

# IPS2018

23rd International Visual Field &  
Imaging Symposium

Kanazawa, Japan,  
May 9<sup>th</sup> - 12<sup>th</sup>, 2018

Program & Abstract Book

Perimetry is the quantitative evaluation of the visual field. Ocular Imaging is the assessment and evaluation of the structural details of the eye. The aims of the IPS are

- 1) to promote the study of normal and abnormal visual function and of ocular imaging.
- 2) to ensure and facilitate the cooperation and friendship of scientists of different countries working and interested in these disciplines.



## Previous Symposia

- 1974: Marseille, France
- 1976: Tübingen, Germany
- 1978: Tokyo, Japan
- 1980: Bristol, UK
- 1982: Sacramento, CA, USA
- 1984: Santa Margherita Ligure, Italy
- 1986: Amsterdam, The Netherlands
- 1988: Vancouver, Canada
- 1990: Malmö, Sweden
- 1992: Kyoto, Japan
- 1994: Washington, D.C. , USA
- 1996: Würzburg, Germany
- 1998: Gardone Riviera, Italy
- 2000: Halifax, Canada
- 2002: Stratford upon Avon, UK
- 2004: Barcelona, Spain
- 2006: Portland, OR, USA
- 2008: Nara, Japan
- 2010: Tenerife, Spain
- 2012: Melbourne, Australia
- 2014: New York, NY, USA
- 2016: Udine, Italy

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IPS2018 Host:

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*Aiko Iwase*

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Dear Colleagues and Friends,

We are honored to be hosting the 23rd International Visual Field & Imaging Symposium (IPS2018) at the Ongakudo (in front of Kanazawa Station) in Kanazawa city, Japan, from May 9 to 12, 2018. The previous IPS meetings had been held in Japan 3 times; the 3rd IPS in Tokyo, 1978 (Prof. Harutake Matsuo), the 10th IPS in Kyoto, 1992 (Prof. Yoshiaki Kitazawa: boss of Aiko & Kazu), the 18th IPS in Nara, 2008 (Prof. Chota Matsumoto). It is our great pleasure to have the opportunity to organize such an influential academic conference and to welcome so many friends from all over the world to Kanazawa!

Kanazawa is unlike the populous metropolitan cities of Tokyo or Osaka; it is considered a popular tourist city where more than 8 million tourists visit each year to see and appreciate genuine Japanese culture. In the era of the Samurai (Edo period - 265 years), Kanazawa had a large population exceeded only by Tokyo, Osaka and Kyoto. This time period was prosperous and characterized by sophisticated foods, crafts, and art developed independently and known as the Hyakumangoku culture. Moreover, as Kanazawa has never been affected by war nor suffered any major natural disasters, the city has been able to maintain its historical districts, which include traditional Japanese dwellings, magnificent gardens, numerous shrines, and the remarkable Kanazawa Castle - all reflecting the culture of the Samurai. Welcome reception will be held in Kanazawa Castle in the evening of May 9 (Wednesday). The participants can enjoy the Congress Tour to the famous areas in Kanazawa City in the afternoon of May 11 (Friday). You will be able to immerse yourself in and experience authentic Japanese culture, including traditional Japanese dress, foods, and daily life, not easily appreciated in the larger metropolitan cities of Japan. Kanazawa is also blessed with beautiful natural surroundings and you can enjoy sophisticated Japanese cuisine such as sushi and tempura made from fresh local fish and shellfish caught and delivered directly from the Sea of Japan and sake (Japanese rice wine) produced from naturally clear local stream water.

The impact and influence of the previous IPS meetings as an international academic organization and the significant contributions made by the IPS members has resulted in a steady evolution in the understanding, technology, and diagnosis skill. However, it is also evident that many challenges still exist; our goals for this meeting are to identify and explore some of these challenges. We want to encourage the sharing of our knowledge and ideas, the discussing of experiences and successes, and the proposing of future directions of focus. We invited Prof. Michael Wall as a speaker of the IPS Lecture. We changed Aulhorn Lecture to Aulhorn Educational Lecture which is more educational contents including imaging and perimetry by 4 speakers. We also conducted the simultaneous meeting of Japan Perimetric Society (JPS2018) from May 12 to 13, 2018 in Kanazawa.

We would be grateful if you would actively exchange your valuable knowledge and experience regarding the development of imaging and perimetry over the 3 days of the conference, enjoy the meeting with many friends and colleagues from all over the world, and form new and deepen old friendships at the same time.  
Welcome to Kanazawa!

### **IPS Board Members:**

President: Chota Matsumoto  
Past President: Chris Johnson  
Vice President: David (Ted) Garway-Heath  
Vice President: Aiko Iwase  
Secretary: Allison M. McKendrick  
Treasurer: Mitchell Dul  
Past-Secretary: David Henson

### **Members at Large:**

Lyne Racette  
Ryo Asaoka

### **Other Board Members:**

Fritz Dannehim  
Kazuhisa Sugiyama  
Aiko Iwase

### **Group Chairs:**

Awards Committee:	Fritz Dannehim
Education - Perimetry:	Chota Matsumoto
Education - Imaging:	David (Ted) Garway-Heath
Imaging Standards:	Linda Zangwill
Industry Liaison and PR Committee:	Paul Artes
Open Perimetry Interface:	Paul Artes; Andrew Turpin

### **Honorary Members of the IPS:**

Stephen Drance  
Jay Enoch  
Franz Fankhauser  
Lars Frisen  
Erik Greve  
Anders Heijl  
Yoshiaki Kitazawa  
Pam Sample

### **In Memoriam Honorary Members of the IPS:**

Elfriede Aulhorn  
Alan Friedmann  
Hans Goldmann  
Heinrich Harms  
Haratuke Matsuo  
Mario Zingirian

### **Local Organizing Committee Host (Program Committee)**

Kazuhisa Sugiyama  
Aiko Iwase

### **Local Executive Committee (Local Organizing Committee)**

Chota Matsumoto  
Shinji Ohkubo  
Tomomi Higashide  
Tadashi Nakano  
Makoto Nakamura  
Sachiko Udagawa

### **Advisory Board**

Keiji Yoshikawa  
Hirotaka Suzumura  
Satoshi Kashii  
Goji Tomita  
Yoshio Yamazaki  
Takeshi Yoshitomi  
Sachiko Okuyama

### **Advisory Steering Board**

Kazutaka Kani  
Makoto Araie  
Shiroaki Shirato

### **JPS Board Members**

Ryo Asaoka  
Shiho Kunimatsu-Sanuki  
Mineo Kondou  
Kei Shinoda  
Nobuyuki Shoji  
Motohiro Shirakashi  
Genichiro Takahashi  
Satoshi Nakadomari  
Takeo Fukuchi  
Kyoko Fujita  
Naoya Fujimoto  
Akemi Wakayama

### **Honorary Members of the JPS**

Haruki Abe  
Nariyoshi Endou  
Toshifumi Otori  
Kazutaka Kani  
Yoshiaki Kitazawa  
Shiroaki Shirato  
Shuji Maeda  
Keiji Yoshikawa

### Venue

Ishikawa Ongakudo  
Showa-machi20-1, Kanazawa-shi, Ishikawa, Japan 920-0856  
FAX : +81-76-232-8101

### Official Language

English

### Registration Fee

Registration fee type	On-site Registration
IPS Members	65,000 JPY
IPS Non Members	75,000 JPY
*Residents/Fellows/Medical Staff	45,000 JPY
Accompanying Persons	45,000 JPY

\*Residents/Fellows/Medical Staff must submit an official university/affiliation certificate or letter in English, in conjunction with on-site registration, which confirms their status. Documentation must be submitted on-site.

### Registration Entitlements

#### [IPS Members, IPS Non Members, Residents/Fellows/Medical Staff]

- Congress Kit
- Access to all Scientific Programs
- Welcome Party on May 9 (Wed.)
- Conference Tour on May 11 (Fri.)
- Closing Banquet on May 12 (Sat.)
- Morning/Luncheon/Afternoon Seminars
- Coffee breaks

#### [Accompanying Persons]

- Welcome Party on May 9 (Wed.)
- Conference Tour on May 11 (Fri.)
- Closing Banquet on May 12 (Sat.)
- Coffee breaks

Accompanying Persons are NOT allowed to attend any scientific programs.

### Registration Desk

The registration desk is located in the lobby of ISHIKAWA ONGAKUDO on 1st floor. Registration Desk opening hours are:

Wednesday, May 9	16:00-17:45
Thursday, May10	7:30-18:00
Friday, May 11	7:30-13:00
Saturday, May 12	7:30-16:30

### Cloakroom

Cloakroom is located in front of Koryu Hall on B1 floor. It opens as follows;

Thursday, May10	7:30-19:00
Friday, May 11	7:30-13:30
Saturday, May 12	7:30-17:30

### Name Badge

All registered attendees will receive a name badge. Please wear the badge for the meeting activities.

### General Information Desk

Inquiries concerning the meeting may be made at the general information desk located next to the registration desk.

### Mobile Device Policy

Photography, filming, or recording is prohibited while presentations. Also, please respect presenters and other delegates by ensuring your mobile devices are switched off or on silent mode while you are in sessions.

### Disclaimer

The organizing committee of IPS2018 will accept no liability for the safety of any participant, or for personal injury of loss, or damage to private property suffered during the meeting.

### 日本眼科学会専門医制度認定単位について

本会で取得可能な単位は以下の通りです。

受付場所：石川県立音楽堂 1F 正面ホワイエ

日時・単位数：5月10日（木）9:00～18:30・3単位

5月11日（金）9:00～12:00・2単位

5月12日（土）9:00～16:35・3単位※

※5月12日（土）はIPSとJPS合わせての単位となります。両学会に参加でも、どちらか1つに参加でも3単位となります。



### For All Chairs

We ask that you strictly adhere to the time provided for presentations and Q&A to ensure smooth operation of the meeting. Please be prepared at the Chairperson's Seats in a session room no later than 15 minutes before the session, and notify staff nearby the Chairperson's Seats of your arrival.

### For Oral Session Presenters

7minutes for presentation & 5minutes for Q&A

Please note that the session room will have a data projector and we will only accept computer-based presentations. Slide/Overhead/VCR projectors will NOT be available. To ensure your presentation runs smoothly, please bring your presentation data to PC Preview Desk located in the lobby on the first floor of the Ishikawa Ongakudo at least 60 minutes prior to your presentation. If you use Macintosh, please bring you own PC, and also stop by PC Preview Desk.

1. Our OS is Windows 10 and projector is XGA, or 1024 by 768 pixels.
2. If you bring your presentation data in a CD-R or USB flash memory stick, please follow the instructions below:
  - a) The computers provided for the sessions will be running the following operating systems with the following application software installed.  
*Windows: PowerPoint 2010, 2013, 2016*
  - b) Use the above operating system's standard fonts  
*(e.g.) Windows: Century, Century Gothic, Times New Roman, etc*
  - c) Name your presentation data as follows:  
*(e.g.) O1-1 John Smith.ppt*
  - d) We use Windows Media Player for video software. Please ensure that your video is playable with the default codecs included in Windows Media Player.
3. If you bring your own laptop computer including Macintosh, please follow the instructions below:
  - a) Ensure that your computer is equipped with the monitor connector of mini D-sub 15 pins. If your computer does not have this connection, please bring an appropriate converter with you.



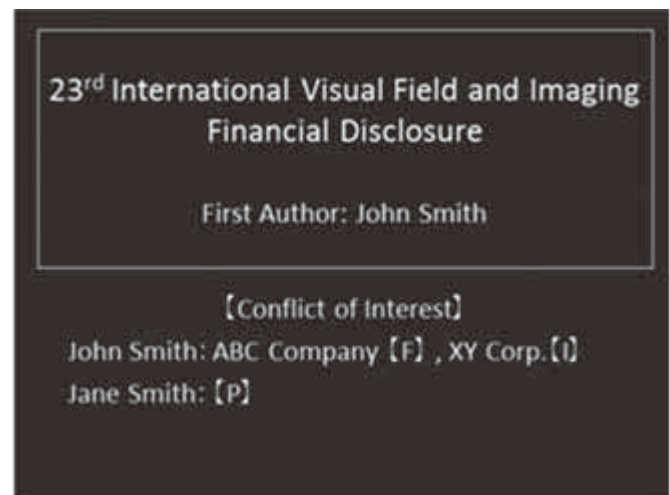
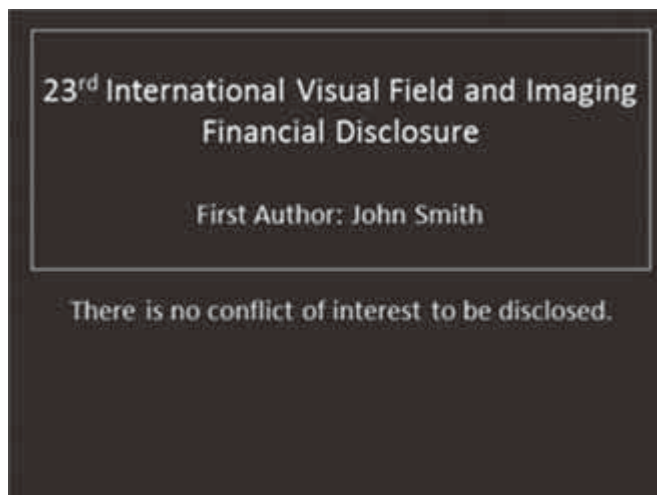
mini D-sub 15 pins

- b) Be sure to bring an AC adaptor with you. The Japanese standard AC voltage is 100V.
  - c) Be sure to turn off screen saver or power saving mode of your laptop in advance.
4. A display monitor, keyboard, and remote mouse will be provided on a podium for presenters to operate. Sound speakers are not available.

## Oral Presentation Guidelines

5. Presentation data loaded on the computers provided will be completely deleted by the secretariat after your presentation.
6. The secretariat is not responsible for any projection troubles caused by computer technical difficulties. We recommend that all presenters bring back-up data.
7. Presenter view is available.
8. COI Disclosure on presentation  
When the authors disclose the conflict of interest in the presentation, the category and the names of the companies should be shown after the authors' names in the second slide or at the end of poster. If none of the authors has any conflict of interest to be disclosed, please write "there is no conflict of interest to be disclosed". For more details, please refer to "Call for Abstract" of IPS2018 website.

### Sample of Slide



### PC Preview Desk open hours:

Wednesday, May 9 16:00-17:45  
Thursday, May 10 7:30-18:00  
Friday, May 11 7:30-13:00  
Saturday, May 12 7:30-17:00

## Poster Presentation Guidelines

Posters are displayed through the duration of the meeting, May 10-12, 2018 and the time schedule for mounting and removing the posters is as follows.

*Posters Mounting: 08:00-11:00, Thursday, May 10*

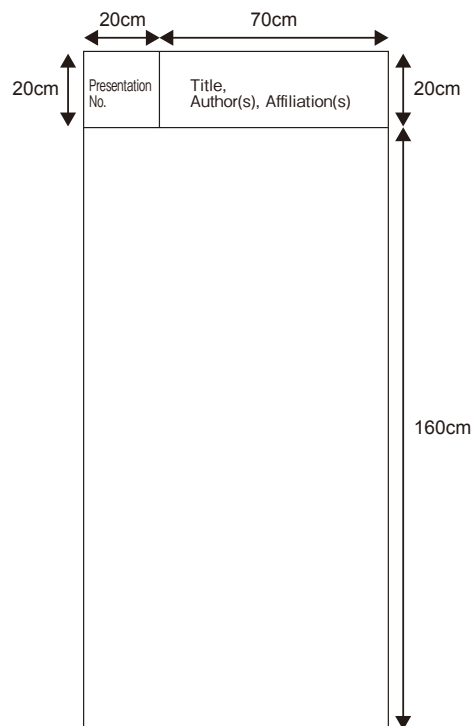
*Posters Removing: 17:00-18:00, Saturday, May 12*

### ■ Poster Preparation and Mounting/Removing

1. The Poster board surfaces measure approximately W90cm × H180cm.

Poster Presentation Number (20 cm × 20 cm) is displayed at the top left of the board.

2. A supply of pushpins will be available in the poster area for mounting your poster.
3. Each poster must have a label at the top that indicates the title of the paper, the name(s) of the author(s) and their affiliation(s). The presenting author should be marked with a circle.
4. Authors are required to mount and remove their materials scheduled as above.
5. We remind you that you should NOT leave poster tubes or cases in the poster areas. The organizers will not be held responsible for any losses which may be incurred.
6. Posters not removed by the removing time mentioned above will be removed and discarded by the secretariat.



### ■ Oral Presentation

#### For All Chairs

We ask that you strictly adhere to the time provided for presentations and Q&A to ensure smooth operation of the meeting. Please be prepared at the Chairperson's Seats in a session room no later than 15 minutes before the session, and notify staff nearby the Chairperson's Seats of your arrival.

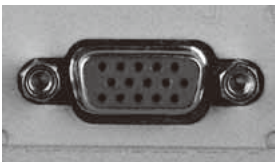
#### For All Poster Presenters

Poster presenters are required to deliver 8 minutes' presentation in an oral session room (3 minutes for presentation & 5 minutes for Q&A). This is designed for delegates to ask questions, the answers to which would be of interest to all delegates. Please note that the session room will have a data projector and we will only accept computer-based presentations. Slide/Overhead/VCR projectors will NOT be available. To ensure your presentation runs smoothly, please bring your presentation data to PC Preview Desk located in the lobby on the first floor of the Ishikawa Ongakudo at least 60 minutes prior to your presentation. If you use Macintosh, please bring your own PC, and also stop by PC Preview Desk.

## Poster Presentation Guidelines

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*(e.g.) 01-1 John Smith.ppt*
  - d) We use Windows Media Player for video software. Please ensure that your video is playable with the default codecs included in Windows Media Player.

3. If you bring your own laptop computer including Macintosh, please follow the instructions below:
  - a) Ensure that your computer is equipped with the monitor connector of mini D-sub 15 pins. If your computer does not have this connection, please bring an appropriate converter with you.



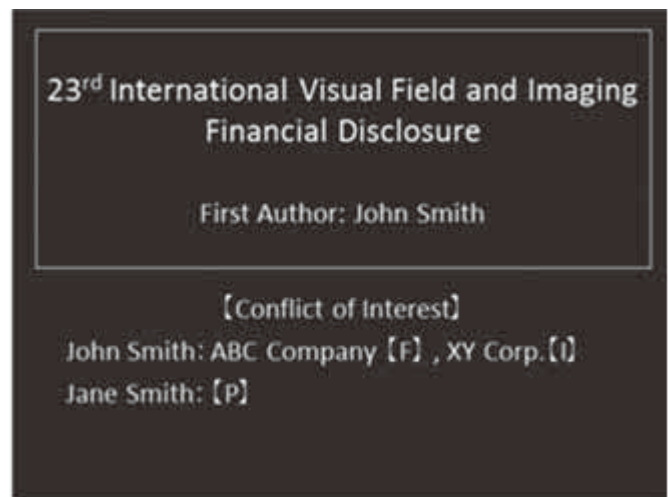
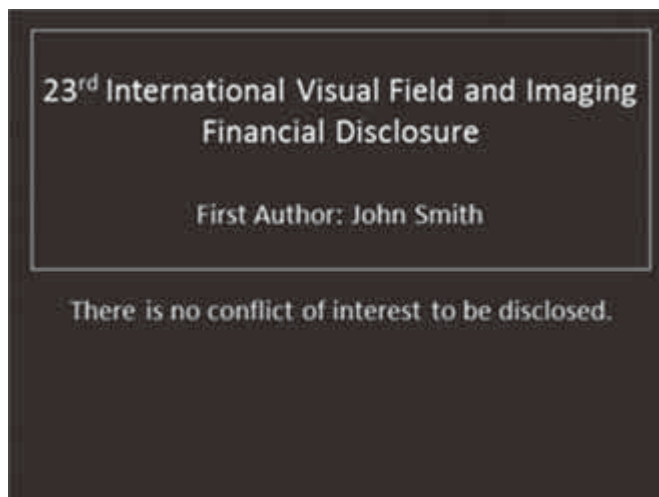
mini D-sub 15 pins

- b) Be sure to bring an AC adaptor with you. The Japanese standard AC voltage is 100V.
  - c) Be sure to turn off screen saver or power saving mode of your laptop in advance.
4. A display monitor, keyboard, and remote mouse will be provided on a podium for presenters to operate. Sound speakers are not available.
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7. Presenter view is available.

## 8. COI Disclosure on presentation

When the authors disclose the conflict of interest in the presentation, the category and the names of the companies should be shown after the authors' names in the second slide or at the end of poster. If none of the authors has any conflict of interest to be disclosed, please write "there is no conflict of interest to be disclosed". For more details, please refer to "Call for Abstract" of IPS2018 website.

### Sample of Slide



### PC Preview Desk open hours:

Wednesday, May 9 16:00-17:45  
Thursday, May 10 7:30-18:00  
Friday, May 11 7:30-13:00  
Saturday, May 12 7:30-17:00

Map of Ishikawa Prefecture



■ From Tokyo to Kanazawa

[Shinkansen - JR East]

•JR Hokuriku Sinkansen Kagayaki :  
approx. 2 hours and 30 minutes

[Airplane]

•From Haneda Airport to Komatsu Airport :  
approx. 60 minutes

•From Komatsu Airport to Kanazawa :  
\* <Bus (Super Express Non-stop)> :  
approx. 45 minutes  
\* <Automobile>: approx. 40 minutes

■ From Osaka to Kanazawa

[JR West Japan]

•JR Special Express Thunderbird:  
approx. 2 hours and 30 minutes

■ From Nagoya to Kanazawa

[JR Central and JR West]

\*Shinkansen: approx. 2 hours and 30 minutes

\*JR Special Express Shirasagi: approx. 3 hours

■ From Komatsu to Kanazawa

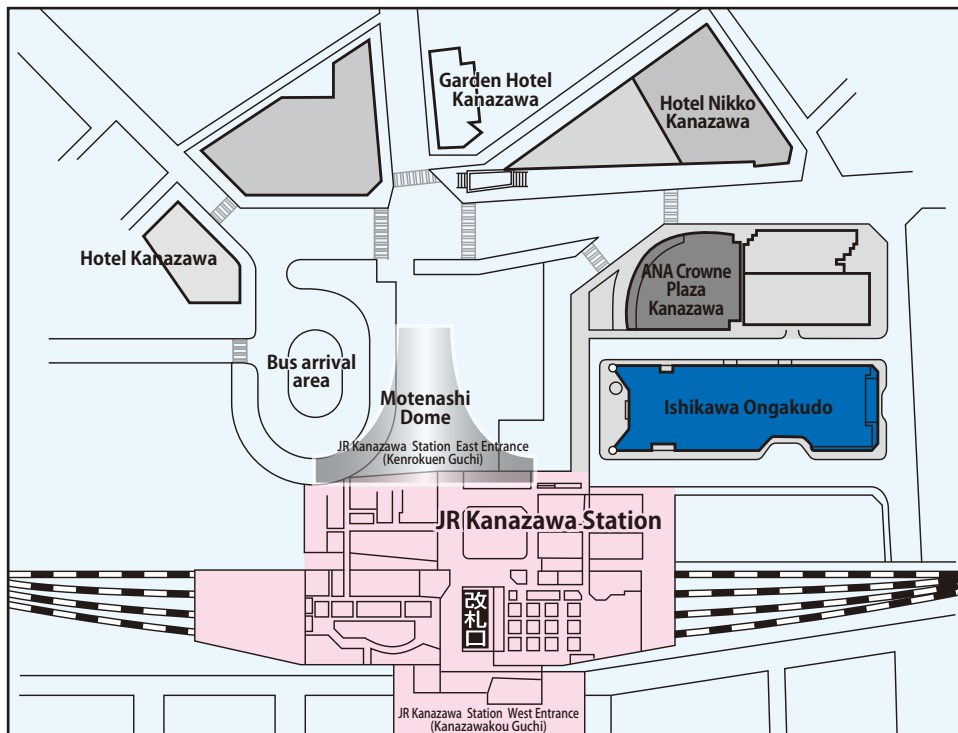
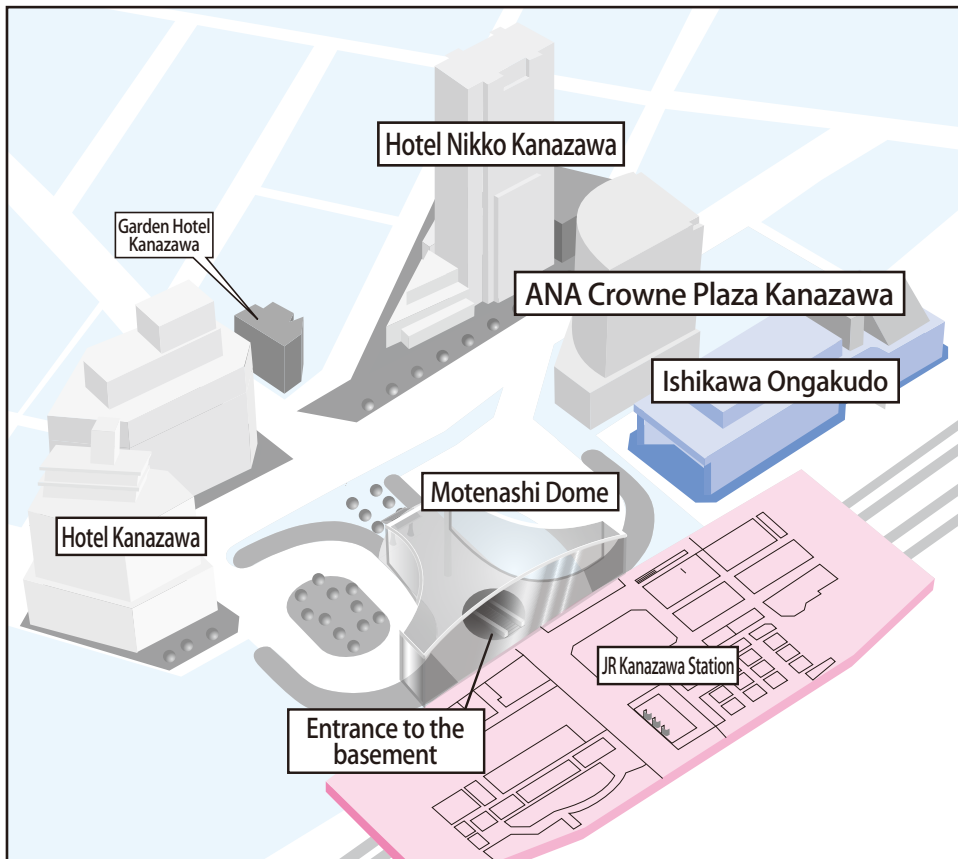
[JR]

•JR Special Express Thunderbird:  
approx. 17 minutes

Downtown Kanazawa

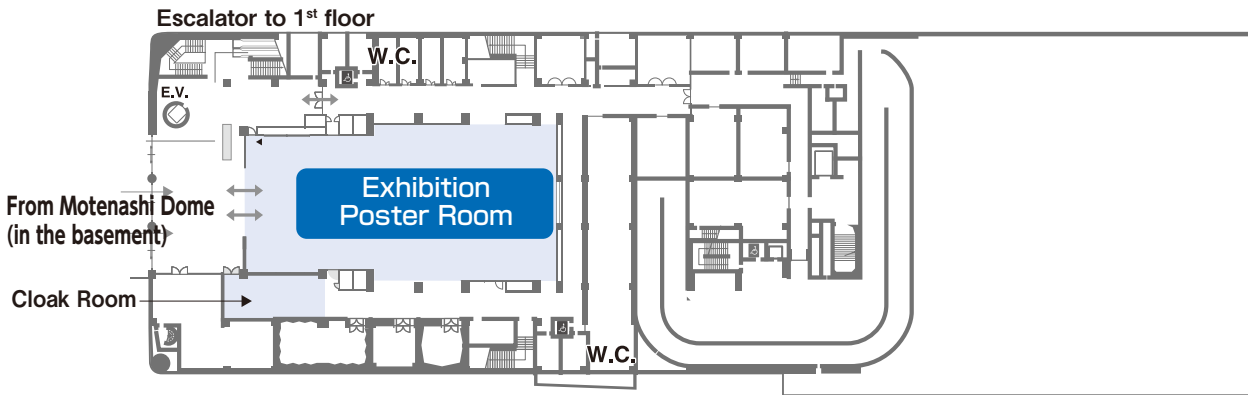


JR Kanazawa Station East Entrance (Kenrokuen Guchi)

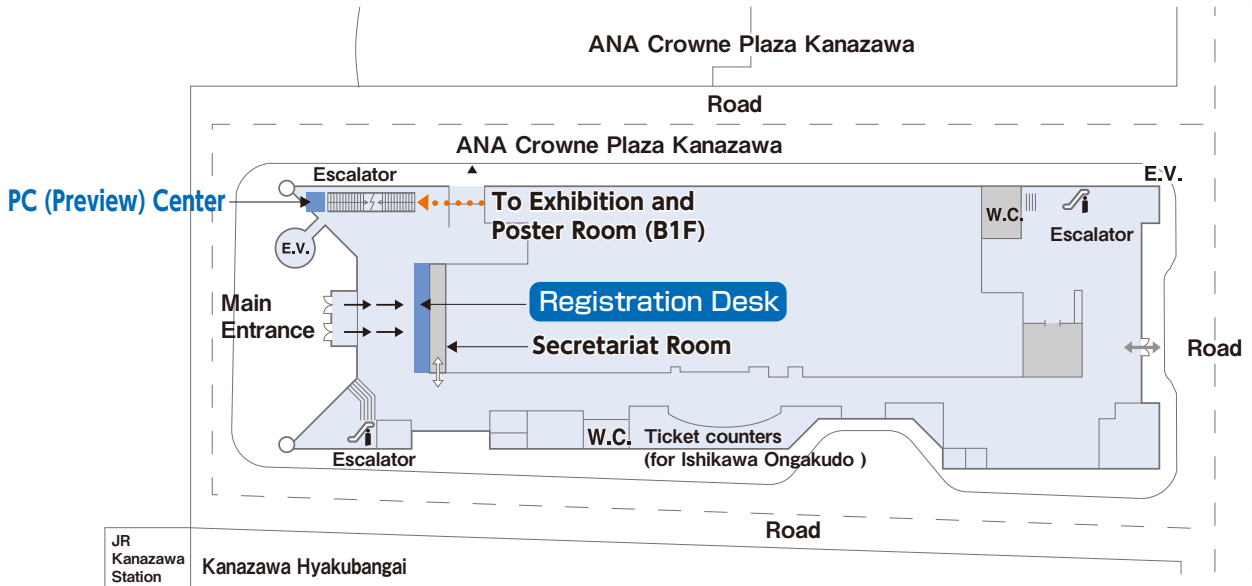


Ishikawa Ongakudo

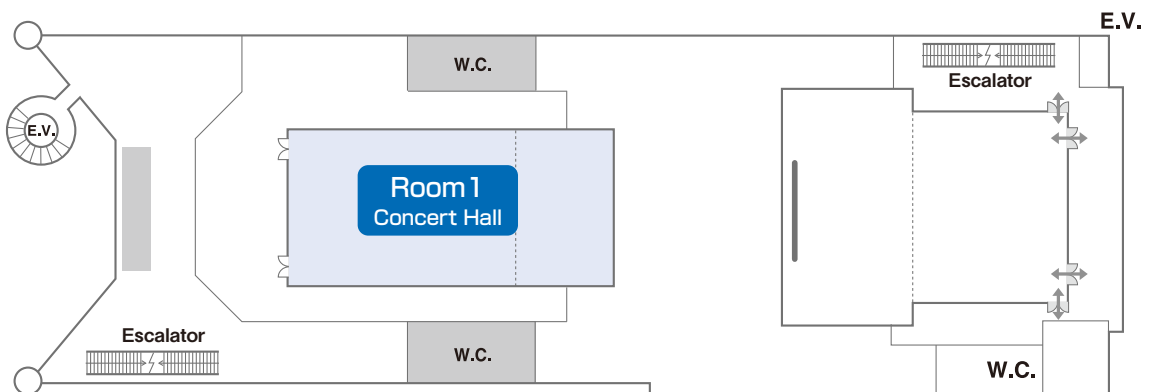
**B1 F**



**1 F**



**2 F**





### Seminars

Alcon Pharma K. K. / Novartis Pharma K. K.  
Carl Zeiss Meditec Co., Ltd.  
CREWT Medical Systems, Inc.  
Heidelberg Engineering GmbH  
Otsuka Pharmaceutical Co., Ltd.  
Santen Pharmaceutical Co., Ltd.  
Senju Pharmaceutical Co., Ltd.  
TOPCON CORPORATION

### Sponsors

Alcon Pharma K. K.  
Bayer Yakuhin, Ltd.  
Beeline Co., Ltd.  
Carl Zeiss Meditec Co., Ltd.  
CENTERVUE S.P.A.  
CENTRAL MEDICAL Co., Ltd.  
CREWT Medical Systems, Inc.  
Gifu Ophthalmologists Association  
Haag-Streit  
HANDAYA CO., LTD  
Heidelberg Engineering GmbH  
HOYA CORPORATION  
Inami & Co., Ltd.  
Ishikawa Ophthalmologists Association  
Kowa Company, Ltd.  
Kowa Pharmaceutical Co. Ltd.  
Maeda Book Store Ltd.  
Medical Book Service  
NIDEK CO., LTD.  
OCULUS Optikgeräte GmbH  
Ophthalmic Bookseller  
Santen Pharmaceutical Co., Ltd.  
SEED Co.,Ltd.  
Senju Pharmaceutical Co., Ltd.  
Tomey Corporation  
TOMIKI MEDICAL INSTRUMENTS co., ltd  
TOPCON CORPORATION

### Endorsement

Japanese Association of Certified Orthoptists  
Japanese Ophthalmological Society  
Japan Ophthalmologists Association

\*Alphabetical Order  
as of April 2, 2018

Wednesday, May 9

### **Welcome Party**

Time: 18:30-20:30

Location: Gojukken Nagaya, Kanazawa Castle

Fee: Included in registration fee

Dress: Casual

Shuttle Bus: Depart at 17:45. Bus Stop is located between Ishikawa Ongakudo and ANA Crowne Plaza Kanazawa.

Welcome Party will be held in Gojukken Nagaya of Kanazawa-jo Castle, where weapons used to be stored. Let the networking begin while you enjoy food and drinks. Fee is included in registration fee, and the party is open to registered participants.

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Thursday, May 10

### **Dinner party**

Time: 19:30-22:00

Location: Japanese Restaurant "Tsubajin"

Fee: 25,000 JPY

Dress: Casual

Shuttle Bus: Depart at 18:45. Bus Stop is located between Ishikawa Ongakudo and ANA Crowne Plaza Kanazawa.

\*Seats are available to the first 100 registrants

Tsubajin is the most traditional Japanese restaurant in Kanazawa, providing you with fresh local ingredients.

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Friday, May 11

### **Conference Tour**

Time: 13:15-17:15

Location: Kanazawa City

(Ishikawa Prefectural Museum of Art, Seisonkaku, Kenrokuen-Garden, Higashi chaya Districts)

Fee: Included in registration fee

Dress: Casual

Shuttle Bus: Depart at 13:10 (after Luncheon Seminar). Bus Stop is located between Ishikawa Ongakudo and ANA Crowne Plaza Kanazawa.

The local organizing committee offers a guided tour of Kanazawa City. The tour is included in registration fee and open to all registered participants.

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Saturday, May 12

### **Closing Banquet**

Time: 18:30-21:30

Location: Room Tsuru on 4<sup>th</sup> floor in Hotel Nikko Kanazawa

Fee: Included in registration fee

Dress: Smart Casual

Closing Banquet will be held at Hotel Nikko Kanazawa as a final to IPS 2018.

Fee is included in registration fee and the banquet is open to all registered participants.

### **Banks/ATMs**

Banks are open from Monday to Friday, 9:00-15:00 (Closed on Saturdays, Sundays, and national holidays). In 7-Eleven convenience stores have automatic teller machines (ATMs) that accept credit, debit and ATM cards issued outside Japan including Visa, Plus, MasterCard, Maestro, Cirrus, American Express and JCB cards with English user menu. Please note most Japanese banks' ATM do not accept foreign cards.

### **Currency Exchange**

A money exchange counter, Travelex, in Kanazawa station is available from 10:00 - 20:00 every day. It is just a few minutes' walk from Ishikawa Ongakudo.

### **Climate**

The temperature in Kanazawa in May typically ranges between 12-23 degrees centigrade (54-74F) during the day.

### **Electricity**

100 volts alternating current at a frequency of 60 Hz. is used in Western Japan. The socket is type A, which has two flat plug holes.

### **Insurance**

The Organizing Committee will assume no liability whatsoever for injury or damage to person or property during the congress. Please make your own arrangements for health insurance and any other necessary insurance.

### **Postal Service**

Hotels often provide simple postage services. Post offices are open from Monday to Friday, 9:00 to 17:00.

### **Time**

Japan Standard Time is 9 hours ahead of UTC (Coordinated Universal Time).

### **Tipping and Consumption Tax**

Tipping is not customary in Japan. However, major restaurants or hotels may add a 10% to 15% service charge to your bill.

# Map of Downtown Kanazawa

- ① ANA Crowne Plaza Kanazawa
- ② Hotel Nikko Kanazawa
- ③ Hotel Kanazawa
- ④ Dormy Inn Kanazawa
- ⑤ Via Inn Kanazawa
- ⑥ APA Hotel Kanazawa Ekimae
- ⑦ Daiwa Roynet Hotel Kanazawa
- ⑧ Kanazawa Manten Hotel Ekimae
- ⑨ Garden Hotel Kanazawa
- ⑩ Hotel Mystays Premier Kanazawa
- ⑪ Hotel Route-Inn Kanazawa Ekimae





### Wednesday, May 9

Ishikawa Ongakudo Lobby (1st Fl.)	
8:00	
9:00	
9:10~9:15	<b>Opening Ceremony</b>
10:00	
11:00	
12:00	
13:00	
14:00	
15:00	
16:00	
17:00	
18:00	
18:30~20:30	<b>Welcome Party</b> [ Gojukken Nagaya, Kanazawa Castle ]
19:00	
20:00	
21:00	

### Thursday, May 10

Ishikawa Ongakudo Room 1 Concert Hall (2nd Fl.)	
8:00~9:00	<b>Morning Seminar 1</b> Alcon Pharma K. K. / Novartis Pharma K. K.
9:15~9:51	<b>Oral Session1 Structure and Function I</b>
9:55~10:51	<b>Poster Session1 Structure and Function II</b>
10:55~12:07	<b>Poster Session2 Imaging I</b>
12:20~13:20	<b>Luncheon Seminar 1</b> Carl Zeiss Meditec Co., Ltd.
13:30~15:30	<b>Aulhorn Educational Lecture</b>
15:45~16:45	<b>Afternoon Seminar 1</b> TOPCON CORPORATION
16:50~18:02	<b>Oral Session2 Perimetry I</b>
18:05~18:29	<b>Oral Session3 Driving and Visual Field</b>
19:30~22:00	<b>Dinner Party</b> (Optional) [ Tsubajin ]



## Friday, May 11

Ishikawa Ongakudo	
Room 1	
Concert Hall (2nd Fl.)	
8:00	8:00~9:00 <b>Morning Seminar 2</b> Santen Pharmaceutical Co., Ltd.
9:00	9:15~10:19 <b>Poster Session3</b> <b>Perimetry II</b>
10:00	10:20~10:44 <b>Oral Session4</b> <b>Machine learning methods</b>
11:00	10:45~11:45 <b>IPS Lecture</b> Perimetry: Past, Present and Future
12:00	12:00~13:00 <b>Luncheon Seminar 2</b> Heidelberg Engineering GmbH
13:00	13:15~17:15 <b>Conference Tour</b> [Kanazawa City]
14:00	
15:00	
16:00	
17:00	
18:00	
19:00	
20:00	
21:00	

## Saturday, May 12

Ishikawa Ongakudo	
Room 1	
Concert Hall (2nd Fl.)	
	8:20~9:20 <b>Morning Seminar 3</b> CREWT Medical Systems, Inc.
	9:30~10:42 <b>Oral Session5</b> <b>Imaging II</b>
	10:45~11:45 <b>Poster 4 / Oral 6 Session</b> <b>New Perimetry</b>
	12:00~13:00 <b>Luncheon Seminar 3</b> Senju Pharmaceutical Co., Ltd. Otsuka Pharmaceutical Co., Ltd.
	13:10~13:58 <b>Oral Session7</b> <b>Structure and Function III</b>
	14:15~15:03 <b>Oral Session8</b> <b>Perimetry III</b>
	15:05~16:05 <b>Oral Session9</b> <b>Perimetry IV</b>
	16:15~17:00 <b>Business Meeting</b>
	17:00~17:05 <b>Closing Ceremony</b>
	18:30~21:30 <b>Closing Banquet</b> [ Hotel Nikko kanazawa ]





**Program**

■ **Thursday, May 10** Room 1 Ishikawa Ongakudo, Concert Hall (2nd Fl.)

**8:00 ~ 9:00 Morning Seminar 1 HOW WE SHOULD MANAGE GLAUCOMA PATIENTS: ELDERLY AND MYOPIA**

Chair: Tetsuya Yamamoto

Speaker : MANAGEMENT OF THE PERIMETRY IN ELDERLY GLAUCOMA PATIENTS

Megumi Honjo

MANAGING PATIENTS WITH MYOPIA AND GLAUCOMA -HOW AI CAN HELP

Robert T. Chang

Sponsor : Alcon Pharma K. K. / Novartis Pharma K. K.

**9:10 Opening Ceremony**

**9:15-9:51 Oral Session 1 Structure and Function I**

Chair: Ulrich Schiefer  
Makoto Nakamura

Speaker :

O1-1 Structure-function correlation across the central visual field using pointwise comparisons and ganglion cell isocontours derived from pattern recognition

Michael - Kalloniatis

O1-2 Structure-function in ocular disease using different psychophysical procedures

Jack Phu

O1-3 Structure-function correlation consistent between normal and glaucomatous patients and improves with stimuli scaled to spatial summation area

Nayuta Yoshioka

**9:55-10:51 Poster Session 1 Structure and Function II**

Chair: Kazuhisa Sugiyama  
Shinji Ohkubo

Speaker :

P1-1 Evaluating the usefulness of MP-3 microperimetry in glaucoma patients

Masato Matsuura

P1-2 Mapping the Central 10 Degrees Visual Field to the Optic Nerve Head using the Structure Function Relationship

Yuri Fujino

P1-3 The relationship among macular inner retinal layer, retinal nerve fiber layer, and visual field sensitivity in gemination period of glaucomatous optic nerve damage.

Yoshio Yamazaki

P1-4 Agreement of a nasal step border by a microperimeter with a temporal raphe by optical coherence tomography in glaucoma patients

Sotaro Mori

- P1-5 The disc-fovea-temporal raphe angle is associated with the severity of glaucoma with a hemi-field defect  
Takuji Kurimoto
- P1-6 Relationship between rim width and nerve-fiber layer thickness in normal tension glaucoma.  
Yoshinori Itoh
- P1-7 Detection of early glaucomatous damage of the macula with OCT oriented perimetry in preperimetric glaucoma  
Shinji Ohkubo

### 10:55-12:07 Poster Session 2 Imaging I

Chair: Balwantray C. Chauhan  
Yoshio Yamazaki

Speaker :

- P2-1 Retinal layer segmentation and clustering by spectral-domain optical coherent tomography in patient with open angle glaucoma  
Shumpei Ogawa
- P2-2 The effects of magnification correction or matching of axial length in normative database on early glaucoma detection by ganglion cell complex in eyes with long axial length  
Tomomi Higashide
- P2-3 Capability of asymmetry in macular ganglion cell layer/inner plexiform layer thickness by optical coherence tomography to detect preperimetric glaucoma.  
Daisuke Takemoto
- P2-4 Blood flow changes after trabeculectomy in and around the optic disc and the macula  
Makoto Sasaki
- P2-5 Correlation between optic disc vessel density and glaucoma severity : enhanced-depth imaging optical coherence tomography angiography study  
Yuji Yoshikawa
- P2-6 Relationship between Optical Coherence Tomography Angiography (OCTA) macular vessel density and visual field loss in glaucoma  
Yusuke Nakatani
- P2-7 The association between glaucomatous visual field defect, foveal avascular zone area and vessel density using swept-source optical coherence tomography angiography  
Yosuke Miyasaka
- P2-8 The association between change of radial peripapillary capillaries and disc hemorrhage occurrence in normal tension glaucoma  
Koji Nitta
- P2-9 Deep-layer microvasculature dropout in glaucoma  
Kimikazu Sakaguchi

**12:20 ~ 13:20 Luncheon Seminar 1 New Era in Perimetry**

Chair: Aiko Iwase

Speaker : HFA central testing and the new 24-2C

Gary Lee

A new SITA test – SITA Faster

Anders Heijl

Sponsor : Carl Zeiss Meditec Co., Ltd.

**13:30-15:30 Aulhorn Educational Lecture**

Chair: Chris A. Johnson  
Linda M. Zangwill

Speaker :

1 Visual function testing -new concepts in research and education

Ulrich Schiefer

2 Computerized perimetry a catalyst for glaucoma science and management

Anders Heijl

3 Glaucoma Imaging Today and Tomorrow

Balwantray C.Chauhan

4 New technology of perimetry

Chota Matsumoto

**15:45 ~ 16:45 Afternoon Seminar 1 An Update on the detection and management of Glaucoma with swept source OCT Triton**

Chair: Linda Zangwill

Speaker : Clinical Application of Deep Optic Nerve Head and Peripapillary Imaging

Tae Woo Kim

Swept-source optical coherence tomography for retinal nerve fiber layer optical texture analysis (ROTA)

Christopher Leung

Sponsor : TOPCON CORPORATION

**16:50-18:02 Oral Session 2 Perimetry I**

Chair: Mitchell Dul  
Sachiko Okuyama

Speaker :

02-1 Visual Field Abnormality Classification in the Ocular Hypertension Treatment Study 20 Year Follow-up (OHTS-3)

John L Keltner

- 02-2 Determination of the intra-subject variability of visual field examinations in glaucoma patients  
Judith Ungewiss
- 02-3 Agreement between multifocal pupillographic objective perimetry, Matrix and HFA in stroke  
Ted Maddess
- 02-4 A comparison between the Compass fundus perimeter and the Humphrey Field Analyzer  
Susan Ruth Bryan
- 02-5 Tablet derived Frequency-of-seeing curves for size-scaled spots in the central visual field  
Algis J Vingrys
- 02-6 Divergence Measures between Normal Subjects and Glaucoma Patients with Mild Visual Loss using Threshold Automated Perimetry of the Full Visual Field  
Gideon KD Zamba

### 18:05-18:29 Oral Session 3 Driving and Visual Field

Chair: Ulrich Schiefer  
Aiko Iwase

Speaker :

- 03-1 Relationship between local binocular visual field sensitivity and location of undetected driving hazards. Gaze-movement corrected analysis in simulated driving.  
Makoto Araie
- 03-2 Effect of simulated superior and inferior visual field loss on vehicle control performance in a driving simulator  
Makoto Inagami

■ **Friday, May 11** Room 1 Ishikawa Ongakudo, Concert Hall (2nd Fl.)

**8:00 ~ 9:00 Morning Seminar 2 Early detection and early treatment of PPG  
-Improvement of diagnostic skill and points of therapeutic  
intervention of PPG with using OCT-**

Chair: Kazuhisa Sugiyama  
Goji Tomita

Speaker : Utilization of OCT -Structural change detection of PPG

Ki Ho Park

Utilization of glaucoma inspection instrument -Diagnosis of PPG / Judgement of  
therapeutic intervention-

Toru Nakazawa

Sponsor : Santen Pharmaceutical Co., Ltd.

**9:15-10:19 Poster Session 3 Perimetry II**

Chair: Fritz Dannheim  
Chota Matsumoto

Speaker :

- P3-1 Visual field changes after vitrectomy for epiretinal membranes in glaucomatous eyes  
Shunsuke Tsuchiya
- P3-2 Usefulness of Clock Chart Driving Edition for self-checking the binocular visual field  
Marika Yamashita
- P3-3 Perimetry for Children or Mentally Handicapped  
Fritz Dannheim
- P3-4 Assessment of response reliability in visual field testing without using catch trials  
Sachiko Okuyama
- P3-5 Influence of Head tilted angle on Blind Spot location in Visual Field Test  
Fumi Tanabe
- P3-6 Contrast gain control in glaucoma under photopic and mesopic luminance conditions  
Catarina A. R. Joao
- P3-7 Dynamic color brightness adaptation abnormalities in early stages of glaucoma.  
Muen Yang
- P3-8 Estimating "True" Retinal Sensitivity from Time-series Visual Field Data Using Gaussian  
Process Regression  
Eiji Murotani

**10:20-10:44 Oral Session 4 Machine learning methods**

Chair: Andrew Turpin  
Hiroshi Murata

Speaker :

04-1 Development of a deep learning algorithm to diagnose glaucoma from fundus photography  
Naoto Shibata

04-2 Deep Learning Approaches to Predict Standard Automated Perimetry Summary Metrics  
from SD-OCT Imaging

Mark Christopher

**10:45-11:45 IPS Lecture Perimetry: Past, Present and Future**

Chair: Chota Matsumoto

Speaker : Perimetry: Past, Present and Future

Michael Wall

**12:00 ~ 13:00 Luncheon Seminar 2 OCT-Based Phenotyping of Eyes in Glaucoma Diagnostics**

Chair: Makoto Araie

Speaker : The Importance of Aging Effects in the Assessment of Structural Changes in Glaucoma  
Balwantray C. Chauhan

Detailed structural characteristics of the optic disc revealed by the Spectralis OCT

Tomomi Higashide

Sponsor : Heidelberg Engineering GmbH

■ **Saturday, May 12** Room 1 Ishikawa Ongakudo, Concert Hall (2nd Fl.)

**8:20 ~ 9:20 Morning Seminar 3 How should we evaluate the data provided by "imo"?**

Chair: Chota Matsumoto

Speaker : What is imo?

Hiromasa Sawamura

Binocular visual field test with imo in clinical use.

Hiroki Nomoto

Sponsor : CREWT Medical Systems, Inc.

**9:30-10:42 Oral Session 5 Imaging II**

Chair: Christopher Leung  
Kazuhisa Sugiyama

Speaker :

- 05-1 Influence of Bruch's membrane opening area on OCT diagnostic accuracy Lucas A Torres
- 05-2 Development of a large normative database to investigate physiological and pathological changes in the central retinal ganglion cell layer Barbara Zangerl
- 05-3 Relationship between peripapillary retinal arteries angle and Ocular Response Analyzer waveform parameters Shotaro Asano
- 05-4 Quantification of peripapillary nerve fibre elevation and its association with axial length in young healthy eyes Masatoshi Tomita
- 05-5 Relationship between peripapillary choroidal thickness and tessellation in young healthy eyes Yusuke Matsushita
- 05-6 Classification of macular shape of children on optical coherence tomography Takehiro Yamashita

**10:45-11:45 Poster 4 / Oral 6 Session New Perimetry**

Chair: Chris A. Johnson  
Nobuyuki Shoji

Speaker :

- P4-1 Evaluation of pupil fields using a newly developed perimeter in glaucoma patients Kazuko Totsuka
- P4-2 Effect of non-measurement eyes on the result of measurement eyes by the monocular visual field tests under binocular open view Hiroyasu Goukon

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- P4-3 The investigation of the difference of central visual field sensitivity between monocular and binocular measurement by head-mounted perimeter  
Tomoyuki Kumagai
- P4-4 Measurements of fixation eye movements during visual field test with head-mounted perimeter "imo".  
Takuya Ishibashi
- P4-5 Influence of a Binocular Viewing Condition on Monocular Sensitivites Measured by imo<sup>®</sup> in Patients with Glaucoma  
Akemi Wakayama
- P4-6 SMARTPHONE-BASED PERIMETRY FOR FAST AND LOW-COST VISUAL FIELD ACQUISITION  
Jan Stapelfeldt
- 06-7 Deploying virtual reality headgear and the foveation reflex to enhance the ergonomics of perimetry  
Bertil Damato

### 12:00 ~ 13:00 Luncheon Seminar 3 Anterior Segment OCT and Glaucoma

Chair: Kazuhisa Sugiyama

Speaker : Anterior Segment OCT and Glaucoma

Tin Aung

sponsor : Senju Pharmaceutical Co., Ltd.  
Otsuka Pharmaceutical Co., Ltd.

### 13:10-13:58 Oral Session 7 Structure and Function III

Chair: Linda M. Zangwill  
Makoto Araie

Speaker :

- 07-1 Focal lamina cribrosa defect in myopic eyes with non-progressive glaucomatous visual field defect  
Yu Sawada
- 07-2 Using structural information to improve perimetric examination of the macular visual field in glaucoma  
Giovanni Montesano
- 07-3 En face slab images of macula better accounts for visual functional outcomes compared with inner retinal thickness in eyes with optic neuritis  
Mari Sakamoto
- 07-4 Inner retinal structure-function relationship within the central 20 degrees in retinitis pigmentosa  
Henrietta Wang

**14:15-15:03 Oral Session 8 Perimetry III**

Chair: Allison M. McKendrick  
Ryo Asaoka

Speaker :

- 08-1 EVALUATION OF THE NEW THRESHOLD STRATEGY USING A VARIATIONAL BAYES MODEL Satoshi Shimada
- 08-2 DENOISING VISUAL FIELDS USING AUTO-ENCODERS Serife S. Kucur
- 08-3 Cluster Identification Algorithm (CIA) Anca D. Demea
- 08-4 The usefulness of waveform parameters measured with the Ocular Response Analyzer to assess the progression of glaucoma Shuichiro Aoki

**15:05-16:05 Oral Session 9 Perimetry IV**

Chair: Michael Wall  
Takeshi Yoshitomi

Speaker :

- 09-1 ARREST: A new visual field test algorithm designed to improve spatial resolution and test time for moderate-advanced visual field damage. Allison M McKendrick
- 09-2 Measuring Frequency of Seeing Curves On and Off Blood Vessels in Normal Eyes Using the Compass Perimeter Controlled by the OPI Andrew Turpin
- 09-3 Robustness of area-modulated perimetric stimuli to increased intraocular straylight Lindsay Rountree
- 09-4 The relationship between cortical receptive field size and eccentricity in V1, V2 and V3 of healthy individuals Melissa E Wright
- 09-5 Visual function and adaptation from star- to sunlight in glaucoma: a case-control study Nomdo M. Jansonius

**17:00 Closing Ceremony**