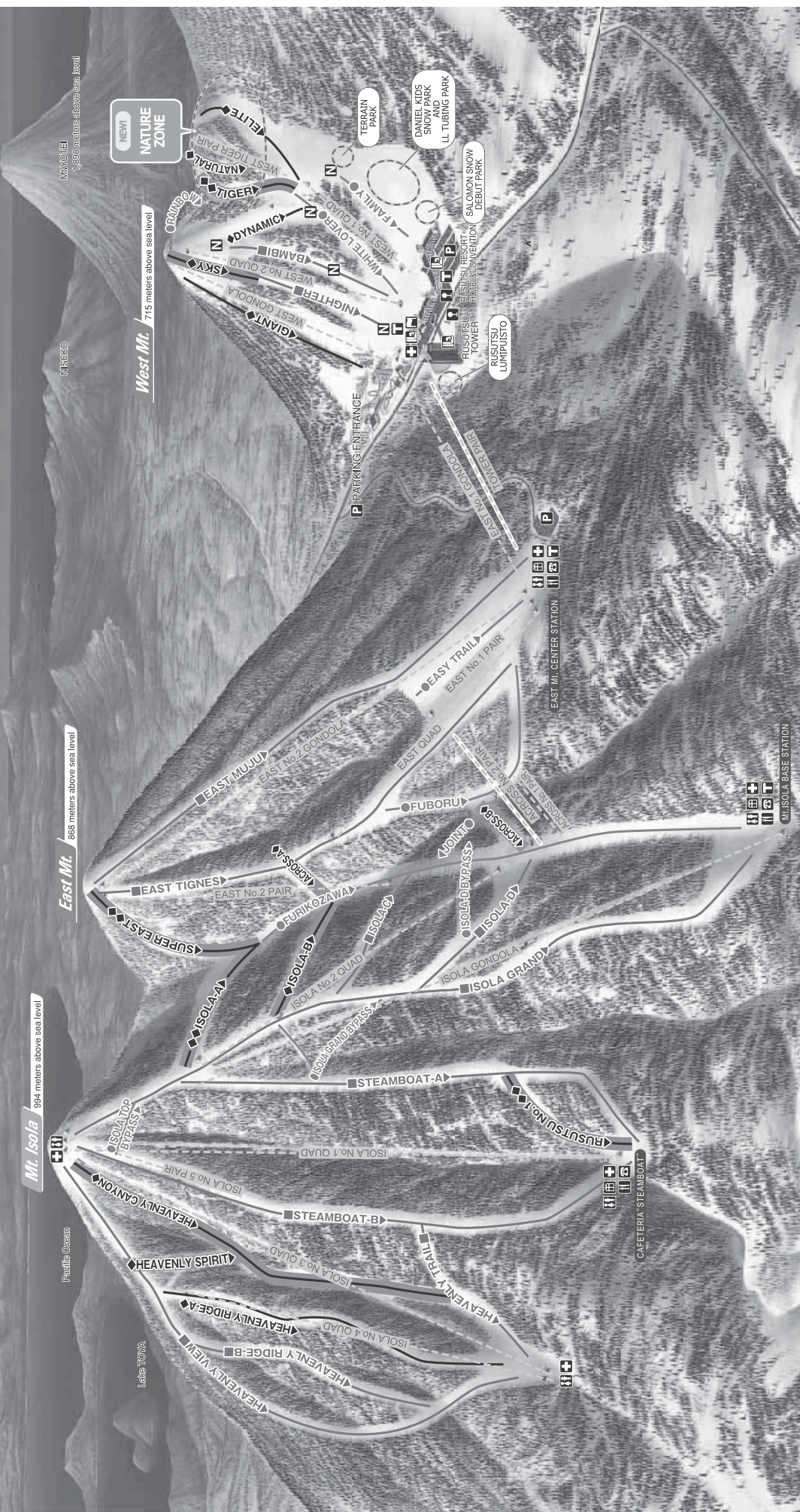
# Trail Map



札幌  
+ New chinese village  
RUSUTSU RESORT  
HOKKAIDO NO.1

## TRIPLE Mt. TRAIL GUIDE

	Mt. Isola	East Mt.	West Mt.
<b>EXPERT</b>	◆ ISOLA-A ◆ RUSUTSU No.1	◆ SUPER-EAST	◆ TIGER
<b>ADVANCED</b>	◆ HEAVENLY SPIRIT ◆ HEAVENLY CANYON ◆ ISOLA-B	◆ AGROSS-A ◆ AGROSS-B	◆ GIANT ◆ SKY ◆ NATURAL ◆ DYNAMIC ◆ ELITE
<b>INTERMEDIATE</b>	◆ ISOLA-C ◆ STEAMBOAT-B ◆ ISOLA-D ◆ HEAVENLY RIDGE-B ◆ ISOLA GRAND ◆ HEAVENLY TRAIL ◆ STEAMBOAT-A ◆ HEAVENLY VIEW	◆ EAST MIJU ◆ EAST TIGNES	◆ BAMBI ◆ NIGHTER
<b>BEGINNER</b>	◆ FURIKOZAWA ◆ ISOLA-D BYPASS ◆ ISOLA GRAND BYPASS ◆ ISOLA TOP BYPASS	◆ EASY TRAIL ◆ FUBORU ◆ JOINT	◆ RAINBOW ◆ FAMILY ◆ WHITE LOVER



MAKOTEI  
1,930 meters above sea level

NISEKO  
715 meters above sea level

East Mt.  
688 meters above sea level

Mt. Isola  
394 meters above sea level

SKI PATROL

PARKING

SKI SNOWBOARD SCHOOL

PHONE

TICKET SALES

NIGHT SKIING AREA

REST ROOM

SHOP

RESTAURANT

BUS STOP

SKISNOWBOARD RENTAL

RESERVATION CENTER

TEL 0136(46)3111

Izumikawa13, Rusutsu, Abuta, Hokkaido, 048-1711 JAPAN

http://en.rusutsu.co.jp/

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21<sup>st</sup> February, 2011



### Venue

Rusutsu Resort, Hokkaido, Japan

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